

The 75th Annual Meeting of the Japanese Cancer Association

# Day 1

October 6 (Thursday)

## Core Symposia

Room 1

Oct. 6 (Thu.) 9:00-11:30

E

CS1

### Interplay between tumor heterogeneity and tumor microenvironment

腫瘍内微小環境により制御されるがんの不均一性

Chairpersons: Hideyuki Saya (Div. of Gene Regulation, IAMR, Keio Univ. Sch. of Med.)

Naoya Fujita (Cancer Chemother. Ctr., JFCR)

座長：佐谷 秀行（慶應大・医・先端研・遺伝子制御）

藤田 直也（がん研・がん化学療法セ）

Tumor is composed of malignant tumor cells and non-cancerous host cells. The importance of such tumor-host interactions in tumor progression, tumor metastasis and resistance to treatment, has been pointed out for more than 100 years ago. Recent progress in the analysis of intratumor heterogeneity clarified the molecular mechanisms and underlying tumor-host interactions that affect genetic and epigenetic change of tumors. As the tumor heterogeneity limits the therapeutic response, it has now been much attention and trying to develop new drugs targeting the tumor-host interactions. In this Core Symposium 1, we would like to focus on the molecular and cellular mechanisms of tumor-host interplay that cause tumor heterogeneity and resistance to therapy. Tumor-infiltrating endothelial cells, metabolic heterogeneity, tumor stem cell-based heterogeneity, cancer-associated fibroblasts as well as computational simulation of heterogeneity development would be presented by the leading scientists. Basic approaches which elucidate the complexity and the biological significance of the tumor heterogeneity would provide novel therapeutic strategies for refractory cancers.

#### CS1-1 The role of tumor-infiltrating endothelial stem cell like cells in anti-angiogenic drug resistance

Nobuyuki Takakura (Dept. of Signal Transduction, RIMD, Osaka Univ.)

血管内皮幹細胞による腫瘍血管形成と薬剤耐性

高倉 伸幸（大阪大・微研・情報伝達）

#### CS1-2 Tumor cell and stromal cell mediated drug resistance in driver oncogene positive non-small cell lung cancer

Ryohei Katayama (Div. of Exp. Chemotherap., Cancer Chemotherapy Ctr., JFCR)

Driver oncogene 陽性肺がんにおける多様な分子標的薬耐性～がんとがん間質細胞が生み出す耐性～

片山 量平（公財）がん研・化療セ・基礎）

#### CS1-3 Interaction of genetic alterations and microenvironment during generation of tumor heterogeneity

Masanobu Oshima (Div. of Gentic, Cancer Res. Inst., Kanazawa Univ.)

ジェネティック変異と微小環境の相互作用が誘導するがん悪性化進展  
大島 正伸（金沢大・がん研・腫瘍遺伝学）

#### CS1-4 Metabolic heterogeneity and plasticity of cancer stem cells

Oltea Sampetrean, Shunsuke Shibao, Noriaki Minami, Hideyuki Saya (Div. of Gene Regulation, IAMR, Keio Univ. Sch. of Med.)

#### CS1-5 A new model of clonal evolution of colorectal neoplasms devised by multiregional and super computational analysis

Koshi Mimori<sup>1</sup>, Atsushi Niida<sup>2</sup>, Ryutaro Uchi<sup>1</sup>, Yusuke Takahashi<sup>1</sup>, Tomoko Saito<sup>1</sup>, Satoru Miyano<sup>2</sup> (<sup>1</sup>Dept. of Surg., Kyushu Univ. Beppu Hosp., <sup>2</sup>Human Genome Ctr., Inst. Of Med. Sci, The Univ. of Tokyo)

多領域分割検体のスパコン解析により明らかにした大腸腫瘍の新しい  
クローン進化モデル

三森 功士<sup>1</sup>、新井田 厚司<sup>2</sup>、内 龍太郎<sup>1</sup>、高橋 佑典<sup>1</sup>、斎藤 衆子<sup>1</sup>、  
宮野 恵<sup>2</sup>（<sup>1</sup>九州大・別府病院・外科、<sup>2</sup>東京大・医科研・ヒトゲノム  
解析セ）

## International Sessions

Room 2

Oct. 6 (Thu.) 9:00-11:30

E

IS1

### Methods of integrative mathematical oncology

統合数理腫瘍学の方法

Chairpersons: Takashi Suzuki (Grad. Sch. of Engineering Sci., Osaka Univ.)

Yu Shyr (Vanderbilt Ctr. for Quantitative Sci., Vanderbilt Univ. Med. Ctr.)

座長：鈴木 貴（大阪大・院・基礎工学）

Yu Shyr (Vanderbilt Ctr. for Quantitative Sci., Vanderbilt Univ. Med. Ctr.)

This international session is devoted to the methods of integrative mathematical oncology (IMO). It is extensively developing and twelve institutions join the Integrative Cancer Biology Program in the United States. Cancer Quantitative Science Center of Vanderbilt University contains three divisions, bio-informatics, systems biology, and bio-statistics. Professor Dr. Yu Shyr, the main guest of this session, is its head. IMO is divided into two parts, data science and mathematical modeling. First, an overview of IMO is illustrated by the organizer of this session. The next two speakers, Dr. Takashi Ito and Dr. Yao-Ting Huang will report on the use of mathematical modeling in the study of drug resistance and lung adenocarcinoma detection. Then, Dr. Kohei Kubo and Ms. Itano will talk on the methods of statistics in the study of protein dynamics and medical image visualization. The following two talks by Dr. Chen-Hsin Chen and Luonan Chen are concerned on the application of systems biology to cancer therapies. Professor Dr. Yu Shyr will finally address recent targets of integrative mathematical oncology.

#### IS1-1 Mathematical analysis of the role of CADM1 in the MET-driven resistance against gefitinib in lung adenocarcinoma

Takeshi Ito<sup>1</sup>, Motoi Ohba<sup>2</sup>, Takashi Suzuki<sup>3</sup>, Yoshinori Murakami<sup>1</sup> (<sup>1</sup>Div. of Mol. Path., Inst. Of Med. Sci., The Univ. of Tokyo, <sup>2</sup>Inst. of Mol. Oncol., Showa Univ., <sup>3</sup>Div. of Math. Sci., Grad. Sch. Of Eng. Sci., Osaka Univ.)

MET 遺伝子増幅型 gefitinib 耐性肺腺がんにおける細胞接着分子  
CADM1 の機能の数理モデリング

伊東 剛<sup>1</sup>、大場 基<sup>2</sup>、鈴木 貴<sup>3</sup>、村上 善則<sup>1</sup>（<sup>1</sup>東京大・医科研・人癌  
病因遺伝子、<sup>2</sup>昭和大・腫瘍分子生物研、<sup>3</sup>大阪大・基礎工・数理）

#### IS1-2 Early Detection of Lung Adenocarcinoma via 3D Structure Reconstruction from Low Dose Computed Tomography

Yao-Ting Huang<sup>1</sup>, Kuo-Wei Chen<sup>1</sup>, Jian-Wei Chen<sup>2</sup>, Sung-Liang Yu<sup>3</sup>,  
Jean-Seng Tseng<sup>4</sup>, Chia-Hung Hsu<sup>4</sup>, Chi-Chen Chang<sup>4</sup>, Hsuan-Yu Chen<sup>5</sup>  
(<sup>1</sup>Dept. of Computer Sci. & Information Engineering, Natl. Chung Cheng Univ., <sup>2</sup>Inst. of Biomed. Sci., Natl. Chung Hsing Univ., <sup>3</sup>Dept. of Lab. Sci. & Med. Biotechnology, Natl. Taiwan Univ., <sup>4</sup>Taiichung Veterans General Hosp., <sup>5</sup>Inst. of Statistical Sci., Academia Sinica)

#### IS1-3 Protein dynamics in response to genotoxic drugs regulated by proteasome system

Kohei Kume<sup>1,2</sup>, Satoshi Nishizuka<sup>1,2</sup> (Mol. Therap. Lab., Dept. of Surg.,  
Iwate Med. Univ. Sch. of Med., <sup>2</sup>Inst. of Biomed. Sci. Iwate Med. Univ.)

DNA 障害薬応答においてプロテアーソーム系に制御されるタンパク動  
態

久米 浩平<sup>1,2</sup>、西塚 哲<sup>1,2</sup>（岩手医大・医・外科・分子治療、<sup>2</sup>岩手医  
大・歯科薬総合研）

#### IS1-4 Mathematical segmentation methods for visualizations and its application and analysis to detecting lesions.

Keiko Itano (Dept. of Systems Innovation, Engineering Sci., Osaka Univ.)

数理的可視化手法と病変診断への応用・解析

板野 景子（大阪大・基礎工学・システム創成・数理）

#### IS1-5 Statistical Modeling for Progression to Cancer, Targeted Therapy and Cure

Chen-Hsin Chen<sup>1,2</sup> (<sup>1</sup>Inst. of Statistical Sci., Academia Sinica, <sup>2</sup>Grad. Inst. of Epidemiology and Prevention Med., Natl. Taiwan Univ.)

#### IS1-6 Molecular biomarkers, network biomarkers and dynamical network biomarkers for complex diseases

Luonan Chen (Shanghai Inst. for Life Sci., Chinese Academy of Sci.)

#### IS1-7 Statistical Aspects of Omics Data Analysis Using the Random Compound Covariate

Yu Shyr (Vanderbilt Ctr. for Quantitative Sci., Vanderbilt Univ. Med. Ctr.)

**International Sessions**

Room 3 Oct. 6 (Thu.) 9:00-11:30

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**IS2****Wnt signaling as therapeutic targets**

Wnt シグナルの基礎研究と治療標的としての展望

Chairpersons: Noriko Gotoh (Div. Cancer Cell Biol., Cancer Res. Inst., Kanazawa Univ.)

David M. Virshup (Cancer &amp; Stem Cell Biol., Duke-NUS Med. Sch.)

座長：後藤 典子（金沢大・がん研・分子病態）

David M. Virshup (Cancer &amp; Stem Cell Biol., Duke-NUS Med. Sch.)

Wnt signaling is one of the essential pathways involved in embryonic development, including cell polarity, proliferation and differentiation. In adult tissues, Wnt signaling plays important roles for maintenance of stem cells in several tissues, gastrointestinal tract and haematopoietic tissues, for example. Wnt family contains 19 members. Upon Wnts binding to their receptors Frizzled (FZD) and coreceptors LRP5/6, the FZD-coupled G-proteins together with Dishevelled (DVL), a multi-domain scaffolding protein, transduce the signal. As a consequence AXIN, part of the  $\beta$ -catenin destruction complex, is recruited to the membrane. The destruction complex contains AXIN, APC and serine/threonine kinases GSK3 $\alpha/\beta$  and CK1 and is responsible for phosphorylation of  $\beta$ -catenin and its subsequent ubiquitylation and degradation. Upon Wnt signaling activation,  $\beta$ -catenin is released from the complex and translocates into the nucleus. In nucleus,  $\beta$ -catenin binds to LEF/TCF transcription factors and leads to activation of transcription of various genes. This pathway is called 'canonical pathway'. There are several non-canonical Wnt signaling pathways.

A nearly half of human tumors show a dysregulation of the Wnt signaling. In colon cancer, mutations in APC is found in ~80% cases. There are many types of dysregulation in Wnt signaling in many other tumors, including mutations in genes and overexpression of proteins that are involved in Wnt signaling. Recently, Wnt signaling is found to be involved in the functions of cancer stem cells. Therefore, Wnt signaling has been a focus for drug development for cancer therapy. In this symposium, we would like to discuss the recent drug development for targeting Wnt signaling and introduce novel findings in Wnt signaling.

**IS2-1 Targeting phospholipase D1 attenuates intestinal tumorigenesis by controlling  $\beta$ -catenin signaling**Do Sik Min<sup>1</sup>, Dong Woo Kang<sup>1</sup>, Chi Yeol Choi<sup>1</sup>, Yong-Hee Cho<sup>2</sup>, Huasong Tian<sup>3</sup>, Gilbert Di Paolo<sup>4</sup>, Kang-Yell Choi<sup>1</sup> (<sup>1</sup>Dept. of Mol. Biol., Pusan Natl. Univ., <sup>2</sup>Dept. of Biotech., Yonsei Univ., <sup>3</sup>Dept. of Med., Memorial Sloan-Kettering Cancer Ctr., <sup>4</sup>Dept. of Path. & Cell Biol., Columbia Univ.)**IS2-2 Role of microRNA and WNT signaling pathway in cancer metastasis**Tomoki Muramatsu<sup>1</sup>, Kenichi Kozaki<sup>1,3</sup>, Johji Inazawa<sup>1,2</sup> (<sup>1</sup>Dept. of Mol. Cytogenet., Med. Res. Inst., Tokyo Med. & Dent. Univ., <sup>2</sup>Bioresource Res. Ctr., Tokyo Med. & Dent. Univ., <sup>3</sup>Dept. of Dent. Pharm., Grad. Sch. of Med., Okayama Univ.)がん転移におけるマイクロ RNA と WNT 経路の役割  
村松 智輝<sup>1</sup>、小崎 健一<sup>1,3</sup>、稻澤 譲治<sup>1,2</sup> (<sup>1</sup>東京医歯大・難研・分子細胞遺伝、<sup>2</sup>東京医歯大・疾患バイオリソースセ、<sup>3</sup>岡山大・医歯薬・歯科薬理)**IS2-3 Activation of  $\beta$ -catenin leads to acquire resistance to EGFR-TKIs in lung adenocarcinoma**Asuka Nakata<sup>1</sup>, Tatsunori Nishimura<sup>1</sup>, Yukino Machida<sup>2</sup>, Noriko Gotoh<sup>1</sup> (<sup>1</sup>Div. of Cancer Cell Biol., Cancer Res. Inst., Kanazawa Univ., <sup>2</sup>Div. of Hematological Malignancy, Natl. Cancer Ctr. Res. Inst.)肺腺癌における  $\beta$  カテニンの活性化は EGFR 阻害剤耐性に関与する  
中田 飛鳥<sup>1</sup>、西村 建徳<sup>1</sup>、町田 雪乃<sup>2</sup>、後藤 典子<sup>1</sup> (<sup>1</sup>金沢大・がん研・分子病態、<sup>2</sup>国立がん研究セ・研・造血器腫瘍)**IS2-4 Lgr5+ Stem Cells in Epithelial Homeostasis, Regeneration & Disease of the Stomach**

Nick Barker (A-STAR Inst. of Med. Biol.)

**IS2-5 Dkk1-CKAP4 signaling pathway represents a novel therapeutic target for cancers.**

Hirokazu Kimura, Katsumi Fumoto, Kensaku Shojima, Yoshihito Osugi, Akira Kikuchi (Dept. of Mol. Biol. and Biochem., Grad. Sch. of Med., Osaka Univ.)

新規癌治療標的である Dkk1-CKAP4 シグナル

木村 公一、麓 勝己、庄嶋 健作、大杉 祥仁、菊池 章（大阪大・院医・分子病態生化学）

**IS2-6****Developing therapeutic intervention of Wnt signaling pathway in colorectal cancer**Mari Masuda<sup>1</sup>, Yuko Uno<sup>2</sup>, Hirokazu Ohata<sup>2</sup>, Hideki Moriyama<sup>3</sup>, Naoko Goto<sup>1</sup>, Koji Okamoto<sup>2</sup>, Masaaki Sawa<sup>4</sup>, Tesshi Yamada<sup>1</sup> (<sup>1</sup>Div. of Chemother. & Clin. Res., Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Div. of Cancer Differentiation, Natl. Cancer Ctr. Res. Inst., <sup>3</sup>Carna Biosci., Inc.)

Wnt シグナル遮断による大腸がん幹細胞根絶を目的とした TNIK 阻害剤の開発

増田 万里<sup>1</sup>、宇野 佑子<sup>3</sup>、大畠 広和<sup>2</sup>、森山 英樹<sup>3</sup>、後藤 尚子<sup>1</sup>、岡本 康司<sup>2</sup>、澤 匡明<sup>3</sup>、山田 哲司<sup>1</sup> (<sup>1</sup>国立がん研究セ・研・創薬臨床、<sup>2</sup>国立がん研究セ・研・がん分化制御解析、<sup>3</sup>カルナバイオサイエンス(株))**IS2-7****Small molecular mimics of KLF5 selectively suppress the survival and Wnt-KLF5 signaling of colorectal cancer cells.**Takeo Nakaya<sup>1</sup>, Hirohumi Nakano<sup>2</sup>, Masaji Kasai<sup>3</sup>, Atsushi Yoshimori<sup>4</sup>, Akira Tanaka<sup>1</sup>, Hiroyuki Kouji<sup>3</sup>, Ryozo Nagai<sup>5</sup> (<sup>1</sup>Dept. of Pathol., Jichi Med. Univ., <sup>2</sup>Chemical Resources Lab., Tokyo Inst. of Tech., <sup>3</sup>PRISM Biolab, <sup>4</sup>Inst. for Theoretical Med., <sup>5</sup>Jichi Med. Univ.)

KLF5 の低分子模倣化合物は大腸癌細胞の生存と Wnt-KLF5 シグナルを選択的に抑制する

仲矢 丈雄<sup>1</sup>、中野 洋文<sup>2</sup>、河西 政次<sup>3</sup>、吉森 篤史<sup>4</sup>、田中 亨<sup>1</sup>、小路 弘行<sup>3</sup>、永井 良三<sup>5</sup> (<sup>1</sup>自治医大・医・人体病理、<sup>2</sup>東工大・資源化学研、<sup>3</sup>PRISM Biolab、<sup>4</sup>理論創薬研、<sup>5</sup>自治医大)**IS2-8****Upstream regulation of Wnt signaling: Mechanism, Diseases, and Therapy**

David M. Virshup (Cancer &amp; Stem Cell Biol., Duke-NUS Med. Sch.)

## Symposia on Specific Tumors

Room 4 Oct. 6 (Thu.) 9:00-11:30

### SST1 Lung cancer translational science

肺がんの Translational Science

Chairpersons: Hirotoshi Akita (Dept. of Med. Oncology, Hokkaido Univ. Grad. Sch. of Med)

Seiji Yano (Cancer Res. Inst. of Kanazawa Univ.)

座長：秋田 弘俊（北海道大・院医・腫瘍内科学）

矢野 聖二（金沢大・がん進展制御研・腫瘍内科）

Lung cancer is the leading cause of cancer death worldwide. Individual therapy based on driver oncogenes and corresponding targeted drugs are available in advanced non-small cell lung cancer (NSCLC). In addition, an immune checkpoint inhibitor has been approved for chemo-refractory NSCLC. However, we face several clinical problems. Firstly, cancer develops recurrent disease by acquiring resistance to targeted drugs. While new generation drugs which overcome resistance have been approved for NSCLC with EGFR mutation or ALK translocation, the resistance to these new generation drugs will also be acquired during the treatment. Secondly, clinical benefit of immune checkpoint inhibitors is limited to a population of NSCLC patients and a predictive biomarker for efficacy has not been established. Thirdly, targeted drugs against tumors with driver oncogenes other than EGFR mutation and ALK translocation are not approved for lung cancer in Japan. These problems need to be resolved for improving prognosis of lung cancer.

In this symposium, we invite 5 distinguished speakers and the cutting edge of their researches regarding these clinical problems will be present. We look forward to sharing latest information of lung cancer and enjoy hot and fruitful discussion!

#### SST1-1 Immune checkpoint inhibitors for lung cancer and development of immuno-oncology biomarker

Kiyotaka Yoh (Dept. of Thoracic Oncology, Natl. Cancer Ctr. Hosp. East)

肺癌の免疫チェックポイント阻害薬による治療とバイオマーカーの探索  
葉 清隆（国立がん研究セ・東病院・呼吸器内科）

#### SST1-2 Perspective of T cell responses as predictive markers in cancer immunotherapy

Yuka Maeda<sup>1</sup>, Hiroyoshi Nishikawa<sup>1,2</sup>, Hiroyuki Mano<sup>1,3</sup> (<sup>1</sup>Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Div. of Cancer Immunol. EPOC., Natl. Cancer Ctr., <sup>3</sup>Dept. of Cell Signaling, Grad. Sch. of Med., The Univ. of Tokyo)

がん免疫療法におけるT細胞応答の効果予測因子としての可能性

前田 優香<sup>1</sup>、西川 博嘉<sup>1,2</sup>、間野 博行<sup>1,3</sup> (<sup>1</sup>国立がん研究セ・研、<sup>2</sup>国立がん研究セ・免疫 TR、<sup>3</sup>東京大・院医・細胞情報)

#### SST1-3 Alternative therapeutic molecular targets for Non-small cell Lung Cancer through Cancer Clinical Sequence

Hiroshi Nishihara<sup>1,2</sup>, Ichiro Kinoshita<sup>3</sup>, Yutaka Hatanaka<sup>4</sup>, Shinya Tanaka<sup>5</sup>, Hirotoshi Akita<sup>2,3</sup> (<sup>1</sup>Dept. of Translational Path., Hokkaido Univ. Sch. of Med., <sup>2</sup>Div. of Cancer Clin. Genetics, Hokkaido Univ. Hosp., <sup>3</sup>Dept. of Oncology, Hokkaido Univ. Sch. of Med., <sup>4</sup>Res. Div. of Companion Diagnosis, Hokkaido Univ. Hosp., <sup>5</sup>Dept. of Cancer Path., Hokkaido Univ. Sch. of Med.)

クリニカルシーケンスの臨床実装による肺癌に対する治療標的分子・個別化治療の探索

西原 広史<sup>1,2</sup>、木下 一郎<sup>3</sup>、畠中 豊<sup>4</sup>、田中 伸哉<sup>5</sup>、秋田 弘俊<sup>2,3</sup> (<sup>1</sup>北海道大・医・探索病理、<sup>2</sup>北海道大・病院・がん遺伝子診断、<sup>3</sup>北海道大・医・腫瘍内科、<sup>4</sup>北海道大・病院・コンパニオン診断、<sup>5</sup>北海道大・医・腫瘍病理)

#### SST1-4 To elucidate the resistance to molecular targeted therapy in EGFR mutated lung cancer

Tadaaki Yamada, Seiji Yano (Div. of Med. Oncol., Cancer Inst., Kanazawa Univ.)

EGFR 肺がんにおける EGFR 阻害薬耐性の機構解明とその克服

山田 忠明、矢野 聖二（金沢大・がん研・腫瘍内科）

#### SST1-5 Overcoming acquired resistance to ALK inhibitors in non-small cell lung cancers harboring EML4-ALK fusion gene

Hideko Isozaki<sup>1,2</sup>, Eiki Ichihara<sup>1</sup>, Nagio Takigawa<sup>3</sup>, Kunio Matsumoto<sup>4</sup>, Toshiaki Sendo<sup>2</sup>, Mitsune Tanimoto<sup>1</sup>, Katsuyuki Kiura<sup>5</sup> (<sup>1</sup>Dept. of Hematology, Oncology & Respiratory Med., Okayama Univ., <sup>2</sup>Dept. of Clin. Pharm., Okayama Univ., <sup>3</sup>Dept. of Gen. Int. Med. 4, Kawasaki Med. Sch., <sup>4</sup>Div. of Tumor Dynamics & Regulation, Cancer Res. Inst., Kanazawa Univ., <sup>5</sup>Dept. of Allergy & Respiratory Med., Okayama Univ. Hosp.)

EML4-ALK 融合遺伝子陽性肺癌における ALK 阻害剤の耐性克服

磯崎 英子<sup>1,2</sup>、市原 英基<sup>1</sup>、瀧川 奈義夫<sup>3</sup>、松本 邦夫<sup>4</sup>、千堂 年昭<sup>2</sup>、谷本 光音<sup>1</sup>、木浦 勝行<sup>5</sup> (<sup>1</sup>岡山大・血液腫瘍呼吸器内科、<sup>2</sup>岡山大・臨床薬剤学、<sup>3</sup>川崎医大・川崎病院・総合内科4、<sup>4</sup>金沢大・がん研・腫瘍動態制御、<sup>5</sup>岡山大・病院・呼吸器アレルギー内科)

## Symposia

Room 5 Oct. 6 (Thu.) 9:00-11:30

### S1

#### DNA damage response and repair in cancer

DNA 損傷と修復

Chairpersons: Makoto Nakanishi (Div. of Cancer Cell Biol., IMS, The Univ. of Tokyo)

Kozo Tanaka (Dept. of Mol. Oncol., Inst. Dev. Aging & Cancer, Tohoku Univ.)

座長：中西 真（東京大・医科研・癌防御シグナル）

田中 耕三（東北大・加齢研・分子腫瘍）

Quality of chromosomal DNA and number of chromosomes in a nucleus have to be stably maintained during normal cell proliferation. However, most cancer cells show instability of chromosomal DNA and an aberrant number of chromosomes (aneuploidy) as a common hallmark. This suggests that there should be at least one or probably more abnormalities in the molecular pathways that regulate DNA damage responses, DNA repair, and chromosome segregation. These abnormalities likely accelerate malignant transformation of cells through accumulation of additional mutations and enhancement of chromosomal instability such as chromothripsis. For prevention of these tragic ends, an entire picture of molecular pathways regulating quality and number of chromosomes has to be unraveled and therapies targeting these pathways have to be emerged. In this session, the speakers will highlight recent advances in basic molecular mechanisms of these events such as chromosomal maintenance, segregation, and DNA repair. The implications of their abnormalities in carcinogenesis will also be discussed.

#### S1-1 Chromosomal instability caused by defective chromosome dynamics

Kozo Tanaka, Kinue Kuniyasu, Kenji Iemura (Dept. of Mol. Oncol., Inst. Dev. Aging & Cancer, Tohoku Univ.)

染色体動態の異常による染色体不安定性の発生

田中 耕三、國安 絹枝、家村 順自（東北大・加齢研・分子腫瘍）

#### S1-2 Mechanisms of chromosomal instability in human cancer

Duane A. Compton (Dept. of Biochemistry & Cell Biol., Geisel Sch. of Med. at Dartmouth)

#### S1-3 Insufficient activity of Aurora B underlies chromosome segregation errors in cancer cells

Yusuke Abe<sup>1,2</sup> (<sup>1</sup>Div. of Exp. Path., Cancer Inst., JFCR, <sup>2</sup>JSPS Res. Fellow)

がん細胞における Aurora B の機能異常：明かされつつある染色体不安定性の分子背景

阿部 優介<sup>1,2</sup> (<sup>1</sup>（公財）がん研・研究所・実験病理、<sup>2</sup>日本学術振興会特別研究員 PD)

#### S1-4 Essential role of auto-activation circuitry on Aurora B-mediated H2AX-pS121 in mitosis

Makoto Nakanishi (Div. of Cancer Cell Biol., IMS, The Univ. of Tokyo)

オーロラ B によるヒストンH2AX セリン121 のリン酸化は正常な染色体分配に必須である

中西 真（東京大・医科研・癌防御シグナル）

#### S1-5 A germline mutation in the WDR4 gene causes severe developmental abnormalities associated with genome instability

Tomoo Ogi<sup>1</sup>, Yasuyoshi Oka<sup>1</sup>, Yuka Nakazawa<sup>1,2</sup>, Nan Jia<sup>1</sup>, Chaowan Guo<sup>1</sup>, Kiyonobu Karata<sup>1</sup>, Tomoji Mashimo<sup>3</sup> (<sup>1</sup>Dept. of Genetics, Nagoya Univ., <sup>2</sup>Res. Inst. Env. Med., <sup>3</sup>NRGIC, Nagasaki Univ., <sup>3</sup>Dept. of Exp. Animal Sci., Osaka Univ. Grad. Sch. of Med.)

ヒトWDR4 遺伝子の先天的な異常はゲノム不安定性に起因する発育異常を誘発する

荻 朋男<sup>1</sup>、岡 泰由<sup>1</sup>、中沢 由華<sup>1,2</sup>、賈 楠<sup>1</sup>、郭 朝万<sup>1</sup>、唐田 清伸<sup>1</sup>、真下 知士<sup>3</sup> (<sup>1</sup>名古屋大・環研・発生遺伝、<sup>2</sup>長崎大・NRGIC (原研修復)、<sup>3</sup>大阪大・医・実験動物学)

#### S1-6 Choice of DNA double-strand break repair pathway by E3 ubiquitin ligase RNF8

Shinichiro Nakada (Bioreg. Cell. Resp., Sch. of Med. Osaka Univ.)

E3 ユビキチンリガーゼが関わるDNA2 本鎖切断修復経路選択  
中田 慎一郎（大阪大・院医・細胞応答制御学）

**Japanese Oral Sessions**

Room 6 Oct. 6 (Thu.) 9:00-10:15

**J12-1** **Cancer immunology (1): immune modulation**  
がん免疫（1）：抑制機構の制御

Chairperson: Tomonori Yaguchi (Div. of Cell. Signaling, Inst. for Adv. Med. Res., Keio Univ. Sch. of Med.)

座長：谷口 智憲（慶應大・医・先端研・細胞情報）

**J-1001 Inhibition of Nr4a breaks Treg-mediated suppression of anti-tumor immunity**

Sana Hibino, Akihiko Yoshimura (Dept of Microbiology and Immunol., Keio Univ. Sch. of Med.)

Nr4a の機能阻害は制御性 T 細胞を介した抗腫瘍免疫応答の抑制を解除する

日比野 沙奈、吉村 昭彦（慶應大・医・微生物学免疫学）

**J-1002 An anti-CD4 depleting antibody reverses Treg-induced suppression of DCs while preventing non-specific T cell activation**Satoshi Ueha<sup>1</sup>, Shouji Yokochi<sup>1,2</sup>, Yoshiro Ishiwata<sup>1,2</sup>, Kazuhiro Kakimi<sup>3</sup>, Satoru Ito<sup>1,2</sup>, Kouji Matsushima<sup>1</sup> (<sup>1</sup>Dept. Mol. Prev. Med., Grad. Sch. Med., The Univ. Tokyo, <sup>2</sup>IDAC Theranostics, Inc., <sup>3</sup>Dept. Immunotherapeutics, The Univ. Tokyo Hospital)

抗 CD4 除去抗体は T 細胞を非特異的に活性化すること無く制御性 T 細胞による樹状細胞の抑制を解除する

上羽 悟史<sup>1</sup>、横地 祥司<sup>1,2</sup>、石渡 義郎<sup>1,2</sup>、垣見 和宏<sup>3</sup>、伊藤 哲<sup>1,2</sup>、松島 綱治<sup>1</sup>（東京大学・院医・分子予防医学教室、<sup>2</sup>IDAC Theranostics, Inc.、<sup>3</sup>東京大学病院・免疫細胞治療学講座）**J-1003 IL-6 inhibits accumulation of antitumor effector cells into tumor microenvironments and promotes tumorigenesis in vivo**Hidemitsu Kitamura<sup>1</sup>, Yosuke Ohno<sup>2</sup>, Yujiro Toyoshima<sup>1,2</sup>, Huihui Xiang<sup>1</sup>, Satoshi Terada<sup>1</sup>, Shinichi Hashimoto<sup>3</sup>, Kazuho Ikeo<sup>4</sup>, Shigenori Homma<sup>2</sup>, Hideki Kawamura<sup>4</sup>, Norihiko Takahashi<sup>2</sup>, Akinobu Taketomi<sup>2</sup> (<sup>1</sup>Div. Functional Immunol., Inst. Genetic Med., Hokkaido Univ., <sup>2</sup>Dept. Gastroenterol. Surg. I, Hokkaido Univ., Grad. Sch. Med., <sup>3</sup>Grad. Sch. Med. Kanazawa Univ., <sup>4</sup>Lab. DNA Data Analysis, Natl. Inst. Genetics) IL-6 は腫瘍微小環境下で抗腫瘍エフェクター細胞の集積を阻害し腫瘍形成を促進する北村 秀光<sup>1</sup>、大野 陽介<sup>2</sup>、豊島 雄二郎<sup>1,2</sup>、項 慧慧<sup>1</sup>、寺田 聖<sup>1</sup>、橋本 真一<sup>3</sup>、池尾 一穂<sup>4</sup>、本間 重紀<sup>2</sup>、川村 秀樹<sup>2</sup>、高橋 典彦<sup>2</sup>、武富 紹信<sup>2</sup>（北大・遺伝研・免疫機能、<sup>2</sup>北大院・医学・消化器外科学、<sup>3</sup>金沢大・院医、<sup>4</sup>国立遺伝研・遺伝情報分析）**J-1004 The anti-SIRP $\alpha$  antibody prevents tumor formation: a novel strategy for cancer therapy**Tadahiko Yanagita<sup>1,2</sup>, Yoji Murata<sup>1</sup>, Daisuke Tanaka<sup>1</sup>, Yasuyuki Saito<sup>1</sup>, Takenori Kotani<sup>1</sup>, Takahide Komori<sup>2</sup>, Takashi Matozaki<sup>1</sup> (<sup>1</sup>Div. Mol. & Cell.Signal., Kobe Univ. Grad. Sch., <sup>2</sup>Div. Oral & Maxillofacial Surg., Kobe Univ. Grad. Sch.)抗 SIRP $\alpha$  抗体を用いた新たながん治療法柳田 匡彦<sup>1,2</sup>、村田 陽二<sup>1</sup>、田中 大介<sup>1</sup>、斎藤 泰之<sup>1</sup>、小谷 武徳<sup>1</sup>、古森 孝英<sup>2</sup>、的崎 尚<sup>1</sup>（神戸大・院・医・シグナル統合学、<sup>2</sup>神戸大・院・医・口腔外科学）**J-1005 High mobility group box 1 inhibitor augmented anti-tumor T cell response induced by peptide vaccination as co-adjuvant**

Kayoko Waki, Akira Yamada (Kurume Univ. Res. Ctr. for Innovative Cancer Therapy)

HMGB 1 阻害剤はコアジュバントとしてペプチドワクチンで誘導される抗腫瘍免疫を増強する

和氣 加容子、山田 亮（久留米大学先端癌治療研究センター）

**J-1006 Targeting FSTL1 is a new approach to treatment of pediatric cancers**Marina Hennmi<sup>1</sup>, Yamato Ogiwara<sup>1</sup>, Masayoshi Toyoura<sup>2</sup>, Kazunori Aoki<sup>1</sup>, Chie Kudo-Saito<sup>1</sup> (<sup>1</sup>National Cancer Center, <sup>2</sup>Pharma Foods)

小児がん治療において FSTL1 阻害が有用である可能性

逸見 真理奈<sup>1</sup>、荻原 大和<sup>1</sup>、豊浦 雅義<sup>2</sup>、青木 一教<sup>1</sup>、工藤 千恵<sup>1</sup>（国立がん研究センター研究所・分子細胞治療、<sup>2</sup>（株）ファーマ フーズ総合研究所・開発部）**English Oral Sessions**

Room 6 Oct. 6 (Thu.) 10:15-11:30

**E12-1** **Cancer immunology (2): immunotherapy**  
がん免疫（2）：抑制制御による治療Chairperson: Toshio Kitawaki (Dept. of Hematol. & Oncol., Kyoto Univ. Hosp.)  
座長：北脇 年雄（京大病院・血液・腫瘍内科）**E-1001 5-FU (fluorouracil) sensitizes oral squamous cell carcinoma (OSCC) to cytotoxic T-lymphocyte (CTL).**Susumu Suzuki<sup>1</sup>, Mayako Nishio N.<sup>2</sup>, Kazuhiro Yoshikawa<sup>3</sup>, Yoshiaki Kazaoka<sup>2</sup>, Ryuzo Ueda<sup>1</sup> (<sup>1</sup>Dept. Tumor immunol., Aichi Med. Univ. Sch. Med., <sup>2</sup>Dept. Oral and Maxillofac. Surg. Aichi Med. Univ., <sup>3</sup>Inst. Comprehensive Med. Res. Aichi Med. Univ.)5-FU は口腔癌の細胞傷害性 T 細胞に対する感受性を増強する  
鈴木 進<sup>1</sup>、西尾 麻矢子<sup>2</sup>、吉川 和宏<sup>3</sup>、風岡 宜暉<sup>2</sup>、上田 龍三<sup>1</sup>（愛知大・医・腫瘍免疫寄附講座、<sup>2</sup>愛知大・歯科口腔外科、<sup>3</sup>愛知大・高度研究機器部門）**E-1002 HIF-2 $\alpha$  inhibitor restores the TRAIL sensitivity of human pancreatic cancer cells**

Harashima Nanae, Yuichi Iida, Mamoru Harada (Dept. Immunol., Shimane Univ. Facult. Med.)

HIF $\alpha$  阻害剤はヒト肺癌細胞の TRAIL 感受性を回復させる  
原嶋 奈々江、飯田 雄一、原田 守（島根大・医・免疫）**E-1003 Intratumoral IFN- $\alpha$  expression reduces trafficking of Tregs into tumor by inhibition of CCL17 in tumors**

Kazunori Aoki, Chihiro Shibasaki, Kenta Narumi, Ryosuke Ueda, Chie Kudo, Hisayoshi Hashimoto (Natl. Cancer Ctr. Res. Inst., Div. Mol. Cell. Med.)

腫瘍内 IFN- $\alpha$  は、CCL17 の発現抑制を介して制御性 T 細胞の腫瘍内への浸潤を減少させる

青木 一教、柴崎 智尋、鳴海 兼太、上田 亮介、工藤 千恵、橋本 尚佳（国立がん研セ・研・分子細胞治療）

**E-1004 Dectin-2 selectively suppresses liver metastasis of cancer through Kupffer cells**Yoshitaka Kimura<sup>1</sup>, Hideyuki Yanai<sup>1,2</sup>, Tadatsugu Taniguchi<sup>1,2</sup> (<sup>1</sup>Inst. of Industrial Sci, The Univ. of Tokyo, <sup>2</sup>Max Planck-The Univ. of Tokyo Ctr. for Integrative Inflammology)Dectin-2 はクッパー細胞を通してがん肝転移を選択性に抑制する  
木村 好孝<sup>1</sup>、柳井 秀元<sup>1,2</sup>、谷口 維紹<sup>1,2</sup>（東大・生産研・炎症免疫制御学、<sup>2</sup>マックスプランク－東大・統合炎症学）**E-1005 Modulation of local and systemic immune responses in the progression of ovarian cancer dissemination**Juri Ogishima<sup>1</sup>, Ayumi Taguchi<sup>1</sup>, Kei Kawana<sup>1</sup>, Mitsuyo Yoshida<sup>1</sup>, Akira Kawata<sup>1</sup>, Hiroe Nakamura<sup>1</sup>, Asaha Fujimoto<sup>1</sup>, Masakazu Sato<sup>1</sup>, Katsuyuki Adachi<sup>1</sup>, Takahide Arimoto<sup>1</sup>, Katsutoshi Oda<sup>1</sup>, Tohru Kyono<sup>2</sup>, Tomoyuki Fujii<sup>1</sup> (<sup>1</sup>Obstetrics & Gynecology, Univ. of Tokyo, <sup>2</sup>Div. of Carcinogenesis Cancer Prevention, Natl. Cancer Ctr. Res. Inst.)

卵巣癌腹腔内進展における局所および全身性免疫応答の変容

荻島 樹里<sup>1</sup>、田口 歩<sup>1</sup>、川名 敬<sup>1</sup>、吉田 光代<sup>1</sup>、河田 啓<sup>1</sup>、中村 寛江<sup>1</sup>、藤本 麻葉<sup>1</sup>、佐藤 雅和<sup>1</sup>、足立 克之<sup>1</sup>、有本 貴英<sup>1</sup>、織田 克利<sup>1</sup>、清野 透<sup>2</sup>、藤井 知行<sup>1</sup>（東京大・医学部・女性外科、<sup>2</sup>国立がん研究センター・研・発がん・予防）**E-1006 IL-6 suppresses Type-1 immune responses in tumor microenvironment and promotes liver metastasis of colon cancer**Yujiro Toyoshima<sup>1,2</sup>, Yosuke Ohno<sup>1</sup>, Huihui Xiang<sup>2</sup>, Satoshi Terada<sup>2</sup>, Shigenori Homma<sup>2</sup>, Hideki Kawamura<sup>2</sup> (<sup>1</sup>Dept. Gastroenterol. Surg., Hokkaido Univ., Grad. Sch. Med., <sup>2</sup>Div. Functional Immunol., Inst. Genetic Med., Hokkaido Univ.)

IL-6 は腫瘍微小環境においてタイプI 抗腫瘍免疫反応を抑制し、大腸がん肝転移を促進する

豊島 雄二郎<sup>1,2</sup>、大野 陽介<sup>1</sup>、項 慧慧<sup>2</sup>、寺田 聖<sup>2</sup>、本間 重紀<sup>1</sup>、川村 秀樹<sup>1</sup>、高橋 典彦<sup>1</sup>、武富 紹信<sup>2</sup>（北大院・医学・消化器外科学、<sup>2</sup>北大・遺伝研・免疫機能）

## Japanese Oral Sessions

Room 7 Oct. 6 (Thu.) 9:00-10:15

### J17-1 DDS, combination therapies

DDS・併用療法

Chairperson: Kazuhiro Noma (Dept. of Gastroenterological Surg., Okayama Univ. Med. Sch.)

座長：野間 和広（岡山大・院医・消化器外科）

#### J-1007 Inhibitory Effect on Lymphoma Cells Proliferation by Regulating Lipid Metabolism Pathway

Yukio Fujiwara<sup>1</sup>, Hasita Horlad<sup>1</sup>, Daisuke Niino<sup>2</sup>, Yutaka Okuno<sup>3</sup>, Yoshitaka Kikukawa<sup>3</sup>, Masao Matsuoka<sup>4</sup>, Motohiro Takeya<sup>1</sup>, Yoshihiro Komohara<sup>1</sup> (<sup>1</sup>Dept. Cell Path., Grad. Sch. Med. Sci., Kumamoto Univ., <sup>2</sup>Dept. Path., Grad. Sch. BioMed. Sci., Nagasaki Univ., <sup>3</sup>Dept. Hematol., Grad. Sch. Med. Sci., Kumamoto Univ., <sup>4</sup>Lab. Virus Cont., Virus Res., Kyoto Univ.)

脂質代謝制御によるリンパ腫に対する新たな治療戦略

藤原 章雄<sup>1</sup>、Hasita Horlad<sup>1</sup>、新野 大介<sup>2</sup>、奥野 豊<sup>3</sup>、菊川 佳敬<sup>3</sup>、松岡 雅雄<sup>4</sup>、竹屋 元裕<sup>1</sup>、菰原 義弘<sup>1</sup>（<sup>1</sup>熊本大院・医・細胞病理、<sup>2</sup>長崎大院・医・病理、<sup>3</sup>熊本大院・医・血液内科、<sup>4</sup>京都大・ウイルス研・ウイルス制御）

#### J-1008 Validation of cancer therapeutic strategy by mitochondrial delivery of anticancer drugs using mitochondrial DDS

Yuma Yamada, Hideyoshi Harashima (Fac. of Pharm. Sci, Hokkaido Univ.)

ミトコンドリアを標的とする DDS を用いた薬剤耐性癌治療戦略の検証

山田 勇磨、原島 秀吉（北大院・薬）

#### J-1009 Validation of an innovative cancer therapy for targeting mitochondria in cancer cells using aminoglycoside drugs

Jiro Abe<sup>1</sup>, Yuma Yamada<sup>2</sup>, Hideyoshi Harashima<sup>2</sup> (<sup>1</sup>Dept.Pediatrics, Graduate School of Medicine, Hokkaido University, <sup>2</sup>Faculty of Pharmaceutical Sciences, Hokkaido University)

癌細胞ミトコンドリアを標的としたアミノグリコシド系薬剤を用いた新規治療戦略の検証

阿部 二郎<sup>1</sup>、山田 勇磨<sup>2</sup>、原島 秀吉<sup>2</sup>（<sup>1</sup>北海道大学・医・小児科、<sup>2</sup>北海道大学・薬・薬剤分子設計学研究室）

#### J-1010 S-Nitrosated Human Serum Albumin Dimer function as a prominent NO delivery carrier and novel nano EPR Effects augmenter

Toru Maruyama<sup>1</sup>, Yu Ishima<sup>2</sup>, Ryo Kinoshita<sup>1</sup>, Mayumi Ikeda<sup>1</sup>, Fang Jun<sup>3</sup>, Hiroshi Maeda<sup>3</sup>, Masaki Otagiri<sup>3</sup> (<sup>1</sup>Dept. Biopharm., Kumamoto Univ., Grad. Sch. Pharm. Sci., <sup>2</sup>Tokushima Univ., Grad. Sch. Pharm. Sci., <sup>3</sup>Sojo Univ., Sch. Pharm.)

S-ニトロソ化ヒト血清アルブミンダイマーは優れたNO デリバリー キャリアー及びEPR 増強剤として機能する

丸山 徹<sup>1</sup>、異島 優<sup>2</sup>、木下 遼<sup>1</sup>、池田 真由美<sup>1</sup>、方 軍<sup>3</sup>、前田 浩<sup>3</sup>、小田切 優樹<sup>3</sup>（<sup>1</sup>熊本大院・薬・薬剤学分野、<sup>2</sup>徳島大院・薬・<sup>3</sup>崇城大・薬）

#### J-1011 S-Nitrosated human serum albumin dimer as novel nano-EPR enhancer applied to macromolecular anti-tumor drugs

Yu Ishima<sup>1</sup>, Ryo Kinoshita<sup>2</sup>, Mayumi Ikeda<sup>1</sup>, Fang Jun<sup>3</sup>, Hideaki Nakamura<sup>3</sup>, Hiroshi Maeda<sup>3</sup>, Masaki Otagiri<sup>3</sup>, Toru Maruyama<sup>1</sup> (<sup>1</sup>Tokushima Univ., Grad. Sch. Pharm. Sci., <sup>2</sup>Dept. Biopharm. Kumamoto Univ., Grad. Sch. Pharm. Sci., <sup>3</sup>Sojo Univ., Sch. Pharm.)

S-ニトロソ化ヒト血清アルブミンダイマーは新規ナノ EPR 増強剤として高分子抗癌剤の治療効果を増強する

異島 優<sup>1</sup>、木下 遼<sup>2</sup>、池田 真由美<sup>2</sup>、方 軍<sup>3</sup>、中村 秀明<sup>3</sup>、前田 浩<sup>3</sup>、小田切 優樹<sup>3</sup>、丸山 徹<sup>1</sup>（<sup>1</sup>徳島大院・薬、<sup>2</sup>熊本大院・薬・薬剤学分野、<sup>3</sup>崇城大・薬）

#### J-1012 S-Nitrosated human serum albumin dimer accelerated the therapeutic effect of albumin bounded anticancer-drug

Ryo Kinoshita<sup>1</sup>, Yu Ishima<sup>2</sup>, Mayumi Ikeda<sup>1</sup>, Fang Jun<sup>3</sup>, Hideaki Nakamura<sup>3</sup>, Hiroshi Maeda<sup>3</sup>, Masaki Otagiri<sup>3</sup>, Toru Maruyama<sup>1</sup> (<sup>1</sup>Dept. Biopharm., Kumamoto Univ., Grad. Sch. Pharm. Sci., <sup>2</sup>Tokushima Univ., Grad. Sch. Pharm. Sci., <sup>3</sup>Sojo Univ., Sch. Pharm.)

S-ニトロソ化ヒト血清アルブミンダイマーはアルブミン結合型抗癌剤の治療効果を亢進する

木下 遼<sup>1</sup>、異島 優<sup>2</sup>、池田 真由美<sup>1</sup>、方 軍<sup>3</sup>、中村 秀明<sup>3</sup>、前田 浩<sup>3</sup>、小田切 優樹<sup>3</sup>、丸山 徹<sup>1</sup>（<sup>1</sup>熊本大院・薬・薬剤学分野、<sup>2</sup>徳島大院・薬・<sup>3</sup>崇城大・薬）

## English Oral Sessions

Room 7 Oct. 6 (Thu.) 10:15-11:30

### E17-1 Drug delivery systems

ドラッグデリバリーシステム

Chairperson: Masahiro Yasunaga (Div. of Developmental Therap., NCC EPOC)  
座長：安永 正浩（国立がん研究セ・先端医療開発セ・新薬開発）

#### E-1007 Withdrawn

演題取り下げ

#### E-1008 Withdrawn

演題取り下げ

#### E-1009 Effects of FLT3-Specific Peptide-Polymeric Micelle Encapsulated Curcumin on EoL-1 Cell Line

Singkome Tima<sup>1,4</sup>, Chadarat Ampasavate<sup>2</sup>, Siriporn Okonogi<sup>2</sup>, Cory Berkland<sup>3</sup>, Songyot Anuchapreeda<sup>4</sup> (<sup>1</sup>Nanoscience Nanotechnology, Grad. Sch., Chiang Mai Univ., Chiang Mai, Thailand, <sup>2</sup>Dept. of Pharm. Sci., Chiang Mai Univ., Chiang Mai, Thailand, <sup>3</sup>Dept. of Pharm. Sci., Sch. of Pharm., Univ. Kansas., USA, <sup>4</sup>Dept. of Med. Tech., Chiang Mai Univ., Chiang Mai, Thailand)

#### E-1010 Novel Komarovquinone derivatives with anti-protozoal activity inhibited growth of high-risk myeloma cells *in vivo*

Takashi Yamaguchi, Daiju Ichikawa, Arimi Ueda, Shuji Aida, Maiko Matsushita, Yutaka Hattori (Clin. Physiol. & Therap., Keio Univ. Faculty of Pharm.)

抗原虫作用を有する新規コマロビキノン誘導体のハイリスク骨髄腫細胞に対する *in vivo* での増殖抑制作用の評価

山口 高史、市川 大樹、植田 有美、會田 宗司、松下 麻衣子、服部 豊（慶應義塾大・薬・病態生理学）

#### E-1011 Comprehensive genetic analysis for the anticancer activity of a novel alkylating agent targeting KRAS mutation

Kiriko Hiraoka<sup>1,3</sup>, Jason Lin<sup>1</sup>, Atsushi Takatori<sup>1</sup>, Asuka Hattori<sup>1,3</sup>, Takahiro Inoue<sup>1,3</sup>, Hiroyuki Yoda<sup>1,3</sup>, Sakthisri Krishnamurthy<sup>1,3</sup>, Yoshinao Shinozaki<sup>1</sup>, Takayoshi Watanabe<sup>1</sup>, Nobuko Koshikawa<sup>1</sup>, Toshinori Ozaki<sup>2</sup>, Hiroki Nagase<sup>1</sup> (Lab.Cancer.Genetics, Chiba Cancer Ctr. Res. Inst, <sup>2</sup>Lab.DNA Damage Signaling, Chiba Cancer Ctr. Res. Inst, <sup>3</sup>Grad.Sch.Med. & Pharm. Sci., Univ. Chiba)

変異型 KRAS を標的とした新規アルキル化剤の網羅的遺伝子解析による抗腫瘍効果の検討

平岡 桐子<sup>1,3</sup>、Jason Lin<sup>1</sup>、高取 敦志<sup>1</sup>、服部 あすか<sup>1,3</sup>、井上 貴博<sup>1,3</sup>、養田 裕行<sup>1,3</sup>、Sakthisri Krishnamurthy<sup>1,3</sup>、篠崎 喜脩<sup>1</sup>、渡邊 隆義<sup>1</sup>、越川 信子<sup>1</sup>、尾崎 俊文<sup>2</sup>、永瀬 浩喜<sup>1</sup>（<sup>1</sup>千葉県がんセ・研・がん遺伝、<sup>2</sup>千葉県がんセ・研・DNA 損傷シグナル、<sup>3</sup>千葉大・院・医学薬学府・分子腫瘍生物学）

#### E-1012 Overview of preclinical and clinical pilot studies of HPMA-polymer conjugated THP having 3 levels of tumor selectivity

Hiroshi Maeda<sup>1</sup>, Hideaki Nakamura<sup>2</sup>, Jun Fang<sup>1,2</sup> (<sup>1</sup>Inst. DDS, Sojo Univ., <sup>2</sup>Facul. Pharm. Sci., Sojo Univ.)

ピラルビシン-HPMA ポリマー結合薬剤 (P-THP) は三段階に腫瘍選択的である：前臨床および臨床パイロットスタディのオーバービュー

前田 浩<sup>1</sup>、中村 秀明<sup>2</sup>、方 軍<sup>1,2</sup>（<sup>1</sup>崇城大・DDS 研、<sup>2</sup>崇城大・薬）

**Japanese Oral Sessions**

Room 8 Oct. 6 (Thu.) 9:00-10:15

J

**J7-1****Large-scale cancer data analysis**

大規模がんデータ解析

Chairperson: Hiromi Sakamoto (Div. of Genetics, Natl. Cancer Ctr. Res. Inst.)

座長：坂本 裕美（国立がん研究セ・研・遺伝医学）

**J-1013 Associations between mutational signatures and clinical backgrounds in liver cancer**

*Yasushi Totoki<sup>1</sup>, Akihiro Fujimoto<sup>2</sup>, Hiromi Nakamura<sup>1</sup>, Natsuko Hama<sup>1</sup>, Fumie Hosoda<sup>1</sup>, Yasuhito Arai<sup>1</sup>, Hideyuki Nakagawa<sup>2</sup>, Tatsuhiro Shibata<sup>1,3</sup> (<sup>1</sup>Div. Cancer Genomics, Natl. Cancer Ctr. Res. Inst., <sup>2</sup>RIKEN, IMS, <sup>3</sup>Human Genome Ctr., Inst. of Med. Sci., Univ. of Tokyo)*

**肝がんの体細胞変異シグネチャーと臨床的背景との関連**

十時 泰<sup>1</sup>、藤本 明洋<sup>2</sup>、中村 浩実<sup>1</sup>、濱 奈津子<sup>1</sup>、細田 文恵<sup>1</sup>、新井 康仁<sup>1</sup>、中川 英刀<sup>2</sup>、柴田 龍弘<sup>1,3</sup> (<sup>1</sup>国立がん研究セ・研・がんゲノミクス、<sup>2</sup>理研・統合生命医科学研究センター、<sup>3</sup>東大・医科研・ヒトゲノム解析センター)

**J-1014 The landscape of structural variations revealed by large scale whole exome analysis using Genomon-SV**

*Yuichi Shiraishi<sup>1</sup>, Keisuke Kataoka<sup>2</sup>, Kenichi Chiba<sup>1</sup>, Ai Okada<sup>1</sup>, Hideki Makishima<sup>2</sup>, Yasunobu Nagata<sup>2</sup>, Seishi Ogawa<sup>2</sup>, Satoru Miyano<sup>1</sup> (<sup>1</sup>Human Genome Ctr., IMS, The Univ. of Tokyo, <sup>2</sup>Dept. Path. & Tumor Biol., Kyoto Univ.)*

**Genomon-SV を使った大規模エキソーム解析で明らかになった構造変異の全体像**

白石 友一<sup>1</sup>、片岡 圭亮<sup>2</sup>、千葉 健一<sup>1</sup>、岡田 愛<sup>1</sup>、牧島 秀樹<sup>2</sup>、永田 安伸<sup>2</sup>、小川 誠司<sup>2</sup>、宮野 悟<sup>1</sup> (<sup>1</sup>東大医科学研・ヒトゲノム解析センター、<sup>2</sup>京都大・医・腫瘍生物学)

**J-1015 Genomic feature of multi-focal hepatocellular carcinoma**

*Shogo Yamamoto<sup>1</sup>, Yutaka Midorikawa<sup>1,2</sup>, Kenji Tatsumi<sup>1</sup>, Hiroki Ueda<sup>1</sup>, Shingo Tsuji<sup>1</sup>, Genta Nagae<sup>1</sup>, Tadatoshi Takayama<sup>2</sup>, Hiroyuki Aburatani<sup>1</sup> (<sup>1</sup>Genome Science div., RCAST, The University of Tokyo, <sup>2</sup>Dept. Digestive Surg., Nihon Univ. Sch. of Med.)*

**多発性肝細胞癌の遺伝子変異と特徴**

山本 尚吾<sup>1</sup>、緑川 泰<sup>1,2</sup>、辰野 健二<sup>1</sup>、上田 宏生<sup>1</sup>、辻 真吾<sup>1</sup>、永江 玄太<sup>1</sup>、高山 忠利<sup>2</sup>、油谷 浩幸<sup>1</sup> (<sup>1</sup>東京大学・先端研・ゲノムサイエンス分野、<sup>2</sup>日本大学・医学部附属病院・消化器外科)

**J-1016 Immune response-associated gene expression in hypermutated tumors with more than 500 total single nucleotide variants**

*Yasuto Akiyama<sup>1</sup>, Akira Iizuka<sup>1</sup>, Takeshi Nagashima<sup>2</sup>, Yuji Shimoda<sup>2</sup>, Tomoe Tanabe<sup>2</sup>, Sumiko Ohnami<sup>1</sup>, Shumpei Ohnami<sup>3</sup>, Keiichi Ohshima<sup>4</sup>, Kenichi Urakami<sup>5</sup>, Masatoshi Kusuvara<sup>6</sup>, Tohru Mochizuki<sup>1</sup>, Ken Yamaguchi<sup>6</sup> (<sup>1</sup>Immunother. Div., Shizuoka Cancer Ctr. Res. Inst., <sup>2</sup>SRL Inc., <sup>3</sup>Cancer Diagnostics Res. Div., Shizuoka Cancer Ctr. Res. Inst., <sup>4</sup>Med. Genetics Div., Shizuoka Cancer Ctr. Res. Inst., <sup>5</sup>Regional Resources Div., Shizuoka Cancer Ctr. Res. Inst., <sup>6</sup>Shizuoka Cancer Ctr.)*

**SNV500 以上の高頻度遺伝子変異を伴う腫瘍における免疫応答関連遺伝子の発現解析**

秋山 靖人<sup>1</sup>、飯塚 明<sup>1</sup>、長嶋 剛史<sup>2</sup>、下田 勇治<sup>2</sup>、田邊 智絵<sup>2</sup>、大浪 澄子<sup>3</sup>、大浪 俊平<sup>3</sup>、大島 啓一<sup>4</sup>、浦上 研一<sup>3</sup>、楠原 正俊<sup>5</sup>、望月 徹<sup>4</sup>、山口 建<sup>6</sup> (<sup>1</sup>静岡がんセ・研・免疫治療、<sup>2</sup>エヌアールエル、<sup>3</sup>静岡がんセ・研・診断技術開発、<sup>4</sup>静岡がんセ・研・遺伝子診療、<sup>5</sup>静岡がんセ・研・地域資源、<sup>6</sup>静岡がんセ)

**J-1017 POLE mutations in 2000 cancer patients**

*Keiichi Hatakeyama<sup>1</sup>, Keiichi Ohshima<sup>1</sup>, Takeshi Nagashima<sup>2,3</sup>, Shumpei Ohnami<sup>2</sup>, Sumiko Ohnami<sup>2</sup>, Koji Maruyama<sup>4</sup>, Yasuto Akiyama<sup>5</sup>, Kenichi Urakami<sup>5</sup>, Masatoshi Kusuvara<sup>6</sup>, Ken Yamaguchi<sup>7</sup>, Tohru Mochizuki<sup>1</sup> (<sup>1</sup>Med. Genetics Div., Shizuoka Cancer Ctr. Res. Inst., <sup>2</sup>Cancer Diagnostics Res. Div., Shizuoka Cancer Ctr. Res. Inst., <sup>3</sup>SRL Inc., <sup>4</sup>Experimental Animal Facility, Shizuoka Cancer Ctr., <sup>5</sup>Immunother. Div., Shizuoka Cancer Ctr. Res. Inst., <sup>6</sup>Regional Resource Div., Shizuoka Cancer Ctr. Res. Inst., <sup>7</sup>Shizuoka Cancer Ctr.)*

**2000 症例における POLE 変異**

畠山 延一<sup>1</sup>、大島 啓一<sup>1</sup>、長嶋 剛史<sup>2,3</sup>、大浪 俊平<sup>2</sup>、大浪 澄子<sup>2</sup>、丸山 宏二<sup>4</sup>、秋山 靖人<sup>5</sup>、浦上 研一<sup>2</sup>、楠原 正俊<sup>6</sup>、山口 建<sup>1</sup>、望月 徹<sup>1</sup> (<sup>1</sup>静岡がんセ・研・遺伝子診療、<sup>2</sup>静岡がんセ・研・診断技術開発、<sup>3</sup>株式会社エヌアールエル、<sup>4</sup>静岡がんセ・研・実験動物管理、<sup>5</sup>静岡がんセ・研・免疫治療、<sup>6</sup>静岡がんセ・研・地域資源、<sup>7</sup>静岡がんセ)

**J-1018 Normal tissue burden by mutation and methylation provides precision cancer risk diagnosis**

*Satoshi Yamashita<sup>1</sup>, Takayoshi Kishino<sup>1</sup>, Takamasa Takahashi<sup>2</sup>, Taichi Shimazu<sup>2</sup>, Hadrien Charvat<sup>2</sup>, Takeshi Nakajima<sup>3</sup>, Yi-Chia Lee<sup>4</sup>, Masahiro Maeda<sup>1</sup>, Naoko Iida<sup>1</sup>, Reiko Nagano<sup>1</sup>, Tsugane Shoichiro<sup>2</sup>, Ming-Shiang Wu<sup>4</sup>, Toshikazu Ushijima<sup>1</sup> (<sup>1</sup>Div. of Epigenomics, Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Ctr. for Public Health Sci., Natl. Cancer Ctr., <sup>3</sup>Endoscopy Div., Natl. Cancer Ctr., <sup>4</sup>Dept. of Internal Med., Natl. Taiwan Univ.)*

**正常組織における突然変異とメチル化異常の測定によるがんリスク診断**

山下 智<sup>1</sup>、岸野 貴賢<sup>1</sup>、高橋 崇真<sup>2</sup>、島津 太一<sup>2</sup>、Hadrien Charvat<sup>2</sup>、中島 健<sup>3</sup>、Yi-Chia Lee<sup>4</sup>、前田 将宏<sup>1</sup>、飯田 直子<sup>1</sup>、永野 玲子<sup>1</sup>、津金 昌一郎<sup>2</sup>、Ming-Shiang Wu<sup>4</sup>、牛島 俊和<sup>1</sup> (<sup>1</sup>国立がん研究セ・研・エビゲノム、<sup>2</sup>国がん研究セ・社会と健康研究センター、<sup>3</sup>国立がん研究セ・中央病院・内視鏡、<sup>4</sup>国立台湾大・医・内科)

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## English Oral Sessions

Room 8

Oct. 6 (Thu.) 10:15-11:30

E

E7-1

Cancer genomics

がんゲノム

Chairperson: Mamoru Kato (Dept. of Bioinformatics, Natl. Cancer Ctr.)

座長：加藤 譲（国立がん研究セ・研・バイオインフォマティクス）

### E-1013 Prognostic implications of genetic alterations from comprehensive genetic profiling in lower-grade gliomas

Kosuke Aoki<sup>1,2</sup>, Hiromichi Suzuki<sup>1,2</sup>, Keitaro Matsuo<sup>3</sup>, Keisuke Kataoka<sup>3</sup>, Teppei Shimamura<sup>4</sup>, Yasunobu Nagata<sup>2</sup>, Tetsuchi Yoshizato<sup>2</sup>, Masashi Sanada<sup>2,5</sup>, Satoru Miyano<sup>6</sup>, Toshihiko Wakabayashi<sup>1</sup>, Seishi Ogawa<sup>2</sup>, Atsushi Natsume<sup>1</sup> (<sup>1</sup>Dept. Nurosurg, Nagoya Univ., Sch. Med., <sup>2</sup>Dept. Path. & Tumor Biol., Kyoto Univ., Sch. Med., <sup>3</sup>Div. Mol. Med., Aichi Cancer Ctr. Res. Inst., <sup>4</sup>Div. System Biol., Nagoya Univ., Sch. Med., <sup>5</sup>Clin. Res. Ctr., Nagoya Med. Ctr., <sup>6</sup>Human Genome Ctr., Univ. of Tokyo., Inst. Med. Sci.)

#### 低悪性度神経膠腫の予後に関与する遺伝子異常の解析

青木 恒介<sup>1,2</sup>、鈴木 啓道<sup>1,2</sup>、松尾 恵太郎<sup>3</sup>、片岡 圭亮<sup>2</sup>、島村 徹平<sup>4</sup>、永田 安伸<sup>2</sup>、吉里 哲一<sup>2</sup>、真田 昌<sup>2,5</sup>、宮野 悟<sup>6</sup>、若林 俊彦<sup>1</sup>、小川 誠司<sup>2</sup>、夏目 敦至<sup>1</sup>（<sup>1</sup>名古屋大学・医・脳外科、<sup>2</sup>京都大学・医・腫瘍生物学、<sup>3</sup>愛知県がんセンター・遺伝子医療研究部、<sup>4</sup>名古屋大学・医・システム生物学、<sup>5</sup>名古屋医療センター臨床研究センター、<sup>6</sup>東京大学・医・ヒトゲノム解析センター）

### E-1014 Genetic characteristics of 500 neuroblastomas using genome-wide analysis combined with immunohistochemistry

Kumiko Uryu<sup>1</sup>, Kenichi Yoshida<sup>2</sup>, Keisuke Kataoka<sup>2</sup>, Masafumi Seki<sup>1</sup>, Mitsuuteru Hiwatari<sup>1</sup>, Yasuhide Hayashi<sup>3</sup>, Atsuko Nakazawa<sup>4</sup>, Tetsuya Takimoto<sup>5</sup>, Tatsuro Tajiri<sup>6</sup>, Akira Nakagawara<sup>7</sup>, Satoru Miyano<sup>7</sup>, Seishi Ogawa<sup>8</sup>, Junko Takita<sup>1</sup> (<sup>1</sup>Dept. of Pediatrics, The Univ. of Tokyo., <sup>2</sup>Dept. of Pathology and Tumor Biology, Kyoto University, <sup>3</sup>Japanese Red Cross Gunma Blood Center, <sup>4</sup>Dept. of Pathological Diagnosis, Tokai University, <sup>5</sup>National Center for Child Health and Development, <sup>6</sup>Japan Neuroblastoma Study Group, <sup>7</sup>HGC, the institute of Medical Science, the University of Tokyo)

#### 神経芽腫500例における遺伝子背景と病理学的検討

瓜生 久美子<sup>1</sup>、吉田 健一<sup>2</sup>、片岡 圭亮<sup>2</sup>、閔 正史<sup>1</sup>、樋渡 光輝<sup>1</sup>、林 泰秀<sup>3</sup>、中澤 温子<sup>4</sup>、瀧本 哲也<sup>5</sup>、田尻 達郎<sup>6</sup>、中川原 章<sup>6</sup>、宮野 悟<sup>7</sup>、小川 誠司<sup>2</sup>、滝田 順子<sup>1</sup>（<sup>1</sup>東京大学・小児科、<sup>2</sup>京都大学腫瘍生物学、<sup>3</sup>群馬赤十字センター、<sup>4</sup>東海大学病理診断学、<sup>5</sup>国立成育医療研究センター、<sup>6</sup>日本神経芽腫研究グループ、<sup>7</sup>東京大学医科研ヒトゲノム解析センター）

### E-1015 Exploring Immunome landscape in biliary tract cancer

Asmaa Elzawahry<sup>1</sup>, Yasuhito Arai<sup>2</sup>, Natsuko Hama<sup>2</sup>, Hiromi Nakamura<sup>2</sup>, Mamoru Kato<sup>1</sup>, Tatsuhiko Shibata<sup>2</sup> (<sup>1</sup>Department of Bioinformatics, National Cancer Center Research Institute, Japan, <sup>2</sup>Division of Cancer Genomics, National Cancer Center Research Institute, Japan)

### E-1016 Impact of somatic mutations on outcome in patients with MDS after stem-cell transplantation

Tetsuichi Yoshizato<sup>1</sup>, Yusuke Shiozawa<sup>1</sup>, Kenichi Yoshida<sup>1</sup>, Yoshiko Atsuta<sup>2</sup>, Yasuhito Nannya<sup>1</sup>, Hiromichi Suzuki<sup>1</sup>, Keisuke Kataoka<sup>1</sup>, Kenichi Chiba<sup>3</sup>, Yuichi Shiraishi<sup>3</sup>, Yoshinobu Kanda<sup>4</sup>, Hideki Makishima<sup>4</sup>, Satoru Miyano<sup>3</sup>, Seishi Ogawa<sup>1</sup> (<sup>1</sup>Department of Pathology and Tumor biology, Kyoto Univ., Kyoto, Japan, <sup>2</sup>Japanese Data Center for Hematopoietic Cell Transplantation, Nagoya, Japan, <sup>3</sup>Human Genome Center, The Univ. of Tokyo, Tokyo, Japan, <sup>4</sup>Division of Hematology, Jichi Medical University, Saitama, Japan)

#### 骨髄異形成症候群移植症例における体細胞変異の影響

吉里 哲一<sup>1</sup>、塩澤 裕介<sup>1</sup>、吉田 健一<sup>1</sup>、熱田 由子<sup>2</sup>、南谷 泰仁<sup>1</sup>、鈴木 啓道<sup>1</sup>、片岡 圭亮<sup>1</sup>、千葉 健一<sup>3</sup>、白石 友一<sup>3</sup>、神田 善伸<sup>4</sup>、牧島 秀樹<sup>1</sup>、宮野 悟<sup>3</sup>、小川 誠司<sup>1</sup>（<sup>1</sup>京都大学 腫瘍生物学講座、<sup>2</sup>日本造血細胞移植データセンター、<sup>3</sup>東京大学 ヒトゲノム解析センター、<sup>4</sup>自治医科大学さいたま医療センター血液科）

### E-1017 Landscape of MDS genomes as revealed by whole genome sequencing

Yasuhito Nannya<sup>1</sup>, Kenichi Yoshida<sup>1</sup>, Keisuke Kataoka<sup>1</sup>, Tomoki Naoe<sup>2</sup>, Hitoshi Kiyoi<sup>3</sup>, Shigeru Chiba<sup>4</sup>, Norio Asou<sup>5</sup>, Yasushi Miyazaki<sup>6</sup>, Hiroko Tanaka<sup>7</sup>, Kenichi Chiba<sup>7</sup>, Yuichi Shiraishi<sup>7</sup>, Satoru Miyano<sup>7</sup>, Seishi Ogawa<sup>1</sup> (<sup>1</sup>Kyoto Univ., Med., Dep. Pathol. and Tumor Biol., <sup>2</sup>Nagoya Med. Center, <sup>3</sup>Nagoya Univ., Dep Hematol., <sup>4</sup>Tsukuba Univ. Dep. Hematol, <sup>5</sup>Saitama Med Univ. International Med Center, <sup>6</sup>Nagasaki Univ., Atomic Bomb Inst., <sup>7</sup>Tokyo Univ., IMSUT, HGC)

#### 全ゲノムシークエンシングによるMDSゲノム異常解析

南谷 泰仁<sup>1</sup>、吉田 健一<sup>1</sup>、片岡 圭亮<sup>1</sup>、直江 知樹<sup>2</sup>、清井 仁<sup>3</sup>、千葉 滋<sup>4</sup>、麻生 篤雄<sup>5</sup>、宮崎 泰司<sup>6</sup>、田中 洋子<sup>7</sup>、千葉 健一<sup>7</sup>、白石 友一<sup>7</sup>、宮野 悟<sup>7</sup>、小川 誠司<sup>1</sup>（<sup>1</sup>京大・医・腫瘍生物学、<sup>2</sup>名古屋医療センター、<sup>3</sup>名古屋大・血液腫瘍、<sup>4</sup>筑波大・血液内科、<sup>5</sup>埼玉医・国際医療<sup>7</sup>、<sup>6</sup>長崎大・原研内科、<sup>7</sup>東大・医科研・ヒトゲノム解析センター）

### E-1018 Systematic phenotyping of novel tumor-specific mutations in receptor tyrosine kinases detected in 1,685 cancer patients

Masakuni Serizawa<sup>1</sup>, Takeshi Nagashima<sup>2,3</sup>, Yuji Shimoda<sup>2,3</sup>, Shunpei Ohnami<sup>2</sup>, Sumiko Ohnami<sup>2</sup>, Keiichi Ohshima<sup>4</sup>, Tohru Mochizuki<sup>4</sup>, Takashi Nakajima<sup>5</sup>, Kenichi Urakami<sup>2</sup>, Masatoshi Kusuvara<sup>1</sup>, Ken Yamaguchi<sup>6</sup> (<sup>1</sup>Drug Discovery & Development Div. Shizuoka Cancer Ctr. Res. Inst., <sup>2</sup>Cancer Diagnostics Res. Div. Shizuoka Cancer Ctr. Res. Inst., <sup>3</sup>SRL Inc., <sup>4</sup>Medical Genetics Div. Shizuoka Cancer Ctr. Res. Inst., <sup>5</sup>Pathology Div. Shizuoka Cancer Ctr., <sup>6</sup>Shizuoka Cancer Ctr.)

#### がん症例1,685例で検出されたレセプターチロシンキナーゼ遺伝子における新規腫瘍特異的変異についての網羅的機能評価

芹澤 昌邦<sup>1</sup>、長嶋 刚史<sup>2,3</sup>、下田 勇治<sup>2,3</sup>、大浪 俊平<sup>2</sup>、大浪 澄子<sup>2</sup>、大島 啓一<sup>4</sup>、望月 徹<sup>4</sup>、中島 孝<sup>5</sup>、浦上 研一<sup>2</sup>、楠原 正俊<sup>1</sup>、山口 建<sup>6</sup>（<sup>1</sup>静岡がんセ・研・新規薬剤開発評価研究部、<sup>2</sup>静岡がんセ・研・診断技術開発研究部、<sup>3</sup>株式会社エスアールエル、<sup>4</sup>静岡がんセ・研・遺伝子診療研究部、<sup>5</sup>静岡がんセ・病・病理診断科、<sup>6</sup>静岡がんセンター）

**Japanese Oral Sessions**

Room 9 Oct. 6 (Thu.) 9:00-10:15

**J14-1****Diagnosis and treatment model of hepato-biliary-pancreatic cancer**

肝胆膵がんの診断・治療モデル

Chairperson: Shunsuke Kato (Dept. Clin. Oncol. Juntendo Univ., Grad. Sch. Med.)  
座長: 加藤 俊介 (順天堂大・医・腫瘍内科)**J-1019 Cancer genome evolution in early hepatocellular carcinoma and premalignant lesions**Akihisa Sakurada<sup>1</sup>, Toshihide Endo<sup>1</sup>, Naoki Einaga<sup>1</sup>, Yutaka Suzuki<sup>2</sup>, Yutaka Midorikawa<sup>3</sup>, Tadatoshi Takayama<sup>3</sup>, Masahiko Sugitani<sup>1</sup>, Mariko Esumi<sup>1</sup> (<sup>1</sup>Dept. Pathol., Nihon Univ. Sch. Med., <sup>2</sup>Dept. CBMS, Grad. Sch. Front. Sci., Univ. Tokyo, <sup>3</sup>Dept. Dig. Surg., Nihon Univ. Sch. Med.)

## 早期肝細胞癌と異型病変におけるがんゲノム進化解析

櫻田 明久<sup>1</sup>、遠藤 聖英<sup>1</sup>、栄永 直樹<sup>1</sup>、鈴木 穂<sup>2</sup>、緑川 泰<sup>3</sup>、高山 忠利<sup>3</sup>、杉谷 雅彦<sup>1</sup>、江角 真理子<sup>1</sup> (<sup>1</sup>日大・医・病理、<sup>2</sup>東大・新領域・メディカルゲノム、<sup>3</sup>日大・医・消外)**J-1020 Genome sequencing of canine hepatocellular carcinoma**Yuiko Tanaka<sup>1,2</sup>, Manabu Watanabe<sup>2</sup>, Kohei Saeki<sup>1</sup>, Masaya Tsuboi<sup>3</sup>, Takayuki Nakagawa<sup>1</sup>, Ryohei Nishimura<sup>1</sup>, Sumio Sugano<sup>2</sup> (<sup>1</sup>Surg., Veterinary Med., Univ. of Tokyo, <sup>2</sup>Genome System, Frontier Sci., Univ. of Tokyo, <sup>3</sup>Path., Veterinary Med., Univ. of Tokyo)

## イヌ肝細胞癌組織のゲノムシーケンス

田中 由依子<sup>1,2</sup>、渡邊 学<sup>2</sup>、佐伯 亘平<sup>1</sup>、坪井 誠也<sup>3</sup>、中川 貴之<sup>1</sup>、西村 亮平<sup>1</sup>、菅野 純夫<sup>2</sup> (<sup>1</sup>東京大・獣医・外科、<sup>2</sup>東京大・新領域・ゲノムシステム、<sup>3</sup>東京大・獣医・病理)**J-1021 Impact of programmed cell death 1 ligand 1 expression in patients with intrahepatic cholangiocarcinoma**

Shinji Itoh, Tomoharu Yoshizumi, Masahiro Shimokawa, Tomonari Shimagaki, Yoshihiro Yoshida, Kanrin Oh, Akihisa Nagatsu, Takashi Motomura, Noboru Harada, Norifumi Harimoto, Toru Ikegami, Yuji Soejima, Yoshihiko Maehara (Dep. Surgery and Science, Kyushu Univ.)

## 肝内胆管癌におけるPD-L1発現の生物学的意義

伊藤 心二、吉住 朋晴、下川 雅弘、島垣 智成、吉田 佳弘、王 敏林、長津 明久、本村 實志、原田 昇、播本 嘉史、池上 徹、副島 雄二、前原 喜彦 (九州大学・医・消化器・総合外科)

**J-1022 Effect on the intrahepatic cholangiocarcinoma by BAP1 expression change**

Kentaro Ishii, Shinobu Ohnuma, Minoru Kobayashi, Tatsuyuki Takada, Shimpei Maeda, Kyohei Ariake, Hideaki Karasawa, Hideo Ohtsuka, Masamichi Mizuma, Hiroki Hayashi, Hiroaki Mushi, Fuyuhiko Motoi, Michiaki Unno (Dept. Surg., Tohoku Univ. Grad. Sch. Med.)

## BAP1発現変化による肝内胆管癌への影響

石居 健太郎、大沼 忍、小林 実、高館 達之、前田 晋平、有明 恒平、唐澤 秀明、大塚 英郎、水間 正道、林 洋毅、武者 宏昭、元井 冬彦、海野 倫明 (東北大・消化器外科)

**J-1023 DPM is a critical prognostic factor and associates with K-ras mutation in pancreatic cancer.**

Nobuyuki Nishizawa, Keishi Yamashita, Yusuke Kumamoto, Kazuharu Igarashi, Satoru Ishii, Toshimichi Tanaka, Keigo Yokoi, Masahiko Watanabe (Department of Surgery, Kitasato University School of Medicine)

## 脾癌の強い予後因子である脾周囲剥離面(DPM)因子は、K-ras遺伝子変異と相関がある

西澤 伸恭、山下 繼史、隈元 雄介、五十嵐 一晴、石井 智、田中 俊道、横井 圭悟、渡邊 昌彦 (北里大学 外科学)

**J-1024 Interaction between Pancreatic cancer cells and MSC for cancer progression**Eisaku Kondo<sup>1</sup>, Ken Saito<sup>1</sup>, Hidekazu Iioka<sup>1</sup>, Masakiyo Sakaguchi<sup>2</sup> (<sup>1</sup>Div. Mol. Cell Pathol., Niigata Univ., GrSch. Med., <sup>2</sup>Dept. of Cell Biol., Okayama Univ., GrSch. Med.)

## 浸潤性肺管癌におけるがん-間質相互反応の増殖・浸潤における役割

近藤 英作<sup>1</sup>、齋藤 憲<sup>1</sup>、飯岡 英和<sup>1</sup>、阪口 政清<sup>2</sup> (<sup>1</sup>新潟大・院医・分子細胞病理、<sup>2</sup>岡山大・院医・細胞生物学)**English Oral Sessions**

Room 9 Oct. 6 (Thu.) 10:15-11:30

**E14-1****Hepato-biliary-pancreatic cancer: translational research**

肝胆膵がん：トランスレーショナルリサーチ

Chairperson: Masatoshi Kudo (Dept. of Gastroenterology &amp; Hepatology, Kindai Univ. Faculty of Med.)

座長: 工藤 正俊 (近畿大・医・消化器)

**E-1019 Epigenomic dysregulation of hepatic enhancers in liver cancer**Genta Nagae<sup>1</sup>, Claire Renard-Guillem<sup>1</sup>, Kenji Tatsuno<sup>1</sup>, Shogo Yamamoto<sup>1</sup>, Hiroki Ueda<sup>1</sup>, Akimasa Hayashi<sup>1</sup>, Naohiro Makise<sup>1</sup>, Yutaka Midorikawa<sup>2</sup>, Hidewaki Nakagawa<sup>3</sup>, Tatsuhiro Shibata<sup>4</sup>, Hiroyuki Aburatani<sup>1</sup> (<sup>1</sup>Res. Ctr. for Advanced Sci. & Tech., The Univ. of Tokyo, <sup>2</sup>Dept. Dig. Surg., Nihon Univ., <sup>3</sup>Hum. Gen. Centr., IMS, RIKEN, <sup>4</sup>The Inst. of Med. Sci., The Univ. of Tokyo)

## 肝がんにおけるエンハンサー領域のエピゲノム異常

永江 玄太<sup>1</sup>、Claire Renard-Guillem<sup>1</sup>、辰野 健二<sup>1</sup>、山本 尚吾<sup>1</sup>、上田 宏生<sup>1</sup>、林 琳匡<sup>1</sup>、牧瀬 尚大<sup>1</sup>、緑川 泰<sup>2</sup>、中川 英刀<sup>3</sup>、柴田 龍弘<sup>4</sup>、油谷 浩幸<sup>1</sup> (<sup>1</sup>東京大学・先端研・ゲノムサイエンス、<sup>2</sup>日本大学・消化器外科、<sup>3</sup>理化学研究所・ヒトゲノムセンター、<sup>4</sup>東京大学・医学研究所)**E-1020 Histone demethylating activity of KDM3A governs the AP-1 dependent tumor initiating potential in liver tumorigenesis**Takuma Nakatsuka<sup>1</sup>, Keisuke Tateishi<sup>1</sup>, Keisuke Yamamoto<sup>1</sup>, Hayato Nakagawa<sup>1</sup>, Yoshinari Asaoka<sup>1</sup>, Yasuo Tanaka<sup>1</sup>, Hideaki Ijichi<sup>1</sup>, Juro Sakai<sup>2</sup>, Hiroyuki Aburatani<sup>3</sup>, Yoichi Shinkai<sup>4</sup>, Kazuhiko Koike<sup>1</sup> (<sup>1</sup>Dept. Gastroenterol., Univ. Tokyo, Sch. Med., <sup>2</sup>Div. Metabolic Med., RCAST, Univ. Tokyo, <sup>3</sup>Div. Genome Sci., RCAST, Univ. Tokyo, <sup>4</sup>Cellular Memory Lab., RIKEN Advanced Sci. Inst.)

## 転写因子AP-1に依存した肝腫瘍形成能はヒストン脱メチル化酵素KDM3Aにより制御される

中塚 拓馬<sup>1</sup>、立石 敬介<sup>1</sup>、山本 恵介<sup>1</sup>、中川 勇人<sup>1</sup>、浅岡 良成<sup>1</sup>、田中 康雄<sup>1</sup>、伊地知 秀明<sup>1</sup>、酒井 寿郎<sup>2</sup>、油谷 浩幸<sup>3</sup>、眞貝 洋一<sup>4</sup>、小池 和彦<sup>1</sup> (<sup>1</sup>東大・医・消化器内科、<sup>2</sup>東大・先端研・代謝医学、<sup>3</sup>東大・先端研・ゲノムサイエンス、<sup>4</sup>理研・基幹研究所・細胞記憶研究室)**E-1021 Driver fusion genes in biliary tract cancer**Yasuhito Arai<sup>1</sup>, Hiromi Nakamura<sup>1</sup>, Yasushi Totoki<sup>1</sup>, Natsuko Hama<sup>1</sup>, Hidenori Ojima<sup>2</sup>, Fumie Hosoda<sup>1</sup>, Kazuaki Shimada<sup>3</sup>, Chigusa Morizane<sup>4</sup>, Takuji Okusaka<sup>4</sup>, Tatsuhiro Shibata<sup>1</sup> (<sup>1</sup>Div. Cancer Genomics, Natl. Can. Ctr. Res. Inst., <sup>2</sup>Dept. Pathol., Sch. Med., Keio Univ., <sup>3</sup>Div. Hepatobil. Panc. Surg., Natl. Can. Ctr. Hosp., <sup>4</sup>Div. Hepatobil. Panc. Oncol., Natl. Can. Ctr. Hosp.)

## 胆道がんにおけるドライバー融合遺伝子の解析

新井 康仁<sup>1</sup>、中村 浩実<sup>1</sup>、十時 泰<sup>1</sup>、濱 奈津子<sup>1</sup>、尾島 英知<sup>2</sup>、細田 文恵<sup>1</sup>、島田 和明<sup>3</sup>、森実 千種<sup>4</sup>、奥坂 拓志<sup>4</sup>、柴田 龍弘<sup>1</sup> (<sup>1</sup>国立がん研究セ・研・がんゲノミクス、<sup>2</sup>慶應大・医・病理、<sup>3</sup>国立がん研究セ・病・肝胆膵外、<sup>4</sup>国立がん研究セ・病・肝胆膵内)**E-1022 Extracellular vesicle-mediated transfer of non-coding RNAs modulates invasion and metastasis in human pancreatic cancer**Kenji Takahashi<sup>1</sup>, Yu Ota, Yuko Suzuki, Yohei Kitano, Yuichi Makino (2nd Dept. Int. Med., Asahikawa Med. Univ.)

## 細胞外小胞EVによるノンコーディングRNAの細胞間伝達は腫瘍浸潤・転移制御に寄与する

高橋 賢治、太田 雄、鈴木 裕子、北野 陽平、牧野 雄一 (旭川医科大学・医・第2内科)

**E-1023 Long non-coding RNA, H19 as a novel therapeutic target for metastasis of pancreatic cancer**Toshiyuki Iishiwa<sup>1</sup>, Hisashi Yoshimura<sup>2</sup>, Yoko Matsuda<sup>3</sup>, Naoshi Ishikawa<sup>1</sup>, Tomio Arai<sup>3</sup>, Kaiyo Takubo<sup>1</sup>, Junko Aida<sup>1</sup> (<sup>1</sup>Geriatric Pathol., Tokyo Metropolitan Inst. Gerontol., <sup>2</sup>Nippon Veterinary and Life Science University, <sup>3</sup>Dept. Pathol., Tokyo Metropolitan Geriatric Hosp.)

## 脾癌の転移に対する新たな治療標的としての長鎖non-coding RNA, H19

石渡 俊行<sup>1</sup>、吉村 久志<sup>2</sup>、松田 陽子<sup>3</sup>、石川 直<sup>1</sup>、新井 富生<sup>3</sup>、田久保 海瑠<sup>1</sup>、相田 順子<sup>1</sup> (<sup>1</sup>東京都健康長寿医療センター・高齢者がん、<sup>2</sup>日本獣医学生命科学大学・獣医保健看護学科、<sup>3</sup>東京都健康長寿医療センター・病理)**E-1024 Activation of lysosomal mediated cell death in the course of autophagy through mTOR-C1 inhibition**Fayaz Malik<sup>1</sup>, Anup Singh<sup>1</sup> (<sup>1</sup>Dept. of Cancer Pharmacology, Indian Institute of Integrative Medicine, <sup>2</sup>Indian Institute of Integrative Medicine)

## Japanese Oral Sessions

Room 10 Oct. 6 (Thu.) 9:00-10:15

J

J14-2

### Urological tumor and genome analysis

泌尿器系腫瘍、ゲノム解析

Chairperson: Seiichi Mori (Genome Ctr., Japanese Found. for Cancer Res.)

座長: 森 誠一 (がん研・ゲノムセ)

#### J-1025 Functional analysis of Zyxin in DU145 prostate cancer cell behavior (II)

Kei Yamamoto<sup>1</sup>, Rina Sakamaki<sup>2</sup>, Shungo Saito<sup>2</sup>, Ryo Maruyama<sup>2</sup>, Jieun Seo<sup>3</sup>, Yasuki Hori<sup>1</sup>, Hiroji Uemura<sup>5</sup>, Hitoshi Ishiguro<sup>6,7</sup>, Tatsuya Kitano<sup>1</sup>, Tadashi Nittami<sup>1</sup>, Masatoshi Watanabe<sup>1</sup> (<sup>1</sup>Med. Eng., Grad. Sch. Eng., Yokohama Natl. Univ., <sup>2</sup>Coll. Eng. Sci., Yokohama Natl. Univ., <sup>3</sup>Dep. Biomed. Sci., Coll. Med., Seoul Natl. Univ., <sup>4</sup>Sch. Med., Akita Univ., <sup>5</sup>Dept. Urol& Renal Transplant, Yokohama City Univ. Med. Ctr., <sup>6</sup>Dept. Urol., Yokohama City Univ. Grad. Sch. Med., <sup>7</sup>Photocatalyst Group, Kanagawa Acad. Sci. Tech.)

#### DU145 前立腺癌細胞の挙動における Zyxin の機能的解析(II)

山本 圭<sup>1</sup>、酒巻 里菜<sup>2</sup>、斎藤 春五<sup>2</sup>、丸山 謙<sup>2</sup>、徐 芝隱<sup>3</sup>、堀 萌樹<sup>4</sup>、上村 博司<sup>5</sup>、石黒 斎<sup>6,7</sup>、北野 竜也<sup>1</sup>、新田見 匡<sup>1</sup>、渡邊 昌俊<sup>1</sup> (<sup>1</sup>横浜国大院・工研院・医工学、<sup>2</sup>横浜国大・理工、<sup>3</sup>ソウル大・医・生体医科学、<sup>4</sup>秋田大・医、<sup>5</sup>横浜市大・センター病院・泌尿器・腎移植科、<sup>6</sup>横浜市大・院・医・泌尿器病態学、<sup>7</sup>神奈川科学技術アカデミー・光触媒グループ)

#### J-1026 Galectin-3 regulates androgen independent progression through RTK and TGF-β signaling pathway in prostate cancer cells

Kei Daizumoto, Tomoharu Fukumori, Tsogt-Ochir Dondoo, Minoru Kowada, Terumichi Shintani, Tomoya Fukawa, Hiroyoshi Nakatsuji, Masayuki Takahashi, Hiro-omi Kanayama (Dept.Urology, IBS, The Univ.Tokushima Graduate School)

Galectin-3は前立腺癌細胞においてチロシンキナーゼ受容体およびTGF-βシグナルを介してアンドロゲン非依存性癌進展を調節する  
大豆本 圭、福森 知治、ドンドオ ツォクトーオチル、小和田 実、新谷 晃理、布川 朋也、中達 弘能、高橋 正幸、金山 博臣（徳島大学大学院IBS研究部 泌尿器科学分野）

#### J-1027 Magnetic nanoparticles enhance docetaxel-induced apoptosis via suppression of NF-κB and anti-apoptotic genes in DU145.

Kanako Kojima<sup>1</sup>, Shungo Saito<sup>2</sup>, Sanai Takahashi<sup>2</sup>, Wataru Kobayashi<sup>2</sup>, Saho Hashimoto<sup>1</sup>, Yoshihiro Endo<sup>1</sup>, Tadashi Nittami<sup>1</sup>, Masatoshi Watanabe<sup>1</sup> (<sup>1</sup>Med. Eng., Grad. Sch. Eng., Yokohama Natl. Univ., <sup>2</sup>Coll. Engin. Sci., Yokohama Natl. Univ.)

磁性体ナノ粒子はNF-κBと抗アポトーシス遺伝子の抑制で、

DU145 細胞のドセタキセルによる細胞死を増強する

小島 佳奈子<sup>1</sup>、斎藤 春五<sup>2</sup>、高橋 沙奈衣<sup>2</sup>、小林 航<sup>2</sup>、橋本 紗歩<sup>1</sup>、遠藤 宣広<sup>1</sup>、新田見 匡<sup>1</sup>、渡邊 昌俊<sup>1</sup> (<sup>1</sup>横浜国大院・工研院・医工学、<sup>2</sup>横浜国大・理工)

#### J-1028 Potent efficacy of oncolytic HSV-1 expressing interleukin 12 in non-seminoma testicular cancer

Shigenori Kakutani<sup>1</sup>, Hiroshi Fukuhara<sup>1</sup>, Akihiro Naito<sup>1</sup>, Satoru Taguchi<sup>1</sup>, Yukio Homma<sup>1</sup>, Yasushi Ino<sup>2</sup>, Tomoki Todo<sup>2</sup> (<sup>1</sup>Dept. Urology, Graduate School of Medicine, The University of Tokyo, <sup>2</sup>Division of Innovative Cancer Therapy, IMUT)

非セミノーマ精巣腫瘍における IL-12 発現型第三世代 HSV-1 の抗腫瘍効果

角谷 成紀<sup>1</sup>、福原 浩<sup>1</sup>、内藤 晶裕<sup>1</sup>、田口 慧<sup>1</sup>、本間 之夫<sup>1</sup>、稻生 靖<sup>2</sup>、藤堂 具紀<sup>2</sup> (<sup>1</sup>東京大学大学院泌尿器科、<sup>2</sup>東京大学医科学研究所先端がん治療分野)

#### J-1029 Prognostic Relevance of Integrated Molecular Profiling in Adult T-cell Leukemia/Lymphoma

Yotaro Ochi<sup>1</sup>, Keisuke Kataoka<sup>1</sup>, Yasunobu Nagata<sup>1</sup>, Akira Kitanaka<sup>2</sup>, Junichiro Yasunaga<sup>3</sup>, Masako Iwanaga<sup>4</sup>, Yuichi Shiraishi<sup>5</sup>, Kenichi Chiba<sup>5</sup>, Aiko Sato-Otsubo<sup>1</sup>, Masashi Sanada<sup>1,6</sup>, Hiroko Tanaka<sup>5</sup>, Hiromichi Suzuki<sup>1</sup>, Yusuke Sato<sup>1</sup>, Yusuke Shiozawa<sup>1</sup>, Tetsuichi Yoshizato<sup>1</sup>, Kenichi Yoshida<sup>1</sup>, Kisato Nosaka<sup>7</sup>, Masakatsu Hishizawa<sup>8</sup>, Yoshitaka Imaizumi<sup>9</sup>, Tomonori Hidaka<sup>9</sup>, Tsuyoshi Nakamaki<sup>11</sup>, Shuichi Miyawaki<sup>12</sup>, Kensei Tobinai<sup>10</sup>, Yasushi Miyazaki<sup>9</sup>, Akifumi Takatori-Kondo<sup>8</sup>, Tatsuhiro Shibata<sup>13</sup>, Satoru Miyanaga<sup>3</sup>, Kazuya Shimoda<sup>2</sup>, Masao Matsuoka<sup>5</sup>, Toshiki Watanabe<sup>14</sup>, Seishi Ogawa<sup>1</sup> (<sup>1</sup>Dept. of Tumor & Path., Kyoto Univ., <sup>2</sup>Dept. of Gastroenterology & Hematology, Faculty of Med., Miyazaki Univ., <sup>3</sup>Lab. of Virus Control, Inst. for Virus Res., Kyoto Univ., <sup>4</sup>Nagasaki Univ. Grad. Sch. of Biomed. Sci., <sup>5</sup>Human Genome Ctr., Inst. of Med. Sci., The Univ. of Tokyo, <sup>6</sup>Dept. of Advanced Diagnosis, Clin. Res. Ctr., Nagoya Med. Ctr., <sup>7</sup>Dept. of Hematology, Kumamoto Univ. Sch. of Med., <sup>8</sup>Dept. of Hematology & Oncology, Grad. Sch. of Med., Kyoto Univ., <sup>9</sup>Dept. of Hematology, Atomic Bomb Disease & Hibakusya Med. Unit, Atomic Bomb Disease Inst., Nagasaki Univ., <sup>10</sup>Dept. of Hematology, Natl. Cancer Ctr. Hosp., <sup>11</sup>Div. of Hematology, Dept. of Med., Showa Univ. Sch. of Med., <sup>12</sup>Div. of Hematology, Dept. of Internal Med., Tokyo Metropolitan Ohtsuka Hosp., <sup>13</sup>Div. Cancer Genomics, Natl. Cancer Ctr. Res. Inst, <sup>14</sup>Grad. Sch. of Frontier Sci., The Univ. of Tokyo)

成人T細胞性白血病/リンパ腫における全遺伝子プロファイリングと予後の相関

越智 陽太郎<sup>1</sup>、片岡 圭亮<sup>1</sup>、永田 安伸<sup>1</sup>、北中 明<sup>2</sup>、安永 純一朗<sup>3</sup>、岩永 正子<sup>4</sup>、白石 友一<sup>5</sup>、千葉 健一<sup>5</sup>、佐藤 亜衣子<sup>1</sup>、真田 昌<sup>1,6</sup>、田中 洋子<sup>5</sup>、鈴木 啓道<sup>1</sup>、佐藤 悠佑<sup>1</sup>、塩澤 裕介<sup>1</sup>、吉里 哲一<sup>1</sup>、吉田 健一<sup>1</sup>、野坂 生郷<sup>7</sup>、菱澤 方勝<sup>8</sup>、今泉 芳孝<sup>9</sup>、日高智徳<sup>2</sup>、中牧 刚<sup>11</sup>、宮脇 修一<sup>12</sup>、飛内 賢正<sup>10</sup>、宮崎 泰司<sup>9</sup>、高折 晃史<sup>8</sup>、柴田 龍弘<sup>13</sup>、宮野 悟<sup>3</sup>、下田 和哉<sup>2</sup>、松岡 雅雄<sup>5</sup>、渡邊 俊樹<sup>14</sup>、小川 誠司<sup>1</sup> (<sup>1</sup>京都大・院医・腫瘍生物、<sup>2</sup>宮崎大・医・消化器血液、<sup>3</sup>京都大・ウイルス研・ウイルス制御、<sup>4</sup>長崎大・生命医科学、<sup>5</sup>東京大・医科研・ヒトゲノム解析セ、<sup>6</sup>名古屋医療セ・高度診断研究、<sup>7</sup>熊本大・血液内科、<sup>8</sup>京都大・院医・血液腫瘍内科、<sup>9</sup>長崎大・原研・原爆・ヒバクシャ医療・血液内科、<sup>10</sup>国立がん研究セ・血液内科、<sup>11</sup>昭和大・内科・血液内科、<sup>12</sup>東京都大塚病院・血液内科、<sup>13</sup>国立がん研究セ・研・がんゲノミクス、<sup>14</sup>東京大・新領域創成科研)

#### J-1030 Targeted next-generation sequencing analysis of well-differentiated/dedifferentiated liposarcoma

Naofumi Asano<sup>1,6</sup>, Sachiyu Mitani<sup>2</sup>, Akihiko Yoshida<sup>3</sup>, Eisuke Kobayashi<sup>4</sup>, Motokiyo Komiyama<sup>5</sup>, Hiroyuki Fujimoto<sup>5</sup>, Hirokazu Chuman<sup>4</sup>, Hideo Morioka<sup>6</sup>, Morio Matumoto<sup>6</sup>, Masaya Nakamura<sup>4</sup>, Akira Kawai<sup>4</sup>, Tadashi Kondo<sup>1</sup>, Hitoshi Ichikawa<sup>2</sup> (<sup>1</sup>Div. of Rare Cancer Res., Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Dept. of Clin. Genomics, Natl. Cancer Ctr. Res. Inst., <sup>3</sup>Dept. of Pathol., Natl. Cancer Ctr. Hosp., <sup>4</sup>Dept. of Musculoskeletal Oncol., Natl. Cancer Ctr. Hosp., <sup>5</sup>Dept. of Urol., Natl. Cancer Ctr. Hosp., <sup>6</sup>Dept. of Orthop. Surg., Keio Univ., Sch. Med.)

次世代シークエンサーを用いた高分化/脱分化型脂肪肉腫の治療標的探索

浅野 尚文<sup>1,6</sup>、三谷 幸代<sup>2</sup>、吉田 朗彦<sup>3</sup>、小林 英介<sup>4</sup>、込山 元清<sup>5</sup>、藤元 博行<sup>5</sup>、中馬 広一<sup>4</sup>、森岡 秀夫<sup>6</sup>、松本 守雄<sup>6</sup>、中村 雅也<sup>6</sup>、川井 章<sup>4</sup>、近藤 格<sup>1</sup>、市川 仁<sup>2</sup> (<sup>1</sup>国立がん研究セ・研究所・臨床ゲノム解析、<sup>2</sup>国立がん研究セ・中央病院・病理、<sup>3</sup>国立がん研究セ・中央病院・骨軟部、<sup>4</sup>国立がん研究セ・中央病院・整形、<sup>5</sup>慶大・医・整形)

**English Oral Sessions**

Room 10 Oct. 6 (Thu.) 10:15-11:30

**E14-2 Translational research in urothelial cancer**  
尿路系がんの基礎と臨床Chairperson: Norio Nonomura (Dept. of Urol, Osaka Univ. Grad. Sch. of Med.)  
座長: 野々村 祝夫 (大阪大・院医・泌尿器)**E-1025 VHL-deficient renal cancer cells gain resistance to apoptosis inducers by activating AKT through the IGF1R-PI3K pathway**Ryuji Yamaguchi (Kansai Medical University Dept of Anesthesiology)  
VHL 欠損腎臓癌細胞は IGF1R-PI3K を通して AKT を活性化し、ミトコンドリア依存性細胞死誘導治療に耐性になる。

山口 龍二 (関西医科大学・麻酔科)

**E-1026 Cancer stem cell characteristics and aldehyde dehydrogenase activity in mTOR inhibitor-resistant kidney cancer cells**Kazuyuki Numakura<sup>1</sup>, Jean-Christophe Pignon<sup>2</sup>, Jesse Novak<sup>2</sup>, Toni Choueiri<sup>3</sup>, Sabina Signoretti<sup>2</sup> (<sup>1</sup>Dept. Urol., Akita Univ., Grad. Sch. Med., <sup>2</sup>Dept. Path., Brigham and Women's Hosp., Harvard Med. Sch., <sup>3</sup>Dept. Oncol., Dana-Farber Cancer Inst., Harvard Med. Sch.)

mTOR 阻害剤耐性腎癌細胞における癌幹細胞とアルデヒドヒドロゲナーゼ活性の意義

沼倉一幸<sup>1</sup>, Jean-Christophe Pignon<sup>2</sup>, Jesse Novak<sup>2</sup>, Toni Choueiri<sup>3</sup>, Sabina Signoretti<sup>2</sup> (<sup>1</sup>秋田大・医・泌尿器科、<sup>2</sup>ハーバード大・医・病理、<sup>3</sup>ハーバード大・医・腫瘍内科)**E-1027 Renal cancer tissue-exudated extracellular vesicles upregulates the endothelial cell permeability**Jingushi Kentaro<sup>1</sup>, Koji Ueda<sup>2</sup>, Motohide Uemura<sup>3</sup>, Toshiro Kinouchi<sup>3</sup>, Kyosuke Matsuzaki<sup>3</sup>, Kazutoshi Fujita<sup>3</sup>, Norio Nonomura<sup>3</sup>, Kazutake Tsujikawa<sup>1</sup> (<sup>1</sup>Mol. Cell. Physiol., Grad. Sch. Pharm. Sci., Osaka Univ., <sup>2</sup>Project. Personalized Can. Med., Genome Ctr., JFCR, <sup>3</sup>Dept. Urology, Grad. Sch. Med., Osaka Univ.)

腎癌組織由来細胞外小胞は血管内皮細胞の透過性を上昇させる

神宮司 健太郎<sup>1</sup>, 植田 幸嗣<sup>2</sup>, 植村 元秀<sup>3</sup>, 木内 利郎<sup>3</sup>, 松崎 恭介<sup>3</sup>, 藤田 和利<sup>3</sup>, 野々村 祝夫<sup>3</sup>, 辻川 和丈<sup>1</sup> (<sup>1</sup>阪大・薬・細胞生理、<sup>2</sup>がん研・ゲノム・がんオーダーメイド、<sup>3</sup>阪大・医・泌尿器科)**E-1028 Is prognosis linked to tumor heterogeneity: A prostate cancer case study**

Yoshie Hidekazu, Anna Sedukhina, Kou Sato (St. Marianna Med. Univ., Sch. Med, Graduate School, Pharmagenomics)

前立腺癌の予後因子とヘテロジエナイティの関連について

吉江 秀和、セドキーナ アンナ、佐藤 工 (聖マリ医大大学院遺伝子多型機能解析学)

**E-1029 Noncoding RNA expression profiling in a mouse PTEN-deficient prostate cancer**Yurie Kura<sup>1</sup>, Marco A. DeVelasco<sup>1,2</sup>, Kazuko Sakai<sup>2</sup>, Yoshihiko Fujita<sup>2</sup>, Yosuke Togashi<sup>2</sup>, Masato Terashima<sup>2</sup>, Kazuhiro Yoshikawa<sup>3</sup>, Kazuto Nishio<sup>2</sup>, Hirotsugu Uemura<sup>1</sup> (<sup>1</sup>Dept. Uro., Med., Kindai Univ., <sup>2</sup>Dept. Genome Biol., Med., Kindai Univ., <sup>3</sup>Aichi Med. Univ.)

PTEN ノックアウトマウス前立腺癌におけるノンコーディング RNA の検討

倉由恵<sup>1</sup>、デベラスコ マルコ<sup>1,2</sup>、坂井 和子<sup>2</sup>、藤田 至彦<sup>2</sup>、富樫 庸介<sup>2</sup>、寺嶋 雅人<sup>2</sup>、吉川 和宏<sup>3</sup>、西尾 和人<sup>2</sup>、植村 天愛<sup>1</sup> (<sup>1</sup>近畿大学医学部泌尿器科学教室、<sup>2</sup>近畿大学医学部ゲノム生物学教室、<sup>3</sup>愛知医科大学)**E-1030 Differential diagnosis of bladder cancer by urine odor as a biomarker using mouse behavioral assays with a Y-maze**Yoichi Mizutani<sup>1</sup>, Takaaki Sato<sup>2</sup>, Toma Aomatsu<sup>1</sup>, Shuya Takahashi<sup>1</sup>, Sae Ashida<sup>1</sup>, Kanari Nishioka<sup>1</sup>, Teruki Maeda<sup>1</sup>, Mizuki Horita<sup>1</sup>, Kimihiko Yoneda<sup>2</sup>, Shinya Uchimoto<sup>4</sup>, Mitsuhiro Nonomura<sup>5</sup>, Yoji Katsuoka<sup>6</sup> (<sup>1</sup>Dept. Med. Engineering, Health Sci., Aino Univ., <sup>2</sup>Health Research Institute, Advanced Industrial Science and Technology, <sup>3</sup>Department of Urology, Kameoka-Shimizu Hospital, <sup>4</sup>Department of Urology, Nozaki Tokushukai Hospital, <sup>5</sup>Department of Urology, Kyoto-Katsura Hospital, <sup>6</sup>Department of Urology, Port Island Hospital)

尿臭をメルクマールにマウス行動実験・Y 迷路による膀胱癌の鑑別診断

水谷 陽一<sup>1</sup>、佐藤 孝明<sup>2</sup>、青松 透真<sup>1</sup>、高橋 周矢<sup>1</sup>、芦田 彩恵<sup>1</sup>、西岡 香奈里<sup>1</sup>、前田 晃紀<sup>1</sup>、堀田 瑞季<sup>1</sup>、米田 公彦<sup>3</sup>、内本 晋也<sup>4</sup>、野々村 光生<sup>5</sup>、勝岡 洋治<sup>6</sup> (<sup>1</sup>藍野大・医療保健・臨床工学科、<sup>2</sup>産総研・バイオメディカル研、<sup>3</sup>亀岡清水病院・泌尿器科、<sup>4</sup>野崎徳州会病院・泌尿器科、<sup>5</sup>京都桂病院・泌尿器科、<sup>6</sup>ポートアイランド病院・泌尿器科)**English Oral Sessions**

Room 11 Oct. 6 (Thu.) 9:00-10:15

**E13-1 Signal transduction and regulation of gene expression (1)**  
シグナル伝達と遺伝子発現 (1)Chairperson: Daizo Koinuma (Dept. of Mol. Pathol., Grad. Sch. of Med., The Univ. of Tokyo)  
座長: 鯉沼 代造 (東京大・院医・分子病理)**E-1031 Identification of LASEP1 as a new serological and prognostic biomarker and a therapeutic target for lung cancer**Atsushi Takano<sup>1,2</sup>, Yusuke Nakamura<sup>3</sup>, Yataro Daigo<sup>1,2</sup> (<sup>1</sup>Ctr. for Antibody/Vaccine, Res. Hosp., Inst. Med. Sci., Univ. Tokyo, <sup>2</sup>Dept. of Med. Oncol./Cancer Ctr., Shiga Univ. of Med. Sci., <sup>3</sup>Dept. of Med. and Surg., Univ. of Chicago)肺がんの新規バイオマーカー、治療標的分子候補 LASEP1 の同定  
高野 淳<sup>1,2</sup>、中村 祐輔<sup>3</sup>、醍醐 弥太郎<sup>1,2</sup> (<sup>1</sup>東大・医科研病院・抗体ワクチンセンター、<sup>2</sup>滋賀医大・医・腫瘍内科・腫瘍センター、<sup>3</sup>シカゴ大学・内科外科)**E-1032 Expression of the chemokine CXCL14 is a predictive biomarker for cetuximab-dependent tumour suppression**Xiao-Yan Yang<sup>1,2</sup>, Shigeyuki Ozawa<sup>3</sup>, Takeharu Ikoma<sup>3</sup>, Kenji Suzuki<sup>3</sup>, Keisuke Kanamori<sup>3</sup>, Tohru Kiyono<sup>4</sup>, Eiro Kubota<sup>5</sup>, Ryu-Ichiro Hata<sup>1,2</sup> (<sup>1</sup>Oral Health Sci. Res. Ctr., Grad. Sch. Kanagawa Dent. Univ., <sup>2</sup>Dept. Oral Sci., Grad. Sch. Kanagawa Dent. Univ., <sup>3</sup>Dept. Oral Maxillofacial Surg., Grad. Sch. Dent. Kanagawa Dent. Univ., <sup>4</sup>Div. Carcinogen and Canc. Prevent. Natl. Cancer Ctr. Res. Inst.)

ケモカイン CXCL14 の発現がセツキシマブの腫瘍応答性を決定する

陽 晓艶<sup>1,2</sup>、小澤 重幸<sup>3</sup>、生駒 丈晴<sup>3</sup>、鈴木 健司<sup>3</sup>、金森 慶亮<sup>3</sup>、清野 透<sup>4</sup>、久保田 英朗<sup>3</sup>、畠 隆一郎<sup>1,2</sup> (<sup>1</sup>神歯大・院・口腔難治研、<sup>2</sup>神歯大・院・口腔科学、<sup>3</sup>神歯大・院・顎顔面外科、<sup>4</sup>国立がん研究センター・発がん・予防)**E-1033 The role of podoplanin-mediated platelet aggregation in tumour growth in vivo**Kenichi Miyata<sup>1,2</sup>, Ai Takemoto<sup>1</sup>, Naoya Fujita<sup>1,2</sup> (<sup>1</sup>Div. Exp. Chemother., Cancer Chemoth. Ctr., JFCR, <sup>2</sup>Grad. Sch. of Frontier Sciences, The Univ. of Tokyo)

Podoplanin を介した血小板凝集による腫瘍の増大

宮田 憲一<sup>1,2</sup>、竹本 愛<sup>1</sup>、藤田 直也<sup>1,2</sup> (<sup>1</sup>がん研・化療セ・基礎、<sup>2</sup>東大院・新領域)**E-1034 A new pathogenic role of IL-34 in cancer**

Ken-ichiro Seino, Muhammad Baghdadi (Div. Immunobiology, Inst. Genetic Med., Hokkaido Univ.)

がんにおける IL-34 の新しい病的役割

清野 研一郎、バグダディ ムハンマド (北海道大学・遺制研・免疫生物学)

**E-1035 Role of TGF-β signaling in renal cancer progression**

Luna Taguchi, Shogo Ehata, Kohei Miyazono (Dept. Mol. Path., Grad. Sch. Med., Univ. Tokyo)

腎臓がんの進展における TGF-β シグナルの役割

田口 瑠奈、江幡 正悟、宮園 浩平 (東大・院医・分病)

**E-1036 Ets-2 transcription factor inhibits endothelial-to-mesenchymal transition by suppressing endogenous TGF-β2 expression**Yasuhiro Yoshimatsu<sup>1</sup>, Kentaro Maeda<sup>1</sup>, Kohei Miyazono<sup>2</sup>, Tetsuro Watabe<sup>3</sup> (<sup>1</sup>Lab. Oncol., Sch. Life Sci., Tokyo Univ. Pharma. Life Sci., <sup>2</sup>Dept. Mol. Pathol., Grad. Sch. Med., Univ. Tokyo, <sup>3</sup>Dept. Bio-matrix, Grad. Sch. Med. Dent., Tokyo Med. Dent. Univ.)

Ets-2 転写因子は内因性の TGF-β2 の発現を抑制することで内皮間葉移行(EndMT)を阻害する

吉松 康裕<sup>1</sup>、前田 健太郎<sup>1</sup>、宮園 浩平<sup>2</sup>、渡部 敏郎<sup>3</sup> (<sup>1</sup>東大・生・命・腫瘍医科、<sup>2</sup>東大・院医・分子病理、<sup>3</sup>東医歯大・医歯総合・硬組織病態)

## English Oral Sessions

Room 11 Oct. 6 (Thu.) 10:15-11:30

E

### E11-1 Cell differentiation 細胞分化

Chairperson: Koji Okamoto (Div. Cancer Differentiation, Natl. Cancer Ctr. Res. Inst.)

座長：岡本 康司（国立がん研究セ・研・がん分化制御解析）

#### E-1037 Prolonged exposure to TGF- $\beta$ stabilizes stem-cell state of breast cancer cells through activation of Akt signaling

Yoko Katsuno<sup>1</sup>, Kohei Miyazono<sup>1</sup>, Rik Deryck<sup>2</sup> (<sup>1</sup>Dept. Mol. Pathol., Grad. Sch. Med., Univ. of Tokyo, <sup>2</sup>Dept. Cell & Tissue Biol., UCSF)

長期 TGF- $\beta$  刺激は Akt シグナル活性化を介して乳がん細胞の幹細胞様形質を安定化させる

勝野 蓉子<sup>1</sup>、宮園 浩平<sup>1</sup>、Rik Deryck<sup>2</sup> (<sup>1</sup>東大・院医・分子病理、<sup>2</sup>カリフォルニア大サンフランシスコ校)

#### E-1038 A single miRNA rescues EBF1 deficiency in B cell development partly through TGF- $\beta$ pathway

Ryutaro Kotaki<sup>1</sup>, Kohei Miyazono<sup>2</sup>, Ai Kotani<sup>1,3</sup> (<sup>1</sup>Div. Hemat. Mal., Inst. Med. Sci., Tokai Univ., <sup>2</sup>Dept. Mol. Pathol., Univ. of Tokyo, Sch. of Med., <sup>3</sup>Dept. Hemat./Ont., Tokai Univ., Sch. Med.)

単一の miRNA が EBF1 欠損による B 細胞分化不全を一部 TGF- $\beta$  経路依存的に補完する

上滝 隆太郎<sup>1</sup>、宮園 浩平<sup>2</sup>、幸谷 愛<sup>1,3</sup> (<sup>1</sup>東海大・総医研・造血腫瘍、<sup>2</sup>東大・医・分子病理、<sup>3</sup>東海大・医・血内)

#### E-1039 Interchangeable differentiation in spheroids derived from mixed small cell carcinoma/adenocarcinoma of uterine cervix

Satoshi Kubota<sup>1,2</sup>, Aya Nakajima<sup>1</sup>, Yumiko Kiyohara<sup>1,2</sup>, Hiroko Endo<sup>1</sup>, Hiroaki Okuyama<sup>1</sup>, Kiyoshi Yoshino<sup>2</sup>, Tadashi Kimura<sup>2</sup>, Masahiro Inoue<sup>1</sup> (<sup>1</sup>Osaka Medical Center for Cancer and Cardiovascular Diseases Biochemistry Department, <sup>2</sup>Osaka Univ. Med. Obst. and Gyne.)

CTOS 法による子宮頸部小細胞がん・腺がん混合腫瘍の解析

久保田 哲<sup>1,2</sup>、中嶋 綾<sup>1</sup>、清原 裕美子<sup>1,2</sup>、遠藤 洋子<sup>1</sup>、奥山 裕照<sup>1</sup>、吉野 潔<sup>2</sup>、木村 正<sup>2</sup>、井上 宏正<sup>1</sup> (<sup>1</sup>大阪府立成人病センター研究所・生化学部門、<sup>2</sup>大阪大・医・産婦人科)

#### E-1040 Identification of six genes that regulate side population of ovarian cancer through a functional genomics screen

Koji Yamanoj<sup>1</sup>, Noriomi Matsumura, Kaoru Abiko, Ken Yamaguchi, Junzo Hamanishi, Tsukasa Baba, Masafumi Koshiyama, Ikuo Konishi (Dept. Gynecol and Obstet., Kyoto Univ., Grad. Sch. Med.)

機能的ゲノミクススクリーニングによる、卵巣癌の side population (SP) 分画を制御する 6 遺伝子の同定

山ノ井 康二、松村 謙臣、安彦 郁、山口 建、濱西 潤三、馬場 長、越山 雅文、小西 郁生（京都大・院・婦人科学座科学院）

#### E-1041 MZF1 and SCAND1 control EMT, oncogenic kinase pathways and molecular chaperone expression in prostate cancer cells

Takanori Eguchi<sup>1,2</sup>, Lang Ben<sup>1</sup>, Prince Thomas<sup>3</sup>, Chiharu Sogawa<sup>2</sup>, Yuka Okusha<sup>2</sup>, Gray Phillip<sup>1</sup>, Kenichi Kozaki<sup>2</sup>, Calderwood Stuart<sup>1</sup> (<sup>1</sup>Dept. of Rad. Onc., BIDMC, Harvard Med. Sch., <sup>2</sup>Okayama Univ. Grad. Sch. of Med. Dent. & Pharm. Sci., <sup>3</sup>NCI)

転写因子 MZF1 と SCAND1 は前立腺癌細胞において EMT、癌促進性キナーゼシグナルおよび分子シャペロン発現を制御する

江口 傑徳<sup>1,2</sup>、ベン ラング<sup>1</sup>、トマス プリンス<sup>3</sup>、十川 千春<sup>2</sup>、奥舎 有加<sup>2</sup>、フィリップ グレイ<sup>1</sup>、小崎 健一<sup>2</sup>、スチュアート カルダー ウッド<sup>1</sup> (<sup>1</sup>ハーバード大・医・BIDMC・放射線腫瘍、<sup>2</sup>岡山大院・医歯薬・生体制御科学・歯科薬理、<sup>3</sup>米国国立癌研究所)

#### E-1042 Identification of GD3-regulated genes in GD3-expressing gliomas

Yuki Ohkawa<sup>1</sup>, Seiya Noda<sup>1</sup>, Hiroyuki Momota<sup>2</sup>, Akira Kato<sup>2</sup>, Boku Chou<sup>1,3</sup>, Keiko Furukawa<sup>1</sup>, Yuhsuke Ohmi<sup>3</sup>, Atsushi Natsume<sup>2</sup>, Toshihiko Wakabayashi<sup>2</sup>, Koichi Furukawa<sup>1,3</sup> (<sup>1</sup>Coll. of Life and Health Sciences, Chubu Univ., <sup>2</sup>Dept. Neurosurgery, Nagoya Univ. Sch. Med., <sup>3</sup>Dept. Biochemistry II, Nagoya Univ. Sch. Med.)

グリオーマにおいて GD3 発現に伴って発現する遺伝子群の同定

大川 祐樹<sup>1</sup>、野田 誠也<sup>1</sup>、百田 洋之<sup>2</sup>、加藤 彰、張 璞<sup>1,3</sup>、古川 圭子<sup>1</sup>、大海 雄介<sup>3</sup>、夏目 敦至<sup>2</sup>、若林 俊彦<sup>2</sup>、古川 鋼一<sup>1,3</sup> (<sup>1</sup>中部大・生命健康、<sup>2</sup>名大・院医・脳神経外科、<sup>3</sup>名大・院医・第2生化)

## Japanese Oral Sessions

Room 12 Oct. 6 (Thu.) 9:00-10:15

J

### J11-1 Cancer stem cell (1) がん幹細胞 (1)

Chairperson: Hiroaki Nagano (Dept. of Gastroenterol. Surg., Yamaguchi Univ. Grad. Sch. of Med.)

座長：永野 浩昭（山口大・院医・消化器・腫瘍外科）

#### J-1031 Adaptive response of C6 glioma stem cells to iron deprivation through macrophage induction

Kouichi Tabu, Wenqian Wang, Yoshitaka Murota, Tetsuya Taga (Dept. of Stem Cell Regulation, Tokyo Med. & Dent. Univ.)

C6 グリオーマ幹細胞におけるマクロファージ誘導を介した鉄枯渇への適応

柄 康一、王 文茜、室田 吉貴、田賀 哲也（東京医科歯科大・難治研・幹細胞制御）

#### J-1032 Enhancement of cancer stem cell signatures in cholangiocarcinoma organoids under glucose deprivation

Nao Yoshikawa, Yoshimasa Saito, Hidetsugu Saito (Div. of Pharmacotherap. Keio Univ. Faculty of Pharm.)

糖欠乏下の胆管癌オルガノイドにおける幹細胞性の増強

吉川 直、齋藤 義正、齋藤 英胤（慶應大・薬・薬治）

#### J-1033 Feedback regulation between NADPH oxidase and mTORC1 contributes to the maintenance of the stemness of colon cancer

Hirokazu Ohata, Daisuke Shiokawa, Koji Okamoto (Natl. Cancer Ctr. Res. Inst., Div. Cancer Diff.)

NADPH oxidase と mTORC1 のフィードバック制御は大腸がん幹細胞性の維持に寄与する

大畠 広和、塩川 大介、岡本 康司（国立がん研セ・研・がん分化制御）

#### J-1034 CXCL12-CXCR7 signaling in lymphoplasmacytic lymphoma

Naoki Wada, Junichiro Ikeda, Eiichi Morii (Dept. Pathol., Osaka Univ., Grad. Sch. Med.)

リンパ形質細胞性リンパ腫における CXCL12-CXCR7 シグナル

和田 直樹、池田 純一郎、森井 英一（大阪大学大学院・医・病理）

#### J-1035 Efficient targeting malignant phenotypes of glioma by disrupting their energy balance

Masahiko Kobayashi<sup>1</sup>, Mohamed Ahmed<sup>1</sup>, Daisuke Yamada<sup>1</sup>, Susumu Kohno<sup>1</sup>, Tomoyoshi Soga<sup>2</sup>, Chiaki Takahashi<sup>1</sup>, Atsushi Hirao<sup>1</sup> (<sup>1</sup>Cancer Res. Inst., Kanazawa Univ., <sup>2</sup>Inst. for Advanced Biosciences, Keio Univ.)

エネルギーバランスを標的とした新規グリオーマ治療法の開発

小林 昌彦<sup>1</sup>、Mohamed Ahmed<sup>1</sup>、山田 大佑<sup>1</sup>、河野 晋<sup>1</sup>、曾我 朋義<sup>2</sup>、高橋 智聰<sup>1</sup>、平尾 敦<sup>1</sup>（金沢大学・がん進展制御研究所、<sup>2</sup>慶應義塾大学先端生命科学研究所）

#### J-1036 Identification of stemness-maintaining factors in cancer stem cells

Takahiko Murayama<sup>1,2</sup>, Tatsunori Nishimura<sup>2</sup>, Kana Tominaga<sup>1</sup>, Asuka Nakata<sup>2</sup>, Masao Yano<sup>3</sup>, Keiichiro Tada<sup>4</sup>, Arinobu Tojo<sup>1</sup>, Noriko Gotoh<sup>1,2</sup> (<sup>1</sup>Div. Mol. Therapy, IMS, Univ. of Tokyo, <sup>2</sup>Div. Cancer Cell Biol., Cancer Res. Inst. Kanazawa Univ., <sup>3</sup>Dept. Surg., Minamimachida Hosp., <sup>4</sup>Dept. Breast & Endocrine Surg., Grad. Sch. Med., Univ. of Tokyo)

がん幹細胞における幹細胞性維持機構の解明

村山 貴彦<sup>1,2</sup>、西村 建徳<sup>2</sup>、富永 香菜<sup>1</sup>、中田 飛鳥<sup>2</sup>、矢野 正雄<sup>3</sup>、多田 敬一郎<sup>4</sup>、東條 有伸<sup>1</sup>、後藤 典子<sup>1,2</sup>（東京大・医科研・分子療法、<sup>2</sup>金沢大・がん進展制御研・がん生物、<sup>3</sup>南町田病院・外科、<sup>4</sup>東京大・乳腺内分泌外科）

## Symposia

Room 13 Oct. 6 (Thu.) 9:00-11:30

E

S2

**ncRNAs: A new paradigm in cancer pathogenesis, diagnosis and therapy**

非コード RNA (ncRNA) : がんの病態、診断、治療における新パラダイム

Chairpersons: Johji Inazawa (Dept. Molec. Cytogenet., Med. Res. Inst., Tokyo Med. Dent. Univ./Bioresource Res. Center, Tokyo Med. Dent)  
Tetsu Akiyama (Inst. Mol. Cell. Biosci., The Univ. of Tokyo)

座長：稻澤 謙治（東京医歯大・難治研・分子細胞遺伝/東京医歯大・疾患バイオリソースセ）  
秋山 徹（東京大・分子細胞生物研）

Non-coding RNAs (ncRNAs), especially microRNAs (miRNAs) and long ncRNAs (lncRNAs), are regulatory molecules involved in a broad range of biological processes. Some ncRNAs have been implicated in cancer, most notably oncogenic miRNAs (Onco-miRs) and tumor suppressor miRNAs (TS-miRs), and are potential targets for cancer therapies. Oligonucleotide-based therapies have faced many challenges due to enzymatic degradation, poor internalization and other problems, but improved delivery strategies, such as the use of PEGylated polyion complexes, may hold promise. miRNAs can also serve as cancer biomarkers, and one reliable source of these markers found in body fluids is exosomes, which function as versatile intracellular communication vehicles. It has also been shown that lncRNAs play important roles in the tumorigenicity of cancer cells. For example, the GSEC lncRNA has been shown to be associated with colon cancer cell migration. Various “omics” approaches have elucidated the roles of lncRNAs in cancer pathology. Another interesting finding is the role of double-strand RNA (dsRNA) processing/signaling in immunometabolic regulation in obesity, which is closely associated with cancer induction. Here, experts in the field will present the latest cutting-edge research on the roles of ncRNAs in cancer.

**S2-1 Identification of novel tumor-suppressor microRNAs and their application for cancer diagnosis and therapeutics**Johji Inazawa<sup>1,2</sup> (<sup>1</sup>Dept. of Molec. Cytogenet., Med. Res. Inst., Tokyo Med. & Dent. Univ., <sup>2</sup>Bioresource Res. Ctr., Tokyo Med. & Dent. Univ.)

## がん抑制マイクロ RNA の探索と診断・治療への応用

稻澤 謙治<sup>1,2</sup> (<sup>1</sup>東京医歯大・難治研・分子細胞遺伝、<sup>2</sup>東京医歯大・疾患バイオリソースセ)**S2-2 Application of senescence-inducible microRNAs for cancer therapy**Hidetoshi Tahara<sup>1,2</sup> (<sup>1</sup>Grad. Sch. of Biomed. Sci, Hiroshima Univ., <sup>2</sup>Dept. of Cell. & Mol. Biol.)老化誘導マイクロ RNA を用いたがん治療の可能性  
田原 実俊<sup>1,2</sup> (<sup>1</sup>広島大・院、<sup>2</sup>医歯薬保健学研究院 (薬))**S2-3 Exosome as a novel delivery cargo of cancer pathogenic components**

Takahiro Ochiya (Div. of Mol Cell Ther, Natl. Cancer Ctr. Res. Inst. Tokyo)

がん進展におけるエクソソームの役割  
落谷 孝広（国立がん研究セ・研・分子細胞治療）**S2-4 Polymer nanotechnology-based nucleic acid delivery**Kanjiro Miyata<sup>1</sup>, Kazunori Kataoka<sup>2</sup> (<sup>1</sup>Dept. of Mater. Eng., Grad. Sch. of Eng., The Univ. of Tokyo, <sup>2</sup>iCONM)高分子ナノテクノロジーが切り拓く核酸医薬デリバリー  
宮田 完二郎<sup>1</sup>、片岡 一則<sup>2</sup> (<sup>1</sup>東京大・工・マテリアル工学、<sup>2</sup>川崎市ナノ医療イノベーションセ)**S2-5 The Novel G-quadruplex-Containing lncRNA GSEC Modulates Colon Cancer Cell Migration**

Yoshihiro Kawasaki, Tetsu Akiyama (Inst. Mol. Cell. Biosci., The Univ. of Tokyo)

グアニン四重鎖を有する新規 lncRNA:GSEC は大腸がん細胞の運動能を調節する  
川崎 善博、秋山 徹（東京大・分生研）**S2-6 Non-coding RNA-mediated regulation of genes that are crucially involved in the molecular pathogenesis of lung cancer**

Takahashi Takahashi (Div. of Mol. Carcinog., Nagoya. Univ. Grad. Sch. of Med.)

ノンコーディング RNA による肺がんの分子病因遺伝子の発現制御機構の解明  
高橋 隆（名古屋大・院医・分子腫瘍）**S2-7 Role of dsRNA-mediated signaling in chronic inflammation**

Takahisa Nakamura (Cincinnati Children's Hosp., Endocrinology)

## 慢性炎症における dsRNA シグナルの役割

中村 能久（シンシナティ小児病院・内分泌学）

## English Oral Sessions

Room 12 Oct. 6 (Thu.) 10:15-11:30

**E11-2 Cancer stem cell (2)**

がん幹細胞 (2)

Chairperson: Masao Saitoh (Ctr. for Med. Sci., Grad. Sch. of Med, Univ. of Yamanashi)

座長：齋藤 正夫（山梨大・医・医教セ）

**E-1043 NFYA regulates multistep process of cancer heterogeneity formation**

Nobuhiro Okada, Chiaki Takahashi (Div. Oncol. Mol. Biol., Cancer Res. Inst., Kanazawa Univ.)

NFYA は癌の不均一性構築過程を多段階的に制御する  
岡田 宣宏、高橋 智聰（金沢大・がん研・腫瘍分子生物学）**E-1044 Heterogeneity of tumor cells in the bone microenvironment; mechanisms and therapeutic targets of bone metastasis**

Mitsuru Futakuchi, Katsumi Fukamachi, Masumi Suzui (Dept. of Molecular Toxicology, Nagoya City Univ. Med. Sch.)

骨微小環境におけるがんの不均一性：骨転移の増殖メカニズムと治療標的因子

二口 充、深町 勝巳、酒々井 真澄（名市大・院医・分子毒性）

**E-1045 Targeting Mesenchymal Transition: from Breast Cancer to Glioblastoma**Kiyotsugu Yoshikawa<sup>1</sup>, Yoshiki Arakawa<sup>2</sup>, Junya Toguchida<sup>3</sup>, Masakazu Toi<sup>4</sup> (<sup>1</sup>DSK, MIC, Kyoto Univ. Grad. Sch. Med, <sup>2</sup>Dept Brain Surgery, Kyoto Univ. Grad. Sch. Med, <sup>3</sup>Center iPS cell Res. Application, Kyoto Univ., <sup>4</sup>Dept Breast Surgery, Kyoto Univ. Grad. Sch. Med)

## 間葉転換解除による難治性がん治療法の開発

吉川 清次<sup>1</sup>、荒川 芳輝<sup>2</sup>、戸口田 淳也<sup>3</sup>、戸井 雅和<sup>4</sup>（<sup>1</sup>京大・院医・MIC・DSK、<sup>2</sup>京大・医・脳外科、<sup>3</sup>京大・iPS 細胞研究所、<sup>4</sup>京大・医・乳腺外科）**E-1046 CD44 standard from supports the acquisition of CSC properties through the EMT induction in oral cancer cells**Ryu-u Takahashi<sup>1</sup>, Takahiro Ochiya<sup>1</sup>, Hiroaki Miyazaki<sup>2</sup> (<sup>1</sup>Div. Mol. Cell. Med., Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Dept of Oral Surg, Showa Univ. Sch. of Dent.)

## 頭頸部がんにおける CD44 を介した上皮間葉転換誘導機構の解明

高橋 陵宇<sup>1</sup>、落谷 孝広<sup>1</sup>、宮崎 裕明<sup>2</sup>（<sup>1</sup>国立がん研セ・研・分子細胞治療、<sup>2</sup>昭和・歯・口腔外科学）**E-1047 Metastatic potentials and expressions of CD44 isoforms in hepatocellular carcinoma stem-like sphere cells**Ryouichi Tsunedomi<sup>1</sup>, Satoshi Matsukuma<sup>1</sup>, Shinsuke Kanekiyo<sup>1</sup>, Kiyoshi Yoshimura<sup>2</sup>, Nobuaki Suzuki<sup>1</sup>, Shigeru Takeda<sup>1</sup>, Tomio Ueno<sup>1</sup>, Shigefumi Yoshino<sup>1,3</sup>, Shoichi Hazama<sup>1,4</sup>, Hiroaki Nagano<sup>1</sup> (<sup>1</sup>Dept. Gastroenterol., Breast and Endocrine Surg., Yamaguchi Univ., Sch. Med., <sup>2</sup>National Cancer Center, <sup>3</sup>Oncol. Center, Yamaguchi Univ. Hospital, <sup>4</sup>Dept. Translational Res. Dev. Ther. Cancer, Yamaguchi Univ., Sch. Med.)

## 肝細胞癌幹細胞様 Sphere 細胞における転移能亢進及び CD44 アイソフォーム発現

恒富 亮一<sup>1</sup>、松隈 聰<sup>1</sup>、兼清 信介<sup>1</sup>、吉村 清<sup>2</sup>、鈴木 伸明<sup>1</sup>、武田 茂<sup>1</sup>、上野 富雄<sup>1</sup>、吉野 茂文<sup>1,3</sup>、裕 彰一<sup>1,4</sup>、永野 浩昭<sup>1</sup>（<sup>1</sup>山口大・医・消化器・腫瘍外科学、<sup>2</sup>がん研究センター、<sup>3</sup>山口大・医・附属病院・腫瘍センター、<sup>4</sup>山口大・医・先端がん治療開発）

INFORMATION

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AM | LS | PM | PostersDAY 3  
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## Symposia

Room 14 Oct. 6 (Thu.) 9:00-11:30

S3

### New frontiers of hereditary cancer towards the precision medicine

遺伝性腫瘍の新しい展開 - プレシジョン医療の実現へ向けて-

Chairpersons: Yoshio Miki (Dept. of Mol. Cytogenet., Med. Res. Inst., Tokyo Med. & Dent. Univ.)  
Yoshinori Murakami (Div. of Mol. Pathol., Inst. Med. Sci., The Univ. of Tokyo)

座長：三木 義男（東京医歯大・難治研・分子細胞遺伝）  
村上 善則（東京大・医科研・人癌病因遺伝子）

Hereditary cancers are the group of cancers with low incidence in population but with very high risk of cancer development. Following the "Angelina effect" of hereditary breast and ovarian cancer (HBOC), hereditary cancer has come to draw a lot of attention both socially and medically in Japan as well as in USA. The innovation of genome technology has led to the search for new responsible genes of the hereditary cancers and the enrichment of database as powerful tools of the management of hereditary cancer. As a result, genomic medicine is expected to develop novel approaches to diagnosis and treatment of hereditary cancers by applying the genomic information. The synthetic lethal therapy with PARP inhibitors has been demonstrated to be effective for the HBOC patients, while the anti-PD-1/PD-L1 antibody drugs have been shown to be effective for Lynch syndrome, leading to the paradigm shift of hereditary cancer treatment. To apply such outstanding findings to the management, it is necessary to build a comprehensive medical care system for hereditary cancers, including examination of the ethical aspects and the legal restrictions related to the handling of genomic information. In this session, we will introduce the basic and clinical studies and the current situations of ELSI on hereditary cancers and discuss the precision medicine of hereditary cancer in Japan.

#### S3-1 Overview of the basic research of hereditary cancer

Yoshinori Murakami (Div. of Mol. Pathol., Inst. Med. Sci., The Univ. of Tokyo)

遺伝性腫瘍の基礎研究の進歩

村上 善則（東京大・医科研・人癌病因遺伝子）

#### S3-2 Recent advances and further challenge in hereditary breast and ovarian cancer (HBOC) syndrome

Natsuko Chiba (Dept. of Can. Biol., IDAC, Tohoku Univ.)

遺伝性乳がん・卵巣がんの現状と今後の展望

千葉 奈津子（東北大・加齢研・腫瘍生物学）

#### S3-3 Analysis of the pathogenesis of familial colon cancer by next generation-sequencing

Yoichi Furukawa<sup>1</sup>, Kiyoshi Yamaguchi<sup>1</sup>, Eigo Shimizu<sup>2</sup>, Mitsuhiro Komura<sup>2</sup>, Rui Yamaguchi<sup>2</sup>, Tetsuo Shibuya<sup>3</sup>, Seiya Imoto<sup>4</sup>, Hideaki Yano<sup>5</sup>, Tsuneo Ikenoue<sup>1</sup>, Satoru Miyano<sup>2,3,4</sup> (<sup>1</sup>Div. of Clin. Genome Res., IMSUT, The Univ. of Tokyo, <sup>2</sup>Lab. DNA Information Analysis, Hum. Genome Ctr., IMSUT, The Univ. of Tokyo, <sup>3</sup>Lab. Sequence Analysis, Hum. Genome Ctr., IMSUT, The Univ. of Tokyo, <sup>4</sup>Div. of Health Med. Data Sci., Health Intelligence Ctr., IMSUT, The Univ. of Tokyo, <sup>5</sup>Dept. of Colorectal Surg., Natl. Ctr. Global Health Med.)

NGSによる家族性大腸がんの原因と病態の解明

古川 洋一<sup>1</sup>、山口 貴世志<sup>1</sup>、清水 英悟<sup>2</sup>、上村 光弘<sup>2</sup>、山口 類<sup>2</sup>、渋谷 哲朗<sup>3</sup>、井元 清哉<sup>4</sup>、矢野 秀朗<sup>5</sup>、池上 恒雄<sup>6</sup>、宮野 悟<sup>2,3,4</sup>（<sup>1</sup>東京大・医科研・臨床ゲノム、<sup>2</sup>東京大・医科研・ヒトゲノム解析セ・DNA情報、<sup>3</sup>東京大・医科研・ヒトゲノム解析セ、<sup>4</sup>東京大・医科研・ヘルスインテリジェンスセ、<sup>5</sup>国立国際医療セ・下部消化管外科）

#### S3-4 Japanese familial pancreatic cancer

Shinichi Yachida<sup>1</sup>, Toru Furukawa<sup>2</sup> (<sup>1</sup>Div. of Cancer Genomics, Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Inst. Integrated Med. Sci., Tokyo Women's Med. Univ.)

本邦における家族性膵臓がんの現状と展望

谷内田 真一<sup>1</sup>、古川 徹<sup>2</sup>（<sup>1</sup>国立がん研究セ・研・がんゲノミクス、<sup>2</sup>東京女子医大・統合医科研）

#### S3-5 Updates of hereditary gastric cancer in Japan

Haruhiko Sugimura<sup>1,2</sup> (<sup>1</sup>Dept. of Tumor Pathol., Hamamatsu Univ., Sch. of Med., <sup>2</sup>Pathol. Div., The Cancer Inst. of JFCR)

日本の遺伝性胃癌の現状

梶村 春彦<sup>1,2</sup>（<sup>1</sup>浜松医大・医・腫瘍病理、<sup>2</sup>がん研・病理）

#### S3-6 Genetic service system for hereditary cancer

Yoshimitsu Fukushima<sup>1,2</sup> (<sup>1</sup>Dept. of Med. Genetics, Shinshu Univ. Sch. of Med., <sup>2</sup>Div. of Clinical Mol. Genetics, Shinshu Univ. Hosp.)

遺伝性腫瘍の遺伝子診療体制

福嶋 義光<sup>1,2</sup>（<sup>1</sup>信州大・医・遺伝医学・予防医学、<sup>2</sup>信州大・病院・遺伝子診療）

## Symposia

Room 15 Oct. 6 (Thu.) 9:00-11:30

S4

### Epigenetic therapeutic targets: Discovery and utilization

エピジェネティック治療の標的同定と活用

Chairpersons: Yutaka Kondo (Dept. of Epigenomics, Nagoya City Univ., Grad. Sch. of Med)

Toshikazu Ushijima (Div. of Epigenomics, Natl. Cancer Ctr. Res. Inst.)

座長：近藤 豊（名古屋市大・院医・遺伝子制御学）

牛島 俊和（国立がん研究セ・研・エピゲノム）

Altered epigenome is a hallmark of many types of cancer. Mutations of epigenetic regulators are frequently observed in some cancers, and environmental exposure is also involved in induction of epigenetic alterations. Stable inheritance is the characteristics of epigenetic alterations, but they are reversible at the same time by the use of inhibitors of writers and erasers of epigenetic modifications. Inhibitors of DNA methyltransferase and histone deacetylase are already in clinical use. Epigenetic drugs that target mutations in epigenetic regulators are in clinical trials. Cancer-preferential epigenomes, such as super-enhancers, are now targeted by inhibition of their readers.

In this symposium, we will focus on discovery of novel epigenetic therapeutic targets in cancer cells and cancer-associated cells, chemicals that target epigenetic regulators, and preclinical analyses for inhibitors of DNA methyltransferase, writer of a histone methyl mark, and a reader of super-enhancer. We will discuss perspectives and challenges for epigenetic cancer therapy in the near future.

#### S4-1 Targeting Non-coding RNA as a Novel Therapeutics for Human Cancers

Yutaka Kondo (Dept. of Epigenomics, Nagoya City Univ., Grad. Sch. of Med.)

非翻訳RNAを標的とした新規がん治療法の開発

近藤 豊（名古屋市大・院医・遺伝子制御学）

#### S4-2 Reference Component Analysis of Single Cell Transcriptomes Reveals Cellular Heterogeneity in Colorectal Cancer

Shyam Prabhakar (Computational & Systems Biol., Genome Inst. of Singapore)

#### S4-3 Histone Lysine Demethylase Inhibitors for Cancer Therapy

Takayoshi Suzuki (Grad. Sch. of Med. Sci., Kyoto Pref. Univ. Med.)

がん治療を目指したヒストン脱メチル化酵素阻害剤の創製

鈴木 孝徳（京都府医大・院医・医薬品化学）

#### S4-4 Optimization of DNA hypomethylating therapy and marker development for patient selection in solid tumors

Toshikazu Ushijima, Yoshiaki Nakamura, Liang Zong, Naoko Hattori (Div. of Epigenomics, Natl. Cancer Ctr. Res. Inst.)

固体腫瘍におけるDNA脱メチル化治療の最適化と患者選択マーカーの開発

牛島 俊和、中村 能章、宗 亮、服部 奈緒子（国立がん研究セ・研・エピゲノム）

#### S4-5 Epigenetic remodeling of cancer associated fibroblasts through BET inhibition suppresses pancreatic cancer progression

Keisuke Yamamoto<sup>1</sup>, Keisuke Tateishi<sup>1</sup>, Takuma Nakatsuka<sup>1</sup>, Yasuo Tanaka<sup>1</sup>, Hedeaki Ijichi<sup>1</sup>, Norihiro Kokudo<sup>2</sup>, Masashi Fukayama<sup>3</sup>, Kazuhiko Koike<sup>1</sup> (<sup>1</sup>Dept. of Gastroenterology, The Univ. of Tokyo, <sup>2</sup>Hepato-Biliary-Pancreatic Surg. Div., Dept. of Surg., The Univ. of Tokyo, <sup>3</sup>Dept. of Path. & Diagnostic Path., The Univ. of Tokyo)

BET 阻害剤による癌関連線維芽細胞のエピジェネティックなリプログラミングは膵癌の進展を抑制する

山本 恵介<sup>1</sup>、立石 敏介<sup>1</sup>、中塚 拓馬<sup>1</sup>、田中 康雄<sup>1</sup>、伊地知 秀明<sup>1</sup>、國士 典宏<sup>2</sup>、深山 正久<sup>3</sup>、小池 和彦<sup>1</sup>（<sup>1</sup>東京大・医・消化器内科、<sup>2</sup>東京大・医・肝胆脾外科、<sup>3</sup>東京大・医・人体病理）

#### S4-6 Novel therapeutic strategies targeting epigenetic regulators that are critical for maintenance of acute myeloid leukemia

Issay Kitabayashi (Div. of Hematol. Malignancy, Natl. Cancer Ctr. Res. Inst.)

エピゲノム制御因子を標的とした急性骨髓性白血病の新規治療法

北林 一生（国立がん研究セ・研・造血器腫瘍）

**English Oral Sessions**

Room 16 Oct. 6 (Thu.) 9:00-10:15

**E10-1 Invasion and extracellular matrix**

Chairperson: Yasuhiko Kitadai (Dept. of Health Sci., Pref. Univ. of Hiroshima)  
座長：北台 靖彦（県立広島大・健康科学）

**E-1048 The dual role of p63 in the development of squamous cell carcinoma**

Takashi Yugawa<sup>1</sup>, Tomomi Nakahara<sup>1</sup>, Masatoshi Fujita<sup>2</sup>, Tohru Kiyono<sup>1</sup>  
(<sup>1</sup>Div. of Carcinog. Cancer Prev., Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Dept. Cell. Biochem., Grad. Sch. Pharm. Sci., Kyushu Univ.)

## 扁平上皮がん発生におけるp63の二面性

温川 恵至<sup>1</sup>、中原 知美<sup>1</sup>、藤田 雅俊<sup>2</sup>、清野 透<sup>1</sup>（<sup>1</sup>国立がん研究センター・研究所 発がん予防、<sup>2</sup>九大・院薬・医薬細胞生化）

**E-1049 EMT in lung adenocarcinoma promotes the matrix remodeling of cancer-associated fibroblasts driving cancer cell invasion**

Shinya Neri<sup>1,2</sup>, Tomoyuki Miyashita<sup>2</sup>, Hiroko Hashimoto<sup>3</sup>, Toshi Menju<sup>1</sup>, Makoto Sonobe<sup>1</sup>, Hiroshi Date<sup>1</sup>, Atsushi Ochiai<sup>2</sup>, Genichiro Ishii<sup>2</sup> (Kyoto University, Graduate School of Medicine, Department of Thoracic Surgery, <sup>2</sup>National Cancer Center, EPOC, Division of Pathology)

## がん細胞EMT のPDGF-BB傍分泌による肺腺癌とがん関連線維芽細胞の相乗的浸潤能獲得機序の解明

祢里 真也<sup>1,2</sup>、宮下 知之<sup>2</sup>、橋本 弘子<sup>2</sup>、毛受 曜史<sup>1</sup>、園部 誠<sup>1</sup>、伊達 洋至<sup>1</sup>、落合 淳志<sup>2</sup>、石井 源一郎<sup>2</sup>（<sup>1</sup>京都大学医学部呼吸器外科、<sup>2</sup>国立がん研究センター東臨床腫瘍病理分野）

**E-1050 CAFs boost mammary cancer metastasis via increasing the cell-cell adhesion**

Akira Orimo<sup>1</sup>, Nadila Wali<sup>1</sup>, Yasuhiko Ito<sup>1</sup>, Okio Hino<sup>1</sup>, Kazuyoshi Takeda<sup>3</sup>, Michiaki Hamada<sup>4</sup>, Yuko Matsumura<sup>1,2</sup> (<sup>1</sup>Dept. of Molecular Pathology, Juntendo Univ. of Med., <sup>2</sup>Dept. Obstetrics and Gynecology, Juntendo Univ. of Med, <sup>3</sup>Dept. Research Centre, Juntendo Univ. of Med, <sup>4</sup>Dept. of Elec. Engi., Waseda Univ.)

## CAFは細胞接着能を亢進することにより乳癌細胞の転移を促進する。

折茂 彰<sup>1</sup>、Nadila Wali<sup>1</sup>、伊藤 恭彦<sup>1</sup>、樋野 興夫<sup>1</sup>、竹田 和由<sup>2</sup>、浜田 道昭<sup>4</sup>、松村 優子<sup>1,2</sup>（<sup>1</sup>順天堂大・医・病理腫瘍学、<sup>2</sup>順天堂大・医・産婦人科、<sup>3</sup>順天堂大・医・基盤、<sup>4</sup>早稲田大・理工学術院）

**E-1051 Simvastatin inhibits acidic extracellular pH signaling through RhoA-PLD1 axis in mouse B16-BL6 melanoma cells**

Yasumasa Kato<sup>1</sup>, Yukio Nishimura<sup>2</sup> (<sup>1</sup>Dept. of Biochem., Ohu Univ. Sch. Dent., <sup>2</sup>Kyushu Univ. Grad. Sch. Pharm. Sci.)

シンバスタチンは、RhoA-PLD1を標的としてB16-BL6メラノーマにおける酸性細胞外pHシグナリングを抑制する。  
加藤 靖正<sup>1</sup>、西村 行生<sup>2</sup>（<sup>1</sup>奥羽大・歯・生化、<sup>2</sup>九州大院・薬）**E-1052 The role of hyaluronan in pancreatic cancer biology and therapy**

Norihiko Sato, Shiro Kohi, Atsuhiro Koga, Keiji Hirata (Dept. of Surgery 1, University of Occupational and Environmental Health)

肺癌の生物学的特徴および治療におけるヒアルロン酸の役割  
佐藤 典宏、厚井 志郎、古賀 敦大、平田 敏治（産業医科大学・第1外科）**E-1053 ADAM9 promotes esophageal squamous cell carcinoma metastasis via suppression of plasminogen activator inhibitor 1**

Yuh-Pyng Sher<sup>1,3</sup>, Yu-Sen Lin<sup>1,4</sup>, Shih-Ting Bai<sup>3</sup>, Ting-Ting Kuo<sup>3</sup>, Guan-Chin Tseng<sup>5</sup>, Wei-Chao Chang<sup>2,3</sup> (<sup>1</sup>Grad. Inst. of Clini. Med. Sci., China Med. Univ., <sup>2</sup>Grad. Inst. for Cancer Biol., China Med. Univ., <sup>3</sup>Ctr. for Mol. Med., China Med. Univ. Hosp., <sup>4</sup>Dept. of Internal Med., China Med. Univ. Hosp., <sup>5</sup>Dept. of Path., China Med. Univ. Hosp.)

**English Oral Sessions**

Room 16 Oct. 6 (Thu.) 10:15-11:30

**E10-2 Invasion and gene expression**

Chairperson: Fumiko Itoh (Tokyo Univ. of Pharm. & Life Sci.)  
座長：伊東 史子（東京薬大・生命科学・心血管医科）

**E-1054 Two Prrx1 isoforms facilitate metastasis with cancer stem cell functions in pancreatic cancer.**

Shigetsugu Takano<sup>1,2</sup>, Hideyuki Yoshitomi<sup>1</sup>, Shingo Kagawa<sup>1</sup>, Kensuke Suzuki<sup>1</sup>, Masayuki Ohtsuka<sup>1</sup>, Masaru Miyazaki<sup>1</sup> (<sup>1</sup>Dept., General Surg., Chiba Univ., <sup>2</sup>Div., Gastroenterology, Univ., Pennsylvania)

## 癌幹細胞機能を有するPrrx1 isoformは肺癌の転移を促進する

高野 重紹<sup>1,2</sup>、吉富 秀幸<sup>1</sup>、賀川 真吾<sup>1</sup>、鈴木 謙介<sup>1</sup>、大塚 将之<sup>1</sup>、宮崎 勝<sup>1</sup>（千葉大学・医・臓器制御外科、<sup>2</sup>ベンシルバニア大学・消化器科）

**E-1055 Decreased expression of Betaglycan promotes renal cell carcinoma metastasis through a multiple mechanism**

Jun Nishida, Shogo Ehata, Kohei Miyazono (Dept. Mol. Path., Grad. Sch. Med., Univ. Tokyo)

腎細胞癌におけるTGF-β III型受容体Betaglycanの発現低下は、癌転移に必要な複数の能力を向上させる  
西田 純、江幡 正悟、宮園 浩平（東大・院医・分子病理）**E-1056 Establishment of the screening system for identification of cancer-related genes enhancing cell migration and invasion**

Soichiro Seino<sup>1</sup>, Jiro Fujimoto<sup>1,2</sup>, Emi Ito<sup>3</sup>, Shinya Watanabe<sup>3</sup>, Kentaro Semba<sup>1,3</sup> (<sup>1</sup>Sch. of Adv. Sci. & Eng., Waseda Univ., <sup>2</sup>Japan Biological Informatics Consortium, <sup>3</sup>Translational Res. Ctr., Fukushima Med. Univ.)

## 細胞遊走能に関与する新規がん関連遺伝子同定のためのスクリーニング系の構築

清野 宗一郎<sup>1</sup>、藤元 次郎<sup>1,2</sup>、伊藤 恵美<sup>3</sup>、渡辺 慎哉<sup>3</sup>、仙波 憲太郎<sup>1,3</sup>（早大・先進理工、<sup>2</sup>バイオ産業情報化コンソーシアム、<sup>3</sup>福島医大・医産TRセンター）

**E-1057 AKR1C1 mediates bladder cancer metastasis and drug resistance**

Masumi Tsuda<sup>1</sup>, Ryuji Matsumoto<sup>1,2</sup>, Kazuhiko Yoshida<sup>1,3</sup>, Mishie Tanino<sup>1</sup>, Taichi Kimura<sup>4</sup>, Hiroshi Nishihara<sup>4</sup>, Takashige Abe<sup>2</sup>, Nobuo Shinohara<sup>2</sup>, Katsuya Nonomura<sup>2</sup>, Shinya Tanaka<sup>1,4</sup> (<sup>1</sup>Dept. of Cancer Path., Hokkaido Univ. Grad. Sch. of Med., <sup>2</sup>Dept. of Urol., Hokkaido Univ. Grad. Sch. of Med., <sup>3</sup>Dept. of Urol., Tokyo Women's Univ. Hosp., <sup>4</sup>Dept. of Translational Path., Hokkaido Univ. Grad. Sch. of Med.)

## AKR1C1は膀胱癌の浸潤・転移と薬剤耐性を制御する

津田 真寿美<sup>1</sup>、松本 隆児<sup>1,2</sup>、吉田 一彦<sup>1,3</sup>、谷野 美智枝<sup>1</sup>、木村 太一<sup>4</sup>、西原 広史<sup>4</sup>、阿部 崇重<sup>2</sup>、篠原 信雄<sup>2</sup>、野々村 克也<sup>2</sup>、田中 伸哉<sup>1,4</sup>（北大院・医・腫瘍病理、<sup>2</sup>北大院・医・腎泌尿器科、<sup>3</sup>東京女子医大・泌尿器科、<sup>4</sup>北大院・医・探索病理）

**E-1058 Sal-like 4 (SALL4) promotes cell migration through up-regulation of integrin genes in basal-like breast cancer cells**

Junji Itou, Sunao Tanaka, Fumiaki Sato, Masakazu Toi (Dept. Breast Surg., Grad. Sch. Med., Kyoto Univ.)

## Basal-like 乳癌におけるSALL4-インテグリン系による移動能促進機構の解明

伊東 潤二、田中 直、佐藤 史顕、戸井 雅和（京大院・医・乳腺）

**E-1059 ZEB1 associated secretory phenotype in breast cancer cells**

Yusuke Tamura<sup>1</sup>, Akihiro Katsura<sup>1</sup>, Masato Morikawa<sup>1</sup>, Anna Mizutani<sup>2</sup>, Daizo Koinuma<sup>1</sup>, Kohei Miyazono<sup>1</sup> (<sup>1</sup>Dept. Mol. Path., Grad. Sch. Med., Univ. Tokyo, <sup>2</sup>Div. Mol. Biother., JFCR Cancer Chemother. Ctr.)

## 乳がん細胞におけるZEB1関連分泌フェノタイプ

田村 佑介<sup>1</sup>、桂 彰宏<sup>1</sup>、森川 真大<sup>1</sup>、水谷 アンナ<sup>2</sup>、鯉沼 代造<sup>1</sup>、宮園 浩平<sup>1</sup>（東大・院医・分子病理、<sup>2</sup>がん研・化療セ・分子生物治療）

## Luncheon Seminars 11:50-12:40

Room 2

**LS1** OncoTherapy Science, Inc.  
オンコセラピー・サイエンス株式会社

### The Promise of Immunopharmacogenomics to Improve Cancer Treatment

Jae-Hyun Park, D.V.M., Ph.D. (Assistant Professor, Section of Hematology/Oncology, The University of Chicago)

Chair: Toyomasa Katagiri, Ph.D. (Division of Genome Medicine, Institute for Genome Research, Tokushima University)

### がん治療における免疫薬理ゲノム学の展望

ジェ ヒョン パク (シカゴ大学医学部 血液・腫瘍内科 助教)

座長：片桐 豊雅（徳島大学 先端酵素学研究所 プロテオゲノム研究領域 ゲノム制御学分野 教授）

Room 4

**LS2** Scrum Inc.  
株式会社スクラム

### "Liquid Biopsy": Real-Time Personalized Molecular Medicine For Monitoring CTC and cfDNA In Cancer Patients

Dave S.B. Hoon (Professor, Director of Molecular Oncology, John Wayne Cancer Institute)

Chair: Tomoshi Kakeya (Director, Science & Technology, Scrum Inc.)

### リキッドバイオプシー：CTCs とセルフリーDNA のモニタリングによる個別化医療の試み

座長：掛谷 知志（株式会社スクラム マーケティング&学術部 学術マネージャー）

Room 5

**LS3** Nippon Becton Dickinson Company,Ltd.  
日本ベクトン・ディッキンソン株式会社

### What do tumor infiltrating lymphocytes say?

Yosuke Togashi,M.D.,Ph.D. (Division of Cancer Immunology, Exploratory Oncology Research and Clinical Trial Center, National Cancer Center)

Chair: Hiroyoshi Nishikawa,M.D.,Ph.D. (Division of Cancer Immunology, Exploratory Oncology Research and Clinical Trial Center, National Cancer Center)

### 腫瘍浸潤リンパ球のflow-cytometry 解析から見えてきたもの

富樫 康介（国立がん研究センター 先端医療開発センター 免疫TR分野）

座長：西川 博嘉（国立がん研究センター 先端医療開発センター 免疫TR分野）

Room 7

**LS4** Merck Ltd.  
メルク株式会社

### Drug delivery based on biofunctional peptide-modified exosomes for cancer targeting - exploitation of Guava easyCyte for detection of exosomal functionality -

Ikuhiko Nakase Ph.D. (Nanoscience and Nanotechnology Research Center, Osaka Prefecture University)

Chair: Naoki Hata, Ph.D (Markting, Life Science, Merck Ltd.)

### がん細胞薬物ターゲティングを目指した機能性ペプチド修飾型エクソソームの開発～Guava easyCyte を活用した機能評価～

中瀬 生彦（大阪府立大学 21世紀科学研究機構 ナノ科学・材料研究センター）

座長：畠 直樹（メルク株式会社 ライフサイエンス マーケティング部）

Room 13

**LS5** Illumina K.K.  
イルミナ株式会社

### 1. Expansion of the utility of FFPE by a new RNA-seq method.

### 2. Variant detection analysis in FFPE samples using Capture Sequencing Technology

1. Shinji Kohsaka M.D., Ph.D. (Department of Medical Genomics, Graduate School of Medicine, The University of Tokyo)

2. Hitomi Fukada (Regional Marketing, Illumina K.K.)

Chair: Hiroya Kumai (Regional Marketing, Marketing Manager, Illumina K.K.)

### 1. 新しいRNA-seq法により広がるFFPEの活用法

### 2. キャプチャーテクノロジーで解決するFFPEサンプルからの変異解析

1. 高阪 真路（東京大学大学院医学系研究科 ゲノム医学講座）

2. 深田 ひとみ（イルミナ株式会社 マーケティング本部）

座長：熊井 広哉（イルミナ株式会社 マーケティング本部 本部長）

Room 14

**LS6** Sysmex Corporation  
シスメックス株式会社

### Liquid Biopsy by BEAMing and Plasma Safe-SeqS

Frank Diehl Ph.D. (Sysmex Inostics, Inc.)

Chair: Hirotoshi Akita (Professor, Department of Medical Oncology, Hokkaido University Graduate School of Medicine)

座長：秋田 弘俊（北海道大学大学院医学研究科腫瘍内科学分野）

Room 15

**LS7** Agilent Technologies Japan, Ltd.  
アジレント・テクノロジー株式会社

### 1. Mutation profiles of lung adenocarcinomas using HaloPlex HS molecular barcodes system

### 2. Demand Precision: NGS molecular barcoding technology enables more accurate panel sequencing

1. Shuta TOMIDA (Department of Biobank, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University)

Shinichi TOYOOKA (Department of Clinical Genomic Medicine, Department of Thoracic, Breast and Endocrinological Surgery, Department of Biobank, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University)

2. Fumiko Yoshizaki (Agilent Technologies Japan, Ltd.)

### 1. 分子バーコード (HaloPlex HS) を用いた、肺癌の遺伝子変異解析

### 2. Demand Precision: NGS 分子バーコード技術でパネルシーケンスにさらなる正確性を

1. 富田 秀太（岡山大学大学院医歯薬学総合研究科・バイオバンク）  
豊岡 伸一（岡山大学大学院医歯薬学総合研究科・臨床遺伝子医療学／胸部外科／バイオバンク）

2. 吉崎 史子（アジレント・テクノロジー株式会社）

**Symposia**

Room 1 Oct. 6 (Thu.) 12:50-15:20

**S5****Development of the molecular-targeting drugs and their application to the clinical medicine**  
分子標的治療薬の開発と臨床への応用を目指してChairpersons: Koichi Hagiwara (Jichi Med. Univ., Pulmonary Med.)  
Minoru Yoshida (RIKEN CSRS)座長：萩原 弘一（自治医大・呼吸器内科）  
吉田 稔（理研・環境資源）

Over the past two decades, an ample repertoire of molecular-targeting drugs has been developed, and great successes in therapy for cancers that express target molecules have been achieved. However, challenges still remain to improve the efficacy of treatment by developing novel drugs that target key molecules in refractory cancers including molecules involved in metastasis, drug resistance, and cancer stemness. This symposium portrays a flowchart for the development of novel molecular-targeting drugs. The chart begins from the exploitation of seed molecules and leads to their clinical applications. We emphasize an important role for initiatives by academic investigators, and discuss how they can cooperate to establish novel cancer treatments.

**S5-1 Targeting adaptive pathways in metastatic treatment-resistant prostate cancer**

Owen N. Witte (Dept. of Microbiology, Immunol. &amp; Mol. Genetics, UCLA)

**S5-2 Targeting acute myeloid leukemia with genetic complexity and heterogeneity**

Fumihiko Ishikawa (Lab. for Human Disease Models, RIKEN IMS)

急性骨髄性白血病のゲノム複雑性と分子標的治療  
石川 文彦（理研・IMS・ヒト疾患モデル研究グループ）**S5-3 Targeting novel function of hTERT and its clinical application**

Kenkichi Masutomi (Natl. Cancer Ctr. Res. Inst., Div. of Cancer Stem Cell)

hTERT の新規機能を標的とした抗がん戦略とその臨床応用  
増富 健吉（国立がん研究セ・研・がん幹細胞）**S5-4 A RaPID way to discover pseudo-natural peptides for cancer therapeutic uses**

Hiroaki Suga (Dept. of Chem., Science, The Univ. of Tokyo)

がん標的に対する特殊ペプチド創薬  
菅 裕明（東京大・理・化学）**S5-5 Mechanism of resistance to EGFR-TKI in lung cancer with EGFR mutation and therapeutic strategy to overcome resistance.**

Makoto Maemondo (Dept. of Respiratory Med., Miyagi Cancer Ctr.)

EGFR 遺伝子変異肺癌に対するチロシンキナーゼ阻害剤の耐性機序と耐性克服戦略  
前門戸 任（宮城県立がんセ）**S5-6 Investigator-initiated GCP-based clinical trials for new drug development in Japan**

Isamu Okamoto (Res. Inst. for Diseases of the Chest, Kyushu Univ.)

日本におけるアカデミア発新薬開発における医師主導治験の役割  
岡本 勇（九州大・病院・呼吸器）**Special Symposia**

Room 1 Oct. 6 (Thu.) 15:30-18:00

**SS1****我が国のがん研究：その歴史と未来**

Chairpersons: Hitoshi Nakagama (Natl. Cancer Ctr.)

Kohei Miyazono (Dept. of Mol. Path., Grad. Sch. of Med., The Univ. of Tokyo)

座長：中釜 斎（国立がん研究セ）  
宮園 浩平（東京大・院医・分子病理学）

我が国のがん研究は、20世紀初頭に山極らによって発がん研究において世界最先端の成果が発表されたことを皮切りに、がん遺伝子、がん抑制遺伝子の研究やがんウイルスなどの研究分野でこれまでに世界に冠たる業績をあげ、国際的にもがん研究の発展に大きく貢献して来た。がんウイルスの研究では新規のがん遺伝子が次々と発見された中にあって、我が国特有の疾患である成人T細胞白血病の研究によってもたらされた知見は極めて大きい。一方で1980年代からの分子生物学研究の急速な進歩により、基礎研究の分野ではサイトカインの分野などで世界を大きくリードする成果が日本初で次々と報告されて来たことは世界でも広く知られている。またゲノム研究の発展により、がんの発症や進展に関わる種々のがん遺伝子、がん抑制遺伝子の役割が次々と解明されて来た。近年は基礎研究の成果をいかに臨床応用へと橋渡して行くかが日本癌学会でも活発に議論されているところである。

本シンポジウムでは日本発の世界をリードするがん研究の成果について4名の先生方にご発表いただき、日本のがん研究の歴史と未来について議論する場としたい。本シンポジウムが若手研究者にとってがん研究に夢を抱いてもらえるような議論の場となることを期待したい。

**SS1-1 Our Oncogene Study; from Isolation of Mutants of Avian Sarcoma Virus to Discovery of ErbB Family**

Kumao Toyoshima (RIKEN)

がん遺伝子研究事始めから erbB の発見へ  
豊島 久真男（理研）**SS1-2 Molecular mechanism of apoptosis**

Shigekazu Nagata (Lab. of Biochem. &amp; Immunol., IFReC, Osaka Univ.)

アボトーシスの分子機構の解明とその生理作用  
長田 重一（大阪大・免疫学フロンティア・免疫・生化学）**SS1-3 Along with the genome era; from cloning of APC gene to drug development**

Yusuke Nakamura (Dept. of Med., Univ. of Chicago)

ゲノム研究と共に歩んで；APC 発見から抗がん剤開発へ  
中村 祐輔（シカゴ大・医・腫瘍内科）**SS1-4 Research progression of adult T cell leukemia/lymphoma since 1975**

Ryuzo Ueda (Dept. of Tumor Immunology, Aichi Med. Univ. Sch. of Med.)

成人T細胞白血病：発見とその治療  
上田 龍三（愛知医大・医・腫瘍免疫）

## International Sessions

Room 2 Oct. 6 (Thu.) 12:50-15:20

IS3

### Clinical sequencing with NGS panel for precision medicine

NGS パネルを用いたクリニカルシークエンスによる precision medicine 構築

Chairpersons: Atsushi Ohtsu (NCC-EPOC)

Patrick Tan (Duke-NUS Med. Sch./Cancer Sci. Inst. of Singapore)

座長 : 大津 敦 (国立がん研究セ・先端医療開発セ)

Patrick Tan (Duke-NUS Med. Sch./Cancer Sci. Inst. of Singapore)

Recent progress on genome analyses with next generation sequencer (NGS) pane has established a possible genome-based treatment approach in some oncology areas. However, various issues still remain in clinical implication of this approach: approval of the panel, quality control of the analysis, curation/annotation procedure, how to select an adequate agent, are on discussions in this regard. Which is suitable for clinical sequencing, target sequencing with NGS panel or whole exome/genome analysis, is another question. For establishing precision medicine, it is mandatory to collect and integrate big genome/clinical data from all over the world.

In this session, 6 speakers, 3 from Asian country and 3 from Japan, will present their experiences in clinical sequencing including the above issues. Future international collaborations are anticipated to achieve a real precision medicine in the world.

#### IS3-1 SCRUM-Japan data commons sharing clinico-genomic information for development of novel cancer therapies

Katsuya Tsuchihara (Div. of Translational Res., NCC-EPOC)

#### IS3-2 Moving NGS into Clinical Implementation : The Singapore Experience

Patrick Tan<sup>1,2</sup> (<sup>1</sup>Duke-NUS Med. Sch., <sup>2</sup>Cancer Sci. Inst. of Singapore)

#### IS3-3 Clinical implication of intrinsic subtypes and somatic mutations in colon cancer

Soonmyung Paik (Yonsei Univ. Coll. of Sci. & NSABP Foundation/NRG Oncology)

#### IS3-4 Mutational panel for following clonal evolution in myelodysplastic syndromes

Hideki Makishima<sup>1,2</sup>, Tetsuichi Yoshizato<sup>1</sup>, Kenichi Yoshida<sup>1</sup>, Yasunobu Nagata<sup>1</sup>, Mikael Sekeres<sup>2</sup>, Yusuke Okuno<sup>1</sup>, Yuichi Shiraishi<sup>3</sup>, Shigeru Chiba<sup>4</sup>, Satoru Miyano<sup>3</sup>, Lee-Yung Shih<sup>5</sup>, Torsten Haferlach<sup>6</sup>, Seishi Ogawa<sup>1</sup>, Jaroslaw Maciejewski<sup>2</sup> (<sup>1</sup>Dept. of Path. & Tumor Biol., Kyoto Univ., <sup>2</sup>Cleveland Clinic, <sup>3</sup>Human Genome Ctr., Inst. Med. Sci., The Univ. of Tokyo, <sup>4</sup>Dept. of Hematology, Faculty of Med., Univ. of Tsukuba, <sup>5</sup>Div. of Hematology-Oncology, Chang Gung Univ., <sup>6</sup>Munich Leukemia Lab.)

骨髄異形成症候群の病期進展を予測する遺伝子変異パネル

牧島 秀樹<sup>1,2</sup>、吉里 哲一<sup>1</sup>、吉田 健一<sup>1</sup>、永田 安伸<sup>1</sup>、セケレス ミカエル<sup>2</sup>、奥野 友介<sup>1</sup>、白石 友一<sup>3</sup>、千葉 澄<sup>4</sup>、宮野 悟<sup>3</sup>、シーリュン<sup>5</sup>、ハフェラッハ トーステン<sup>6</sup>、小川 誠司<sup>1</sup>、マチャエイフスキヤロスワフ<sup>2</sup> (<sup>1</sup>京都大・医・腫瘍生物学、<sup>2</sup>クリーブランドクリニック、<sup>3</sup>東京大・医科研・ヒューマンゲノムセ、<sup>4</sup>筑波大・医・血液内科、<sup>5</sup>チャンギン大・血液内科、<sup>6</sup>ミュンヘン白血病研)

#### IS3-5 Computational Challenges in IMSUT's Artificial Intelligence-based Clinical Sequencing

Seiya Imoto<sup>1</sup>, Clinical Sequencing Team IMSUT<sup>2</sup> (<sup>1</sup>Health Intelligence Ctr., Inst. Med. Sci., The Univ. of Tokyo, <sup>2</sup>Inst. Med. Sci., The Univ. of Tokyo)

東大医科研における人工知能を用いた臨床シークエンスの計算科学的課題

井元 清哉<sup>1</sup>、医科研 クリニカルシークエンスチーム<sup>2</sup> (<sup>1</sup>東京大・医科研・ヘルスインテリジェンスセ、<sup>2</sup>東京大・医科研)

#### IS3-6 Using Diagnostic Whole Genome analysis to stratify treatment of Recalcitrant Cancers

Sean Grimmond (The Univ. of Melbourne Ctr. for Cancer Res.)

## International Sessions

Room 3 Oct. 6 (Thu.) 12:50-15:20

IS4

### Advances in Drug Delivery System (DDS)

ドラッグデリバリーシステムの最先端

Chairpersons: Nobuhiro Nishiyama (Chemical Resources Lab., Tokyo Inst. of Tech.)

Won Jong Kim (Ctr. for Self-assembly & Complexity, IBS)

座長 : 西山 伸宏 (東京工大・資源化学研)

Won Jong Kim (Ctr. for Self-assembly & Complexity, IBS)

Recent advances in biotechnology allow to develop various functional molecules including targeting molecules such as aptamers, peptides and antibodies, and their application in medicine is strongly demanded. In the design of DDS, such functional molecules are integrated to the platform of nanocarriers, aiming to improve the safety and efficacy of bioactive compounds. DDS can realize effective but non-toxic cancer treatment, practical use of emerging biomedicine, biofunctional imaging and minimally invasive surgery in combination with medical instruments. Thus, the field of DDS is progressing steady and spreading versatile directions. Under these circumstances, an interdisciplinary collaboration must be promoted. In order to increase such opportunities, excellent scientists from Asian countries will present recent achievement of DDS and related technologies in this session.

#### IS4-1 Polymeric nanoparticles for stimuli-sensitive drug delivery

Won Jong Kim<sup>1,2</sup> (Ctr. for Self-assembly & Complexity, IBS, <sup>3</sup>Dept. of Chemistry, POSTECH)

#### IS4-2 Novel targeted chemotherapy by using anti-tissue factor antibody conjugated micelle

Masahiro Yasunaga<sup>1</sup>, Yoshikatsu Koga<sup>1</sup>, Hiroki Takashima<sup>1</sup>, Akinori Sugaya<sup>1</sup>, Kenichiro Naito<sup>2</sup>, Yasuhiro Matsumura<sup>1</sup> (<sup>1</sup>Developmental Therap., EPOC, Natl. Cancer Ctr., <sup>2</sup>Res. Div., NanoCarrier Co., Ltd.)

#### IS4-3 Sonoporation with nano-bubble and ultrasoud as a novel antigen delivery system for cancer immunotherapy

Ryo Suzuki, Kazuo Maruyama (Lab. of Drug Delivery System, Faculty of Pharma-Sci., Teikyo Univ.)

がん免疫療法に対する新規抗原デリバリーとしてのナノバブルと超音波の併用によるソノポレーション  
鈴木 亮、丸山 一雄 (帝京大・薬)

#### IS4-4 Polymer-liposomes for tumor extracellular matrix environment-triggered targeting drug delivery

Chun-Liang Lo (Dept. of Biomed. Engineering, Natl. Yang Ming Univ.)

#### IS4-5 Development of Multi-functional Polymeric Nanoparticles for Efficient Delivery of Therapeutics for Anti-cancer Therapy

In-Kyu Park (Dept. of Biomed. Sci., Chonnam Natl. Univ. Med. Sch.)

#### IS4-6 DNA Nanosphere as a Drug Delivery System for Cancer Cells

Supattra Chaitongyot<sup>1</sup>, Nusara Chomanee<sup>2</sup>, Komgrid Charngkaew<sup>2</sup>, Anuttara Udomprasert<sup>3</sup>, Thaned Kangsamaksin<sup>1</sup> (<sup>1</sup>Dept. of Biochem., Mahidol Univ., <sup>2</sup>Dept. of Path., Siriraj Hosp., <sup>3</sup>Dept. of Biochem., Burapha Univ.)

#### IS4-7 In vivo evaluation and comparison of P-HPMA-pirarubicin conjugates with different molecular weights

Jun Fang<sup>1,2</sup>, Kenji Tsukigawa<sup>1,2</sup>, Hideaki Nakamura<sup>1,2</sup>, Hiroshi Maeda<sup>1</sup> (<sup>1</sup>DDS Res. Inst., Sojo Univ., <sup>2</sup>Faculty Pharma. Sci., Sojo Univ.)

分子量の異なるビラルビシン P-HPMA 結合体の体内動態、抗腫瘍効果と副作用の評価

方 軍<sup>1,2</sup>、月川 健士<sup>1,2</sup>、中村 秀明<sup>1,2</sup>、前田 浩<sup>1</sup> (<sup>1</sup>崇城大・DDS 研、<sup>2</sup>崇城大・薬)

#### IS4-8 Effect of the substituted-HPMA on cellular response of curcumin to inhibit K562 leukemic cells

Siriporn Okonogi<sup>1</sup>, Songyot Anuchapreeda<sup>2</sup>, Ornchuma Naksuriya<sup>1</sup>, Singkome Tima<sup>2</sup> (<sup>1</sup>Dept. of Pharm. Sci., Chiang Mai Univ., <sup>2</sup>Dept. of Med. Tech., Chiang Mai Univ.)

#### IS4-9 Enhanced permeability and retention (EPR) effect in early stage of lung metastasis

Ariunbayan Sukhbaatar<sup>1,2</sup>, Sachiko Horie<sup>1</sup>, Shiro Mori<sup>3</sup>, Tetsuya Kodama<sup>1</sup> (<sup>1</sup>Dept. of Biomed. Eng., Grad. Sch. Biomed. Eng., Tohoku Univ., <sup>2</sup>Dept. of Maxillofacial Surg., Sch. Dent., Tohoku Univ., <sup>3</sup>Dept. of Maxillofacial Surg., Hosp., Tohoku Univ.)

## Symposia on Specific Tumors

Room 4 Oct. 6 (Thu.) 12:50-15:20

**SST2****The latest medical research and development in gastrointestinal carcinoma**

消化器癌領域における最新の医療研究開発

Chairpersons: Chikashi Ishioka (Dept. of Clin. Oncology, Inst. of Development, Aging and Cancer, Tohoku Univ.)

Masaki Mori (Dept. of Gastroenterological Surg., Osaka Univ.)

座長：石岡 千加史（東北大・加齢医学研・臨床腫瘍）  
森 正樹（大阪大・院医・消化器外科）

The title of this symposium is “The latest medical research and development in gastrointestinal carcinoma”. Gastrointestinal cancer is the commonest form of malignancy in Japan, highlighting the need to develop more effective treatments for this disease.

In this session, the first three presentations will provide general remarks related to advancing cancer treatment. Dr Seno will present about Dclk1, a novel cancer stem cell marker. Novel drug delivery system with super-carbon apatite will be presented by Prof Yamamoto. His team is now applying for clinical trials. Prof Muto will present their trial introducing genome-based medicine in the clinical setting.

The last three presentations will provide a relatively detailed look at novel management strategies. Prof Koga will present about improving the diagnostic sensitivity of colorectal cancer using both fecal miRNA and the traditional fecal occult blood test. He is also developing novel antibody-drug conjugates and antibody-conjugated micelles. Prof Eguchi will present about miRNAs that are associated with anti-cancer drug resistance. Prof Takahashi will present novel epigenetic biomarkers that are superior for predicting efficacy of anti-EGFR antibody than KRAS mutation status in colorectal cancers.

This symposium will provide insight into latest medical research and developments in the field of gastrointestinal carcinoma.

**SST2-1 Targeting tumor stem cells for the treatment of digestive organ tumors**

Hiroshi Seno, Takahisa Maruno, Norihiro Goto, Akihisa Fukuda (Dept. of Gastroenterol. &amp; Hepatol., Kyoto Univ. Grad. Sch. of Med.)

## 消化器腫瘍における腫瘍幹細胞標的治療

妹尾 浩、丸野 貴久、後藤 規弘、福田 晃久（京都大・医・消化器内科）

**SST2-2 Mechanistic analysis of sCA for efficient in vivo delivery to tumor cells**Hiroyumi Yamamoto<sup>1,2</sup>, Tsunekazu Mizushima<sup>2</sup>, Junichi Nishimura<sup>2</sup>, Taishi Hata<sup>2</sup>, Chu Matsuda<sup>2</sup>, Naotsugu Haraguchi<sup>2</sup>, Hidekazu Takahashi<sup>2</sup>, Yuichiro Dok<sup>2</sup>, Masaki Mori<sup>2</sup> (<sup>1</sup>Dept. of Mol. Path., Health Sci., Grad. Sch. of Med., Osaka Univ., <sup>2</sup>Dept. of Gastroenterological Surg., Grad. Sch. of Med., Osaka Univ.)

## 卓越した in vivo 腫瘍デリバリーを達成する新規 DDS のメカニズム解析

山本 浩文<sup>1,2</sup>、水島 恒和<sup>2</sup>、西村 潤一<sup>2</sup>、畠 泰司<sup>2</sup>、松田 宙<sup>2</sup>、原口 直紹<sup>2</sup>、高橋 秀和<sup>2</sup>、土岐 祐一郎<sup>2</sup>、森 正樹<sup>2</sup>（<sup>1</sup>大阪大・医・保健・分子病理、<sup>2</sup>大阪大・消化器外科）**SST2-3 Clinical biobank and clinical sequencing consortium in Japan**Muto Manabu<sup>1</sup>, Mavashi Kauai<sup>1</sup>, Shigemi Matsumoto<sup>1</sup>, Yasushi Okuno<sup>2</sup>, Shinichi Toyota<sup>3</sup>, Hiroshi Nishihara<sup>4</sup>, Hisahiro Matsubara<sup>5</sup>, Satoshi Miyake<sup>6</sup>, Eisaburo Sueoka<sup>7</sup> (<sup>1</sup>Dept. of Clin Oncol., Kyoto Univ. Hosp., <sup>2</sup>Dept. System Oncol., Kyoto Univ., <sup>3</sup>Okayama Univ., <sup>4</sup>Hokkaido Univ., <sup>5</sup>Chiba Univ., <sup>6</sup>Tokyo Med. & Dent. Univ., <sup>7</sup>Saga Univ.)

## クリニカルバイオバンク研究会とクリニカルシーケンスコンソーシアムの構築

武藤 学<sup>1</sup>、金井 雅史<sup>1</sup>、松本 繁巳<sup>1</sup>、奥野 恭史<sup>2</sup>、豊岡 伸一<sup>3</sup>、西原 広史<sup>4</sup>、松原 久裕<sup>5</sup>、三宅 智<sup>6</sup>、末岡 榮三郎<sup>7</sup>（<sup>1</sup>京都大・医・腫瘍薬物治療、<sup>2</sup>京都大・医・臨床システム腫瘍、<sup>3</sup>岡山大・医・臨床遺伝子医療、<sup>4</sup>北海道大・医・がん遺伝子診療、<sup>5</sup>千葉大・医・先端応用外科、<sup>6</sup>東京医歯大・医・臨床腫瘍、<sup>7</sup>佐賀大・医・臨床検査）**SST2-4 Original research for gastrointestinal cancer - from fecal molecular diagnosis to antibody based treatment**

Yoshikatsu Koga (Div. of Developmental Therap., Natl. Cancer Ctr.)

ユニークな消化器癌研究—便の分子診断から抗体デリバリーまで—古賀 宣勝（国立がん研究セ・先端医療開発セ・新薬開発）

**SST2-5 Epigenetic biomarkers in colorectal cancer treatment**Shin Takahashi<sup>1,2</sup>, Kota Ouchi<sup>2</sup>, Chikashi Ishioka<sup>1,2</sup> (<sup>1</sup>Dept. of Clinical Oncol., IDAC, Tohoku Univ., <sup>2</sup>Dept. of Medical Oncol., Tohoku Univ. Hosp.)大腸がん治療におけるエピジェネティックバイオマーカー  
高橋 信<sup>1,2</sup>、大内 康太<sup>2</sup>、石岡 千加史<sup>1,2</sup>（<sup>1</sup>東北大・加齢研・臨床腫瘍、<sup>2</sup>東北大・病院・腫瘍内科）**IS4-10 The Presence and Impact of anti-PEG IgM in Human on Injection of PLD to Ovarian Cancer Patients**Yoko Matsumoto<sup>1</sup>, Asaha Fujimoto<sup>1</sup>, Taro Shimizu<sup>2</sup>, Yukiyo Kubo<sup>2</sup>, Kenbun Sone<sup>1</sup>, Mayuyo Mori<sup>1</sup>, Katsuyuki Adachi<sup>1</sup>, Kazunori Nagasaka<sup>1</sup>, Takahide Arimoto<sup>1</sup>, Katsutoshi Oda<sup>1</sup>, Kei Kawana<sup>1</sup>, Tatsuhiko Ishida<sup>2</sup>, Tomoyuki Fuji<sup>1</sup> (<sup>1</sup>Dept. of Gynecol., The Univ. of Tokyo Sch. of Med., <sup>2</sup>Biopharm., Tokushima Univ., Pharm.)

## ヒトにおける抗PEG IgM 抗体の産生とPLD投与への影響

松本 陽子<sup>1</sup>、藤本 麻葉<sup>1</sup>、清水 太郎<sup>2</sup>、久保 幸代<sup>2</sup>、曾根 献文<sup>1</sup>、森 薫代<sup>1</sup>、足立 克之<sup>1</sup>、長阪 一憲<sup>1</sup>、有本 貴英<sup>1</sup>、織田 克利<sup>1</sup>、川名 敬<sup>1</sup>、石田 龍弘<sup>2</sup>、藤井 知行<sup>1</sup>（<sup>1</sup>東京大・医・女性外科、<sup>2</sup>徳島大・院医歯・薬物動態制御）

## Symposia on Specific Tumors

J

Room 5

Oct. 6 (Thu.) 12:50-15:20

SST3

Exploring novel biomarkers for prostate cancer bridging basic research and clinical applications

基礎研究と臨床を繋ぐ前立腺癌に対する新規バイオマーカー探索

### SST2-6 MicroRNAs in gastroenterological cancers; recent progress and clinical implications

Hidetoshi Eguchi, Yuchihiro Doki, Masaki Mori (Dept. of Gastroenterol. Surg., Osaka Univ., Grad. Sch. of Med.)

消化器癌領域におけるマイクロ RNA 研究の現状と展望

江口 英利、土岐 祐一郎、森 正樹（大阪大・院・消化器外科）

Chairpersons: Mototsugu Oya (Dept. of Urology, Keio Univ. Sch. of Med.)

Shigeo Horie (Dept. of Urology, Juntendo Univ. Grad. Sch. of Med.)

座長：大家 基嗣（慶應大・医・泌尿器）

堀江 重郎（順天堂大・院医・泌尿器外科）

The prevalence of prostate cancer is on the rise worldwide. Despite decline in prostate cancer death in Western countries, prostate cancer mortality is continuously increasing here in Japan. Hormonal therapy used to be the only treatment option for metastatic prostate cancer. Recently, the development of novel anti-androgen agents in addition to chemotherapy allowed for a variety of treatment options, which also improved prognosis.

Regarding prostate cancer biomarker, the most widely used PSA is an excellent biomarker for diagnosis, treatment efficacy, and prediction for disease recurrence. However, since PSA value does not strictly reflect heterogeneity of prostate cancer, novel biomarkers are required for accurate assessment of disease status, diagnosis and appropriate treatment option. These days, research interest goes beyond cancer tissue and serum, and circulating tumor cells is now at the center of attention. Furthermore, emergent studies have suggested that combining chemotherapy with hormonal therapy markedly improves survival for men with metastatic, high tumor load, hormone-sensitive prostate cancer. This is a game changer for prostate cancer treatment that blindly worshiped hormonal therapy.

In this symposium, young researchers in the field of translational research will present their novel and exciting findings regarding prostate cancer biomarkers.

#### SST3-1 The clinical significance of liquid biopsy for treatments of advanced prostate cancer patients

Masayoshi Nagata<sup>1</sup>, Mayuko Kanayama<sup>1</sup>, Naoya Nagaya<sup>1</sup>, Hisamitsu Ide<sup>2</sup>, Takahiro Ochiya<sup>3</sup>, Shigeo Horie<sup>1</sup> (<sup>1</sup>Dept. of Urology, Juntendo Univ., Grad. Sch. of Med., <sup>2</sup>Dept. of Urology, Sch. of Med., Teikyo Univ., <sup>3</sup>Div. of Mol. Cell. Med., Natl. Cancer Ctr. Res. Inst.)

進行前立腺癌の臨床に向けての Liquid Biopsy の意義

永田 政義<sup>1</sup>、金山 麻裕子<sup>1</sup>、長屋 直哉<sup>1</sup>、井手 久満<sup>2</sup>、落谷 孝広<sup>3</sup>、

堀江 重郎<sup>1</sup>（<sup>1</sup>順天堂大・院医・泌尿器外科、<sup>2</sup>帝京大・医・泌尿器、

<sup>3</sup>国がん研究セ・研・分子細胞治療）

#### SST3-2 Genome-based precision medicine in the therapeutics for prostate cancer

Masaki Shiota, Masatoshi Eto (Dept. of Urol., Kyushu Univ., Grad. Sch. of Med. Sci.)

遺伝情報に基づく前立腺癌治療の個別化へむけて

塙田 真己、江藤 正俊（九州大・医・泌尿器）

#### SST3-3 Non-AR related clinically actionable pathways in CRPC

Takeo Kosaka, Yasumasa Miyazaki, Akira Miyajima, Eiji Kikuchi, Mototsugu Oya (Dept. of Urology, Keio Univ. Sch. of Med.)

CRPC におけるアンドロゲン受容体シグナル経路以外の臨床的に治療介入可能なシグナル経路

小坂 威雄、宮崎 保匡、宮嶋 哲、菊地 栄次、大家 基嗣（慶應大・医・泌尿器）

#### SST3-4 Development of novel biomarkers in prostate cancer

Motohide Uemura<sup>1</sup>, Atsunari Kawashima<sup>1,2</sup>, Takeshi Ujike<sup>1</sup>, Akira Nagahara<sup>1</sup>, Kazutoshi Fujita<sup>1</sup>, Norio Nonomura<sup>1</sup> (<sup>1</sup>Dept. of Urology, Osaka Univ. Grad. Sch. of Med., <sup>2</sup>Dept. of Therap. Urologic Oncology)

前立腺がんにおける新規バイオマーカー探索研究

植村 元秀<sup>1</sup>、河嶋 厚成<sup>1,2</sup>、氏家 刷<sup>1</sup>、永原 啓<sup>1</sup>、藤田 和利<sup>1</sup>、野々村 祝夫<sup>1</sup>（<sup>1</sup>大阪大・院医・泌尿器、<sup>2</sup>泌尿器標的治療学寄附講座）

#### SST3-5 Tissue androgen concentrations ratio as a prognostic biomarker in men with castration-resistant prostate cancer

Yasuhide Miyoshi<sup>1</sup>, Takashi Kawahara<sup>1</sup>, Yumiko Yokomizo<sup>2</sup>, Masato Yasui<sup>1</sup>, Koichi Uemura<sup>1</sup>, Shuko Yoneyama<sup>1</sup>, Yusuke Hattori<sup>1</sup>, Jun-ichi Teranishi<sup>1</sup>, Hiroji Uemura<sup>1</sup>, Masahiro Yao<sup>2</sup> (<sup>1</sup>Dept. of Urology & Renal Transplantation, Yokohama City Univ. Med. Ctr., <sup>2</sup>Dept. of Urology, Yokohama City Univ., Grad. Sch. of Med.)

去勢抵抗性前立腺癌における予後予測バイオマーカー：前立腺組織内アンドロゲン濃度比

三好 康秀<sup>1</sup>、河原 崇司<sup>1</sup>、横溝 由美子<sup>2</sup>、安井 将人<sup>1</sup>、植村 公一<sup>1</sup>、  
米山 健子<sup>1</sup>、服部 裕介<sup>1</sup>、寺西 淳一<sup>1</sup>、上村 博司<sup>1</sup>、矢尾 正祐<sup>2</sup>（<sup>1</sup>横浜市大・市民総合医療セ・泌尿器腎移植、<sup>2</sup>横浜市大・泌尿器）

**Japanese Oral Sessions**

Room 6 Oct. 6 (Thu.) 12:50-14:05

**J12-2****Cancer immunology (3): augmentation of antitumor immune-responses**

がん免疫（3）：抗腫瘍免疫応答の増強

Chairperson: Tetsuya Nakatsura (Div. of Cancer Immunother., Natl. Cancer Ctr.)  
座長：中面 哲也（国立がん研究セ・先端医療開発セ・免疫療法開発）**J-1037 Antitumor effects of a low dose TLR7/8 agonist and its combined therapy with PD-L1 blockade**Naoto Nishii<sup>1</sup>, Hidetake Tachinami<sup>1</sup>, Yuta Kondo<sup>1</sup>, Hiroyuki Harada<sup>2</sup>, Miyuki Azuma<sup>1</sup> (<sup>1</sup>Dept. Molec. Immunol., Tokyo Med. & Dent. Univ., <sup>2</sup>Dept. Oral & Maxillofacial Surg., Tokyo Med. & Dent. Univ.)低濃度 TLR7/8 アゴニストの抗腫瘍効果と PD-L1 阻害との併用  
西井 直人<sup>1</sup>、立浪 秀剛<sup>1</sup>、近藤 雄太<sup>1</sup>、原田 浩之<sup>2</sup>、東 みゆき<sup>1</sup>（<sup>1</sup>東医歯大・分子免疫、<sup>2</sup>東医歯大・顎口腔外科）**J-1038 Intratumoral STING stimulation accumulates M1-like macrophages in the tumor site resulting in the anti-tumor effects**Kei Ishibashi<sup>1,2</sup>, Takayuki Ohokuri<sup>1</sup>, Akemi Kosaka<sup>1</sup>, Takumi Kumai<sup>1</sup>, Yui Hirata<sup>1,3</sup>, Kenzo Ohara<sup>1,3</sup>, Toshihiro Nagato<sup>3</sup>, Kensuke Oikawa<sup>1</sup>, Naoko Aoki<sup>1</sup>, Yasuaki Harabuchi<sup>1</sup>, Hiroya Kobayashi<sup>1</sup> (<sup>1</sup>Dept. Pathology, Asahikawa Med. Univ., <sup>2</sup>Respiratory Center, Asahikawa Med. Univ., <sup>3</sup>Dept. Otolaryngology-Head and Neck Surgery, Asahikawa Med. Univ.)

STING リガンドの腫瘍内投与は腫瘍内にマクロファージを集積させ抗腫瘍免疫応答を誘導する

石橋 佳<sup>1,2</sup>、大栗 敬幸<sup>1</sup>、小坂 朱<sup>1</sup>、熊井 琢美<sup>3</sup>、平田 結<sup>1,3</sup>、大原 賢三<sup>1,3</sup>、長門 利純<sup>3</sup>、及川 賢輔<sup>1</sup>、青木 直子<sup>1</sup>、原渕 保明<sup>3</sup>、小林 博也<sup>1</sup>（<sup>1</sup>旭川医大・医・免疫病理、<sup>2</sup>旭川医大・呼吸器センター、<sup>3</sup>旭川医大・医・耳鼻咽喉頭頸部外科）**J-1039 Anti-tumor immunity by IL-12 is dramatically enhanced by combination with inactivated Sendai virus particle, HVJ-E**

Kotaro Saga, Yasufumi Kaneda (Gen. Ther. Sci., Osaka Univ., Med.)

IL-12 の抗腫瘍免疫活性は不活性化センダイウイルス粒子 (HVJ-E) によって劇的に増強される

佐賀 公太郎、金田 安史（阪大・医・遺伝子治療学）

**J-1040 Antigen Delivery to Tumoral Macrophages Leads to Eradication of Tumor Resistant to Immune Checkpoint Inhibitors**Daisuke Muraoka<sup>1,2</sup>, Naohiro Seo<sup>2</sup>, Naozumi Harada<sup>2</sup>, Keisuke Fujii<sup>3</sup>, Mitsuhiro Komura<sup>3</sup>, Seiya Imoto<sup>3</sup>, Rui Yamaguchi<sup>3</sup>, Satoru Miyano<sup>3</sup>, Hideo Yagita<sup>4</sup>, Kazunari Akiyoshi<sup>5</sup>, Hiroshi Shiku<sup>2</sup> (<sup>1</sup>Cent. for Drug-Discovery, Grad. Sch. of Pharm. Sci., Univ. Sizuoka, <sup>2</sup>Dept. of Immuno-Gene Therapy, Mie Univ. Grad. Sch. of Med., <sup>3</sup>Human Genome Ctr., The Inst. Med. Sci., The Univ. Tokyo, <sup>4</sup>Dept. Immunol., Juntendo Univ. Sch. Med., <sup>5</sup>Dept. of Polymer Chem., Grad. Sch. of Engineering, Kyoto Univ.)

腫瘍マクロファージへの抗原輸送は免疫チェックポイント抵抗性腫瘍を治癒へと導く

村岡 大輔<sup>1,2</sup>、瀬尾 尚宏<sup>2</sup>、原田 直純<sup>2</sup>、藤井 啓介<sup>2</sup>、上村 光弘<sup>3</sup>、井元 清哉<sup>3</sup>、山口 類<sup>3</sup>、宮野 悟<sup>3</sup>、八木田 秀雄<sup>4</sup>、秋吉 一成<sup>5</sup>、珠玖 洋<sup>2</sup>（<sup>1</sup>静岡県立大学大学院 創薬探索センター、<sup>2</sup>三重大学大学院 遺伝子・免疫細胞治療学、<sup>3</sup>東大・医研・ヒトゲノム解析センター、<sup>4</sup>順天堂大・医・免疫学講座、<sup>5</sup>京都大学大学院 生体機能高分子）**J-1041 Vaccine with Optimized Long Peptide Antigen Sensitizes Immune Checkpoint Blockade-Resistant Tumor to T Cell Therapy**Naozumi Harada<sup>1,2</sup>, Daisuke Muraoka<sup>3</sup>, Kazunari Akiyoshi<sup>2,4</sup>, Hiroshi Shiku<sup>1,2</sup> (<sup>1</sup>Dept. Immuno-Gene Ther., Mie Univ. Grad. Sch. Med., <sup>2</sup>Akiyoshi Bio-nanotransporter Project, JST ERATO, <sup>3</sup>Centr. Drug Discov., Grad. Sch. Pharm. Sci., Univ. Sizuoka, <sup>4</sup>Dept. Polymer Chem., Grad. Sch. Eng., Kyoto Univ.)

配列最適化長鎖ペプチドワクチンをベースとする複合的がん免疫療法は免疫チェックポイント阻害不応がんを治癒できる

原田 直純<sup>1,2</sup>、村岡 大輔<sup>3</sup>、秋吉 一成<sup>2,4</sup>、珠玖 洋<sup>1,2</sup>（<sup>1</sup>三重大・院・医・遺伝子免疫細胞治療学、<sup>2</sup>JST ERATO・秋吉プロジェクト、<sup>3</sup>静岡県大・薬院・創薬探索セ、<sup>4</sup>京大・院・工・高分子化学）**J-1042 Radiation combined with immune checkpoint blockades enhances local and distant antitumor efficacy for osteosarcoma**YUTAKA TAKAHASHI<sup>1</sup>, Keisuke TAMARI<sup>1</sup>, MASAHIKO KOIZUMI<sup>2</sup>, FUMIAKI ISOHASHI<sup>1</sup>, KAZUHIKO OGAWA<sup>1</sup> (<sup>1</sup>Dept. of Rad. Oncol., Osaka Univ. Sch. Med, <sup>2</sup>Dept. of Health. Science, Osaka Univ. Sch. Med)

免疫チェックポイント阻害剤と放射線の併用は骨肉腫に抗腫瘍効果の局所効果と遠隔効果を増強する

高橋 豊<sup>1</sup>、玉利 康介<sup>1</sup>、小泉 雅彦<sup>2</sup>、磯橋 文明<sup>1</sup>、小川 和彦<sup>1</sup>（<sup>1</sup>大阪大学・医・放射線治療、<sup>2</sup>大阪大学・医・保健）**English Oral Sessions**

Room 6 Oct. 6 (Thu.) 14:05-15:20

**E12-2****Cancer immunology (4): antitumor effector cell**

がん免疫（4）：抗腫瘍エフェクター

Chairperson: Shinichiro Fujii (Lab. Immunotherapy, RIKEN IMS)

座長：藤井 真一郎（理研・IMS・免疫細胞治療）

**E-1060 Identification of tumor-specific TCR from primary tumor-infiltrating lymphocytes and its application to TCR gene therapy**

Hiroyuki Kishi, Atsushi Muraguchi (Dept. Immunol., Grad. Sch. Med. Pharm. Sci., Univ. Toyama)

腫瘍浸潤リンパ球の単一細胞解析による腫瘍特異的TCRの同定および治療への応用（担癌マウスモデル）

岸 裕幸、村口 篤（富山大・医・免疫）

**E-1061 Tumor Infiltrating T Cells Were Losing CD4/CD8 Coreceptor on Follicular Lymphoma "Spider Web"**Xiao Liu<sup>1,4</sup>, Girish Venkataraman<sup>2</sup>, Sonali Smith<sup>1</sup>, Ryuji Hamamoto<sup>1</sup>, Kazuma Kiyotani<sup>1</sup>, Miran Jang<sup>1</sup>, Sandeep Gurbuxani<sup>2</sup>, Justin Kline<sup>1</sup>, Yusuke Nakamura<sup>1,3</sup> (<sup>1</sup>Department of Medicine, University of Chicago, <sup>2</sup>Department of Pathology, University of Chicago, <sup>3</sup>Department of Surgery, University of Chicago, <sup>4</sup>Institute for Molecular Engineering, University of Chicago)**E-1062 Comprehensive Analysis of T Cell Receptor Repertoire in Primary Esophageal Cancer Tissue**Tomoya Sudo<sup>1</sup>, Atsushi Mizoguchi<sup>2</sup>, Akihiko Kawahara<sup>3</sup>, Ryousuke Nishida<sup>1</sup>, Kazutaka Kadoya<sup>1</sup>, Kouhei Saisho<sup>1</sup>, Sachiko Nagasuu<sup>1</sup>, Naoki Mori<sup>1</sup>, Satoru Matono<sup>1</sup>, Toshiaki Tanaka<sup>1</sup>, Akira Yamada<sup>4</sup>, Koshi Mimori<sup>5</sup>, Yoshito Akagi<sup>1</sup> (<sup>1</sup>Dept. of Surg., Kurume Univ. Sch. of Med., <sup>2</sup>Dept. of Immunology, Kurume Univ. Sch. of Med., <sup>3</sup>Dept. of Pathology, Kurume Univ. Sch. of Med., <sup>4</sup>Research Center for Innovative Cancer Therapy, Kurume Univ., <sup>5</sup>Dept. of Surg., Kyushu Univ. Hospital Beppu Hospital)

食道癌組織におけるT細胞レセプターパートリーの包括的解析

主藤 朝也<sup>1</sup>、溝口 充志<sup>2</sup>、河原 明彦<sup>3</sup>、西田 良介<sup>1</sup>、門屋 一貴<sup>1</sup>、最所 公平<sup>1</sup>、長主 祥子<sup>1</sup>、森 直樹<sup>1</sup>、的野 吾<sup>1</sup>、田中 寿明<sup>1</sup>、山田 亮<sup>4</sup>、三森 功士<sup>5</sup>、赤木 由人<sup>1</sup>（<sup>1</sup>久留米大学外科学講座、<sup>2</sup>久留米大学免疫学講座、<sup>3</sup>久留米大学病理診断科病理部、<sup>4</sup>久留米大学先端癌治療研究センター、<sup>5</sup>九州大学病院別府病院外科学講座）**E-1063 Tumor-infiltrating T cell subset analysis of urothelial carcinoma patients**Takayuki Kanazawa<sup>1,2</sup>, Kawashima Atsunari<sup>2,3</sup>, Kumiko Goto<sup>1,2</sup>, Kota Iwahori<sup>1</sup>, Akiko Morimoto<sup>2</sup>, Takeshi Ujiiie<sup>3</sup>, Akira Nagahara<sup>3</sup>, Kazutoshi Fujita<sup>3</sup>, Motohide Uemura<sup>3</sup>, Norio Nonomura<sup>3</sup>, Hisashi Wada<sup>2</sup> (<sup>1</sup>Shionogi & Co., LTD. Drug Disc. & Disease Res. Lab., <sup>2</sup>Dept. Clin. Res. Tumor Immunol. Osaka Univ. Sch. Med., <sup>3</sup>Dept. Urology Osaka Univ. Sch. Med.)

尿路上皮癌における腫瘍浸潤T細胞サブセット解析

金沢 崇之<sup>1,2</sup>、河嶋 厚成<sup>2,3</sup>、後藤 久充子<sup>1,2</sup>、岩堀 幸太<sup>2</sup>、森本 晶子<sup>2</sup>、氏家 剛<sup>3</sup>、永原 啓<sup>3</sup>、藤田 和利<sup>3</sup>、植村 元秀<sup>3</sup>、野々村 祝夫<sup>3</sup>、和田 尚<sup>2</sup>（<sup>1</sup>塩野義製薬（株）・創薬疾患研、<sup>2</sup>阪大・医・臨床腫瘍免疫、<sup>3</sup>阪大・医・泌尿器科）**E-1064 Efficient regeneration of human V $\alpha$ 24 $^+$  invariant NKT cells for anti-tumor activity *in vivo***Tomonori Iyoda<sup>1</sup>, Daisuke Yamada<sup>2</sup>, Kanako Shimizu<sup>1</sup>, Yusuke Sato<sup>1</sup>, Osamu Ohara<sup>2</sup>, Masaru Taniguchi<sup>1</sup>, Haruhiko Koseki<sup>2</sup>, Shin-ichi Fujii<sup>1</sup> (<sup>1</sup>Laboratory for Immunotherapy, IMS, RIKEN, <sup>2</sup>Laboratory for Developmental Genetics, IMS, RIKEN, <sup>3</sup>Laboratory for Integrative Genomics, IMS, RIKEN, <sup>4</sup>Laboratory for Immunoregulation, IMS, RIKEN)iPS細胞由来V $\alpha$ 24陽性ヒトNKT細胞の抗腫瘍活性の検討伊豫田 智典<sup>1</sup>、山田 大輔<sup>2</sup>、清水 佳奈子<sup>1</sup>、佐藤 悠輔<sup>1</sup>、小原 收<sup>3</sup>、谷口 克<sup>4</sup>、古関 明彦<sup>2</sup>、藤井 真一郎<sup>1</sup>（<sup>1</sup>理研・IMS・免疫細胞治療研究チーム、<sup>2</sup>理研・IMS・免疫器官形成研究グループ、<sup>3</sup>理研・IMS・統合ゲノミクス研究グループ、<sup>4</sup>理研・IMS・免疫制御戦略研究グループ）**E-1065 Humoral immunity including auto-antibodies has an important role in cancer immune surveillance**

Hirohito Ishigaki, Misako Nakayama, Yasushi Itoh, Kazumasa Ogasawara (Dept. Pathol., Shiga Univ. of Med. Sci.)

癌の免疫監視において、自己抗体を含む液性免疫も重要である  
石垣 宏仁、仲山 美沙子、伊藤 靖、小笠原 一誠（滋賀医科大学・病理学講座）

## Japanese Oral Sessions

Room 7 Oct. 6 (Thu.) 12:50-14:05

J12-3

### Cancer immunology (5): immune-biomarkers and clinical trials

がん免疫（5）：バイオマーカーと臨床試験

Chairperson: Shigehisa Kitano (Dept. of Experimental Therapeutics, Natl. Cancer Ctr. Hosp.)

座長：北野 滋久（国立がん研究セ・中央病院・先端医療）

#### J-1043 The clinical role of Tr1 and Foxp3+regulatory T cells in cancer patients' immunity

Tetsuya Ikemoto, Mitsuo Shimada, Daichi Ishikawa, Yuji Morine, Satoru Imura, Shuichi Iwahashi, Yu Saito, Shinichiro Yamada, Masato Yoshikawa, Toshiaki Yoshimoto (Dept. Surgery, Tokushima Univ.)

Tr1 と Foxp3 陽性調節性 T 細胞は担癌患者の腫瘍免疫に関する検討  
池本 哲也、島田 光生、石川 大地、森根 裕二、居村 晃、岩橋 衆一、齋藤 裕、山田 真一郎、吉川 雅登、良元 俊昭（徳島大学 外科）

#### J-1044 Tumor infiltrating B cells are associated with favorable prognosis of patients with gastric cancer

Chie Sakimura, Hiroaki Tanaka, Soichiro Hiramatsu, Masatsune Shibutani, Sadaaki Yamazoe, Hisashi Nagahara, Kenjiro Kimura, Takahiro Toyokawa, Ryosuke Amano, Kazuya Muguruma, Kiyoshi Maeda, Kosei Hirakawa, Masaichi Ohira (Dept. Surgical Oncology, Osaka City Univ.)

腫瘍浸潤 B 細胞と胃癌における良好な予後との関係

崎村 千恵、田中 浩明、平松 宗一郎、渋谷 雅常、山添 定明、永原 央、木村 健二郎、豊川 貴弘、天野 良亮、六車 一哉、前田 清、平川 弘聖、大平 雅一（大阪市立大学 腫瘍外科）

#### J-1045 The plasma soluble IL2R $\alpha$ as a biomarker in the cancer vaccine for gastric cancer

Haruna Nagumo<sup>1</sup>, Tomonobu Fujita<sup>1</sup>, Toshiharu Sakurai<sup>1</sup>, Shinobu Nojii<sup>1</sup>, Satoko Matsueda<sup>2</sup>, Tetsuro Sasada<sup>2,3</sup>, Shigeki Shichijo<sup>2</sup>, Kyogo Itoh<sup>2</sup>, Yutaka Kawakami<sup>1</sup> (<sup>1</sup>Inst. Adv. Med. Res., Keio Univ., Sch. Med., <sup>2</sup>Cancer Vaccine Center, Kurume Univ., <sup>3</sup>Kanagawa Cancer Center)

胃がんワクチンにおける血漿 sIL2R $\alpha$  のバイオマーカーとしての意義

南雲 春菜<sup>1</sup>、藤田 知信<sup>1</sup>、桜井 敏晴<sup>1</sup>、野路 しのぶ<sup>1</sup>、松枝 智子<sup>2</sup>、笛田 哲朗<sup>2,3</sup>、七條 茂樹<sup>2</sup>、伊東 恭悟<sup>2</sup>、河上 裕<sup>1</sup>（慶應義塾大学・医・先端医科学 細胞情報、<sup>2</sup>久留米大学がんワクチンセンター、<sup>3</sup>神奈川県立がんセンター臨床研究所）

#### J-1046 Whole exome analysis on glioblastoma multiforme successfully treated with dendritic/tumor fusion cell vaccine

Yuko Kamata<sup>1</sup>, Akiko Kuhara<sup>1</sup>, Yasuharu Akasaki<sup>2</sup>, Sadamu Homma<sup>1</sup> (<sup>1</sup>Div. Oncology, Jikei Univ., Sch. Med., <sup>2</sup>Dept. Neurosurgery, Jikei Univ. Sch. Med.)

樹状細胞/腫瘍細胞融合ワクチンが有効であった膠芽腫の全エクソン解析による遺伝子変異の探索

鎌田 裕子<sup>1</sup>、久原 映子<sup>1</sup>、赤崎 安晴<sup>2</sup>、本間 定<sup>1</sup>（慈恵医大・悪性腫瘍治療研究部、<sup>2</sup>慈恵医大・脳神経外科）

#### J-1047 An open-label phase II randomized trial of WT1 peptide vaccine plus gemcitabine for advanced pancreatic cancer

Takeshi Ishikawa<sup>1</sup>, Sumiyuki Nishida<sup>2</sup>, Shinichi Egawa<sup>3</sup>, Shigeo Koido<sup>4</sup>, Jun Ishii<sup>5</sup>, Yoshihide Kanno<sup>6</sup>, Hiroaki Yanagimoto<sup>7</sup>, Satoshi Kokura<sup>1</sup>, Soyoko Morimoto<sup>2</sup>, Mari S. Oba<sup>8</sup>, Yoshihiro Oka<sup>2</sup>, Haruo Sugiyama<sup>2</sup> (<sup>1</sup>Dept. Gastroenterology and Hepatology, Kyoto Pref. Univ. Med., <sup>2</sup>Osaka Univ. Graduate Sch. of Med., <sup>3</sup>Int. Res. Inst. of Disaster Sci., Tohoku Univ., <sup>4</sup>Dept. Gastroenterology and Hepatology, Jikei Univ. of Med., <sup>5</sup>Faculty of Med., Toho Univ., <sup>6</sup>Dept. Gastroenterology, Sendai City Medical Center, <sup>7</sup>Dept. of Surgery, Kansai Med. Univ.)

進行膵癌に対するゲムシタビン併用 WT1 ベプチドワクチン療法のランダム化第 2 相試験

石川剛<sup>1</sup>、西田 純幸<sup>2</sup>、江川 新一<sup>3</sup>、小井戸 薫雄<sup>4</sup>、石井 淳<sup>5</sup>、菅野 良秀<sup>6</sup>、柳本 泰明<sup>7</sup>、古倉 聰<sup>1</sup>、森本 創世子<sup>2</sup>、大庭 真梨<sup>5</sup>、岡 芳弘<sup>2</sup>、杉山 治夫<sup>2</sup>（京都府立医科大学・消化器内科、<sup>2</sup>大阪大学大学院医学系研究科、<sup>3</sup>東北大・災害科学国際研究所、<sup>4</sup>東京慈恵医科大学・消化器・肝臓内科、<sup>5</sup>東邦大学・医学部、<sup>6</sup>仙台市医療センター・消化器内科、<sup>7</sup>関西医大・外科学）

#### J-1048 Phase I/II clinical trial of Aurora kinase peptide vaccination for the treatment of refractory acute myeloid leukemia

Kazushi Tanimoto<sup>1</sup>, Hiroshi Fujiwara<sup>1</sup>, Toshiki Ochi<sup>1</sup>, Taichi Azuma<sup>1</sup>, Kazuto Takeuchi<sup>1</sup>, Kiyotaka Kuzushima<sup>2</sup>, Masaki Yasukawa<sup>1</sup> (<sup>1</sup>Dept. of Hematol., Clin. Immunol. and Infect. Disease, Ehime Univ., <sup>2</sup>Div. of Immunol., Aichi Cancer Ctr. Res. Inst.)

治療抵抗性急性骨髓性白血病に対する Aurora Kinase ベプチドワクチン療法

谷本 一史<sup>1</sup>、藤原 弘<sup>1</sup>、越智 俊元<sup>1</sup>、東 太地<sup>1</sup>、竹内 一人<sup>1</sup>、葛島 清隆<sup>2</sup>、安川 正貴<sup>1</sup>（愛媛大学大学院 血液・免疫・感染症内科学、<sup>2</sup>愛知県がんセンター研究所）

## English Oral Sessions

Room 7 Oct. 6 (Thu.) 14:05-15:20

E14-3

### Immune-oncology

がん免疫療法

Chairperson: Kiyoshi Yoshimura (NCC-EPOC)

座長：吉村 清（国立がん研究セ・先端医療開発セ）

#### E-1066 Monitoring of circulating PD-1 $^+$ cells and PD-1 $^+$ tumor-infiltrating lymphocytes in non-small-cell lung cancer

Tomoyuki Igarashi<sup>1,2</sup>, Yoko Kataoka<sup>2</sup>, Jun Hanaoka<sup>2</sup>, Koji Teramoto<sup>1</sup>, Yataro Daigo<sup>1</sup> (<sup>1</sup>Dep. Med. Oncol., Shiga Univ. Med. Sci., <sup>2</sup>Dep. Surg., Shiga Univ. Med. Sci.)

非小細胞肺癌における血中 PD-1 陽性細胞と PD-1 陽性腫瘍浸潤リ

ンバ球の関連  
五十嵐 知之<sup>1,2</sup>、片岡 瑛子<sup>2</sup>、花岡 淳<sup>2</sup>、寺本 晃治<sup>1</sup>、醍醐 弥太郎<sup>1</sup>  
(<sup>1</sup>滋賀医科大学 腫瘍内科、<sup>2</sup>滋賀医科大学 呼吸器外科)

#### E-1067 M2-activated M $\phi$ s elongate in the ESCC tissues, consistent with the *in vitro* cell image analyses

Mari Nishio<sup>1</sup>, Maiko Okamoto<sup>1</sup>, Masayuki Doi<sup>1</sup>, Nobuhide Higashino<sup>1,2</sup>, Himiko Kodaira<sup>1</sup>, Masayoshi Hosono<sup>1,2</sup>, Nobuhisa Takase<sup>1,2</sup>, Yumi Ichihara<sup>1</sup>, Manabu Shigeoka<sup>1</sup>, Yuichiro Koma<sup>1</sup>, Hiroshi Yokozaki<sup>1</sup> (<sup>1</sup>Dept. Pathol., Kobe Univ., Grad. Sch. Med., <sup>2</sup>Div. GI Surg., Kobe Univ., Grad. Sch. Med.)

食道扁平上皮癌組織で M2 マクロファージは非癌部より伸長し、*in vitro* 培養マクロファージ画像解析と合致する

西尾 真理<sup>1</sup>、岡本 真生子<sup>1</sup>、土井 雅之<sup>1</sup>、東野 展英<sup>1,2</sup>、小平 日実子<sup>1</sup>、細野 雅義<sup>1,2</sup>、高瀬 信尚<sup>1,2</sup>、市原 有美<sup>1</sup>、重岡 学<sup>1</sup>、泊 雄一朗<sup>1</sup>、横崎 宏<sup>1</sup>（<sup>1</sup>神戸大院・病理、<sup>2</sup>神戸大院・医・食道胃腸外科）

#### E-1068 The elucidation of the tumor immunosuppression affected by cancer-associated fibroblasts (CAFs) in esophageal cancer

Takuya Kato, Kazuhiro Noma, Hajime Kashima, Yuki Katsura, Takayuki Ninomiya, Toshiaki Ohara, Hiroshi Tazawa, Shunsuke Kagawa, Yasuhiro Shirakawa, Toshiyoshi Fujiwara (Dept. Gastroenterological Surgery, Okayama Univ.)

癌関連線維芽細胞(CAFs)が及ぼす腫瘍免疫逃避の解明-CAFs と腫瘍浸潤リンパ球の検討-

加藤 阜也、野間 和広、賀島 肇、桂 佑貴、二宮 卓之、大原 利章、田澤 大、香川 俊輔、白川 靖博、藤原 俊義（岡山大学・大学院・消化器外科）

#### E-1069 PD 1 expression is an independent prognostic factor in gastric cancer after curative resection

Kozo Yoshikawa<sup>1</sup>, Mitsuo Shimada, Jun Higashijima, Masaaki Nishi, Hideya Kashihara, Chie Takasu, Masato Yoshikawa, Daichi Ishikawa (Department of Surgery, University of Tokushima)

胃癌根治切除症例における PD 1 発現の意義

吉川 幸造、島田 光生、東島 潤、西 正暁、柏原 秀也、高須 千絵、吉川 雅登、石川 大地（徳島大学・消化器・移植外科）

#### E-1070 Clinical significance of PD-L1 and PD-1 expression in peripheral blood and bone marrow in gastric cancer

Shuhei Ito, Kuniaki Sato, Qingjiang Hu, Tomoko Saito, Sho Nambara, Hisateru Komatsu, Shotaro Sakimura, Hidenari Hirata, Naoki Hayashi, Yohsuke Kuroda, Takaaki Masuda, Hidetoshi Eguchi, Koshi Mimori (Dept. Surg., Kyushu Univ. Beppu Hosp.)

胃癌患者の末梢血、骨髄血における PD-L1、PD-1 発現の臨床的意義

伊藤 修平、佐藤 晋影、胡 慶江、齋藤 衆子、南原 翔、小松 久晃、崎村 正太郎、平田 秀成、林 直樹、黒田 陽介、増田 隆明、江口 英利、三森 功士（九州大学病院別府病院 外科）

#### E-1071 The oncoprotein gankyrin promotes the development of colitis-associated cancer by mediating STAT3 and ERK activation

Toshiharu Sakurai, Tomoyuki Nagai, Hiroshi Kashida, Masatoshi Kudo (Dept. Gastroenterology and Hepatology, Kindai Univ.)

癌遺伝子ガンキリンは炎症をコントロールすることで大腸癌発生を促進する

櫻井 俊治、永井 知行、樋田 博史、工藤 正俊（近畿大学・医・消化器内科）

**English Oral Sessions**

Room 8 Oct. 6 (Thu.) 12:50-14:05

E

**E7-2****Hereditary predisposition and genetics**

遺伝的素因・遺伝学

Chairperson: Takehiko Kamijo (Res. Inst. for Clin. Oncol., Saitama Cancer Ctr.)

座長：上條 岳彦（埼玉県がんセ・臨床腫瘍研）

**E-1072 Genomic Landscape and Clonal Expansions of Upper Urinary Tract Urothelial Carcinoma**

Yoichi Fujii<sup>1,2</sup>, Yusuke Sato<sup>1,2</sup>, Hiromichi Suzuki<sup>2</sup>, Kenichi Yoshida<sup>2</sup>, Yuichi Shiraishi<sup>3</sup>, Tohru Nakagawa<sup>2</sup>, Haruki Kume<sup>2</sup>, Hiroaki Nishimatsu<sup>4</sup>, Toshikazu Okaneya<sup>5</sup>, Hideki Makisima<sup>2</sup>, Satoru Miyano<sup>3</sup>, Yukio Homma<sup>2</sup>, Seishi Ogawa<sup>1</sup> (<sup>1</sup>Dept. Path. & Tumor Biol., Kyoto Univ., Grad. Sch. Med., <sup>2</sup>Dept. Urol., Univ. of Tokyo, Grad. Sch. Med., <sup>3</sup>Human Genome Ctr., Inst. Med. Sci., Univ. of Tokyo, <sup>4</sup>Dept. Urol., The Fraternity Memorial Hosp., <sup>5</sup>Dept. Urol., Toranomon Hosp.)

## 上部尿路上皮癌の網羅的ゲノム解析およびクローン増殖

藤井 陽一<sup>1,2</sup>、佐藤 悠佑<sup>1,2</sup>、鈴木 啓道<sup>2</sup>、吉田 健一<sup>2</sup>、白石 友一<sup>3</sup>、中川 徹<sup>2</sup>、久米 春喜<sup>2</sup>、西松 寛明<sup>4</sup>、岡根谷 利一<sup>5</sup>、牧島 秀樹<sup>2</sup>、宮野 悟<sup>3</sup>、本間 之夫<sup>2</sup>、小川 誠司<sup>1</sup> (<sup>1</sup>京都大・医・腫瘍生物学、<sup>2</sup>東京大・医・泌尿器科、<sup>3</sup>東京大・医科研・ヒトゲノム解析センター、<sup>4</sup>同愛記念病院・泌尿器科、<sup>5</sup>虎の門病院・泌尿器科)

**E-1073 Alternative splicing is a frequent event in mouse PTEN-deficient prostate cancer**

DeVelasco Marco A.<sup>1,2</sup>, Kura Yurie<sup>1</sup>, Sakai Kazuko<sup>2</sup>, Fujita Yoshihiko<sup>2</sup>, Togashi Yosuke<sup>2</sup>, Terashima Masato<sup>2</sup>, Yoshikawa Kazuhiro<sup>3</sup>, Nishio Kazuto<sup>2</sup>, Uemura Hirotsugu<sup>1</sup> (<sup>1</sup>Dept. Uro., Med., Kindai Univ., <sup>2</sup>Dept. Genome Biol., Med., Kindai Univ., <sup>3</sup>Aichi Med. Univ.)

## PTENノックアウトマウス前立腺癌における選択的スプライシングは頻繁に認められる

デベラスコ マルコ<sup>1,2</sup>、倉 由吏恵<sup>1</sup>、坂井 和子<sup>2</sup>、藤田 至彦<sup>2</sup>、富樫 庸介<sup>2</sup>、寺嶋 雅人<sup>2</sup>、吉川 和宏<sup>3</sup>、西尾 和人<sup>2</sup>、植村 天愛<sup>1</sup> (<sup>1</sup>近畿大学医学部泌尿器科学教室、<sup>2</sup>近畿大学医学部ゲノム生物学教室、<sup>3</sup>愛知医科大学)

**E-1074 Single-cell sequencing reveals genomic and transcriptomic dynamics during tumor development in a mouse model**

Mamoru Kato<sup>1</sup>, Yasuhito Arai<sup>2</sup>, Hanako Ono<sup>1</sup>, Joe Miyamoto<sup>1</sup>, Eisaku Furukawa<sup>1</sup>, Daichi Narushima<sup>1</sup>, Hiromi Nakamura<sup>2</sup>, Elzawahry Asmaa<sup>1</sup>, Yoshitaka Hippo<sup>3</sup>, Tatsuhiro Shibata<sup>2</sup> (<sup>1</sup>Dept. Bioinformatics, Res. Inst., NCC, <sup>2</sup>Div. Cancer Genomics, Res. Inst., NCC, <sup>3</sup>Div. Mol. Carcin., Chiba Cancer Ctr.)

## 一細胞シーケンスが明らかにする、マウスマodelの腫瘍進展におけるゲノムおよびトランスクリプトームのダイナミクス

加藤 譲<sup>1</sup>、新井 康仁<sup>2</sup>、小野 華子<sup>1</sup>、宮本 丈<sup>1</sup>、古川 英作<sup>1</sup>、成島 大智<sup>1</sup>、中村 浩実<sup>2</sup>、アスマ エルザワハリ<sup>1</sup>、筆宝 義隆<sup>3</sup>、柴田 龍弘<sup>2</sup> (<sup>1</sup>国がんセ・研・バイオインフォ、<sup>2</sup>国がんセ・研・がんゲノミクス、<sup>3</sup>千葉県がんセ・研・発がん制御)

**E-1075 Molecular Characteristics of Renal Cell Carcinomas (RCCs) in Patients with Birt-Hogg-Dubé Syndrome (BHD)**

Mitsuko Furuya<sup>1</sup>, Yasuhiro Iribar<sup>2</sup>, Hisashi Hasumi<sup>3</sup>, Masaya Baba<sup>4</sup>, Yoji Nagashima<sup>5</sup>, Ikuma Kato<sup>1</sup>, Yukio Nakatani<sup>6</sup>, Masahiro Yao<sup>3</sup> (<sup>1</sup>Dept. Mol Pathol., Yokohama City. Univ., Sch. Med., <sup>2</sup>Dept. Pathol., Kochi Red Cross Hospital, <sup>3</sup>Dept. Urol., Yokohama City. Univ., <sup>4</sup>IRCMS, Kumamoto Univ., <sup>5</sup>Dept. Surg Pathol., Tokyo Women's Med Univ, <sup>6</sup>Dept. Diagn Pathol., Chiba Univ., Sch. Med)

## Birt-Hogg-Dubé 症候群における腎癌の分子病理学的検討

古屋 充子<sup>1</sup>、入部 康弘<sup>2</sup>、蓮見 寿史<sup>3</sup>、馬場 理也<sup>4</sup>、長嶋 洋治<sup>5</sup>、加藤 生真<sup>1</sup>、中谷 行雄<sup>6</sup>、矢尾 正祐<sup>3</sup> (<sup>1</sup>横浜市大・医・分子病理、<sup>2</sup>高知赤十字病院・病理診断科、<sup>3</sup>横浜市大・医・泌尿器科、<sup>4</sup>熊本大・院・先導機構 国際先端医学、<sup>5</sup>東京女子医大・病理診断科、<sup>6</sup>千葉大・院・診断病理)

**E-1076 Validation of previously identified lung cancer susceptibility genes in a Japanese population**

Kouya Shiraishi<sup>1</sup>, Kumiko Sunami<sup>1</sup>, Kimihiro Shimizu<sup>2</sup>, Akiteru Goto<sup>3</sup>, Hiromi Sakamoto<sup>4</sup>, Hideo Kunitoh<sup>5</sup>, Takashi Kohno<sup>1</sup> (<sup>1</sup>Div. Genome Biol., Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Dept. Thoracic & Visceral Organ Surgery, Gunma Univ. Grad. Sch. Med., <sup>3</sup>Dept. Cellular & Organ Path., Grad. Sch. Med., Akita Univ., <sup>4</sup>Div. Genetics, Natl. Cancer Ctr. Res. Inst., <sup>5</sup>Dept. Med. Oncology, Japanese Red Cross Med. Ctr.)

## 日本人集団における既知の肺がん感受性遺伝子に対する検証研究

白石 航也<sup>1</sup>、角南 久仁子<sup>1</sup>、清水 公裕<sup>2</sup>、後藤 明輝<sup>3</sup>、坂本 裕美<sup>4</sup>、國頭 英夫<sup>5</sup>、河野 隆志<sup>1</sup> (<sup>1</sup>国立がん研セ・研・ゲノム生物、<sup>2</sup>群馬大・臓器病態外科、<sup>3</sup>秋田大・医・器官病態学、<sup>4</sup>国立がん研セ・研・遺伝医学、<sup>5</sup>日本赤十字医療セ・化学療法科)

## Japanese Oral Sessions

Room 8 Oct. 6 (Thu.) 14:05-15:20

J

### J15-1 Diagnostic biomarker

診断バイオマーカー

Chairperson: Kazufumi Honda (Div. of Chem. Clin., Natl. Cancer Ctr. Res. Inst.)  
座長: 本田 一文 (国立がん研究セ・研・創薬臨床)

#### J-1049 Stool DNA testing in combination with fecal immunochemical test may be useful for detection of colorectal tumors

Yutaka Suehiro, Takahiro Yamasaki (Dept. Oncology & Lab. Med., Yamaguchi Univ., Grad. Sch. Med.)

便DNA検査と便潜血検査の組合せによる大腸腫瘍スクリーニングの有用性の検討

末廣 寛、山崎 隆弘 (山口大・院医・臨床検査・腫瘍学)

#### J-1050 Study of early detection of breast cancer by serum biomarker TFF

Yuko Ishibashi<sup>1,3</sup>, Sachio Nomura<sup>2</sup>, Rie Kurabayashi<sup>3</sup>, Takako Waketa<sup>3</sup>, Yasuko Kikuchi<sup>3</sup>, Yoshihiro Uchida<sup>6</sup>, Susumu Aikou<sup>2</sup>, Hiroshi Ohtsu<sup>1</sup>, Takeshi Sasaki<sup>1</sup>, Masashi Fukayama<sup>4</sup>, Toshihisa Ogawa<sup>7</sup>, Keiichiro Tada<sup>1,3</sup>, Yasuyuki Seto<sup>2</sup> (<sup>1</sup>Dept. Endocrine Surg., Grad.Sch.Med., Univ. Tokyo, <sup>2</sup>Dept. Gastrointestinal Surg., Grad.Sch.Med., Univ. Tokyo, <sup>3</sup>Dept. Breast and Endocrine Surg., Univ. Tokyo Hosp, <sup>4</sup>Dept. Path., Univ. Tokyo Hosp, <sup>5</sup>National Center for Global Health and Med., <sup>6</sup>International Univ. Health and Welfare, Mita Hosp., Breast Ctr., <sup>7</sup>Dokkyo Med. Univ., Koshigaya Hosp., Breast Ctr.)

血清バイオマーカーTFFによる乳癌早期発見の検討

石橋 祐子<sup>1,3</sup>、野村 幸世<sup>2</sup>、倉林 理恵<sup>3</sup>、分田 貴子<sup>3</sup>、菊池 弥寿子<sup>3</sup>、内田 恵博<sup>6</sup>、愛甲 丞<sup>2</sup>、大津 洋<sup>5</sup>、佐々木 毅<sup>4</sup>、深山 正久<sup>4</sup>、小川 利久<sup>7</sup>、多田 敬一郎<sup>1,3</sup>、瀬戸 泰之<sup>2</sup> (<sup>1</sup>東大・大学院・代謝栄養内分泌外科、<sup>2</sup>東大・大学院・消化管外科、<sup>3</sup>東大・医・乳腺内分泌外科、<sup>4</sup>東大・医・病理部、<sup>5</sup>国立国際医療センター・医療情報解析研究室、<sup>6</sup>国際医療福祉大三田・乳腺センター、<sup>7</sup>獨協大越谷・乳腺センター)

#### J-1051 BARHL2 methylation using gastric wash or gastric juice exosomal DNA is a useful marker for detection of gastric cancer

Hiroyuki Yamamoto<sup>1</sup>, Yoshiyuki Watanabe<sup>1,2</sup>, Ritsuko Oikawa<sup>1</sup>, Ryō Morita<sup>1</sup>, Yoshihito Yoshida<sup>1</sup>, Yasumasa Matsuo<sup>1</sup>, Shun-ichiro Ozawa<sup>1</sup>, Yoshinori Sato<sup>1</sup>, Tadateru Maehata<sup>3</sup>, Hiroaki Taniguchi<sup>4</sup>, Katsuhiko Noshio<sup>5</sup>, Hiroshi Yasuda<sup>1</sup>, Fumio Itoh<sup>1</sup> (<sup>1</sup>Div. Gastroenterol. & Hepatol., St. Marianna Univ. Sch. Med., <sup>2</sup>Dept. Int. Med, Kawasaki Rinko General Hospital, <sup>3</sup>Div. Res. Development Minimally Invasive Treatment, Cancer Ctr, Keio Univ., <sup>4</sup>Antibody, Vaccine, Mol.Targeted Therapy, Inst. Med Sci., Univ. of Tokyo, <sup>5</sup>Dept. Gastroenterol., Sapporo Med. Univ. Sch. Med.)

内視鏡胃洗浄液あるいは胃液エクソソームDNAを用いた  
BARHL2遺伝子メチル化は胃癌診断の有用なマーカーである

山本 博幸<sup>1</sup>、渡邊 嘉行<sup>1,2</sup>、及川 律子<sup>1</sup>、森田 亮<sup>1</sup>、吉田 良仁<sup>1</sup>、松尾 康正<sup>1</sup>、小澤 俊一郎<sup>1</sup>、佐藤 義典<sup>1</sup>、前畠 忠輝<sup>3</sup>、谷口 博昭<sup>4</sup>、能正 勝彦<sup>5</sup>、安田 宏<sup>1</sup>、伊東 文生<sup>1</sup> (<sup>1</sup>聖マリアンナ医大・消化器・肝臓内科、<sup>2</sup>総合川崎臨港病院 内科、<sup>3</sup>慶應大・腫瘍セ・低侵襲療法研究開発部門、<sup>4</sup>東大医科研・抗体・ワクチン・分子標的、<sup>5</sup>札医大・医・消化器内科)

#### J-1052 Exosomal microRNA in plasma as non-invasive biomarkers for recurrence of non-small-cell lung cancer

Iyunko Tamura, Hisae Iinuma, Hitoshi Dejima, Rie Kanaoka, Takashi Nakayama, Hirofumi Uehara, Noriyuki Matsutani, Masafumi Kawamura (Dept. Surgery, Teikyo Univ. Sch. Med.)

非小細胞肺がん再発予測のための血漿エクソソームmicroRNAの有用性

田村 純子、飯沼 久恵、出嶋 仁、金岡 里枝、中山 敬史、上原 浩文、  
松谷 哲行、川村 雅文 (帝京大・医・外科)

#### J-1053 The combination of five serum microRNAs can detect breast cancer in any subtypes

Akihiko Shimomura<sup>1</sup>, Sho Shiino<sup>2</sup>, Junpei Kawauchi<sup>3</sup>, Satoko Takizawa<sup>3</sup>, Hiromi Sakamoto<sup>4</sup>, Chikako Shimizu<sup>1</sup>, Fumitaka Takeshita<sup>6</sup>, Shumpei Niida<sup>7</sup>, Takayuki Kinoshita<sup>2</sup>, Kenji Tamura<sup>1</sup>, Takahiro Ochiya<sup>5</sup> (<sup>1</sup>Dept. Breast and Med. Oncology, Natl. Cancer Ctr. Hosp., <sup>2</sup>Dept. Breast Surg., Natl. Cancer Ctr. Hosp., <sup>3</sup>New Frontiers Res. Lab., Toray Industries., <sup>4</sup>Div. Genetics, Natl. Cancer Ctr. Res. Inst., <sup>5</sup>Div. Mol. and Cell. Med., Natl. Cancer Ctr. Res. Inst., <sup>6</sup>Dept. Funct. Anal. FIOC, Natl. Cancer Ctr. Res. Inst., <sup>7</sup>Med. Genome Ctr., Natl. Ctr. Geriatrics and Gerontology)

血清中マイクロRNAを用いた各サブタイプごとの乳がん診断

下村 昭彦<sup>1</sup>、椎野 翔<sup>2</sup>、河内 淳平<sup>3</sup>、滝澤 智子<sup>3</sup>、坂本 裕美<sup>4</sup>、清水 千佳子<sup>1</sup>、竹下 文隆<sup>6</sup>、新飯田 俊平<sup>7</sup>、木下 貴之<sup>2</sup>、田村 研治<sup>1</sup>、落谷 孝広<sup>5</sup> (<sup>1</sup>国立がん研究セ・中央病院・乳腺腫瘍内科、<sup>2</sup>国立がん研究セ・中央病院・乳腺外科、<sup>3</sup>東レ株式会社・先端融合研、<sup>4</sup>国立がん研究セ・研・遺伝医学、<sup>5</sup>国立がん研究セ・研・分子細胞治療、<sup>6</sup>国立がん研究セ・研・研支援コア・機能解析、<sup>7</sup>国立長寿研究セ・メディカルゲノムセンター)

#### J-1054 Frequent Wnt/β-catenin signaling pathway alterations in basal cell tumors of the salivary gland

Masanobu Sato<sup>1,2</sup>, Hidetaka Yamamoto<sup>1</sup>, Toshimitsu Nishijima<sup>1,3</sup>, Torahiko Nakashima<sup>2</sup>, Kenichi Taguchi<sup>4</sup>, Muneyuki Masuda<sup>5</sup>, Takashi Nakagawa<sup>2</sup>, Yoshinao Oda<sup>1</sup> (<sup>1</sup>Dept. Anatomic Pathol., Grand. Sch. Med. Sci., Kyushu Univ., <sup>2</sup>Dept. Otorhinolaryngol., Grand. Sch. Med. Sci., Kyushu Univ., <sup>3</sup>Dept. Otorhinolaryngol., Japan Community Health Care Organization Kyushu Hosp., <sup>4</sup>Dept. Pathol., Kyushu Cancer Center, <sup>5</sup>Dept. Head And Neck Surgery, Kyushu Cancer Center)

唾液腺基底細胞腫瘍にはWnt/β-cateninシグナル異常が高頻度に存在する

佐藤 方宣<sup>1,2</sup>、山元 英崇<sup>1</sup>、西嶋 利光<sup>1,3</sup>、中島 寅彦<sup>2</sup>、田口 健一<sup>4</sup>、益田 宗幸<sup>5</sup>、中川 尚志<sup>2</sup>、小田 義直<sup>1</sup> (<sup>1</sup>九州大学大学院形態機能病理、<sup>2</sup>九州大学大学院耳鼻咽喉科頭頸部外科、<sup>3</sup>JCHO 九州病院耳鼻咽喉科頭頸部外科、<sup>4</sup>九州がんセンター病理診断科、<sup>5</sup>九州がんセンター頭頸科)

**Japanese Oral Sessions**

Room 9 Oct. 6 (Thu.) 12:50-14:05

**J14-3****Diagnosis and treatment model of pancreatic cancer**

膵がんの診断・治療モデル

Chairperson: Michiaki Unno (Dept. of Surg., Tohoku Univ. Sch. of Med.)  
 座長：海野 優明（東北大・消化器外科）

**J-1055 Deferasirox, a novel oral iron chelator, with gemcitabine inhibits pancreatic cancer growth in vitro and in vivo.**

Shuhei Shinoda<sup>1</sup>, Taro Takami<sup>1</sup>, Takahiro Yamasaki<sup>1</sup>, Isao Sakaida<sup>1</sup>  
 (<sup>1</sup>Dept of Gastroenterology and Hepatology, Yamaguchi Univ. Sch. Med., <sup>2</sup>Dept of Oncology and Laboratory Med, Yamaguchi Univ. Sch. Med)

経口鉄キレート剤とゲムシタビン併用による新たな膵癌治療の基礎的検討

篠田 崇平<sup>1</sup>、高見 太郎<sup>1</sup>、山崎 隆弘<sup>2</sup>、坂井田 功<sup>1</sup>（<sup>1</sup>山口大学・医・消化器病態内科学、<sup>2</sup>山口大学・医・臨床検査・腫瘍学）

**J-1056 HSP90 inhibitor inhibit the activation of proliferation, chemotaxis and EMT in pancreatic cancer cells**

Masahiro Yamamura<sup>1</sup>, Akira Yamauchi<sup>2</sup>, Naoki Katase<sup>3</sup>, Futoshi Kurabayashi<sup>2</sup>, Yoshiyuki Yamaguchi<sup>1</sup> (<sup>1</sup>Department of Clinical Oncology, Kawasaki Medical School, <sup>2</sup>Department of Biochemistry, Kawasaki Medical School, <sup>3</sup>Department of Molecular Biology, Kawasaki Medical School)

HSP90 阻害剤は、膵臓癌細胞における増殖、走化性および上皮間葉転換を阻害する

山村 真弘<sup>1</sup>、山内 明<sup>2</sup>、片瀬 直樹<sup>3</sup>、栗林 太<sup>2</sup>、山口 佳之<sup>1</sup>（<sup>1</sup>川崎医科大学 臨床腫瘍学、<sup>2</sup>川崎医科大学 生化学、<sup>3</sup>川崎医科大学 分子生物学）

**J-1057 Photodynamic therapy with a novel oligosaccharide-conjugated chlorin for peritoneal dissemination of pancreatic cancer**

Akihisa Kato<sup>1</sup>, Hiromi Kataoka<sup>1</sup>, Shigenobu Yano<sup>2</sup>, Michihiro Yoshida<sup>1</sup>, Kazuki Hayashi<sup>1</sup>, Satoru Takahashi<sup>3</sup>, Takashi Joh<sup>1</sup> (<sup>1</sup>Dept.Gastro. Metabo.Med.,Nagoya City Univ., <sup>2</sup>Material.Sci.Nara.Institute.Sci.Tech., <sup>3</sup>Dept.Exp.Path.Tumor.Biol.,Nagoya City Univ.)

膵癌腹膜播種に対するオリゴ糖連結クロリンを用いた新規光線力学療法

加藤 晃久<sup>1</sup>、片岡 洋望<sup>1</sup>、矢野 重信<sup>2</sup>、吉田 道弘<sup>1</sup>、林 香月<sup>1</sup>、高橋 智<sup>3</sup>、城 卓志<sup>1</sup>（<sup>1</sup>名市大・院・医・消化器・代謝内科、<sup>2</sup>奈良先端科学技術・院・物質創成科学、<sup>3</sup>名市大・院・医・実験病態病理）

**J-1058 Hes1 plays an essential role in pancreatic carcinogenesis**

Yoshihiro Nishikawa, Yuzo Kodama, Tsutomu Chiba, Hiroshi Seno (Dept. Gastroenterology and Hepatology, Kyoto Univ. Graduate School of Medicine)

膵癌形成における Hes1 の機能解析

西川 義浩、児玉 裕三、千葉 勉、妹尾 浩（京都大学大学院医学研究科消化器内科学講座）

**J-1059 Development and analysis of genetically engineered mouse models to increase knowledge for catastrophic phenotype of PDAC**

Takashi Yamaguchi<sup>1,2</sup>, Sanae Ikehara<sup>2</sup>, Hayao Nakanishi<sup>3</sup>, Yuzuru Ikehara<sup>1,2</sup> (<sup>1</sup>Dept. Mol. Tumor Path., Grad. Sch. Med., Chiba Univ., <sup>2</sup>Natl. Inst. Advanced Industrial Sci. and Tech., <sup>3</sup>Aichi Cancer Ctr. Hosp.)

Catastrophic な膵管がんマウスと同マウスに由来する細胞株を用いた膵管がんマーカー探索モデル

山口 高志<sup>1,2</sup>、池原 早苗<sup>2</sup>、中西 速夫<sup>3</sup>、池原 讓<sup>1,2</sup>（<sup>1</sup>千葉大・医学研究院・腫瘍病理、<sup>2</sup>産総研・創薬基盤、<sup>3</sup>愛知県がんセ・中央病院・遺伝子病理）

**J-1060 Anti-pancreatic tumor effect of KR12, alkylating agent targeting KRAS mutation in a mouse model of spontaneous PDAC**

Nina Matsuo<sup>1,2</sup>, Takahiro Inoue<sup>1,2</sup>, Kiriko Hiraoka<sup>1,2</sup>, Hiroyuki Yoda<sup>1,2</sup>, Takayoshi Watanabe<sup>1</sup>, Yoshinao Shinozaki<sup>1</sup>, Atsushi Takatori<sup>1</sup>, Nobuko Koshikawa<sup>1</sup>, Hiroki Nagase<sup>1</sup> (<sup>1</sup>Lab. Cancer Genetics, Chiba Cancer Center Res. Inst., <sup>2</sup>Grad. Sch. Med. & Pharm. Sci., Chiba. Univ.)

膵腺管癌自然発生マウスモデルにおける KRAS 変異アルキル化剤の抗腫瘍効果

松尾 仁以奈<sup>1,2</sup>、井上 貴博<sup>1,2</sup>、平岡 桐子<sup>1,2</sup>、養田 裕行<sup>1,2</sup>、渡部 隆義<sup>1</sup>、篠崎 喜脩<sup>1</sup>、高取 敦志<sup>1</sup>、越川 信子<sup>1</sup>、永瀬 浩喜<sup>1</sup>（<sup>1</sup>千葉県がんセ・研・がん遺伝創薬、<sup>2</sup>千葉大・院・医学薬学府・分子腫瘍生物学）

**English Oral Sessions**

Room 9 Oct. 6 (Thu.) 14:05-15:20

**E14-4****Basic and clinical research of cancer**

臓器がんの基礎と治療

Chairperson: Yae Kanai (Dept. of Path., Keio Univ. Sch. of Med.)  
 座長：金井 弥栄（慶應大・医・病理）

**E-1078 Development of An Organoid-based Model for Gall Bladder Carcinogenesis**

Yoshitaka Hippo<sup>1</sup>, Yoshiaki Maru<sup>1</sup>, Masako Ochiai<sup>2</sup>, Tetsuya Matsuura<sup>2,3</sup>, Toshio Imai<sup>2</sup> (<sup>1</sup>Div. Mol. Carcinog., Chiba Cancer Ctr. Res. Inst., <sup>2</sup>Dep. Animal Exp., FIOC, Natl. Cancer Ctr. Res. Inst., <sup>3</sup>Dep. Gastroenterology and Hepatology, Yokohama City Univ. Sch. Med.)

オルガノイドを用いた胆嚢発がんモデルの確立

筆宝 義隆<sup>1</sup>、丸 喜明<sup>1</sup>、落合 雅子<sup>2</sup>、松浦 哲也<sup>2,3</sup>、今井 俊夫<sup>2</sup>（<sup>1</sup>千葉県がんセンター・研・発がん制御、<sup>2</sup>国立がん研究セ・研・FIOC・動物実験部門、<sup>3</sup>横浜市大・院医・肝胆胰消化器病）

**E-1079 Clinical significance of primary cilia in pancreatic ductal adenocarcinoma and analysis of pancreatic cancer cell lines**

Katsura Emoto, Ken Yamazaki, Michiie Sakamoto (Dept. Pathol., Keio Univ. Sch. Med.)

膵がん細胞に形成される Primary cilia の臨床的意義と膵がん細胞株を用いた in vitro/in vivo での解析

江本 桂、山崎 剣、坂元 亨宇（慶大・医・病理）

**E-1080 Arid1a suppresses formation of Intraductal Papillary Mucinous Neoplasia and Pancreatic Ductal Adenocarcinoma.**

Yoshito Kimura, Akihisa Fukuda, Takahisa Maruno, Yutaka Takada, Motoyuki Tsuda, Yukiko Hiramatsu, Hiroshi Seno (Dept. Gastroenterology and Hepatology, Kyoto Univ. Grad. Sch. Med.)

Arid1a は膵管内乳頭粘液性腫瘍と膵癌の形成を抑制する

木村 佳人、福田 晃久、丸野 貴久、高田 裕、津田 喬之、平松 由紀子、妹尾 浩（京都大学大学院・医・消化器内科）

**E-1081 Brg1 plays a Critical Role in Pancreatic Intraepithelial Neoplasia Formation Through Regulation of Sox9 Expression**

Motoyuki Tsuda, Akihisa Fukuda, Yukiko Hiramatsu, Yoshito Kimura, Yutaka Takada, Takahisa Maruno, Hiroshi Seno (Dept. Gastroenterol. & hepatol., Kyoto Univ. Grad. Sch. Med.)

Brg1 は Sox9 の発現調節を介し PanIN の形成に重要な役割をはたす

津田 喬之、福田 晃久、平松 由紀子、木村 佳人、高田 裕、丸野 貴久、妹尾 浩（京都大学大学院・医・消化器内科学）

**E-1082 The role of galectin-3 in human lung adenocarcinoma**

Yoko Kataoka<sup>1</sup>, Yasuhiko Ohshio<sup>1</sup>, Tomoyuki Igarashi<sup>1</sup>, Koji Teramoto<sup>2</sup>, Jun Hanaoka<sup>1</sup> (<sup>1</sup>Dept. Surg., Shiga Univ. Med. Sci., <sup>2</sup>Dept. Med. Oncol., Shiga Univ. Med. Sci.)

ヒト肺腺がんにおける galectin-3 の役割

片岡 瑛子<sup>1</sup>、大塩 耕彦<sup>1</sup>、五十嵐 知之<sup>1</sup>、寺本 晃治<sup>2</sup>、花岡 淳<sup>1</sup>（<sup>1</sup>滋賀医大・医・呼吸器外科、<sup>2</sup>滋賀医科大学・医・臨床腫瘍学）

**E-1083 Effects of Carbon Ion Beam Alone or in Combination with Cisplatin on Malignant Mesothelioma Cells In Vitro and In Vivo**

Sei Saito<sup>1</sup>, Masao Suzuki<sup>1</sup>, Guillaume Vares<sup>2</sup> (<sup>1</sup>Dept. Basic Med. Sci. Radiat. Damages, Natl. Inst. Radiol. Sci., <sup>2</sup>OIST)

炭素線単独或いはシスプラチンとの併用による悪性中皮腫細胞への影響

崔 星<sup>1</sup>、鈴木 雅雄<sup>1</sup>、パレス ギヨーム<sup>2</sup>（<sup>1</sup>放医研・放射線障害治療、<sup>2</sup>沖縄科技大）

## English Oral Sessions

Room 10 Oct. 6 (Thu.) 12:50-14:05

E

E14-5

### Molecular targeting therapy for lung cancer

肺がん：分子標的治療

Chairperson: Tetsuya Mitsudomi (Dept. of Surg., Kindai Univ. Faculty of Med.)  
座長：光富 徹哉（近畿大・医・呼吸器外科）

#### E-1084 Gene Aberrations for Precision Medicine against Lung Adenocarcinoma

Motonobu Saito<sup>1,2</sup>, Kouya Shiraishi<sup>1</sup>, Seiichi Takenoshita<sup>2</sup>, Jun Yokota<sup>1</sup>, Takashi Kohno<sup>1</sup> (<sup>1</sup>Div. Genome Biol., Natl Cancer Ctr. Res Inst., <sup>2</sup>Dept. Organ Regulatory Surg., Fukushima Med. Univ.)

肺腺がん個別化医療にむけての遺伝子変異解析

齋藤 元伸<sup>1,2</sup>、白石 航也<sup>1</sup>、竹之下 誠一<sup>2</sup>、横田 淳<sup>1</sup>、河野 隆志<sup>1</sup>  
(<sup>1</sup>国立がん研セ・研・ゲノム生物、<sup>2</sup>福島医大・医・器官制御外科)

#### E-1085 Identification of Proteasomal Catalytic Subunit PSMA6 as a Therapeutic Target for Lung Cancer

Mitsuo Sato<sup>1</sup>, Tomohiko Kakumu<sup>1</sup>, Toshio Kato<sup>1</sup>, Naoyuki Yogo<sup>1</sup>, Tetsunari Hase<sup>1</sup>, Masahiro Morise<sup>1</sup>, Takayuki Fukui<sup>2</sup>, Kohei Yokoi<sup>2</sup>, Luc Girard<sup>3</sup>, John Minna<sup>3</sup>, Masashi Kondo<sup>4</sup>, Yoshinori Hasegawa<sup>1</sup> (<sup>1</sup>Dept. of Respiratory Med. Nagoya Univ. Grad. Sch. of Med., <sup>2</sup>Dept. of Thorac. Surg. Nagoya Univ. Grad. Sch. of Med., <sup>3</sup>Univ. of Texas Southwestern. Med. Ctr.)

肺癌治療標的としてのプロテアソームサブユニット遺伝子 PSMA6

佐藤 光夫<sup>1</sup>、各務 智彦<sup>1</sup>、加藤 俊夫<sup>1</sup>、與語 直之<sup>1</sup>、長谷 哲成<sup>1</sup>、森 瀬 昌宏<sup>1</sup>、福井 高幸<sup>2</sup>、横井 香平<sup>2</sup>、Luc Girard<sup>3</sup>、John Minna<sup>3</sup>、近藤 征史<sup>1</sup>、長谷川 好規<sup>1</sup>（名古屋大学医学部附属病院・呼吸器内科、<sup>2</sup>名古屋大学医学部附属病院・呼吸器外科、<sup>3</sup>Univ. of Texas Southwestern. Med. Ctr.)

#### E-1086 SOX2 suppresses CDKN1A to sustain growth of lung squamous cell carcinoma

Takuya Fukazawa<sup>1</sup>, Tomoki Yamatsuji<sup>1</sup>, Munenori Takaoka<sup>1</sup>, Masakazu Yoshida<sup>1</sup>, Etsuko Yokota<sup>1</sup>, Miki Iwai<sup>1</sup>, Minoru Haisa<sup>1</sup>, Noriko Miyake<sup>2</sup>, Tomoko Ikeda<sup>3</sup>, Nagio Takigawa<sup>3</sup>, Minzhe Guo<sup>4</sup>, Yutaka Maeda<sup>5</sup>, Yoshio Naomoto<sup>5</sup> (<sup>1</sup>Department of General Surgery, Kawasaki Medical School, <sup>2</sup>Kawasaki Hospital Research Center, <sup>3</sup>Department of Internal Medicine 4, Kawasaki Medical School, <sup>4</sup>Department of Electrical Engineering and Computing Systems, University of Cincinnati, <sup>5</sup>Division of Pulmonary Biology, Cincinnati Children's Hospital Medical Center)

深澤 拓也<sup>1</sup>、山辺 知樹<sup>1</sup>、高岡 宗徳<sup>1</sup>、吉田 将和<sup>1</sup>、横田 悅子<sup>1</sup>、岩井 美樹<sup>1</sup>、羽井佐 実<sup>1</sup>、三宅 規子<sup>2</sup>、池田 智子<sup>2</sup>、瀧川 奈義夫<sup>3</sup>、Minzhe Guo<sup>4</sup>、前田 豊<sup>5</sup>、猶本 良夫<sup>5</sup>（川崎医科大学 総合外科、<sup>2</sup>川崎病院研究センター、<sup>3</sup>川崎医科大学 総合内科 4、<sup>4</sup>シンシナティ大・コンピュータ技術科、<sup>5</sup>シンシナティ小児病院 肺生物部門）

#### E-1087 Ultra-sensitive picodroplet digital PCR assay for multiplex genotyping of EGFR mutations in non-small cell lung cancer

Akihito Kubo<sup>1,2</sup>, Tomoya Kawaguchi<sup>3,4</sup>, Masaru Watanabe<sup>1,5</sup>, Shun-ichi Isa<sup>3</sup>, Masahiko Ando<sup>6</sup>, Akihiro Tamiya<sup>3</sup>, Hideo Saka<sup>1</sup>, Akihide Matsumura<sup>3</sup>, Yasuhiro Koh<sup>1,5</sup> (<sup>1</sup>Dept. Resp. Med. Med. Oncol., NHO Nagoya Med. Ctr., <sup>2</sup>Div. Respir. Med. Allergol., Aichi Med. Univ. Sch. Med., <sup>3</sup>NHO Kinki-chuo Chest Med. Ctr., <sup>4</sup>Dept. Resp. Med., Grad. Sch. Med., Osaka City Univ., <sup>5</sup>Third Dept. Int. Med., Wakayama Med. Univ., <sup>6</sup>Ctr. for Advanced Med. Clin. Res., Nagoya Univ. Hosp.)

ドロップレットデジタルPCRによるEGFR変異マルチプレックス検出法の確立

久保 昭仁<sup>1,2</sup>、川口 知哉<sup>3,4</sup>、渡辺 勝<sup>1,5</sup>、伊佐 俊一<sup>3</sup>、安藤 昌彦<sup>6</sup>、田宮 朗裕<sup>3</sup>、坂 英雄<sup>1</sup>、松村 晃秀<sup>3</sup>、洪 泰浩<sup>1,5</sup>（名古屋医療センター、<sup>2</sup>愛知医科大学、<sup>3</sup>近畿中央胸部疾患センター、<sup>4</sup>大阪市立大学、<sup>5</sup>和歌山県立医科大学、<sup>6</sup>名古屋大学）

#### E-1088 Strong mutational asymmetry in target genes of neuroendocrine transcription factors in small cell lung carcinomas

Yusuke Suenaga<sup>1</sup>, Masato Shingyoji<sup>2</sup>, Sotaro Kanematsu<sup>1</sup>, Toshihiko Iizasa<sup>2</sup>, Mamoru Kato<sup>3</sup>, Sana Yokoi<sup>1</sup> (<sup>1</sup>Cancer Genome Ctr., Chiba Cancer Ctr. Res. Inst., <sup>2</sup>Div. Thoracic Diseases, Chiba Cancer Ctr., <sup>3</sup>Dept. of Bioinformatics, Res. Inst., NCC)

神経内分沁分化を制御する転写因子の下流遺伝子は小細胞肺癌において鑄型鎖・非鑄型鎖の変異率に強い非対称性を示す

末永 旌介<sup>1</sup>、新行内 雅斗<sup>2</sup>、兼松 宗太郎<sup>1</sup>、飯笛 俊彦<sup>2</sup>、加藤 譲<sup>3</sup>、横井 左奈<sup>1</sup>（千葉県がんセ・研・がんゲノムセンター、<sup>2</sup>千葉県がんセ・呼吸器科、<sup>3</sup>国がんセ・研究所・バイオインフォ）

#### E-1089 Role of Autophagy in cancer stem cell-like EGFR-TKI resistant NCSLC cells

Xi Wang<sup>2</sup>, Yuho Maki<sup>1</sup>, Kei Namba<sup>1</sup>, Hiroki Sato<sup>1</sup>, Hidejiro Torigoe<sup>1</sup>, Mototsugu Watanabe<sup>1</sup>, Ken Suzawa<sup>1</sup>, Hiromasa Yamamoto<sup>1</sup>, Junichi Soh<sup>1</sup>, Kazunori Tsukuda<sup>1</sup>, Shinichi Toyooka<sup>1,2</sup>, Shinichiro Miyoshi<sup>1</sup> (<sup>1</sup>Dept. Thoracic surg., Okayama Univ, <sup>2</sup>Dept. Clin Gen Med., Okayama Univ)

## English Oral Sessions

Room 11 Oct. 6 (Thu.) 12:50-14:05

## E-1-1 DNA damage and carcinogenic process

DNA 損傷と発がん過程

Chairperson: Noriko Hosoya (Lab. Mol. Radiol., Grad. Sch. of Med., The Univ. of Tokyo)

座長：細谷 紀子（東京大・院医・放射線分子医学）

## E-1090 Persistent DNA double strand breaks formation by gamma-irradiation

Ken-ichi Yoshioka (Div. Carrion. and can. pre., National Cancer Center Research Institute)

放射線損傷によって修復されない二重鎖 DNA 切断が生じる機構の解析

吉岡 研一（国立がん研究セ・発がん・予防研究分野）

## E-1091 mRNA splicing is an emerging player of DNA damage response and homologous recombination repair

Michihiro Tanikawa, Osamu Hiraike, Makoto Takeuchi, Harunori Honjyo, Katsutoshi Oda, Kei Kawana, Yutaka Osuga, Tomoyuki Fujii (Dept. of Ob/Gy., Univ. Tokyo)

mRNA スプライシング因子は新規の DNA 損傷修復因子として相同組み換え修復経路を制御する

谷川 道洋、平池 修、竹内 真、本城 晴紀、織田 克利、川名 敬、大須賀 穂、藤井 知行（東京大学・医・産婦人科）

## E-1092 Modest attenuation of DNA damage repair delays therapy-related cancer in mouse model

Hitoshi Okada<sup>1,2</sup>, Tong Kit<sup>2</sup>, Kazushige Ota<sup>1</sup>, Akiyoshi Komuro<sup>1</sup>, Anne Koch<sup>3,4</sup>, Akihiko Ito<sup>5</sup> (<sup>1</sup>Dept. Biochem., Kindai Univ., Fclty. Med., <sup>2</sup>Campbell Family Breast Cancer Inst., Ontario Cancer Inst., <sup>3</sup>Princess Margaret Cancer Center, <sup>4</sup>Dept. of Medical Biophys. Univ. of Toronto, <sup>5</sup>Dept. Path. Kindai Univ., Fclty. Med.)

マウスモデルを用いた DNA 損傷修復機能抑制による治療関連白血病予防効果の検討

岡田 斎<sup>1,2</sup>、Tong Kit<sup>2</sup>、太田 一成<sup>1</sup>、古室 晓義<sup>1</sup>、Anne Koch<sup>3,4</sup>、伊藤 彰彦<sup>5</sup>（<sup>1</sup>近大・医・生化学、<sup>2</sup>キャンベルファミリー乳がん研究所、<sup>3</sup>プリンセスマーガレット癌センター、<sup>4</sup>トロント大・医・生物物理、<sup>5</sup>近大・医・病理）

## E-1093 Whole-exome sequencing of 75 ovarian clear cell carcinomas identifies a subgroup without mutations in ARID1A and PIK3CA

Akira Nishijima<sup>1,2</sup>, Katsutoshi Oda<sup>2</sup>, Kayo Asada<sup>1,2</sup>, kosei Hasegawa<sup>3</sup>, Takanori Koso<sup>1,2</sup>, Shogo Yamamoto<sup>1</sup>, Kenji Tatsuno<sup>1</sup>, Hiroki Ueda<sup>1</sup>, Kei Kawana<sup>2</sup>, Keiichi Fujiwara<sup>3</sup>, Yutaka Osuga<sup>2</sup>, Tomoyuki Fujii<sup>2</sup>, Hiroyuki Aburatani<sup>1</sup> (<sup>1</sup>Genome Science Div., RCAST, The Univ. of Tokyo, <sup>2</sup>Dept. of Obstetrics and Gynecology, The Univ. of Tokyo, <sup>3</sup>Dept. of Obstetrics and Gynecology, Saitama Int. Med. Ctr)

卵巣明細胞癌 75 例における全エクソンシークエンス解析 - ARID1A, PIK3CA 変異性サブグループの遺伝的特徴

西島 明<sup>1,2</sup>、織田 克利<sup>2</sup>、浅田 佳代<sup>1,2</sup>、長谷川 幸清<sup>3</sup>、神尊 貴裕<sup>1,2</sup>、山本 省吾<sup>1</sup>、辰野 健二<sup>1</sup>、上田 宏樹<sup>1</sup>、川名 敬<sup>2</sup>、藤原 恵一<sup>3</sup>、大須賀 穂<sup>2</sup>、藤井 知行<sup>2</sup>、油谷 浩幸<sup>1</sup>（<sup>1</sup>東京大学 RCAST ゲノムサイエンス部門、<sup>2</sup>東京大学附属病院産婦人科、<sup>3</sup>埼玉医科大学国際医療センター婦人科腫瘍科）

## E-1094 Inactivation of HMGCL involved in the ketogenesis promote the proliferation and metastasis of nasopharyngeal carcinoma

Wenqi Luo<sup>1</sup>, Xiaoying Zhou<sup>2</sup>, Zhe Zhang<sup>2</sup>, Guangwu Huang<sup>2</sup>, Ping Li<sup>1</sup> (<sup>1</sup>Dept. of Path., First Affiliated Hospital of Guangxi Medical University, <sup>2</sup>Dept. of Otolaryngology-Head & Neck Surgery)

## E-1095 ACAAI inhibits malignant phenotype of NPC cells via PTEN/AKT pathway.

Bo Li<sup>1,2,3,4</sup>, Xiaoying Zhou<sup>2</sup>, Zhe Zhang<sup>2</sup>, Guangwu Huang<sup>2</sup> (<sup>1</sup>Dept. Radiotherapy, <sup>2</sup>Dept. of Otolaryngology-Head & Neck Surgery, <sup>3</sup>Dept. of Otolaryngology-Head & Neck Surgery, <sup>4</sup>Dept. of Otolaryngology-Head & Neck Surgery, <sup>5</sup>Dept. of Otolaryngology-Head & Neck Surgery, <sup>6</sup>Dept. of Otolaryngology-Head & Neck Surgery, <sup>7</sup>Dept. of Otolaryngology-Head & Neck Surgery)

## Japanese Oral Sessions

Room 10 Oct. 6 (Thu.) 14:05-15:20

## J-14-4 Lung cancer and mesothelioma

肺がん・中皮腫

Chairperson: Yuichi Ishikawa (Dept. of Path. Cancer Inst., JFCR)

座長：石川 雄一（がん研・研・病理）

## J-1061 S100A11 is a possible therapeutic target in malignant pleural mesothelioma

Hiroki Sato, Hiromasa Yamamoto, Kei Namba, Hidejiro Torigoe, Atsushi Shimoda, Tahahiro Yoshioka, Kazuhiko Shien, Junichi Soh, Shinichi Toyooka (Department of Thoracic Surgery, Okayama, Japan)

悪性胸膜中皮腫における S100A11 の働き

佐藤 博紀、山本 寛斎、難波 圭、鳥越 英次郎、下田 篤志、吉岡 貴裕、枝園 和彦、宗 淳一、豊岡 伸一（岡山大学 呼吸器外科）

## J-1062 Expression of Notch1 and Numb in Non-small Cell Lung Cancer

Hajime Kikuchi<sup>1</sup>, Jun Sakakibara-Konishi<sup>1</sup>, Megumi Morimoto<sup>1</sup>, Yasuyuki Ikezawa<sup>1</sup>, Hidenori Mizugaki<sup>1</sup>, Eiki Kikuchi<sup>1</sup>, Junko Kikuchi<sup>1</sup>, Satoshi Oizumi<sup>1</sup>, Yasuhiro Hida<sup>2</sup>, Kichizo Kaga<sup>2</sup>, Ichiro Kinoshita<sup>3</sup>, Hirotoshi Dosaka-Akita<sup>3</sup>, Masaharu Nishimura<sup>1</sup> (<sup>1</sup>1st Dept. of Med., Hokkaido Univ., Sch. Grad. of Med., <sup>2</sup>Dept. of Thoracic Surgery, Hokkaido Univ. Grad. Sch. of Med., <sup>3</sup>Dept. of Med. Oncology, Hokkaido Univ. Grad. Sch. of Med.)

非小細胞肺癌における Notch1、Numb の発現

菊池 創<sup>1</sup>、榎原 純<sup>1</sup>、森本 恵<sup>1</sup>、池澤 靖元<sup>1</sup>、水柿 秀紀<sup>1</sup>、菊地 英毅<sup>1</sup>、菊地 順子<sup>1</sup>、大泉 聰史<sup>1</sup>、樋田 泰浩<sup>2</sup>、加賀 基知三<sup>2</sup>、木下 一郎<sup>3</sup>、秋田 弘俊<sup>3</sup>、西村 正治<sup>1</sup>（<sup>1</sup>北海道大学病院 内科 1、<sup>2</sup>北海道大学病院 循環器・呼吸器外科、<sup>3</sup>北海道大学病院 腫瘍内科）

## J-1063 Clinical application of amplicon-based next-generation sequencing to therapeutic decision making in lung cancer

Masayuki Takeda<sup>1</sup>, Kazuko Sakai<sup>2</sup>, Hidetoshi Hayashi<sup>1</sup>, Kaoru Tanaka<sup>1</sup>, Takayuki Takahama<sup>1</sup>, Takeshi Yoshida<sup>1</sup>, Tsutomu Iwasa<sup>1</sup>, Tetsuya Mitsudomi<sup>1,2</sup>, Akihiko Ito<sup>4</sup>, Kazuto Nishio<sup>2</sup>, Kazuhiko Nakagawa<sup>1</sup> (<sup>1</sup>Departments of Medical Oncology, Kindai University Faculty of Medicine, <sup>2</sup>Departments of Genome Biology, Kindai University Faculty of Medicine, <sup>3</sup>Departments of Thoracic Surgery, Kindai University Faculty of Medicine, <sup>4</sup>Departments of Pathology, Kindai University Faculty of Medicine)

肺癌に於ける次世代シーケンサーを用いた変異解析に基づく分子標的薬適応決定

武田 真幸<sup>1</sup>、坂井 和子<sup>2</sup>、林 秀敏<sup>1</sup>、田中 薫<sup>1</sup>、高濱 隆幸<sup>1</sup>、吉田 健史<sup>1</sup>、岩朝 勤<sup>1</sup>、光畠 徹哉<sup>3</sup>、伊藤 彰彦<sup>4</sup>、西尾 和人<sup>2</sup>、中川 和彦<sup>1</sup>（<sup>1</sup>近畿大学医学部腫瘍内科、<sup>2</sup>近畿大学医学部ゲノム生物学、<sup>3</sup>近畿大学医学部呼吸器外科、<sup>4</sup>近畿大学医学部病理学）

## J-1064 Nupr1 contributed to cell survival and chromosomal stability via autophagy in NSCLC cells with resistance to EGFR-TKIs

HIROKI SUGIURA<sup>1</sup>, Yasuhiro Miki<sup>1</sup>, Shuko Hata<sup>1</sup>, Ryoko Saito<sup>1</sup>, Ikuro Sato<sup>2</sup>, Hisafumi Yamada-Okabe<sup>3</sup>, Hironobu Sasano<sup>1</sup> (<sup>1</sup>Dept. Path., Tohoku Univ. Grad. Sch. Med., <sup>2</sup>Dept. Path., Miyagi Cancer Ctr., <sup>3</sup>Pharm. Res. Dept., Chugai Pharm.)

EGFR-TKI 耐性獲得肺腺癌において Nupr1 誘導性オートファジーが染色体の安定性を支えている

杉浦 弘樹<sup>1</sup>、三木 康宏<sup>1</sup>、端 秀子<sup>1</sup>、齊藤 涼子<sup>1</sup>、佐藤 郁郎<sup>2</sup>、岡部 尚文<sup>3</sup>、笹野 公伸<sup>1</sup>（<sup>1</sup>東北大・医・病理診断、<sup>2</sup>宮城県立がんセンター、<sup>3</sup>中外製薬株式会社）

## J-1065 Identifications of inhibitors which can overcome acquired resistance to third-generation EGFR-TKI

Ken Uchibori, Naoya Fujita, Ryohei Katayama (JFCR, Section of Experimental Chemotherapy)

第3 世代 EGFR-TKI の獲得耐性に対する克服薬の発見

内堀 健、藤田 直也、片山 量平（がん研究所・基礎研究部）

## J-1066 Combination therapy of oncolytic herpes simplex virus type 1 G47Δ and erlotinib for lung cancer

Yoshinori Sakata<sup>1,2</sup>, Yasushi Ino<sup>1</sup>, Miwako Iwai<sup>1</sup>, Norihiko Ikeda<sup>2</sup>, Tomoki Todo<sup>1</sup> (<sup>1</sup>Division of Innovative Cancer Therapy, IMSUT, <sup>2</sup>Department of Surgery, Tokyo Medical University)

肺癌に対するがん治療用ヘルペスウィルス G47Δ とエルロチニブとの併用療法

坂田 義詞<sup>1,2</sup>、稻生 靖<sup>1</sup>、岩井 美和子<sup>1</sup>、池田 徳彦<sup>2</sup>、藤堂 具紀<sup>1</sup>（<sup>1</sup>東大医研科・先端医療研究・先端がん、<sup>2</sup>東京医大・呼吸器・甲状腺外科学分野）

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## English Oral Sessions

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## English Oral Sessions

Room 12 Oct. 6 (Thu.) 12:50-14:05

### E1-2 Inflammation and signaling

炎症とシグナル伝達

Chairperson: Minoru Takata (Radiat. Biol. Ctr., Kyoto Univ.)

座長: 高田 穣 (京都大・放射線生物研究セ)

#### E-1096 Inflammation-mediated MSH2 downregulation enhances genetic susceptibility to mutagenesis during hepatocarcinogenesis

Yoji Eso, Atsushi Takai, Tsutomu Chiba, Hiroshi Seno, Marusawa Hiroyuki (Dept. of Gastroenterology and Hepatology, Kyoto Univ.)

肝炎症発癌におけるDNAミスマッチ修復遺伝子MSH2の発現低下と変異パターンの関連性

恵荘 裕嗣、高井 淳、千葉 勉、妹尾 浩、丸澤 宏之 (京都大・消化器内科)

#### E-1097 Suppression of chemical hepatocarcinogenesis in transgenic mice expressing nuclear-localized kinase-negative IKK $\beta$

Yoshihiro Tsuchiya<sup>1</sup>, Shin Maeda<sup>2</sup>, Hideaki Kamata<sup>1</sup> (<sup>1</sup>Biomed. Hiroshima Univ. Sch. Med., <sup>2</sup>Dep. Gastroenterol. Yokohama City Univ.)

核局在型IKK $\beta$ 遺伝子を発現するトランスジェニックマウスにおける肝蔵の化学発がんの抑制

土谷 佳弘<sup>1</sup>、前田 慎<sup>2</sup>、鎌田 英明<sup>1</sup> (<sup>1</sup>広島大学大学院・医・医化学、<sup>2</sup>横浜市大・医・消化器内科)

#### E-1098 Heterogeneity of colon tumor stem cells and alteration of Wnt target gene expressions demonstrated by single-cell qPCR

Daisuke Shiokawa, Hirokazu Ohata, Koji Okamoto (Div. Cancer Differentiation, Natl. Cancer Ctr. Res. Inst.)

シングルセル遺伝子発現解析により示された大腸がん幹細胞の多様性とWntターゲット遺伝子の発現変化

塙川 大介、大畠 広和、岡本 康司 (国立がん研究セ・研・がん分化)

#### E-1099 Immune cell-independent elimination of Wnt signaling-dysregulated "abnormal" cells supports animal tissue homeostasis.

Tohru Ishitani (Div. of Cell Reg. Sys., MIB, Kyushu Univ.)

動物組織の恒常性を支える、免疫細胞非依存的なWntシグナル異常細胞排除システム

石谷 太 (九大・生医研・細胞統御システム)

#### E-1100 Functional analysis of Discoidin domain receptor 2 in squamous cell lung cancer

Aragane Naoko<sup>1</sup>, Akemi Sato<sup>1</sup>, Tatsuro Watanabe<sup>2,3</sup>, Eisaburo Sueoka<sup>2</sup>, Shinya Kimura<sup>1</sup> (<sup>1</sup>Division of Hematology, Respiratory Medicine and Oncology, Saga University, <sup>2</sup>Department of Laboratory Medicine, Saga University Hospital, <sup>3</sup>Department of Pediatrics Hematology/Oncology/Bone Marrow Transplantation, University of Colorado)

肺扁平上皮がんにおけるDiscoidin domain receptor 2の機能解析

荒金 尚子<sup>1</sup>、佐藤 明美<sup>1</sup>、渡邊 達郎<sup>2,3</sup>、末岡 栄三朗<sup>2</sup>、木村 晋也<sup>1</sup> (<sup>1</sup>佐賀大学・医・血液・呼吸器・腫瘍内科、<sup>2</sup>佐賀大学附属病院・検査部、<sup>3</sup>コロラド大学・小児血液学)

#### E-1101 Epstein-Barr virus LMP2A modulates migration of nasopharyngeal carcinoma cells via EGFR/Ca2+/Calpain axis.

Jiezheng Liang, Xiaoying Zhou, Zhe Zhang, Guangwu Huang (Dept of Otolaryngology-Head & Neck Surgery)

E

### E11-3 Cancer stem cell (3)

がん幹細胞 (3)

Chairperson: Ryohei Katayama (Cancer Chemother. Ctr., JFCR)

座長: 片山 量平 (がん研・化療セ・基礎)

#### E-1102 Identification of MTDs that suppress the growth of PDX-derived diffuse-type gastric tumor-initiating cells

Hiroshi Fukamachi<sup>1</sup>, Taketo Nishikawaji<sup>1</sup>, Shu Shimada<sup>1</sup>, Yoshimitsu Akiyama<sup>1</sup>, Yasuhito Yuasa<sup>1</sup>, Kiichiro Tsuchiya<sup>2</sup>, Shinji Tanaka<sup>1</sup> (<sup>1</sup>Dept. Mol. Oncol., Tokyo Med. Dent. Univ., <sup>2</sup>Dept. Gastroenterology Hepatology, Tokyo Med. Dent. Univ.)

低分化型胃がん幹細胞の増殖を抑制する分子標的薬の同定—患者由来がん幹細胞の初代培養系を用いた試み

深町 博史<sup>1</sup>、西川路 武人<sup>1</sup>、島田 周<sup>1</sup>、秋山 好光<sup>1</sup>、湯浅 保仁<sup>1</sup>、土屋 輝一郎<sup>2</sup>、田中 真二<sup>1</sup> (<sup>1</sup>東京医科歯科大・分子腫瘍医学、<sup>2</sup>東京医科歯科大・医・消化器内科)

#### E-1103 Epigenetic targets of stemness for metastasis and therapeutic resistance in patients with pancreatic and liver cancers

Shinji Tanaka<sup>1,2</sup>, Shu Shimada<sup>1</sup>, Yoshimitsu Akiyama<sup>1</sup> (<sup>1</sup>Dept. Mol. Oncol., Tokyo Med. Dent. Univ., <sup>2</sup>Grad. Sch. Med., <sup>2</sup>Dept. HBP Surg., Tokyo Med. Dent. Univ. Hosp.)

癌幹細胞のエピジェネティック変化と転移性および治療抵抗性獲得機序

田中 真二<sup>1,2</sup>、島田 周<sup>1</sup>、秋山 好光<sup>1</sup> (<sup>1</sup>東京医科歯科大・院医・分子腫瘍医学、<sup>2</sup>東京医科歯科大・医・肝胆脾外科)

#### E-1104 Novel leukemia stem cell-targeted therapy for acute myeloid leukemia based on dual inhibition of EZH1/EZH2

Shuhei Fujita<sup>1</sup>, Emi Takamatsu<sup>1</sup>, Atsushi Iwama<sup>3</sup>, Issay Kitabayashi<sup>1</sup>, (<sup>1</sup>Div. Hematological Malignancy, Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Onc. Lab., R&D Cent., Daiichi Sankyo Co., Ltd, <sup>3</sup>Dept. Cell. & Mol., Med. Grad. Sch. Med., Chiba Univ.)

急性骨髓性白血病におけるEZH1/EZH2二重阻害による白血病幹細胞を標的とした新規治療

藤田 修平<sup>1</sup>、高松 純美<sup>1</sup>、岩間 厚志<sup>3</sup>、北林 一生<sup>1</sup> (<sup>1</sup>国がん・研・造血器腫瘍、<sup>2</sup>第一三共・研究開発本部・オンコラボ、<sup>3</sup>千葉大院・医・細胞分子医学)

#### E-1105 Targeting of triple-negative breast cancer stem cells with miR-29 mimic and carbon-ion beam exposure

Guillaume Vares<sup>1,2</sup>, Sei Sai<sup>3</sup>, Mitsuru Neno<sup>2</sup>, Hirotaka Sugawara<sup>1</sup>, Tetsuo Nakajima<sup>2</sup> (<sup>1</sup>Adv. Med. Instrumentation Unit, OIST, <sup>2</sup>Dept. of Rad. Effects Res., NIRS, QST, <sup>3</sup>Dept. of Basic Med. Sci. for Rad. Damages, NIRS, QST)

#### E-1106 Tankyrase inhibitors suppress growth of colorectal cancer stem-like CD44-positive cells

Tetsuo Mashima, Yukiko Muramatsu, Hiroyuki Seimiya (Div. Mol. Biother., JFCR Cancer Chemother. Ctr.)

大腸がん幹細胞様CD44陽性細胞に対するタンキラーゼ阻害剤の増殖抑制効果

馬島 哲夫、村松 由起子、清宮 啓之 (がん研・化療セ・分子生物治療)

#### E-1107 Enhancement of 5-aminolevulinic acid-based fluorescence detection of C6 glioma stem cells by chelating iron

Wenqian Wang<sup>1</sup>, Kouichi Tabu<sup>1</sup>, Yuichiro Hagiya<sup>2</sup>, Yoshitaka Murota<sup>1</sup>, Shun-ichiro Ogura<sup>2</sup>, Tetsuya Taga<sup>1</sup> (<sup>1</sup>Dep. of Stem Cell Regulation, Tokyo Med. & Dental Univ., <sup>2</sup>Grad. Sch. of Biosci. and Biotech, Tokyo Inst. of Technology)

アミノレブリン酸を用いたC6グリオーマ幹細胞の検出に対する鉄キレート剤による向上効果

王 文茜<sup>1</sup>、楠 康一<sup>1</sup>、萩谷 祐一郎<sup>2</sup>、室田 吉貴<sup>1</sup>、小倉 俊一郎<sup>2</sup>、田賀 哲也<sup>1</sup> (<sup>1</sup>東京医科歯科大・難治研・幹細胞制御、<sup>2</sup>東京工業大・生命理工)

## Symposia

Room 14 Oct. 6 (Thu.) 12:50-15:20

E

S6

## Key signal transduction pathways in cancer development

がん化・悪性化の鍵となるシグナル伝達経路

Chairpersons: Jun-ichiro Inoue (Div. of Cell. &amp; Mol. Biol., IMS, The Univ. of Tokyo)

Hidenori Ichijo (Cell Signaling, Grad. Sch. of Pharm. Sci., The Univ. of Tokyo)

座長: 井上 純一郎 (東京大・医科研・分子発癌)

一條 秀憲 (東京大・院薬・細胞情報)

Signal transduction pathways are triggered by various ligand-receptor interactions and lead to modulation of gene expression profiles, which cell-autonomously or non-cell-autonomously regulate proliferation, differentiation and survival of cells. Therefore, proper regulation of signal transduction pathways plays critical roles in maintenance of the health of each of us, while their dysregulations likely cause onset and development of various diseases such as cancer. Needless to say, molecules involved in such pathways could be targets for anti-cancer interventions. In this symposium, we would like to focus on six key pathways involved in cancer development: two pathways that control tumor progression by killing tumor cells, alongside four pathways that promote tumor development. Precise molecular mechanisms of cancer development and therapeutic strategies based on each finding will be discussed.

## S6-1 Non-canonical Warburg effect induces elimination of transformed cells from epithelia

Yasuyuki Fujita (Inst. for Genetics Med., Hokkaido Univ.)

細胞競合がもたらすワープルグ効果様の代謝変化

藤田 恭之 (北海道大・遺制研・分子腫瘍)

## S6-2 What do we learn from cancer cell necrosis

Liming Sun (Inst. of Biochemistry &amp; Cell Biol., CAS)

## S6-3 Stress signaling in tumorigenesis and tumor metastasis

Miki Kamiyama, Isao Naguro, Hidenori Ichijo (Cell Signaling, Grad. Sch. of Pharm. Sci., The Univ. of Tokyo)

ストレスシグナル経路とがん進展

神山 美樹、名黒 功、一條 秀憲 (東京大・院薬・細胞情報)

## S6-4 Role of Akt-Girdin signaling in cancer progression

Masahide Takahashi, Atsushi Enomoto, Naoya Asai (Dept. of Pathol. Nagoya Univ. Grad. Sch. of Med.)

がんの進展におけるAkt-girdin シグナル伝達系の役割

高橋 雅英、榎本 篤、浅井 直也 (名古屋大・院医・分子病理/腫瘍病理)

## S6-5 Differential roles of NF-κB activation in mammary gland development and breast cancer malignancy

Mizuki Yamamoto<sup>1</sup>, Jun-ichiro Inoue<sup>2</sup> (Res. Ctr. for Asian Infectious Diseases, IMSUT, <sup>3</sup>Div. of Cell. & Mol. Biol., IMSUT)

乳腺発達と乳癌悪性化における転写因子NF-κBの役割の相違

山本 瑞生<sup>1</sup>、井上 純一郎<sup>2</sup> (<sup>1</sup>東京大・医科研・アジア感染症拠点、<sup>2</sup>東京大・医科研・分子発癌)

## S6-6 Aberrant activation of signal transduction pathways in ATL cells

Toshiaki Watanabe<sup>1,2</sup>, Makoto Yamagishi<sup>2</sup>, Kazumi Nakano<sup>2</sup>, Kaoru Uchimaru<sup>3</sup> (<sup>1</sup>Dept. of Advanced Med. Innovation, St. Marianna Univ., <sup>2</sup>Lab. Tumor Cell Biol. Grad. Sch. of Frontier Sci., The Univ. of Tokyo)

ATL 細胞におけるシグナル伝達系の異常な異常な活性化の機構と意義

渡邊 俊樹<sup>1,2</sup>、山岸 誠<sup>2</sup>、中野 和民<sup>2</sup>、内丸 薫<sup>2</sup> (<sup>1</sup>聖マリ医大・院・先端医療開発、<sup>2</sup>東京大・新領域・病態医療)

## English Oral Sessions

Room 12 Oct. 6 (Thu.) 14:05-15:20

## E11-4 Cancer stem cell (4)

がん幹細胞 (4)

Chairperson: Yoshihiro Kawasaki (Inst. Mol. Cell. Biosci., The Univ. of Tokyo)

座長: 川崎 善博 (東京大・分生研)

## E-1108 Novel culture method developed for primary colorectal cancer cells

*Shiki Fujino<sup>1</sup>, Norikatsu Miyoshi<sup>2</sup>, Masayuki Ohue<sup>2</sup>, Masayoshi Yasui<sup>2</sup>, Hidekazu Takahashi<sup>1</sup>, Naotsugu Haraguchi<sup>1</sup>, Junichi Nishimura<sup>1</sup>, Taishi Hata<sup>1</sup>, Chu Matsuda<sup>1</sup>, Tsunekazu Mizushima<sup>1</sup>, Yuichiro Doki<sup>1</sup>, Masashi Mori<sup>1</sup> (Osaka Univ. Grad. Surg., <sup>2</sup>OMCCD)*

臨床応用を目指した大腸癌新規初代培養法の構築と癌幹細胞研究

藤野 志季<sup>1</sup>、三吉 範克<sup>2</sup>、大植 雅之<sup>2</sup>、安井 昌義<sup>2</sup>、高橋 秀和<sup>1</sup>、原口 直紹<sup>1</sup>、西村 潤一<sup>1</sup>、畠 泰司<sup>1</sup>、松田 宙<sup>1</sup>、水島 恒和<sup>1</sup>、土岐 祐一郎<sup>1</sup>、森 正樹<sup>1</sup> (<sup>1</sup>大阪大学大学院・医・消化器外科、<sup>2</sup>大阪府立成人病センター)

## E-1109 Iron metabolism is a novel therapeutic target of cancer stem cells

*Toshiaki Ohara<sup>1,2</sup>, Takayuki Ninomiya<sup>2</sup>, Yuki Katsura<sup>2</sup>, Hajime Kashima<sup>2</sup>, Takuya Kato<sup>2</sup>, Kazuhiro Noma<sup>2</sup>, Hiroshi Tazawa<sup>2</sup>, Toshiyoshi Fujiwara<sup>2</sup> (<sup>1</sup>Pathology & Experimental Med., Okayama Univ Graduate Sch., <sup>2</sup>Gastroenterological Surgery, Okayama Univ Graduate Sch.)*

鉄代謝は癌幹細胞の新規治療ターゲットとなり得る

大原 利章<sup>1,2</sup>、二宮 卓之<sup>2</sup>、桂 佑貴<sup>2</sup>、賀島 肇<sup>2</sup>、加藤 卓也<sup>2</sup>、野間 和広<sup>2</sup>、田澤 大<sup>2</sup>、藤原 俊義<sup>2</sup> (<sup>1</sup>岡山大学大学院 免疫病理学、<sup>2</sup>岡山大学大学院 消化器外科学)

## E-1110 Suppression of intestinal cancer stemness and malignant progression by intestine-specific homeoproteins CDX1 and CDX2

*Koji Aoki (Pharmacol., Fukui Univ., Sch. Med.)*

ホメオボックス蛋白質 CDX1 と CDX2 による大腸癌の癌幹細胞性と悪性化進展の抑制

青木 耕史 (福井大・医・薬理学)

## E-1111 The role of Hes1 in normal stem cells and tumor stem cells of the intestine

*Norihiko Goto, Takuto Yoshioka, Akihisa Fukuda, Hiroshi Seno (Department of Gastroenterology and Hepatology, Kyoto University)*

腸管の正常幹細胞と腫瘍幹細胞における Hes1 の役割

後藤 規弘、吉岡 拓人、福田 晃久、妹尾 浩 (京都大学大学院医学研究科 消化器内科)

## E-1112 Induction of cancer stem cell dormancy and recurrence by Dox-inducible secondary reprogramming system

*Akira Shimamoto, Kimiyoshi Yano, Hidetoshi Tahara (Dept. Cell. Mol. Biol., Grad. Sch. Biomed. Health, Hiroshima Univ.)*

ドキシサイクリン誘導性リプログラミングによるがん幹細胞の休眠状態と再発の誘導

嶋本 顯、矢野 公義、田原 栄俊 (広島大学大学院医歯薬保・細胞分子生物学)

## Symposia

Room 15 Oct. 6 (Thu.) 12:50-15:20

E

S7

### Targeting metabolism in cancer

代謝を標的としたがんの制御

Chairpersons: Issay Kitabayashi (Div. of Hematol. Malignancy, Natl. Cancer Ctr Res. Inst.)

Chiaki Takahashi (Div. of Onc. Mol. Biol., Cancer Res. Inst., Kanazawa Univ.)

座長：北林 一生（国立がん研究セ・造血器腫瘍）

高橋 智聰（金沢大・がん進展制御研・腫瘍分子生物学）

Emerging evidences suggest a pivotal role of cellular metabolism in cancer. Especially, discovery of mutations in isocitrate dehydrogenase (IDH) genes provided a mechanism whereby aberration in cellular metabolism perturbs epigenetic programs leading to carcinogenesis. Currently, drugs targeting aberrant activity of mutated IDH are developed and under clinical trials. How cellular metabolism is derailed by oncogenic signals (RB pathway and Nrf2-Keap1 system) will be also discussed in this symposium. Finally, a metabolomics study of large number colorectal cancer cases covering all disease stages will be introduced. This will highlight when aberration in cellular metabolism becomes evident during tumor progression. We selected four additional short talks. We anticipate lively discussion by speakers and audience.

#### S7-1 Metabolic regulation by RB tumor suppressor gene

Chiaki Takahashi (Div. of Onc. Mol. Biol., Cancer Res. Inst., Kanazawa Univ.)

RB がん抑制遺伝子による代謝制御

高橋 智聰（金沢大・がん進展制御研・腫瘍分子生物学）

#### S7-2 Enhancement mechanisms of NRF2-dependent transcriptional activation in cancer cells

Hozumi Motohashi (Dept. of Gene Exp. Reg., IDAC, Tohoku Univ.)

がん細胞における NRF2 依存の転写活性の増強メカニズム

本橋 ほづみ（東北大・加齢研・遺伝子発現制御）

#### S7-3 Spheroid cancer stem cells display reprogrammed metabolism and actively run the tricarboxylic acid (TCA) cycle

Masakazu Sato, Kei Kawana, Katsuyuki Adachi, Asaha Fujimoto, Akira Kawata, Juri Takahashi, Mitsuyo Yoshida, Hiroe Nakamura, Haruka Nishida, Tomoko Inoue, Ayumi Taguchi, Katsutoshi Oda, Tomoyuki Fujii (Obstetrics & Gynecology, The Univ. of Tokyo)

癌幹細胞様集団スフェロイドは代謝を変化させ TCA サイクルを活性化させる

佐藤 雅和、川名 敬、足立 克之、藤本 麻葉、河田 啓、高橋 樹里、吉田 光代、中村 寛江、西田 晴香、井上 知子、田口 歩、織田 克利、藤井 知行（東京大・医・女性外科）

#### S7-4 Targeting CERS6-dependent Sphingolipid Homeostasis in Lung Cancer Cells

Motoshi Suzuki<sup>1</sup>, Takashi Murate<sup>2</sup>, Mamoru Kyogashima<sup>3</sup>, Yuji Komizu<sup>4</sup>, Yoko Matsumoto<sup>5</sup>, Ryuichi Ueoka<sup>6</sup>, Takashi Takahashi<sup>1</sup> (<sup>1</sup>Div. of Mol Carcinog, Nagoya Univ. Grad. Sch. of Med., <sup>2</sup>Life Health Sci, Chubu Univ., <sup>3</sup>Div. of Microbiol Mol. Cell Biol, Nihon Pharm Univ., <sup>4</sup>App Life Sci, Grad. Sch. of Engineer, Sojo Univ.)

CERS6 および癌特有のスフィンゴ脂質代謝ホメオスタシスを利用した肺がん分子標的治療

鈴木 元<sup>1</sup>、村手 隆<sup>2</sup>、京ヶ島 守<sup>3</sup>、古水 雄志<sup>4</sup>、松本 陽子<sup>4</sup>、上岡 龍一<sup>4</sup>、高橋 隆<sup>1</sup>（<sup>1</sup>名古屋大・院医・分子腫瘍、<sup>2</sup>中部大・生命健康科学、<sup>3</sup>日薬大・生命分子薬学、<sup>4</sup>崇城大・応用生命）

#### S7-5 A serine-glycine metabolic enzyme MTHFD2 is a novel target for overcoming resistance in lung cancer

Noriko Gotoh<sup>1</sup>, Tatsunori Nishimura<sup>1</sup>, Asuka Nakata<sup>1</sup>, Susumu Kohno<sup>2</sup>, Chiaki Takahashi<sup>2</sup>, Tomoyoshi Soga<sup>3</sup>, Arinobu Tojo<sup>4</sup> (<sup>1</sup>Div. of Cancer Cell Biol, Cancer Res. Inst., Kanazawa Univ., <sup>2</sup>Div. of Oncol. & Mol. Biol., Cancer Res. Inst., Kanazawa Univ., <sup>3</sup>Inst. Advanced Biosci., Keio Univ., <sup>4</sup>Div. of Mol. Therapy, Inst. Med. Sci., The Univ. of Tokyo)

肺がんの耐性克服を目指した新規分子標的：セリン・グリシン代謝酵素 MTHFD2

後藤 典子<sup>1</sup>、西村 建徳<sup>1</sup>、中田 飛鳥<sup>1</sup>、河野 晋<sup>2</sup>、高橋 智聰<sup>2</sup>、曾我 朋義<sup>3</sup>、東條 有伸<sup>4</sup>（<sup>1</sup>金沢大・がん研・分子病態、<sup>2</sup>金沢大・がん研・腫瘍分子生物学、<sup>3</sup>慶應大・先端生命科学研、<sup>4</sup>東京大・医科研・分子療法）

S7-6

### Phosphoethanolamine stimulates cancer cells tolerance against nutrient starvation through alteration of PE biosynthesis

Tsuyoshi Osawa<sup>1</sup>, Teppei Shimamura<sup>2</sup>, Ayano Kondo<sup>3</sup>, Rika Tsuchida<sup>4</sup>, Satoru Miyano<sup>5</sup>, Hiroyuki Aburatani<sup>3</sup>, Masabumi Shibuya<sup>6</sup>, Tomoyoshi Soga<sup>7</sup>, Tatsuhiko Kodama<sup>1</sup> (<sup>1</sup>Systems Biol., RCAST, The Univ. of Tokyo, <sup>2</sup>Systems Biol. Med., Nagoya Univ., <sup>3</sup>Genome Sci., RCAST, The Univ. of Tokyo, <sup>4</sup>Ped., Med., Tokyo Med. & Dental. Univ., <sup>5</sup>Human Genome Ctr., IMS, The Univ. of Tokyo, <sup>6</sup>Jobu Univ., <sup>7</sup>Inst. Adv. Biosci., Keio Univ.)

PE 生合成系の調整を介しエタノールアミンリン酸はがん細胞の飢餓耐性に寄与する

大澤 豊、島村 徹平<sup>2</sup>、近藤 彩乃<sup>3</sup>、土田 里香<sup>4</sup>、宮野 悟<sup>5</sup>、油谷 浩幸<sup>3</sup>、濵谷 正史<sup>6</sup>、曾我 朋義<sup>7</sup>、児玉 龍彦<sup>1</sup>（<sup>1</sup>東京大・先端研・システム生物、<sup>2</sup>名大・医・システム生物、<sup>3</sup>東京大・先端研・ゲノムサイエンス、<sup>4</sup>東京医歯大・医・小兒、<sup>5</sup>東京大・医科研・ヒトゲノム解析セ、<sup>6</sup>上武大、<sup>7</sup>慶應大・先端研）

S7-7

### Multi-omics analysis to understand the regulation of colorectal cancer metabolism

Tomoyoshi Soga<sup>1,2</sup> (<sup>1</sup>Inst. Adv. Biosci., Keio Univ., <sup>2</sup>AMED-CREST)

マルチオミクスによる大腸がん組織の代謝解析

曾我 朋義<sup>1,2</sup>（<sup>1</sup>慶應大・先端生命研、<sup>2</sup>AMED-CREST）

S7-8

### The mutant IDH1 inhibitor prevents growth of glioblastoma with IDH1 mutation in patient-derived xenograft (PDX) model

Yukino Machida<sup>1</sup>, Yoko Ogawara<sup>1</sup>, Masayuki Yamaguchi<sup>2</sup>, Kazutsune Yamagata<sup>3</sup>, Yukiko Aikawa<sup>4</sup>, Makoto Nakagawa<sup>4</sup>, Hironori Matsunaga<sup>5</sup>, Takahiko Seki<sup>6</sup>, Oltea Sampetrean<sup>4</sup>, Hideyuki Saya<sup>4</sup>, Koichi Ichimura<sup>5</sup>, Kazushi Araki<sup>3</sup>, Issay Kitabayashi<sup>1</sup> (<sup>1</sup>Div. of Hematological Malignancy, Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Div. of Funct. Imaging, Natl. Cancer Ctr. Res. Inst., <sup>3</sup>R&D Div., Daiichi Sankyo Co., Ltd., <sup>4</sup>Div. of Gene Reg., IAMR, Keio Univ. Sch. of Med., <sup>5</sup>Div. of Brain Tumor Translational Res., Natl. Cancer Ctr. Res. Inst.)

変異型 IDH1 阻害剤は変異型 IDH1 を有する膠芽腫患者組織片皮下移植 (PDX) モデルの腫瘍増殖を抑制する

町田 雪乃<sup>1</sup>、小川原 陽子<sup>1</sup>、山口 雅之<sup>2</sup>、山形 和恒<sup>1</sup>、相川 祐規子<sup>1</sup>、中川 亮<sup>1</sup>、松永 大典<sup>3</sup>、関 剛彦<sup>3</sup>、サンペトラ オルテア<sup>4</sup>、佐谷 秀行<sup>4</sup>、市村 幸一<sup>5</sup>、荒木 一司<sup>3</sup>、北林 一生<sup>1</sup>（<sup>1</sup>国立がん研究セ・研・造血器腫瘍、<sup>2</sup>国立がん研究セ・機能診断開発、<sup>3</sup>第一三共・癌研・第三グループ、<sup>4</sup>慶應大・医・先端研・遺伝子制御、<sup>5</sup>国立がん研究セ・研・脳腫瘍連携）

**Japanese Oral Sessions**

Room 16 Oct. 6 (Thu.) 12:50-14:05

**J9-1 Epigenetic regulation**  
エピジェネティクス制御

Chairperson: Hidenobu Soejima (Div. of Mol. Genet. & Epigenet., Dept. of Biomol. Sci., Facul. of Med., Saga Univ.)

座長：副島 英伸（佐賀大・医・分子遺伝・エピジェネティクス）

**J-1067 Epigenome events induce carcinogenesis in the rat's model with gastroduodenal reflux similar to that of humans**

Satoshi Fujii<sup>1</sup>, Seiya Seki<sup>2</sup>, Masahide Seki<sup>2</sup>, Tomoharu Miyashita<sup>3</sup>, Ryohei Takei<sup>3</sup>, Satoshi Takada<sup>3</sup>, Katsuya Tsuchihara<sup>4</sup>, Tetsuo Ohta<sup>4</sup>, Yutaka Suzuki<sup>2</sup> (Exploratory Oncology Research & Clinical Trial Center National Cancer Center, <sup>2</sup>Dept. of Computational Biology and Medical Sciences, Univ. of Tokyo, <sup>3</sup>Dept. Gastroenterological Surgery, Kanazawa University Hospital, <sup>4</sup>Exploratory Oncology Research and Clinical Trial Center National Cancer Center)

胃・十二指腸液逆流ラットモデルにおける発癌機構に関わるエピゲノム変化

藤井 誠志<sup>1</sup>、関 聖矢<sup>2</sup>、関 真秀<sup>2</sup>、宮下 知治<sup>3</sup>、武居 亮平<sup>3</sup>、高田 智司<sup>3</sup>、土原 一哉<sup>4</sup>、太田 哲生<sup>3</sup>、鈴木 穂<sup>2</sup>（<sup>1</sup>国立がんセ・先端医療開発セ・臨床腫瘍病理、<sup>2</sup>東京大学大学院新領域創成科学研究科、<sup>3</sup>金沢大学消化器・腫瘍再生外科学、<sup>4</sup>国立がん研究セ・先端医療開発セ・TR 分野）

**J-1068 Genome-wide DNA methylation analysis during non-alcoholic steatohepatitis (NASH)-related hepatocarcinogenesis**

Junko Kuramoto<sup>1</sup>, Eri Arai<sup>1,2</sup>, Tian Ying<sup>1</sup>, Masaki Hiramoto<sup>3</sup>, Takao Nammo<sup>3</sup>, Yoriko Takahashi<sup>4</sup>, Hidenori Ojima<sup>1</sup>, Kazuki Yasuda<sup>3</sup>, Yae Kanai<sup>1,2</sup> (Department of Pathology, Keio University School of Medicine, <sup>2</sup>Division of Molecular Pathology, National Cancer Center Research Institute, <sup>3</sup>Department of Metabolic Disorder, Diabetes Research Center, NCGM, <sup>4</sup>Biomedical Department, Solution Center, Mitsui Knowledge Industry Co., Ltd.)

NASH 由来肝がん過程におけるゲノム網羅のDNAメチル化解析

藏本 純子<sup>1</sup>、新井 恵史<sup>1,2</sup>、田 迎<sup>1</sup>、平本 正樹<sup>3</sup>、南茂 隆生<sup>3</sup>、高橋 順子<sup>4</sup>、尾島 英和<sup>1</sup>、安田 和基<sup>3</sup>、金井 弥栄<sup>1,2</sup>（慶應義塾大学医学部病理学教室、<sup>2</sup>国立がん研究センター研究所分子病理分野、<sup>3</sup>国立国際医療研究センター代謝疾患研究部、<sup>4</sup>三井情報株式会社バイオメディカル室）

**J-1069 Comprehensive methylation analysis of imprinting-associated differentially methylated regions in colorectal cancer**

Hidaka Hidenori<sup>1,2</sup>, Ken Higashimoto<sup>1</sup>, Yasuo Koga<sup>3</sup>, Hidenobu Soejima<sup>1</sup> (Div. of Mol. Genetics & Epigenetics, Saga Univ., <sup>2</sup>Dept. of Internal Med. & Gastrointestinal Endoscopy, Saga Med. Sch., <sup>3</sup>Dept. of Surgery, Saga Univ. Faculty of Med.)

大腸癌におけるインプリントDMRの包括的メチル化解析

樋高 秀憲<sup>1,2</sup>、東元 健<sup>1</sup>、古賀 靖大<sup>3</sup>、副島 英伸<sup>1</sup>（<sup>1</sup>佐賀大学・医・分子生命科学講座分子遺伝学、<sup>2</sup>佐賀大学・医・消化器内科、<sup>3</sup>佐賀大学・医・一般・消化器外科）

**J-1070 Molecular mechanism of a novel tumor suppressor gene NDRG2 expression regulation by HTLV1 infection**

Tomonaga Ichikawa, Shingo Nakahata, Kazuhiro Morishita (Tumor and Cellular Biochemistry, Faculty of Medicine, University of Miyazaki) HTLV1 感染による新規がん抑制遺伝子 NDRG2 の発現調節機能の解析  
市川 朝永、中畑 新吾、森下 和広（宮崎大学医学部腫瘍生化学）

**J-1071 *in vivo* Chromatin Accessibility Analysis of Hepatocellular Carcinoma by Next Generation Sequencing**

Shuhei Yoshikawa<sup>1</sup>, Naohiro Makise<sup>1,2</sup>, Akimasa Hayashi<sup>2</sup>, Takanori Fujita<sup>1</sup>, Seitaro Nomura<sup>1</sup>, Genta Nagae<sup>1</sup>, Yutaka Midorikawa<sup>3</sup>, Masashi Fukayama<sup>2</sup>, Hiroyuki Aburatani<sup>1</sup> (Genome Sci. Div., RCAST, Univ. Tokyo, <sup>2</sup>Dept. Human Path., Grad. Sch. Med., Tokyo Univ., <sup>3</sup>Dept. Digestive Surgery, Nihon Univ., Sch. Med)

次世代シーケンスによる肝細胞癌のクロマチンアクセシビリティ解析  
吉川 修平<sup>1</sup>、牧瀬 尚大<sup>1,2</sup>、林 玲匡<sup>2</sup>、藤田 隆教<sup>1</sup>、野村 征太郎<sup>1</sup>、永江 玄太<sup>1</sup>、緑川 泰<sup>3</sup>、深山 正久<sup>2</sup>、油谷 浩幸<sup>1</sup>（<sup>1</sup>東大・先端研・ゲノムサイエンス、<sup>2</sup>東京大・医・病理、<sup>3</sup>日大・医・消化器外科）

**J-1072 Interactome analysis of BRCA2-binding proteins on mitotic chromosomes**

Nao Otsuka<sup>1</sup>, Miho Takaoka<sup>1</sup>, Akira Nakanishi<sup>1</sup>, Yoshio Miki<sup>1,2</sup> (Dept. Mol. Genet., Tokyo Med& Dent. Univ., <sup>2</sup>Dept. Mol. Diagnosis, JFCR. The Cancer Inst.)

M期染色体におけるBRCA2タンパク質のインタラクトーム解析

大塚 菜央<sup>1</sup>、高岡 美帆<sup>1</sup>、中西 啓<sup>1</sup>、三木 義男<sup>1,2</sup>（<sup>1</sup>東京医科歯科大学・難研・分子遺伝、<sup>2</sup>癌研・研・遺伝子診断）

**English Oral Sessions**

Room 16 Oct. 6 (Thu.) 14:05-15:20

**E9-1 Epigenetic treatment**  
エピジェネティクス治療

Chairperson: Ryuji Hamamoto (Nat'l. Cancer Ctr. Res. Inst.)

座長：浜本 隆二（国立がん研究セ・研・がん分子修飾制御）

**E-1113 Identification of lncRNAs Involved in the Sensitivity to DNA Demethylation Therapy**

Liang Zong<sup>1,2</sup>, Naoko Hattori<sup>1</sup>, Yasuyuki Seto<sup>2</sup>, Toshikazu Ushijima<sup>1</sup> (<sup>1</sup>Div. of Epigenomics, Nat'l. Cancer Ctr. Res. Inst., <sup>2</sup>Dept. of Gastrointestinal Surg., The Univ. of Tokyo)

**E-1114 The silence of GFI1 enhancer by LSD1 is associated with myeloid differentiation block in AML**

Goichi Tatsumi<sup>1</sup>, Masahiro Kawahara<sup>2</sup>, Hirotaka Matsui<sup>3</sup>, Masakatsu Hishizawa<sup>1</sup>, Toshiya Inaba<sup>4</sup>, Takayoshi Suzuki<sup>5</sup>, Akifumi Takaori-Kondo<sup>1</sup> (<sup>1</sup>Dept. of Hematology and Oncology, Kyoto Univ., <sup>2</sup>Dept. of Gastroenterology and Hematology, Shiga Univ. of Med. Sci., <sup>3</sup>Dept. of Mol. Lab. Med., Kumamoto Univ., <sup>4</sup>Dept. of Mol. Oncology and Leukemia Program Project, Hiroshima Univ., <sup>5</sup>Dept. of Chemistry, Kyoto Pref. Univ. of Med.)

LSD1により抑制されたGFI1 エンハンサーは AML の骨髄分化障害に重要である

辰巳 刚一<sup>1</sup>、河原 真大<sup>2</sup>、松井 啓隆<sup>3</sup>、菱澤 方勝<sup>1</sup>、稻葉 俊哉<sup>4</sup>、鈴木 孝禎<sup>5</sup>、高折 晃史<sup>1</sup>（<sup>1</sup>京都大学 血液腫瘍内科、<sup>2</sup>滋賀医科大学 消化器血液内科、<sup>3</sup>熊本大学 臨床病態解析学分野、<sup>4</sup>広島大学 原医研 がん分子病態研究分野、<sup>5</sup>京都府立医大 化学教室）

**E-1115 Development of a novel inhibitor against EZH2/PRC2**

Keiko Shinjo<sup>1</sup>, Natsuki Dohi<sup>1</sup>, Keisuke Katsushima<sup>1</sup>, Akihiro Ito<sup>2</sup>, Tetsuo Onuki<sup>3</sup>, Minoru Yoshida<sup>2</sup>, Yutaka Kondo<sup>1</sup> (Dept. of Epigenomics, Grad. Sch. Med. Sci., Nagoya City Univ., <sup>2</sup>Chem. Genet., RIKEN)

ポリコームタンパク複合体を標的とした新規治療薬の開発

新城 恵子<sup>1</sup>、土肥 名月<sup>1</sup>、勝島 啓佑<sup>1</sup>、伊藤 昭博<sup>2</sup>、大貫 哲男<sup>2</sup>、吉田 稔<sup>2</sup>、近藤 豊<sup>1</sup>（名古屋市大・院医・遺伝子制御学、<sup>2</sup>理研・化学遺伝）

**E-1116 Epigenetic-basis synthetic lethality for the therapy of adult T cell leukemia-lymphoma (ATL)**

Makoto Yamagishi<sup>1</sup>, Dai Fujikawa<sup>1</sup>, Takeo Ohsugi<sup>2</sup>, Makoto Hori<sup>1</sup>, Kazumi Nakano<sup>1</sup>, Seiichiro Kobayashi<sup>3</sup>, Masako Iwanaga<sup>4</sup>, Atae Utsunomiya<sup>5</sup>, Kaoru Uchimaru<sup>1</sup>, Toshiki Watanabe<sup>1,6</sup> (Grad. Sch. Front. Sci., Univ. of Tokyo, <sup>2</sup>Dept. Lab. Animal Sci., Sch. Vet. Med., Rakuno Gakuen Univ., <sup>3</sup>Inst. Med. Sci., Univ. of Tokyo, <sup>4</sup>Nagasaki Univ. Grad. Sch. Biomed. Sci., <sup>5</sup>Dept. Hematol., Imamura Bun-in Hosp., <sup>6</sup>Dept. Adv. Med. Innov., St. Marianna Univ. Grad. Sch. Med.)

エピジェネティクスを基盤とした成人T細胞白血病の新たな治療戦略

山岸 誠<sup>1</sup>、藤川 大<sup>1</sup>、大杉 剛生<sup>2</sup>、堀 真琴<sup>1</sup>、中野 和民<sup>1</sup>、小林 誠一郎<sup>3</sup>、岩永 正子<sup>4</sup>、宇都宮 與<sup>5</sup>、内丸 薫<sup>1</sup>、渡邊 俊樹<sup>1,6</sup>（<sup>1</sup>東大院・新領域・<sup>2</sup>酪農学園大・獣医学群、<sup>3</sup>東大・医科研、<sup>4</sup>長崎大院・医歯薬学総合研究科、<sup>5</sup>今村病院分院・血液内科、<sup>6</sup>聖マリアンナ医科大・先端医療開発学）

**E-1117 Targeted epigenetic activation of genes by LSD1 inhibitor NCD38 conjugated to Pyrrole Imidazole Polyamide (PIP)**

Kokiladevi Alagarswamy<sup>1</sup>, Ken-ichi Shinohara<sup>2</sup>, Atsushi Okabe<sup>1</sup>, Masaki Fukuyo<sup>1</sup>, Natsumi Yoda<sup>1</sup>, Hiroki Nagase<sup>3</sup>, Takayoshi Suzuki<sup>4</sup>, Tetsuhiro Nemoto<sup>2</sup>, Atsushi Kaneda<sup>1</sup> (Dept. Mol. Oncol, Grad. Sch. Med., Chiba Univ., <sup>2</sup>Dept. Pharm. Sci, Grad. Sch. Pharm, Chiba Univ, <sup>3</sup>Dept. Cancer Genetics, Chiba Cancer center, <sup>4</sup>Grad. Sch. Med. Sci, Kyoto Pref. Univ. Med)

**E-1118 Critical DNA hypermethylation in gastrointestinal cancer and its region-specific inhibition by small-molecule compounds**

Atsushi Kaneda (Dept Mol Oncol, Grad Sch Med, Chiba Univ)

消化管癌におけるDNA高メチル化誘導の標的および機序の解明と小分子化合物によるその領域選択的メチル化阻害

金田 篤志（千葉大・医・分子腫瘍学）

Discussion (I)  
15:50-16:35

Discussion (II)  
16:35-17:20

P1-1~2	Chemical carcinogenesis and radiation carcinogenesis
P7-1~6	Cancer genome/genetics
P9-1~4	Epigenetics
P10-1~4	Invasion and metastasis
P11-1~6	Characteristics of cancer cells
P12-1~4	Cancer immunity
P13-1~4	Growth factors/cytokines/hormones
P14-1~29	Cancer basic, diagnosis and treatment
P15-1	Diagnosis
P17-1~6	Chemotherapy and endocrine therapy

**P7-5 Cancer genome analysis (5)**

p93

P-1048	P-1047	P-1046	P-1045	P-1044	P-1043	P-1042
P-1049	P-1050	P-1051	P-1052	P-1053	P-1054	P-1055

**P7-6 Familial tumor**

p94

**P10-1 Cell adhesion/migration**

p97

P-1085	P-1084	P-1083	P-1082	P-1081	P-1080	P-1079
P-1086	P-1087	P-1088	P-1089	P-1090	P-1091	P-1092

**P10-2 Invasion (1)**

p98

**P11-3 Cancer stem cell (3)**

p100

P-1124	P-1123	P-1122	P-1121	P-1120	P-1119	P-1118
P-1125	P-1126	P-1127	P-1128	P-1129	P-1130	P-1131

**P11-4 Cancer stem cell (4)**

p101

**P12-3 Antitumor effector cells and their induction (2)**

p104

P-1165	P-1164	P-1163	P-1162	P-1161	P-1160	P-1159
P-1166	P-1167	P-1168	P-1169			

**P12-4 Vaccination therapy**

p104

**P14-1 Gastric cancer (1)**

p107

P-1202	P-1201	P-1200	P-1199	P-1198	P-1197	P-1196
P-1203	P-1204	P-1205	P-1206	P-1207	P-1208	P-1209

**P14-2 Gastric cancer (2)**

p107

**P14-7 Esophageal cancer (2)**

p110

P-1242	P-1241	P-1240	P-1239	P-1238	P-1237	P-1236
P-1243	P-1244	P-1245	P-1246	P-1247	P-1248	P-1249

**P14-8 Esophageal cancer (3)**

p110

**P14-13 Colorectal cancer (5)**

p113

	P-1280	P-1279	P-1278	P-1277	P-1276	P-1275
P-1281	P-1282	P-1283	P-1284	P-1285	P-1286	

**P14-14 Colorectal cancer (6)**

p114

**P14-19 Pancreatic cancer (1)**

p116

P-1315	P-1314	P-1313	P-1312	P-1311	P-1310	P-1309
P-1316	P-1317	P-1318	P-1319	P-1320	P-1321	P-1322

**P14-20 Pancreatic cancer (2)**

p116

**P14-25 Lung cancer (5)**

p119

		P-1351	P-1350	P-1349	P-1348	P-1347
P-1352	P-1353	P-1354	P-1355	P-1356	P-1357	P-1358

**P14-26 Uterine cancer (1)**

p119

**P17-1 Natural substances (1)**

p122

			P-1382	P-1381	P-1380	P-1379
P-1383	P-1384	P-1385	P-1386			

**P17-2 Natural substances (2)**

p122


<b>P1-1 Carcinogens</b>	<i>p90</i>					
P-1001	P-1002	P-1003	P-1004	P-1005	P-1006	P-1007
	P-1013	P-1012	P-1011	P-1010	P-1009	P-1008
<b>P1-2 Carcinogenic stimuli</b>	<i>p90</i>					
<b>P7-1 Cancer genome analysis (1)</b>	<i>p91</i>					
P-1014	P-1015	P-1016	P-1017	P-1018	P-1019	P-1020
P-1027	P-1026	P-1025	P-1024	P-1023	P-1022	P-1021
<b>P7-2 Cancer genome analysis (2)</b>	<i>p91</i>					
<b>P7-3 Cancer genome analysis (3)</b>	<i>p92</i>					
P-1034	P-1033	P-1032	P-1031	P-1030	P-1029	P-1028
P-1062	P-1063	P-1064	P-1065	P-1066	P-1067	
<b>P9-2 DNA methylation (2)</b>	<i>p96</i>					
<b>P9-3 DNA methylation (3)</b>	<i>p96</i>					
P-1073	P-1072	P-1071	P-1070	P-1069	P-1068	
P-1099	P-1100	P-1101	P-1102	P-1103		
<b>P10-4 Extracellular matrix and protease</b>	<i>p99</i>					
<b>P11-1 Cancer stem cell (1)</b>	<i>p99</i>					
P-1110	P-1109	P-1108	P-1107	P-1106	P-1105	P-1104
P-1139	P-1140	P-1141	P-1142	P-1143	P-1144	P-1145
<b>P11-6 Cancer stem cell (6)</b>	<i>p102</i>					
<b>P12-1 Tumor antigen</b>	<i>p103</i>					
P-1152	P-1151	P-1150	P-1149	P-1148	P-1147	P-1146
P-1177	P-1178	P-1179	P-1180	P-1181	P-1182	
<b>P13-2 Growth Factor Receptor</b>	<i>p105</i>					
<b>P13-3 Hormones</b>	<i>p105</i>					
P-1188	P-1187	P-1186	P-1185	P-1184	P-1183	
P-1217	P-1218	P-1219	P-1220	P-1221	P-1222	P-1223
<b>P14-4 Gastric cancer (4)</b>	<i>p108</i>					
<b>P14-5 Gastric cancer (5)</b>	<i>p109</i>					
P-1228	P-1227	P-1226	P-1225	P-1224		
P-1257	P-1258	P-1259	P-1260	P-1261	P-1262	
<b>P14-10 Colorectal cancer (2)</b>	<i>p112</i>					
<b>P14-11 Colorectal cancer (3)</b>	<i>p112</i>					
P-1268	P-1267	P-1266	P-1265	P-1264	P-1263	
P-1292	P-1293	P-1294	P-1295			
<b>P14-16 Hepatocellular cancer (2)</b>	<i>p115</i>					
<b>P14-17 Hepatocellular cancer (3)</b>	<i>p115</i>					
P-1301	P-1300	P-1299	P-1298	P-1297	P-1296	
P-1330	P-1331	P-1332	P-1333	P-1334		
<b>P14-22 Lung cancer (2)</b>	<i>p117</i>					
<b>P14-23 Lung cancer (3)</b>	<i>p118</i>					
P-1340	P-1339	P-1338	P-1337	P-1336	P-1335	
P-1364	P-1365	P-1366	P-1367	P-1368	P-1369	P-1370
<b>P14-28 Ovarian cancer (1)</b>	<i>p120</i>					
<b>P14-29 Ovarian cancer (2)</b>	<i>p121</i>					
P-1375	P-1374	P-1373	P-1372	P-1371		
P-1392	P-1393	P-1394	P-1395	P-1396		
<b>P17-4 Synthetic anticancer compounds (2)</b>	<i>p123</i>					
<b>P17-5 Anticancer drug and cell death (1)</b>	<i>p123</i>					
P-1401	P-1400	P-1399	P-1398	P-1397		

<b>P7-4 Cancer genome analysis (4)</b>	<i>p93</i>					
P-1041	P-1040	P-1039	P-1038	P-1037	P-1036	P-1035
P-1056	P-1057	P-1058	P-1059	P-1060	P-1061	
<b>P9-1 DNA methylation (1)</b>	<i>p95</i>					
<b>P9-4 DNA methylation (4)</b>	<i>p97</i>					
	P-1078	P-1077	P-1076	P-1075	P-1074	
P-1093	P-1094	P-1095	P-1096	P-1097	P-1098	
<b>P10-3 Invasion (2)</b>	<i>p98</i>					
<b>P11-2 Cancer stem cell (2)</b>	<i>p100</i>					
P-1117	P-1116	P-1115	P-1114	P-1113	P-1112	P-1111
P-1132	P-1133	P-1134	P-1135	P-1136	P-1137	P-1138
<b>P11-5 Cancer stem cell (5)</b>	<i>p101</i>					
<b>P12-2 Antitumor effector cells and their induction (1)</b>	<i>p103</i>					
	P-1158	P-1157	P-1156	P-1155	P-1154	P-1153
P-1170	P-1171	P-1172	P-1173	P-1174	P-1175	P-1176
<b>P13-1 Growth- and differentiation-regulating factors</b>	<i>p105</i>					
<b>P13-4 TGF-β/Smad</b>	<i>p106</i>					
P-1195	P-1194	P-1193	P-1192	P-1191	P-1190	P-1189
P-1210	P-1211	P-1212	P-1213	P-1214	P-1215	P-1216
<b>P14-3 Gastric cancer (3)</b>	<i>p108</i>					
<b>P14-6 Esophageal cancer (1)</b>	<i>p109</i>					
P-1235	P-1234	P-1233	P-1232	P-1231	P-1230	P-1229
P-1250	P-1251	P-1252	P-1253	P-1254	P-1255	P-1256
<b>P14-9 Colorectal cancer (1)</b>	<i>p111</i>					
<b>P14-12 Colorectal cancer (4)</b>	<i>p113</i>					
	P-1274	P-1273	P-1272	P-1271	P-1270	P-1269
P-1287	P-1288	P-1289	P-1290	P-1291		
<b>P14-15 Hepatocellular cancer (1)</b>	<i>p114</i>					
<b>P14-18 GIST/biliary tract cancer</b>	<i>p115</i>					
P-1308	P-1307	P-1306	P-1305	P-1304	P-1303	P-1302
P-1323	P-1324	P-1325	P-1326	P-1327	P-1328	P-1329
<b>P14-21 Lung cancer (1)</b>	<i>p117</i>					
<b>P14-24 Lung cancer (4)</b>	<i>p118</i>					
	P-1346	P-1345	P-1344	P-1343	P-1342	P-1341
P-1359	P-1360	P-1361	P-1362	P-1363		
<b>P14-27 Uterine cancer (2)</b>	<i>p120</i>					
<b>P15-1 Pathological diagnosis</b>	<i>p121</i>					
	P-1378	P-1377	P-1376			
P-1387	P-1388	P-1389	P-1390	P-1391		
<b>P17-3 Synthetic anticancer compounds (1)</b>	<i>p122</i>					
<b>P17-6 Anticancer drug and cell death (2)</b>	<i>p124</i>					
	P-1406	P-1405	P-1404	P-1403	P-1402	

# 1 Chemical carcinogenesis and radiation carcinogenesis

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

## P1-1 Carcinogens 発がん物質

Chairperson: Teruhisa Tsuzuki (Dept. of Med. Biophys. & Radiat. Biol., Faculty of Med. Sci., Kyushu Univ.)

座長：續 輝久（九州大・院医・基礎医学・生体制御）

### P-1001 DNA adductome analysis for exploration of esophageal cancer etiology in China

Yukari Totsuka<sup>1</sup>, Yingsong Lin<sup>2</sup>, Mamoru Kato<sup>3</sup>, Yasushi Totoki<sup>4</sup>, Tatsuhiko Shibata<sup>4</sup>, Yoshitaka Matsushima<sup>5</sup>, Hitoshi Nakagama<sup>1</sup> (<sup>1</sup>Div. Carcinogenesis & Cancer Prev., Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Dept. Publ. Health. Archie Med. Univ., Sch. Med., <sup>3</sup>Dept. Bioinformatics, Natl. Cancer Ctr. Res. Inst., <sup>4</sup>Div. Cancer Genomics, Natl. Cancer Ctr. Res. Inst., <sup>5</sup>Dept. Applied Biol. Chem., Tokyo Univ. Agricul.)

#### DNA アダクトーム解析により中国食道癌の要因を探索する

戸塚 ゆか里<sup>1</sup>、林 櫻松<sup>2</sup>、加藤 譲<sup>3</sup>、十時 泰<sup>4</sup>、柴田 龍弘<sup>4</sup>、松島 芳隆<sup>5</sup>、中釜 斎<sup>1</sup>（<sup>1</sup>国立がん研究セ・研・発がん・予防・<sup>2</sup>愛知県医大・医・公衆衛生、<sup>3</sup>国立がん研究セ・研・バイオインフォ、<sup>4</sup>国立がん研究セ・研・がんゲノミクス、<sup>5</sup>東京農大・応用生物）

### P-1002 Genotoxicity on the next generation and effect on the differences of both age and sex detected by the Pig-a assay

Katsuyoshi Horibata, Masamitsu Honma (Division of Genetics and Mutagenesis, National Institute of Health Sciences)

Pig-a アッセイの週齢差および性差による影響と次世代遺伝毒性  
堀端 克良、本間 正充（国立医薬品食品衛生研究所・変異遺伝部）

### P-1003 Initiation effects of N-methyl-N-formylhydrazine on gallbladder carcinogenesis in male ICR mice.

Toshiya Kuno, Hiroyuki Kato, Aya Naiki-Ito, Shugo Suzuki, Satoru Takahashi (Dept. Exp. Path. Tumor Biol., Nagoya City Univ.)

マウス胆嚢におけるN-メチル-N-フォルミルヒドラジンの発がんイニシエーション効果の検討

久野 善也、加藤 寛之、内木 純、鈴木 周五、高橋 智（名市大・院・医・実験病態病理）

### P-1004 Quantitative dose-response analyses of genotoxic and carcinogenic potency of mouse liver carcinogens

Kenichi Masumura, Masamitsu Honma (Div. Genetics & Mutagenesis, Natl. Inst. Health Sci.)

マウス肝発がん物質を用いた遺伝毒性および発がん性の定量的分析に関する研究

増村 健一、本間 正充（国立衛研・変異遺伝部）

### P-1005 Effects of various chronic liver injuries on mouse hepatocarcinogenesis induced by diethylnitrosamine

Masahiro Yamamoto, Bing Xin, Takako Ooshio, Kenji Watanabe, Kiyonaga Fujii, Yoko Okada, Yuji Nishikawa (Dept. Pathol. Asahikawa Med. Univ.)

ジエチルニトロサミン誘発マウス肝発癌における様々な肝傷害の影響  
山本 雅大、辛 氷、大塩 貴子、渡邊 賢二、藤井 清永、岡田 陽子、西川 祐司（旭川医大・腫瘍病理）

### P-1006 Involvement of ERK1/2 activation in DHPN-induced rat lung adenocarcinoma

Keiko Yamakawa<sup>1</sup>, Masanao Yokohira<sup>1</sup>, Yuko Narusawa<sup>1</sup>, Nozomi Hashimoto<sup>1</sup>, Shohei Kanie<sup>1</sup>, Shota Yoshida<sup>1</sup>, Kousuke Saoo<sup>1,2</sup>, Katsumi Imaida<sup>1</sup> (<sup>1</sup>Onco-Pathol., Fac. Med., Kagawa Univ., <sup>2</sup>Kaisei General Hosp.)

DHPN 誘発ラット肺腺癌におけるERK1/2活性化の関与

山川 けいこ<sup>1</sup>、横平 政直<sup>1</sup>、成澤 裕子<sup>1</sup>、橋本 希<sup>1</sup>、蟹江 尚平<sup>1</sup>、吉田 翔太<sup>1</sup>、竿尾 光祐<sup>1,2</sup>、今井田 克己<sup>1</sup>（<sup>1</sup>香大・医・腫瘍病、<sup>2</sup>回生病院）

### P-1007 2-Hydroxyglurate Induces Epithelial-Mesenchymal Transition Through Histone Modifications in Colorectal Cancer Cells

Hugh Colvin<sup>1,2</sup>, Naohiro Nishida<sup>1,2</sup>, Jun Koseki<sup>3</sup>, Masamitsu Konno<sup>2</sup>, Koichi Kawamoto<sup>1,2</sup>, Yuichiro Dok<sup>1,2,3</sup>, Masaki Mori<sup>1,2,3</sup>, Hideshi Ishii<sup>2,3</sup> (<sup>1</sup>Department of Gastrointestinal Surgery, Osaka University, <sup>2</sup>Department of Frontier Science for Cancer and Chemotherapy, Osaka University, <sup>3</sup>Department of Cancer Profiling Discovery, Osaka University)

Room P Oct. 6 (Thu.) 16:35-17:20

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## P1-2 Carcinogenic stimuli 発がん刺激

Chairperson: Dai Nakae (Dept. of Nutr. Sci. Food Safety, Faculty. Appl. Biosci., Tokyo Univ. Agricul.)

座長：中江 大（東京農大・応用生物科学・食品安全健康）

### P-1008 DNA methylation alteration in mammary tissue of rats fed on high-fat diet in the stages of growth or adulthood

Toshio Imai<sup>1,2</sup>, Masako Ochiai<sup>2</sup>, Mami Takahashi<sup>1</sup> (<sup>1</sup>Central Animal Div., Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Dep. Animal Exp., Natl. Cancer Ctr. Res. Inst.)

成長期または成熟期の高脂肪食摂取によるラット乳腺組織のDNAメチル化変化

今井 俊夫<sup>1,2</sup>、落合 雅子<sup>2</sup>、高橋 真美<sup>1</sup>（<sup>1</sup>国立がん研究セ・研・動物実験支援施設、<sup>2</sup>国立がん研究セ・研・動物実験部門）

### P-1009 Plasma level of cis-4-decenal is a possible risk marker for susceptibility to colorectal cancer

Susumu Tomono<sup>1</sup>, Taiki Yamaji<sup>2</sup>, Motoki Iwasaki<sup>3</sup>, Daichi Narushima<sup>3</sup>, Mamoru Kato<sup>3</sup>, Yukari Totsuka<sup>4</sup>, Noriyuki Miyoshi<sup>1</sup>, Toshio Imai<sup>5</sup> (<sup>1</sup>Grad. Sch. of Int. Pharm. & Nutr. Sci., Univ. of Shizuoka, <sup>2</sup>Epidemiol. & Prev. Grp., Natl. Canc. Ctr., <sup>3</sup>Dept. of Bioinfo., Natl. Canc. Ctr., <sup>4</sup>Div. of Carci. & Canc. Prev., Natl. Canc. Ctr., <sup>5</sup>Dept. of Anim. Exp., Natl. Canc. Ctr.)

血漿中 cis-4-decenal の大腸がんリスクマーカーとしての可能性

伴野 効<sup>1</sup>、山地 太樹<sup>2</sup>、岩崎 基<sup>2</sup>、成島 大智<sup>3</sup>、加藤 譲<sup>3</sup>、戸塚 ゆかり<sup>4</sup>、三好 規之<sup>1</sup>、今井 俊夫<sup>5</sup>（<sup>1</sup>静岡県大院・薬食生命、<sup>2</sup>国立がん研・疫学研究部、<sup>3</sup>国立がん研・バイオインフォマティクス部門、<sup>4</sup>国立がん研・発がん・予防研究分野、<sup>5</sup>国立がん研・動物実験支援施設）

### P-1010 Carcinogenic effects of concurrent administration of 1,2-dichloropropane and dichloromethane in mice

Satoko Kawachi, Min Gi, Masaki Fujioka, Kumiko Tatsumi, Anna Kakehashi, Kenichiro Doi, Hideki Wanibuchi (Dept. Mol. Path., Osaka city Univ., Grad. Sch. Med.)

1,2-DCP および DCM 複合曝露がマウス肝発がんを促進する

河内 智子、魏 民、藤岡 正喜、辰巳 久美子、梯 アンナ、土井 賢一郎、鶴渕 英機（大阪市大・院・医・分子病理学）

### P-1011 Modifying effects of 1,2-DCP in hamster two-stage carcinogenesis model

Min Gi, Kumiko Tatsumi, Masaki Fujioka, Satoko Kawachi, Kenji Kumada, Anna Kakehashi, Hideki Wanibuchi (Dept. Mol. Path., Osaka city Univ., Grad. Sch. Med.)

ハムスター二段階発がんモデルにおける 1,2-DCP の発がん修飾作用

魏 民、辰巳 久美子、藤岡 正喜、河内 智子、熊田 賢次、梯 アンナ、鶴渕 英機（大阪市大・院・医・分子病理学）

### P-1012 Suppressive effect of apocynin, NADPH oxidase inhibitor, on rat hepatocarcinogenesis.

Shugo Suzuki<sup>1,2</sup>, Aya Naiki-Ito<sup>1</sup>, Hiroyuki Kato<sup>1</sup>, Satoshi Fuji<sup>1</sup>, Toshiya Kuno<sup>1</sup>, Satoru Takahashi<sup>1</sup> (<sup>1</sup>Dept. Exp. Path. Tumor Biol., Nagoya City Univ., <sup>2</sup>Path. Div., Nagoya City East Med. Ctr.)

NADPH oxidase 阻害剤 apocynin によるラット肝発がん抑制効果

鈴木 周五<sup>1,2</sup>、内木 純<sup>1</sup>、加藤 寛之<sup>1</sup>、不二 哲<sup>1</sup>、久野 善也<sup>1</sup>、高橋 智<sup>1</sup>（名市大・院・医・実験病態病理、<sup>2</sup>名古屋市立東部医療センター・病理診断科）

### P-1013 A novel function of HMGA family proteins in the induction of apoptosis triggered by O6-methylguanine in DNA

Ryosuke Fujikane<sup>1</sup>, Yukimasa Takeishi<sup>2</sup>, Mutsuo Sekiguchi<sup>2</sup>, Masumi Hidaka<sup>1</sup> (<sup>1</sup>Dept. Physiol. Sci. and Mol. Biol., Fukuoka Dental College, <sup>2</sup>Adv. Res. Center, Fukuoka Dental College)

ミスマッチ修復タンパク質依存のアポトーシス誘導におけるHMGA ファミリータンパク質の機能

藤兼 亮輔<sup>1</sup>、武石 幸容<sup>2</sup>、関口 瞳夫<sup>2</sup>、日高 真純<sup>1</sup>（<sup>1</sup>福岡歯科大学・細胞分子生物学講座、<sup>2</sup>福岡歯科大学・先端科学研究センター）

## 7 Cancer genome/genetics

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

**P7-1**

### Cancer genome analysis (1) がんゲノム解析 (1)

Chairperson: Shuichi Tsutsumi (Genome Sci. Div., RCAST, The Univ. of Tokyo)  
座長: 堤 修一 (東京大・先端科学技術研究セ)

#### P-1014 SMARCB1 mutation with 22q UPD was more frequent in Japanese rhabdoid tumors in kidney than in Caucasian counterparts

Yasuhiko Kaneko<sup>1</sup>, Masayuki Haruta<sup>1</sup>, Takehiko Kamijo<sup>1</sup>, Yasuhito Arai<sup>2</sup>, Hajime Okita<sup>3</sup>, Motoaki Chin<sup>4</sup>, Takaharu Oue<sup>5</sup>, Tsugumichi Koshinaga<sup>6</sup>, Masahiro Fukuzawa<sup>7</sup> (<sup>1</sup>Res. Inst. Clin. Oncol. Saitama Cancer Ctr., <sup>2</sup>Div. Cancer Genomics, Natl. Cancer Ctr Res. Inst., <sup>3</sup>Dept. Path. Keio Univ. Sch. Med., <sup>4</sup>Dept. Pediatr. Nihon Univ. Sch. Med., <sup>5</sup>Dept. Pediatr. Surg. Hyogo College Med., <sup>6</sup>Dept. Pediatr. Surg. Nihon Univ. Sch. Med., <sup>7</sup>Osaka Med. Ctr. Res. Inst. Maternal Child Health)

22q uniparental disomy を伴う SMARCB1 遺伝子変異の頻度は欧米人の腎または脳ラブドトイド腫瘍より日本人の腎ラブドトイド腫瘍に高い

金子 安比古<sup>1</sup>、春田 雅之<sup>1</sup>、上條 岳彦<sup>1</sup>、新井 康仁<sup>2</sup>、大喜多 肇<sup>3</sup>、陳 基明<sup>4</sup>、大植 孝治<sup>5</sup>、越永 従道<sup>6</sup>、福澤 正洋<sup>7</sup> (<sup>1</sup>埼玉がんセ臨床腫瘍研究所、<sup>2</sup>国立がん研究セ研究所がんゲノミクス、<sup>3</sup>慶應大医病理、<sup>4</sup>日本大医小児科、<sup>5</sup>兵庫医大小児外科、<sup>6</sup>日本大医小児外科、<sup>7</sup>大阪母子保健総合医療セ)

#### P-1015 Comprehensive integrated analysis to identify novel therapeutic targets for triple negative breast cancer patients

Reika Kawabata<sup>1</sup>, Tadashi Hannada<sup>2</sup>, Takehiko Yokobori<sup>3</sup>, Susumu Rokudai<sup>3</sup>, Eisuke Horigome<sup>3</sup>, Daiki Tanaka<sup>3</sup>, Shinji Yoshiyama<sup>3</sup>, Arito Yamane<sup>3</sup>, Ikuko Horikoshi<sup>3</sup>, Ayaka Katayama<sup>2</sup>, Tetsunari Oyama<sup>2</sup>, Masahiko Nishiyama<sup>1,3</sup> (<sup>1</sup>Div. Integrated Oncology Res., Gunma Univ. Initiative for Advanced Res., <sup>2</sup>Dept. Diagnostic Path., Gunma Univ. Grad. Sch. Med., <sup>3</sup>Dept. Mol. Pharm. & Oncol., Gunma Univ. Grad. Sch. Med.)

網羅的遺伝子発現解析および shRNA ライブラリー解析に基づくト リプルネガティブ乳がんに対する新規治療標的の同定

川端 麗香<sup>1</sup>、半田 正<sup>2</sup>、横堀 武彌<sup>3</sup>、六代 範<sup>3</sup>、堀込 瑛介<sup>3</sup>、田中 大輝<sup>3</sup>、吉山 伸司<sup>3</sup>、山根 有人<sup>3</sup>、堀越 郁子<sup>3</sup>、片山 彩香<sup>2</sup>、小山 徹也<sup>2</sup>、西山 正彦<sup>1,3</sup> (<sup>1</sup>群馬大・未来先端研究機構・統合腫瘍学、<sup>2</sup>群馬大・院・医・病理診断学、<sup>3</sup>群馬大・院・医・病態腫瘍薬理学)

#### P-1016 Comprehensive genomic profile of Japanese gastric cancer

Akihiro Suzuki<sup>1,4</sup>, Miwako Kakiuchi<sup>1</sup>, Amane Tagashira<sup>1,5</sup>, Hiroto Katoh<sup>1</sup>, Hiroki Ueda<sup>1</sup>, Shogo Yamamoto<sup>1</sup>, Kenji Tatsuno<sup>1</sup>, Takashi Ohshima<sup>1</sup>, Yasushi Rino<sup>1</sup>, Atsushi Nakajima<sup>1</sup>, Masashi Fukayama<sup>5</sup>, Shunpei Ishikawa<sup>2</sup>, Hiroyuki Aburatani<sup>1</sup> (<sup>1</sup>Genome science Div., RCAST, <sup>2</sup>Genomic pathology Dept., Tokyo Medical and Dental Univ., <sup>3</sup>Surgery Dept., Yokohama City Univ., <sup>4</sup>Gastroenterology and Hepatology Dept., Yokohama City Univ., <sup>5</sup>Pathology Dept., Tokyo Univ.)

日本人胃がんの包括的ゲノムプロファイル

鈴木 章浩<sup>1,4</sup>、垣内 美和子<sup>1</sup>、田頭 周<sup>1,5</sup>、加藤 洋人<sup>2</sup>、上田 宏生<sup>1</sup>、山本 尚吾<sup>1</sup>、辰野 健二<sup>1</sup>、大島 貴<sup>3</sup>、利野 靖<sup>3</sup>、中島 淳<sup>4</sup>、深山 正久<sup>5</sup>、石川 俊平<sup>2</sup>、油谷 浩幸<sup>1</sup> (<sup>1</sup>東大先端研ゲノムサイエンス分野、<sup>2</sup>東京医科歯科大学ゲノム病理学、<sup>3</sup>横浜市大外科治療学、<sup>4</sup>横浜市大肝胆脾消化器内科、<sup>5</sup>東大病理学)

#### P-1017 A system or comprehensive analysis of cancer-stroma interactome

Daisuke Komura<sup>1</sup>, Takayuki Isagawa<sup>1</sup>, Ryohei Suzuki<sup>1</sup>, Kazuki Kishi<sup>1</sup>, Reiko Sato<sup>1</sup>, Hiroto Katoh<sup>1</sup>, Mariko Tanaka<sup>2</sup>, Shogo Yamamoto<sup>3</sup>, Masashi Fukayama<sup>2</sup>, Hiroyuki Aburatani<sup>3</sup>, Shunpei Ishikawa<sup>1</sup> (<sup>1</sup>Dept. Genomic Pathology, MRI, TMDU, <sup>2</sup>Dept. Pathology, Grad. Sch. Med., The Univ. of Tokyo, <sup>3</sup>Genome. Sci. Lab., RCAST, The Univ. of Tokyo)

腫瘍一間質間相互作用解析システム

河村 大輔<sup>1</sup>、砂河 孝行<sup>1</sup>、鈴木 良平<sup>1</sup>、貴志 一樹<sup>1</sup>、佐藤 玲子<sup>1</sup>、加藤 洋人<sup>1</sup>、田中 麻理子<sup>2</sup>、山本 尚吾<sup>3</sup>、深山 正久<sup>2</sup>、油谷 浩幸<sup>3</sup>、石川 俊平<sup>1</sup> (<sup>1</sup>東京医歯大・難治研・ゲノム病理学、<sup>2</sup>東大・医・人体病理学、<sup>3</sup>東大・先端研・ゲノムサイエンス)

#### P-1018 Analysis of 2000 cancer tissues with whole exome sequencing and panel-based deep sequencing - Project HOPE

Takeshi Nagashima<sup>1,2</sup>, Yuji Shimoda<sup>1,2</sup>, Tomoe Tanabe<sup>1,2</sup>, Junko Saito<sup>3</sup>, Akane Naruoka<sup>3</sup>, Keiichi Ohshima<sup>4</sup>, Kenichi Urakami<sup>1</sup>, Sumiko Ohnami<sup>1</sup>, Shunpei Ohnami<sup>1</sup>, Tohru Mochizuki<sup>4</sup>, Masatoshi Kusuhara<sup>3,5</sup>, Ken Yamaguchi<sup>6</sup> (<sup>1</sup>Cancer Diagnostics Res. Div. Shizuoka Cancer Ctr. Res. Inst., <sup>2</sup>SRL Inc., <sup>3</sup>Drug Discovery & Development Div. Shizuoka Cancer Ctr. Res. Inst., <sup>4</sup>Medical Genetics Div. Shizuoka Cancer Ctr. Res. Inst., <sup>5</sup>Regional Resources Div. Shizuoka Cancer Ctr. Res. Inst., <sup>6</sup>Shizuoka Cancer Ctr.)

プロジェクトHOPE - 全エキソンシーケンスと遺伝子パネルの併用による2000症例の変異解析

長嶋 剛史<sup>1,2</sup>、下田 勇治<sup>1,2</sup>、田邊 智絵<sup>1,2</sup>、齊藤 淳子<sup>3</sup>、成岡 茜<sup>3</sup>、大島 啓一<sup>4</sup>、浦上 研一<sup>1</sup>、大浪 澄子<sup>1</sup>、大浪 俊平<sup>1</sup>、望月 徹<sup>4</sup>、楠原 正俊<sup>3,5</sup>、山口 建<sup>6</sup> (<sup>1</sup>静岡がんセ・研・診断技術開発研究部、<sup>2</sup>株式会社エスアールエル、<sup>3</sup>静岡がんセ・研・新規薬剤開発評価研究部、<sup>4</sup>静岡がんセ・研・遺伝子診療研究部、<sup>5</sup>静岡がんセ・研・地域資源研究部、<sup>6</sup>静岡がんセンター)

#### P-1019 Next generation sequencing approach for detecting 491 fusion genes from human cancer - Project HOPE

Kenichi Urakami<sup>1</sup>, Yuji Shimoda<sup>1,2</sup>, Keiichi Ohshima<sup>3</sup>, Takeshi Nagashima<sup>1,2</sup>, Junko Saito<sup>4</sup>, Tomoe Tanabe<sup>1,2</sup>, Yuuko Watanabe<sup>3</sup>, Masakuni Serizawa<sup>4</sup>, Sumiko Ohnami<sup>1</sup>, Syunpei Ohnami<sup>1,3</sup>, Tohru Mochizuki<sup>3</sup>, Masatoshi Kusuhara<sup>4,5</sup>, Ken Yamaguchi<sup>6</sup> (<sup>1</sup>Cancer Diagnostics Res. Div. Shizuoka Cancer Ctr. Res. Inst., <sup>2</sup>SRL Inc., <sup>3</sup>Med. Genetics Div. Shizuoka Cancer Center. Res. Inst., <sup>4</sup>Drug Discovery and Development Div. Shizuoka Cancer Center. Res. Inst., <sup>5</sup>Region Resources Div. Shizuoka Cancer Center. Res. Inst., <sup>6</sup>Shizuoka Cancer Ctr.)

プロジェクトHOPE - 1300症例における次世代DNAシーケンサーを用いた491融合遺伝子の解析

浦上 研一<sup>1</sup>、下田 勇治<sup>1,2</sup>、大島 啓一<sup>3</sup>、長嶋 剛史<sup>1,2</sup>、齊藤 淳子<sup>4</sup>、田邊 智絵<sup>1,2</sup>、渡辺 ゆう子<sup>3</sup>、芹澤 昌邦<sup>4</sup>、大浪 澄子<sup>1</sup>、大浪 俊平<sup>1,3</sup>、望月 徹<sup>3</sup>、楠原 正俊<sup>4,5</sup>、山口 建<sup>6</sup> (<sup>1</sup>静岡がんセ・研・診断技術開発、<sup>2</sup>株式会社エスアールエル、<sup>3</sup>静岡がんセ・研・遺伝子診療、<sup>4</sup>静岡がんセ・研・新規薬剤開発評価、<sup>5</sup>静岡がんセ・研・地域資源、<sup>6</sup>静岡がんセ)

#### P-1020 Accuracy of whole exome sequencing data of 2000 cancer patients

Akane Naruoka<sup>1</sup>, Sumiko Ohnami<sup>2</sup>, Takeshi Nagashima<sup>2,3</sup>, Yuji Shimoda<sup>2,3</sup>, Tomoe Tanabe<sup>2,3</sup>, Junko Saito<sup>1</sup>, Shunpei Ohnami<sup>2</sup>, Kenichi Urakami<sup>2</sup>, Masatoshi Kusuhara<sup>1,4</sup>, Ken Yamaguchi<sup>6</sup> (<sup>1</sup>Drug Discovery & Development Div. Shizuoka Cancer Ctr. Res. Inst., <sup>2</sup>Cancer Diagnostics Res. Div. Shizuoka Cancer Ctr. Res. Inst., <sup>3</sup>Regional Resources Div. Shizuoka Cancer Ctr. Res. Inst., <sup>4</sup>Shizuoka Cancer Ctr.)

がん患者2000症例の全エキソンシーケンス解析結果と結果の正確性について

成岡 茜<sup>1</sup>、大浪 澄子<sup>2</sup>、長嶋 剛史<sup>2,3</sup>、下田 勇治<sup>2,3</sup>、田邊 智絵<sup>2,3</sup>、齊藤 淳子<sup>1</sup>、大浪 俊平<sup>2</sup>、浦上 研一<sup>2</sup>、楠原 正俊<sup>1,4</sup>、山口 建<sup>6</sup> (<sup>1</sup>静岡がんセ・研・新規薬剤開発評価研究部、<sup>2</sup>静岡がんセ・研・診断技術開発研究部、<sup>3</sup>株式会社エスアールエル、<sup>4</sup>静岡がんセ・研・地域資源研究部、<sup>5</sup>静岡がんセンター)

Room P Oct. 6 (Thu.) 16:35-17:20

J/E

**P7-2**

### Cancer genome analysis (2) がんゲノム解析 (2)

Chairperson: Masafumi Seki (Dept. of Ped., The Univ. of Tokyo)  
座長: 関 正史 (東京大・院医・小児)

#### P-1021 Molecular biological analysis of the pediatric atypical chronic myeloid leukemia case

Yujin Sekinaka<sup>1</sup>, Kanako Sekinaka<sup>1</sup>, Hiroyuki Kawaguchi (Dept. Ped. Med., NDMC)

小児aCML症例の分子生物学的検討

關中 悠仁、關中 佳奈子、川口 裕之 (防衛医大・医・小児科)

**P-1022 Prognostic relevance of integrated genetic profiling in pediatric acute lymphoblastic leukemia**

Hiroo Ueno<sup>2</sup>, Kenichi Yoshida<sup>2</sup>, Yusuke Shiozawa<sup>3</sup>, Yuichi Shiraishi<sup>4</sup>, Hiroko Tanaka<sup>4</sup>, Kenichi Chiba<sup>4</sup>, Atsushi Sato<sup>5</sup>, Yoshiko Hashii<sup>6</sup>, Toshihiko Immura<sup>7</sup>, Satoru Miyano<sup>4</sup>, Seishi Ogawa<sup>2</sup>, Keizo Horibe<sup>1</sup>, Masashi Sanada<sup>1</sup> (<sup>1</sup>Dept. Advanced Diagnosis, Clin. Res. Ctr., Nagoya Med. Ctr., <sup>2</sup>Dept. Pathol. and Tumor Biol. Kyoto Univ., <sup>3</sup>Dept. Pediatr. Tokyo Univ., <sup>4</sup>Human Genome Ctr., Univ. Tokyo, <sup>5</sup>Dept. Hematol. & Oncol. Miyagi Child. Hosp., <sup>6</sup>Dept. Pediatr. Osaka Univ., <sup>7</sup>Dept. Pediatr. Kyoto Pref. Univ.)

小児B細胞性急性リンパ性白血病における遺伝子プロファイルと予後との関連

上野 浩生<sup>2</sup>、吉田 健一<sup>2</sup>、塙澤 裕介<sup>3</sup>、白石 友一<sup>4</sup>、田中 洋子<sup>4</sup>、千葉 健一<sup>4</sup>、佐藤 篤<sup>5</sup>、橋井 佳子<sup>6</sup>、今村 俊彦<sup>7</sup>、宮野 悟<sup>4</sup>、小川 誠司<sup>2</sup>、堀部 敬三<sup>1</sup>、真田 昌<sup>1</sup> (<sup>1</sup>名古屋医療センター高度診断研究部、<sup>2</sup>京大・医・腫瘍生物学、<sup>3</sup>東大・医・児、<sup>4</sup>東大・医科研・ヒトゲノム解析センター、<sup>5</sup>宮城こども・血液腫瘍、<sup>6</sup>阪大・医・児、<sup>7</sup>京府医・児)

**P-1023 A frameshift germline mutation of SMAD4 gene in massive gastric polypsis**

Kahyo Tomoaki<sup>1</sup>, Hidetaka Yamada<sup>1</sup>, Masashi Mori<sup>2</sup>, Atsushi Isogaki<sup>3</sup>, Akira Komiyama<sup>4</sup>, Moriya Iwaizumi<sup>5</sup>, Haruhiko Sugimura<sup>1</sup> (<sup>1</sup>Dept. Tumor Path., Hamamatsu Univ. Sch. Med., <sup>2</sup>Dept. Med., Fujinomiya City General Hosp., <sup>3</sup>Dept. Surg., Fujinomiya City General Hosp., <sup>4</sup>Dept. Path., Fujinomiya City General Hosp., <sup>5</sup>First Dept. Med., Hamamatsu Univ. Sch. Med.)

胃ポリポーシスにおけるSMAD4 遺伝子の生殖細胞系列フレームシフト変異

華表 友暁<sup>1</sup>、山田 英孝<sup>1</sup>、森 雅史<sup>2</sup>、磯垣 淳<sup>3</sup>、小宮山 明<sup>4</sup>、岩泉 守哉<sup>5</sup>、相村 春彦<sup>1</sup> (<sup>1</sup>浜松医大・腫瘍病理学、<sup>2</sup>富士宮市立病院・内科、<sup>3</sup>富士宮市立病院・外科、<sup>4</sup>富士宮市立病院・病理診断科、<sup>5</sup>浜松医大・第一内科)

**P-1024 Identification of somatic mutations and copy number variations in multiple myeloma using next generation sequencing.**

Hisayo Fukushima<sup>1,2</sup>, Yasushi Sasaki<sup>1</sup>, Miyuki Tamura<sup>1</sup>, Hiroshi Ikeda<sup>3</sup>, Kazuya Ishiguro<sup>4</sup>, Akihiro Sakurai<sup>5</sup>, Takashi Tokino<sup>1</sup> (<sup>1</sup>Med. Genome Sci., Res. Inst. Frontier Med., Sapporo Med. Univ., <sup>2</sup>Dept. Med. Genetics, Sapporo Med. Univ., <sup>3</sup>Dept. Hematology, Sapporo Med. Univ., <sup>4</sup>Dept. Gastroenterology, Sapporo Med. Univ.)

次世代シーケンサーを用いた多発性骨髄腫における遺伝子変異とコピー数異常の解析

福島 久代<sup>1,2</sup>、佐々木 泰史<sup>1</sup>、田村 みゆき<sup>1</sup>、池田 博<sup>3</sup>、石黒 一也<sup>4</sup>、櫻井 晃洋<sup>2</sup>、時野 隆至<sup>1</sup> (<sup>1</sup>札幌医大・医・フロンティア研・ゲノム、<sup>2</sup>札幌医大・医・遺伝医学、<sup>3</sup>札幌医大・医・血液内科学講座、<sup>4</sup>札幌医大・医・消化器内科学講座)

**P-1025 Detection and identification of cancer mutations in lung cancer cells using the long-read and portable sequencer**

Ayako Suzuki<sup>1</sup>, Takashi Kohno<sup>1</sup>, Katsuya Tsuchihara<sup>1</sup>, Yutaka Suzuki<sup>2</sup> (<sup>1</sup>TR, EPOC, Natl. Cancer Ctr., <sup>2</sup>Grad. Sch. Front. Sci., Univ. Tokyo)

ナノポアシーケンサーによる肺腺癌の変異検出およびフェージング解析

鈴木 純子<sup>1</sup>、河野 隆志<sup>1</sup>、土原 一哉<sup>1</sup>、鈴木 穂<sup>2</sup> (<sup>1</sup>国立がん研究セ・先端医療開発セ・TR、<sup>2</sup>東大・新領域)

**P-1026 Germline variations of cancer driver genes in hepatocellular carcinomas**

Kenji Tatsuno<sup>1</sup>, Shogo Yamamoto<sup>1</sup>, Genta Nagae<sup>1</sup>, Akimasa Hayashi<sup>2</sup>, Yutaka Midorikawa<sup>3</sup>, Hiroyuki Aburatani<sup>1</sup> (<sup>1</sup>Genome Science Div., RCAST, Univ. of Tokyo, <sup>2</sup>Dept. Pathology, Univ. of Tokyo, Grad. Sch. Med., <sup>3</sup>Div. Digestive Surg., Nihon Univ. Sch. of Med.)

肝細胞がんの非癌部でのドライバー遺伝子変異

辰野 健二<sup>1</sup>、山本 尚吾<sup>1</sup>、永江 玄太<sup>1</sup>、林 瑞匡<sup>2</sup>、緑川 泰<sup>3</sup>、油谷 浩幸<sup>1</sup> (<sup>1</sup>東京大・先端研・ゲノムサイエンス、<sup>2</sup>東京大・院医・人体病理学・病理診断学、<sup>3</sup>日大・医・消化器外科)

**P-1027 Comparison of the mutation profiles of the multicentric tumors in an occupational cholangiocarcinoma case**

Sachiyo Mimaki<sup>1</sup>, Shoji Nakamori<sup>2</sup>, Shoji Kubo<sup>3</sup>, Masahiko Kinoshita<sup>3</sup>, Yukari Totsuka<sup>4</sup>, Hitoshi Nakagama<sup>5</sup>, Atsushi Ochiai<sup>6</sup>, Hiroyasu Esumi<sup>1,7</sup>, Katsuya Tsuchihara<sup>1</sup> (<sup>1</sup>Div. TR, EPOC, Natl. Cancer Ctr., <sup>2</sup>Dept. of Surg., Osaka Natl. Hosp., <sup>3</sup>Dept. of Hepato-Biliary-Pancreatic Surg., Osaka City Univ., <sup>4</sup>Natl. Cancer Ctr. Res. Inst., <sup>5</sup>Natl. Cancer Ctr., <sup>6</sup>Path. Div., EPOC, Natl. Cancer Ctr., <sup>7</sup>Res. Inst. Biomed. Sci., Tokyo Univ. Sci.)

職業性胆管がん一症例に認められた同時多発腫瘍の変異プロファイルの比較

三牧 幸代<sup>1</sup>、中森 正二<sup>2</sup>、久保 正二<sup>3</sup>、木下 正彦<sup>3</sup>、戸塚 ゆ加里<sup>4</sup>、中釜 真<sup>5</sup>、落合 淳志<sup>6</sup>、江角 浩安<sup>1,7</sup>、土原 一哉<sup>1</sup> (<sup>1</sup>国立がん研究

セ・先端医療開発セ・TR、<sup>2</sup>国立病院機構大阪医療セ・外科、<sup>3</sup>大阪市大・肝胆脾外科、<sup>4</sup>国立がん研究セ・研、<sup>5</sup>国立がん研究セ・<sup>6</sup>国立がん研究セ・先端医療開発セ・病理、<sup>7</sup>東京理科大・生命医科学研)

**Room P | Oct. 6 (Thu.) 15:50-16:35**

**J/E**

**P7-3**

**Cancer genome analysis (3)**

がんゲノム解析 (3)

Chairperson: Akihiro Fujimoto (Dept. of Med., Kyoto Univ.)

座長：藤本 明洋（京都大・医・創薬医学）

**P-1028 Development and evaluation of cancer gene panels for NGS-based genomic testing system at the National Cancer Center**

Takashi Kubo<sup>1</sup>, Hiroshi Yoshida<sup>2</sup>, Sachio Mitani<sup>3</sup>, Shizuka Shinohara<sup>3</sup>, Erika Arakawa<sup>3</sup>, Mamoru Kato<sup>4</sup>, Takashi Kohno<sup>5</sup>, Hitoshi Ichikawa<sup>1,3</sup> (<sup>1</sup>Div. of Transl. Res., Natl. Cancer Ctr. EPOC, <sup>2</sup>Dept. of Pathol., Natl. Cancer Ctr. Hosp., <sup>3</sup>Dept. of Clin. Genomics, Natl. Cancer Ctr. Res. Inst., <sup>4</sup>Dept. of Bioinformatics, Natl. Cancer Ctr. Res. Inst., <sup>5</sup>Div. of Genome Biol., Natl. Cancer Ctr. Res. Inst.)

次世代シーケンサーによるがん遺伝子パネルの開発と評価

久保 崇<sup>1</sup>、吉田 裕<sup>2</sup>、三谷 幸代<sup>3</sup>、篠原 静佳<sup>3</sup>、荒川 えりか<sup>3</sup>、加藤 譲<sup>4</sup>、河野 隆志<sup>5</sup>、市川 仁<sup>1,3</sup> (<sup>1</sup>国立がん研究セ・先端医療開発セ・TR、<sup>2</sup>国立がん研究セ・中央病院・病理、<sup>3</sup>国立がん研究セ・研究所・臨床ゲノム解析、<sup>4</sup>国立がん研究セ・研究所・バイオインフォ、<sup>5</sup>国立がん研究セ・研究所・ゲノム生物)

**P-1029 Exome and transcriptome analysis from small amounts of starting materials**

Ayako Karakawa<sup>1,2,3</sup>, Shogo Yamamoto<sup>1</sup>, Kenji Tatsuno<sup>1</sup>, Kayo Asada<sup>1</sup>, Genta Nagae<sup>1</sup>, Hiroki Ueda<sup>1</sup>, Hiroyuki Aburatani<sup>1</sup> (<sup>1</sup>Genome Sci. lab., Tokyo Univ RCAST, <sup>2</sup>Ophthal, Tokyo Univ., <sup>3</sup>JSPS, Research Fellowship for Young Scientists)

微量検体からのエクソーム及びトランスクリプトーム解析

唐川 綾子<sup>1,2,3</sup>、山本 尚吾<sup>1</sup>、辰野 健二<sup>1</sup>、浅田 佳代<sup>1</sup>、永江 玄太<sup>1</sup>、上田 宏生<sup>1</sup>、油谷 浩幸<sup>1</sup> (<sup>1</sup>東大先端研・ゲノムサイエンス、<sup>2</sup>東大・眼科、<sup>3</sup>学振・特別研究員)

**P-1030 Clinical Utility of Cell Free (cf) DNA in Plasma in Breast Cancer Management**

Hiroshi Nakagomi<sup>1</sup>, Masayuki Inoue<sup>1</sup>, Yosuke Hirotsu<sup>2</sup>, Hitoshi Mochizuki<sup>2</sup>, Masao Omata<sup>2</sup> (<sup>1</sup>Dept. of Surgery, Yamanashi Prefectural Central Hospital, <sup>2</sup>Genome Analyzing Center, Yamanashi Prefectural Central Hospital)

乳癌治療におけるCell Free DNA (cf DNA) 解析の有用性と課題

中込 博<sup>1</sup>、井上 正行<sup>1</sup>、弘津 陽介<sup>2</sup>、望月 仁<sup>2</sup>、小俣 政男<sup>2</sup> (<sup>1</sup>山梨県立中央病院 外科、<sup>2</sup>山梨県立中央病院 ゲノム解析センター)

**P-1031 Clinical application of cell-free DNA in oral cancer**

Yu Oikawa<sup>1</sup>, Keiichi Morita<sup>2,3</sup>, Kou Kayamori<sup>1</sup>, Kei Sakamoto<sup>4</sup>, Shunpei Ishikawa<sup>3,5</sup>, Johji Inazawa<sup>3,6</sup>, Hiroyuki Harada<sup>1</sup> (<sup>1</sup>Oral & Maxillofacial Surgery, Grad. Sch., Tokyo Medical & Dental Univ., <sup>2</sup>Maxillofacial Surgery, Grad. Sch., Tokyo Medical & Dental Univ., <sup>3</sup>Biosource Research Ctr., Tokyo Medical & Dental Univ., <sup>4</sup>Oral Pathology, Grad. Sch., Tokyo Medical & Dental Univ., <sup>5</sup>Genomic Pathology, Med. Res. Inst., Tokyo Medical & Dental Univ., <sup>6</sup>Molecular Cytogenetics, Med. Res. Inst., Tokyo Medical & Dental Univ.)

口腔がんにおけるcell-free DNA の臨床応用

及川 悠<sup>1</sup>、森田 圭一<sup>2,3</sup>、柏森 高<sup>4</sup>、坂本 啓<sup>4</sup>、石川 俊平<sup>3,5</sup>、稻澤 譲治<sup>3,6</sup>、原田 浩之<sup>1</sup> (<sup>1</sup>東医歯大・医歯・顎口腔外科学、<sup>2</sup>東医歯大・医歯・顎顔面外科学、<sup>3</sup>東医歯大・疾患バイオリソースセンター、<sup>4</sup>東医歯大・医歯・口腔病理学、<sup>5</sup>東医歯大・難治研・ゲノム病理学、<sup>6</sup>東医歯大・分子細胞遺伝学)

**P-1032 Targeted next-generation sequencing of 50 cancer-related genes in oral squamous cell carcinoma**

Yasushi Sasaki<sup>1,2</sup>, Takafumi Nakagaki<sup>1,3</sup>, Miyuki Tamura<sup>1</sup>, Ryota Koyama<sup>1</sup>, Hisayo Fukushima<sup>1</sup>, Tomoko Ohashi<sup>1</sup>, Masashi Idogawa<sup>1,2</sup>, Kazuhiro Ogi<sup>3</sup>, Hiroyoshi Hiratsuka<sup>3</sup>, Takashi Tokino<sup>1</sup> (<sup>1</sup>Med. Genome, Res. Inst. Frontier Med., Sapporo Med. Univ., <sup>2</sup>Dept. of Gastroenterol., Rheumatol. and Clin. Immunol., Sapporo Med. Univ., <sup>3</sup>Dep. of Oral Surgery, Sapporo Med. Univ.)

口腔扁平上皮癌におけるがん関連50遺伝子の変異解析

佐々木 泰史<sup>1,2</sup>、中垣 貢文<sup>1,3</sup>、田村 みゆき<sup>1</sup>、小山 良太<sup>1</sup>、福島 久代<sup>1</sup>、大箸 智子<sup>1</sup>、井戸川 雅史<sup>1,2</sup>、荻 和弘<sup>3</sup>、平塚 博義<sup>3</sup>、時野 隆至<sup>1</sup> (<sup>1</sup>札幌医大・医・フロンティア研・ゲノム、<sup>2</sup>札幌医大・医・消化器・免疫・リウマチ内科、<sup>3</sup>札幌医大・医・口腔外科)

**P-1033 Whole-exome sequencing of oral squamous cell carcinoma using semiconductor sequencing platform**

Miyuki Tamura<sup>1</sup>, Yasushi Sasaki<sup>1</sup>, Takafumi Nakagaki<sup>2</sup>, Ryota Koyama<sup>1</sup>, Tomoko Ohashi<sup>1</sup>, Masashi Idogawa<sup>1</sup>, Kazuhiro Ogi<sup>2</sup>, Hiroyoshi Hiratsuka<sup>2</sup>, Takashi Tokino<sup>1</sup> (<sup>1</sup>Med. Genome Sci., Res. Inst. Frontier Med., Sapporo Med. Univ., <sup>2</sup>Dept. Oral Surg., Sapporo Med. Univ.)

**半導体シーケンサーを用いた口腔扁平上皮癌の全エクソームシーケンス**

田村 みゆき<sup>1</sup>、佐々木 泰史<sup>1</sup>、中垣 貴文<sup>2</sup>、小山 良太<sup>1</sup>、大箸 智子<sup>1</sup>、井戸川 雅史<sup>1</sup>、荻 和弘<sup>2</sup>、平塚 博義<sup>2</sup>、時野 隆至<sup>1</sup> (<sup>1</sup>札幌医大・医・フロンティア研・ゲノム、<sup>2</sup>札幌医大・医・口腔外科学講座)

**P-1034 Genomic correlates of response to chemoradiotherapy in esophageal squamous cell carcinoma**

Hirata Hidenari<sup>1,2,3</sup>, Shuhei Ito<sup>1</sup>, Atsushi Niida<sup>1</sup>, Ryutaro Uchi<sup>1</sup>, Shotaro Sakimura<sup>1</sup>, Tomoko Saito<sup>1</sup>, Takaaki Masuda<sup>1</sup>, Naoki Hayashi<sup>1</sup>, Yohsuke Kuroda<sup>1</sup>, Hidetoshi Eguchi<sup>1</sup>, Masakazu Hirakawa<sup>2</sup>, Hiroshi Honda<sup>1</sup>, Koshi Mimori<sup>1</sup> (<sup>1</sup>Dept. Surg., Kyushu Univ., Beppu Hosp., <sup>2</sup>Dept. Radiol., Kyushu Univ., Beppu Hosp., <sup>3</sup>Dept. Radiol., Grad. Sch. Med. Sci., Kyushu Univ., <sup>4</sup>Human Genome Ctr., Inst. Med. Sci., Univ. Tokyo.)

**食道扁平上皮癌に対する化学放射線治療効果とがんゲノム解析**

平田 秀成<sup>1,2,3</sup>、伊藤 修平<sup>1</sup>、新井田 厚司<sup>4</sup>、内 龍太郎<sup>1</sup>、崎村 正太郎<sup>1</sup>、齋藤 衆子<sup>1</sup>、増田 隆明<sup>1</sup>、林 直樹<sup>1</sup>、黒田 陽介<sup>1</sup>、江口 英利<sup>1</sup>、平川 雅和<sup>2</sup>、本田 浩<sup>3</sup>、三森 功士<sup>1</sup> (<sup>1</sup>九大別府病院・外科、<sup>2</sup>九大別府病院・放射線科、<sup>3</sup>九大・医・放、<sup>4</sup>東大 医科研 ヒトゲノム解析センター)

Room P Oct. 6 (Thu.) 16:35-17:20

J/E

**P7-4 Cancer genome analysis (4)  
がんゲノム解析 (4)**

Chairperson: Tatsuhiko Tsunoda (Dept. of Med. Sci. Math., Med. Res. Inst., Tokyo Med. & Dent. Univ.)

座長：角田 達彦（東京医歯大・難治研・医科学数理）

**P-1035 Genomic driver events in Japanese and US colorectal cancer determined by a comprehensive genomic profiling**

Masayuki Nagahashi, Yoshifumi Shimada, Hiroshi Ichikawa, Toshifumi Wakai (Div. Digestive & General Surg., Niigata Univ. Grad. Sch. Med. Dent.)

**包括的がんゲノムプロファイルによる日本と米国における大腸癌のドライバー遺伝子異常の解析**

永橋 昌幸、島田 能史、市川 寛、若井 俊文（新潟大・医・消化器・一般外科）

**P-1036 Identification of a germline nonsense mutation in MBD4 gene in a young colorectal cancer patient with multiple polyps**

Yuhki Tada<sup>1</sup>, Kohji Tanakaya<sup>2</sup>, Hidetaka Eguchi<sup>1</sup>, Kiwamu Akagi<sup>3</sup>, Tetsuhiko Tachikawa<sup>3</sup>, Hideyuki Ishida<sup>4</sup>, Yasushi Okazaki<sup>1</sup> (<sup>1</sup>Div. Translat. Res., RCGM, Saitama Med. Univ., <sup>2</sup>Dept. Surg. Natl. Hosp. Organization Iwakuni Clin. Ctr., <sup>3</sup>Div. Mol. Diagnosis & Cancer Prevention, Saitama Cancer Ctr., <sup>4</sup>Dept. Dig. Tract & Gen Surg., Saitama Med. Univ.)

**多数のポリープを認めた若年大腸癌患者における MBD4 の生殖細胞系ナンセンス変異の同定**

田畠 祐喜<sup>1</sup>、田中屋 宏爾<sup>2</sup>、江口 英孝<sup>1</sup>、赤木 究<sup>3</sup>、立川 哲彦<sup>3</sup>、石田 秀行<sup>4</sup>、岡崎 康司<sup>1</sup> (<sup>1</sup>埼玉医大・ゲノム医セ・TR部門、<sup>2</sup>国立病院機構 岩国医療センター 外科、<sup>3</sup>埼玉県立がんセンター 腫瘍診断・予防科、<sup>4</sup>埼玉医大・総医セ・消化管・一般外科)

**P-1037 Clonal changes of single nucleotide variants from primary to metastatic lesions in patients with colorectal cancer**

Shotaro Sakimura<sup>1</sup>, Satoshi Nagayama<sup>2</sup>, Hidenari Hirata<sup>1</sup>, Naoki Hayashi<sup>1</sup>, Yohsuke Kuroda<sup>1</sup>, Hidetoshi Eguchi<sup>1</sup>, Shuhei Ito<sup>1</sup>, Takaaki Masuda<sup>1</sup>, Keishi Sugimachi<sup>3</sup>, Sumio Hoka<sup>4</sup>, Koshi Mimori<sup>1</sup> (<sup>1</sup>Department of Surgery, Kyushu University Beppu Hospital, <sup>2</sup>Department of Surgery, Cancer Institute Hospital, <sup>3</sup>Department of Surgery, Fukuoka City Hospital, <sup>4</sup>Department of Anesthesiology & Critical Care Medicine, Kyushu University)

**大腸癌再発症例における遺伝子変異の同定と転移パターンに関して**

**Molecular profiles of the malignant pleural mesothelioma**

Junpei Takeshita<sup>1</sup>, Shogo Yamamoto<sup>1</sup>, Kenji Tatsuno<sup>1</sup>, Yuichi Shiraishi<sup>2</sup>, Taiichiro Otsuki<sup>3</sup>, Kozo Kurabayashi<sup>3</sup>, Nobuyuki Kondo<sup>4</sup>, Seiki Hasegawa<sup>4</sup>, Ayuko Sato<sup>5</sup>, Tohru Tsujimura<sup>6</sup>, Takashi Nakano<sup>3</sup>, Yoshitaka Sekido<sup>6</sup>, Hiroyuki Aburatani<sup>1</sup> (<sup>1</sup>Div. Genome, RCAST., Tokyo Univ., <sup>2</sup>Lab., DNA info, Inst. Med. Sci., Tokyo Univ., <sup>3</sup>Div. Resp., Dept. Int. Med., Hyogo. Col., Sch. Med., <sup>4</sup>Dept. Thorasic.Surg., Hyogo. Col., Sch. Med., <sup>5</sup>Dept. Mol. Path, Hyogo. Col., Sch. Med., <sup>6</sup>Div. Mol. Oncol, Aichi. Cancer Ctr., Res., Inst.)

**悪性胸膜中皮腫の分子プロファイル**

竹下 純平<sup>1</sup>、山本 尚吾<sup>1</sup>、辰野 健二<sup>1</sup>、白石 友一<sup>2</sup>、大塙 泰一郎<sup>3</sup>、栗林 康造<sup>3</sup>、近藤 展行<sup>4</sup>、長谷川 政紀<sup>4</sup>、佐藤 鮎子<sup>5</sup>、辻村 亨<sup>5</sup>、中野 孝司<sup>3</sup>、関戸 好孝<sup>6</sup>、油谷 浩幸<sup>1</sup> (<sup>1</sup>東大・先端研・ゲノム、<sup>2</sup>東大・医科研・ヒトゲノムセンター、<sup>3</sup>兵医大・医・呼内、<sup>4</sup>兵医大・医・呼外、<sup>5</sup>兵医大・医・分子病理、<sup>6</sup>愛知がん・研・分子腫瘍)

**NRG1 Gene Fusion Enhances Cancer Stem Cell-like Properties in Lung Cancer.**

Takashi Nakaoku<sup>1</sup>, Takahiko Murayama<sup>2,3</sup>, Asuka Nakata<sup>2</sup>, Noriko Gotoh<sup>2,3</sup>, Takashi Kohno<sup>1</sup> (<sup>1</sup>Div. Genome Biol., Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Div. Cancer Cell Biol., Cancer Res. Inst., Kanazawa Univ., <sup>3</sup>Div. Mol. Therapy, Inst. Med. Sci., Univ. Tokyo)

**NRG1 融合遺伝子は肺がんにおけるがん幹細胞形質の促進に寄与する**

中奥 敬史<sup>1</sup>、村山 寛彦<sup>2,3</sup>、中田 飛鳥<sup>2</sup>、後藤 典子<sup>2,3</sup>、河野 隆志<sup>1</sup> (<sup>1</sup>国立がん研究セ研・ゲノム生物学、<sup>2</sup>金沢大・がん進展制御研・分子病態研究分野、<sup>3</sup>東京大・医科研・分子療法)

**Establishment of a novel quantitative assay for cancer-related gene fusion using CRISPR/Cas9**

Motohiro Yamauchi (A. Bomb Disease Inst., Nagasaki Univ.)

**CRISPR/Cas9 を用いた癌関連融合遺伝子の生成頻度の定量アッセイの樹立**

山内 基弘 (長崎大・原研・放射線生物・防護学)

**Gene amplification of CCNE1, CCND1 and CDK6 in gastric cancersdetected by MLPA and FISHand FISH**

Akishi Ooi<sup>1</sup>, Takeru Oyama<sup>1</sup>, Ritsuko Nakamura<sup>1</sup>, Sachio Fushida<sup>2</sup>, Yoh Dobashi<sup>3</sup> (<sup>1</sup>Dept. Mol. Cell.l Path., Sch Med., Kanazawa Univ., <sup>2</sup>Gastroenterological Surg., Sch Med., Kanazawa Univ., <sup>3</sup>Dept. Path, Saitama Med. Ctr., Jichi Med. Univ.)

**MLPA と FISH を用いた胃癌におけるCCNE1, CCND1、CDK6 遺伝子増幅の検討**

大井 章史<sup>1</sup>、尾山 武<sup>1</sup>、中村 律子<sup>1</sup>、伏田 幸夫<sup>2</sup>、土橋 洋<sup>3</sup> (<sup>1</sup>金沢大学・医学系大学院・分子細胞病理、<sup>2</sup>金沢大学・医学系大学院・消化器外科、<sup>3</sup>自治医大・埼玉医療センター・病理部)

**Identification of germline variants in the drug response genes for cancer using whole-exome sequencing**

Sumiko Ohnami<sup>1</sup>, Akane Naruoka<sup>2</sup>, Takeshi Nagashima<sup>1,3</sup>, Yuji Shimoda<sup>1,3</sup>, Junko Saito<sup>2</sup>, Masakuni Serizawa<sup>2</sup>, Keiichi Ohshima<sup>4</sup>, Shunpei Ohnami<sup>1</sup>, Kenichi Urakami<sup>1</sup>, Masatoshi Kusuvara<sup>2,5</sup>, Ken Yamaguchi<sup>6</sup> (<sup>1</sup>Cancer Diagnostics Res. Div. Shizuoka Cancer Ctr. Res., <sup>2</sup>Drug Discovery & Development Div. Shizuoka Cancer Ctr. Res., <sup>3</sup>SRL Inc., <sup>4</sup>Med. Genetics Div. Shizuoka Cancer Ctr. Res., <sup>5</sup>Region Resources Div. Shizuoka Cancer Ctr. Res., <sup>6</sup>Shizuoka Cancer Ctr.)

**薬物応答に関する遺伝子の全エキソン解析**

大浪 澄子<sup>1</sup>、成岡 茜<sup>2</sup>、長嶋 剛史<sup>1,3</sup>、下田 勇治<sup>1,3</sup>、斎藤 淳子<sup>2</sup>、芹澤 昌邦<sup>2</sup>、大島 啓一<sup>4</sup>、大浪 俊平<sup>1</sup>、浦上 研一<sup>1</sup>、楠原 正俊<sup>2,5</sup>、山口 建<sup>6</sup> (<sup>1</sup>静岡がんセ・研・診断技術開発研究部、<sup>2</sup>静岡がんセ・研・新規薬剤開発・評価研究部、<sup>3</sup>株式会社エスアールエル、<sup>4</sup>静岡がんセ・研・遺伝子診療研究部、<sup>5</sup>静岡がんセ・研・地域資源研究部、<sup>6</sup>静岡がんセ)

Chairperson: Yukinori Okada (Dept. of Stat. Genet, Osaka Univ., Sch. of Med.)  
座長 : 岡田 随象 (大阪大・院医・遺伝統計)

**P-1049 Phenotypes of sporadic familial adenomatous polyposis are mainly induced by APC truncating mutations**

Moriya Iwazumi<sup>1</sup>, Hong Tao<sup>2</sup>, Tomohiro Sugiyama<sup>1</sup>, Satoshi Suzuki<sup>1</sup>, Yasushi Hamaya<sup>1</sup>, Kiyotaka Kurachi<sup>3</sup>, Yoichi Furukawa<sup>4</sup>, Masato Maekawa<sup>5</sup>, Haruhiko Sugimura<sup>2</sup> (<sup>1</sup>1st Dept. Med., Hamamatsu Univ. Sch. Med., <sup>2</sup>Dept. Tumor Path., Hamamatsu Univ. Sch. Med., <sup>3</sup>2nd Dept. Surg., Hamamatsu Univ. Sch. Med., <sup>4</sup>Div. Clin. Genome Res., Inst. Med. Sci., Univ. Tokyo, <sup>5</sup>Dept. Lab. Med., Hamamatsu Univ. Sch. Med.)

**孤発性家族性大腸腺腫症は APC 短縮変異により引き起こされやすい**  
岩泉 守哉<sup>1</sup>、陶 弘<sup>2</sup>、杉山 智洋<sup>1</sup>、鈴木 聰<sup>1</sup>、濱屋 寧<sup>1</sup>、倉地 清隆<sup>3</sup>、古川 洋一<sup>4</sup>、前川 真人<sup>5</sup>、梶村 春彦<sup>2</sup> (<sup>1</sup>浜松医大・医・第1内科、<sup>2</sup>浜松医大・医・腫瘍病理、<sup>3</sup>浜松医大・医・第2外科、<sup>4</sup>東大・医科研・臨床ゲノム、<sup>5</sup>浜松医大・医・臨床検査)

**P-1050 Mutation analysis of MUTYH in Japanese colorectal adenomatous polyposis patients having no germline APC mutation**

Keiko Taki<sup>1,2</sup>, Sachio Nomura<sup>1,3</sup>, Ikufumi Tajima<sup>4</sup>, Koukichi Sugano<sup>5</sup>, Masami Arai<sup>1</sup> (<sup>1</sup>Clin. Genet. Oncology, Cancer Inst. Hosp. JFCR., <sup>2</sup>Chemist. lifeSci. Inst. Innov. Res., Tokyo Inst. Tech. Univ., <sup>3</sup>Dept. Clin. Res., Cancer Inst. Hosp. JFCR, <sup>4</sup>Tajima hospital, <sup>5</sup>Oncogene Res./Cancer Prevention, Tochigi Cancer Ctr.)

**APC 遺伝子の生殖細胞系列変異陰性多発大腸腺腫症例における MUTYH 遺伝子変異の解析**

瀧 景子<sup>1,2</sup>、野村 幸男<sup>1,3</sup>、田島 郁文<sup>4</sup>、菅野 康吉<sup>5</sup>、新井 正美<sup>1</sup> (<sup>1</sup>がん研有明病院・遺伝子診療部、<sup>2</sup>東工大・化学生命科学研、<sup>3</sup>がん研有明病院・臨床研究部、<sup>4</sup>田島病院、<sup>5</sup>柄木がんセ・研・がん遺伝子・がん予防)

**P-1051 Reduced APC-1B transcript but not 1A by the deletion of promoter 1B is responsible for familial adenomatous polyposis**

Kiyoishi Yamaguchi<sup>1</sup>, Satoshi Nagayama<sup>2</sup>, Eigo Shimizu<sup>3</sup>, Mitsuhiro Komura<sup>3</sup>, Rui Yamaguchi<sup>1</sup>, Tetsuo Shibuya<sup>4</sup>, Masami Arai<sup>5</sup>, Tsuneo Ikenoue<sup>1</sup>, Satoru Miyano<sup>3,4</sup>, Seiya Imoto<sup>6</sup>, Yoichi Furukawa<sup>1</sup> (<sup>1</sup>Div. Clin. Genome Res., Inst. Med. Sci., Univ. Tokyo, <sup>2</sup>Gastroenterol Surg., Cancer Inst. Hosp., <sup>3</sup>Lab. DNA Information Analysis, Inst. Med. Sci., Univ. Tokyo, <sup>4</sup>Lab. Sequence Analysis, Inst. Med. Sci., Univ. Tokyo, <sup>5</sup>Dept. Clin. Genet. Oncol., Cancer Inst. Hosp., <sup>6</sup>Div. Health Med. Data Sci., Inst. Med. Sci., Univ. Tokyo)

**プロモーター 1B の欠失による APC-1B 転写産物の減少は大腸腺腫の発生に寄与する**

山口 貴世志<sup>1</sup>、長山 聰<sup>2</sup>、清水 英悟<sup>3</sup>、上村 光弘<sup>3</sup>、山口 類<sup>3</sup>、渋谷 哲朗<sup>4</sup>、新井 正美<sup>5</sup>、池上 恒雄<sup>1</sup>、宮野 悟<sup>3,4</sup>、井元 清哉<sup>6</sup>、古川 洋一<sup>1</sup> (<sup>1</sup>東大・医科研・臨床ゲノム、<sup>2</sup>がん研有明病院・消化器外科、<sup>3</sup>東大・医科研・DNA 情報解析、<sup>4</sup>東大・医科研・シークエンスデータ情報処理、<sup>5</sup>がん研有明病院・遺伝子診療、<sup>6</sup>東大・医科研・健康医療データサイエンス)

**P-1052 Computer program for detecting gene rearrangements of the MSH2 and MLH1 from the data of the target sequencing analysis**

Kokichi Sugano<sup>1,2</sup>, Shinya Saito<sup>1</sup>, Futoshi Satoh<sup>1</sup>, Kazuho Imai<sup>1</sup>, Kyoko Takai<sup>1</sup>, Mineko Ushijima<sup>2,3</sup>, Hiromi Sakamoto<sup>2,3</sup>, Teruhiko Yoshida<sup>2,3</sup> (<sup>1</sup>Oncogene Res. Unit / Cancer Prev. Unit, Tochigi Cancer Ctr., <sup>2</sup>Genetic Med. & Services, National Cancer Center Hospital, <sup>3</sup>Genetics Div., National Cancer Center Res. Inst.)

**ターゲット DNA シークエンス法による遺伝子再構成検出プログラムの開発**

菅野 康吉<sup>1,2</sup>、斎藤 伸哉<sup>1</sup>、佐藤 太<sup>1</sup>、今井 一穂<sup>1</sup>、高井 韶子<sup>1</sup>、牛尼 美年子<sup>2,3</sup>、坂本 裕美<sup>2,3</sup>、吉田 輝彦<sup>2,3</sup> (<sup>1</sup>柄木がんセ・研・がん遺伝子研/がん予防研、<sup>2</sup>国立がん研究セ・中央病院・遺伝子診療部門、<sup>3</sup>国立がん研究セ・研・遺伝学分野)

**P-1053 Germline Genetic Testing for Genetic Predisposition to Cancer : Can and when Gene Panel be standard for it in Japan ?**

Hiromi Nakata<sup>1,2,3</sup>, Tomoko Tamaoki<sup>4</sup> (<sup>1</sup>Shinjuku Minerva Clinic, <sup>2</sup>Graduate School of Medicine, Kagawa University, <sup>3</sup>Japanese Society of Ethical, Legal and Social Issues, <sup>4</sup>Clinical Genetics, The Hospital of Hyogo Medical College)

**遺伝学的腫瘍易罹患性症候群に対する生殖細胞系列遺伝子パネル検査の可能性と問題点**

仲田 洋美<sup>1,2,3</sup>、玉置 知子<sup>4</sup> (<sup>1</sup>新宿ミネルバクリニック、<sup>2</sup>香川大学医

学系研究科、<sup>3</sup>一般社団法人 ELSI 研究会、<sup>4</sup>兵庫医科大学臨床遺伝部)

**P-1054 Genetic testing and characteristics of development of tumors in Li-Fraumeni syndrome**

Kazuo Tamura (Life Sci., Faculty Sci. & Engineer., Kindai Univ.)

Li-Fraumeni 症候群の遺伝学的検査と腫瘍発生の特性  
田村 和朗 (近大・理工・生命科学科)

**P-1055 PTCH1 deletions detected in 9 families with nevoid basal cell carcinoma syndrome**

Yoshinaga Takayama<sup>1</sup>, Kazuaki Nagao<sup>1</sup>, Katsunori Fujii<sup>2</sup>, Toshiyuki Miyashita<sup>1</sup> (<sup>1</sup>Dept. Mol. Genet., Kitasato Univ., Sch. Med., <sup>2</sup>Dept. Pediat., Chiba Univ., Grad. Sch. Med.)

PTCH1 ゲノム広範囲欠損の解析

高山 吉永<sup>1</sup>、長尾 和右<sup>1</sup>、藤井 克則<sup>2</sup>、宮下 俊之<sup>1</sup> (北里大・医・分子遺伝、<sup>2</sup>千葉大・大学院・医・小児病態)

**9 Epigenetics**

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

**P9-1 DNA methylation (1)  
DNA メチル化 (1)**

Chairperson: Yoshimasa Saito (Div. of Pharmacotherapeutics, Keio Univ. Faculty of Pharm.)

座長 : 斎藤 義正 (慶應大・薬・薬治)

**P-1056 Integrity of TET dioxygenase activity determines leukemic transformation**

Koichiro Maie<sup>1</sup>, Mamiko Sakata-Yanagimoto<sup>1</sup>, Motohiko Oshima<sup>2</sup>, Yaeko Nakajima<sup>2</sup>, Hirotaka Matsui<sup>3</sup>, Takayasu Kato<sup>1</sup>, Hideharu Muto<sup>1</sup>, Haruhiko Koseki<sup>1</sup>, Atsushi Iwama<sup>2</sup>, Shigeru Chiba<sup>1</sup> (<sup>1</sup>Dept. of Hematol., Univ. of Tsukuba, <sup>2</sup>Dept. of Cell. and Mol. Med., Chiba Univ., <sup>3</sup>Dept. of Mol. Lab. Med., Kumamoto Univ., <sup>4</sup>RIKEN Ctr. Integr. Med. Sci.)

TET 酶素活性の喪失により発症する急性骨髓性白血病マウスモデル  
真家 純一郎・坂田 (柳元) 麻実子<sup>1</sup>、大島 基彦<sup>2</sup>、中島 やえ子<sup>2</sup>、  
松井 啓隆<sup>3</sup>、加藤 貴康<sup>1</sup>、武藤 秀治<sup>1</sup>、古関 明彦<sup>4</sup>、岩間 厚志<sup>2</sup>、千葉 滋<sup>1</sup> (筑波大学・血液内科、<sup>2</sup>千葉大学・細胞分子医学、<sup>3</sup>熊本大学・臨床病態解析学、<sup>4</sup>理研・統合生命医学セ・免疫器官形成)

**P-1057 eEF1A2 is a target gene of DNA demethylating agents for improving anemia of MDS**

Akiko Nagamachi<sup>1</sup>, Hirotaka Matsui<sup>2</sup>, Akinori Kanai<sup>3</sup>, Toshiya Inaba<sup>3</sup> (<sup>1</sup>Radiation Research Center, RIRBM, Hiroshima Univ., Japan., <sup>2</sup>Graduate School of Medical Sciences, Kumamoto Univ., Japan., <sup>3</sup>Division of Molecular Oncology, RIRBM, Hiroshima Univ., Japan.)

Aza-dC による MDS 患者の貧血改善メカニズムの検討

長町 安希子<sup>1</sup>、松井 啓隆<sup>2</sup>、金井 昭教<sup>3</sup>、稻葉 俊哉<sup>3</sup> (広島大学 原医研 先端医学実験施設、<sup>2</sup>熊本大学 臨床病態解析学分野、<sup>3</sup>広島大学 原医研 がん分子病態研究分野)

**P-1058 DNA/RNA demethylase ALKBH3 rescues DNA methylation damage through p53 signal transduction pathway in NSCLC cells.**

Takahiro Kogaki, Kentaro Jingushi, Hiroaki Hase, Kazutake Tsujikawa (Mol. Cell. Physiol., Grad. Sch. Pharm. Sci., Osaka Univ.)

非小細胞肺癌細胞において DNA/RNA 脱メチル化酵素 ALKBH3  
は p53 シグナル伝達経路を介して DNA メチル化損傷を修復する  
小垣 考弘・神宮司 健太郎、長谷 拓明、辻川 和丈 (阪大院薬)

**P-1059 DNA methylation changes in hepatic normal tissues and tumor tissues in gestationally arsenite-exposed F2 mice**

Kazuyuki Okamura, Keiko Nohara (Ctr. Health&Env.Risk Res., Natl. Inst. Env. Studies.)

妊娠期ヒ素曝露による F2 マウス肝臓の正常組織、腫瘍組織における  
DNA メチル化変化

岡村 和幸、野原 恵子 (国環研・リスク健康 C)

**P-1060 Identification of aberrant DNA methylation associated with the development of colorectal traditional serrated adenoma**

Hironori Aoki<sup>1,5</sup>, Eiichiro Yamamoto<sup>1,4</sup>, Hiro-o Yamano<sup>2</sup>, Akira Yorozu<sup>1</sup>, Kazuya Ishiguro<sup>1,4</sup>, Taku Harada<sup>1</sup>, Takeshi Niinuma<sup>1</sup>, Masahiro Kai<sup>1</sup>, Yasushi Adachi<sup>1</sup>, Takao Endou<sup>3</sup>, Tamotsu Sugai<sup>3</sup>, Hiromu Suzuki<sup>1</sup> (<sup>1</sup>Dept. of Mol. Biol., Sapporo Med. Univ., Sch. Med., <sup>2</sup>Dept. of Gastroenterol., Akita Red Cross Hosp., <sup>3</sup>Dept. of Mol. Diag. Path., Iwate Med. Univ., Sch. Med., <sup>4</sup>Dept. of Gastroenterol., Rheumatol. and Clin. Immunol., Sapporo Med. Univ., <sup>5</sup>Dept. of Gastroenterol., Sapporo Shirakaba-dai Hosp.)

大腸鋸歯状腺腫の進展に関する DNA メチル化異常の同定

青木 敬則<sup>1,5</sup>、山本 英一郎<sup>1,4</sup>、山野 泰穂<sup>2</sup>、萬 顕<sup>1</sup>、石黒 一也<sup>1,4</sup>、原田 拓<sup>1</sup>、新沼 猛<sup>1</sup>、甲斐 正広<sup>1</sup>、足立 靖<sup>5</sup>、遠藤 高夫<sup>5</sup>、菅井 有<sup>3</sup>、鈴木 拓<sup>1</sup> (札幌医大・医・分子生物、<sup>2</sup>秋田赤十字病院・消化器病センター、<sup>3</sup>岩手医大・医・<sup>4</sup>札幌医大・医・消化器・免疫・リウマチ内科、<sup>5</sup>札幌しらかば台病院・消化器科)

**P-1061 Epigenetic regulation of the transcription variants of diacylglycerol kinase zeta in colorectal cancer**

Masahiro Kai<sup>1</sup>, Takeshi Niinuma<sup>1</sup>, Hiroshi Kitajima<sup>1</sup>, Reo Maruyama<sup>1</sup>, Eiichiro Yamamoto<sup>1,2</sup>, Hiromu Suzuki<sup>1</sup> (<sup>1</sup>Dept. Mol. Biol., Sapporo Med. Univ., Sch. Med., <sup>2</sup>Dept. Gastroenterol., Sapporo Med. Univ. Sch. Med.)

大腸がんにおける diacylglycerol kinase zeta 遺伝子バリエント  
のエピジェネティックな制御

甲斐 正広<sup>1</sup>、新沼 猛<sup>1</sup>、北嶋 洋志<sup>1</sup>、丸山 玲緒<sup>1</sup>、山本 英一郎<sup>1,2</sup>、鈴木 拓<sup>1</sup> (札幌医大・医・分子生物学、<sup>2</sup>札幌医大・医・消化器内科)

Room P Oct. 6 (Thu.) 16:35-17:20

J/E

**P9-2 DNA methylation (2)**

DNA メチル化 (2)

Chairperson: Keiko Shinjo (Dept. of Epigenomics, Grad. Sch. of Med. Sci., Nagoya City Univ.)

座長：新城 恵子（名古屋市大・院医・遺伝子制御）

**P-1062 Screening of low molecule weight compounds inducing cancer cells to the demethylated process**

Yoshitaka Ishihara, Norimasa Miura (Div. Pharmacotherapeutics, Dept. Pathophysiological & therapeutic science, Med., Tottori Univ.)

がん細胞において脱メチル化を誘導する低分子化合物のスクリーニング

石原 巧貴、三浦 正典（鳥取大・医・病態解析医学・薬物治療学）

**P-1063 Identification of novel DNA demethylating agents**

Eriko Okochi-Takada<sup>1</sup>, Naoko Hattori<sup>1</sup>, Magoichi Sako<sup>2</sup>, Toshikazu Ushijima<sup>1</sup> (<sup>1</sup>Div. of Epigenomics, Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Drug Development Lab., OHARA Pharmaceutical Co., Ltd.)

新規 DNA 脱メチル化剤の同定

大河内（高田）江里子<sup>1</sup>、服部 奈緒子<sup>1</sup>、酒向 孫市<sup>2</sup>、牛島 俊和<sup>1</sup>  
(<sup>1</sup>国立がん研究センター・研・エピゲノム、<sup>2</sup>大原薬品工業株式会社・医薬開発研)

**P-1064 Identification of a DNA methylation marker to estimate cancer cell content in lung cancer**

Emi Kubo, Hideyuki Takeshima, Toshikazu Ushijima (National Cancer Center Research Institute, Division of Epigenomics)

肺がんにおける腫瘍細胞率予測 DNA メチル化マーカー開発

久保 純美、竹島 秀幸、牛島 俊和（国立がん研究センター・研・エピゲノム）

**P-1065 A subgroup of HIV-patients shows a DNA methylation profile similar to HIV-associated lymphoma**

Akihiro Matsunaga, Masako Oka, Yukihito Ishizaka, Mari Shimura (Dept. Intractable Diseases, National Center for Global Health and Medicine)

HIV 感染者末梢血にみられる DNA メチル化変動からみた HIV 悪性リンパ腫早期診断の可能性

松永 章弘、岡 雅子、石坂 幸人、志村 まり（国立国際医療研究センター・難治性疾患）

**P-1066 DNA methylation of ZNF671 as a biomarker for early recurrence in serous ovarian cancer**

Shoko Mase<sup>1,2</sup>, Keiko Shinjo<sup>1</sup>, Haruhito Totani<sup>1</sup>, Shoichi Deguchi<sup>1</sup>, Keisuke Katsushima<sup>1</sup>, W.Y. Chan Michael<sup>3</sup>, Mayumi Sugiura<sup>2</sup>, Yutaka Kondo<sup>1</sup> (<sup>1</sup>Dept. of Epigenomics, Grad. Sch. Med. Sci., Nagoya city univ., <sup>2</sup>Dept. of Obstetrics and Gynecology, Nagoya city univ., <sup>3</sup>Dept. of Life Sci. Natl. Chung Cheng Uni.)

漿液性卵巣がんの早期再発バイオマーカーとなる DNA メチル化遺伝子の同定

間瀬 聖子<sup>1,2</sup>、新城 恵子<sup>1</sup>、戸谷 治仁<sup>1</sup>、出口 彰一<sup>1</sup>、勝島 啓佑<sup>1</sup>、W.Y. Chan Michael<sup>3</sup>、杉浦 真弓<sup>2</sup>、近藤 豊<sup>1</sup>（名古屋市立大・院医・遺伝子制御学、<sup>2</sup>名古屋市立大・院医・産科婦人科学、<sup>3</sup>Dept. of Life Sci. Natl. Chung Cheng Uni）

**P-1067 Clinical significance of Methylated CDO1 in Primary Liver Cancer**

Kazuharu Igarashi, Keishi Yamashita, Yousuke Oizumi, Keita Kojima, Satoru Ishii, Toshimichi Tanaka, Nobuyuki Nishizawa, Keigo Yokoi, Naoko Minatani, Hiroshi Katoh, Masahiko Watanabe (Dept of surgery, Kitasato Univ, Sch. Med)

原発性肝癌における CDO1 遺伝子メチル化の臨床的意義

五十嵐 一晴、山下 繼史、大泉 陽介、小島 康太、石井 智、田中 俊道、西澤 伸恭、横井 圭悟、南谷 菜穂子、加藤 弘、渡邊 昌彦（北里大学病院・外科）

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

**P9-3 DNA methylation (3)**

DNA メチル化 (3)

Chairperson: Satoshi Yamashita (Div. of Epigenomics, Natl. Cancer Ctr. Res. Inst.)

座長：山下 聰（国立がん研究センター・研・エピゲノム解析）

**P-1068 Utilization of DNA promoter methylation in gastric cancer clinics**

Keishi Yamashita, Keita Kojima, Hideki Ushiku, Akira Ema, Kei Hosoda, Hiroaki Mieno, Hiromitsu Moriya, Masahiko Watanabe (Dept. Surg., Kitasato Univ. Sch. Med.)

プロモーター DNA メチル化の胃癌臨床における有用性について

山下 繼史、小島 康太、牛久 秀樹、江間 玲、細田 桂、三重野 浩朗、森谷 宏光、渡邊 昌彦（北里大・医・外科）

**P-1069 Genome Wide DNA Methylation Analysis in Remnant Gastric Cancer**

Kiichi Sugimoto<sup>1</sup>, Tomoaki Ito<sup>2</sup>, Hajime Orita<sup>2</sup>, Tomoyuki Kushida<sup>2</sup>, Mutsumi Sakurada<sup>2</sup>, Hiroshi Maekawa<sup>2</sup>, Hiromitsu Komiyama<sup>1</sup>, Makoto Takahashi<sup>1</sup>, Michitoshi Goto<sup>1</sup>, Yuichi Tomiki<sup>1</sup>, Kazuhiro Sakamoto<sup>1</sup>, Koichi Sato<sup>2</sup> (<sup>1</sup>Dept. Coloproctological Surg. Juntendo Univ. Sch. Med., <sup>2</sup>Dept. Surg. Juntendo Univ. Shizuoka Hp.)

残胃癌におけるゲノムワイド DNA メチル化解析

杉本 起一<sup>1</sup>、伊藤 智彰<sup>2</sup>、折田 創<sup>2</sup>、櫛田 知志<sup>2</sup>、櫻田 瞳<sup>2</sup>、前川 博<sup>2</sup>、小見山 博光<sup>1</sup>、高橋 玄<sup>1</sup>、五藤 優敏<sup>1</sup>、富木 裕一<sup>1</sup>、坂本 一博<sup>1</sup>、佐藤 浩一<sup>2</sup>（<sup>1</sup>順天堂大・医・下部消化管外科、<sup>2</sup>順天堂静岡病院・外科）

**P-1070 Possibility of remnant gastric cancer onset prediction using a cancer-specific methylation**

Keita Kojima, Keishi Yamashita, Kei Hosoda, Hiromitsu Moriya, Hiroaki Mieno, Hideki Ushiku, Satoru Ishii, Keigo Yokoi, Toshimichi Tanaka, Nobuyuki Nishizawa, Kazuharu Igarashi, Yosuke Oizumi, Masahiko Watanabe (Surg., Kitasato Univ., Sch. Med.)

癌特異的メチル化を利用した残胃癌発症予測の可能性について

小島 康太、山下 繼史、細田 桂、森谷 宏光、三重野 浩朗、牛久 秀樹、石井 智、横井 圭悟、田中 俊道、西澤 伸恭、五十嵐 一晴、大泉 陽介、渡邊 昌彦（北里大学・医・外科）

**P-1071 Tumor Response to Systematic Chemotherapy could be Estimated by A Novel Circulating Cell Free DNA-Based Assay**

Toshima Toshiaki, Takeshi Nagasaki, Keisuke Kimura, Kazuya Yasui, Takashi Kawai, Yoshiko Mori, Toshiyoshi Fujiwara (Department of Gastroenterology, Okayama University Medical School)

circulating cell free DNA のメチル化解析による大腸癌化学療法の治療効果判定の診断

戸嶋 俊明、永坂 岳司、木村 圭佑、安井 和也、河合 毅、母里 淑子、藤原 俊義（岡山大学大学院消化器外科学）

**P-1072 Hypermethylation of CDO1 promotor region is associated with higher chemosensitivity of Stage III colon cancer.**

Keigo Yokoi, Keishi Yamashita, Satoru Ishii, Toshimichi Tanaka, Nobuyuki Nishizawa, Kazuharu Igarashi, Yosuke Oizumi, Keita Kojima, Naoko Minatani, Hiroshi Katoh, Masahiko Watanabe (Department of Surgery, Kitasato University School of Medicine)

CDO1 遺伝子プロモーター領域のメチル化は Stage III 結腸癌における抗がん剤感受性亢進と相関する

横井 圭悟、山下 繼史、石井 智、田中 俊道、西澤 伸恭、五十嵐 一晴、大泉 陽介、小島 康太、南谷 菜穂子、加藤 弘、渡邊 昌彦（北里大学・外科）

**P-1073 Clinical significance of LINE-1 and ESR1 methylation levels in ulcerative colitis associated neoplasia.**

Yuji Toiyama<sup>1</sup>, Junichiro Hiro<sup>1</sup>, Minoko Kobayashi<sup>2</sup>, Toshimitsu Araki<sup>1</sup>, Yoshiki Okita<sup>1</sup>, Yasuhiro Inoue<sup>1</sup>, Yasuhiro Mohri<sup>1</sup>, Masato Kusunoki<sup>1,2</sup> (<sup>1</sup>Gastro and Pediatric. Surg., Mie Univ., <sup>2</sup>Innov. Surg., Mie Univ.)

潰瘍性大腸炎粘膜における LINE-1 ならびに ESR1 メチル化レベルの臨床的意義

間山 裕二<sup>1</sup>、廣 純一郎<sup>1</sup>、小林 美奈子<sup>2</sup>、荒木 俊光<sup>1</sup>、大北 喜基<sup>1</sup>、井上 靖浩<sup>1</sup>、毛利 靖彦<sup>1</sup>、楠 正人<sup>1,2</sup>（<sup>1</sup>三重大学大学院 消化管小児外科、<sup>2</sup>三重大学大学院 先端的外科技術開発学）

Room P Oct. 6 (Thu.) 16:35-17:20

**P9-4 DNA methylation (4)**

Chairperson: Eri Arai (Dept. of Pathol., Keio Univ. Sch. of Med.)

座長：新井 恵吏（慶應大・医・病理）

**P-1074 Evaluation of biased and unbiased primers for quantification of DNA methylation using MS-HRM**

Temduang Limpaliboon, Wiphawan Wasenang (CMDL, Fac. of Assoc. Med. Sci., KKU)

**P-1075 Epigenetic silencing of FHIT determines radiosensitivity and treatment responses in oral cancer**Ru-Inn Lin<sup>1</sup>, Hon-Yi Lin<sup>1,2</sup>, Shih-Kai Hung<sup>1,2</sup>, Moon-Sing Lee<sup>1,2</sup>, Wen-Yen Chiou<sup>1,2</sup>, Bing-Jie Shen<sup>1,2</sup>, Chen-lin Chi<sup>3</sup>, Michael W.Y. Chan<sup>4</sup>  
(<sup>1</sup> Departments of Radiation Oncology, Buddhist Dalin Tzu Chi Hospital, Taiwan, <sup>2</sup>School of Medicine, Tzu Chi University, Taiwan, <sup>3</sup>Departments of Pathology, Buddhist Dalin Tzu Chi Hospital, Taiwan, <sup>4</sup>Department of Life Science, National Chung Cheng University, Taiwan)**P-1076 Cis Regulatory Element Determines CIMP and Its Implication in Non-invasive Diagnosis in Urothelial Carcinoma**Shih-Yuan Huang<sup>1</sup>, Pi-Che Chen<sup>2</sup>, Szu-Shan Chen<sup>1</sup>, Chia-Ming Yeh<sup>1</sup>, Hsiao-Yen Hsieh<sup>3</sup>, Ru-Inn Lin<sup>4</sup>, Jora Meng-Ju Lin<sup>1</sup>, Shu-Fen Wu<sup>1</sup>, Cheng-Huang Shen<sup>2</sup>, Michael W.Y. Chan<sup>1</sup> (<sup>1</sup>Dept. of Life Sci. & AIM-HI, Natl. Chung-Cheng Univ., Taiwan, <sup>2</sup>Dept. of Urology, Ditmanson Med. Foundation Chiayi Christian Hosp., Taiwan, <sup>3</sup>Dept. of Med. Res., Chia-Yi Christian Hosp., Taiwan, <sup>4</sup>Dept. of Radiation Oncology, Dalin Tzu Chi General Hosp., Taiwan)**P-1077 Methylocomics analysis identifies ZNF671 as an epigenetically repressed tumor suppressor in urothelial carcinoma**Yu-Ming Chuang<sup>1</sup>, Pi-Che Chen<sup>3</sup>, Chia-Ming Yeh<sup>1,2</sup>, Yeong-Chin Jou<sup>3</sup>, Chang-Te Lin<sup>3</sup>, Ru-Inn Lin<sup>1,3</sup>, Chun-Liang Tung<sup>4</sup>, Shu-Fen Wu<sup>1,2</sup>, Cheng-Huang Shen<sup>3</sup>, Cheng-Da Hsu<sup>5</sup>, Michael W.Y. Chan<sup>1,2</sup> (<sup>1</sup>Dept. of Life Sci. Natl. Chung Cheng Univ., Chia-Yi, Taiwan, <sup>2</sup>Inst. of Mol. Biol. Natl. Chung Cheng Univ., Chia-Yi, Taiwan, <sup>3</sup>Dept. of Urology, Chia-Yi Christian Hosp., Taiwan, <sup>4</sup>Dept. of Path. Chia-Yi Christian Hosp., Taiwan, <sup>5</sup>Dept. of Med. Res. Chia-Yi Christian Hosp., Taiwan, <sup>6</sup>Dept. of Radiation Oncology, Dalin Tzu Chi General Hosp., Taiwan)**P-1078 Hypermethylation of a TGF-beta target, ABCA1 is associated with poor prognosis in ovarian cancer patients**Jian-Liang Chou<sup>1,2</sup>, Lin-Yu Chen<sup>1</sup>, Pearly S. Yan<sup>4</sup>, Wei-Ting Chao<sup>5</sup>, Yi-Hui Lai<sup>1,2</sup>, Tai-Kuang Chao<sup>7</sup>, Rui-Lan Huang<sup>6</sup>, Cheng-I Lee<sup>1,2</sup>, Chien-Kuo Tai<sup>1,3</sup>, Shu-Fen Wu<sup>1,3</sup>, Hung-Cheng Lai<sup>6</sup>, Michael W.Y. Chan<sup>1,3</sup> (<sup>1</sup>Dept. of Life Sci., CCU, Taiwan, <sup>2</sup>Inst. of Mol. Biol., CCU, Taiwan, <sup>3</sup>Lab. of Cancer Systems Biol., CCU, Taiwan, <sup>4</sup>Div. of Hematology, Comprehensive Cancer Ctr., Ohio, <sup>5</sup>Dept. of Life Sci., THU, Taiwan, <sup>6</sup>Dept. of Obstetrics and Gynecol., Tri-Service General Hosp., Taiwan, <sup>7</sup>Dept. of Pathology, Tri-Service General Hosp., Taiwan)**E 10 Invasion and metastasis**

Room P Oct. 6 (Thu.) 15:50-16:35

**P10-1 Cell adhesion/migration**Chairperson: Shiro Suetsugu (Grad. Sch. of Biol. Sci., NAIST)  
座長：末次 志郎（奈良先端大・バイオ・分子医学細胞生物）**P-1079 Epithelial to mesenchymal transition in clear cell renal cell carcinoma with rhabdoid features**Masaaki Sugimoto<sup>1,2</sup>, Kenichi Kohashi<sup>2</sup>, Masaki Shiota<sup>1</sup>, Kentaro Kuroiwa<sup>1</sup>, Seiji Naito<sup>3</sup>, Yoshinao Oda<sup>2</sup> (<sup>1</sup>Dept. Urology, Kyushu Univ., <sup>2</sup>Dept. Anatomic Pathol. Kyushu Univ., <sup>3</sup>Div. Urology Harasanshin Hosp.)横紋筋肉腫様変化を伴う腎細胞癌における上皮間葉転換の検討  
杉本 昌顕<sup>1,2</sup>、孝橋 賢一<sup>2</sup>、塩田 真己<sup>1</sup>、黒岩 顯太郎<sup>1</sup>、内藤 誠二<sup>3</sup>、小田 義直<sup>2</sup>（九州大・院医・泌尿器科、<sup>2</sup>九州大・院医・形態機能病理、<sup>3</sup>原三信病院・泌尿器科）**P-1080 Peritoneal dissemination requires an Sp1-dependent CXCR4/CXCL12 signaling axis and sphere formation**Yui Harada<sup>1</sup>, Yuta Kasagi<sup>2</sup>, Yosuke Morodomi<sup>3</sup>, Yoshikazu Yonemitsu<sup>1</sup> (<sup>1</sup>LITS, Kyushu University Graduate School of Pharmaceutical Sciences, <sup>2</sup>Penn center for molecular studies in digestive and liver diseases, <sup>3</sup>Department of Cancer Biology, The Scripps Research Institute)腹膜播種の全容解明～Sp1によるCXCR4/CXCL12シグナル活性化と細胞外マトリクスを介したスフェア形成～  
原田 結<sup>1</sup>、笠木 勇太<sup>2</sup>、諸富 洋介<sup>3</sup>、米満 吉和<sup>1</sup>（九州大学・葉・革新的バイオ医薬創成学、<sup>2</sup>ペンシルベニア大学・疾患分子研究センター、<sup>3</sup>スクリプス研究所・がん生物学分野）**P-1081 Is SMAD4 relevant to the spheroid formation of pancreatic cancer cells?**

Eri Kokaji, Takeshi Nishida, Johji Imura (Dept. Diag. Pathol., Grad. Sch. Med., Univ. of Toyama)

SMAD4は膵癌細胞のSpheroid形成に関与するのか？  
小梶 恵利、西田 健志、井村 穂二（富山大・院・医・病理診断）**P-1082 Phosphorylated HSP20 (HSPB6) Regulates TGF- $\alpha$ -Induced Migration and Invasion of Hepatocellular Carcinoma Cells**Rie Matsushima-Nishiwaki<sup>1</sup>, Hidenori Toyoda<sup>2</sup>, Takashi Kumada<sup>2</sup>, Osamu Koza<sup>1</sup> (<sup>1</sup>Dept. Pharmacol., Gifu Univ. Graduate Sch. Med., <sup>2</sup>Dept. Gastroenterol., Ogaki Municipal Hospital)TGF- $\alpha$ 刺激による肝癌細胞遊走および浸潤のリン酸化HSP20(HSPB6)による抑制西脇 理英<sup>1</sup>、豊田 秀徳<sup>2</sup>、熊田 卓<sup>2</sup>、小澤 修<sup>1</sup>（岐阜大・医・薬理、<sup>2</sup>大垣市民病院・消化器内科）**P-1083 SH3P2 suppresses cell motility by anchoring Myosin 1E in the cytosol**Susumu Tanimura<sup>1,2</sup>, Michiaki Kohno<sup>1</sup>, Kohsuke Takeda<sup>1</sup> (<sup>1</sup>Dept. Cell Reg., Grad. Sch. Biomed. Sci., Nagasaki Univ., <sup>2</sup>NRGIC)

SH3P2はMyosin 1Eを細胞質に止めることで細胞運動を抑制する

谷村 進<sup>1,2</sup>、河野 通明<sup>1</sup>、武田 弘資<sup>1</sup>（長崎大院・医歯薬・細胞制御、<sup>2</sup>長崎大・がん・ゲノム不安定性研究拠点）**P-1084 Knockdown of superoxide dismutase 2 (SOD2) reduced the invasive ability of human melanoma cells.**Arisa Kudo, Jun Murata (Lab. Mol. Biol., Biores. Sci., Akita Pref. Univ.)  
抗酸化酵素SOD2の発現抑制はヒトメラノーマ細胞の浸潤能を低下させる

工藤 亜莉沙、村田 純（秋田県大院・生物資源・分子生物）

**P-1085 Exploring serum factors for evoking and promoting cancer metastasis**Akira Yamauchi<sup>1</sup>, Masahiro Yamamura<sup>2</sup>, Naoki Katae<sup>3</sup>, Yoshiyuki Yamaguchi<sup>2</sup> (<sup>1</sup>Kawasaki Medical School, Biochemistry, <sup>2</sup>Kawasaki Medical School, Clinical Oncology, <sup>3</sup>Kawasaki Medical School, Molecular Biology)

癌転移を惹起・増強する血清因子の探索

山内 明<sup>1</sup>、山村 真弘<sup>2</sup>、片瀬 直樹<sup>3</sup>、山口 佳之<sup>2</sup>（川崎医科大学学生化学生教室、<sup>2</sup>川崎医科大学臨床腫瘍学教室、<sup>3</sup>川崎医科大学分子生物学教室）

P10-2

**Invasion (1)**

浸潤 (1)

Chairperson: Takashi Yugawa (Div. of Carcinog. Cancer Prev., Natl. Cancer Ctr. Res. Inst.)

座長：温川 恭至（国立がん研究セ・研・発がん予防）

**P-1086 Radiation-induced cancer spreading mechanism: stimulation of compensatory proliferation during apoptosis by RhoGDIbeta**

Mamoru Fujiwara<sup>1</sup>, Takahide Ota<sup>2</sup>, Masaaki Tatsuka<sup>1</sup> (<sup>1</sup>Dep. Life Sci., Fac. Life Environ. Sci., Pref. Univ. Hiroshima, <sup>2</sup>Div. Tumor Biol., Med. Res. Inst., Kanazawa Med. Univ.)

3型カスパーゼによる腫瘍再増殖機構：電離放射線誘導性変様 RhoGDIbeta の関与

藤原 守<sup>1</sup>、太田 隆英<sup>2</sup>、達家 雅明<sup>1</sup> (<sup>1</sup>県立広島大学・生命環境・生命科学、<sup>2</sup>金沢医大・総医研・腫瘍生物学)

**P-1087 CEACAM1 cytoplasmic domain isoform balance is associated with differentiation and poor survival of gastric cancer**

Akihiro Takeuchi, Shozo Yokoyama, Yasuyuki Mitani, Mikihito Nakamori, Masaki Nakamura, Toshiyasu Ojima, Masahiro Katsuda, Toshiaki Tsuji, Keiji Hayata, Tomoya Kato, Junya Kitadani, Hirotaka Tabata, Hiroki Yamaue (Second Department of Surgery, Sakayama Medical University)

胃癌悪性度におけるCEACAM1 細胞内ドメイン isoform balance の意義

竹内 昭博、横山 駿三、三谷 泰之、中森 幹人、中村 公紀、尾島 敏康、勝田 将裕、辻 俊明、早田 啓治、加藤 智也、北谷 純也、田端 宏堯、山上 裕機 (和歌山県立医科大学 第2外科)

**P-1088 IL-32 controls the invasive ability of the pancreatic cancer cell.**

Johji Imura, Kohji Takagi, Akiko Shimomura, Takashi Minamisaka, Takahiko Nakajima, Shigeharu Miwa, Shinichi Hayashi, Kenji Nishida, Hideki Hatta (Dept. Diag. Pathol. Grad. Sch. Med. Pharmace. Sci., Uni Toyama)

IL-32は肺癌細胞の浸潤能を制御している

井村 穎二、高木 康司、下村 明子、南坂 尚、中島 隆彦、三輪 重治、林 伸一、西田 健志、八田 秀樹 (富山大・医薬研・病理診断学)

**P-1089 Oligodendrocyte stimulates the invasion ability of Glioblastoma cells**

Toshiyuki Kawashima<sup>1</sup>, Masakazu Yashiro<sup>2</sup>, Hiroaki Kasashima<sup>2</sup>, Taichiro Kawakami<sup>1</sup>, Takehiro Uda<sup>1</sup>, Kosuke Nakajo<sup>1</sup>, Yusuke Watanabe<sup>1</sup>, Masaichi Ohira<sup>2</sup>, Kenji Ohata<sup>1</sup> (<sup>1</sup>Dept. Neurosurgery, Osaka City University School of Medicine, <sup>2</sup>Dept. Surg. Oncology, Osaka City University School of Medicine)

乏突起膠細胞は膠芽腫細胞の浸潤を促進する

川嶋 俊幸<sup>1</sup>、八代 正和<sup>2</sup>、笠島 裕明<sup>2</sup>、川上 太一郎<sup>1</sup>、宇田 武弘<sup>1</sup>、中条 公輔<sup>1</sup>、渡部 祐輔<sup>1</sup>、大平 雅一<sup>2</sup>、大畑 建治<sup>1</sup> (<sup>1</sup>大阪市立大学医学部脳神経外科、<sup>2</sup>大阪市立大学医学部腫瘍外科)

**P-1090 Role of ATF5 in cancer cell invasion of several diverse human cancer cell lines**

Akihiro Nukuda<sup>1</sup>, Motoaki Yasuda<sup>2</sup>, Hisashi Haga<sup>1</sup> (<sup>1</sup>Advanced Life Sci., Hokkaido Univ., <sup>2</sup>Dept. Oral Pathobiology, Grad. Sch. Den. Med., Hokkaido Univ.)

様々ながん細胞株の浸潤における転写因子ATF5の役割

温田 晃弘<sup>1</sup>、安田 元昭<sup>2</sup>、芳賀 永<sup>1</sup> (<sup>1</sup>北海道大・院先端生命、<sup>2</sup>北海道大・院歯・口腔医学)

**P-1091 Intratumoral injection of 2'3'-cGAMP suppresses the migration of myeloid-derived suppressor cells into the tumor site**

Takayuki Ohkuri<sup>1</sup>, Akemi Kosaka<sup>1</sup>, Kei Ishibashi<sup>1</sup>, Kenzo Ohara<sup>1,2</sup>, Yui Hirata<sup>1,2</sup>, Toshihiro Nagato<sup>2</sup>, Naoko Aoki<sup>1</sup>, Kensuke Oikawa<sup>1</sup>, Yasuaki Harabuchi<sup>2</sup>, Hiroya Kobayashi<sup>1</sup> (<sup>1</sup>Dept. Path., Asahikawa Med. Univ., <sup>2</sup>Dept. Otolaryngology-Head&Neck, Asahikawa Med. Univ.)

2'3'-cGAMPの腫瘍内投与によって骨髄由来免疫抑制性細胞の腫瘍内浸潤を抑制する

大栗 敬幸<sup>1</sup>、小坂 朱<sup>1</sup>、石橋 佳<sup>1</sup>、大原 賢三<sup>1,2</sup>、平田 結<sup>1,2</sup>、長門 利純<sup>2</sup>、青木 直子<sup>1</sup>、及川 賢輔<sup>1</sup>、原渕 保明<sup>2</sup>、小林 博也<sup>1</sup> (<sup>1</sup>旭川医大・医・病理、<sup>2</sup>旭川医大・医・耳鼻咽喉科・頭頸部外科)

**P-1092 Novel signaling collaboration between TGF-beta and adaptor protein Crk facilitates EMT in human lung cancer**

Mishie A. Tanino<sup>1</sup>, Aiman Elimansuri<sup>1</sup>, Roshan Mahabir<sup>1</sup>, Lei Wang<sup>2</sup>, Taichi Kimura<sup>2</sup>, Hiroshi Nishihara<sup>2</sup>, Masumi Tsuda<sup>1</sup>, Shinya Tanaka<sup>1,2</sup> (<sup>1</sup>Dept. of Cancer Path., Hokkaido Univ. Grad. Sch. Med., <sup>2</sup>Dept. of Translational Path., Hokkaido Univ. Grad. Sch. Med.)

肺癌においてアダプター蛋白CrkはTGF-βシグナルと協調してEMTを誘導する

谷野 美智枝<sup>1</sup>、Aiman Elimansuri<sup>1</sup>、Roshan Mahabir<sup>1</sup>、王磊<sup>2</sup>、木村 太一<sup>2</sup>、西原 広史<sup>2</sup>、津田 真寿美<sup>1</sup>、田中 伸哉<sup>1,2</sup> (<sup>1</sup>北大院・医・腫瘍病理、<sup>2</sup>北大・医・探索病理)

P10-3

**Invasion (2)**

浸潤 (2)

Chairperson: Hiroaki Kataoka (Dept. of Pathol., Fac. of Med., Univ. of Miyazaki)  
座長：片岡 寛章（宮崎大・医・病理・再生病態）

**P-1093 CXCR3A, but not 3B, confers proliferation and invasion of colorectal cancer**

Eriko Nozaki<sup>1,2</sup>, Takaaki Kobayashi<sup>2,3</sup>, Hiroyuki Sakurai<sup>4</sup>, Fumio Nagashima<sup>3</sup>, Jyunji Furuse<sup>3</sup>, Tadahiko Masaki<sup>2</sup>, Masanori Sugiyama<sup>2</sup> (<sup>1</sup>Kyorin Med. Univ., <sup>2</sup>Kyorin Med. Univ., <sup>3</sup>Kyorin Med. Univ., <sup>4</sup>Kyorin Med. Univ.)

CXCR3Aは大腸癌の増殖と浸潤に寄与する

野崎 江里子<sup>1,2</sup>、小林 敏明<sup>2,3</sup>、櫻井 裕之<sup>4</sup>、長島 文夫<sup>3</sup>、古瀬 順司<sup>3</sup>、正木 忠彦<sup>2</sup>、杉山 政則<sup>2</sup> (<sup>1</sup>杏林大・医・臨床検査医学、<sup>2</sup>杏林大・医・消化器外科、<sup>3</sup>杏林大・医・腫瘍内科学、<sup>4</sup>杏林大・医・薬理学)

**P-1094 Fascin-1 promotes cancer cell invasion via activation of Stat3**

Toshiaki Takahashi<sup>1</sup>, Akihiro Nukuda<sup>1</sup>, Masayuki Kano<sup>2</sup>, Hisahiro Matsubara<sup>2</sup>, Hisashi Haga<sup>1</sup> (<sup>1</sup>Advanced Life Sci., Hokkaido Univ., <sup>2</sup>Dept. Frontier Surg., Grad. Sch. Med., Chiba Univ.)

Fascin-1による転写因子Stat3を介したがん細胞の浸潤促進

高橋 都史樹<sup>1</sup>、温田 晃弘<sup>1</sup>、加野 将之<sup>2</sup>、松原 久裕<sup>2</sup>、芳賀 永<sup>1</sup> (<sup>1</sup>北海道大・院先端生命、<sup>2</sup>千葉大・院医学研究・先端応用外科学)

**P-1095 YTHDC2 regulate the expression of E-cadherin by which Twist1 mRNA is translated on colon cancer.**

Kaori Takai, Atsushi Tanabe, Machi Suzuki, Hiroto Ikeda, Ryo Okihiro, Misaki Matsuura, Kento Kimura, Hiroeki Sahara (Lab.Biol., Azabu Univ., Sch.Vet.Med.)

大腸癌においてYTHDC2はTwist1の翻訳を通じて、E-カドヘリンの発現を制御している

高井 香里、田辺 敦、鈴木 茉智、池田 拓人、沖廣 瞭、松浦 美紗希、木村 健人、佐原 弘益（麻布大・獣医・生物学）

**P-1096 The mechanism of integrin alpha 6 activation on metastasis in basal-like breast cancer**

Sunao Tanaka, Junji Itou, Fumiaki Sato, Masakazu Toi (Dept.Breast Surg., Grad. Sch. Med., Kyoto Univ.)

Basal-like 乳癌細胞の転移におけるインテグリンα6の活性機構

田中 直、伊東 潤二、佐藤 史顕、戸井 雅和（京大院・医・乳腺）

**P-1097 Clinical significance of peroxiredoxin 4 expression in gastric cancer**

Seong Yeob Ryu, Jae Hyuk Lee, Jae Kyoon Joo, Dong Yi Kim (Dept. of Surg. Chonnam national University Hospital)

**P-1098 Gadd45β Regulates Metastasis in Cholangiocarcinoma by Modulating EMT pathway**

Rutaiwan Tohtong<sup>1</sup>, Kyaw Z. Myint<sup>1</sup>, Pornparn Kongpracha<sup>1</sup>, Panthip Rattanasinghanchan<sup>2</sup>, Penpak Moolthiya<sup>2</sup> (<sup>1</sup>Department of Biochemistry, Faculty of Science, Mahidol University, <sup>2</sup>Faculty of Medical Technology, Huachiew Chalermprakiet University)

Room P Oct. 6 (Thu.) 16:35-17:20

P10-4

**Extracellular matrix and protease**  
細胞外マトリックスとプロアーゼChairperson: Naohiko Koshikawa (Kanagawa Cancer Ctr. Res. Inst.)  
座長: 越川直彦 (神奈川県がんセンター・臨床研・がん生物学)**P-1099 HIC-5 acts as a negative regulator for MMP-9 expression by inhibiting NOX4 expression in oncogenic RAS-driven cancers**

Mori Kazunori, Fumihiro Ishikawa, Motoko Shibanuma (Div. Cancer Cell Biol., Showa Univ., Sch Pharm.)

HIC-5 による NOX4 依存性細胞内レドックス制御と MMP-9 発現抑制

森一憲、石川文博、柴沼質子 (昭和大・薬・腫瘍細胞生物学)

**P-1100 JIP3 is a substrate for c-Abl and Arg tyrosine kinases**Takahisa Takino<sup>1,2</sup>, Takahiro Domoto<sup>1</sup>, Taisuke Yoshimoto<sup>3</sup>, Shuichi Kawashiri<sup>3</sup>, Yoshiro Endo<sup>1</sup>, Hiroshi Sato<sup>1</sup> (<sup>1</sup>Div. Mol Virol & Oncol, Cancer Res. Inst., Kanazawa Univ., <sup>2</sup>LIAS, Kanazawa Univ., <sup>3</sup>Oral Surg., Sch. Med., Kanazawa Univ.)

JIP3 は c-Abl と Arg の基質である

滝野 隆久<sup>1,2</sup>、堂本 貴寛<sup>1</sup>、吉本 泰祐<sup>3</sup>、川尻 秀一<sup>3</sup>、遠藤 良夫<sup>1</sup>、佐藤 博<sup>1</sup> (<sup>1</sup>金沢大・がん進展研・細胞機能、<sup>2</sup>金沢大・基幹教育院、<sup>3</sup>金沢大・医・口腔外科)**P-1101 Tenascin-C promotes mouse primary mammary tumor growth and regulates the expression of CXCL chemokines**

Moriaki Kusakabe, Takayuki Nakagawa, Ryohei Nishimura, Kohei Saeki (Grad. Sch. Agr. &amp; Life Sci., Univ. Tokyo)

Tenascin C はマウス乳腺腫瘍の原発巣成長を促進し CXCL ケモカインの発現を制御する

日下部 守昭、中川 貴之、西村 亮平、佐伯 亘平 (東大・農)

**P-1102 Loss of HAI-1 upregulates MMP-9 expression and induces degradation of epidermal basement membrane**

Makiko Kawaguchi, Tsuyoshi Fukushima, Hiroaki Kataoka (Dept. Path., Med., Miyazaki Univ.)

HAI-1 欠失はケラチノサイトの MMP-9 発現を誘導する  
川口 真紀子、福島 剛、片岡 寛章 (宮大・医・病理)**P-1103 Downregulation of miR-148a Contributes to the Carcinogenesis and Cell Invasion of Colorectal Cancer**

Naoya Sakamoto, Yumi Hibino, Keisuke Goto, Kazuhiro Sentani, Naohide Oue, Wataru Yasui (Dept. Mol. Path., Hiroshima Univ. Inst. Biomed. Health Sci.)

miR-148a は大腸癌の発がん・進展に寄与している

坂本 直也、日比野 佑美、後藤 景介、仙谷 和弘、大上 直秀、安井 弥 (広島大学 院医歯薫保健学 分子病理)

J/E

**11 Characteristics of cancer cells**

Room P Oct. 6 (Thu.) 15:50-16:35

P11-1

**Cancer stem cell (1)**  
がん幹細胞 (1)Chairperson: Yoko Katsuno (Dept. of Mol. Pathol., Grad. Sch. of Med., The Univ. of Tokyo)  
座長: 勝野 蓉子 (東京大・院医・分子病理)**P-1104 Gene expression analysis of artificially developed cancer stem cells using spherical self-organization map**Akimasa Seno<sup>1</sup>, Tomonari Kasai<sup>1</sup>, Arun Vaidyanath<sup>1</sup>, Junko Masuda<sup>1</sup>, Akifumi Mizutani<sup>1</sup>, Hiroshi Murakami<sup>1</sup>, Tetsuya Ishikawa<sup>2</sup>, Masaharu Seno<sup>1</sup> (<sup>1</sup>Lab. Nano-Biotech., Dept. Med. Bioeng. Sci., Okayama Univ., <sup>2</sup>FIOC, Natl. Cancer Ctr. Res. Inst.)

球面自己組織化マップを利用した人工がん幹細胞発現遺伝子解析

妹尾 彰正<sup>1</sup>、笠井 健成<sup>1</sup>、バイディニアードアルン<sup>1</sup>、増田 潤子<sup>1</sup>、水谷 昭文<sup>1</sup>、村上 宏<sup>1</sup>、石川 哲也<sup>2</sup>、妹尾 昌治<sup>1</sup> (<sup>1</sup>岡大・自然科学・ナノバイオ、<sup>2</sup>国がんセ・研・FIOC)**P-1105 Isolation and characterization of cancer stem cells from primary human endometrioid adenocarcinoma**

Yuta Tabuchi, Yoshihiko Hirohashi, Takayuki Kanaseki, Tomohide Tsukahara, Hiroko Asanuma, Toshihiko Torigoe (1st Dept. of Pathology, Sapporo Medical Univ.)

子宮体癌初代培養細胞株からの癌幹細胞の分離同定と解析

田渕 雄大、廣橋 良彦、金閑 貴幸、塚原 智英、浅沼 広子、鳥越 俊彦 (札幌医大・医・第一病理)

**P-1106 Aldehyde Dehydrogenase Activity Plays No Role for Cancer Stem-Like Properties in Anaplastic Thyroid Cancer Cell Lines**Mika Shimamura<sup>1</sup>, Norisato Mitsutake<sup>2</sup>, Yuji Nagayama<sup>1</sup> (<sup>1</sup>Dept. Mol. Med., ABDI., Nagasaki Univ., <sup>2</sup>Dept. Rad. Med. Sci., ABDI., Nagasaki Univ.)

ALDH は甲状腺未分化癌細胞株において単なる癌幹細胞のマーカーであり機能的な役割を果たしていない

嶋村 美加<sup>1</sup>、光武 篤史<sup>2</sup>、永山 雄二<sup>1</sup> (<sup>1</sup>長崎大・原研・分子医学、<sup>2</sup>長崎大・原研・放射線災害医療)**P-1107 Clinical significance of cancer stem cell markers (ALDH1 and CD133) in the patients with lung adenocarcinoma**Takeaki Miyata<sup>1,2</sup>, Takashi Yoshimatsu<sup>2</sup>, Hanae Higa<sup>2</sup>, Daigo Kawano<sup>2</sup>, Atsushi Sekimura<sup>3</sup>, Tetsuya So<sup>4</sup>, Tsumehiro Oyama<sup>1,5</sup>, Hisao Nagaya<sup>1</sup>, Akinobu Gotoh<sup>1</sup> (<sup>1</sup>Lab of Cell and Gene Therapy, Hyogo College of Med, <sup>2</sup>Dept of Thoracic Surg, Fukuoka-Wajiro Hosp, <sup>3</sup>Dept of Thoracic Surg, Shin-Takeo Hosp, <sup>4</sup>Dept of Thoracic Surg, Shin-Komonji Hosp, <sup>5</sup>Imamitsu Home Care Clinic)

肺腺癌における癌幹細胞マーカー(ALDH1、CD133)の意義

宮田 剛彰<sup>1,2</sup>、吉松 隆<sup>2</sup>、比嘉 花絵<sup>2</sup>、川野 大悟<sup>2</sup>、関村 敦<sup>3</sup>、宗 哲哉<sup>4</sup>、小山 優浩<sup>1,5</sup>、長屋 寿雄<sup>1</sup>、後藤 章暢<sup>1</sup> (<sup>1</sup>兵庫医大・先端研・細胞遺伝子治療部門、<sup>2</sup>福岡和白病院呼吸器外科、<sup>3</sup>新武雄病院呼吸器外科、<sup>4</sup>新小文字病院呼吸器外科、<sup>5</sup>今光ホームケアクリニック)**P-1108 Evaluations of aldehyde dehydrogenase-1 (ALDH1) and TP53 expressions in human lung adenocarcinoma**Tsunehiro Oyama<sup>1</sup>, Hidetaka Uramoto<sup>2</sup>, Kazue Yoneda<sup>3</sup>, Naoko Imanishi<sup>3</sup>, Hisao Nagaya<sup>1</sup>, Takeaki Miyata<sup>1,4</sup>, Tetsuya So<sup>5</sup>, Manabu Yasuda<sup>6</sup>, Takashi Yoshimatsu<sup>4</sup>, Takeshi Hanagiri<sup>6</sup>, Toshihiro Osaki<sup>7</sup>, Fumihiro Tanaka<sup>3</sup>, Akinobu Gotoh<sup>1</sup> (<sup>1</sup>Lab of Cell and Gene Therapy, Hyogo College of Med, <sup>2</sup>Dept of Chest Surg, Kanazawa Med Univ, <sup>3</sup>2nd Dept of Surg, UOEH, <sup>4</sup>Dept of Thoracic Surg, Fukuoka-Wajiro Hosp, <sup>5</sup>Dept of Thoracic Surg, Shin-Komonji Hosp, <sup>6</sup>Dept of Thoracic Surg, Shin-Kokura Hosp, <sup>7</sup>Dept of Chest Surg, Iizuka Hosp)

肺腺癌におけるアルデヒド脱水素酵素 1 発現と p53 発現の意義

小山 優浩<sup>1</sup>、浦本 秀隆<sup>2</sup>、米田 和恵<sup>3</sup>、今西 直子<sup>3</sup>、長屋 寿雄<sup>1</sup>、宮田 剛彰<sup>1,4</sup>、宗 哲哉<sup>5</sup>、安田 学<sup>6</sup>、吉松 隆<sup>4</sup>、花桐 武志<sup>6</sup>、大崎 敏昌<sup>7</sup>、田中 文啓<sup>3</sup>、後藤 章暢<sup>1</sup> (<sup>1</sup>兵庫医大・先端医学・細胞・遺伝子治療、<sup>2</sup>金沢大・呼吸器外科、<sup>3</sup>産業医大・医・第2外科、<sup>4</sup>福岡和白病院・呼吸器外科、<sup>5</sup>新小文字病院・呼吸器外科、<sup>6</sup>新小倉病院・呼吸器外科、<sup>7</sup>飯塚病院・呼吸器外科)**P-1109 ADAM23 (a disintegrin and metalloproteinase 23) downregulated in side population inhibits lung carcinoma cell metastasis**Masahide Ota<sup>1,2,3</sup>, Satsuki Mochizuki<sup>3,4</sup>, Masayuki Shimoda<sup>3</sup>, Hitoshi Abe<sup>5</sup>, Hiroshi Kimura<sup>2</sup>, Yasunori Okada<sup>3,4</sup> (<sup>1</sup>Dept. Respir. Int. Med., Nara Pref. Gen. Med. Ctr., <sup>2</sup>2nd Dept. Int. Med., Nara Med. Univ., Sch. Med., <sup>3</sup>Dept. Path., Keio Univ., Sch. Med., <sup>4</sup>Dept. Pathophysiol. Locom. Neop. Dis., Junctendo Univ. Grad. Sch. Med.)

Side populationにおいて発現抑制されているADAM23は、肺癌の転移を抑制している

大田 正秀<sup>1,2,3</sup>、望月 早月<sup>3,4</sup>、下田 将之<sup>3</sup>、阿部 仁<sup>3</sup>、木村 弘<sup>2</sup>、岡田 保典<sup>3,4</sup> (<sup>1</sup>奈良県総合医療センター・呼内、<sup>2</sup>奈良医大・医・第2内科、<sup>3</sup>慶大・医・病理、<sup>4</sup>順大院・医・運動器腫瘍性疾患病態学講座)

**P-1110 Tobacco specific nitrosamine NNK increases cancer stem cells via Wnt signaling.**

Naoya Hirata, Yasunari Kanda (Div. Pharmacol., NIH)

タバコ特異的ニトロソアミンNNKによるWntシグナルを介した肺癌幹細胞の増殖

平田 尚也、諫田 泰成（国立衛研・薬理）

Room P Oct. 6 (Thu.) 16:35-17:20 J/E

**P11-2 Cancer stem cell (2)**

がん幹細胞 (2)

Chairperson: Kenkichi Masutomi (Div. of Cancer Stem Cell/Natl. Cancer Ctr. Res. Inst.)

座長：増富 健吉（国立がん研究セ・研・がん幹細胞）

**P-1111 AMPK confers metabolic stress resistance to acute myeloid leukaemia-initiating cells**

Yusuke Saito<sup>1,2</sup>, Kazuhiro Morishita<sup>2</sup>, Daisuke Nakada<sup>1</sup> (<sup>1</sup>Molecular and Human Genetics, Baylor College of Med., <sup>2</sup>Tumor and Cellular Biochem., Dept. of Med., Univ. of Miyazaki)

AMPKは白血病幹細胞を代謝ストレスから防護する

齋藤 祐介<sup>1,2</sup>、森下 和広<sup>2</sup>、中田 大介<sup>1</sup> (<sup>1</sup>ペイラー医科大学・分子人類遺伝、<sup>2</sup>宮崎大・医・腫瘍生化)

**P-1112 Doxycycline targets mitochondria of Cancer stem like cells and causes apoptosis through ER stress.**

Takashi Matsumoto<sup>1,2</sup>, Keisuke Monji<sup>1,2</sup>, Masaki Shiota<sup>2</sup>, Akira Yokomizo<sup>2</sup>, Masatoshi Eto<sup>2</sup>, Seiji Naito<sup>2</sup>, Takeshi Uchiumi<sup>1</sup> (<sup>1</sup>Department of Clinical Chemistry and Laboratory Medicine, Kyushu University, <sup>2</sup>Department of Urology, Kyushu University)

ドキシサイクリンは癌幹細胞のミトコンドリアを標的とし、ERストレスを介してアポトーシスを引き起こす

松元 崇<sup>1,2</sup>、門司 恵介<sup>1,2</sup>、塙田 真己<sup>2</sup>、横溝 晃<sup>2</sup>、江藤 正俊<sup>2</sup>、内藤 誠二<sup>2</sup>、内海 健<sup>1</sup> (<sup>1</sup>九州大学 臨床検査医学、<sup>2</sup>九州大学 泌尿器科学分野)

**P-1113 Inhibition of liver tumor development in CD44 knockout mice**

Anna Kakehashi<sup>1</sup>, Naomi Ishii<sup>1</sup>, Kumiko Tatsumi<sup>1</sup>, Min Gi<sup>1</sup>, Hideyuki Saya<sup>2</sup>, Hideki Wanibuchi<sup>1</sup> (<sup>1</sup>Dept. Mol. Path., Osaka City Univ., Grad. Sch. Med., <sup>2</sup>Div. Gene Regul., Grad. Sch. Med., Keio Univ.)

CD44ノックアウトマウスにおける肝臓腫瘍の発生の抑制

梯 アンナ<sup>1</sup>、石井 真美<sup>1</sup>、辰巳 久美子<sup>1</sup>、魏 民<sup>1</sup>、佐谷 秀行<sup>2</sup>、鶴渕 英機<sup>1</sup> (<sup>1</sup>大阪市大・院・医・分子病理学、<sup>2</sup>慶應義塾大・院・医・遺伝子制御研究部門)

**P-1114 Sulfasalazine targets the xCT-CD44v9 system inducing oxidative stress-mediated apoptosis in liver cancer cells**

Fumitaka Wada<sup>1,2</sup>, Hironori Koga<sup>1,2</sup>, Jun Akiba<sup>3</sup>, Yu Ikezono<sup>1,2</sup>, Toru Nakamura<sup>1,2</sup>, Hideki Iwamoto<sup>1,2</sup>, Takahiko Sakaue<sup>1,2</sup>, Atsutaka Masuda<sup>1,2</sup>, Mitsuhiro Abe<sup>1,2</sup>, Hirohisa Yano<sup>3</sup>, Takuji Torimura<sup>1,2</sup> (<sup>1</sup>Div. of Gastroenterol, Kurume Univ., <sup>2</sup>Research Center for Innovative Cancer Therapy, Kurume University, <sup>3</sup>Department of Pathology, Kurume University School of Medicine)

xCT-CD44v9システムを標的とするスルファサラジンは、肝癌細胞において酸化ストレスを介したアポトーシスを誘導する

和田 史孝<sup>1,2</sup>、古賀 浩徳<sup>1,2</sup>、秋葉 純<sup>3</sup>、池園 友<sup>1,2</sup>、中村 徹<sup>1,2</sup>、岩本 英希<sup>1,2</sup>、阪上 尊彦<sup>1,2</sup>、増田 篤高<sup>1,2</sup>、安倍 満彦<sup>1,2</sup>、矢野 博久<sup>3</sup>、鳥村 拓司<sup>1,2</sup> (<sup>1</sup>久留米大学医学部消化器内科、<sup>2</sup>久留米大学先端癌治療研究センター肝癌部門、<sup>3</sup>久留米大学医学部病理学講座)

**P-1115 Hepatocellular carcinoma originates from EpCAM-positive hepatic stem/progenitor cells**

Tomonori Matsumoto<sup>1</sup>, Atsushi Takai<sup>1</sup>, Yuji Eso<sup>1</sup>, Tsutomu Chiba<sup>2</sup>, Hiroshi Seno<sup>1</sup>, Hiroyuki Marusawa<sup>1</sup> (<sup>1</sup>Dept. Gastroenterology and Hepatology, Kyoto Univ., Grad. Sch. Med., <sup>2</sup>Sogoseizongakukan, Kyoto Univ., Grad. Sch.)

EpCAM陽性肝幹/前駆細胞は肝細胞癌の起源となる

松本 知訓<sup>1</sup>、高井 淳<sup>1</sup>、恵荘 裕嗣<sup>1</sup>、千葉 勉<sup>2</sup>、妹尾 浩<sup>1</sup>、丸澤 宏之<sup>1</sup> (<sup>1</sup>京都大・医・消化器内科、<sup>2</sup>京都大・院・総合生存学館)

**P-1116 Inhibitory effect of hybrid liposomes on the growth of liver cancer stem cells**

Yuji Komizu<sup>1</sup>, Seiichi Ishida<sup>2</sup>, Ryuichi Ueoka<sup>1</sup>, Yoko Matsumoto<sup>1</sup>, Taku Matsushita<sup>1</sup> (<sup>1</sup>Div. of App. Life Sci., Sojo Univ., <sup>2</sup>Div. of Pharmacology, NIH)

ハイブリッドリポソームの肝臓がん幹細胞に対する増殖抑制効果

古水 雄志<sup>1</sup>、石田 誠一<sup>2</sup>、上岡 龍一<sup>1</sup>、松本 陽子<sup>1</sup>、松下 琢<sup>1</sup> (<sup>1</sup>崇城大・応用生命、<sup>2</sup>国立衛研・薬理部)

**P-1117 CWP232228 targets liver cancer stem cells through Wnt signaling: a novel therapeutic approach for liver cancer treatment**

Hwayong Lee<sup>1</sup>, Ji-Young Kim<sup>2,3</sup>, Kwankyu Park<sup>4</sup>, Yangkyu Choi<sup>3</sup>, Jeongseok Nam<sup>5</sup>, Insun Hong<sup>2,6</sup> (<sup>1</sup>The Faculty of Liberal Arts, Jungwon Univ., <sup>2</sup>Lee Gil Ya Cancer and Diabetes Inst. Gachon Univ., <sup>3</sup>Dept. of College of Veterinary Med. Konkuk Univ., <sup>4</sup>Dept. of Path. College of Med. Catholic Univ., <sup>5</sup>Sch. of Life Sci. Gwangju Inst. of Sci. and Tech., <sup>6</sup>Dept. of Mol. Med. Sch. of Med. Gachon Univ.)

Room P Oct. 6 (Thu.) 15:50-16:35 J/E

**P11-3 Cancer stem cell (3)**

がん幹細胞 (3)

Chairperson: Hideaki Ijichi (Dept. of Clin. Nutr. Ther., The Univ. of Tokyo)

座長：伊地知 秀明（東京大・医・病態栄養治療）

**P-1118 Macrophage migration inhibitory factor (MIF) supports the cell proliferation in brain tumor-initiating cells**

SHIGEKI OHTA<sup>1</sup>, Raita Fukaya<sup>2</sup>, Tomonori Yaguchi<sup>1</sup>, Yumi Matsuzaki<sup>3</sup>, Eiji Sugihara<sup>1</sup>, Hideyuki Sayai<sup>4</sup>, Hideyuki Okano<sup>3</sup>, Takeshi Kawase<sup>2</sup>, Kazunori Yoshida<sup>2</sup>, Masahiro Toda<sup>2</sup>, Yutaka Kawakami<sup>1</sup> (<sup>1</sup>Cell Info. Inst. Adv. Med. Res., Keio Univ., Sch. Med., <sup>2</sup>Dept. Neurosurgery, Keio Univ., Sch. Med., <sup>3</sup>Dept. Physiology, Keio Univ., Sch. Med., <sup>4</sup>Gene Reg. Inst. Adv. Med. Res., Keio Univ., Sch. Med.)

MIFによるグリオーマ幹細胞増殖促進

大多 茂樹<sup>1</sup>、深谷 雷太<sup>2</sup>、谷口 智憲<sup>1</sup>、松崎 有未<sup>3</sup>、杉原 英志<sup>4</sup>、佐谷 秀行<sup>4</sup>、岡野 栄之<sup>3</sup>、河瀬 斦<sup>2</sup>、吉田 一成<sup>2</sup>、戸田 正博<sup>2</sup>、河上 裕<sup>1</sup> (<sup>1</sup>慶應大・医・先端研・細胞情報、<sup>2</sup>慶應大・医・脳外科、<sup>3</sup>慶應大・医・生理学、<sup>4</sup>慶應大・医・先端研・遺伝子)

**P-1119 Novel CD133 transcription pathway for regulating stemness of neuroblastoma**

Hisanori Takenobu<sup>1,2</sup>, Miki Ohira<sup>1,2</sup>, Koji Chikaraishi<sup>1,3</sup>, Kyosuke Mukae<sup>1</sup>, Nobuhiko Akita<sup>1,2,4</sup>, Masayuki Haruta<sup>1</sup>, Haruhiko Koseki<sup>5</sup>, Takehiko Kamijo<sup>1</sup> (<sup>1</sup>Res. Inst. Clinical Oncology, Saitama Cancer Ctr., <sup>2</sup>Res. Inst. Chiba Cancer Ctr., <sup>3</sup>Dept. Pediatrics, Chiba Univ., <sup>4</sup>Dept. Pediatrics, Nagoya Med. Ctr., <sup>5</sup>Lab. Dev. Genetics, Ctr. Integrative Med Sci, RIKEN)

神経芽腫幹細胞を制御する新規シグナル経路の解析

竹信 尚典<sup>1,2</sup>、大平 美紀<sup>1,2</sup>、力石 浩志<sup>1,3</sup>、迎 恭輔<sup>1</sup>、秋田 直洋<sup>1,2,4</sup>、春田 雅之<sup>1</sup>、古閑 明彦<sup>5</sup>、上條 岳彦<sup>1</sup> (<sup>1</sup>埼玉県立がんセ・研、<sup>2</sup>千葉県がんセ・研、<sup>3</sup>千葉大・小児、<sup>4</sup>名古屋医療セ・小児、<sup>5</sup>免疫器官形成・免疫アレルギー・理研)

**P-1120 Hedgehog/GLI and mTOR signals in pancreatic cancer stem cells**

Shyuichiro Matsubara, Koichiro Tsukasa, Yumi Miyazaki, Toru Obara, Takami Matsuyama, Sonshin Takao (Cancer & Regenerative med. Kagoshima Univ. Sch. Med.)

膵癌幹細胞におけるHedgehog/GLIおよびmTORシグナルの機能

松原 修一郎、政 幸一郎、宮崎 優美、小原 徹、松山 隆美、高尾 尊身（鹿児島大・院・癌再生医療学）

**P-1121 siRNA therapy targeting PRDM14 decreases cancer stem-like phenotypes including liver metastasis of pancreatic cancer**

Chiharu Moriya<sup>1</sup>, Hiroaki Taniguchi<sup>1</sup>, Kohzoh Imai<sup>2</sup> (<sup>1</sup>Ctr. for Antibody & Vaccine Therapy, IMS, Univ. of Tokyo, <sup>2</sup>Inst. of Med. Sci., Univ. of Tokyo)

PRDM14標的siRNAは膵管癌のがん幹細胞様形質を抑制し、肝転移を減少させる

森谷 千春<sup>1</sup>、谷口 博昭<sup>1</sup>、今井 浩三<sup>2</sup> (<sup>1</sup>東大医科研附属病院 抗体ワクチンセンター、<sup>2</sup>東大医科研)

**P-1122 PGE2-ALDH1 signaling promotes the clonogenic growth potential in pancreatic ductal adenocarcinoma**

Kota Arima<sup>1</sup>, Takatsugu Ishimoto<sup>1</sup>, Masaki Ohmura<sup>2</sup>, Keisuke Miyake<sup>1</sup>, Tsugio Eto<sup>1</sup>, Takayoshi Kaida<sup>1</sup>, Takaaki Higashii<sup>1</sup>, Hirohisa Okabe<sup>1</sup>, Hidetoshi Nitta<sup>1</sup>, Daisuke Hashimoto<sup>1</sup>, Akira Chikamatsu<sup>1</sup>, Yoji Yamashita<sup>1</sup>, Hideo Baba<sup>1</sup> (<sup>1</sup>Dept. Gastroenterol. Surg., Grad. Sch. Med., Kumamoto Univ., <sup>2</sup>Inst. Resource Dev. Analysis, Kumamoto Univ.)

がん幹細胞マーカーが膀胱癌進展を引き起こすメカニズムの解明

有馬 浩太<sup>1</sup>、石本 崇胤<sup>1</sup>、大村谷 昌樹<sup>2</sup>、三宅 慧輔<sup>1</sup>、江藤 二男<sup>1</sup>、甲斐田 剛圭<sup>1</sup>、東 孝暉<sup>1</sup>、岡部 弘尚<sup>1</sup>、新田 英利<sup>1</sup>、橋本 大輔<sup>1</sup>、近本 亮<sup>1</sup>、山下 洋市<sup>1</sup>、馬場 秀夫<sup>1</sup> (<sup>1</sup>熊本大学大学院 消化器外科学、<sup>2</sup>熊本大学生命資源研究支援センター)

**P-1123 Expression of CD133 in exosomes derived from ascites of patients with advanced pancreatic cancer**

Takahiko Sakaue<sup>1,2,3</sup>, Hironori Koga<sup>1,2</sup>, Masaru Fukahori<sup>1,3</sup>, Toru Nakamura<sup>1,2</sup>, Yu Ikezono<sup>1,2</sup>, Fumitaka Wada<sup>1,2</sup>, Hideki Iwamoto<sup>1,2</sup>, Atsutaka Masuda<sup>1,2</sup>, Takuji Torimura<sup>1,2</sup> (<sup>1</sup>Div. of Gastroenterology, Kurume Univ. Sch. of Med., <sup>2</sup>Res. Ctr. for Innovative Cancer Therapy, Kurume Univ., <sup>3</sup>Ctr. for Multidisciplinary Treatment of Cancer, Kurume Univ. Hosp.)

進行膀胱患者の癌性腹水中エクソソームにおける CD133 の発現

阪上 尊彦<sup>1,2,3</sup>, 古賀 浩徳<sup>1,2</sup>, 深堀 理<sup>1,3</sup>, 中村 徹<sup>1,2</sup>, 池園 友<sup>1,2</sup>, 和田 史孝<sup>1,2</sup>, 岩本 英希<sup>1,2</sup>, 増田 篤高<sup>1,2</sup>, 鳥村 拓司<sup>1,2</sup> (<sup>1</sup>久留米大学医学部 消化器内科、<sup>2</sup>久留米大学 先端癌治療研究センター、<sup>3</sup>久留米大学病院 がん集学治療センター)

**P-1124 Gemcitabine Enhances Kras-MEK-induced MMP-10 Expression in Gemcitabine-resistant Pancreatic Tumor-initiating Cells**

Nozomi Kojima, Makoto Miyoshi, Satoshi Nishiyama, Yuka Tsuchida, Shun Osaka, Yuichi Hori (Dept. Biophysics, Kobe Grad. Sch. Health Sci.)

Gemcitabine は抗癌剤耐性膀胱細胞に MMP-10 の発現を増強する

小嶋 望実、三好 真琴、西山 悟史、土田 悠加、大坂 峻、堀 裕一（神戸大・保健学研究科）

Room P Oct. 6 (Thu.) 16:35-17:20

J/E

**P11-4 Cancer stem cell (4)**

がん幹細胞 (4)

Chairperson: Hirofumi Yamamoto (Dept. of Mol. Path., Osaka Univ.)

座長：山本 浩文（大阪大・院医・分子病理）

**P-1125 Serum depletion induced cancer stem cell-like phenotype due to nitric oxide synthesis in H-Ras(G12V) transformed cells**

Keisuke Monji<sup>1,2</sup>, Takeshi Uchiumi<sup>1</sup>, Takashi Matsumoto<sup>1,2</sup>, Masaki Shiota<sup>1</sup>, Akira Yokomizo<sup>1</sup>, Masatoshi Eto<sup>1</sup> (<sup>1</sup>Clin. Chem. and Labo. Med., Kyushu Univ., Sch. Med., <sup>2</sup>Dept of Urology., Kyushu Univ., Sch. Med.)

変異型 H-Ras 導入細胞において血清除去は一酸化窒素合成を介して癌幹細胞様変化を誘導する

門司 恵介<sup>1,2</sup>、内海 健<sup>1</sup>、松元 崇<sup>1,2</sup>、塙田 真己<sup>2</sup>、横溝 晃<sup>2</sup>、江藤 正俊<sup>2</sup> (<sup>1</sup>九州大学・医・臨床検査医学、<sup>2</sup>九州大学・医・泌尿器科学)

**P-1126 Esophageal cancer stem cells are suppressed by Tranilast, TRPV2 channel inhibitor**

Michihiro Kudou<sup>1</sup>, Atsushi Shiozaki<sup>1</sup>, Daisuke Ichikawa<sup>1</sup>, Hiroki Shimizu<sup>1</sup>, Tomohiro Arita<sup>1</sup>, Toshiyuki Kosuga<sup>1</sup>, Hirotaka Konishi<sup>1</sup>, Shuhei Komatsu<sup>1</sup>, Hitoshi Fujiwara<sup>1</sup>, Kazuma Okamoto<sup>1</sup>, Yoshinori Marunaka<sup>1</sup>, Eigo Otsuji<sup>2</sup> (<sup>1</sup>Dept. Surg., Div. Dig. Surg., Kyoto Pref. Univ. Med., <sup>2</sup>Dept. Mol. Cell Physiol., Kyoto Pref. Univ. Med.)

食道癌幹細胞における transient receptor potential vanilloid 2 阻害剤、tranilast の抗腫瘍効果

工藤 道弘<sup>1</sup>、塙崎 敦<sup>1</sup>、市川 大輔<sup>1</sup>、清水 浩紀<sup>1</sup>、有田 智洋<sup>1</sup>、小菅 敏幸<sup>1</sup>、小西 博貴<sup>1</sup>、小松 周平<sup>1</sup>、藤原 斎<sup>1</sup>、岡本 和真<sup>1</sup>、丸中 良典<sup>1</sup>、大辻 英吾<sup>2</sup> (<sup>1</sup>京府医大・医・消化器外科、<sup>2</sup>京府医大・医・細胞生理学)

**P-1127 Involvement of PERK in metabolic stress-induced downregulation of cancer stem cell marker LGR5**

Yuka Okamoto, Masaru Koido, Ikuko Nagasawa, Akihiro Tomida (Genome Research, Cancer Chemotherapy Center, JFCR)

がん幹細胞マーカー分子 LGR5 の代謝ストレス下での発現制御における PERK の関与

岡本 有加、小井士 大、永澤 生久子、富田 章弘 ((公財) がん研・がん化療セ・ゲノム研究部)

**P-1128 Immunological Aspects of Colorectal Cancer Stem Cells**

Liming Wang<sup>1,2</sup>, Tadashi Ogawa<sup>1,3</sup>, Yoshihiko Hirohashi<sup>1</sup>, Toshihiko Torigoe<sup>1</sup> (<sup>1</sup>Dept. of Path., Sapporo Med. Univ., <sup>2</sup>Dept. of Surg., Sapporo Higashi Tokusyukai Hosp., <sup>3</sup>The First Surg. Dept. of Sapporo Med. Univ.)

新鮮な大腸がんサンプルから癌細胞株樹立と癌幹細胞免疫特性解析  
王 利明<sup>1,2</sup>、小川 宰司<sup>1,3</sup>、廣橋 良彦<sup>1</sup>、鳥越 俊彦<sup>1</sup> (<sup>1</sup>札幌医大・第一病理、<sup>2</sup>札幌東徳洲会病院外科、<sup>3</sup>札幌医大・第一外科)

**P-1129 The significance of the expression of a cancer stem cell marker Dclk1 in KRAS mutant colorectal cancer**

Shunichiro Makino<sup>1</sup>, Hidekazu Takahashi<sup>1</sup>, Naotsugu Haraguchi<sup>1</sup>, Junichi Nishimura<sup>1</sup>, Taishi Hata<sup>1</sup>, Tunekazu Mizushima<sup>2</sup>, Hirofumi Yamamoto<sup>1</sup>, Yuichiro Dokai<sup>1</sup>, masaki mori<sup>1</sup> (<sup>1</sup>Osaka University, Graduate School of Medicine, Department of Gastroenterological Surgery, <sup>2</sup>Osaka University, Department of Therapeutics for Inflammatory Bowel Diseases, <sup>3</sup>Osaka University Graduate School of Medicine, Division of Health Sciences)

KRAS 変異型大腸がんにおけるがん幹細胞マーカー Dclk1 の発現の意義

牧野 俊一郎<sup>1</sup>、高橋 秀和<sup>1</sup>、原口 直紹<sup>1</sup>、西村 潤一<sup>1</sup>、畠 泰司<sup>1</sup>、水島 恒<sup>2</sup>、山本 浩文<sup>3</sup>、土岐 祐一郎<sup>1</sup>、森 正樹<sup>1</sup> (<sup>1</sup>大阪大学外科学講座消化器外科学、<sup>2</sup>大阪大学炎症性腸疾患治療学、<sup>3</sup>大阪大学保健学科機能診断科学講座)

**P-1130 Selectively upregulated miR-221 regulates the clonogenicity of human colon cancer stem cells**

Naoki Shibuya<sup>1,2</sup>, Junko Mukohiyama<sup>1,2</sup>, Taichi Isobe<sup>3</sup>, Hiroki Kondo<sup>1</sup>, Toru Mukohara<sup>4,5</sup>, Yoshihiro Kakeji<sup>2</sup>, Hironobu Minami<sup>4,5</sup>, Akira Suzuki<sup>1</sup>, Yohei Shimono<sup>1,4</sup> (<sup>1</sup>Div. Mol. Cell. Biol., Kobe Univ. Grad. Sch. Med., <sup>2</sup>Div. Gastrointestinal Surg., Kobe Univ. Grad. Sch. Med., <sup>3</sup>Inst. Stem Cell Biol., Stanford Univ., <sup>4</sup>Div. Med. Oncology/Hematology, Kobe Univ. Grad. Sch. Med., <sup>5</sup>Cancer Ctr., Kobe Univ. Hosp.)

選択的に発現上昇しているマイクロ RNA-221 がヒト大腸がん幹細胞のクローニング能を制御する

渋谷 尚樹<sup>1,2</sup>、向山 順子<sup>1,2</sup>、磯部 大地<sup>3</sup>、近藤 弘基<sup>1</sup>、向原 徹<sup>4,5</sup>、掛地 吉弘<sup>2</sup>、南 博信<sup>4,5</sup>、鈴木 聰<sup>1</sup>、下野 洋平<sup>1,4</sup> (<sup>1</sup>神大院・医・分子細胞生物学、<sup>2</sup>神大院・医・食道胃腸外科学、<sup>3</sup>スタンフォード大・医・幹細胞生物学研究所、<sup>4</sup>神大院・医・腫瘍・血液内科学、<sup>5</sup>神大病院・腫瘍セ)

**P-1131 Enhanced autophagy in colorectal cancer stem cells does not contribute to radio-resistance**

Chen Yan, Tao-Sheng Li (Dept. of Stem Cell Biol., ABDI, Nagasaki Univ.)

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

**P11-5 Cancer stem cell (5)**

がん幹細胞 (5)

Chairperson: Rie Horii (Dept. of Path., Cancer Inst. Hosp., Japanese Foundation for Cancer Res.)

座長：堀井 理絵（がん研・有明・病理）

**P-1132 Single cell-based cell fate analysis of podoplanin-positive tumor initiating cells(TICs)**

Tomoyuki Miyashita<sup>1,2</sup>, Youichi Higuchi<sup>1,2</sup>, Motohiro Kojima<sup>2</sup>, Atsushi Ochiai<sup>1,2</sup>, Genichiro Ishii<sup>1,2</sup> (<sup>1</sup>Lab. of Cancer Biol. Frontier Sci., The Univ. of Tokyo, <sup>2</sup>Div. of Pathology, EPOC, Natl. Cancer Ctr.)

Podoplanin 陽性がん幹/始原細胞の、単細胞レベルにおける細胞運命の解明

宮下 知之<sup>1,2</sup>、樋口 洋一<sup>1,2</sup>、小嶋 基寛<sup>2</sup>、落合 淳志<sup>1,2</sup>、石井 源一郎<sup>1,2</sup> (<sup>1</sup>東大・新領域・がん先端生命、<sup>2</sup>国立がん研究センター・先端医療開発・病理)

**P-1133 Dissecting molecular mechanisms underlying CAF-induced metastatic dissemination of human breast carcinomas**

Nadila Wali<sup>1</sup>, Yuko Matsumura<sup>1,2</sup>, Yasuhiko Ito<sup>1</sup>, Kaoru Mogushi<sup>1</sup>, Yasuhisa Terao<sup>2</sup>, Satoru Takeda<sup>2</sup>, Ko Okumura<sup>3</sup>, Kazuyoshi Takeda<sup>3</sup>, Okio Hino<sup>1</sup>, Akira Orimo<sup>1</sup> (<sup>1</sup>Dept. of Molecular Pathology, Juntendo University Faculty of Medicine, <sup>2</sup>Dept. Obstetrics and Gynecology, Juntendo University Faculty of Medicine, <sup>3</sup>Atopy Research Center, Juntendo University Faculty of Medicine, <sup>4</sup>Genome regeneration Medical center, Juntendo Univ.)

ワリ ナディラ<sup>1</sup>、松村 優子<sup>1,2</sup>、伊藤 恭彦<sup>1</sup>、茂櫻 薫<sup>4</sup>、寺尾 保久<sup>2</sup>、竹田 省<sup>2</sup>、奥村 康<sup>3</sup>、竹田 和由<sup>3</sup>、樋野 興夫<sup>1</sup>、折茂 彰<sup>1</sup> (<sup>1</sup>順天堂大学・病理・腫瘍学、<sup>2</sup>順天堂大学・産婦人科、<sup>3</sup>順天堂大学・免疫学、<sup>4</sup>順天堂大学ゲノム再生医療センター)

- P-1134** **MICAL3 regulates symmetrical cell division of human breast cancer stem cells.**  
 Kana Tominaga<sup>1,2</sup>, Hajime Kanauchi<sup>3</sup>, Masao Yano<sup>4</sup>, Toshihisa Ogawa<sup>5</sup>, Keiichiro Tada<sup>5</sup>, Arinobu Tojo<sup>4</sup>, Noriko Gotoh<sup>1,6</sup> (<sup>1</sup>Div. of Mol. Therapy, Inst. of Med. Sci., Univ. Tokyo, <sup>2</sup>JSPS, <sup>3</sup>Dept. of Breast & Endocrine Surg., Showa General Hosp., <sup>4</sup>Dept. of Surg., Minamimachida Hosp., <sup>5</sup>Dept. of Breast & Endocrine Surg., Grad. Sch. Med., Univ. Tokyo, <sup>6</sup>Div. of Cancer Cell Biol., Cancer Res. Inst., Kanazawa Univ.)  
**MICAL3** はがん幹細胞の対称性分裂を制御している。  
 富永 香菜<sup>1,2</sup>、金内 一<sup>3</sup>、矢野 正雄<sup>4</sup>、小川 利久<sup>5</sup>、多田 敬一郎<sup>5</sup>、東條 有伸<sup>1</sup>、後藤 典子<sup>1,6</sup> (<sup>1</sup>東大・医科研・分子療法、<sup>2</sup>日本学術振興会、<sup>3</sup>公立昭和病院・乳腺内分泌外科、<sup>4</sup>南町田病院・外科、<sup>5</sup>東大・乳腺内分泌外科、<sup>6</sup>金沢大・がん進展制御研究所・分子病態)
- P-1135** **GDF15 promotes mammosphere formation in breast cancer**  
 Asako Sasahara<sup>1,2</sup>, Kana Tominaga<sup>1</sup>, Keiichiro Tada<sup>2</sup>, Hajime Kanauchi<sup>3</sup>, Yasuyuki Seto<sup>4</sup>, Arinobu Tojo<sup>4</sup>, Noriko Gotoh<sup>1,5</sup> (<sup>1</sup>Div. of Mol. Therapy, Inst. of Med. Sci., Univ. Tokyo, <sup>2</sup>Dept. of Breast Endocrine Surg., Grad. Sch. Med., Univ. Tokyo, <sup>3</sup>Dept. of Breast and Endocrine Surg., Showa Gen. Hosp., <sup>4</sup>Dept. of Gastrointestinal Surg., Grad. Sch. Med., Univ. Tokyo, <sup>5</sup>Div. of Cancer Cell Biol., Cancer Res. Inst., Kanazawa Univ.)  
**GDF15** は乳癌においてスフェア形成を促進する  
 笹原 麻子<sup>1,2</sup>、富永 香菜<sup>1</sup>、多田 敬一郎<sup>2</sup>、金内 一<sup>3</sup>、瀬戸 泰之<sup>4</sup>、東條 有伸<sup>1</sup>、後藤 典子<sup>1,5</sup> (<sup>1</sup>東大・医科研・分子療法、<sup>2</sup>東大・院医・乳腺代謝栄養内分泌外科、<sup>3</sup>公立昭和病院・乳腺内分泌外科、<sup>4</sup>東大・院医・消化管外科、<sup>5</sup>金沢大・がん研・分子病態)
- P-1136** **DYRK2 contributes to the generation of breast cancer stem cells through KLF4**  
 Yoshimi Imawari<sup>1,2</sup>, Rei Mimoto<sup>1,2</sup>, Noriko Yamaguchi<sup>1,3</sup>, Kiyotsugu Yoshida<sup>1</sup> (<sup>1</sup>Dept. Biochem., Jikei Univ., Sch. Med., <sup>2</sup>Dept. Surg., Jikei Univ., Sch. Med., <sup>3</sup>Dept. OB/GYN., Jikei Univ., Sch. Med.)  
 乳癌細胞において DYRK2 は KLF4 を介して幹細胞性を制御する  
 井廻 良美<sup>1,2</sup>、三本 麗<sup>1,2</sup>、山口 乃里子<sup>1,3</sup>、吉田 清嗣<sup>1</sup> (<sup>1</sup>慈恵医大・生化学講座、<sup>2</sup>慈恵医大・外科、<sup>3</sup>慈恵医大・産婦人科)
- P-1137** **Maintenance of stemness of breast cancer cells by FRS2beta during mammary tumorigenesis**  
 Natsuko Kimura<sup>1</sup>, Yukino Machida<sup>5</sup>, Tatsunori Nishimura<sup>6</sup>, Arinobu Tojo<sup>1</sup>, Nobuaki Yoshida<sup>2</sup>, Kouichi Akashi<sup>3</sup>, Hideyuki Saya<sup>4</sup>, Issay Kitabayashi<sup>5</sup>, Noriko Gotoh<sup>1,6</sup> (<sup>1</sup>Div. of Mol. Therapy, Inst. of Med. Sci., Tokyo Univ., <sup>2</sup>Dev. Genet., IMS, Univ. Tokyo, <sup>3</sup>Dept. Med. & Biosystematic Sci. Faculty of Med., Kyusyu Univ., <sup>4</sup>Div. Gene Reg., IAMR., Keio Univ., <sup>5</sup>Div. of Hematological Malignancy, Natl. Cancer Ctr. Res. Inst., <sup>6</sup>Div. of cancer cell Bio., Cancer Res. Inst. Kanazawa Univ.)  
 乳癌における FRS2beta による癌幹細胞性の維持機構  
 木村 奈津子<sup>1</sup>、町田 雪乃<sup>5</sup>、西村 建徳<sup>6</sup>、東條 有伸<sup>1</sup>、吉田 進昭<sup>2</sup>、赤司 浩一<sup>3</sup>、佐谷 秀行<sup>4</sup>、北林 一生<sup>5</sup>、後藤 典子<sup>1,6</sup> (<sup>1</sup>東大・医科研・分子療法、<sup>2</sup>東大・医科研・発生工学、<sup>3</sup>九大・医・病態修復内科、<sup>4</sup>慶應大・医・先端研・遺伝子制御、<sup>5</sup>国立がん研究センター・造血腫瘍、<sup>6</sup>金大・がん進展制御・分子病態)
- P-1138** **The role of histone demethylase KDM4b in breast cancer stem cell**  
 Akiyoshi Komuro, Kazushige Ota, Hitoshi Okada (Dept. of Biochem., Faculty of Med., Kindai Univ.)  
 乳がん幹細胞における Histone demethylase KDM4b の役割  
 古室 睿義、太田 一成、岡田 斎 (近畿大学 医学部 生化学)
- Room P Oct. 6 (Thu.) 16:35-17:20 J/E
- |       |                                   |
|-------|-----------------------------------|
| P11-6 | Cancer stem cell (6)<br>がん幹細胞 (6) |
|-------|-----------------------------------|
- Chairperson: Tetsuo Mashima (Cancer Chemotherapy Ctr, JFCR)  
 座長：馬島 哲夫（がん研・がん化療セ・分子生物治療）
- P-1139** **Targeting GLUT1 inhibits the self-renewal and tumor-initiating capacity of cancer stem cells**  
 Masashi Okada<sup>1</sup>, Shuhei Suzuki<sup>2</sup>, Manabu Seino<sup>3</sup>, Hiroyuki Takeda<sup>2</sup>, Chifumi Kitanaka<sup>1</sup> (<sup>1</sup>Dept. Mol. Can. Sci., Yamagata Univ., Sch. Med., <sup>2</sup>Dep. Clin. Oncol., Yamagata Univ., Sch. Med., <sup>3</sup>Dep. Obst. Gyne., Yamagata Univ., Sch. Med.)  
 促進性グルコース輸送体 GLUT1 阻害は癌幹細胞の自己複製能と腫瘍形成能を抑制する  
 岡田 雅司<sup>1</sup>、鈴木 修平<sup>2</sup>、清野 学<sup>3</sup>、武田 弘幸<sup>2</sup>、北中 千史<sup>1</sup> (<sup>1</sup>山形大・医・腫瘍分子、<sup>2</sup>山形大・医・臨床腫瘍、<sup>3</sup>山形大・医・産婦)
- P-1140** **High expression of serine protease inhibitor is a novel indicator of stem cell tumorigenicity**  
 In Sun Hong<sup>1,2</sup>, Na-Hee Lee<sup>1,2</sup>, Jeong-Seok Nam<sup>3</sup> (<sup>1</sup>Lee Gil Ya Cancer and Diabetes Inst., Gachon Univ., <sup>2</sup>Dept. of Mol. Med., Sch. of Med., Gachon Univ., <sup>3</sup>Sch. of Life Sci., Gwangju Inst. of Sci. and Tech.)
- P-1141** **Daunorubicin induces caspase-independent apoptosis in cancer stem model cell.**  
 Akifumi Mizutani, Akifumi Mizutani, Kazuki Aizawa, Ryoma Onoue, Junko Masuda, Akimasa Seno, Arun Vaidyanath, Tomonari Kasai, Hiroshi Murakami, Masaharu Seno (Div. Medical Bioengineering, Grd. Sch. Natural Science, Okayama Univ.)  
 がん幹細胞モデル細胞におけるダウノルビシンによるカスペーゼ非依存アポトーシスの誘導  
 水谷 昭文、水谷 昭文、相澤 一輝、尾上 稔馬、増田 潤子、妹尾 彰正、バイディアナス アルン、笠井 智成、村上 宏、妹尾 昌治 (岡山大・院・自然科学・医用生命工学)
- P-1142** **Cytotoxic effects of bleomycin (BLM) on cancer stem cells originating from BLM-resistant murine tumor**  
 Jiro Fujimoto (Hyogo Prefecture Health Promotion Association)  
 ブレオマイシン耐性マウス腫瘍のがん幹細胞にブレオマイシンが効く  
 藤本 二郎 (兵庫県健康財団)
- P-1143** **Expression of drug resistance genes associated with hypoxia.**  
 Yukiko Nakahara<sup>1</sup>, Motofumi Koguchi<sup>1</sup>, Hiroshi Ito<sup>1</sup>, Tomihiro Wakamiya<sup>1</sup>, Ikuko Morisaki<sup>2</sup>, Yasutomo Momii<sup>2</sup>, Hirotaka Fudaba<sup>2</sup>, Minoru Fujiki<sup>2</sup>, Tatsuya Abe<sup>1</sup> (<sup>1</sup>Dept. of Neurosurg. Faculty of Med. Saga Univ., <sup>2</sup>Dept. of Neurosurg. Faculty of Med. Oita Univ.)  
 低酸素状態における薬剤耐性遺伝子発現の検討  
 中原 由紀子<sup>1</sup>、高口 素史<sup>1</sup>、伊藤 寛<sup>1</sup>、若宮 富浩<sup>1</sup>、森崎 郁子<sup>2</sup>、糸井 泰朋<sup>2</sup>、札場 博貴<sup>2</sup>、藤木 稔<sup>2</sup>、阿部 龍也<sup>1</sup> (<sup>1</sup>佐賀大・医・脳神経外科、<sup>2</sup>大分大・医・脳神経外科)
- P-1144** **A gastric cancer patient-derived cell model to investigate the relationship between cancer stemness and drug resistance**  
 Ryuhei Kawakami<sup>1,2</sup>, Tetsuo Mashima<sup>1</sup>, Toshiro Migita<sup>1</sup>, Koshi Kumagai<sup>3</sup>, Takeshi Sano<sup>3</sup>, Nobuyuki Mizunuma<sup>4</sup>, Kensei Yamaguchi<sup>4</sup>, Hiroyuki Seimiya<sup>1,2</sup> (<sup>1</sup>Div. Mol. Biother., Cancer Chemother. Ctr., JFCR, <sup>2</sup>Dept. Med. Sci., Grad. Sch. Frontier Sci., Univ. Tokyo, <sup>3</sup>Dept. Gastroent. Surg., Cancer Inst. Hosp., JFCR, <sup>4</sup>Dept. Gastroent. Med., Cancer Inst. Hosp., JFCR)  
 がん幹細胞性と薬剤耐性の結びつきを検証する患者由来胃癌細胞モデル  
 川上 隆兵<sup>1,2</sup>、馬島 哲夫<sup>1</sup>、右田 敏郎<sup>1</sup>、熊谷 厚志<sup>3</sup>、佐野 武<sup>3</sup>、水沼 信之<sup>4</sup>、山口 研成<sup>4</sup>、清宮 啓之<sup>1,2</sup> (<sup>1</sup>がん研・化療セ・分子生物治療、<sup>2</sup>東大院・新領域・メディ・がん分子標的、<sup>3</sup>がん研・有明病院・消化器外科、<sup>4</sup>がん研・有明病院・消化器内科)
- P-1145** **Clinical significance of CD44-positive cancer stem cells at invasion front of gastric cancer**  
 Hirokazu Kodama<sup>1,4</sup>, Satoshi Murata<sup>1,2</sup>, Mitsuaki Ishida<sup>3</sup>, Ngoc Pham Minh<sup>1</sup>, Tohru Miyake<sup>1</sup>, Tomoko Umeda<sup>1</sup>, Naomi Kitamura<sup>1</sup>, Yuki Kawai<sup>2</sup>, Tsuyoshi Yamaguchi<sup>1</sup>, Sachiko Kaida<sup>1</sup>, Katsushi Takebayashi<sup>1</sup>, Hiroshi Yamamoto<sup>1</sup>, Masaji Tani<sup>1</sup> (<sup>1</sup>Dept. Surg. Shiga Med. Univ., Sch. Med., <sup>2</sup>Cancer Ctr. Shiga Med. Univ. Hosp., <sup>3</sup>Dept. Path. Shiga Med. Univ. Hosp., <sup>4</sup>Hino Memorial Hospital)  
 胃癌浸潤最深部における CD44陽性癌幹細胞の存在と臨床的意義  
 児玉 泰一<sup>1,4</sup>、村田 聰<sup>1,2</sup>、石田 光明<sup>3</sup>、Ngoc Pham Minh<sup>1</sup>、三宅 亨<sup>1</sup>、梅田 朋子<sup>1</sup>、北村 直美<sup>1</sup>、河合 由紀<sup>2</sup>、山口 剛<sup>1</sup>、貝田 佐知子<sup>1</sup>、竹林 克士<sup>1</sup>、山本 寛<sup>1</sup>、谷 真至<sup>1</sup> (<sup>1</sup>滋賀医大・医・外科学講座、<sup>2</sup>滋賀医大病院・腫瘍センター、<sup>3</sup>滋賀医大病院・病理部、<sup>4</sup>医療法人社団昂会日野記念病院)

**12 Cancer immunity**

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

**P12-1 Tumor antigen**  
腫瘍抗原

Chairperson: Hideaki Tahara (Dept. of Surg. &amp; Bioengineering, ACRC, Inst. Med. Sci., The Univ. of Tokyo)

座長：田原 秀晃（東京大・先端研・臓器細胞工学）

**P-1146 Phenotypic analysis of Human colon cancer stem cell like cells and the search for the targets of CAR-T therapy**Masanori Fuse<sup>1</sup>, Inoue Moeko<sup>1</sup>, Tetsuhiko Asao<sup>1,2</sup>, Rie Ishibashi<sup>1</sup>, Kiyoshi Yoshimura<sup>1,3</sup> (<sup>1</sup>Dept. Exploratory Oncology Res. & Clin. Trial, Natl. Cancer Ctr., <sup>2</sup>Dept. Thoracic Oncology, Natl. Cancer Ctr., <sup>3</sup>Dept. Experimental Therapeutics, Natl. Cancer Ctr.)

大腸癌由来がん幹細胞の表現型解析およびCAR-T療法のための標的抗原の探索

布施 雅規<sup>1</sup>、井上 茗子<sup>1</sup>、朝尾 哲彦<sup>1,2</sup>、石橋 里絵<sup>1</sup>、吉村 清<sup>1,3</sup>（<sup>1</sup>国がん 先端医療開発センター、<sup>2</sup>国がん 中央病院 呼吸器内科、<sup>3</sup>国がん 中央病院 先端医療科）**P-1147 NKG2D / NKG2DL relation on gastric cancer**Tetsuhiko Asao<sup>1,2</sup>, Rie Ishibashi<sup>1</sup>, Moeko Inoue<sup>1</sup>, Masanori Fuse<sup>1</sup>, Kiyoshi Yoshimura<sup>1,3</sup> (<sup>1</sup>Div. Cancer Immunotherapy, Natl. Cancer Ctr., <sup>2</sup>Dept. Thoracic Oncology, <sup>3</sup>Dept. Developmental Ther.)

胃がんにおけるNKG2D / NKG2DLの意義

朝尾 哲彦<sup>1,2</sup>、石橋 里絵<sup>1</sup>、井上 茗子<sup>1</sup>、布施 雅規<sup>1</sup>、吉村 清<sup>1,3</sup>（<sup>1</sup>国立がん研究センター免疫療法開発分野、<sup>2</sup>国立がん研究センター中央病院呼吸器内科、<sup>3</sup>国立がん研究センター中央病院先端医療科）**P-1148 Chemotherapeutic agent pretreatment enhances the  $\gamma\delta$  T cell cytotoxicity against urinary bladder cancer cells**Teruki Shimizu<sup>1,2</sup>, Makou Tomogane<sup>1</sup>, Osamu Ukimura<sup>2</sup>, Eishi Ashihara<sup>1</sup> (<sup>1</sup>Department of Clinical and Translational Physiology, Kyoto Pharmaceutical University, <sup>2</sup>Department of Urology, Kyoto Prefectural University of Medicine)膀胱癌細胞株に対する抗癌剤前処置は $\gamma\delta$ T細胞による抗腫瘍効果を増強する清水 輝記<sup>1,2</sup>、友金 真光<sup>1</sup>、浮村 理<sup>2</sup>、芦原 英司<sup>1</sup>（<sup>1</sup>京都薬科大学・病態生理学分野、<sup>2</sup>京都府立医科大学・泌尿器科）**P-1149 Combination of HER family inhibitor and HER-3-targeted immunotherapy against head and neck squamous cell carcinoma**Takumi Kumai<sup>1,2</sup>, Kenzo Ohara<sup>1,2</sup>, Yui Hirata<sup>1,2</sup>, Takayuki Ohkuri<sup>1</sup>, Akemi Kosaka<sup>1</sup>, Toshihiro Nagato<sup>1,2</sup>, Kei Ishibashi<sup>1</sup>, Kensuke Oikawa<sup>1</sup>, Yasuaki Harabuchi<sup>1</sup>, Hiroya Kobayashi<sup>1</sup> (<sup>1</sup>Dept. Path, Asahikawa Med. Univ., <sup>2</sup>Dept. Otolaryngology, Head and Neck Surg., Asahikawa Med. Univ.)

HER-3標的ヘルパーCD4T細胞による抗腫瘍効果とHER阻害薬併用による相乗効果の検討

熊井 琢美<sup>1,2</sup>、大原 賢三<sup>1,2</sup>、平田 結<sup>1,2</sup>、大栗 敏幸<sup>1</sup>、小坂 朱<sup>1</sup>、長門 利純<sup>1,2</sup>、石橋 佳<sup>1</sup>、及川 賢輔<sup>1</sup>、原渕 保明<sup>2</sup>、小林 博也<sup>1</sup>（旭川医大・医・病理・免疫病理、<sup>2</sup>旭川医大・医・耳鼻咽喉科・頭頸部外科）**P-1150  $\gamma\delta$  T cells exert cytotoxicity against cancer cells regardless of PD-L1 expression in cancer cells.**Mako Tomogane<sup>1</sup>, Teruki Shimizu<sup>1,2</sup>, Yuki Toda<sup>1</sup>, Kazuyuki Takata<sup>1</sup>, Eishi Ashihara<sup>1</sup> (<sup>1</sup>Department of Clinical and Translational Physiology, Kyoto Pharmaceutical University, <sup>2</sup>Department of Urology, Kyoto Prefectural University) $\gamma\delta$ T細胞はPD-L1を発現しているがん細胞に対しても抗腫瘍効果を示す友金 真光<sup>1</sup>、清水 輝記<sup>1,2</sup>、戸田 侑紀<sup>1</sup>、高田 和幸<sup>1</sup>、芦原 英司<sup>1</sup>（京都薬科大学・病態生理学分野、<sup>2</sup>京都府立医科大学・泌尿器科）**P-1151 Immune monitoring in patients with bone and soft tissue sarcomas**Youngji Kim<sup>1,2,3</sup>, Eisuke Kobayashi<sup>1</sup>, Daisuke Kubota<sup>3</sup>, Ayumu Ito<sup>4</sup>, Yoshiyuki Suehara<sup>3</sup>, Kazuo Kaneko<sup>3</sup>, Akira Kawai<sup>1</sup>, Hirokazu Chuman<sup>1</sup>, Shigehisa Kitano<sup>4</sup> (<sup>1</sup>Div. Musculoskeletal Oncology, Natl. Cancer Ctr. Host., <sup>2</sup>Dept. Experimental Therapeutics., Natl. Cancer Ctr. Host., <sup>3</sup>Dept. Orthopedic Surg., Juntendo Univ. Sch. of Med., <sup>4</sup>Dept. Hematopoietic Stem Cell Transplantation, Natl. Cancer Ctr. Host.)

肉腫(悪性骨軟部腫瘍)患者における免疫モニタリング

金 栄智<sup>1,2,3</sup>、小林 英介<sup>1</sup>、窪田 大介<sup>3</sup>、伊藤 歩<sup>4</sup>、末原 義之<sup>3</sup>、金子 和夫<sup>3</sup>、川井 章<sup>1</sup>、中馬 広一<sup>1</sup>、北野 滋久<sup>4</sup>（<sup>1</sup>国立がん研究センター骨軟部腫瘍科、<sup>2</sup>国立がん研究センター 先端医療科、<sup>3</sup>順天堂大学整形外科、<sup>4</sup>国立がん研究センター 造血幹細胞移植科）**P-1152 Expression and roles of asialo-series gangliosides in human cancer cell lines**Robiul H. Bhuiyan<sup>1,2</sup>, Yuji Kondo<sup>1</sup>, Tokiaki Yamaguchi<sup>1</sup>, Noriyo Tokuda<sup>1</sup>, Yuki Ohkawa<sup>2</sup>, Yuhsuke Ohmi<sup>1</sup>, Maiko Takano<sup>1,2</sup>, Pu Zhang<sup>1,2</sup>, Nobutoshi Esaki<sup>1,2</sup>, Yoshio Yamauchi<sup>1</sup>, Keiko Furukawa<sup>3</sup>, Tetsuya Okajima<sup>1</sup>, Koichi Furukawa<sup>1,2</sup> (<sup>1</sup>Dept. of Biochem. II, Nagoya Univ. Grad. Sch. of Med., <sup>2</sup>Chubu Univ. College of Life and Health Sci., <sup>3</sup>Dept. of Biomed. Sci., Chubu Univ.)

Room P Oct. 6 (Thu.) 16:35-17:20

**P12-2 Antitumor effector cells and their induction (1)**  
抗腫瘍エフェクター細胞とその誘導 (1)Chairperson: Hideo Yagita (Dept. of Immunol., Juntendo Univ. Sch. of Med.)  
座長：八木田 秀雄（順天堂大・医・免疫）**P-1153 Development of "TCR-multimer": Toward the evaluation of HLA/peptide complex presented on cell surface.**Kazue Watanabe<sup>1,2</sup>, Tomohide Tsukahara<sup>2</sup>, Toshihiko Torigoe<sup>2</sup>, Shingo Toji<sup>1</sup> (<sup>1</sup>Med. & Biological Lab. co., Ltd., <sup>2</sup>Dept. of Path, Sapporo Med. Univ., Sch. Med.)

細胞表面におけるHLA／ペプチド複合体を検出可能なTCRマルチマーの開発

渡邊 一絵<sup>1,2</sup>、塚原 智英<sup>2</sup>、鳥越 俊彦<sup>2</sup>、田路 真悟<sup>1</sup>（<sup>1</sup>（株）医学生物学研究所、<sup>2</sup>札医・医・病理）**P-1154 Inhibitory effect of CD4<sup>+</sup>CD25<sup>+</sup> Treg cells on anti-tumor immunity in lymph node metastases**Kumiko Goto<sup>1,2</sup>, Takayuki Kanazawa<sup>1,2</sup>, Atsunari Kawashima<sup>1</sup>, Kota Iwahori<sup>1</sup>, Akiko Morimoto<sup>1</sup>, Hisashi Wada<sup>1</sup> (<sup>1</sup>Dept. of Clin. Res. in Tumor Immunology, Osaka Univ., <sup>2</sup>Shionogi Co. Ltd.)

リンパ節転移巣におけるTregの抑制性細胞としての可能性

後藤 久充子<sup>1,2</sup>、金沢 崇之<sup>1,2</sup>、河嶋 厚成<sup>1</sup>、岩堀 幸太<sup>1</sup>、森本 晶子<sup>1</sup>、和田 尚<sup>1</sup>（大阪大・医・臨床腫瘍免疫、<sup>2</sup>塩野義製薬）**P-1155 Analysis of TCR repertoire usage and identification of antigens recognized by CT26 tumor-infiltrating CD8<sup>+</sup> T cells**Keisuke Fujii<sup>1</sup>, Yoshihiro Miyahara<sup>1</sup>, Daisuke Muraoka<sup>3</sup>, Kiyomi Saito<sup>2</sup>, Hiroshi Hamana<sup>2</sup>, Hiroyuki Kishi<sup>2</sup>, Hiroshi Shiku<sup>1</sup> (<sup>1</sup>Mie University Graduate School of medicine, <sup>2</sup>Graduate School of Medicine and Pharmaceutical Sciences, University of Toyama, <sup>3</sup>School of Pharmaceutical Sciences, University of Shizuoka)CT26腫瘍局所浸潤CD8<sup>+</sup>T細胞のTCRレパトア解析と認識エピトープの同定藤井 啓介<sup>1</sup>、宮原 廉裕<sup>1</sup>、村岡 大輔<sup>3</sup>、下岡 清美<sup>2</sup>、浜名 洋<sup>2</sup>、岸 裕幸<sup>2</sup>、珠玖 洋<sup>1</sup>（三重大学大学院医学系研究科、<sup>2</sup>富山大学大学院医学系学研究部、<sup>3</sup>静岡県立大学薬学研究院）**P-1156 A cancer testis antigen BORIS is expressed in lung cancer stem-like cells and can be a target of immunotherapy.**Ryota Horibe<sup>1,2</sup>, Yoshihiko Hirohashi<sup>1</sup>, Kazue Watanabe<sup>1,3</sup>, Eri Atsuyama<sup>3</sup>, shingo toji<sup>3</sup>, Hiroki Takahashi<sup>2</sup>, Toshihiko Torigoe<sup>1</sup> (<sup>1</sup>1st Dept. of Pathology, Sapporo Med. Univ., <sup>2</sup>Dept. of Respiratory Med. & Allergology, Sapporo Med. Univ., <sup>3</sup>Medical & Biological Laboratories Co., Ltd.)

癌精巢抗原BORISの肺癌幹細胞様細胞における発現とそれを標的とした免疫療法の検討

堀部 亮多<sup>1,2</sup>、廣橋 良彦<sup>1</sup>、渡邊 一絵<sup>1,3</sup>、厚山 恵理<sup>3</sup>、田路 真悟<sup>3</sup>、高橋 弘毅<sup>2</sup>、鳥越 俊彦<sup>1</sup>（札幌医大・医・病理学第一講座、<sup>2</sup>札幌医大・医・呼吸器アレルギー内科学講座、<sup>3</sup>医学生物学研究所）**P-1157 Comprehensive analysis of T cell responses specific to neoantigens derived from gene mutations**Junya Ohtake<sup>1</sup>, Satoshi Wada<sup>1</sup>, Erica Yada<sup>1</sup>, Yuki Fujimoto<sup>1</sup>, Hidemi Uchiyama<sup>1</sup>, Shintaro Yoshida<sup>1</sup>, Tetsuro Sasada<sup>1</sup> (Kanagawa Cancer Ctr. Res. Inst., Dept. Cancer Immunol.)

突然変異遺伝子由来のネオアンチゲンに対する特異的T細胞反応の網羅的解析

大竹 淳矢、和田 聰、矢田 英理香、藤本 佑希、内山 秀美、吉田 慎太郎、笹田 哲郎（神奈川県立がんセンター・臨研・がん免疫）

**P-1158 The immune checkpoint molecule, PD-L1 is a specific tumor associated antigen for CD4 helper T lymphocytes.**Yui Hirata<sup>1</sup>, Kenzo Ohara<sup>1,2</sup>, Kei Ishibashi<sup>1</sup>, Takumi Kumai<sup>1,2</sup>, Takayuki Ohkuri<sup>1</sup>, Akemi Kosaka<sup>1</sup>, Toshihiro Nagato<sup>2</sup>, Kensuke Oikawa<sup>3</sup>, Yasuaki Harabuchi<sup>2</sup>, Hiroya Kobayashi<sup>1</sup> (<sup>1</sup>Dept. Immuno Pathol., Asahikawa Med. Univ., Sch. Med., <sup>2</sup>Dept. Otolaryngology, Asahikawa Med. Univ., Sch. Med., <sup>3</sup>Dept. Nursing, Asahikawa Med. Univ., Sch. Med.)

免疫チェックポイント分子PD-L1を標的としたヘルパーT細胞ク

## ローンによる免疫療法

平田 結<sup>1</sup>、大原 賢三<sup>1,2</sup>、石橋 佳<sup>1</sup>、熊井 琢美<sup>1,2</sup>、大栗 敬幸<sup>1</sup>、小坂 朱<sup>1</sup>、長門 利純<sup>2</sup>、及川 賢輔<sup>3</sup>、原渕 保明<sup>2</sup>、小林 博也<sup>1</sup> (<sup>1</sup>旭川医大・医・免疫病理、<sup>2</sup>旭川医科大学・医・耳鼻咽喉科・頭頸部外科、<sup>3</sup>旭川医科大学・医・看護学講座)

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

### P12-3 Antitumor effector cells and their induction (2)

抗腫瘍エフェクター細胞とその誘導 (2)

Chairperson: Yuji Heike (Immunotherapy & Cell Therapy Service St Lukes International Univ. & Hosp.)

座長: 平家 勇司 (聖路加国際病院・免疫・細胞治療)

### P-1159 PD-1 blockade enhances priming of effector T cells during homeostatic proliferation after cytotoxic therapy

Miho Takahashi, Satoshi Watanabe, Toshiaki Kikuchi (Dept. of Respiratory Medicine and Infectious Diseases, Niigata Univ.)

PD-1 抗体療法は殺細胞性治療後の回復期におけるエフェクター T 細胞の導入を増強する

高橋 美帆、渡部 聰、菊地 利明 (新潟大学・呼吸器感染症内科)

### P-1160 TCR sequencing of peptide-specific T cells in advanced colorectal cancer patients treated with cancer peptide vaccines

Kazuma Kiyotani<sup>1</sup>, Kenji Tamura<sup>1</sup>, Rui Yamaguchi<sup>2</sup>, Seiya Imoto<sup>3</sup>, Hiroko Takenouchi<sup>4</sup>, Satoru Miyano<sup>2</sup>, Shoichi Hazama<sup>4</sup>, Yusuke Nakamura<sup>1</sup> (<sup>1</sup>Department of Medicine, The University of Chicago, <sup>2</sup>Human Genome Center, Institute of Medical Science, University of Tokyo, <sup>3</sup>Health Intelligence Center, Institute of Medical Science, University of Tokyo, <sup>4</sup>Yamaguchi University Graduate School of Medicine)

大腸癌患者におけるペプチドワクチン特異的 T 細胞の TCR シーケンス解析

清谷 一馬<sup>1</sup>、田村 賢司<sup>1</sup>、山口 類<sup>2</sup>、井元 清哉<sup>3</sup>、竹之内 寛子<sup>4</sup>、宮野 悟<sup>2</sup>、裕 彰<sup>4</sup>、中村 祐輔<sup>1</sup> (<sup>1</sup>シカゴ大・医、<sup>2</sup>東大・医科研・ヒトゲノムセ、<sup>3</sup>東大・医科研・ヘルスインテリジェンスセ、<sup>4</sup>山口大・医)

### P-1161 Impairment of glucose metabolism in peripheral CD8+ T cells derived from cancer patients

Mototsugu Watanabe<sup>1,2</sup>, Shingo Eikawa<sup>2</sup>, Nahoko Tomonobu<sup>2</sup>, Yuji Kimura<sup>2,3</sup>, Takenori Uehara<sup>2,4</sup>, Yuki Kunisada<sup>2,5</sup>, Shinichi Toyooka<sup>1</sup>, Shinichiro Miyoshi<sup>1</sup>, Heiichiro Udon<sup>2</sup> (<sup>1</sup>Dept. Thoracic Surg. Okayama Univ., <sup>2</sup>Dept. Immunol. Okayama Univ., <sup>3</sup>Dept. Gastroenterol. Surg. Okayama Univ., <sup>4</sup>Dept. Orthopaedic Surg. Okayama Univ., <sup>5</sup>Dept. Oral and Maxillofacial Surg. Okayama Univ.)

癌患者由来末梢血 CD8+ T 細胞における糖代謝の障害

渡邊 元嗣<sup>1,2</sup>、榮川 伸吾<sup>2</sup>、友信 奈保子<sup>1</sup>、木村 裕司<sup>2,3</sup>、上原 健敬<sup>4</sup>、國定 勇希<sup>2,5</sup>、豊岡 伸一<sup>1</sup>、三好 新一郎<sup>1</sup>、鶴殿 平一郎<sup>2</sup> (<sup>1</sup>岡山大学呼吸器・乳腺内分泌外科学、<sup>2</sup>岡山大学免疫学、<sup>3</sup>岡山大学消化器外科学、<sup>4</sup>岡山大学整形外科学、<sup>5</sup>岡山大学口腔外科学)

### P-1162 Metformin demands glucose for the maintenance of polyfunctional effector T cells in tumor microenvironment

Nahoko Tomonobu<sup>1</sup>, Shingo Eikawa<sup>1</sup>, Fang He<sup>1</sup>, Nahoko Yamashita<sup>1</sup>, Mototsugu Watanabe<sup>1</sup>, Yuji Kimura<sup>1</sup>, Yuki Kunisada<sup>2</sup>, Takenori Uehara<sup>1</sup>, Heiichiro Udon<sup>1</sup> (<sup>1</sup>Dept. Immunol., Okayama Univ., <sup>2</sup>Dept. Oral and Maxillofacial Surg. and Biopathol., Okayama Univ., <sup>3</sup>Dept. Orthopaedic Surg., Okayama Univ.)

メトホルミンは腫瘍局所で多機能性エフェクター T 細胞を維持させるためにグルコースを必要とする

友信 奈保子<sup>1</sup>、榮川 伸吾<sup>1</sup>、賀 芳<sup>1</sup>、山下 奈穂子<sup>1</sup>、渡邊 基嗣<sup>1</sup>、木村 裕司<sup>1</sup>、國定 勇希<sup>2</sup>、上原 健敬<sup>3</sup>、鶴殿 平一郎<sup>2</sup> (<sup>1</sup>岡山大学・医歯薬・免疫、<sup>2</sup>岡山大学・医歯薬・口腔外科、<sup>3</sup>岡山大学・医歯薬・整形外科)

### P-1163 Cellular Adjuvant, Direct Cytotoxicity of Re-differentiated iNKT-like Cells from Human Induced Pluripotent Stem Cells

Shuichi Kitayama<sup>1</sup>, Rong Zhang<sup>2,3</sup>, Shoichi Iriyuchi<sup>1</sup>, Tatsuaki Iwama<sup>3</sup>, Yasutaka Mizorō<sup>1</sup>, Akira Watanabe<sup>1</sup>, Kiyotaka Kuzushima<sup>2</sup>, Yasushi Uemura<sup>2,3</sup>, Shin Kaneko<sup>1</sup> (<sup>1</sup>Center for iPSC Cell Research and Application (CiRA), Kyoto University, <sup>2</sup>Division of Immunology, Aichi Cancer Center Research Institute (ACCR), <sup>3</sup>Exploratory Oncology Research & Clinical Trial Center, National Cancer Center (NCC))

アジュバント効果並びに細胞傷害能を有するヒト iPSC 細胞由来 iNKT 細胞の再分化誘導

喜多山 秀一<sup>1</sup>、張 工イ<sup>2,3</sup>、入口 翔一<sup>1</sup>、岩間 達章<sup>3</sup>、溝曾路 祥孝<sup>1</sup>、渡辺 亮<sup>1</sup>、葛島 清隆<sup>2</sup>、植村 靖史<sup>2,3</sup>、金子 新一<sup>1</sup> (<sup>1</sup>京都大学・iPSC 細胞研究所、<sup>2</sup>愛知県がんセンター研究所・腫瘍免疫学部、<sup>3</sup>国立がん研究センター)

### P-1164 Characterization of immuno-suppressive NKT cells in mouse lungs

Shingo Kato<sup>1,2</sup> (<sup>1</sup>Vaccine Branch, NCI, NIH, USA, <sup>2</sup>Gastroenterology and Hepatology, Yokohama City University, Japan)

マウス肺における免疫抑制性 NKT 細胞の解析

加藤 真吾<sup>1,2</sup> (<sup>1</sup>Vaccine Branch, NCI, NIH, USA、<sup>2</sup>横浜市立大学肝胆脾消化器病学)

### P-1165 Combination Treatment of Bone Marrow DCs and X-ray Irradiation in a Melanoma Mouse Model

Yuzi Wang<sup>1</sup>, Ariungerel Gerelchuluun<sup>2</sup>, Junko Zenkoh<sup>2</sup>, Xiaokang Li<sup>3</sup>, Koji Tsuboi<sup>2</sup> (Comprehensive Human Science, University of Tsukuba, <sup>2</sup>School of Medicine and Medical Sciences, University of Tsukuba, <sup>3</sup>Division of Radiation Safety, Kokuritsu Seiiku Medical Research Center Hospital.)

Room P Oct. 6 (Thu.) 16:35-17:20

J

### P12-4 Vaccination therapy

がんワクチン療法

Chairperson: Takuya Tsunoda (Dept. of Clin. Immuno Oncology, Showa Univ.)

座長: 角田 卓也 (昭和大・臨床免疫腫瘍)

### P-1166 Phase I clinical study of CHP-NY-ESO-1 vaccine and a novel adjuvant MIS416 for the patients with refractory UC or CRPC

Yasutaka Tono<sup>1</sup>, Mikiya Ishihara<sup>2</sup>, Yoshihiro Miyahara<sup>3</sup>, Taizo Shiraiishi<sup>4</sup>, Eiichi Sato<sup>5</sup>, Shinichi Kageyama<sup>3</sup>, Naoyuki Katayama<sup>1</sup>, Hiroshi Shiku<sup>3</sup>, Yoshiki Sugimura<sup>6</sup> (<sup>1</sup>Dept. Hematology & Oncology, Mie Univ., Grad. Sch. Med., <sup>2</sup>Cancer center, Mie Univ. Hosp., <sup>3</sup>Dept. Immuno-Gene Therapy, Mie Univ., Grad. Sch. Med., <sup>4</sup>Dept. Path., Mie Univ. Hosp., <sup>5</sup>Dept. Path., Tokyo Med. Univ. Hosp., <sup>6</sup>Dept. Nephro-Urologic Surgery and Andrology, Mie Univ. Grad. Sch. Med.)

難治性尿路上皮がんおよび前立腺がんに対する CHP-NY-ESO-1 がんワクチンと MIS416 の併用療法の第Ⅰ相臨床試験

戸野 泰孝<sup>1</sup>、石原 幹也<sup>2</sup>、宮原 廉裕<sup>3</sup>、白石 泰三<sup>4</sup>、佐藤 永一<sup>5</sup>、影山 優一<sup>3</sup>、片山 直之<sup>1</sup>、珠玖 洋<sup>3</sup>、杉村 芳樹<sup>6</sup> (<sup>1</sup>三重大・医・血液・腫瘍内科、<sup>2</sup>三重大・医・附属病院がんセンター、<sup>3</sup>三重大・医・遺伝子・免疫細胞治療学、<sup>4</sup>三重大・医・病理、<sup>5</sup>東京医大・医・病理、<sup>6</sup>三重大・医・腎泌尿器外科)

### P-1167 Establishment of an artificial CTL clone expressing the TCR highly reacting with autologous sarcoma stem cell antigen.

Yuji SHIBAYAMA<sup>1,2</sup>, Tomohide TSUKAHARA<sup>1</sup>, Toshihiko TORIGOE<sup>1</sup> (<sup>1</sup>Department of Pathology 1, Sapporo Medical University, <sup>2</sup>Department of Orthopaedic Surgery, Sapporo Medical University)

肉腫幹細胞抗原を認識する TCR を持つ人工 CTL クローンの開発

芝山 雄二<sup>1,2</sup>、塚原 智英<sup>1</sup>、鳥越 俊彦<sup>1</sup> (<sup>1</sup>札幌医科大学病理学第一講座、<sup>2</sup>札幌医科大学整形外科学講座)

### P-1168 Development of new cancer peptide vaccine therapy that targets XCR1+ dendritic cell

Yuki Mizumoto<sup>1</sup>, Masahiro Katsuda<sup>1</sup>, Motoki Miyazawa<sup>1</sup>, Yuji Kitahata<sup>1</sup>, Ayako Tsumura<sup>1</sup>, Atsushi Miyamoto<sup>1</sup>, Mikihito Nakamori<sup>1</sup>, Toshiyasu Ojima<sup>1</sup>, Hiroaki Hemmi<sup>2</sup>, Tsuneyasu Kaisho<sup>2</sup>, Hiroki Yamaue<sup>1</sup> (<sup>1</sup>2nd. Dept. Surg., Wakayama Med. Univ., <sup>2</sup>Dept. Immunol. Inst. Advanced Medicine, Wakayama Med. Univ.)

XCR1+樹状細胞をターゲットとした新規がんペプチドワクチン療法の開発

水本 有紀<sup>1</sup>、勝田 将裕<sup>1</sup>、宮澤 基樹<sup>1</sup>、北畠 裕司<sup>1</sup>、津村 亜矢子<sup>1</sup>、宮本 篤<sup>1</sup>、中森 幹人<sup>1</sup>、尾島 敏康<sup>1</sup>、邊見 弘明<sup>2</sup>、改正 恒康<sup>2</sup>、山上 裕機<sup>1</sup> (<sup>1</sup>和歌山医大・第2外科、<sup>2</sup>和歌山医大・先端医研・生体調節機構研究部)

### P-1169 Evaluation of IgG response to prostate-related antigen of peptide vaccination for metastatic recurrent breast cancer

Uhi Toh<sup>1</sup>, Nobutaka Iwakuma<sup>1</sup>, Mina Okabe<sup>1</sup>, Shuko Saku<sup>1</sup>, Momoko Akashi<sup>1</sup>, Yoshito Akagi<sup>1</sup>, Akira Yamada<sup>2</sup>, Shigeki Shijijo<sup>3</sup>, Kyogo Itoh<sup>3</sup> (<sup>1</sup>Dept. Surgery, Kurume Univ., Sch. Med., <sup>2</sup>Innovative Cancer Therapy Research Center, Kurume Univ., <sup>3</sup>Cancer Vaccine Center, Kurume Univ.)

血清抗前立腺関連抗原 (prostate-related antigen) 抗体価の乳癌ペプチドワクチン療法における臨床的意義に関する検討

唐宇飛<sup>1</sup>、岩熊 伸高<sup>1</sup>、岡部 実奈<sup>1</sup>、朔 周子<sup>1</sup>、赤司 桃子<sup>1</sup>、赤木 由人<sup>1</sup>、山田 亮<sup>2</sup>、七條 茂樹<sup>3</sup>、伊東 恭悟<sup>3</sup> (<sup>1</sup>久留米大・医・外科学、<sup>2</sup>久留米大・先端がん治療研究センター、<sup>3</sup>久留米大学がんワクチンセンター)

**13 Growth factors/cytokines/hormones**

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

**P13-1 Growth- and differentiation-regulating factors  
増殖・分化調節因子**Chairperson: Yasufumi Sato (Dept. of Vasc. Biol., IDAC, Tohoku Univ.)  
座長: 佐藤 靖史 (東北大・加齢研・腫瘍循環)**P-1170 IGF1, IGFBP3 and the risk of esophageal cancer in a nested case-control study**

*Yasushi Adachi<sup>1,2</sup>, Masanori Nojima<sup>3</sup>, Mitsuji Mori<sup>4</sup>, Kentaro Yamashita<sup>1</sup>, Shigeru Sasaki<sup>1</sup>, Takao Endo<sup>2</sup>, Hiroshi Nakase<sup>1</sup>, Kiyomi Sakata<sup>5</sup>, Akiko Tamakoshi<sup>6</sup> (<sup>1</sup>Dept. Gastroenterol., Sapporo Med. Univ., Sch. Med., <sup>2</sup>Div. Gastroenterol., Sapporo Shirakaba-dai Hosp., <sup>3</sup>Inst. Med. Sci., Univ. of Tokyo, <sup>4</sup>Dept. Public Health, Sapporo Med. Univ., Sch. Med., <sup>5</sup>Dept. Hygiene Preventive Med., Iwate Med. Univ., Sch. Med., <sup>6</sup>Dept. Public Health, Hokkaido Univ. Sch. Med.)*

**IGF1, IGFBP3 と食道癌発症リスク**

足立 竣<sup>1,2</sup>、野島 正寛<sup>3</sup>、森 滉<sup>4</sup>、山下 健太郎<sup>1</sup>、佐々木 茂<sup>1</sup>、遠藤 高夫<sup>2</sup>、仲瀬 裕志<sup>1</sup>、坂田 清美<sup>5</sup>、玉腰 晓子<sup>6</sup> (<sup>1</sup>札幌医大・医・消化器内科、<sup>2</sup>札幌しらかば台病院・消化器科、<sup>3</sup>東京大学・医科学研究所、<sup>4</sup>札幌医大・医・公衆衛生、<sup>5</sup>岩手医大・衛生学公衆衛生学、<sup>6</sup>北海道大・医・公衆衛生)

**P-1171 A Dominant-negative FGF2 Mutants Suppress Angiogenesis**

*Nobuaki Hatori, Seiji Mori, Nariaki Matsuura, Hirofumi Yamamoto (Osaka Univ.)*

**FGF2 変異体は血管新生を抑制する**

羽鳥 暢晃、森 誠司、松浦 成昭、山本 浩文 (大阪大学)

**P-1172 Possible association between VEGF gene amplification and intratumoral microvessel density in human gastric cancer**

*Hiroyuki Kohno<sup>1</sup>, Takeru Oyama<sup>2</sup> (<sup>1</sup>Dept. Immunol., Kanazawa Med. Univ. Sch., <sup>2</sup>Dept. of Mol. and Cellular Pathol.)*

**ヒト胃癌における VEGF 遺伝子増幅が腫瘍内微小血管密度に関与する可能性に対する検討**

甲野 裕之<sup>1</sup>、尾山 武<sup>2</sup> (<sup>1</sup>金沢医科大学・医・免疫学、<sup>2</sup>金沢大学・医・分子細胞病理学)

**P-1173 Status of E74-like factor 5 (ELF5) in Ductal Carcinoma in Situ of the Triple Negative Breast Cancers (TNBC) Subtype**

*Fumiya Omata<sup>1</sup>, Keely M. McNamara<sup>1</sup>, Koyu Suzuki<sup>2</sup>, Yang Yang<sup>3</sup>, Eriko Abe<sup>3</sup>, Hisashi Hirakawa<sup>4</sup>, Ishida Takanori<sup>5</sup>, Noriaki Ohuchi<sup>2</sup>, Hironobu Sasano<sup>1</sup> (<sup>1</sup>Tohoku Univ., Sch. of Med., Dept. of Anatomical Path., <sup>2</sup>Tohoku Univ., Sch. of Med., Dept. of Surg. Oncology, <sup>3</sup>Dept. of Path. St Lukes Hosp., Tokyo, Japan, <sup>4</sup>Dept. of Path. Tohoku Kosai Hosp., Sendai, Japan)*

**P-1174 Acidic microenvironment contributes the development of cancer malignancy via IL-8 production**

*Masako Nakanishi, Yasuteru Muragaki (Dept. Pathol., Wakayama Med. Univ.)*

**腫瘍巣の酸性微小環境は IL-8 の発現誘導を介して癌の悪性化に関与する**

中西 雅子、村垣 泰光 (和医大・医・病理)

**P-1175 GD3-expressing glioma reduce M1-like phenotypes of glioma-associated microglia/macrophages via inflammatory cytokines**

*Pu Zhang<sup>1,2</sup>, Yuki Ohkawa<sup>2</sup>, RH Bhuiyan<sup>1,2</sup>, Yuhsuke Ohmi<sup>1</sup>, Maiko Takano<sup>1,2</sup>, Keiko Furukawa<sup>2</sup>, Koichi Furukawa<sup>1,2</sup> (<sup>1</sup>Dept. Biochem II, Nagoya Univ. Grad. Sch. Med., <sup>2</sup>College of Life and Health Sciences, Chubu Univ.)*

張 璞<sup>1,2</sup>、大川 祐樹<sup>2</sup>、RH Bhuiyan<sup>1,2</sup>、大海 雄介<sup>1</sup>、高野 舞子<sup>1,2</sup>、古川 圭子<sup>2</sup>、古川 鋼一<sup>1,2</sup> (<sup>1</sup>名大生化学第二講座、<sup>2</sup>中部大学生命健康科学研究所)

**P-1176 The C5a-C5a receptor system promotes cancer metastasis and C5a in the cancer microenvironment enhances cancer invasion**

*Takahisa Imamura<sup>1</sup>, Masakazu Yoneda<sup>2</sup>, Yoshiaki Kawano<sup>3</sup>, Hideki Nakayama<sup>2</sup> (<sup>1</sup>Dept. Mol. Pathol, Faculty Life Sci., Kumamoto Univ., <sup>2</sup>Dept. Oral & Maxillofacial Surgery, Faculty Life Sci., Kumamoto Univ., <sup>3</sup>Dept. Urology, Faculty Life Sci., Kumamoto Univ.)*

**C5a-C5a 受容体系は癌転移を促進し、癌微小環境 C5a は癌浸潤を亢進する**

今村 隆寿<sup>1</sup>、米田 雅一<sup>2</sup>、河野 吉昭<sup>3</sup>、中山 秀樹<sup>2</sup> (<sup>1</sup>熊本大・院・生命科学研究部・分子病理学、<sup>2</sup>熊本大・院・生命科学研究部・歯科口腔外科学、<sup>3</sup>熊本大・院・生命科学研究部・泌尿器科学)

Room P Oct. 6 (Thu.) 16:35-17:20

**P13-2 Growth Factor Receptor**

増殖因子受容体

Chairperson: Kunio Matsumoto (Cancer Res. Inst., Kanazawa Univ.)  
座長: 松本 邦夫 (金沢大・がん進展制御研・腫瘍動態制御)**P-1177 DDX3X dependent VEGFR expression in lung cancer cells harboring EGFR mutation resulted in EGFR-TKI resistance**

*Aya Ohtsubo<sup>1</sup>, Hiroshi Kagamu<sup>2</sup>, Satoshi Shoji<sup>1</sup>, Toshiaki Kikuchi<sup>1</sup> (<sup>1</sup>Resp. and Infect. Dis. Med., Niigata Univ., Sch. Med., <sup>2</sup>Resp. Med., Int. Med. Cent., Saitama Med. Sch.)*

**VEGFR 依存性 EGFR-TKI 耐性メカニズム**

大坪 亜矢<sup>1</sup>、各務 博<sup>2</sup>、庄子 聰<sup>1</sup>、菊地 利明<sup>1</sup> (<sup>1</sup>新潟大・医・呼吸器感染症内科、<sup>2</sup>埼玉医大・国際セ・呼内)

**P-1178 Ertredin, a new inhibitor of sphere & tumor growth, regulates mitochondria & glycolysis in EGFRvIII-transformed cells**

*Sonoko Atsumi<sup>1</sup>, Manabu Kawada<sup>1</sup>, Masabumi Shibuya<sup>2</sup> (<sup>1</sup>Inst. Microbial Chemist. Lab. Onco., <sup>2</sup>Jobu Univ.)*

**新規腫瘍抑制物質 Ertredin は EGFRvIII 発現細胞においてミトコンドリア機能および解糖系を調節する**

渥美 園子<sup>1</sup>、川田 学<sup>1</sup>、澁谷 正史<sup>2</sup> (<sup>1</sup>微化研・第1生物活性、<sup>2</sup>上武大学)

**P-1179 p38 regulates non-canonical trafficking of ligand-unbound EGFR in EGF signaling**

*Tomohiro Tanaka, Yue Zhou, Hiroaki Sakurai (Cancer Cell Biol., Grad. Sch. Med. Pharm. Sci., Univ. Toyama)*

**EGF シグナルにおける p38 によるリガンド非結合型 EGFR の非定型的輸送制御**

田中 智大、周 越、櫻井 宏明 (富山大・院薬・がん細胞生物学)

**P-1180 Roles of tyrosine kinase-independent phosphorylation of ErbB4**

*Satoko Watabe, Asako Yamaguchi, Yayoi Fukushima, Tomohiro Tanaka, Yuko Kawasaki, Hiroaki Sakurai (Dept. Cancer Cell Biol., Univ. Toyama)*

**チロシンキナーゼ非依存的な ErbB4 リン酸化の役割**

渡部 聰子、山口 麻子、福司 弥生、田中 智大、河崎 優希、櫻井 宏明 (富山大・薬・がん細胞)

**P-1181 Ligand-independent regulation of KIT activation by non-canonical phosphorylation**

*Minori Kimura, Masahide Saito, Hiroaki Sakurai (Dept. Cancer Cell Biol., Univ. Toyama)*

**非定型的リン酸化によるリガンド非依存的な KIT の活性化機構**

木村 美乃里、齊藤 正英、櫻井 宏明 (富山大・薬・がん細胞)

**P-1182 The combined effect of Ephedra Herb and Erlotinib on growth of Met-overexpressed non-small cell lung cancer, H1993 cells**

*Sumiko Hyuga<sup>1</sup>, Masashi Hyuga<sup>2</sup>, Yukio Nishimura<sup>3</sup>, Kazuyuki Itoh<sup>4</sup>, Hiroshi Odaguchi<sup>1</sup>, Toshihiko Hanawa<sup>1</sup> (<sup>1</sup>Oriental Med. Res. Center, Kitasato Univ., <sup>2</sup>Div. of Biol. Chem. & Biologicals, NIHS, <sup>3</sup>Div. Pharm. Cell Biol., Grad. Sch. Pharm. Sci., Kyushu Univ., <sup>4</sup>Res. Inst. Nozaki Tokushukai)*

**MET 過剰発現非小細胞肺がんの増殖に対する麻黄及びエルロチニブの併用効果**

日向 順美子<sup>1</sup>、日向 昌司<sup>2</sup>、西村 行生<sup>3</sup>、伊藤 和幸<sup>4</sup>、小田口 浩<sup>1</sup>、花輪 寿彦<sup>1</sup> (<sup>1</sup>北里大・東医研、<sup>2</sup>国立衛研・生物薬品、<sup>3</sup>九州大学 院薬学研究院 細胞生物薬学、<sup>4</sup>野崎德州会病・研)

Room P Oct. 6 (Thu.) 15:50-16:35

**P13-3 Hormones**

ホルモン

Chairperson: Toyomasa Katagiri (Div. of Genome Med., Inst. Genome Res., Tokushima Univ.)

座長: 片桐 豊雅 (徳島大・先端酵素学研・プロテオゲノム・ゲノム制御)

**P-1183 Multiple mechanisms of hormonal therapy resistance in breast cancer model established in ovariectomized mice**

*Yuri Yamaguchi<sup>1</sup>, Miki Ohira<sup>1</sup>, Takehiko Kamijo<sup>1</sup>, Shin-ichi Hayashi<sup>2</sup> (<sup>1</sup>Res. Inst. Clin. Oncol., Saitama Cancer Ctr., <sup>2</sup>Dept. Mol. Functional Dynamics, Tohoku Univ., Grad. Sch. Med.)*

**卵巣摘出マウスで樹立したホルモン療法耐性乳癌モデル細胞における耐性機序の多様性**

山口 ゆり<sup>1</sup>、大平 美紀<sup>1</sup>、上條 岳彦<sup>1</sup>、林 慎一<sup>2</sup> (<sup>1</sup>埼玉がんセ・臨床腫瘍研究所、<sup>2</sup>東北大学・院医・分子機能解析学)

- P-1184** **The induction of androgen synthesis enzyme by Cancer-associated fibroblasts in estrogen receptor negative breast cancer**  
 Kyoko Kikuchi<sup>1</sup>, Keely M McNamara<sup>1</sup>, Yasuhiro Miki<sup>2</sup>, Minako Sakurai<sup>1</sup>, Yoshiaki Onodera<sup>1</sup>, Hironobu Sasano<sup>1</sup> (<sup>1</sup>Dept. Pathol., Tohoku Univ., Sch. Med., <sup>2</sup>Disaster Obstetrics & Gynecol., Tohoku Univ., IRIDEs)  
 乳癌における癌関連線維芽細胞によるアンドロゲン合成酵素の発現誘導  
 菊地 杏子<sup>1</sup>、Keely M McNamara<sup>1</sup>、三木 康宏<sup>2</sup>、櫻井 美奈子<sup>1</sup>、小野寺 好明<sup>1</sup>、笹野 公伸<sup>1</sup> (<sup>1</sup>東北大・医・病理、<sup>2</sup>東北大・医・災害産婦人科)
- P-1185** **Escaping roles of TGF-β signals on cellular senescence induced by hormone ablation**  
 Hirotoshi Kawata, Takeo Nakaya, Akira Tanaka (Dept. of Pathol, Jichi Med Univ.)  
 性ホルモン除去による細胞老化におけるTGF-β シグナルの回避的役割  
 河田 浩敏、仲矢 丈雄、田中 亨（自治医大・医・病理）
- P-1186** **Effects of relaxin on endometrial cancer malignancy**  
 Misaki Fue<sup>1,2</sup>, Yasuhiro Miki<sup>1</sup>, Kiyoshi Takagi<sup>2</sup>, Takashi Suzuki<sup>2</sup>, Kiyoshi Ito<sup>1</sup> (<sup>1</sup>Disaster Ob/Gyn, Int. Res. Inst. of Disaster Sci., Tohoku Univ., <sup>2</sup>Pathol & Histotech., Tohoku Univ. Grad. Sch. Med.)  
 子宮内膜癌におけるリラキシンの影響  
 笛 未崎<sup>1,2</sup>、三木 康宏<sup>1</sup>、高木 清司<sup>2</sup>、鈴木 貴<sup>2</sup>、伊藤 潔<sup>1</sup> (<sup>1</sup>東北大・災害研・災害産婦人科学分野、<sup>2</sup>東北大・医・病理検査学分野)
- P-1187** **Biological function of Glucocorticoid receptor(GR) in triple negative breast cancer**  
 Yoko Takeda<sup>1</sup>, McNamara Keely M<sup>1</sup>, Tiffany Mori<sup>1</sup>, Minoru Miyashita<sup>1</sup>, Noriko Nemoto<sup>1</sup>, Kentaro Tamaki<sup>2</sup>, Yoshiaki Sagara<sup>3</sup>, Yoshiaki Rai<sup>3</sup>, Yasuyo Ohi<sup>3</sup>, Takanori Ishida<sup>1</sup>, Noriaki Ohuchi<sup>1</sup>, Hironobu Sasano<sup>1</sup> (<sup>1</sup>Tohoku University School of Graduate Medicine, <sup>2</sup>Naha-nishi clinic, <sup>3</sup>Sagara hospital,Kagoshima Japan)  
 トリプルネガティブ乳癌におけるグルココルチコイドレセプターの発現動態について  
 武田 瑠子<sup>1</sup>、キーリー マクナマラ<sup>1</sup>、モリ ティファニー<sup>1</sup>、宮下 穂<sup>1</sup>、根本 紀子<sup>1</sup>、玉城 研太朗<sup>2</sup>、相良 吉昭<sup>3</sup>、雷 哲明<sup>3</sup>、大井 荏代<sup>3</sup>、石田 孝宣<sup>1</sup>、大内 憲明<sup>1</sup>、笹野 公伸<sup>1</sup> (<sup>1</sup>東北大・医・医学系研究科、<sup>2</sup>那覇西クリニック、<sup>3</sup>相良病院)
- P-1188** **SOCS2-AS1, AR-targeted long non-coding RNA, promotes androgen signals and inhibits apoptosis in prostate cancer**  
 Ken-ichi Takayama<sup>1,2</sup>, Aya Misawa<sup>2</sup>, Satoshi Inoue<sup>1,2,3</sup> (<sup>1</sup>Func. Biogeront., Tokyo Metro. Inst. of Geront., <sup>2</sup>Dept. Anti-Aging Med., Grad. Sch. of Med., Univ. of Tokyo, <sup>3</sup>Div. Gene Reg. Sig. Trans., Res. Cent. Genomic.., Saitama Med.)  
 AR 標的 long non-coding RNA である SOCS2-AS1 は前立腺癌におけるアンドロゲンシグナルを促進しアポトーシスを抑制する  
 高山 賢一<sup>1,2</sup>、三沢 彩<sup>2</sup>、井上 聰<sup>1,2,3</sup> (<sup>1</sup>東京都健康長寿医療センター・ゲノム探索、<sup>2</sup>東京大・医学系研究科・抗加齢医学講座、<sup>3</sup>埼玉医大・ゲノム・遺伝子情報制御)
- P-1189** **TGF-β-induced podoplanin expression is associated with EMT of human esophageal carcinoma TE-11 cells**  
 Yunyan Wu<sup>1</sup>, Qiang Liu<sup>1</sup>, Xu Yan<sup>1</sup>, Yukio Kato<sup>2</sup>, Hiroko Seino<sup>1</sup>, Satoko Morohashi<sup>1</sup>, Hiroshi Kijima<sup>1</sup> (<sup>1</sup>Dept. Pathol. Biosci., Hirosaki Univ., Grad. Sch. Med., <sup>2</sup>Dept. Dent. Med. Biochem., Hiroshima Univ., Grad. Sch. Biomed. Sci.)  
 ヒト食道がん細胞の上皮一間葉移行における podoplanin の機能解析  
 吳 雲燕<sup>1</sup>、リュウ キョウウ<sup>1</sup>、エン キョク<sup>1</sup>、加藤 幸夫<sup>2</sup>、清野 浩子<sup>1</sup>、諸橋 聰子<sup>1</sup>、鬼島 宏<sup>1</sup> (<sup>1</sup>弘前大・医・病理生命科学講座、<sup>2</sup>広島大・歯・口腔生化学探索医科学講座)
- P-1190** **Effect of transforming growth factor-β (TGF-β) on drug-resistance of a human scirrhouous gastric cancer cell line, HSC-39**  
 Mashiro Okunaka<sup>1</sup>, Hiroko Murase<sup>1</sup>, Atsushi Koike<sup>1</sup>, Rie Tamaki<sup>1,2</sup>, Kazuyoshi Yanagihara<sup>3</sup>, Fumio Amano<sup>1</sup> (<sup>1</sup>Osaka Univ. Pharm. Sci., <sup>2</sup>Kobe City Med. Gentr. Gen. Hosp., <sup>3</sup>Natl. Cancer Centr. Res. Insti.)  
 ヒストキルス胃がん細胞株 HSC-39 細胞の薬剤耐性に及ぼす TGF-β  
 奥中 真白<sup>1</sup>、村瀬 博子<sup>1</sup>、小池 敦資<sup>1</sup>、玉木 理衣<sup>1,2</sup>、柳原 五吉<sup>3</sup>、天野 富美夫<sup>1</sup> (<sup>1</sup>大阪薬大・薬・生体防御学、<sup>2</sup>神戸市立医療センター中央市民病院、<sup>3</sup>国立がん研究センター東病院)
- P-1191** **STAT3/c-Ski-induced repression of Smad3 selects Smad2 for TGF-β to suppress the immunogenicity of dendritic cells**  
 Jeong-Hwan Yoon<sup>1,2</sup>, Masahiko Kuroda<sup>2</sup>, Keiji Miyazawa<sup>3</sup>, Mitsuyasu Kato<sup>4</sup>, Mizuko Mamura<sup>1,2,5</sup> (<sup>1</sup>Dept. Int. Med., Kyungpook Natl. Univ., Sch. Med., <sup>2</sup>Dept. Mol. Path., Tokyo Med. Univ., <sup>3</sup>Dept. Biochem., Sch. Med., Univ. Yamanashi, <sup>4</sup>Dept. Exp. Path., Faculty Med., Univ. Tsukuba, <sup>5</sup>Physician, Student and Researcher Support Center, Tokyo Med. Univ.)  
 STAT3/c-Ski による Smad3 転写抑制は樹状細胞免疫原性を抑制する TGF-β シグナル分子として Smad2 を選択する  
 尹 晶煥<sup>1,2</sup>、黒田 雅彦<sup>2</sup>、宮澤 恵二<sup>3</sup>、加藤 光保<sup>4</sup>、真村 瑞子<sup>1,2,5</sup> (<sup>1</sup>韓国慶北大学内科、<sup>2</sup>東京医科大学分子病理学、<sup>3</sup>山梨大学医学部生化学講座第2、<sup>4</sup>筑波大学人間総合科学研究科実験病理学、<sup>5</sup>東京医科大医師学生研究者支援センター)
- P-1192** **Determination of functional domains in Smad3 by using synthetic peptide blockers**  
 Mitsuyoshi Mochizuki, Masao Saitoh, Keiji Miyazawa (Dept. of Biochemistry, Yamanashi Univ.)  
 合成ペプチドを用いた Smad3 の機能的領域の同定  
 望月 光由、齋藤 正夫、宮澤 恵二（山梨大学・医・生化学第2）
- P-1193** **Suppression of CBR1 induces EMT through TGFβ signaling in uterine cervical squamous cell carcinoma**  
 Takuya Kajimura, Kengo Nakashima, Yuki Nishimoto, Kotaro Sueoka, Akihiro Murakami, Norihiro Sugino (Obstetrics and gynecology., Yamaguchi. Univ., grad.Sch. Med.)  
 子宮頸部扁平上皮癌において Carbonyl reductase 1 の発現低下は TGFβ 経路を介し上皮間葉転換を誘導する  
 梶邑 匠彌、中島 健吾、西本 裕喜、末岡 幸太郎、村上 明弘、杉野 法広（山口大・医・産科婦人科）
- P-1194** **TGF-β signaling and PEG10 exhibit mutually opposite expression pattern and roles in cell invasion of chondrosarcoma**  
 Naohiro Shinohara<sup>1,2</sup>, Shingo Maeda<sup>1</sup>, Satoshi Nagano<sup>2</sup>, Takao Setoguchi<sup>2</sup>, Yasuhiro Ishidou<sup>1</sup>, Setsuro Komiya<sup>1,2</sup> (<sup>1</sup>Dept. Med. Joint Materials, Kagoshima Univ., Sch. Med. Dent. Sci, <sup>2</sup>Dept. Orthop. Surg., Kagoshima Univ., Sch. Med. Dent. Sci.)  
 TGF-β シグナルと PEG10 は軟骨肉腫において相反する発現パターンと細胞浸潤能への役割を呈する  
 篠原 直弘<sup>1,2</sup>、前田 真吾<sup>1</sup>、永野 聰<sup>2</sup>、瀬戸口 啓夫<sup>2</sup>、石堂 康弘<sup>1</sup>、小宮 順郎<sup>1,2</sup> (<sup>1</sup>鹿児島大・医歯研・医療関節材料開発、<sup>2</sup>鹿児島大・医歯研・整形外科)
- P-1195** **Transforming growth factor-beta promotes cholangiocarcinoma cell invasion via Smad2/3 and ERK1/2 pathways**  
 Tuangporn Suthiphongchai, Phajit Sritananuwat, Natthaporn Sueangoen, Parichut Thummarrati (Department of Biochemistry, Faculty of Science, Mahidol University, Bangkok, Thailand)

Room P Oct. 6 (Thu.) 16:35-17:20

J/E

P13-4 TGF-β/Smad  
TGF-β/Smad

Chairperson: Yasumichi Inoue (Dept. of Cell Signal., Grad. Sch. of Pharm. Sci., Nagoya City Univ.)

座長：井上 靖道（名古屋市大・院薬・細胞情報）

**P-1189** **TGF-β-induced podoplanin expression is associated with EMT of human esophageal carcinoma TE-11 cells**

Yunyan Wu<sup>1</sup>, Qiang Liu<sup>1</sup>, Xu Yan<sup>1</sup>, Yukio Kato<sup>2</sup>, Hiroko Seino<sup>1</sup>, Satoko Morohashi<sup>1</sup>, Hiroshi Kijima<sup>1</sup> (<sup>1</sup>Dept. Pathol. Biosci., Hirosaki Univ., Grad. Sch. Med., <sup>2</sup>Dept. Dent. Med. Biochem., Hiroshima Univ., Grad. Sch. Biomed. Sci.)

ヒト食道がん細胞の上皮一間葉移行における podoplanin の機能解析

吳 雲燕<sup>1</sup>、リュウ キョウウ<sup>1</sup>、エン キョク<sup>1</sup>、加藤 幸夫<sup>2</sup>、清野 浩子<sup>1</sup>、諸橋 聰子<sup>1</sup>、鬼島 宏<sup>1</sup> (<sup>1</sup>弘前大・医・病理生命科学講座、<sup>2</sup>広島大・歯・口腔生化学探索医科学講座)

## 14 Cancer basic, diagnosis and treatment

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

### P14-1 Gastric cancer (1) 胃がん (1)

Chairperson: Kazuhiro Yoshida (Dept. of Surgical Oncology, Gifu Univ. Sch. of Med.)

座長：吉田 和弘（岐阜大・院医・腫瘍外科）

### P-1196 Overexpression of PCDHB9 is associated with poor prognosis in gastric cancer

Naohide Oue<sup>1</sup>, Shoichiro Mukai<sup>1,2</sup>, Takeharu Imai<sup>1</sup>, Naoya Sakamoto<sup>1</sup>, Kazuhiro Sentani<sup>1</sup>, Hiroki Kuniyasu<sup>2</sup>, Hideki Ohdan<sup>3</sup>, Wataru Yasui<sup>1</sup> (<sup>1</sup>Dept. Mol. Pathol., Hiroshima Univ., <sup>2</sup>Dept. Mol. Pathol., Nara Med. Univ., <sup>3</sup>Dept. Gastroenterol. Surg., Hiroshima Univ.)

**PCDHB9** は胃癌の予後不良因子である

大上 直秀<sup>1</sup>、向井 正一朗<sup>1,3</sup>、今井 健晴<sup>1</sup>、坂本 直也<sup>1</sup>、仙谷 和弘<sup>1</sup>、國安 弘基<sup>2</sup>、大段 秀樹<sup>3</sup>、安井 弥<sup>1</sup>（広島大・医歯薬保健学・分子病理、<sup>2</sup>奈良医大・医・分子病理、<sup>3</sup>広島大・医歯薬保健学・消化器移植外科）

### P-1197 Significance of the preoperative neutrophil-to-lymphocyte ratio in the short term outcomes of gastric cancer patients

Ryoichi Miyamoto, Satoshi Inagawa, Naoki Sano, Sosuke Tadano, Masayoshi Yamamoto (Department of Gastroenterological Surgery, Tsukuba Medical Center Hospital)

胃癌患者における術前 NLR と短期成績の検討

宮本 良一、稻川 智、佐野 直樹、只野 惣介、山本 雅由（筑波メディカルセンター病院、消化器外科）

### P-1198 The Significance of stamp cytology for patients with gastric cancer

Yuichiro Miki, Masakazu Yashiro, Go Masuda, Hiroaki Kasahima, Kishu Kitayama, Tomohisa Okuno, Katsunobu Sakurai, Takahiro Toyokawa, Naoshi Kubo, Hiroaki Tanaka, Kazuya Muguruma, Kosei Hirakawa, Masaichi Ohira (Osaka City University, Department of Surgical Oncology)

胃癌患者における Stamp 細胞診の有用性

三木 友一郎、八代 正和、増田 剛、笠島 裕明、北山 紀州、奥野 倫久、櫻井 克宣、豊川 貴弘、久保 尚士、田中 浩明、六車 一哉、平川 弘聖、大平 雅一（大阪市立大学 腫瘍外科学）

### P-1199 Fukutin, identified by CAST method, participates in tumor progression in gastric cancer

Kazuhiro Sentani, Zarni Oo Htoo, Shoichiro Mukai, Takuya Hattori, Keisuke Goto, Naoya Sakamoto, PT Trang, Takeharu Imai, Naohide Oue, Wataru Yasui (Dept. Mol. Pathol., Hiroshima Univ. Inst. Biomed. Health Sci.)

CAST 法によって同定した Fukutin は胃癌の進展に寄与する

仙谷 和弘、Zarni Oo Htoo、向井 正一郎、服部 拓也、後藤 景介、坂本 直也、PT Trang、今井 健晴、大上 直秀、安井 弥（広島大・院医歯薬保健学・分子病理）

### P-1200 Genomic analysis of Alpha-Fetoprotein producing gastric cancer.

Amane Tagashira<sup>1</sup>, Shinichi Yachida<sup>2</sup>, Miwako Kakiuchi<sup>1</sup>, takahumi Rokutan<sup>2</sup>, akimasa Hayashi<sup>3</sup>, kenji Tatsuno<sup>1</sup>, Shogo Yamamoto<sup>4</sup>, Genta Nagae<sup>5</sup>, Hiroyuki Abe<sup>3</sup>, Shumpei Ishikawa<sup>3</sup>, Tatsuhiko Shibata<sup>4</sup>, Masashi Fukayama<sup>2</sup>, Hiroyuki Aburatani<sup>1</sup> (<sup>1</sup>Genome Science Division, RCAST, Tokyo Univ., <sup>2</sup>National Cancer Center Research Institute, <sup>3</sup>Department of Pathology, Grad. Med. Tokyo Univ., <sup>4</sup>Medical Research Institute Tokyo Med. and Dent. Univ.)

**Alpha-Fetoprotein(AFP) 產生胃癌のゲノム解析**

田頭 周<sup>1</sup>、谷内田 真一<sup>2</sup>、垣内 美和子<sup>1</sup>、六反 啓文<sup>2</sup>、林 玲匡<sup>3</sup>、辰野 健二<sup>1</sup>、山本 尚吾<sup>1</sup>、永江 玄太<sup>1</sup>、阿部 浩幸<sup>3</sup>、石川 俊平<sup>3</sup>、柴田 龍弘<sup>4</sup>、深山 正久<sup>2</sup>、油谷 浩幸<sup>1</sup>（東大先端研ゲノムサイエンス分野、<sup>2</sup>国立がんセンターがんゲノミクス研究分野、<sup>3</sup>東大・医・病理学教室、<sup>4</sup>東京医科歯科大ゲノム病理学分野）

### P-1201 The significance of gene amplification for VEGFA in human gastric cancers

Takeru Oyama, Ritsuko Nakamura, Akishi Ooi (Dept. Mol. Cell. Pathol., Kanazawa Univ.)

ヒト胃癌における VEGFA 遺伝子増幅の意義

尾山 武、中村 律子、大井 章史（金沢大学 医学系 分子細胞病理学）

### P-1202 Characterization of cancer stromal fibroblasts in primary sites of metastatic gastric cancer.

Kazuo Yasumoto<sup>1</sup>, Atsuhiro Kawashima<sup>2</sup>, Suguru Kasai<sup>1</sup>, Seiji Yano<sup>3</sup>, Yoshiharu Motoo<sup>1</sup> (Med. Oncol. Kanazawa Med. Univ., Sch. Med., <sup>2</sup>Dept. Clin. Lab., Kanazawa Med. Center, <sup>3</sup>Dev. Med. Oncol., Cancer Res. Inst., Kanazawa Univ.)

胃癌転移様式からみた癌間質の特性と生物学的意義の検討

安本 和生<sup>1</sup>、川島 篤弘<sup>2</sup>、葛西 健<sup>1</sup>、矢野 聖二<sup>3</sup>、元雄 良治<sup>1</sup>（金沢医大・医・腫瘍内科、<sup>2</sup>金沢医療センター・臨床検査科、<sup>3</sup>金沢大学がん進展制御研究所・腫瘍内科）

Room P Oct. 6 (Thu.) 16:35-17:20

### P14-2 Gastric cancer (2) 胃がん (2)

Chairperson: Hiroyuki Sugihara (Dept. of Path., Shiga Univ. Med. Sci.)

座長：杉原 洋行（滋賀医大・病理・分子診断病理）

### P-1203 Incorporation of macrophages into tubular formation of lymphatic endothelial cells in gastric cancer

Hiroaki Tanaka<sup>1</sup>, Yukie Tauchi<sup>1</sup>, Chie Sakimura<sup>1</sup>, Soichiro Hiramatsu<sup>1</sup>, Kanako Kumamoto<sup>2</sup>, Mao Tokumoto<sup>1</sup>, Kenjiro Kimura<sup>1</sup>, Tatsuro Tamura<sup>1</sup>, Ryosuke Amano<sup>1</sup>, Takahiro Toyokawa<sup>1</sup>, Kazuya Muguruma<sup>1</sup>, Kosei Hirakawa<sup>1</sup>, Masaichi Ohira<sup>1</sup> (Dept. Surg. Oncol., Osaka City Univ., <sup>2</sup>Dept. Gene. Dis. Res., Osaka City Univ)

胃癌におけるマクロファージのリンパ管形成への関与

田中 浩明<sup>1</sup>、田内 幸枝<sup>1</sup>、崎村 千恵<sup>1</sup>、平松 宗一郎<sup>1</sup>、熊本 香名子<sup>2</sup>、徳本 真央<sup>1</sup>、木村 健二郎<sup>1</sup>、田村 達郎<sup>1</sup>、天野 良亮<sup>1</sup>、豊川 貴弘<sup>1</sup>、六車 一哉<sup>1</sup>、平川 弘聖<sup>1</sup>、大平 雅一<sup>1</sup>（大阪市大・医・腫瘍外科、<sup>2</sup>大阪市大・医・分子生体医学）

### P-1204 Significance of highly proliferative glands and tumor-associated macrophages for rapid progression of gastric adenoma

Daiki Taniyama<sup>1,2</sup>, Kiyomi Taniyama<sup>3</sup>, Junichi Zaitsu<sup>1</sup>, Akihisa Saito<sup>1</sup>, Kazuya Kuraoka<sup>1,4</sup>, Kazuhiro Sentani<sup>2</sup>, Naohide Oue<sup>2</sup>, Wataru Yasui<sup>2</sup> (<sup>1</sup>Dept. Diag. Pathol., NHO, Kure Medical Center, Chugoku Cancer Center, <sup>2</sup>Dept. Mol. Pathol., Hiroshima Univ., <sup>3</sup>President, NHO, Kure Medical Center, Chugoku Cancer Center, <sup>4</sup>Inst. Clin. Res., NHO, Kure Medical Center, Chugoku Cancer Center)

胃腺腫癌化例における増殖細胞と腫瘍間連組織球の分布

谷山 大樹<sup>1,2</sup>、谷山 清己<sup>3</sup>、在津 潤一<sup>1</sup>、齊藤 彰久<sup>1</sup>、倉岡 和矢<sup>1,4</sup>、仙谷 和弘<sup>2</sup>、大上 直秀<sup>2</sup>、安井 弥<sup>2</sup>（<sup>1</sup>吳医療セ・中国がんセ・病理診断科、<sup>2</sup>広島大・院医歯薬学・分子病理、<sup>3</sup>吳医療セ・中国がんセ・院長、<sup>4</sup>吳医療セ・中国がんセ・臨床研究部）

### P-1205 Characteristics of poorly differentiated adenocarcinomas with loss of ARID1A expression in the stomach

Takahisa Nakayama, Ken-ichi Mukaisho, Takanori Hattori, Hiroyuki Sugihara (Dept. of Path., Shiga Univ., Med. Sci.)

ARID1A 発現消失を伴う胃低分化型腺癌の特徴

仲山 貴永、向所 賢一、服部 隆則、杉原 洋行（滋賀医大・病理学・分子診断病理学部門）

### P-1206 Gene analysis of different histological subtypes in gastric cancer

Ritsuko Nakamura, Takeru Oyama, Akishi Ooi (Molecular and Cellular Pathology, Kanazawa University)

胃癌の組織分化に関わる遺伝子の解析

中村 律子、尾山 武、大井 章史（金沢大学・医・分子細胞病理学）

### P-1207 Histopathology of hereditary diffuse gastric cancer in Japanese patients.

Hiroshi Kawachi<sup>1,2</sup>, Masami Arai<sup>3</sup>, Junko Fujisaki<sup>4</sup>, Souya Nunobe<sup>5</sup>, Noriko Yamamoto<sup>1,2</sup>, Manabu Takamatsu<sup>1,2</sup>, Maki Kobayashi<sup>1,2</sup>, Ishikawa Yuichi<sup>1,2</sup> (Div. Path., The Cancer Inst., JFCR., <sup>3</sup>Dept. Path., The Cancer Inst. Hosp., JFCR., <sup>4</sup>Dept. Clin. Genet. Oncol., The Cancer Inst. Hosp., JFCR., <sup>5</sup>Div. Endosc., The Cancer Inst. Hosp., JFCR., <sup>5</sup>Dept. Gastric Surg., The Cancer Inst. Hosp., JFCR.)

本邦における遺伝性胃癌症例の病理組織像

河内 洋<sup>1,2</sup>、新井 正美<sup>3</sup>、藤崎 順子<sup>4</sup>、布部 劇也<sup>5</sup>、山本 智理子<sup>1,2</sup>、高松 学<sup>1,2</sup>、小林 真季<sup>1,2</sup>、石川 雄一<sup>1,2</sup>（がん研・病理、<sup>2</sup>がん研有明病院・病理、<sup>3</sup>がん研有明病院・遺伝子診療、<sup>4</sup>がん研有明病院・内視鏡、<sup>5</sup>がん研有明病院・胃外科）

**P-1208 Immunohistochemical study of γ-H2AX and p53 in human gastric cancer**

Yuka Kiriyama<sup>1</sup>, Takeshi Toyoda<sup>2</sup>, Kumiko Ogawa<sup>2</sup>, Tetsuya Tsukamoto<sup>1</sup> (<sup>1</sup>Dept. of Diag. Pathol., Fujita Health Univ. Sch. Med., <sup>2</sup>Div. of Pathol., Natl. Inst. Health Sci.)

ヒト胃癌におけるγ-H2AXとp53の免疫組織学的解析  
桐山 諭和<sup>1</sup>、豊田 武士<sup>2</sup>、小川 久美子<sup>2</sup>、塚本 徹哉<sup>1</sup> (<sup>1</sup>藤田保健衛生大・医・病理診断、<sup>2</sup>国立衛研・病理)

**P-1209 Quantitative comparison between the stereoscopic image and the corresponding histology of human gastric cancer**

Yasuko Fujita, yoshinori harada, hideo tanaka (Dept. Pathol. Cell Regulation, Kyoto Pref. Univ. of Med.)

胃微小癌の表面観察像と組織像との定量的対比

藤田 泰子、原田 義規、田中 秀央（京府立医大・医・細胞分子機能病理学）

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

**P14-3 Gastric cancer (3)**

胃がん (3)

Chairperson: Tetsuo Ushiku (Dept. of Path., The Univ. of Tokyo)

座長：牛久 哲男（東京大・院医・人体病理・病理診断）

**P-1210 EphA1-4 protein expressions correlated clinicopathological factors and survival in gastric cancer**

Mikito Inokuchi<sup>1</sup>, Sho Otsuki<sup>1</sup>, Kazuyuki Kojima<sup>2</sup>, Tatsuyuki Kawano<sup>1</sup> (<sup>1</sup>Dept. of Gastrointest. Surg., Tokyo Medical and Dental Univ., <sup>2</sup>Dept. of Minimally Invasive Surg., Tokyo Medical abd Dental Univ.)

胃がんにおけるEphA1-4蛋白発現と臨床病理学的因子および予後  
井ノ口 幹人<sup>1</sup>、大槻 将<sup>1</sup>、小嶋 一幸<sup>2</sup>、河野 長幸<sup>1</sup> (<sup>1</sup>東京医科歯科大学大学院 消化管外科学、<sup>2</sup>東京医科歯科大学 低侵襲医療センター)

**P-1211 Karyopherin alpha2 and karyopherin beta1 expression was associated with poor prognosis in gastric cancer**

Yoshihito Ohhara<sup>1</sup>, Ichiro Kinoshita<sup>1</sup>, Yasushi Shimizu<sup>1</sup>, Akira Suzuki<sup>1</sup>, Hirotoshi Akita<sup>1</sup> (<sup>1</sup>Dept. Med. Oncology, Hokkaido Univ., Grad. Sch. Med., <sup>2</sup>Dept. Med. Oncology, KKR Sapporo Med. Ctr., <sup>3</sup>Dept. Path., KKR Sapporo Med. Ctr.)

胃癌におけるKaryopherin alpha2およびbeta1の発現と予後の検討

大原 克仁<sup>1,2</sup>、木下 一郎<sup>1</sup>、清水 康<sup>1</sup>、鈴木 昭<sup>3</sup>、秋田 弘俊<sup>1</sup> (<sup>1</sup>北海道大・医・腫瘍内科、<sup>2</sup>KKR札幌医療センター・腫瘍内科、<sup>3</sup>KKR札幌医療センター・病理診断科)

**P-1212 Somatic mutations in mucinous gastric carcinoma**

Hirofumi Rokutan<sup>1,2</sup>, Fumie Hosoda<sup>1</sup>, Yasushi Totoki<sup>1</sup>, Hironori Satoh<sup>1,3</sup>, Shinichi Yachida<sup>1</sup>, Hitoshi Katai<sup>4</sup>, Masashi Fukayama<sup>2</sup>, Tatsuhiro Shibata<sup>1,5</sup> (<sup>1</sup>Cancer Genomics Div., Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Dept. Pathology, Univ. of Tokyo, <sup>3</sup>Tohoku Pharm. Univ. Hosp., <sup>4</sup>Gastric Surgery Div., Natl. Cancer Ctr. Hosp., <sup>5</sup>Lab. Mol. Med., HGC, IMSUT, Univ. of Tokyo)

胃粘液癌に高頻度にみられる体細胞変異の特徴

六反 啓文<sup>1,2</sup>、細田 文惠<sup>1</sup>、十時 泰<sup>1</sup>、佐藤 大希<sup>1,3</sup>、谷内田 真一<sup>1</sup>、片井 均<sup>4</sup>、深山 正久<sup>2</sup>、柴田 龍弘<sup>1,5</sup> (<sup>1</sup>国がん研究セ・研・がんゲノミクス、<sup>2</sup>東大・院医・人体病理学、<sup>3</sup>東北医科歯科大学病院、<sup>4</sup>国がん研究セ・中央病院・胃外科、<sup>5</sup>東大・医科研・ゲノム医学科学分野)

**P-1213 Accumulation of DNA methylation along with carcinogenetic process in stomach and esophagogastric junction**

Masayuki Urabe<sup>1,2,3</sup>, Keisuke Matsusaka<sup>3</sup>, Tetsuo Ushiku<sup>2</sup>, Masaki Fukuyo<sup>3</sup>, Hiroharu Yamashita<sup>1</sup>, Yasuyuki Seto<sup>1</sup>, Masashi Fukayama<sup>2,4</sup>, Atsushi Kaneda<sup>3,4</sup> (<sup>1</sup>Dept. Gastrointestinal Surgery, Grad. Sch. Med., Univ. of Tokyo, <sup>2</sup>Dept. Pathol., Grad. Sch. Med., Univ. of Tokyo, <sup>3</sup>Dept. Mol. Oncol., Grad. Sch. Med., Chiba Univ., <sup>4</sup>CREST, AMED.)

胃癌、食道胃接合部癌および背景粘膜におけるDNAメチル化異常の蓄積

浦辺 雅之<sup>1,2,3</sup>、松坂 恵介<sup>3</sup>、牛久 哲男<sup>2</sup>、福世 真樹<sup>3</sup>、山下 裕玄<sup>1</sup>、瀬戸 泰之<sup>1</sup>、深山 正久<sup>2,4</sup>、金田 篤志<sup>3,4</sup> (<sup>1</sup>東大・医・消化管外科、<sup>2</sup>東大・医・人体病理、<sup>3</sup>千葉大・医・分子腫瘍、<sup>4</sup>科学技術振興機構)

**P-1214 Characteristics of genetic alterations in synchronous and metachronous multiple early gastric cancers.**

Aya Mizuguchi<sup>1</sup>, Atsushi Takai<sup>1</sup>, Tsutomu Chiba<sup>2</sup>, Hiroshi Seno<sup>1</sup>, Hiroyuki Marusawa<sup>1</sup> (<sup>1</sup>Dept. Gastroenterology and Hepatology, Kyoto Univ., Grad. Sch., <sup>2</sup>Sogoseizongakkan, Kyoto Univ., Grad. Sch.)

当院で内視鏡治療を施行した同時性異時性多発早期胃癌における遺伝

**子異常の検討**

水口 綾<sup>1</sup>、高井 淳<sup>1</sup>、千葉 勉<sup>2</sup>、妹尾 浩<sup>1</sup>、丸澤 宏之<sup>1</sup> (<sup>1</sup>京都大・医・消化器内科、<sup>2</sup>京都大・院・総合生存学館)

**P-1215 HER2 gene amplification in early gastric cancer**

Kanayama Kazuki<sup>1,4</sup>, Hiroshi Imai<sup>2</sup>, Eri Usugi<sup>2</sup>, Taizo Shiraishi<sup>3,4</sup>, Yoshifumi Hirokawa<sup>1</sup> (<sup>1</sup>Dept. Clin. Nut., Suzuka Univ., Med. Sci., <sup>2</sup>Path. Div., Mie Univ. Hosp., <sup>3</sup>Kuwana Med Ctr., <sup>4</sup>Dept. Oncol. Path., Mie Univ. Grad. Sch. Med.)

早期胃癌におけるHER2遺伝子増幅

金山 和樹<sup>1,4</sup>、今井 裕<sup>2</sup>、白杵 恵梨<sup>2</sup>、白石 泰三<sup>3,4</sup>、広川 佳史<sup>4</sup> (<sup>1</sup>鎌鹿医療大・保・医療栄養、<sup>2</sup>三重大学・医・病院・病理部、<sup>3</sup>桑名・医療センター、<sup>4</sup>三重大学・院医・腫瘍病理学)

**P-1216 Expression and localization of KIFC1 and its association with cancer stem cell in esophageal squamous cell carcinoma**

Yui Hattori, Naohide Oue, Takuya Hattori, Takeharu Imai, Naoya Sakamoto, Kazuhiro Sentani, Wataru Yasui (Dept. of Mol. Pathol., Hiroshima Univ.)

食道扁平上皮癌におけるKIFC1の発現と幹細胞との関連

服部 結、大上 直秀、服部 拓也、今井 健晴、坂本 直也、仙谷 和弘、安井 弥（広大院・医歯薬保健学・分子病理）

Room P Oct. 6 (Thu.) 16:35-17:20

J

**P14-4 Gastric cancer (4)**

胃がん (4)

Chairperson: Masakazu Yashiro (Mol. Oncology & Therapeutics, Osaka City Univ. Grad. Sch. of Med.)

座長：八代 正和（大阪市大・院・腫瘍外科・老年腫瘍病態学）

**P-1217 The association between the expression of cancer/testis antigens and Helicobacter pylori infection in gastric cancer.**

Kei Hosoda<sup>1</sup>, Takashi Fukuyama<sup>2</sup>, Akira Ema<sup>1</sup>, Keishi Yamashita<sup>1</sup>, Nobue Futawatari<sup>3</sup>, Yoshihito Takahashi<sup>2</sup>, Masahiko Watanabe<sup>1</sup> (<sup>1</sup>Dept. Surg., Kitasato Univ. Sch. Med., <sup>2</sup>Kitasato Univ. Medical Center, <sup>3</sup>N.H.O. Sagamihara Hosp.)

胃癌におけるHelicobacter pylori感染と癌/精巣抗原の発現との関連性

細田 桂<sup>1</sup>、福山 隆<sup>2</sup>、江間 玲<sup>1</sup>、山下 繼史<sup>1</sup>、二渡 信江<sup>3</sup>、高橋 稔人<sup>2</sup>、渡邊 昌彦<sup>1</sup> (<sup>1</sup>北里大学・医・外科学、<sup>2</sup>北里大学メディカルセンター、<sup>3</sup>国立病院機構相模原病院外科)

**P-1218 SETDB2 contributes to gastric cancer progression by deregulating the expression of tumor suppressor genes**

Nishikawaji Taketo, Yoshimitsu Akiyama, Shu Shimada, Yasuhito Yuasa, Shinji Tanaka (Dept. Mol. Oncol., Tokyo Med&Dentl. Univ.)

胃がんにおけるヒストンメチル化酵素SETDB2の標的遺伝子に対する発現制御機構

西川路 武人、秋山 好光、島田 周、湯浅 保仁、田中 真二（東京医科歯科大学・分子腫瘍医学）

**P-1219 Omics analysis focused on peritoneally-metastasized cancer cells in diffuse-type gastric cancer**

Masayuki Komatsu<sup>1</sup>, Hiromi Sakamoto<sup>2</sup>, Fumiko Chiwaki<sup>1</sup>, Hitoshi Ichikawa<sup>3</sup>, Rie Komatsuzaki<sup>1</sup>, Tetsuya Hamaguchi<sup>3</sup>, Narikazu Boku<sup>4</sup>, Takashi Kohno<sup>5</sup>, Keisuke Matsusaki<sup>6</sup>, Atsushi Ochiai<sup>7</sup>, Teruhiko Yoshida<sup>2</sup>, Hiroki Sasaki<sup>1</sup> (<sup>1</sup>Dept. of Translational Oncology, Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Div. of Genetics, Natl. Cancer Ctr. Res. Inst., <sup>3</sup>Gastrointestinal Oncology Div., Natl. Cancer Ctr. Hosp., <sup>4</sup>Gastrointestinal Oncology Div., Natl. Cancer Ctr. Hosp., <sup>5</sup>Div. of Genome Biology, Natl. Cancer Ctr. Res. Inst., <sup>6</sup>Kanamechou Hosp., <sup>7</sup>FIOC, Natl. Cancer Ctr. Res. Inst.)

未分化型胃がん患者の腹水中がん細胞を対象とした多層的オミックス解析

小松 将之<sup>1</sup>、坂本 裕美<sup>2</sup>、千賀 史子<sup>1</sup>、市川 仁<sup>2</sup>、小松崎 理絵<sup>1</sup>、濱口 哲弥<sup>3</sup>、朴 成和<sup>4</sup>、河野 隆志<sup>5</sup>、松崎 圭祐<sup>6</sup>、落合 淳志<sup>7</sup>、吉田 輝彦<sup>2</sup>、佐々木 博己<sup>1</sup> (<sup>1</sup>国立がん研究セ・研・バイオマーカー探索、<sup>2</sup>国立がん研究セ・研・遺伝医学、<sup>3</sup>国立がん研究セ・研・内科、<sup>4</sup>国立がん研究セ・研・内科、<sup>5</sup>国立がん研究セ・研・ゲノム生物学、<sup>6</sup>要町病院・要第2クリニック・腹水治療セ、<sup>7</sup>国立がん研究セ・研・基盤コアセ)

**P-1220 Fusion gene analysis of diffuse-type gastric cancer**

Ayano Doi<sup>1</sup>, Sachio Mitani<sup>1</sup>, Hiromi Sakamoto<sup>2</sup>, Fumiko Chiwaki<sup>3</sup>, Takashi Kubo<sup>4</sup>, Hiroki Sasaki<sup>2</sup>, Teruhiko Yoshida<sup>3</sup>, Hitoshi Ichikawa<sup>1,4</sup> (<sup>1</sup>Dept. of Clin. Genomics, Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Div. of Genet., Natl. Cancer Ctr. Res. Inst., <sup>3</sup>Dept. of Transl. Oncol., Natl. Cancer Ctr. Res. Inst., <sup>4</sup>Div. of Transl. Res., Natl. Cancer Ctr. EPOC)

## に関する研究

武田 重臣、山田 豪、神田 光郎、田中 千恵、中山 吾郎、小池 聖彦、藤原 道隆、小寺 泰弘（名古屋大学医学部医学系研究科消化器外科学）

**P-1227 High risk mucosa after helicobacter eradication**

Kousuke Takeda<sup>1</sup>, Rina Fujiwara<sup>2</sup>, Yukiko Nishiguchi<sup>2</sup>, Takamitsu Sasaki<sup>2</sup>, Hitoshi Yoshiji<sup>1</sup>, Hiroki Kuniyasu<sup>2</sup> (<sup>1</sup>Dept. Gastroenterol. Med, Nara Med. Univ., <sup>2</sup>Dept. Mol. Pathol., Nara Med. Univ.)

**Helicobacter pylori**除菌後の発癌ハイリスク粘膜の予測

竹田 幸祐<sup>1</sup>、藤原 里奈<sup>2</sup>、西口 由希子<sup>2</sup>、佐々木 隆光<sup>2</sup>、吉治 仁志<sup>1</sup>、國安 弘基<sup>2</sup>（<sup>1</sup>奈良医大・消化器内科、<sup>2</sup>奈良医大・分子病理）

**P-1228 Morphology of gastric cancer cells using a silicate fiber scaffold for three-dimensional cell culture system**

Ken-ichi Mukaisho<sup>1</sup>, Shunnpei Kanai<sup>1</sup>, Hiroto Yamamoto<sup>1</sup>, Masahiro Noi<sup>1</sup>, Takahisa Nakayama<sup>1</sup>, Takuya Iwasa<sup>2</sup>, Takanori Hattori<sup>1</sup>, Hiroyuki Sugihara<sup>1</sup> (<sup>1</sup>Dept. Pathol., Div. Mol. Diagn. Pathol., Shiga Univ. Med. Sci., <sup>2</sup>Central Research Laboratory, Japan Vilen)

## シリカファイバー不織布シートによる3次元培養システムを用いた胃癌細胞の細胞形態

向所 賢一<sup>1</sup>、金井 俊平<sup>1</sup>、山本 裕人<sup>1</sup>、野井 将大<sup>1</sup>、仲山 貴永<sup>1</sup>、岩佐 韶哉<sup>2</sup>、服部 隆則<sup>1</sup>、杉原 洋行<sup>1</sup>（<sup>1</sup>滋賀医大・医・分子診断病理、<sup>2</sup>日本バイリーン株式会社 研究所）

Room P Oct. 6 (Thu.) 16:35-17:20 J/E

**P14-6 Esophageal cancer (1)**  
食道がん (1)

Chairperson: Hisahiro Matsubara (Dept. of Frontier Surg., Chiba Univ., Grad. Sch. of Med)

座長：松原 久裕（千葉大・院医・先端応用外科）

**P-1229 FOXC2, A Potential New Prognostic Marker in Esophageal Cancer.**

Kosuke Takato<sup>1</sup>, Naohiro Nishida<sup>2,4</sup>, Koshi Mimori<sup>3</sup>, Yuichiro Doki<sup>2</sup>, Masaki Mori<sup>2</sup>, Hideshi Ishii<sup>4</sup>, Kazuhiko Ogawa<sup>1</sup> (<sup>1</sup>Dept. of Radiation Oncology, Osaka Univ., <sup>2</sup>Dept. of Gastroenterological Surg., Osaka Univ., <sup>3</sup>Dept. of Surg., Kyushu Univ. Beppu Hosp., <sup>4</sup>Dept. of Cancer Profiling Discovery, Osaka Univ.)

## FOXC2, 食道癌における新たな予後因子の可能性

竹藤 晃介<sup>1</sup>、西田 尚弘<sup>2,4</sup>、三森 功士<sup>3</sup>、土岐 祐一郎<sup>2</sup>、森 正樹<sup>2</sup>、石井 秀始<sup>4</sup>、小川 和彦<sup>1</sup>（<sup>1</sup>阪大・医・放射線治療科、<sup>2</sup>阪大・医・消化器外科、<sup>3</sup>九大・別府病院・外科、<sup>4</sup>阪大・医・癌創薬プロファイリング学）

**P-1230 Impact of Anion Exchanger 2 Expression in Human Esophageal Squamous Cell Carcinoma**

Toshiyuki Kobayashi<sup>1</sup>, Atsushi Shiozaki<sup>1</sup>, Daisuke Ichikawa<sup>1</sup>, Hitoshi Fujiwara<sup>1</sup>, Hirotaka Konishi<sup>1</sup>, Shoichiro Hikami<sup>1</sup>, Toshiyuki Kosuga<sup>1</sup>, Tomohiro Arita<sup>1</sup>, Shuhei Komatsu<sup>1</sup>, Masayoshi Nakanishi<sup>1</sup>, Kazuma Okamoto<sup>1</sup>, Mitsuo Kishimoto<sup>2</sup>, Eigo Otsuji<sup>1</sup> (<sup>1</sup>Digestive Surg., Kyoto Pref. Univ. of Med., <sup>2</sup>Path., Kyoto Pref. Univ. of Med.)

## 食道扁平上皮癌におけるAnion exchanger 2 発現の意義

小林 利行<sup>1</sup>、塩崎 敦<sup>1</sup>、市川 大輔<sup>1</sup>、藤原 斎<sup>1</sup>、小西 博貴<sup>1</sup>、樋上 翔一郎<sup>1</sup>、小菅 敏幸<sup>1</sup>、有田 智洋<sup>1</sup>、小松 周平<sup>1</sup>、中西 正芳<sup>1</sup>、岡本 和真<sup>1</sup>、岸本 光夫<sup>2</sup>、大辻 英吾<sup>1</sup>（<sup>1</sup>京都府立医大・消化器外科、<sup>2</sup>京都府立医大・病理部）

**P-1231 Expression and prognostic significance of the sodium iodide symporter in human esophageal squamous cell carcinoma**

Yuzo Yamazato<sup>1</sup>, Atsushi Shiozaki<sup>1</sup>, Daisuke Ichikawa<sup>1</sup>, Yosuke Ariyoshi<sup>1</sup>, Daisuke Itaka<sup>2</sup>, Tomohiro Arita<sup>1</sup>, Toshiyuki Kosuga<sup>1</sup>, Hirotaka Konishi<sup>1</sup>, Shuhei Komatsu<sup>1</sup>, Hitoshi Fujiwara<sup>1</sup>, Kazuma Okamoto<sup>1</sup>, Mitsuo Kishimoto<sup>3</sup>, Eigo Otsuji<sup>1</sup> (<sup>1</sup>Div. Digestive Surg., Dept. Surg. Kyoto Pref. Univ., Sch. Med., <sup>2</sup>Dept. Surg., Saiseikai Shiga Hosp., <sup>3</sup>Dept. Path., Kyoto Pref. Univ., Sch. Med.)

## 食道扁平上皮癌におけるNIS の発現と予後との相関

山里 有三<sup>1</sup>、塩崎 敦<sup>1</sup>、市川 大輔<sup>1</sup>、有吉 要輔<sup>1</sup>、飯高 大介<sup>2</sup>、有田 智洋<sup>1</sup>、小菅 敏幸<sup>1</sup>、小西 博貴<sup>1</sup>、小松 周平<sup>1</sup>、藤原 斎<sup>1</sup>、岡本 和真<sup>1</sup>、岸本 光夫<sup>3</sup>、大辻 英吾<sup>1</sup>（<sup>1</sup>京都府立医大・医・消外、<sup>2</sup>済生会滋賀病院・外科、<sup>3</sup>京都府立医大・医・病理）

**P-1232 Clinical significance between miR-7 downregulation and hematogenous recurrence in esophageal squamous cell carcinoma**

Masayuki Kano<sup>1</sup>, Yasunori Matsumoto<sup>1</sup>, Ryota Otsuka<sup>1</sup>, Nobufumi Sekino<sup>1</sup>, Masahiko Takahashi<sup>1</sup>, Kentaro Murakami<sup>1</sup>, Isamu Hoshino<sup>2</sup>, Yasunori Akutsu<sup>1</sup>, Hisahiro Matsubara<sup>1</sup> (<sup>1</sup>Dept. of Frontier Surg. Chiba Univ., <sup>2</sup>Digestive surgery, Chiba cancer center)

食道扁平上皮癌におけるmiR-7 低発現と血行性転移再発の関係にお

## ける臨床的意義

加野 将之<sup>1</sup>、松本 泰典<sup>1</sup>、大塚 亮太<sup>1</sup>、関野 伸史<sup>1</sup>、高橋 理彦<sup>1</sup>、村上 健太郎<sup>1</sup>、星野 敏<sup>2</sup>、阿久津 泰典<sup>1</sup>、松原 久裕<sup>1</sup> (<sup>1</sup>千葉大・先端応用外科、<sup>2</sup>千葉県がんセンター)

### P-1233 Prognostic value of hematological parameters in patients undergoing esophagectomy for esophageal squamous cell carcinoma

Noriyuki Noriyuki, Yusuke Fujii, Yoshitugu Tajima (Dig and Gene Surg., Shimane Univ., Fac. Med.)

根治術後の食道扁平上皮癌の予後因子の検討

平原 典幸、藤井 雄介、田島 義証（島根大・医・消化器総合外科）

### P-1234 IL-8 derived from TAMs promotes cell migration and invasion of human Esophageal cancer cells

Masayoshi Hosono<sup>1</sup>, Masayuki Doi<sup>1</sup>, Maiko Okamoto<sup>1</sup>, Nobuhide Higashino<sup>1,2</sup>, Himiko Kodaira<sup>1</sup>, Yumi Ichihara<sup>1</sup>, Nobuhisa Takase<sup>1,2</sup>, Mari Nishio<sup>1</sup>, Manabu Shigeoka<sup>1</sup>, Yuichiro Koma<sup>1</sup>, Hiroshi Yokozaki<sup>1</sup> ('Path., Kobe Univ., Sch. Med., <sup>2</sup>Gastroint. Surg., Kobe Univ., Sch. Med.)

癌微小環境における主要関連マクロファージ由来のIL-8はヒト食道扁平上皮癌の運動能および浸潤能を促進する

細野 雅義<sup>1</sup>、土井 雅之<sup>1</sup>、岡本 真生子<sup>1</sup>、東野 展英<sup>1,2</sup>、小平 日実子<sup>1</sup>、市原 有美<sup>1</sup>、高瀬 信尚<sup>1,2</sup>、西尾 真理<sup>1</sup>、重岡 学<sup>1</sup>、泊 雄一朗<sup>1</sup>、横崎 宏<sup>1</sup> (<sup>1</sup>神戸大学・医・病理学講座病理学分野、<sup>2</sup>神戸大学・医・外科学講座食道胃腸外科分野)

### P-1235 Role of NCAM in cell survival and migration of TAMs in human esophageal squamous cell carcinoma

Nobuhide Higashino<sup>1,2</sup>, Nobuhisa Takase<sup>1,2</sup>, Maiko Okamoto<sup>1</sup>, Masayuki Doi<sup>1</sup>, Himiko Kodaira<sup>1</sup>, Masayoshi Hosono<sup>1,2</sup>, Yumi Ichihara<sup>1</sup>, Mari Nishio<sup>1</sup>, Manabu Shigeoka<sup>1</sup>, Yuichiro Koma<sup>1</sup>, Hiroshi Yokozaki<sup>1</sup> ('Div. Path., Kobe Univ., Grad. Sch. Med., <sup>2</sup>Gastro-intestinal Surg., Kobe Univ., Grad. Sch. Med.)

ヒト食道扁平上皮癌における腫瘍関連マクロファージの生存能および遊走能に対するNCAMの役割

東野 展英<sup>1,2</sup>、高瀬 信尚<sup>1,2</sup>、岡本 真生子<sup>1</sup>、土井 雅之<sup>1</sup>、小平 日実子<sup>1</sup>、細野 雅義<sup>1,2</sup>、市原 有美<sup>1</sup>、西尾 真理<sup>1</sup>、重岡 学<sup>1</sup>、泊 雄一朗<sup>1</sup>、横崎 宏<sup>1</sup> (<sup>1</sup>神戸大・医・病理学講座病理学分野、<sup>2</sup>神戸大・医・食道胃腸外科学分野)

Room P Oct. 6 (Thu.) 15:50-16:35 J

### P14-7 Esophageal cancer (2)

食道がん (2)

Chairperson: Hiroki Sasaki (Dept. of Translational Oncol., Natl. Cancer Ctr. Res. Inst.)

座長：佐々木 博己（国立がん研究セ・研・バイオマーク）

### P-1236 Analysis of genes induced by the co-culture of esophageal cancer cells with tumor associated macrophages

Himiko Kodaira<sup>1</sup>, Masayuki Doi<sup>1</sup>, Maiko Okamoto<sup>1</sup>, Nobuhide Higashino<sup>1,2</sup>, Masayoshi Hosono<sup>1,2</sup>, Yumi Ichihara<sup>1</sup>, Nobuhisa Takase<sup>1,2</sup>, Mari Nishio<sup>1</sup>, Manabu Shigeoka<sup>1</sup>, Yuichiro Koma<sup>1</sup>, Hiroshi Yokozaki<sup>1</sup> ('Div. Pathol., Kobe Univ., Grad. Sch. Med., <sup>2</sup>Div. Gastro-intestinal surg., Kobe Univ., Grad. Sch. Med.)

腫瘍関連マクロファージとの共培養により食道扁平上皮癌細胞に誘導される遺伝子の解析

小平 日実子<sup>1</sup>、土井 雅之<sup>1</sup>、岡本 真生子<sup>1</sup>、東野 展英<sup>1,2</sup>、細野 雅義<sup>1,2</sup>、市原 有美<sup>1</sup>、高瀬 信尚<sup>1,2</sup>、西尾 真理<sup>1</sup>、重岡 学<sup>1</sup>、泊 雄一朗<sup>1</sup>、横崎 宏<sup>1</sup> (<sup>1</sup>神戸大・院医・病理学、<sup>2</sup>神戸大・院医・食道胃腸外科学)

### P-1237 Roles of macrophages in early squamous cell carcinogenesis of the esophagus

Yuichiro Koma<sup>1</sup>, Maiko Okamoto<sup>1</sup>, Masayuki Doi<sup>1</sup>, Nobuhide Higashino<sup>1,2</sup>, Himiko Kodaira<sup>1</sup>, Masayoshi Hosono<sup>1,2</sup>, Yumi Ichihara<sup>1</sup>, Nobuhisa Takase<sup>1,2</sup>, Mari Nishio<sup>1</sup>, Manabu Shigeoka<sup>1</sup>, Hiroshi Yokozaki<sup>1</sup> ('Div. Pathol., Kobe Univ., Grad. Sch. Med., <sup>2</sup>Div. Gastro-intestinal surg., Kobe Univ., Grad. Sch. Med.)

ヒト食道扁平上皮癌の発癌初期段階におけるマクロファージの機能解析

泊 雄一朗<sup>1</sup>、岡本 真生子<sup>1</sup>、土井 雅之<sup>1</sup>、東野 展英<sup>1,2</sup>、小平 日実子<sup>1</sup>、細野 雅義<sup>1,2</sup>、市原 有美<sup>1</sup>、高瀬 信尚<sup>1,2</sup>、西尾 真理<sup>1</sup>、重岡 学<sup>1</sup>、横崎 宏<sup>1</sup> (<sup>1</sup>神戸大・院医・病理、<sup>2</sup>神戸大・院医・食道胃腸外科学)

Room P Oct. 6 (Thu.) 16:35-17:20 J/E

### P14-8 Esophageal cancer (3)

食道がん (3)

Chairperson: Yoshifumi Baba (Dept. of Gastroenterological Surg., Kumamoto Univ.)

座長：馬場 祥史（熊本大・院・生命科学・消化器外科）

### P-1243 Expression of Signal peptidase complex 18 is associated with poor survival of patients with esophageal cancer

Yuji Yamamoto<sup>1</sup>, Naohide Oue<sup>1</sup>, Takeharu Imai<sup>1</sup>, Naoya Sakamoto<sup>1</sup>, Kazuhiro Sentani<sup>1</sup>, Hideki Ohdain<sup>2</sup>, Wataru Yasui<sup>1</sup> (<sup>1</sup>Dept. of Mol. Pathol., Hiroshima Univ., <sup>2</sup>Dept. of Gastroenterological and Transplant Surgery, Hiroshima Univ.)

食道癌におけるSignal peptidase complex 18の発現は予後不

良因子である

山本 悠司<sup>1</sup>、大上 直秀<sup>1</sup>、今井 健晴<sup>1</sup>、坂本 直也<sup>1</sup>、仙谷 和弘<sup>1</sup>、大段 秀樹<sup>2</sup>、安井 弥<sup>1</sup>（<sup>1</sup>広島大・院・医歯薬保・分子病理、<sup>2</sup>広島大学・医・消化器移植外科）

#### P-1244 Differential role of mutations in clonal evolution in esophageal mucosa in high-risk individuals for cancer

Akira Yokoyama<sup>1,2</sup>, Hiromichi Suzuki<sup>1</sup>, Tetsuichi Yoshizato<sup>1</sup>, Yusuke Shiozawa<sup>1</sup>, Yusuke Sato<sup>1</sup>, Kosuke Aoki<sup>1</sup>, Nobuyuki Kakiuchi<sup>1,3</sup>, Yasuhide Takeuchi<sup>4</sup>, Shigeru Tsunoda<sup>5</sup>, Masashi Sanada<sup>6</sup>, Satoru Miyano<sup>7</sup>, Manabu Muto<sup>8</sup>, Seishi Ogawa<sup>1</sup> (<sup>1</sup>Department of Pathology and Tumor Biology, Kyoto University, Kyoto, Japan, <sup>2</sup>Department of therapeutic Oncology, Kyoto University, Kyoto, Japan, <sup>3</sup>Department of Gastroenterology and Hepatology, Kyoto University, Kyoto, Japan, <sup>4</sup>Department of Diagnostic Pathology, Kyoto University, Kyoto, Japan, <sup>5</sup>Department of Gastrointestinal Surgery, Kyoto University, Kyoto, Japan, <sup>6</sup>Department of Advanced Diagnosis, Nagoya Medical Center, Nagoya, Japan, <sup>7</sup>Human Genome Center, Medical Science, The University of Tokyo)

食道癌ハイリスク群の食道粘膜では、遺伝子変異の clonal evolution は癌化において異なった役割を担う

横山 顯礼<sup>1,2</sup>、鈴木 啓道<sup>1</sup>、吉里 哲一<sup>1</sup>、塩澤 祐介<sup>1</sup>、佐藤 悠佑<sup>1</sup>、青木 恒介<sup>1</sup>、垣内 伸之<sup>1,3</sup>、竹内 康英<sup>4</sup>、角田 茂<sup>5</sup>、真田 昌<sup>6</sup>、宮野 悟<sup>7</sup>、武藤 学<sup>2</sup>、小川 誠司<sup>1</sup>（<sup>1</sup>京都大学腫瘍生物学講座、<sup>2</sup>京都大学腫瘍葉物治療学、<sup>3</sup>京都大学消化器内科、<sup>4</sup>京都大学病理診断科、<sup>5</sup>京都大学消化管外科、<sup>6</sup>名古屋医療センター臨床研究センター、<sup>7</sup>東京大学ヒトゲノム解析センター）

#### P-1245 Possible involvement of Lipocalin 2 (LCN2) secretion in the metastatic property of esophageal squamous cell carcinoma

Masafumi Okuda<sup>1,2</sup>, Jun Inoue<sup>1,3</sup>, Tatsuyuki Kawano<sup>2</sup>, Johji Inazawa<sup>1,3</sup> (<sup>1</sup>Dept. Mol. Cytogenet., Tokyo Medical and Dental Univ., <sup>2</sup>Dept. Esophageal Surgery, Tokyo Medical and Dental Univ., <sup>3</sup>Bioresource Research Center, Tokyo Medical and Dental Univ.)

食道扁平上皮癌の転移における Lipocalin2 の関与

奥田 将史<sup>1,2</sup>、井上 純<sup>1,3</sup>、河野 辰幸<sup>2</sup>、稻澤 譲治<sup>1,3</sup>（<sup>1</sup>東京医科歯科大学(TMDU) 分子細胞遺伝、<sup>2</sup>東京医科歯科大学(TMDU) 食道外科、<sup>3</sup>東京医科歯科大学疾患バイオリソースセンター）

#### P-1246 A predictive marker for the response of esophageal squamous cell carcinoma to definitive chemoradiotherapy

Jun Iwabu<sup>1,3</sup>, Satoshi Yamashita<sup>1</sup>, Takayoshi Kishino<sup>1</sup>, Takamasa Takahashi<sup>1</sup>, Masahiro Maeda<sup>1</sup>, Mika Wakabayashi<sup>1</sup>, Reiko Nagano<sup>1</sup>, Takeshi Nakajima<sup>2</sup>, Hiroyasu Igaki<sup>3</sup>, Yuji Tachimori<sup>3</sup>, Toshikazu Ushijima<sup>1</sup> (<sup>1</sup>Div. of Epigenomics, Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Endoscopy Div., Natl. Cancer Ctr. Hosp., <sup>3</sup>Esophageal Surgery Div., Natl. Cancer Ctr. Hosp.)

食道扁平上皮癌の根治的化学放射線療法に対する予測マーカー

岩部 純<sup>1,3</sup>、山下 啓<sup>1</sup>、岸野 貴賢<sup>1</sup>、高橋 崇真<sup>1</sup>、前田 将宏<sup>1</sup>、若林 美香<sup>1</sup>、永野 玲子<sup>1</sup>、中島 健<sup>2</sup>、井垣 弘康<sup>3</sup>、日月 裕司<sup>3</sup>、牛島 俊和<sup>1</sup>（<sup>1</sup>国立がん研究セ・研・エビゲノム、<sup>2</sup>国立がん研究セ・中央病院・内視鏡科、<sup>3</sup>国立がん研究セ・中央病院・食道外科）

#### P-1247 Neoadjuvant Chemotherapy with Divided-dose DCF for Patients with Squamous Cell Carcinoma of the Esophagus

Toshiyasu Ojima<sup>1</sup>, Mikihito Nakamori<sup>1</sup>, Masaki Nakamura<sup>1</sup>, Masahiro Katsuda<sup>1</sup>, Keiji Hayata<sup>1</sup>, Tomoya Kato<sup>1</sup>, Junya Kitadani<sup>1</sup>, Hirotaka Tabata<sup>1</sup>, Akihiro Takeuchi<sup>1</sup>, Toshiaki Tsuji<sup>1</sup>, Makoto Iwahashi<sup>1</sup>, Hiroki Yamaue<sup>1</sup> (Second Department of Surgery, Wakayama Medical University)

進行食道癌に対する NAC-DCF 第 II 相試験結果

尾島 敏康、中森 幹人、中村 公紀、勝田 将裕、早田 啓治、加藤 智也、北谷 純也、田端 宏堯、竹内 昭博、辻 俊明、岩橋 誠、山上 裕機（和歌山県立医大）

#### P-1248 Differential effects of EGFR inhibitors on epithelial- and mesenchymal-like esophageal squamous carcinoma cells.

Masahiro Yoshioka<sup>1</sup>, Shinya Ohashi<sup>2</sup>, Osamu Kikuchi<sup>2</sup>, Masashi Tamaoki<sup>2</sup>, Jun'ichi Matsubara<sup>2</sup>, Yukiko Mori<sup>2</sup>, Shin'ichi Miyamoto<sup>1</sup>, Manabu Muto<sup>2</sup> (<sup>1</sup>Dept. of Gastroenterology and Hepatology, Kyoto Univ. Hosp., <sup>2</sup>Dept. of Clinical Oncology, Kyoto Univ. Hosp.)

上皮様、間葉様の食道扁平上皮癌に対する EGFR 阻害剤による分化誘導効果

吉岡 正博<sup>1</sup>、大橋 真也<sup>2</sup>、菊池 理<sup>2</sup>、玉置 将司<sup>2</sup>、松原 淳一<sup>2</sup>、森 由希子<sup>2</sup>、宮本 心一<sup>1</sup>、武藤 学<sup>2</sup>（<sup>1</sup>京都大学医学部附属病院・消化器内科、<sup>2</sup>京都大学医学部附属病院・がん薬物治療科）

#### P-1249 The antitumor effect of metformin on esophageal squamous cell carcinoma cells

Nobufumi Sekino, Masayuki Kano, Yasunori Akutsu, Naoyuki Hanari, Kentaro Murakami, Masahiko Takahashi, Yasunori Matsumoto, Ryota Otsuka, Masaya Yokoyama, Hisahiro Matsubara (Dept. of Frontier Surgery, Grad. Sch. of Med., Chiba Univ.)

食道癌におけるメトホルミンの抗腫瘍効果についての検討

関野 伸史、加野 将之、阿久津 泰典、羽成 直行、村上 健太郎、高橋 理彦、松本 泰典、大塚 亮太、横山 将也、松原 久裕（千葉大学大学院 医学研究院 先端応用外科）

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

#### P-14-9 Colorectal cancer (1)

大腸がん (1)

Chairperson: Tsunekazu Mizushima (Osaka Univ. Grad. Sch. of Med.)

座長：水島 恒和（大阪大・院医・炎症性腸疾患治療学）

#### P-1250 Low expression of Slingshot1 (SSH1) is the recurrence-related marker in colorectal cancer

Yuichiro Miyake, Naotsugu Haraguchi, Junichi Nishimura, Taishi Hata, Tsunekazu Mizushima, Hirofumi Yamamoto, Masaki Mori (Dept. Gastroenterological Surg., Osaka Univ. Grad. Sch. Med)

新規大腸癌再発関連遺伝子 Slingshot1 (SSH1) に関する検討

三宅 祐一朗、原口 直紹、西村 潤一、畠 泰司、水島 恒和、山本 浩文、森 正樹（大阪大学・医・消化器外科）

#### P-1251 P4H9-detected molecule expression on spindle-shaped fibroblasts indicates malignant phenotype of colorectal cancer

Shozo Yokoyama, Akihiro Takeuchi, Shunsuke Yamaguchi, Yasuyuki Mitani, Tsukasa Hotta, Kenji Matsuda, Takashi Watanabe, Hiromitsu Iwamoto, Hiroki Yamaue (2nd Dept. Surg., Wakayama Med. Univ., Sch. Med.)

大腸癌間質線維芽細胞の β2 integrin 抗体 P4H9 が認識する分子の発現と大腸癌悪性度

横山 省三、竹内 昭博、山口 俊介、三谷 泰之、堀田 司、松田 健司、渡邊 高士、岩本 博光、山上 裕機（和歌山医大・医・第2外科）

#### P-1252 The significance of the evaluation of tumor-infiltrating lymphocytes in colorectal cancer.

Yasuhito Iseki, Masatsune Shibutani, Kiyoshi Maeda, Hisashi Nagahara, Tatsuro Tamura, Go Ohira, Sadaaki Yamazoe, Kenjiro Kimura, Takahiro Toyokawa, Ryosuke Amano, Hiroaki Tanaka, Kousei Hirakawa, Masaichi Ohira (Dept. Surg. Oncol., Osaka City Univ. Grad. Sch. Med)

大腸癌における腫瘍浸潤リンパ球の新しい評価法の意義

井関 康仁、渋谷 雅常、前田 清、永原 央、田村 達郎、大平 豪、山添 定明、木村 健二郎、豊川 貴弘、天野 良亮、田中 浩明、平川 弘聖、大平 雅一（大阪市立大学大学院・医学研究科・腫瘍外科）

#### P-1253 Tumor-infiltrating lymphocytes predict the chemotherapeutic outcomes in patients with stage IV colorectal cancer

Masatsune Shibutani, Kiyoshi Maeda, Hisashi Nagahara, Shinji Matsutani, Yasuhito Iseki, Kenjiro Kimura, Takahiro Toyokawa, Ryosuke Amano, Hiroaki Tanaka, Kazuya Muguruma, Kousei Hirakawa, Masaichi Ohira (Osaka City Univ. Dept. of Surgical Oncology)

Stage IV 大腸癌において腫瘍浸潤リンパ球は化学療法の効果予測に有用である

渋谷 雅常、前田 清、永原 央、松谷 慎治、井関 康仁、木村 健二郎、豊川 貴弘、天野 良亮、田中 浩明、六車 一哉、平川 弘聖、大平 雅一（大阪市立大学大学院・腫瘍外科）

#### P-1254 TILs after NAC/NACRT correlate with the effectiveness of therapies in patients with rectal cancer

Shinji Matsutani, Masatsune Shibutani, Kiyoshi Maeda, Hisashi Nagahara, Yasuhito Iseki, Kenjiro Kimura, Takahiro Toyokawa, ryousuke Amano, Hiroaki Tanaka, Kazuya Muguruma, Kousei Hirakawa, Masaichi Oohira (Dept. of Surgical Oncology, Osaka City Univ. Sch. Med.)

直腸癌術前補助療法後の腫瘍浸潤リンパ球は治療効果と相関する

松谷 慎治、渋谷 雅常、前田 清、永原 央、井関 康仁、木村 健二郎、豊川 貴弘、天野 良亮、田中 浩明、六車 一哉、平川 弘聖、大平 雅一（大阪市立大・医・腫瘍外科）

#### P-1255 DYRK2 regulates colorectal cancer liver metastasis through EMT.

Daisuke Ito<sup>1,2</sup>, Satomi Yogosawa<sup>1</sup>, Katsuhiko Yanaga<sup>2</sup>, Kiyotsugu Yoshida<sup>1</sup> (<sup>1</sup>Dept. Biochem, Jikei Univ., Sch. Med., <sup>2</sup>Dept. Surg, Jikei Univ., Sch. Med)

大腸癌においてDYRK2はEMTを介して大腸癌の転移・浸潤を制御する

伊藤 大介<sup>1,2</sup>、與五沢 里美<sup>1</sup>、矢永 勝彦<sup>2</sup>、吉田 清嗣<sup>1</sup>（<sup>1</sup>慈恵医大・生化学講座、<sup>2</sup>慈恵医大・外科）

**P-1256 Impact of CDX2 expression status on survival of patients with curatively resected colorectal liver metastases**

Yasuyuki Shigematsu, Hiroaki Kanda, Kentaro Inamura, Seiji Sakata, Yuichi Ishikawa (Dept. Path. Cancer Institute Hosp of JFCR.)

CDX2 発現状況が大腸がん肝転移切除後症例の予後に及ぼす影響  
重松 康之、神田 浩明、稲村 健太郎、坂田 征士、石川 雄一（がん研有明病院・病理部）

Room P Oct. 6 (Thu.) 16:35-17:20 J/E

**P14-10 Colorectal cancer (2)**

大腸がん (2)

Chairperson: Taishi Hata (Dept. of Gastroenterological Surg., Grad. Sch. of Med., Osaka Univ.)

座長：畠 泰司（大阪大・院医・消化器外科）

**P-1257 Enteric nerve degeneration in the colon dilated due to the luminal stenosis by cancer: involvement of CADM1/TSLC1**

Man Hagiyama<sup>1</sup>, Azusa Yoneshige, Akihiko Ito (Dept. Pathol., Fac. Med., Kindai Univ.)

癌による内腔狭窄に伴って拡張した大腸における腸管神経変性：  
CADM1/TSLC1 の関与

萩山 満、米重 あづさ、伊藤 彰彦（近大・医・病理学）

**P-1258 Mucin core protein expression in ulcerative colitis-associated colonic neoplasms**

Tetuo Mikami<sup>1</sup>, Hiroyuki Hayashi<sup>2</sup>, Yoshiko Numata<sup>3</sup>, Isao Okayasu<sup>3</sup>, Yoshiki Murakumo<sup>3</sup> (<sup>1</sup>Dept. Path. Toho Univ. Sch. Med., <sup>2</sup>Dept. Path. Yokohama Municipal Citizen's Hospital, <sup>3</sup>Dept. Path. Kitasato Univ. Sch. Med.)

潰瘍性大腸炎関連腫瘍におけるムチンコアタンパクの発現について  
三上 哲夫<sup>1</sup>、林 宏行<sup>2</sup>、沼田 賀子<sup>3</sup>、岡安 純<sup>3</sup>、村雲 芳樹<sup>3</sup>（<sup>1</sup>東邦大学・医・病理学、<sup>2</sup>横浜市立市民病院・病理診断科、<sup>3</sup>北里大学・医・病理学）

**P-1259 Cellular senescence and morphological change in sessile serrated adenoma/polyp**

Kenji Hisamatsu<sup>1</sup>, Tomohiro Kanayama<sup>1</sup>, Ayumi Niwa<sup>1</sup>, Kei Noguchi<sup>1</sup>, Kazuhiro Kobayashi<sup>2</sup>, Hiroyuki Tomita<sup>1</sup>, Yuichiro Hatano<sup>1</sup>, Akira Hara<sup>1</sup> (<sup>1</sup>Dept. Tumor Path., Gifu Uni. Grad. Sch. Med., <sup>2</sup>Dept. Path., Gifu Uni. Hosp.)

Sessile serrated adenoma/polyp における細胞老化と形態変化に関する検討

久松 憲治<sup>1</sup>、金山 知弘<sup>1</sup>、丹羽 亜弓<sup>1</sup>、野口 廉<sup>1</sup>、小林 一博<sup>2</sup>、富田 弘之<sup>1</sup>、波多野 裕一郎<sup>1</sup>、原 明<sup>1</sup>（<sup>1</sup>岐阜大・医・腫瘍病理、<sup>2</sup>岐阜大・医・病院・病理）

**P-1260 Expression and distribution of SPC18 in colorectal cancer**

Takuya Hattori, Kazuhiro Sentani, Naohide Oue, Naoya Sakamoto, Wataru Yasui (Dept. of Mol. Pathol., Hiroshima Univ)

大腸癌におけるSPC18の発現解析

服部 拓也、仙谷 和弘、大上 直秀、坂本 直也、安井 弥（広島大・院医歯保・分子病理）

**P-1261 Analysis of pseudomyxoma peritonei derived from a ruptured ovarian teratoma in a Lynch syndrome patient**

Rei Noguchi<sup>1</sup>, Kiyoshi Yamaguchi<sup>1</sup>, Tsuneo Ikenoue<sup>1</sup>, Hideaki Yano<sup>2</sup>, Yoshimasa Gohda<sup>2</sup>, Toru Igari<sup>3</sup>, Hideaki Yano<sup>2</sup>, Toru Igari<sup>3</sup>, Harumi Nakamura<sup>3</sup>, Yasunori Ohta<sup>4</sup>, Yoichi Furukawa<sup>1</sup> (<sup>1</sup>Div. Clin. Genome Res., IMS, The Univ Tokyo, <sup>2</sup>Dept. Surg., National Center for Global Health and Medicine, <sup>3</sup>Pathology Division, National Center for Global Health and Medicine, <sup>4</sup>Dept. Pathology, Hosp, IMS, The Univ. Tokyo)

リンチ症候群症例での卵巣奇形腫破裂由来の腹膜偽粘液腫の解析  
野口 琴<sup>1</sup>、山口 貴世志<sup>1</sup>、池上 恒雄<sup>1</sup>、矢野 秀朗<sup>2</sup>、合田 良征<sup>2</sup>、猪狩 亨<sup>3</sup>、矢野 秀朗<sup>2</sup>、猪狩 亨<sup>3</sup>、中村 ハリミ<sup>3</sup>、大田 泰徳<sup>4</sup>、古川 洋一<sup>1</sup>（<sup>1</sup>東大・医科研・臨床ゲノム腫瘍学、<sup>2</sup>国立国際医療センター下部消化管外科、<sup>3</sup>国立国際医療センター病理診断科、<sup>4</sup>東大・医科研・病院病理部）

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**P-1262 Nuclear localized mutant p53 causes invasion and metastasis by drastic morphological changes of colorectal tumor gland.**

Mizuho Nakayama<sup>1</sup>, Eri Sakai<sup>1</sup>, Kanae Echizen<sup>1</sup>, Hiroko Oshima<sup>1</sup>, Tae-su Han<sup>1</sup>, Rieko Ohki<sup>2</sup>, Atsushi Ochiai<sup>3</sup>, Dominic C. Voon<sup>1</sup>, Makoto Taketo<sup>1</sup>, Masanobu Oshima<sup>1</sup> (<sup>1</sup>Div. Genet., Cancer Res. Inst., Kanazawa Univ., <sup>2</sup>Div. of Rare Cancer Res., Natl. Cancer Ctr. Res. Inst., <sup>3</sup>Div. of Pathol. Clin. Lab., Natl. Cancer Ctr. Hosp.)

核局在した変異型p53は、大腸がん腺管構造変化を伴う悪性化浸潤・転移を誘導する。

中山 瑞穂<sup>1</sup>、坂井 絵梨<sup>1</sup>、越前 佳奈惠<sup>1</sup>、大島 浩子<sup>1</sup>、Tae-su Han<sup>1</sup>、大木 理恵子<sup>2</sup>、落合 淳志<sup>3</sup>、Dominic C. Voon<sup>1</sup>、武藤 誠<sup>1</sup>、大島 正伸<sup>1</sup>（<sup>1</sup>金沢大・がん研・腫瘍遺伝、<sup>2</sup>国立がん研究セ・研・希少がん、<sup>3</sup>国立がん研究セ・先端医セ）

Room P	Oct. 6 (Thu.) 16:35-17:20	J/E
<b>P14-10</b>	<b>Colorectal cancer (2)</b>	J/E

Room P	Oct. 6 (Thu.) 15:50-16:35	J/E
<b>P14-11</b>	<b>Colorectal cancer (3)</b>	J/E

**P-1263 Seven-colors fluorescence quantitative analysis of tertiary lymphoid structure in human colorectal cancers**

Kyoko Inadomi<sup>1</sup>, Mamoru Tanaka<sup>1</sup>, Michitaka Nakano<sup>1</sup>, Kohta Miyawaki<sup>1</sup>, Hiroaki Miyoshi<sup>2</sup>, Kenji Tsuchihashi<sup>1</sup>, Shuji Arita<sup>3</sup>, Hiroshi Ariyama<sup>1</sup>, Hitoshi Kusaba<sup>1</sup>, Koichi Ohshima<sup>1</sup>, Koichi Akashi<sup>1</sup>, Eishi Baba<sup>3</sup> (<sup>1</sup>Dept. Med. & Biosystemic Sci., Kyushu Univ. Grad. Sch. Med., <sup>2</sup>Dept. Pathol., Kurume Univ., <sup>3</sup>Dept. Comprehensive Clin. Oncology, Faculty Med. Sci., Kyushu Univ.)

7色多重免疫組織化学染色による大腸癌組織中の3次リンパ装置の定量的解析

稻富 享子<sup>1</sup>、田中 守<sup>1</sup>、中野 優子<sup>1</sup>、宮脇 恒太<sup>1</sup>、三好 寛明<sup>2</sup>、土橋 賢司<sup>1</sup>、在田 修二<sup>3</sup>、有山 寛<sup>1</sup>、草場 仁志<sup>1</sup>、大島 孝一<sup>2</sup>、赤司 浩一<sup>1</sup>、馬場 英司<sup>3</sup>（<sup>1</sup>九州大学・医・病態修復内科、<sup>2</sup>久留米大学・医・病理学講座、<sup>3</sup>九州大学・医・九州連携臨床腫瘍学講座）

**P-1264 Analysis of responsible gene in early-onset colorectal cancer**

Yamamoto Gou<sup>1</sup>, Yoshiko Arai, Tetsuhiko Tachikawa, Kiwamu Akagi (Div. Mol. Diag. & Cancer Prev., Saitama Cancer Center)

若年発症大腸癌の原因遺伝子探索

山本 剛、新井 吉子、立川 哲彦、赤木 究（埼玉がんセ・腫予）

**P-1265 Negative effects of LPA4 and LPA6 on cell growth and motile activities of colon cancer cells**

Kaede Takahashi<sup>1</sup>, Kaori Fukushima<sup>1</sup>, Kanya Honoki<sup>2</sup>, Toshifumi Tsujiiuchi<sup>1</sup> (<sup>1</sup>Dept. Life Sci., Kindai Univ., <sup>2</sup>Dept. Orthop. Surg., Nara Med. Univ.)

大腸がんの細胞増殖・運動能に対するリゾフォスファチジン酸受容体-4(LPA4)およびLPA6の抑制効果

高橋 楓<sup>1</sup>、福嶋 香<sup>1</sup>、朴木 寛弥<sup>2</sup>、辻内 俊文<sup>1</sup>（<sup>1</sup>近畿大・理工・生命、<sup>2</sup>奈良医大・整外）

**P-1266 Transcription factor X promotes stemness and induces malignant phenotypes in colon cancer**

Hisayoshi Igarashi<sup>1</sup>, Hiroaki Taniguchi<sup>1</sup>, Chiharu Moriya<sup>1</sup>, Anri Saitoh<sup>1</sup>, Yohei Miyagi<sup>2</sup>, Kohzoh Imai<sup>2</sup> (<sup>1</sup>Ctr. Antibody & Vaccine Therapy, Inst. Med. Sci., Univ. Tokyo, <sup>2</sup>Kanagawa Cancer Center, <sup>3</sup>The Institute of Medical Science, The University of Tokyo)

転写因子Xは大腸癌の幹細胞性を誘導し悪性形質を促進する

五十嵐 央祥<sup>1</sup>、谷口 博昭<sup>1</sup>、森谷 千春<sup>1</sup>、斎藤 杏里<sup>1</sup>、宮城 洋平<sup>2</sup>、今井 浩三<sup>3</sup>（<sup>1</sup>東大・医科研・抗体ワクチンセンター、<sup>2</sup>神奈川県立がんセンター、<sup>3</sup>東京大学医科学研究所）

**P-1267 Analysis of peptidylarginine deiminase 2 which is suppressed in colon cancer**

Hajime Taniguchi<sup>1</sup>, Ryo Funayama<sup>2</sup>, Minoru Kobayashi<sup>1</sup>, Tatsuyuki Takadate<sup>1</sup>, Tomoya Abe<sup>1</sup>, Masamichi Mizuma<sup>1</sup>, Fumiyoji Fujishima<sup>3</sup>, Shinobu Ohnuma<sup>1</sup>, Takeshi Naitoh<sup>1</sup>, Michiaki Unno<sup>1</sup>, Keiko Nakayama<sup>2</sup> (<sup>1</sup>Dept. Surg., Tohoku Univ. Grad. Sch. Med., <sup>2</sup>Div. Cell Prolife., Tohoku Univ. Grad. Sch. Med., <sup>3</sup>Dept. Path. & Histotech., Tohoku Univ. Grad. Sch. Med.)

大腸癌で発現が抑制されるPeptidylarginine deiminase 2の機能解析

谷口 肇<sup>1</sup>、舟山 亮<sup>2</sup>、小林 実<sup>1</sup>、高館 達之<sup>1</sup>、阿部 友哉<sup>1</sup>、水間 正道<sup>1</sup>、藤島 史喜<sup>3</sup>、大沼 忍<sup>1</sup>、内藤 剛<sup>1</sup>、海野 優明<sup>1</sup>、中山 啓子<sup>2</sup>（<sup>1</sup>東北大大学院・消化器外科学分野、<sup>2</sup>東北大大学院・細胞増殖制御分野、<sup>3</sup>東北大大学院・病理検査学分野）

**P-1268 Phosphoserine phosphatase (PSPH) is a novel candidate driver gene on chromosome 7 in colorectal cancer (CRC).**

Kuniaki Sato, Qingjiang Hu, Shinya Kidogami, Tomoko Saito, Sho Nambara, Hisateru Komatsu, Hidenari Hirata, Shotaro Sakimura, Yohsuke Kuroda, Shuhei Ito, Hidetoshi Eguchi, Takaaki Masuda, Koshi Mimori (Kyushu University Beppu Hospital Department of Surgery)

**PSPH** は 7 番染色体上に存在する大腸癌の新規 ドライバー候補遺伝子である。

佐藤 晋彰、胡 慶江、木戸上 真也、齋藤 衆子、南原 翔、小松 久晃、平田 秀成、崎村 正太郎、黒田 陽介、伊藤 伊藤、江口 英利、増田 隆明、三森 功士（九州大学病院別府病院・外科）

Room P Oct. 6 (Thu.) 16:35-17:20

J/E

**P14-12 Colorectal cancer (4)**

大腸がん (4)

Chairperson: Tomio Arai (Path., Tokyo Metro. Geriatr. Hosp.)  
座長：新井 富生（東京都健康長寿医療セ・老年病理学）

**P-1269 Surgical outcome of laparoscopic colectomy for T4a colon cancer**

Hidejiro Kawahara, Katsuhiko Yanaga (Dept. Surg., Jikei Univ. Sch. Med.)

漿膜浸潤結腸癌に対する腹腔鏡下手術の適応拡大に関する検討  
河原 秀次郎、矢永 勝彦（慈恵医大・外科）

**P-1270 Analysis of microRNA profiles involved in the resistance mechanism of TAS-102**

Kenta Tsunekuni<sup>1,2,3</sup>, jun koseki<sup>3</sup>, yuichiro doki<sup>1</sup>, masaki mori<sup>1</sup>, hidemitsu ishii<sup>3</sup> (<sup>1</sup>Dept. Gastrointestinal Surg. Med., Osaka Univ., <sup>2</sup>Taiho Pharmaceutical Co., Ltd., <sup>3</sup>Dept. Cancer Cancer Profiling Discovery, Med., Osaka Univ.)

TAS-102 の耐性機序に関わる microRNA プロファイルの解析

常國 健太<sup>1,2,3</sup>、小関 準<sup>3</sup>、土岐 祐一郎<sup>1</sup>、森 正樹<sup>1</sup>、石井 秀始<sup>3</sup>（大阪大学大学院・医・消化器外科、<sup>2</sup>大鵬薬品工業（株）・育葉研究所、<sup>3</sup>大阪大院・医・癌創薬プロファイリング）

**P-1271 Enhancement of antitumoral effect of molecular-targeting antibody by anti-claudin-4 antibody**

Hiroki Kuniyasu<sup>1,2,3</sup>, Yi Luo<sup>1</sup>, Takamitsu Sasaki<sup>2</sup>, Yoshitomo Chihara<sup>1</sup>, Rina Fujiwara<sup>1</sup>, Yukiko Nishiguchi<sup>1</sup>, Yosuke Hashimoto<sup>3</sup>, Masao Kondo<sup>3</sup> (<sup>1</sup>Dept. Mol. Pathol., Nara Med. Univ., <sup>2</sup>Dept. Gastroenterol. Surg., Fukuoka Univ. Sch. Med., <sup>3</sup>Grad. Sch. Pharm. Sci., Osaka Univ.)

抗 claudin-4 抗体の併用による抗体分子治療薬の効果促進

國安 弘基<sup>1,2,3</sup>、羅 奕<sup>1</sup>、佐々木 隆光<sup>2</sup>、千原 良友<sup>1</sup>、藤原 里奈<sup>1</sup>、西口 由希子<sup>1</sup>、橋本 洋祐<sup>3</sup>、近藤 昌夫<sup>3</sup>（奈良医大・分子病理、<sup>2</sup>福岡大・医・消化器外科、<sup>3</sup>大阪大院・薬学）

**P-1272 Targeting distant metastasis of colorectal cancer with a combination of anti-claudin-4 antibody**

Rina Fujiwara<sup>1,2,3</sup>, Yi Luo<sup>1</sup>, Takamitsu Sasaki<sup>2</sup>, Yukiko Nishiguchi<sup>1</sup>, Hitoshi Ohmori<sup>1</sup>, Yosuke Hashimoto<sup>3</sup>, Masuo Kondo<sup>3</sup>, Hiroki Kuniyasu<sup>1</sup> (<sup>1</sup>Dept. Mol. Pathol., Nara Med. Univ., <sup>2</sup>Dept. Gastroenterol. Surg., Fukuoka Univ. Sch. Med., <sup>3</sup>Grad. Sch. of Pharm. Sci., Osaka Univ.)

抗 claudin-4 抗体による大腸癌遠隔転移の標的化

藤原 里奈<sup>1,2,3</sup>、羅 奕<sup>1</sup>、佐々木 隆光<sup>2</sup>、西口 由希子<sup>1</sup>、大森 斎<sup>1</sup>、橋本 洋祐<sup>3</sup>、近藤 昌夫<sup>3</sup>、國安 弘基<sup>1</sup>（奈良医大・分子病理、<sup>2</sup>福岡大・医・消化器外科、<sup>3</sup>大阪大院・薬学）

**P-1273 Detection of micro RNAs as promising therapeutic targets for anti-metastatic therapy in colorectal cancer**

Takashi Kawai, Takashi Nagasaka, Tomokazu Fuji, Toshiaki Toshima, Kazuya Yasui, Yoshiko Mori, Toshiyoshi Fujiwara (Dept. Gastroenterological Surg., Okayama Univ., Med. Sch.)

転移性大腸癌における治療標的となりうるマイクロ RNA の同定

河合 賢、永坂 岳司、藤 智和、戸嶋 俊明、安井 和也、母里 淑子、藤原 俊義（岡山大・大学院・消化器外科学）

**P-1274 Novel serum microRNAs that enable liquid biopsy for colorectal cancer**

Hiroyuki Takamaru<sup>1</sup>, Yutaka Saito<sup>1</sup>, Ken Kato<sup>2</sup>, Junpei Kawauchi<sup>3</sup>, Satoko Takizawa<sup>3</sup>, Hiromi Sakamoto<sup>4</sup>, Takeshi Nakajima<sup>1</sup>, Motohiro Kojima<sup>5</sup>, Atsushi Ochiai<sup>6</sup>, Takahiro Ochiai<sup>6</sup>, Takahisa Matsuda<sup>1,7</sup> (<sup>1</sup>Div. of Endoscopy, Natl. Cancer Ctr. Hosp., <sup>2</sup>Gastrointestinal Med. Oncology Div., Natl. Cancer Ctr. Hosp., <sup>3</sup>Toray Industries, Inc. New Frontiers Res. Lab., <sup>4</sup>Div. of Genetics, Natl. Cancer Ctr. Res. Inst., <sup>5</sup>Div. of Path., Natl. Cancer Ctr. Hosp. East, <sup>6</sup>Div. Mol. and Cell. Med., Natl. Cancer Ctr. Res. Inst., <sup>7</sup>Cancer Screening Ctr., Natl. Cancer Ctr. Hosp.)

血清マイクロ RNA での大腸癌におけるリキッドバイオプシーの検証  
高丸 博之<sup>1</sup>、斎藤 豊<sup>1</sup>、加藤 健<sup>2</sup>、河内 淳平<sup>3</sup>、滝澤 聰子<sup>3</sup>、坂本 裕美<sup>4</sup>、中島 健<sup>1</sup>、小嶋 基寛<sup>5</sup>、落合 淳志<sup>5</sup>、落谷 孝広<sup>6</sup>、松田 尚久<sup>1,7</sup> (<sup>1</sup>国立がん研セ 中央病院 内視鏡科、<sup>2</sup>国立がん研セ 中央病院 消化管内科、<sup>3</sup>東レ株式会社先端融合研究所、<sup>4</sup>国立がん研セ研究所 遺伝医学研究分野、<sup>5</sup>国立がん研セ 東病院 病理・臨床検査科、<sup>6</sup>国立がん研セ研究所 分子細胞治療研究分野、<sup>7</sup>国立がん研セ 検診センター）

Room P Oct. 6 (Thu.) 15:50-16:35

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**P14-13****Colorectal cancer (5)**

大腸がん (5)

Chairperson: Ichiro Takemasa (Dept. of Surg., Surgical Oncol. & Sci. Sapporo Med. Univ.)  
座長：竹政 伊知朗（札幌医大・医・消化器総合・乳腺・内分泌外科）

**P-1275 Probiotic-derived polyphosphate inhibits colon cancer progression**

Aki Sakatani, Mikihiro Fujiya, Junpei Sasajima, Katsuya Ikuta, Toshikatsu Okumura (Div. of Gastroenterology and Hematology/Oncology, Asahikawa Med. Univ.)

乳酸菌由来長鎖ポリリン酸の大腸癌に対する抗腫瘍効果  
坂谷 慧、藤谷 幹浩、笹島 順平、生田 克哉、奥村 利勝（旭川医大・消化器血液腫瘍制御内科学）

**P-1276 Identification of antitumor component in maple syrup to develop novel anti-cancer drugs for colorectal cancer.**

Tetsushi Yamamoto, Ryota Shiburo, Kuniko Mitamura, Atsushi Taga (Pathological and biomolecule analyses laboratory, Faculty of Pharmacy, Kindai University)

新規大腸癌治療薬開発のためのメープルシロップ中抗腫瘍成分の同定  
山本 哲志、瀧路 龍大、三田村 邦子、多賀 淳（近畿大・薬・病態分子解析）

**P-1277 The role of maple syrup on cell proliferation of colorectal cancer cells**

Chiaki Kubota, Tetsushi Yamamoto, Kuniko Mitamura, Atsushi Taga (Pathological and Biomolecule Analysis Laboratory, School of Pharmacy, Kindai University)

大腸がん細胞の細胞増殖におけるメープルシロップの役割について  
久保田 千晶、山本 哲志、三田村 邦子、多賀 淳（近畿大院・薬・病態分子解析）

**P-1278 Effect of proton pump inhibitor on colonic cancer cells**

Shiori Mori, Yui Kadocchi, Yi Luo, Hiroyuki Tatsutagawa, Yukiko Nishiguchi, Hitoshi Ohmori, Hiroki Kuniyasu (Dept. Mol. Pathol., Nara Med. Univ.)

Proton pump inhibitor の大腸癌に対する影響

森 汐莉、門地 優衣、羅 奕、桂川 広幸、西口 由希子、大森 斎、國安 弘基（奈良医大・分子病理）

**P-1279 Effect of middle chain fatty acid and ketone body on cancer cells**

Yui Kadocchi<sup>1</sup>, Shiori Mori<sup>1</sup>, Yi Luo<sup>1</sup>, Naoya Iwata<sup>1</sup>, Rina Fujiwara<sup>1</sup>, Takamitsu Sasaki<sup>2</sup>, Kiyomu Fujii<sup>1</sup>, Hiroki Kuniyasu<sup>1</sup> (<sup>1</sup>Dept. Mol. Pathol., Nara Med. Univ., <sup>2</sup>Dept. Gastroenterol. Surg., Fukuoka Univ. Sch. Med.)

中鎖脂肪酸およびケトン体の癌細胞への影響

門地 優衣<sup>1</sup>、森 汐莉<sup>1</sup>、羅 奕<sup>1</sup>、岩田 直也<sup>1</sup>、藤原 里奈<sup>1</sup>、佐々木 隆光<sup>2</sup>、藤井 澄<sup>1</sup>、國安 弘基<sup>1</sup>（奈良医大・分子病理、<sup>2</sup>福岡大・医・消化器外科）

**P-1280 Trans fatty acid enhances the progression of colorectal cancer by activating cancer stem cells**

Yi Luo<sup>1</sup>, Hitoshi Ohmori<sup>1</sup>, Yui Kadocchi<sup>1</sup>, Shiori Mori<sup>1</sup>, Kiyomu Fujii<sup>1</sup>, Takamitsu Sasaki<sup>2</sup>, Hiroki Kuniyasu<sup>1</sup> (<sup>1</sup>Dept. Mol. Pathol., Nara Med. Univ., <sup>2</sup>Dept. Gastroenterol. Surg., Fukuoka Univ. Sch. Med.)

トランス脂肪酸はがん幹細胞を活性化し大腸癌の転移を促進する

羅 奕<sup>1</sup>、大森 斎<sup>1</sup>、門地 優衣<sup>1</sup>、森 汐莉<sup>1</sup>、藤井 澄<sup>1</sup>、佐々木 隆光<sup>2</sup>、國安 弘基<sup>1</sup>（奈良医大・分子病理、<sup>2</sup>福岡大・医・消化器外科）

Room P Oct. 6 (Thu.) 16:35-17:20

P14-14

**Colorectal cancer (6)**

大腸がん (6)

J/E

Chairperson: Hidekazu Takahashi (Dept. of Gastroenterological Surg., Osaka Univ. Sch. of Med.)  
座長：高橋 秀和（大阪大・院医・消化器外科）

**P-1281 Autocrine BMP-4 accelerates proteasomal degradation of Bim and protects colorectal cancer cells from apoptosis**

Yuichiro Yokoyama<sup>1</sup>, Shogo Ehata<sup>1</sup>, Toshiaki Watanabe<sup>2</sup>, Kohei Miyazono<sup>1</sup> (<sup>1</sup>Dept. Mol. Path., Univ of Tokyo, Grad. Sch. Med., <sup>2</sup>Dept. Surg. Oncol., Univ of Tokyo)

大腸癌細胞はBMP-4を自己分泌し、Bimのプロテアソーム依存的な分解を促進することでアポトーシスを回避する

横山 雄一郎<sup>1</sup>、江幡 正悟<sup>1</sup>、渡邊 聰明<sup>2</sup>、宮園 浩平<sup>1</sup> (<sup>1</sup>東大医・院医・分子病理、<sup>2</sup>東大医・腫瘍外科)

**P-1282 Identification of tumor endothelium-related genes in colorectal cancer**

Akira Yorozu<sup>1</sup>, Eiichiro Yamamoto<sup>2</sup>, Akihiro Tsuyada<sup>1</sup>, Yuto Numata<sup>1</sup>, Kai Masahiro<sup>1</sup>, Takeshi Niinuma<sup>1</sup>, Hiroshi Kitajima<sup>1</sup>, Hironori Aoki<sup>1</sup>, Hideki Wakasugi<sup>2</sup>, Takashi Tokino<sup>3</sup>, Hiroshi Nakase<sup>2</sup>, Tamotsu Sugai<sup>1</sup>, Hiromu Suzuki<sup>1</sup> (<sup>1</sup>Dept. Mol. Biol., Sapporo Med. Univ. Sch. Med., <sup>2</sup>Dept. Gastroenterol., Sapporo Med. Univ. Sch. Med., <sup>3</sup>Med. Genome Sci., Frontier Med., Sapporo Med. Univ. Sch. Med., <sup>1</sup>Dept. Mol. Diag. Pahtol., Iwate Med. Univ.)

大腸癌における腫瘍血管内皮関連遺伝子の同定

萬 顕<sup>1</sup>、山本 英一郎<sup>2</sup>、津矢田 明泰<sup>1</sup>、沼田 有斗<sup>1</sup>、甲斐 正広<sup>1</sup>、新 沼 猛<sup>1</sup>、北嶋 洋志<sup>1</sup>、青木 敏則<sup>1</sup>、若杉 秀樹<sup>2</sup>、時野 隆至<sup>3</sup>、仲瀬 裕志<sup>2</sup>、菅井 有<sup>4</sup>、鈴木 拓<sup>1</sup> (<sup>1</sup>札幌医大・医・分子生物学、<sup>2</sup>札幌医大・医・消内、<sup>3</sup>札幌医大・医・フロ研・ゲノム医学科、<sup>4</sup>岩手医大・病理診断)

**P-1283 Disruption of colorectal cancer organoids promotes growth and stemness by activating WNT pathway.**

Takeshi Hagiwara<sup>1,2</sup>, Piulats\_M Jose<sup>1</sup>, Hiroko Endo<sup>1</sup>, Hiroaki Okuyama<sup>1</sup>, Takahiro Tashiro<sup>1,2</sup>, Yoshiharu Sakai<sup>2</sup>, Masahiro Inoue<sup>1</sup> (<sup>1</sup>Dept. of Biochem., OMCC, <sup>2</sup>Dept. of Surg., Grad. Sch. of Med., Kyoto Univ.)

大腸がんスフェロイド破壊による、WNT経路の活性化と増殖と幹細胞性の亢進

萩原 健<sup>1,2</sup>、Piulats\_M Jose<sup>1</sup>、遠藤 洋子<sup>1</sup>、奥山 裕照<sup>1</sup>、多代 尚広<sup>1,2</sup>、坂井 義治<sup>2</sup>、井上 正宏<sup>1</sup> (<sup>1</sup>大阪府立成人病センター研究所 生化学部門、<sup>2</sup>京都大学 消化管外科)

**P-1284 The study on cancer stem cell-specific therapy through drug repositioning strategy**

Na-Hee LEE<sup>1</sup>, In-Sun Hong<sup>1</sup>, Jeong-Seok Nam<sup>2</sup>, Ji-Young Kim<sup>1</sup>, Gyu-Beom Jang<sup>1</sup>, Se-Ra Park<sup>1</sup>, Hyun-Jin Kim<sup>1</sup>, Jae-Wan Kim<sup>1</sup> (<sup>1</sup>Department of Molecular Medicine, Gachon University, <sup>2</sup>Dept. of Life Sciences, Gwangju Institute of Science and Technology)

**P-1285 Chemo-resistance regulatory factor CSF2 promote colorectal cancer stem cell property**

Gyu-Beom Jang<sup>1,2</sup>, Ji-Young Kim<sup>1</sup>, Na-Hee Lee<sup>1</sup>, Se-Ra Park<sup>1</sup>, Jae-Wan Kim<sup>1</sup>, Hyeon-Jin Kim<sup>1</sup>, Jeong-Seok Nam<sup>2</sup>, In-Sun Hong<sup>1</sup> (<sup>1</sup>Dept. of Molecular Medicine, Gachon University, <sup>2</sup>Dept. of Life Sciences, Gwangju Institute of Science and Technology)

**P-1286 Drug repositioning for colorectal cancer stem cell therapeutics**

SERA PARK<sup>1</sup>, Gyu-beom Jang<sup>1</sup>, Ji-Young Kim<sup>1</sup>, Na-Hee Lee<sup>1</sup>, Jae-Wan Kim<sup>1</sup>, Hyeon-Jin Kim<sup>1</sup>, Jeong-Seok Nam<sup>2</sup>, In-Sun Hong<sup>1</sup> (<sup>1</sup>Dept. of Molecular Medicine, Gachon University, <sup>2</sup>Dept. of Life Sciences, Gwangju Institute of Science and Technology)

Room P Oct. 6 (Thu.) 15:50-16:35

P14-15

**Hepatocellular cancer (1)**

肝がん (1)

J/E

Chairperson: Tamotsu Sugai (Dept. of Mol. Diagn. Pathol., Iwate Med. Univ. Sch. of Med.)  
座長：菅井 有（岩手医大・病理診断）

**P-1287 Increased expression of Fanconi anemia group D2 gene indicates malignant outcomes in human hepatocellular carcinoma**

Hisateru Komatsu<sup>1,2</sup>, Takaaki Masuda<sup>1</sup>, Tomohiro Iguchi<sup>1</sup>, Hidenari Hirata<sup>1</sup>, Shinya Kidogami<sup>1</sup>, Yohsuke Kuroda<sup>1</sup>, Shuhei Ito<sup>1</sup>, Hidetoshi Eguchi<sup>1</sup>, Keishi Sugimachi<sup>1</sup>, Hidetoshi Eguchi<sup>2</sup>, Yuichiro Doki<sup>2</sup>, Masaki Mori<sup>2</sup>, Koshi Mimori<sup>1</sup> (<sup>1</sup>Dept. Surgery, Kyushu Univ. Beppu Hosp., <sup>2</sup>Dept. Gastroenterological Surg, Osaka Univ., Grad. Sch. Med.)

肝細胞癌におけるFanconi Anemia, Complementation Group D2 遺伝子発現の意義

小松 久晃<sup>1,2</sup>、増田 隆明<sup>1</sup>、井口 友宏<sup>1</sup>、平田 秀成<sup>1</sup>、木戸上 真也<sup>1</sup>、黒田 陽介<sup>1</sup>、伊藤 修平<sup>1</sup>、江口 英利<sup>1</sup>、杉町 圭史<sup>1</sup>、江口 英利<sup>2</sup>、土岐 祐一郎<sup>2</sup>、森 正樹<sup>2</sup>、三森 功士<sup>1</sup> (<sup>1</sup>九州大学病院別府病院 外科、<sup>2</sup>大阪大学大学院 消化器外科学)

**P-1288 Activation of the Akt/mTOR pathway in Combined hepatocellular carcinoma and cholangiocarcinoma**

Yukihiro Okumura, Kenichi Kohashi, Yuki Tanaka, Yoshinao Oda (Anatomic Pathol. Dept, Kyushu Univ.)

混合型肝癌におけるAkt/mTOR pathway の解析

奥村 幸彦、孝橋 賢一、田中 ゆき、小田 義直（九大・形態機能病理学）

**P-1289 Programmed death-ligand 1 (PD-L1) expression pattern in the hepatocellular carcinomas**

Hiroaki Kanda<sup>1</sup>, Yasin Mahmut<sup>1</sup>, Yasuyuki Shigematsu<sup>1</sup>, Takeru Wakatsuki<sup>1</sup>, Noriko Yamamoto<sup>1</sup>, Akio Sairua<sup>2</sup>, Yuichi Ishikawa<sup>1</sup>, Tomoyuki Kitagawa<sup>1</sup> (<sup>1</sup>Dept. Pathol. The Cancer Inst of JFCR, <sup>2</sup>Dept. Surg. The Cancer Inst Hosp of JFCR)

肝細胞がんにおけるPD-L1 の発現様式

神田 浩明<sup>1</sup>、マハムット ヤゼン<sup>1</sup>、重松 康之<sup>1</sup>、若槻 尊<sup>1</sup>、山本 智理子<sup>1</sup>、齋浦 明夫<sup>2</sup>、石川 雄一<sup>1</sup>、北川 知行<sup>1</sup> (<sup>1</sup>がん研・研・病理、<sup>2</sup>がん研・病・外科)

**P-1290 HMGA2 is a promising antitumor target for hepatocellular carcinoma with low mitochondrial activity**

Masato Higurashi<sup>1</sup>, Kohji Saito<sup>3</sup>, yohko Kohno<sup>2</sup>, Fumihiro Ishikawa<sup>1</sup>, Kazunori Mori<sup>1</sup>, Takeshi Aoki<sup>4</sup>, Masahiko Murakami<sup>4</sup>, Masafumi Takimoto<sup>3</sup>, Motoko Shibanuma<sup>1</sup> (<sup>1</sup>Dept. Cancer Cell Biol., Showa Univ., Sch. Pharm., <sup>2</sup>Dept. Oral Diagnostic Sci., Showa Univ., Sch. Dent., <sup>3</sup>Dept. Pathology., Showa Univ., Sch. Med., <sup>4</sup>Dept. Surgery, Div. General & Gastroenterological Surgery)

肝細胞がんに対する新規治療戦略：ATM/ATR-HMGA2 経路の遮断による老化形質誘導の可能性

日暮 大渡<sup>1</sup>、斎藤 光次<sup>3</sup>、河野 葉子<sup>2</sup>、石川 文博<sup>1</sup>、森 一憲<sup>1</sup>、青木 武士<sup>4</sup>、村上 雅彦<sup>4</sup>、瀧本 雅文<sup>3</sup>、柴沼 賢子<sup>1</sup> (<sup>1</sup>昭和大・薬・腫瘍細胞生物学、<sup>2</sup>昭和大・歯・口腔病理、<sup>3</sup>昭和大・医・臨床病理診断、<sup>4</sup>昭和大・医・消化器一般外科)

**P-1291 Fetal/neonatal gene expression in oncogene-induced mouse liver tumors: possible involvement of epigenetic mechanisms**

Kenji Watanabe, Xi Chen, Masahiro Yamamoto, Bing Xin, Kiyonaga Fujii, Takako Ooshio, Yoko Okada, Yuji Nishikawa (Div. Tumor Pathol., Dep. Pathol., Asahikawa Med. Univ.)

癌遺伝子誘発マウス肝腫瘍におけるエピジェネティックな過程を介した胎児・新生児期遺伝子の活性化

渡邊 賢二、陳 錫、山本 雅大、辛 氷、藤井 清永、大塩 貴子、岡田 陽子、西川 祐司（旭川医大・病理・腫瘍病理）

Room P Oct. 6 (Thu.) 16:35-17:20

J/E

**P-14-16 Hepatocellular cancer (2)**

肝がん (2)

Chairperson: Eisaku Kondo (Div. of Mol. Cell. Pathol., Niigata Univ., Grad. Sch. of Med.)

座長：近藤 英作（新潟大・院医歯・分子細胞病理）

**P-1292 Evaluation of laparoscopic partial hepatectomy for hepatocellular carcinoma in cirrhosis in our hospital**

Yoshiteru Katsura, Yutaka Takeda, Yoshiaki Ohmura, Takuya Sakamoto, Junichi Inadome, Atsushi Naito, Kohei Murakami, Yoshinori Kagawa, Atsushi Takeno, Chiyomi Egawa, Takeshi Kato, Shigeyuki Tamura (Dept. Surg., Kansai Rosai Hosp.)

当院の肝機能不良（肝障害度B）肝細胞癌に対する腹腔鏡下肝部分切除術の治療成績

桂 宜輝、武田 裕、大村 仁昭、阪本 阜也、稻留 遼一、内藤 敦、村上 剛平、賀川 義規、竹野 淳、柄川 千代美、加藤 健志、田村 茂行（関西労災病院 外科）

**P-1293 Analysis of N-glycan alternation and invasiveness associated with u-PA expression in hepatocellular carcinoma cell-lines**

Hideyori Takahashi, Toshiya Kamiyama, Takeshi Aiyama, Tatsuya Orimo, Tatsuhiko Kakisaka, Hideki Yokoo, Akinobu Taketomi (Dept. Gastroenterol Surg I, Hokkaido Univ.)

肝癌細胞株における糖鎖異常とu-PA発現変化に伴う浸潤能の解析

高橋 秀徳、神山 俊哉、相山 健、折茂 達也、柿坂 達彦、横尾 英樹、武富 紹信（北大・医・消化器外科I）

**P-1294 Continuous hepatocyte apoptosis accelerates diethylnitrosamine-induced tumorigenesis in the liver**

Yasutoshi Nozaki, Hayato Hikita, Satoshi Tanaka, Yuta Myojin, Yuki Makino, Yoshinobu Saito, Ryotaro Sakamori, Tomohide Tatsumi, Tetsuo Takehara (Dep. Gastroenterology and Hepatology., Osaka University Graduate School of Medicine)

肝細胞アポトーシスが持続する肝臓では、DEN誘発性腫瘍形成が促進する

野崎 泰俊、疋田 隼人、田中 聰司、明神 悠太、牧野 祐紀、齋藤 義修、阪森 亮太郎、巽 智秀、竹原 徹郎（大阪大学 消化器内科）

**P-1295 Non-alcoholic steatohepatitis-related liver tumorigenesis is suppressed in mice lacking hepatic retinoid storage**

Yohei Shirakami, Takayasu Ideta<sup>2</sup>, Hiroyasu Sakai<sup>2</sup>, Takuji Tanaka<sup>3</sup>, Masahito Shimizu<sup>2</sup>, Mitsuhiro Seishima<sup>1</sup> (<sup>1</sup>Dept. of Informative Clinical Med., Gifu Univ. Grad. Sch. Med., <sup>2</sup>Dept. of Gastroenterology, Gifu Univ. Grad. Sch. Med., <sup>3</sup>Dept. of Pathol. Diagnosis, Gifu Municipal Hosp.)

肝レチノイド貯蔵欠如マウスにおいて非アルコール性脂肪肝炎関連肝発癌は抑制される

白上 洋平<sup>1</sup>、出田 貴康<sup>2</sup>、境 浩康<sup>2</sup>、田中 卓二<sup>3</sup>、清水 雅仁<sup>2</sup>、清島 満<sup>1</sup>（<sup>1</sup>岐阜大・院医・病態情報解析医学、<sup>2</sup>岐阜大・院医・消化器病態学、<sup>3</sup>岐阜市民病院・病理診断科部）

Room P Oct. 6 (Thu.) 15:50-16:35

E

**P-14-17 Hepatocellular cancer (3)**

肝がん (3)

Chairperson: Hidetoshi Eguchi (Dept. of Gastroenterological Surg., Grad. Sch. of Med., Osaka Univ.)

座長：江口 英利（大阪大・院医・消化器外科）

**P-1296 High-throughput drug library screening for overcoming sorafenib resistance in hepatocarcinoma cell lines**

Ju Hyun Shim, Bora Oh, Jihyun An, Jihyun Song, Naomi Park, Han Chu Lee (Dept. of Gastroenterology, AMC)

**P-1297 Galectin-1 regulates the inflammatory crosstalk of hepatic myofibroblasts and hepatocellular carcinoma**

Ming-Heng Wu, Kai-Huei Yang (Graduate Institute of Translational Medicine, Taipei Medical University, Taipei, Taiwan)

**P-1298 Clinical application of non-coding RNAs as a biomarker in human hepatocellular carcinoma**

Keun Hur<sup>1,2</sup>, Gyeonghwa Kim<sup>1,2</sup>, Se Young Jang<sup>3</sup>, Yong-Hun Choi<sup>1,2</sup>, Yu Rim Lee<sup>3</sup>, Su hyun Lee<sup>3</sup>, Sun Kyung Jang<sup>3</sup>, Soo Young Park<sup>3</sup>, Won Young Tak<sup>3</sup>, Young Oh Kweon<sup>3</sup> (<sup>1</sup>Dept. Biochem.&Cell Biol., Sch. of Med., Kyungpook Natil. Univ., <sup>2</sup>BK21 Plus, Dept. of Biomed. Sci., Kyungpook Natil. Univ., <sup>3</sup>Dept. of Internal Med., Kyungpook Natil. Univ. Hosp.)

**P-1299 Teroxitrine induces extrinsic pathway-mediated apoptosis and suppresses metastasis in human hepatocellular carcinoma**

Kang Fang, Wen-Hsing Wang, Seung-Hun Kim, Chun-Yen Liu, Chang-Hung Hsieh (Dept. of Life Science, Natl. Taiwan Normal Univ.)

**P-1300 ZNF479 contributes in 14-3-3ε-suppressed metallothionein-1 expression and tumor progression of hepatocellular carcinoma.**

Yi-Ju Wu<sup>1,2</sup>, Jun-Yang Liou<sup>2</sup> (<sup>1</sup>Inst. of Mol. Med., NTHU, Hsinchu, Taiwan, <sup>2</sup>Inst. of Cell. & System Med., NHRI, Zhunan, Taiwan)

**P-1301 CWP232228 targets liver cancer stem cells through Wnt/b-catenin signaling**

Ji-Young Kim<sup>1</sup>, In-Sun Hong<sup>1</sup>, Kyu-Beom Jang<sup>1</sup>, Na-Hee Lee<sup>1</sup>, Se-Ra Park<sup>1</sup>, Hyun-Jin Kim<sup>1</sup>, Jae-Wan Kim<sup>1</sup>, Jung-Seok Nam<sup>2</sup> (<sup>1</sup>Department of Molecular Medicine, Gachon University, <sup>2</sup>Dept. of Life Sciences, Gwangju Institute of Science and Technology)

Room P Oct. 6 (Thu.) 16:35-17:20

J/E

**P-14-18 GIST/ biliary tract cancer**

GIST・胆道がん

Chairperson: Tsuyoshi Takahashi (Dept. of Surg., Osaka Univ.)

座長：高橋 剛（大阪大・院医・消化器外科）

**P-1302 Analysis of microRNA associated with recurrence of gastrointestinal stromal tumor**

Takeshi Niijuma<sup>1</sup>, Hideki Wakasugi<sup>2</sup>, Eiichiro Yamamoto<sup>2</sup>, Masahiro Kai<sup>1</sup>, Hiromu Suzuki<sup>1</sup> (<sup>1</sup>Department of Molecular Biology, Sapporo Medical University, <sup>2</sup>Department of Gastroenterology, Rheumatology and Clinical Immunology)

消化管間質腫瘍の再発に関するmicroRNAの解析

新沼 猛<sup>1</sup>、若杉 英樹<sup>2</sup>、山本 英一郎<sup>2</sup>、甲斐 正広<sup>1</sup>、鈴木 拓<sup>1</sup>（札幌医科大学 分子生物学講座、<sup>2</sup>同 消化器・免疫・リウマチ内科学講座）

**P-1303 Microarray Analysis of Gastrointestinal Stromal Tumor-Originated Spheroids**

Hirotoshi Kikuchi<sup>1</sup>, Tomohiro Murakami<sup>1</sup>, Tomohiro Matsumoto<sup>1</sup>, Yusuke Ozaki<sup>1</sup>, Toshiki Kawabata<sup>1</sup>, Yoshihiro Hiramatsu<sup>1</sup>, Kinji Kamiya<sup>1</sup>, Manabu Ohta<sup>2</sup>, Takanori Sakaguchi<sup>1</sup>, Hiroyuki Konno<sup>3</sup> (<sup>1</sup>Second Dept. Surg., Hamamatsu Univ. Sch. Med., <sup>2</sup>Oncol. Ctr. Hamamatsu Univ. Hosp., <sup>3</sup>Hamamatsu Univ. Sch. Med.)

消化管間質腫瘍由来spheroidにおける遺伝子発現の解析

菊池 寛利<sup>1</sup>、村上 智洋<sup>1</sup>、松本 知拓<sup>1</sup>、尾崎 裕介<sup>1</sup>、川端 俊貴<sup>1</sup>、平松 良浩<sup>1</sup>、神谷 欣志<sup>1</sup>、太田 学<sup>2</sup>、坂口 孝宣<sup>1</sup>、今野 弘之<sup>3</sup>（浜松医大・第二外科、<sup>2</sup>浜松医大病院・腫瘍セ、<sup>3</sup>浜松医大）

**P-1304 Low expression of aldehyde dehydrogenase 1 is a poor prognostic factor in extrahepatic bile duct and gallbladder cancer**

Fumihiko Matsuzawa, Tatsuzo Mizukami, Hirofumi Kamachi, Takahiro Einama, Toshiya Kamiyama, Akinobu Taketomi (Dept. Gastroenterol. Surg., Hokkaido Univ.)

ALDH1の低発現は肝外胆管癌および胆囊癌の重要な予後因子である

松澤 文彦、水上 達三、蒲池 浩文、永生 高広、神山 俊哉、武富 紹信（北大・医・消化器外科）

**P-1305 Expression of beta4, beta6 integrins in intrahepatic cholangiocarcinoma and cholangiolocellular carcinoma**

Yurie Soejima<sup>1,2</sup>, Motoji Sawabe<sup>1</sup>, Takumi Akashi<sup>3</sup>, Yoshinobu Eishi<sup>3</sup>, Toshio Fukusato<sup>2</sup> (<sup>1</sup>Dept. Mol. Path., Tokyo Med. & Dent. Univ., <sup>2</sup>General Med. Edu. & Res. Ctr., Teikyo Univ., <sup>3</sup>Dept. Hum. Path., Tokyo Med. & Dent. Univ.)

肝内胆管癌および細胆管細胞癌組織におけるインテグリンβ4, β6の発現

副島 友莉恵<sup>1,2</sup>、沢辺 元司<sup>1</sup>、明石 巧<sup>3</sup>、江石 義信<sup>3</sup>、福里 利夫<sup>2</sup>（東医歯大・保・分子病態検査、<sup>2</sup>帝京大・医療共通教育研究センター、<sup>3</sup>東医歯大・医・人体病理学）

**P-1306 Stratification of Intrahepatic Cholangiocarcinoma by Mutational Status of The IDH1/2 and KRAS Genes.**

Kazuya Yasui, Takeshi Nagasaki, Yuzo Umeda, Tomokazu Fuji, Toshiaki Toshima, Takashi Kawai, Yoshiko Mori, Takahito Yagi, Toshiyoshi Fujiwara (Dept. Gastroenterological Surg., Okayama Univ., Med. Sch.)

IDH1/2 および KRAS 遺伝子の変異ステータスによる肝内胆管癌の層別化

安井 和也、永坂 岳司、模田 祐三、藤 智和、戸嶋 俊明、河合 肖、母里 淑子、八木 孝仁、藤原 俊義（岡山大・大学院・消化器外科学）

**P-1307 Overexpression of nuclear karyopherin-alpha2 in cholangiocarcinoma correlates with poor prognosis and chemosensitivity**

Mariko Tsukagoshi<sup>1,3</sup>, Kenichiro Araki<sup>1,3</sup>, Takehiko Yokobori<sup>1</sup>, Norio Kubo<sup>1,3</sup>, Akira Watanabe<sup>1,3</sup>, Takamichi Igarashi<sup>3</sup>, Norihiro Ishii<sup>1</sup>, Ken Shirabe<sup>2</sup>, Hiroyuki Kuwano<sup>1</sup> (<sup>1</sup>Dept. General Surgical Science, Gunma Univ. Sch. Med., <sup>2</sup>Dept. Hepatobiliary and Pancreatic Surgery, Gunma Univ. Sch. Med., <sup>3</sup>Division of Hepatobiliary and Pancreatic Surgery, Gunma Univ. Hosp., <sup>4</sup>Dept. Molecular Pharmacology and Oncology, Gunma Univ. Sch. Med.)

胆管癌におけるKPNA2高発現は予後不良と抗癌剤感受性に関与する

塚越 真梨子<sup>1,3</sup>、新木 健一郎<sup>1,3</sup>、横堀 武彦<sup>4</sup>、久保 憲生<sup>1,3</sup>、渡辺 亮<sup>1,3</sup>、五十嵐 隆通<sup>3</sup>、石井 範洋<sup>1</sup>、調 憲<sup>2</sup>、桑野 博行<sup>1</sup> (<sup>1</sup>群馬大学大学院 病態総合外科学、<sup>2</sup>群馬大学大学院 肝胆脾外科学、<sup>3</sup>群馬大学医学部附属病院 肝胆脾外科、<sup>4</sup>群馬大学大学院 臨床腫瘍薬理学)

**P-1308 DEVELOPMENT OF A NEW THERAPEUTIC APPROACH USING A THIRD GENERATION ONCOLYTIC HSV-1 FOR BILIARY TRACT CANCER**

Yoko Tateno<sup>1,2</sup>, Yasushi Ino<sup>1</sup>, Miwako Iwai<sup>1</sup>, Masaru Shinozaki<sup>2</sup>, Tomoki Todo<sup>1</sup> (<sup>1</sup>Div. Innovative Cancer Therapy, Institute of Medical Science, Univ. Tokyo, <sup>2</sup>Dept. Surg., Institute of Medical Science Hospital, Univ.Tokyo)

第三世代がん治療用単純ヘルペスウイルス1型を用いた胆道癌に対する新規治療法の開発

立野 陽子<sup>1,2</sup>、稻生 靖<sup>1</sup>、岩井 美和子<sup>1</sup>、篠崎 大<sup>2</sup>、藤堂 具紀<sup>1</sup> (<sup>1</sup>東京大学医科学研究所先端がん治療分野、<sup>2</sup>東京大学医科学研究所附属病院外科)

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

**P14-19 Pancreatic cancer (1)**

膵がん (1)

Chairperson: Norihiro Sato (Dept. of Surg. 1, Univ. of Occupational & Environmental Health)

座長：佐藤 典宏（産業医大・消化器・内分泌外科）

**P-1309 The overexpression of RAB5 in pancreatic cancer is associated with poor prognosis via E-cadherin suppression.**

Takamichi Igarashi<sup>1,2</sup>, Kenichiro Araki<sup>1,2</sup>, Takehiko Yokobori<sup>3</sup>, Altan Bolag<sup>2</sup>, Takahiro Yamanaka<sup>1,2</sup>, Norihiro Ishii<sup>1,2</sup>, Mariko Tsukagoshi<sup>1,2</sup>, Akira Watanabe<sup>1,2</sup>, Norio Kubo<sup>1,2</sup>, Masahiko Nishiyama<sup>3</sup>, Ken Shirabe<sup>1,2</sup>, Hiroyuki Kuwano<sup>2</sup> (<sup>1</sup>Dept. Hepatobiliary & Pancreatic Surg., Gunma Univ., Grad. Sch. Med., <sup>2</sup>Integrative Ctr. General Surg., Gunma Univ Hosp., <sup>3</sup>Dept. Mol. Pharmacology & Oncology, Gunma Univ., Grad. Sch. Med.)

膵癌進展におけるRAB5発現の意義-E-cadherin発現との関連-五十嵐 隆通<sup>1,2</sup>、新木 健一郎<sup>1,2</sup>、横堀 武彦<sup>3</sup>、金 泉<sup>2</sup>、山中 崇弘<sup>1,2</sup>、石井 範洋<sup>1,2</sup>、塚越 真梨子<sup>1,2</sup>、渡辺 亮<sup>1,2</sup>、久保 憲生<sup>1,2</sup>、西山 正彦<sup>3</sup>、調 憲<sup>1,2</sup>、桑野 博行<sup>2</sup> (<sup>1</sup>群馬大・医・肝胆脾外科、<sup>2</sup>群馬大・医・外科診療センター、<sup>3</sup>群馬大・医・病態腫瘍薬理)

**P-1310 Overexpression of KIAA1199/CEMIP predicts poor prognosis in pancreatic cancer**

Atsuhiro Koga, Norihiro Sato, Shiro Kohi, Nobutaka Matayoshi, Kazunori Shibao, Keiji Hirata (1st Dept. Surg., UOEH, Sch. Med.)

膵癌におけるKIAA1199/CEMIPの発現は予後不良のマーカーとなる

古賀 敦大、佐藤 典宏、厚井 志郎、又吉 信貴、柴尾 和徳、平田 敬治（産業医科大学・医・第1外科）

**P-1311 Functional significance of KIAA1199 overexpression in pancreatic cancer**

Shiro Kohi, Norihiro Sato, Atsuhiro Koga, Kazunori Shibao, Keiji Hirata (Department of Surgery1, University of Occupational and Environmental Health)

膵癌でのKIAA1199の発現および機能解釈

厚井 志郎、佐藤 典宏、古賀 敦大、柴尾 和徳、平田 敬治（産業医科大学・医学部・第一外科）

**P-1312 Different roles of lysophosphatidic acid receptors in cellular functions of pancreatic cancer cells**

Kaori Fukushima<sup>1</sup>, Kaede Takahashi<sup>1</sup>, Kanya Honoki<sup>2</sup>, Toshifumi Tsujiuchi<sup>1</sup> (<sup>1</sup>Dept. Life Sci., Kindai Univ., <sup>2</sup>Dept. Orthop, Surg, Nara Med. Univ.)

膵がん細胞の増殖・進展におけるリゾフォスファチジン酸受容体の生

**物学的機能**

福嶋 香<sup>1</sup>、高橋 楓<sup>1</sup>、朴木 寛弥<sup>2</sup>、辻内 俊文<sup>1</sup> (<sup>1</sup>近大・理工・生命、<sup>2</sup>奈良医大・整外)

**P-1313 Plasma DNA genotyping using digital PCR for early detection of pancreatic cancer; 2nd report (UMIN000012810)**

Yusuke Mizukami<sup>1</sup>, Yusuke Ono<sup>1</sup>, Hidenori Karasaki<sup>1</sup>, Kiyohiro Ando<sup>2</sup>, Shingo Asahara<sup>3</sup>, Kazuo Nagashima<sup>1</sup> (<sup>1</sup>Ctr. Clin. Biomed. Res., Sapporo Higasi Tokushukai Hosp., <sup>2</sup>Ctr. Clin TR Sci., Shonan Kamakura Gen. Hosp., <sup>3</sup>Clin. Res. Ctr. Chiba Tokushukai Hosp.)

液体生検による膵癌診断（第2報）

水上 裕輔<sup>1</sup>、小野 裕介<sup>1</sup>、唐崎 秀則<sup>1</sup>、安藤 清宏<sup>2</sup>、浅原 新吾<sup>3</sup>、長嶋 和朗<sup>1</sup> (<sup>1</sup>札幌東徳洲会病院・臨床研究七、<sup>2</sup>湘南鎌倉総合病院・臨床研究七、<sup>3</sup>千葉徳洲会病院・治験・臨床研究七)

**P-1314 Activation of laminin/integrin pathway is critical for the growth of pancreatic cancer as a potential diagnostic marker**

Takashi Asada, Shingo Nakahata, Tomonaga Ichikawa, Tohru Kamata, Kazuhiro Morishita (Div. Tumor & Cell. Biochem., Dept. Med. Sci., Univ. of Miyazaki)

Laminin/integrin 経路の活性化は膵癌の増殖に重要であり、有望な新規診断マーカーとなり得る。

麻田 貴志、中畠 新吾、市川 朝永、鎌田 徹、森下 和広（宮崎大学・医学部・腫瘍生化学）

**P-1315 Physical properties of recombinant fusion protein drug targeting HIF-active cancers**

Takehiro Itoh, Tetsuya Kadono, ThiHongNgoc Hoang, Takahiro Kuchimaru, Shinae Kondoh (Sch. of Life Sci. and Tech., Tokyo Inst. of Tech.)

低酸素がんを標的とした融合タンパク質製剤の物性評価

伊藤 雄大、門之園 哲哉、ThiHongNgoc Hoang、口丸 高弘、近藤 科江（東工大 生命理工学院）

Room P Oct. 6 (Thu.) 16:35-17:20

J/E

**P14-20 Pancreatic cancer (2)**

膵がん (2)

Chairperson: Hiroshi Wada (Dept. of Gastroenterol. Surg., Osaka Univ.)

座長：和田 浩志（大阪大・院医・消化器外科）

**P-1316 The sensitization for gemcitabine-resistant pancreatic cancer cells with valpronic acid**

Yasuhiro Kuramitsu, Yufen Wang, Kazuhiro Tokuda, Byron Baron, Takao Kitagawa (1st Dept. Biochemistry, Yamaguchi Univ., Sch. Med.)

バルプロ酸によるゲムシタビン抵抗性膵癌細胞の対ゲムシタビン感受性化

藏満 保宏、王 宇峰、徳田 和央、バロン バイロン、北川 孝雄（山口大学・医・第1生化学）

**P-1317 MAST4 is associated with gemcitabine resistance of pancreatic ductal carcinoma**

Takamitsu Sasaki, Rina Fujiwara<sup>2</sup>, Yi Luo<sup>2</sup>, Yoshiyuki Dohara<sup>2</sup>, Satoshi Shinya<sup>1</sup>, Daisuke Kato<sup>1</sup>, Yohei Shiwaku<sup>1</sup>, Hiroki Kuniyasu<sup>2</sup> (<sup>1</sup>Dept. Gastroenterol. Surg., Fukuoka Univ. Sch. Med., <sup>2</sup>Dept. Mol. Pathol., Nara Med. Univ.)

MAST4発現は膵管癌におけるgemcitabine耐性に関与する

佐々木 隆光<sup>1</sup>、藤原 里奈<sup>2</sup>、羅 奕<sup>2</sup>、堂原 慶之<sup>2</sup>、新屋 智志<sup>1</sup>、加藤 大祐<sup>1</sup>、塩飽 洋平<sup>1</sup>、國安 弘基<sup>2</sup> (<sup>1</sup>福岡大・医・消化器外科、<sup>2</sup>奈良医大・分子病理)

**P-1318 Suppression of STAT5b in pancreatic cancer cells leads to attenuated gemcitabine chemoresistance, adhesion and invasion**

Akira Matsushita<sup>1</sup>, Hiroki Sumiyoshi<sup>1</sup>, Yoshiharu Nakamura<sup>1</sup>, Akira Katsuno<sup>1</sup>, Kazuya Yamahatsu<sup>1</sup>, Takeshi Matsutani<sup>1</sup>, Takeshi Yamada<sup>1</sup>, Nobutoshi Hagiwara<sup>1</sup>, seiichi Shinji<sup>1</sup>, Yoko Matsuda<sup>2</sup>, Yoshiyuki Ishiwata<sup>3</sup>, Zenya Naito<sup>2</sup>, Eiji Uchida<sup>1</sup> (<sup>1</sup>Dept. Surg. Nippon Med. Sch., <sup>2</sup>Dept. Path. Nippon Med. Sch., <sup>3</sup>Dept. Path. Tokyo Metropolitan Geriatric Hospital and Institute of Gerontology)

ヒト膵癌細胞におけるSTAT5bのゲムシタビン抵抗性、接着能、浸潤能への関与

松下 晃<sup>1</sup>、住吉 宏樹<sup>1</sup>、中村 慶春<sup>1</sup>、勝野 晓<sup>1</sup>、山初 和也<sup>1</sup>、松谷 育<sup>1</sup>、山田 岳史<sup>1</sup>、萩原 信敏<sup>1</sup>、進士 誠一<sup>1</sup>、松田 陽子<sup>3</sup>、石渡 俊行<sup>3</sup>、内藤 善哉<sup>2</sup>、内田 英二<sup>1</sup> (<sup>1</sup>日本医大・消化器外科、<sup>2</sup>日本医大・病理、<sup>3</sup>東京都健康長寿医療センター・病理)

**P-1319 Putative role of glycogen synthase kinase (GSK)-3β in acquired resistance to chemotherapy in pancreatic cancer**

Masahiro Uehara<sup>1</sup>, Takahiro Domoto<sup>1</sup>, Satoshi Takenaka<sup>1,2</sup>, Osamu Takeuchi<sup>3</sup>, Ilya V Pyko<sup>1</sup>, Takeo Shimasaki<sup>1,4</sup>, Tomoharu Miyashita<sup>2</sup>, Tetsuo Ohta<sup>2</sup>, Toshinari Minamoto<sup>1</sup> (<sup>1</sup>Div. Transl. Clin. Oncol., Cancer Res. Inst., Kanazawa Univ., <sup>2</sup>Dept. Gastro. Surg., Grad. Sch. Med. Sci., Kanazawa Univ., <sup>3</sup>Biomed. Lab., Biomed. Res. Ctr., Kitasato Univ. Kitasato Inst. Hosp., <sup>4</sup>Med. Res. Inst., Kanazawa Med. Univ.)

肺がんの化学療法耐性獲得における glycogen synthase kinase (GSK)-3β の役割

上原 将大<sup>1</sup>、堂本 貴寛<sup>1</sup>、竹中 哲<sup>1,2</sup>、竹内 修<sup>3</sup>、ピコ イリア<sup>1</sup>、島崎 猛夫<sup>1,4</sup>、宮下 知治<sup>2</sup>、太田 哲生<sup>2</sup>、源 利成<sup>1</sup> (<sup>1</sup>金沢大・がん研・腫瘍制御・<sup>2</sup>金沢大・医・消化器・腫瘍・再生外科・<sup>3</sup>北里大・北里研病・バイオメディカルセ・<sup>4</sup>金沢医大・総医研)

**P-1320 Intrapitoneal interaction between tumor-associated macrophages and pancreas cancer by visual assistance of TelomeScan**

Kuwada Kazuya<sup>1</sup>, Shunsuke Kagawa<sup>1</sup>, Shuichi Sakamoto<sup>1</sup>, Megumi Watanabe<sup>1</sup>, Tetsuya Kagawa<sup>1</sup>, Satoru Kikuchi<sup>1</sup>, Shinji Kuroda<sup>1</sup>, Ryuichi Yoshida<sup>1</sup>, Yasuo Urata<sup>2</sup>, Hiroshi Tazawa<sup>1,2</sup>, Toshiyoshi Fujiwara<sup>1</sup> (<sup>1</sup>Dept. Gastroenterological Surg., Okayama Univ. Grad. Sch., <sup>2</sup>Ctr. for Innovative Clinical Med., Okayama Univ. Hosp., <sup>3</sup>Oncolys BioPharma, Inc.)

蛍光ウイルスによる腹腔内の腫瘍関連マクロファージと肺癌細胞の関連性の解析

桑田 和也<sup>1</sup>、香川 俊輔<sup>1</sup>、坂本 修一<sup>1</sup>、渡邊 めぐみ<sup>1</sup>、香川 哲也<sup>1</sup>、菊地 覚次<sup>1</sup>、黒田 新士<sup>1</sup>、吉田 龍一<sup>1</sup>、浦田 泰生<sup>3</sup>、田澤 大<sup>1,2</sup>、藤原 俊義<sup>1</sup> (<sup>1</sup>岡山大学 消化器外科、<sup>2</sup>岡山大学 新医療研究開発センター、<sup>3</sup>オンコリスバイオファーマ)

**P-1321 Evaluation of fatty infiltration of the pancreas by area-based measurement on CT images in a correlation with histology**

Mika Hori<sup>1</sup>, Hiroaki Onaya<sup>2</sup>, Nobuyoshi Hiraoaka<sup>3</sup>, Taiki Yamaji<sup>1</sup>, Mami Takahashi<sup>4</sup>, Michihiro Mutoh<sup>4</sup>, Hitoshi Nakagama<sup>5</sup> (<sup>1</sup>Dep. Mol. Innov. lipidol, Natl. Cereb. Cardiovasc. Ctr., <sup>2</sup>Radiol. Consul. Sec, Dept. Med. Support Partnership, Natl. Cancer Ctr., <sup>3</sup>Mol. Pathol. Div, Natl. Cancer Ctr. Res. Inst., <sup>4</sup>Epidemiol. Prev. Group, Ctr. Public Health Sciences, Natl. Cancer Ctr., <sup>5</sup>Animal Div, Natl. Cancer Ctr. Res. Inst., <sup>6</sup>Natl. Cancer Ctr.)

CT を用いた病理組織像に相当する脂肪肺画像の評価

堀 美香<sup>1</sup>、女屋 博昭<sup>2</sup>、平岡 伸介<sup>3</sup>、山地 太樹<sup>4</sup>、高橋 真美<sup>5</sup>、武藤 優弘<sup>4</sup>、中釜 齊<sup>6</sup> (<sup>1</sup>国立循環器病研究セ・研・病態代謝、<sup>2</sup>国立がん研究セ・がん対策情報セ・画像診断、<sup>3</sup>国立がん研究セ・研・分子病理、<sup>4</sup>国立がん研究セ・社会と健康セ、<sup>5</sup>国立がん研究セ・研・実験動物、<sup>6</sup>国立がん研究セ)

**P-1322 Investigation of factors affecting exosome dynamics in pancreatic cancer cells.**

Takeo Shimasaki<sup>1,2,4</sup>, Satoko Yamamoto<sup>1</sup>, Takahiro Domoto<sup>2</sup>, Etsuko Kiyokawa<sup>3</sup>, Tomiyasu Arisawa<sup>4</sup>, Toshinari Minamoto<sup>2</sup> (<sup>1</sup>Med. Res. Inst., Kanazawa Med. Univ., <sup>2</sup>Div. Transl. Clin. Oncol., Cancer Res. Inst., Kanazawa Univ., <sup>3</sup>Dept. Path. 1, Kanazawa Med. Univ., <sup>4</sup>Dept. Gastroenterol., Kanazawa Med. Univ.)

肺癌細胞のエクソソーム動態に影響する因子の検討

島崎 猛夫<sup>1,2,4</sup>、山本 智子<sup>1</sup>、堂本 貴寛<sup>2</sup>、清川 悅子<sup>3</sup>、有沢 富康<sup>4</sup>、源 利成<sup>2</sup> (<sup>1</sup>金沢医大・総医研、<sup>2</sup>金沢大・がん研・腫瘍制御、<sup>3</sup>金沢医大・病理 1、<sup>4</sup>金沢医大・消内)

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

**P14-21 Lung cancer (1)  
肺がん (1)**

Chairperson: Mingyon Mun (Dept. of Thoracic Surgical Oncology, Cancer Inst. Hosp.)

座長：文 敏景（がん研・有明・呼吸器セ）

**P-1323 High plasma programmed cell death ligand 1 is prognostic of reduced survival in advanced lung cancer**

Yusuke Okuma<sup>1</sup>, Yukio Hosomi<sup>2</sup>, Kie Mirokuji<sup>3</sup>, Kageaki Watanabe<sup>2,3</sup>, Yoshiro Nakahara<sup>3</sup>, Satoshi Takahashi<sup>4</sup>, Yukiko Sagawa<sup>1</sup>, Sadamu Homma<sup>1</sup> (<sup>1</sup>Div. of Oncology, The Jikei Univ. Sch. Med., <sup>2</sup>Dept of Thoracic Oncology, Tokyo Metropolitan Komagome Hospital, <sup>3</sup>Dept of Respiratory Medicine, Kitasato Univ., <sup>4</sup>Dept of Respiratory Medicine, Nippon Med. Univ.)

進行肺がん患者における可溶性 PD-L1 高値は予後不良となる

大熊 裕介<sup>1</sup>、細見 幸生<sup>2</sup>、弥勒寺 紀栄<sup>2</sup>、渡邊 景明<sup>2,3</sup>、中原 善朗<sup>3</sup>、高橋 智<sup>4</sup>、佐川 由紀子<sup>1</sup>、本間 定<sup>1</sup> (<sup>1</sup>東京慈恵会医科大学・悪性腫瘍

治療部、<sup>2</sup>東京都立駒込病院・呼吸器内科、<sup>3</sup>北里大学・呼吸器内科、<sup>4</sup>日本医科大学・呼吸器内科)

**P-1324 B7-H3 (CD276) protein expression, smoking history, and patient survival in lung adenocarcinoma**

Kentaro Inamura<sup>1</sup>, Maki Kobayashi<sup>1</sup>, Rie Sakakibara<sup>1</sup>, Hironori Ninomiya<sup>1</sup>, Sophia Subat<sup>1</sup>, Hiroko Nagano<sup>1</sup>, Kimie Nomura<sup>1</sup>, Sakae Okumura<sup>2</sup>, Yuichi Ishikawa<sup>1</sup> (<sup>1</sup>Dev. Pathol., The Cancer Inst., JFCR, <sup>2</sup>Thoracic Oncol. Center, The Cancer Inst. Hospital, JFCR)

肺腺癌における B7-H3 (CD276) 蛋白質発現および喫煙歴と予後  
稲村 健太郎<sup>1</sup>、小林 真季<sup>1</sup>、柳原 里江<sup>1</sup>、三宮 浩範<sup>1</sup>、ソバティン フィア<sup>1</sup>、長野 裕子<sup>1</sup>、野村 起美恵<sup>1</sup>、奥村 栄<sup>2</sup>、石川 雄一<sup>1</sup> (<sup>1</sup>がん研究会・がん研究所・病理、<sup>2</sup>がん研究会・がん研有明病院・呼吸器)

**P-1325 Role of TIM-3/Galectin-9 pathway in lung adenocarcinoma**

Yoshihiro Ohue<sup>1</sup>, Koji Kurose, Yumi Nishio, Midori Isobe, Mikio Oka, Eiichi Nakayama (Kawasaki Medical School)

肺腺癌の TIM-3/Galectin-9 経路を介した免疫抑制

大植 祥弘、黒瀬 浩史、西尾 祐美、磯辺 みどり、岡 三喜男、中山 駿一 (川崎医科大学)

**P-1326 MicroRNA-21 induce the cancer associated fibroblast phenotype in lung adenocarcinoma**

Akiko Kunita<sup>1</sup>, Shigeki Morita<sup>2</sup>, Masashi Fukayama<sup>1,2</sup> (<sup>1</sup>Dept. Path., Grad.Sch.Med., Univ. Tokyo, <sup>2</sup>Dept. Path., Univ. Tokyo. Hosp.)

肺腺癌の線維芽細胞における microRNA-21 の発現は CAF を誘導する

国田 朱子<sup>1</sup>、森田 茂樹<sup>2</sup>、深山 正久<sup>1,2</sup> (<sup>1</sup>東大院・医・人体病理、<sup>2</sup>東大病院・病理)

**P-1327 Amyloid precursor protein in human lung adenocarcinoma**

Shigehiro Ito<sup>1</sup>, Yasuhiro Miki<sup>2</sup>, Ryoko Saito<sup>1</sup>, Hironobu Sasano<sup>1</sup> (<sup>1</sup>Dept. of Anatomic Path., Tohoku Univ., Grad. Sch., Med., <sup>2</sup>Disaster Obstetrics & Gynecol, IRIDeS Tohoku Univ.)

ヒト肺腺癌組織におけるアミロイド前駆体の発現について

伊藤 重宏<sup>1</sup>、三木 康宏<sup>2</sup>、齊藤 涼子<sup>1</sup>、笹野 公伸<sup>1</sup> (<sup>1</sup>東北大・医・病理診断学、<sup>2</sup>東北大・災害研・災害産婦人科学)

**P-1328 Upregulation of S100A10 is associated with poor prognosis in lung adenocarcinoma**

Yuriko Saiki<sup>1</sup>, Masaki Makita<sup>1</sup>, kazumori Arai<sup>2</sup>, Akira Sakurada<sup>3</sup>, Akira Horii<sup>1</sup> (<sup>1</sup>Dept. of Mol. Path., Tohoku Univ., Grad. Sch. Med, <sup>2</sup>Dept. of Path., Shizuoka General Hosp., <sup>3</sup>Dept. of Thoracic Surgery, Inst. of Development, Aging, and Cancer)

S100A10 の高発現は、肺腺癌の悪い予後と関連する

齋木 由利子<sup>1</sup>、蒔田 真基<sup>1</sup>、新井 一守<sup>2</sup>、桜田 晃<sup>3</sup>、堀井 明<sup>1</sup> (<sup>1</sup>東北大・院医・分子病理、<sup>2</sup>静岡県立総合病院・病理部、<sup>3</sup>東北大・加齢医学研究・呼吸器外科学)

**P-1329 Efficacy of adjuvant chemotherapy for non-small cell lung cancer assessed by metastatic potential associated with ACTN4**

Nami Miura, Hirokazu Shioji, Kaoru Onidani, Tesshi Yamada, Kazufumi Honda (Div. Chem. Clin., Natl. Cancer Ctr. Res. Inst.)

ACTN4 の発現は早期肺腺がんにおける術後化学療法の有効性を予測するバイオマーカーである

三浦 奈美、庄司 広和、鬼谷 薫、山田 哲司、本田 一文 (国立がん研究セ・研究所・創薬臨床)

Room P Oct. 6 (Thu.) 16:35-17:20

J/E

**P14-22 Lung cancer (2)  
肺がん (2)**

Chairperson: Akira Sakurada (Dept. of Thorac. Surg., IDAC, Tohoku Univ.)  
座長：桜田 晃（東北大・医・呼吸器外科）

**P-1330 The association of monocytes in primary tumors and peripheral monocyte counts in non-small cell lung cancer patients**

Cheng-long Huang, Tatsuya Hirai, Ryota Sumitomo (Dept. Thorac. Surg., Kitano Hospital)

非小細胞肺癌患者における腫瘍内単核球と末梢血液内単核球数との関連

黄 政龍、平井 達也、住友 亮太 (北野病院・呼吸器外科)

**P-1331 The roles of cancer associated fibroblasts (CAFs) in NSCLC**

Chihiro Inoue, Ryoko Saito, Yasuhiro Miki, Shuko Hata, Hironobu Sasano (Dept. of anat. pathol., Tohoku univ., Grad. Sch. Med.)

非小細胞肺癌における癌関連線維芽細胞のはたらき

井上 干裕、齊藤 涼子、三木 康宏、端 秀子、笹野 公伸 (東北大・医・病理診断学)

- P-1332 Liquid biopsy using digital PCR for early- and advanced-stage lung cancer**  
 Yusuke Ono<sup>1</sup>, Takaaki Sasaki<sup>2</sup>, Ryouhei Yoshida<sup>2</sup>, Kiyohiro Ando<sup>3</sup>, Yoshinobu Ohsaki<sup>2</sup>, Yusuke Mizukami<sup>1</sup> (<sup>1</sup>Ctr. Clin. Biomed. Res., Sapporo Higasi Tokushukai Hosp., <sup>2</sup>Rest. Center, Asahikawa Med. Univ. Hosp., <sup>3</sup>Ctr. Clin. TR Sci., Shonan Kamakura Gen. Hosp.)  
**非小細胞肺癌を対象としたデジタルPCRによるliquid biopsy**  
 小野 裕介<sup>1</sup>、佐々木 高明<sup>2</sup>、吉田 遼平<sup>2</sup>、安藤 清宏<sup>3</sup>、大崎 能伸<sup>2</sup>、水上 裕輔<sup>1</sup>（<sup>1</sup>札幌東徳洲会病院・臨床研究セクション、<sup>2</sup>旭川医大病院・呼吸器セクション、<sup>3</sup>湘南鎌倉総合病院・臨床研究セクション）
- P-1333 Relationship between intratumoral expression of TS and RRM1 and tumor proliferation in non-small cell lung cancers**  
 Ryota Sumitomo, Tatsuya Hirai, Cheng-long Huang (Department of Thoracic Surgery, Kitano Hospital, Osaka, Japan)  
**非小細胞肺癌におけるTSとRRM1の腫瘍内発現と腫瘍増殖能との関連**  
 住友 亮太、平井 達也、黄 政龍（北野病院呼吸器外科）
- P-1334 Phase II study of erlotinib in advanced non-small cell lung cancer patients with leptomeningeal metastasis**  
 Noriyuki Ebi<sup>1</sup>, Takeshi Kitazaki<sup>2</sup>, Akinobu Hamada<sup>3</sup>, Mitsuhiro Takenoyama<sup>4</sup>, Kenji Sugio<sup>5</sup> (<sup>1</sup>Dept. Resp. Oncol., Iizuka Hosp., <sup>2</sup>Dept. Resp. Dis., Nagasaki Genbaku Hosp., <sup>3</sup>Div. Clin. Pharm. & Transl. Res., Natl. Cancer Ctr., <sup>4</sup>Dept. Thorac. Oncol., Natl. Kyushu Cancer Ctr., <sup>5</sup>Dept. Thorac. & Breast Surg., Oita Univ.)  
**既治療進行非小細胞肺癌の癌性髄膜炎に対するエルロチニブ第2相試験**  
 海老 規之<sup>1</sup>、北崎 健<sup>2</sup>、濱田 哲暢<sup>3</sup>、竹之山 光広<sup>4</sup>、杉尾 賢二<sup>5</sup>（<sup>1</sup>飯塚病院・呼吸器腫瘍内科、<sup>2</sup>長崎原爆病院 呼吸器内科、<sup>3</sup>国立がん研究センター 臨床薬理TR分野、<sup>4</sup>九州がんセンター 呼吸器腫瘍科、<sup>5</sup>大分大学 呼吸器・乳腺外科）
- |  |                           |   |
|--|---------------------------|---|
| Room P                                   | Oct. 6 (Thu.) 15:50-16:35 | J |
| <b>P14-23 Lung cancer (3)</b><br>肺がん (3) |                           |   |
- Chairperson: Sana Yokoi (Cancer Genome Ctr., Chiba Cancer Ctr. Res. Inst.)  
 座長：横井 左奈（千葉がんセラピーワークス）
- P-1335 The correlation of MMP-1 expression with EGFR-TKI resistance and clinicopathological factors in pulmonary adenocarcinoma**  
 Ryoko Saito<sup>1</sup>, Yasuhiro Miki<sup>1</sup>, Naoya Ishida<sup>1</sup>, Shuko Hata<sup>2</sup>, Hironobu Sasano<sup>1</sup> (<sup>1</sup>Dept. Pathol., Tohoku Univ., Grad. Sch. Med., <sup>2</sup>Dept. Pathol., Tohoku Med. Pharm. Univ., Med.)  
**肺腺癌におけるMMP-1発現とEGFR-TKI耐性および臨床病理学的事項との関連**  
 齊藤 涼子<sup>1</sup>、三木 康宏<sup>1</sup>、石田 直也<sup>1</sup>、端 秀子<sup>2</sup>、笠野 公伸<sup>1</sup>（<sup>1</sup>東北大・院・医・病理診断学、<sup>2</sup>東北医科薬科大・医・病理学）
- P-1336 Inactivating mutations of the NKX2-1 gene in non-TRU-type lung cancer: identification through histology-driven approach**  
 Daisuke Matsubara<sup>1</sup>, Manabu Soda<sup>2</sup>, Taichiro Yoshimoto<sup>1</sup>, Yusuke Amano<sup>1</sup>, Toshihide Ueno<sup>2</sup>, Shinya Kojima<sup>2</sup>, Hiroyuki Mano<sup>3,4</sup>, Toshiro Niki<sup>1</sup> (<sup>1</sup>Dept. of Path., Jichi Med. Univ., <sup>2</sup>Dept. of Cell. Signaling, Grad. Sch. of Med., The Univ. of Tokyo, <sup>3</sup>Natl. Cancer Ctr. Res. Inst.)  
**病理組織学的アプローチによるNon-TRUタイプ肺腺癌のNKX2-1遺伝子変異の同定**  
 松原 大祐<sup>1</sup>、曾田 学<sup>2</sup>、吉本 多一郎<sup>1</sup>、天野 雄介<sup>1</sup>、上野 敏秀<sup>2</sup>、小島 進也<sup>2</sup>、間野 博行<sup>2,3</sup>、仁木 利郎<sup>1</sup>（<sup>1</sup>自治医大・医・病・産婦人科、<sup>2</sup>東京大・院医・細胞情報、<sup>3</sup>国立がん研究センター・研）
- P-1337 The anti-proliferation activity of GPR87-suppressing adenoviral vector in the human lung cancer cell lines**  
 Yusuke Kita<sup>1</sup>, Liu Dage<sup>1</sup>, Xia Zhang<sup>2</sup>, Nakashima Narisyasu<sup>1</sup>, Yoshimasa Tokunaga<sup>1</sup>, Takayuki Nakano<sup>1</sup>, Kazuhito Nii<sup>1</sup>, Yoshiyuki Kakehi<sup>2</sup>, Hiroyasu Yokomise<sup>1</sup> (<sup>1</sup>Dept. of Thoracic Surg. Faculty of Med., Kagawa Univ., <sup>2</sup>Dept. of Urology, Faculty of Med., Kagawa Univ.)  
**肺癌細胞株におけるGPR87抑制アデノウイルスベクターの抗細胞増殖効果**  
 喜田 裕介<sup>1</sup>、劉 大革<sup>1</sup>、張 霞<sup>2</sup>、中島 成泰<sup>1</sup>、徳永 義昌<sup>1</sup>、中野 貴之<sup>1</sup>、新居 和人<sup>1</sup>、寛 善行<sup>2</sup>、横見瀬 裕保<sup>1</sup>（<sup>1</sup>香川大・医・呼吸器外科、<sup>2</sup>香川大・医・泌尿器科学）
- P-1338 Comprehensive cancer-stroma interactome analysis of lung adenocarcinoma xenografts.**  
 Yoshimoto Taichiro<sup>1</sup>, Daisuke Matsubara<sup>1</sup>, Toshiro Niki<sup>1</sup>, Daisuke Komura<sup>2</sup>, Ishikawa Shunpei<sup>2</sup> (<sup>1</sup>Dept. Integrative Pathol., Jichi Med. Univ., <sup>2</sup>Dept. Genomic Pathol., Medical Research Institute Tokyo Medical and Dental Univ.)  
**肺腺癌 Xenograft モデルにおける癌間質相互作用の包括的解析**  
 吉本 多一郎<sup>1</sup>、松原 大祐<sup>1</sup>、仁木 利郎<sup>1</sup>、河村 大輔<sup>2</sup>、石川 俊平<sup>2</sup>（<sup>1</sup>自治医大・医・統合病理、<sup>2</sup>東京医科歯科大・医・ゲノム病理）
- P-1339 Molecular analysis of two cases with the EML4-ALK fusion positive squamous cell carcinoma components.**  
 Hironori Ninomiya<sup>1</sup>, Kentaro Inamura<sup>1</sup>, Makoto Nishio<sup>2</sup>, Sakae Okumura<sup>2</sup>, Yuichi Ishikawa<sup>1</sup> (<sup>1</sup>Div. Pathol., The Cancer Inst., JFCR, <sup>2</sup>Thoracic Oncol. Center, The Cancer Inst. Hospital, JFCR)  
**EML4-ALK陽性扁平上皮癌成分を有する2症例の分子生物学的解析**  
 二宮 浩範<sup>1</sup>、稻村 健太郎<sup>1</sup>、西尾 誠人<sup>2</sup>、奥村 栄<sup>2</sup>、石川 雄一<sup>1</sup>（<sup>1</sup>公益財団法人がん研究会がん研究所病理部、<sup>2</sup>（公）がん研究会有明病院呼吸器センター）
- P-1340 Transcriptome Analysis of Small Cell Lung Cancer**  
 Masafumi Horie<sup>1,2</sup>, Akira Saito<sup>1,2</sup>, Takahide Nagase<sup>1</sup> (<sup>1</sup>Division for Health Service Promotion, The University of Tokyo, <sup>2</sup>Department for Respiratory Medicine, The University of Tokyo)  
**肺小細胞癌のトランスクレプトーム解析**  
 堀江 真史<sup>1,2</sup>、齋藤 朗<sup>1,2</sup>、長瀬 隆英<sup>2</sup>（<sup>1</sup>東京大学 保健・健康推進本部、<sup>2</sup>東京大学大学院医学系研究科 呼吸器内科学）
- |  |                           |     |
|--|---------------------------|-----|
| Room P                                   | Oct. 6 (Thu.) 16:35-17:20 | J/E |
| <b>P14-24 Lung cancer (4)</b><br>肺がん (4) |                           |     |
- Chairperson: Masakuni Serizawa (Drug Discovery & Development Div., Shizuoka Cancer Ctr. Res. Inst.)  
 座長：芹澤 昌邦（静岡がんセラピーワークス）
- P-1341 PhaseI/II study of induction CBDCA+CPT11 and sequential radiotherapy for elderly patients with LD-SCLC (TORG0604)**  
 Naoki Katsuhiko<sup>1</sup>, Yuki Misumi<sup>2</sup>, Hiroaki Okamoto<sup>3</sup>, Kenzo Soejima<sup>1</sup>, Yukio Hosomi<sup>4</sup>, Takashi Ogura<sup>5</sup>, Noriyuki Masuda<sup>6</sup>, Koichi Minato<sup>7</sup>, Takuma Yokoyama<sup>3</sup>, Koshiro Watanabe<sup>2</sup> (<sup>1</sup>Keio Univ., Sch. Med., <sup>2</sup>Yokohama Municipal Citizen's Hosp., <sup>3</sup>Kyorin Univ. Medical Department Attached Hosp., <sup>4</sup>Tokyo Metropolitan Cancer and Infectious Disease Ctr., Komagome Hosp., <sup>5</sup>Kanagawa Cardiovascular and Respir. Ctr., <sup>6</sup>Kitasato Univ. Hosp., <sup>7</sup>Gunma Pref. Cancer Ctr.)  
**高齢者LD-SCLCに対するCBDCA／CPT-11併用+逐次胸部放射線治療第I／II相試験 (TORGO604)**  
 猶木 克彦<sup>1</sup>、三角 裕生<sup>2</sup>、岡本 浩明<sup>2</sup>、副島 研造<sup>1</sup>、細見 幸生<sup>4</sup>、小倉 高志<sup>5</sup>、益田 典幸<sup>6</sup>、湊 浩一<sup>7</sup>、横山 琢磨<sup>3</sup>、渡辺 古志郎<sup>2</sup>（慶應義塾大学・医、<sup>2</sup>横浜市立市民病院、<sup>3</sup>杏林大学医学部付属病院、<sup>4</sup>がん・感染症センター都立駒込病院、<sup>5</sup>神奈川県立循環器呼吸器病センター、<sup>6</sup>北里大学病院、<sup>7</sup>群馬県立がんセンター）
- P-1342 Lymphotoxin B is associated with the development of resistance to pemetrexed in lung cancer.**  
 Kentaro Miura, Ken-ichi Ito, Takaaki Oba, Asumi Iesato (Div.Breast Endocrine and Respiratory Surg., Dep. Surg., Shinshu Univ)  
**肺癌におけるペメトレキセド耐性獲得とlymphotoxin β遺伝子発現の関連**  
 三浦 健太郎、伊藤 研一、大場 崇旦、家里 明日美（信州大学医学部乳腺内分泌呼吸器外科）
- P-1343 EBUS-TBNA as a promising method for evaluation of tumor PD-L1 expression in lung cancer**  
 Rie Sakakibara<sup>1</sup>, Kentarou Inamura<sup>1</sup>, Noriko Motoi<sup>1</sup>, Hironori Ninomiya<sup>1</sup>, Sakae Okumura<sup>2</sup>, Makoto Nishio<sup>2</sup>, Yuichi Ishikawa<sup>1</sup> (<sup>1</sup>Div. Pathol. The Cancer Institute, JFCR, <sup>2</sup>Thoracic Oncol. The Cancer Institute Hosp. JFCR)  
**肺癌においてEBUS-TBNA検体はPD-L1発現評価に有用である**  
 神原 里江<sup>1</sup>、稻村 健太郎<sup>1</sup>、元井 紀子<sup>1</sup>、二宮 浩範<sup>1</sup>、奥村 栄<sup>2</sup>、西尾 誠人<sup>2</sup>、石川 雄一<sup>1</sup>（がん研究会・がん研究所・病理、<sup>2</sup>がん研究会・がん研有明病院・呼吸器）
- P-1344 The interaction between epithelial cells and fibroblasts via extracellular vesicles in smoking-related lung diseases**  
 Tsukasa Kadota<sup>1,2</sup>, Yusuke Yoshioka<sup>1</sup>, Yu Fujita<sup>1,2</sup>, Takanori Ochiya<sup>1</sup> (<sup>1</sup>Div. Mol. & Cell. Med., Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Div. Respiratory Disease, Dept. Internal Medicine, Jikei Univ. Sch. Med.)

## 喫煙関連肺疾患における細胞外小胞の役割

門田 実<sup>1,2</sup>、吉岡 裕亮<sup>1</sup>、藤田 雄<sup>1,2</sup>、落谷 孝広<sup>1</sup>（<sup>1</sup>がん研究センター・分子細胞治療研究分野、<sup>2</sup>東京慈恵会医科大学・呼吸器内科）

## P-1345 Development of anti-tumor peptide for lung cancer therapy

Ken Saito, Hidekazu Iioka, Eisaku Kondo (Div. Mol. Cell. Pathol., Niigata Univ. Sch. Med.)

## 難治性肺癌治療に向けた抗腫瘍ペプチドの開発

齋藤 憲、飯岡 英和、近藤 英作（新潟大・院医・分子細胞病理）

## P-1346 Comparison of orthotopic and heterotopic graft models using a cell line derived from metastatic pulmonary adenocarcinoma

Rikako Ishigamori<sup>1</sup>, Mami Takahashi<sup>1</sup>, Takashi Kohno<sup>2</sup>, Hiroki Sasaki<sup>3</sup>, Toshio Imai<sup>1</sup> (<sup>1</sup>Central Animal Div., Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Div. of Genome Biol., Natl. Cancer Ctr. Res. Inst., <sup>3</sup>Dept. of Translational Oncol., Natl. Cancer Ctr. Res. Inst.)

## 転移性肺腺がん由來の細胞株を用いる同所・異所移植の比較検討

石ヶ守 里加子<sup>1</sup>、高橋 真美<sup>1</sup>、河野 隆志<sup>2</sup>、佐々木 博己<sup>3</sup>、今井 俊夫<sup>1</sup>（<sup>1</sup>国立がん研究セ・研・動物実験支援、<sup>2</sup>国立がん研究セ・研・ゲノム生物、<sup>3</sup>国立がん研究セ・研・バイオマーカー探索）

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

## P-14-25 Lung cancer (5)

肺がん (5)

Chairperson: Daiya Takai (Dept. of Clin. Lab., The Univ. of Tokyo)

座長：高井 大哉（東大病院・検査）

## P-1347 PAI-1 plays an important role in lung cancer progression through differentiation of CAF to myofibroblasts

Takeshi Masuda<sup>1</sup>, Noboru Hattori<sup>1</sup>, Yasushi Horimatsu<sup>1</sup>, Kazunori Fujitaka<sup>1</sup>, Hironobu Hamada<sup>2</sup> (<sup>1</sup>Dept. of Mol. Intern. Med., Hiroshima Univ., <sup>2</sup>Dept. of Physical Analysis and Therap. Sci., Hiroshima Univ.)

## 癌関連線維芽細胞の筋線維芽細胞への分化による腫瘍進展促進：PAI-1 の関与の検討

益田 武<sup>1</sup>、服部 登<sup>1</sup>、堀益 靖<sup>1</sup>、藤高 一慶<sup>1</sup>、濱田 泰伸<sup>2</sup>（<sup>1</sup>広島大学大学院分子内科学、<sup>2</sup>広島大学生体機能解析制御科学）

## P-1348 Phosphoproteomic analysis of EGFR/ALK-negative lung adenocarcinoma

Satoshi Okada<sup>1</sup>, Min Gi<sup>1</sup>, Shotaro Yamano<sup>2</sup>, Kenichiro Doi<sup>1</sup>, Anna Kakehashi<sup>1</sup>, Masaki Fujioka<sup>1</sup>, Hideki Wanibuchi<sup>1</sup> (<sup>1</sup>Dept. Molpath. Osaka City Univ. Grad. Sch. Med., <sup>2</sup>Division of Rare Cancer Research National Cancer Center Research Institute)

## EGFR・ALK 陰性原発性肺腺癌を用いた網羅的リン酸化プロテオーム解析

岡田 諭志<sup>1</sup>、魏 民<sup>1</sup>、山野 庄太郎<sup>2</sup>、土井 賢一郎<sup>1</sup>、梯 アンナ<sup>1</sup>、藤岡 正喜<sup>1</sup>、鶴渕 英機<sup>1</sup>（<sup>1</sup>大阪市大・院・医・分子病理学、<sup>2</sup>国立がん研究センター・希少がん研究分野）

## P-1349 Stratifin-associated ubiquitin-specific protease 8 stabilizes c-Met in lung adenocarcinoma

Yunjung Kim<sup>1</sup>, Aya Shiba-Ishii<sup>2</sup>, Masayuki Noguchi<sup>2</sup> (<sup>1</sup>Dept. of Path., Univ. of Tsukuba, <sup>2</sup>Dept. of Path., Univ. of Tsukuba)

## P-1350 DNMT3a Expression Pattern and Its Prognostic Value in Lung Adenocarcinoma

Ryan Edbert Husni<sup>1</sup>, Aya Shiba-Ishii<sup>2</sup>, Shinji Iiyama<sup>1</sup>, Toshihiro Shiozawa<sup>1</sup>, Yunjung Kim<sup>1</sup>, Tomoki Nakagawa<sup>1</sup>, Taiki Sato<sup>1</sup>, Junko Kano<sup>2</sup>, Yuko Minami<sup>3</sup>, Masayuki Noguchi<sup>2</sup> (<sup>1</sup>Graduate School of Comprehensive Human Sciences, University of Tsukuba, <sup>2</sup>Department of Pathology, Faculty of Medicine, University of Tsukuba, <sup>3</sup>Department of Pathology, National Hospital Organization Ibarakihigashi National Hospital)

## P-1351 Biological implication of cytoplasmic ECT2 in malignant progression of lung adenocarcinoma

Zeinab M. Kosibaty<sup>1</sup>, Yoshihiko Murata<sup>2</sup>, Yuko Minami<sup>2</sup>, Masayuki Noguchi<sup>2</sup> (<sup>1</sup>Graduate School of comprehensive Human Sciences, University of Tsukuba, Ibaraki, Japan., <sup>2</sup>Dept. of pathology, Faculty of Medicine, University of Tsukuba, Ibaraki, Japan.)

Room P Oct. 6 (Thu.) 16:35-17:20

## P14-26 Uterine cancer (1)

子宮がん (1)

Chairperson: Nobuyuki Susumu (Dept. of Obstetrics & Gynecology, Keio Univ. Sch. of Med.)

座長：進 伸幸（慶應大・医・産婦）

## P-1352 SIM2 enhances sensitivity against oxidative stress and suppresses tumor growth in cervical cancer

Kanako Nakamura<sup>1</sup>, Masayuki Komatsu<sup>2</sup>, Fumiko Chiwaki<sup>2</sup>, Yusuke Kobayashi<sup>1</sup>, Kouji Banno<sup>1</sup>, Daisuke Aoki<sup>1</sup>, Teruhiko Yoshida<sup>2</sup>, Hiroki Sasaki<sup>2</sup> (<sup>1</sup>Dep. of OB/GYN, Keio Univ. Sch. of Med., <sup>2</sup>Dept. of Translational Oncology, Natl. Cancer Ctr. Res Inst.)

## SIM2 は子宮頸がんの酸化ストレスに対する感受性と腫瘍増殖に関与する

中村 加奈子<sup>1</sup>、小松 将之<sup>2</sup>、千脇 史子<sup>2</sup>、小林 佑介<sup>1</sup>、阪埜 浩司<sup>1</sup>、青木 大輔<sup>1</sup>、吉田 輝彦<sup>2</sup>、佐々木 博己<sup>2</sup>（<sup>1</sup>慶應大・医・産婦人科、<sup>2</sup>国立がん研究セ・研・バイオマーカー探索）

## P-1353 USP15 Inhibits HPV16 E6 Degradation but Catalytically Inactive USP15 Reduces Its Activity

Aoi Tokuda, Masafumi Yoshimoto, Yuji Yaginuma (Dept. Oncology, Graduate School of Health Sciences, Kumamoto University)

## USP15 は HPV16 E6 タンパクと結合し、E6 タンパクの分解を抑制する

徳田 葵、吉本 賢史、柳沼 裕二（熊本大学大学院生命科学研究部保健学系）

## P-1354 The Codon 389 Polymorphism of PICT-1 is a Risk Factor for Uterine Cervical Cancer via the degradation of p53 protein

Masafumi Yoshimoto<sup>1</sup>, Aoi Tokuda<sup>1</sup>, Kunihiko Nishiwaki<sup>3</sup>, Yuji Yaginuma<sup>2</sup> (<sup>1</sup>Grad. Sch. Health Sci., Kumamoto Univ., <sup>2</sup>Dept. Oncology, Grad. Sch. Health Sci., Kumamoto Univ., <sup>3</sup>Dept. Obstetrics&Gynecol., Asahikawa Med. Univ.)

## PICT-1 のコドン 389 番目の遺伝子多型は p53 分解を介して子宮頸癌のリスク因子となる

吉本 賢史<sup>1</sup>、徳田 葵<sup>1</sup>、西脇 邦彦<sup>3</sup>、柳沼 裕二<sup>2</sup>（<sup>1</sup>熊大・大学院保健学教育部、<sup>2</sup>熊大・大学院生命科学研究部・保健学科、<sup>3</sup>旭川医大・医・産婦人科）

## P-1355 Decreased CBR1 expression enhances malignant behaviors through EMT and promotes tumorigenesis in cervical cancer.

Yuuki Nishimoto<sup>1</sup>, Kengo Nakasima<sup>2</sup>, Takuya Kazimura<sup>2</sup>, Kotaro Sueoka<sup>2</sup>, Norihiro Sugino<sup>2</sup> (<sup>1</sup>Nagato general hospital, <sup>2</sup>Yamaguchi Med.Univ.)

## CBR1 低下は EMT を介して子宮頸癌の悪性度を増悪させる

西本 裕喜<sup>1</sup>、中島 健吾<sup>2</sup>、梶邑 拓彌<sup>2</sup>、末岡 幸太郎<sup>2</sup>、杉野 法広<sup>2</sup>（<sup>1</sup>長門総合病院産婦人科、<sup>2</sup>山口大学医学部附属病院）

## P-1356 The histone methyltransferase EZH2 is a potential therapeutic target for endometrial cancer

Shinya Oki, Kenbun Sone, Katsutoshi Oda, Akira Nishijima, Makoto Takeuchi, Agapiti Chuwa, Kayo Asada, Chinami Makii, Kei Kawana, Yutaka Osuga, Tomoyuki Fujii (Department of Obstetrics and Gynecology, the University of Tokyo)

## ヒストンメチル化酵素 EZH2 を標的とした子宮体癌における新規分子標的薬の検討

大木 慎也、曾根 献文、織田 克利、西島 明、竹内 真、Agapiti Chuwa、浅田 佳代、牧井 千波、川名 敬、大須賀 穂、藤井 知行（東京大学医学部 産科婦人科学教室）

## P-1357 Targeted bisulfite sequencing using peripheral blood of patients with CIMP-high endometrial cancer

Megumi Yanokura<sup>1,2</sup>, Kouji Banno<sup>1</sup>, Masataka Adachi<sup>1</sup>, Kiyoko Umene<sup>1</sup>, Yusuke Kobayashi<sup>1</sup>, Wataru Yamagami<sup>1</sup>, Eiichiro Tominaga<sup>1</sup>, Nobuyuki Susumu<sup>1</sup>, Daisuke Aoki<sup>1</sup> (<sup>1</sup>Dept. Ob & Gy., Keio Univ. Sch. of Med., <sup>2</sup>Univ. Tsukuba, Grad. Sch. Biol. Sci.)

## CIMP-H 子宮体癌患者の末梢血を利用した Targeted bisulfite sequencing

矢野倉 恵<sup>1,2</sup>、阪埜 浩司<sup>1</sup>、安達 将隆<sup>1</sup>、梅根 紀代子<sup>1</sup>、小林 佑介<sup>1</sup>、山上 亘<sup>1</sup>、富永 英一郎<sup>1</sup>、進 伸幸<sup>1</sup>、青木 大輔<sup>1</sup>（<sup>1</sup>慶應大・医・産婦人科、<sup>2</sup>筑波大・院・生物科学）

P-1358

### Expression of NOTCH pathway genes in SP cells from endometrial cancer cells using a violet laser diode.

Tomoyuki Miyamoto<sup>1,2</sup>, Satoshi Tomiyasu<sup>3</sup>, Yukihiko Osawa<sup>4</sup>, Makoto Nishimori<sup>1,2</sup>, Hiromasa Yakushiji<sup>1,2</sup>, Junya Mitoma<sup>1,2</sup>, Chikafumi Shoshi<sup>1,2</sup>, Nobunao Ikewaki<sup>1,2</sup>, Yatsuki Aratake<sup>1,2</sup>, Setsuya Ohno<sup>1,2,4</sup>, Eiji Ohno<sup>1,2,4</sup>  
(<sup>1</sup>Dept. Med. Sci., Kyushu Univ. Helth & Welfare., <sup>2</sup>Cancer cell Inst. Kyushu Univ. Health & Welfare., <sup>3</sup>Dept. Med. Tech. Sci., Int. Univ. Health & Welfare., <sup>4</sup>Grad. Sch. Health Sci. Studies, Kyushu Univ. Health & Welfare.)

### Violet レーザーを用いて分取した子宮体癌 SP 細胞における NOTCH シグナル経路遺伝子の発現。

宮本 朋幸<sup>1,2</sup>、富安 聰<sup>3</sup>、大澤 幸希光<sup>4</sup>、西森 誠<sup>1,2</sup>、薬師寺 宏匡<sup>1,2</sup>、三苦 純也<sup>1,2</sup>、所司 瞳文<sup>1,2</sup>、池脇 信直<sup>1,2,4</sup>、荒武 八起<sup>1,2</sup>、大野 節代<sup>1,2,4</sup>、大野 英治<sup>1,2,4</sup>（<sup>1</sup>九州保健福祉大・生命医科、<sup>2</sup>九州保健福祉大・がん細胞研、<sup>3</sup>国際医療福祉大・福岡保健医療、<sup>4</sup>九州保健福祉大・院・保健科学）

Room P Oct. 6 (Thu.) 16:35-17:20

J/E

P14-28

### Ovarian cancer (1)

Chairperson: Shingo Miyamoto (Dept. of Obstet. & Gynecol, Faculty of Med., Fukuoka Univ.)

座長：宮本 新吾（福岡大・医・産婦）

### P-1364 TOP2A amplification is related to platinum-resistance in ovarian clear cell carcinoma

Sachiko Kitamura, Ken Yamaguchi, Ryusuke Murakami, Tsukasa Baba, Junzo Hamanishi, Kaoru Abiko, Noromi Matsumura (Department of Gynecology and Obstetrics, Kyoto University)

### 卵巣明細胞癌においてTOP2A 遺伝子増幅はシスプラチン耐性に関する

北村 幸子、山口 健、村上 隆介、馬場 長、濱西 潤三、安彦 郁、松村 謙臣（京都大学・婦人科学産科学）

### P-1365 Is ovarian clear cell carcinoma really a homogeneous disease ?

Shinichi Komiya, Kaneyuki Kubushiro (Dept. Gynecol., Toho Univ. Ohashi Med. Ctr.)

### 卵巣明細胞癌は単一の疾患単位ではない？

小宮山 慎一、久布白 兼行（東邦大・大橋・婦人科）

### P-1366 EphA2 processing by MT1-MMP in ovarian tumors

Yoko Takahashi<sup>1,2</sup>, Mikiko Aoki<sup>1</sup>, Kaori Koga<sup>1</sup>, Makoto Hamasaki<sup>1</sup>, Naohiko Koshikawa<sup>3</sup>, Shingo Miyamoto<sup>2</sup>, Kazuki Nabeshima<sup>1</sup> (<sup>1</sup>Dept. Pathol., Fukuoka Univ., Sch. Med., <sup>2</sup>Dept. Obstetrics and Gynecology., Fukuoka Univ., Sch. Med., <sup>3</sup>Kanagawa Cancer Center, Research)

### 卵巣腫瘍におけるMT1-MMPによるEphA2のプロセッシング

高橋 康子<sup>1,2</sup>、青木 光希子<sup>1</sup>、古賀 佳織<sup>1</sup>、濱崎 慎一、越川 直彦<sup>3</sup>、宮本 新吾<sup>2</sup>、鍋島 一樹<sup>1</sup>（<sup>1</sup>福岡大・医・病理学、<sup>2</sup>福岡大・医・産婦、<sup>3</sup>神奈川県立がんセンター臨床研究所）

### P-1367 The association between high-grade serous carcinoma and serous intraepithelial carcinoma

Ikuko Sakamoto<sup>1</sup>, Yosuke Hirotsu<sup>2</sup>, Saki Koshiishi<sup>3</sup>, Hiroshi Nakagomi<sup>4</sup>, Hitoshi Mochizuki<sup>2</sup>, Toshio Oyama<sup>5</sup>, Masao Omata<sup>2</sup> (<sup>1</sup>Gynecol., Yamanashi Prefectural Central Hospital, <sup>2</sup>Genome Analysis Center, Yamanashi Prefectural Central Hospital, <sup>3</sup>Diagnostic pathology, Yamanashi Prefectural Central Hospital, <sup>4</sup>Breast Surg., Yamanashi Prefectural Central Hospital)

### 卵巣癌症例における漿液性卵管上皮内病変の検討

坂本 育子<sup>1</sup>、弘津 陽介<sup>2</sup>、奥石 早紀<sup>3</sup>、中込 博<sup>4</sup>、望月 仁<sup>2</sup>、小山 敏雄<sup>3</sup>、小俣 政男<sup>2</sup>（<sup>1</sup>山梨県立中央病院 婦人科、<sup>2</sup>山梨県立中央病院 ゲノム解析センター、<sup>3</sup>山梨県立中央病院 病理診断科、<sup>4</sup>山梨県立中央病院 乳腺外科）

### P-1368 Cisplatin-induced PD-L1 up-regulation is suppressed in cisplatin-resistant ovarian cancer cells

Yukiko Sagawa<sup>1</sup>, Toshiyuki Seki<sup>2</sup>, Yuko Kamata<sup>1</sup>, Masaki Ito<sup>1</sup>, Aikou Okamoto<sup>2</sup>, Sadamu Homma<sup>1</sup> (Div. Oncol., Jikei Univ. Sch. Med., <sup>2</sup>Dept. Gynecol. Jikei Univ.Sch. Med.)

### シスプラチン誘導性PD-L1 発現増強はシスプラチン抵抗性卵巣がん細胞では抑制されている

佐川 由紀子<sup>1</sup>、關 壽之<sup>2</sup>、鎌田 裕子<sup>1</sup>、伊藤 正紀<sup>1</sup>、岡本 愛光<sup>2</sup>、本間 定<sup>1</sup>（<sup>1</sup>慈恵医大・医・悪性腫瘍治療研、<sup>2</sup>慈恵医大・医・産婦人科）

### P-1369 Identification of somatic genetic alterations in ovarian clear cell carcinomas with next generation sequencing

Yusuke Shibuya<sup>1</sup>, Sakae Saito<sup>2</sup>, Kaname Kojima<sup>2</sup>, Bin Li<sup>1</sup>, Hideki Tokunaga<sup>1</sup>, Masao Nagasaki<sup>2</sup>, Jun Yasuda<sup>2</sup>, Nobuo Yaegashi<sup>1</sup> (OB/GY, Tohoku Univ., <sup>2</sup>Tohoku Med. Megabank Org. Dept. of Integrative Genomics)

### 次世代シーケンサーを用いた卵巣明細胞腺癌の遺伝子変異の探索

渋谷 祐介<sup>1</sup>、齋藤 さかえ<sup>2</sup>、小島 要<sup>2</sup>、李 賢<sup>1</sup>、徳永 英樹<sup>1</sup>、長崎 正朗<sup>2</sup>、安田 純<sup>2</sup>、八重樫 伸生<sup>1</sup>（<sup>1</sup>東北大・医・産婦人科、<sup>2</sup>東北メディカルメガバンク・ゲノム解析分野）

### P-1370 Patient-derived model of ovarian clear cell carcinoma with ARID1A deficiency

Kazuaki Takahashi<sup>1,2</sup>, Hideaki Ogihara<sup>1</sup>, Farhana I Ghani<sup>3</sup>, Reiko Watanabe<sup>4</sup>, Hiroshi Yoshida<sup>4</sup>, Mitsuya Ishikawa<sup>5</sup>, Tohru Kiyono<sup>3</sup>, Aikou Okamoto<sup>2</sup>, Tomoyasu Kato<sup>5</sup>, Takashi Kohno<sup>1</sup> (<sup>1</sup>Div. of Genome Biol., Natl. Cancer Ctr. Res. Inst., <sup>2</sup>Dept of Ob/Gyn., The Jikei Univ. Sch. Med., <sup>3</sup>Div. of Carcinogenesis Cancer Prevention, Natl. Cancer Ctr. Res. Inst., <sup>4</sup>Dept. of Pathol., Natl. Cancer Ctr. Hosp., <sup>5</sup>Dept. of Gynecol., Natl. Cancer Ctr. Hosp.)

### ARID1A 欠失型卵巣明細胞がんにおける患者モデルの確立

高橋 一彰<sup>1,2</sup>、荻原 秀明<sup>1</sup>、Farhana I Ghani<sup>3</sup>、渡邊 麗子<sup>4</sup>、吉田

裕<sup>4</sup>、石川 光也<sup>5</sup>、清野 透<sup>3</sup>、岡本 愛光<sup>2</sup>、加藤 友康<sup>5</sup>、河野 隆志<sup>1</sup>  
(<sup>1</sup>国立がん研究セ・研究所 ゲノム生物、<sup>2</sup>慈恵医大・産婦人科、<sup>3</sup>国立がん研究セ・研究所 発がん・予防、<sup>4</sup>国立がん研究セ・中央病院・病理科、<sup>5</sup>国立がん研究セ・中央病院・産婦人科)

Room P Oct. 6 (Thu.) 15:50-16:35

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**P14-29 Ovarian cancer (2)**  
卵巣がん (2)

Chairperson: Nobuyoshi Hiraoka (Div. of Pathol., Natl. Cancer Ctr., Hosp.)

座長：平岡 伸介（国立がん研究セ・中央・病理）

**P-1371 Profiling of human ovarian cancer exosomes using comprehensive microRNA analysis.**

Horie Kayo<sup>1</sup>, Nanashima Naoki<sup>1</sup>, Yokoyama Yoshihito<sup>2</sup>, Watanabe Jun<sup>1</sup>  
(<sup>1</sup>Dept. Biosci & Lab. Med, Hirosaki Univ. Grad. Sch. Health Sci., <sup>2</sup>Dept. Obstetrics & Gynecology, Hirosaki Univ. Grad. Sch. Med.)

ヒト卵巣癌エクソソーム内在 miRNA 発現プロファイルの探索

堀江 香代<sup>1</sup>、七島 直樹<sup>1</sup>、横山 良仁<sup>2</sup>、渡邊 純<sup>1</sup> (<sup>1</sup>弘前大・院保健・生体検査、<sup>2</sup>弘前大・院医・産婦人科)

**P-1372 Elevated level of serum miR-99a is correlated with serous epithelial ovarian cancer and can be a potential biomarker.**

Akihiko Yoshimura, Kenjiro Sawada, Koji Nakamura, Yasuto Kinose, Erika Nakatsuka, Seiji Mabuchi, Tadashi Kimura (OB/GYN, Osaka Univ., Fac. Med.)

血清中 miR-99a は卵巣高悪性度漿液性腺癌のバイオマーカーとなりえる

吉村 明彦、澤田 健二郎、中村 幸司、木瀬 康人、中塚 えりか、馬淵 誠士、木村 正（大阪大学・院・産婦人科）

**P-1373 STAT3 pathway of ovarian cancer cells and M2 macrophages in cancer microenvironment are inactivated by Onionin A**

Junko Tsuboki<sup>1</sup>, Yukio Fujiwara<sup>2</sup>, Kiyomi Takaishi<sup>1</sup>, Fumitaka Saito<sup>1</sup>, Takeshi Motohara<sup>1</sup>, Isao Sakaguchi<sup>1</sup>, Yoshihiro Komohara<sup>2</sup>, Hironori Tashiro<sup>3</sup>, Motohiro Takeya<sup>2</sup>, Hidekata Katabuchi<sup>1</sup> (<sup>1</sup>Dept. Obstetrics and Gynecology, Kumamoto Univ., <sup>2</sup>Dept. Cell Pathology, Kumamoto Univ., <sup>3</sup>Dept. Maternal-Newborn Nursing, Kumamoto Univ.)

Onionin Aによる卵巣癌細胞と癌微小環境中の M2 マクロファージの STAT3 活性の制御

坪木 純子<sup>1</sup>、藤原 草雄<sup>2</sup>、高石 清美<sup>1</sup>、齋藤 文薈<sup>1</sup>、原本 剛志<sup>1</sup>、坂口 繁<sup>1</sup>、菰原 義弘<sup>2</sup>、田代 浩徳<sup>3</sup>、竹屋 元裕<sup>2</sup>、片渕 秀隆<sup>1</sup> (<sup>1</sup>熊本大・医・産科婦人科、<sup>2</sup>熊本大・医・細胞病理学、<sup>3</sup>熊本大・医・母子看護学)

**P-1374 EMT-related gene Snail promotes MDSC chemotaxis in ovarian cancer via CXCR2**

Mana Taki<sup>1</sup>, Kaoru Abiko<sup>1</sup>, Tsukasa Baba<sup>1</sup>, Junzo Hamanishi<sup>1</sup>, Ken Yamaguchi<sup>1</sup>, Naoki Horikawa<sup>1</sup>, Ikuo Konishi<sup>2</sup>, Noriomi Matsumura<sup>1</sup> (<sup>1</sup>Dept. Ob & Gyn., Kyoto Univ., <sup>2</sup>Dept. Ob & Gyn., National Hospital Organization Kyoto Medical Center.)

卵巣癌において EMT 誘導因子 Snail は CXCR2 を介して MDSC の腫瘍への浸潤を促進する

滝 真奈<sup>1</sup>、安彦 郁<sup>1</sup>、馬場 長<sup>1</sup>、濱西 潤三<sup>1</sup>、山口 建<sup>1</sup>、堀川 直城<sup>1</sup>、小西 郁生<sup>2</sup>、松村 篤臣<sup>1</sup> (<sup>1</sup>京都大学・医・産婦人科、<sup>2</sup>京都医療センター・産婦人科)

**P-1375 SIRT1 plays a role in the acquisition of aggressiveness and chemo-resistance of ovarian carcinoma cells**

David H. Mvunta, Tsutomu Miyamoto, Ryoichi Asaka, Hirofumi Ando, Yasushi Yamada, Shotaro Higuchi, Koichi Ida, Hisanori Kobara, Hiroyasu Kashima, Tanri Shiozawa (Department of Obstetrics & Gynecology, Shinshu University Graduate School of Medicine)

## 15 Diagnosis

Room P Oct. 6 (Thu.) 16:35-17:20

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**P15-1 Pathological diagnosis**

Chairperson: Yoshinao Oda (Dept. of Anatomic Pathol. Grad. Sch. of Med. Sci., Kyushu Univ.)

座長：小田 義直（九州大・院医・形態機能病理）

**P-1376 Re-classification of rhabdoid tumor: three subtypes of rhabdoid tumor according to their histological features**

Kenichi Kohashi<sup>1</sup>, Yukichi Tanaka<sup>2</sup>, Hiroshi Kishimoto<sup>3</sup>, Hidekata Yamamoto<sup>1</sup>, Yuichi Yamada<sup>1</sup>, Izumi Kinoshita<sup>1</sup>, Tomoaki Taguchi<sup>1</sup>, Yoshinao Oda<sup>1</sup> (<sup>1</sup>Dept. Anatomic Path., Kyushu Univ., <sup>2</sup>Dept. Path., Kanagawa Children's Med. Ctr., <sup>3</sup>Dept. Path., Saitama Children's Med. Ctr., <sup>4</sup>Dept. Pediatric Surg., Kyushu Univ.)

悪性ラブドイド腫瘍の再分類：組織学的特徴に基づく3つの亜型  
李橋 賢一<sup>1</sup>、田中 祐吉<sup>2</sup>、岸本 宏志<sup>3</sup>、山元 英崇<sup>1</sup>、山田 裕一<sup>1</sup>、木下 伊寿美<sup>1</sup>、田口 智章<sup>4</sup>、小田 義直<sup>1</sup>（九州大学・院医・形態機能病理、<sup>2</sup>神奈川県立こども医療センター・病理診断科、<sup>3</sup>埼玉県立小児医療センター・病理診断科、<sup>4</sup>九州大学・院医・小児外科）

**P-1377 Low molecular weight keratin, CAM5.2, immunoreactivity in squamous cell carcinoma of various organs**

Obulhasim Gulzarbar, Hiroshi Kawachi, Yutaka Takazawa, Hironori Ninomiya, Kentaro Inamura, Takashi Endo, Yukiko Sato, Noriko Yamamoto, Yuichi Ishikawa (Div. Pathol., The Cancer Inst., Japanese Foundation for Cancer Research)

種々の臓器の扁平上皮癌における低分子量サイトケラチン CAM5.2 の発現

グランバル ウブリハスム、河内 洋、高澤 豊、二宮 浩範、稻村 健太郎、遠藤 太嘉志、佐藤 由紀子、山本 智理子、石川 雄一（がん研・病理）

**P-1378 Development of a 4,6-diaryl-3-cyano-2-pyridinone derivatives as a survivin targeting SPECT probe for tumor imaging**

Takeshi Fuchigami<sup>1</sup>, Natsumi Ishikawa<sup>1</sup>, Tatsuya Mizoguchi<sup>1</sup>, Mamoru Haratake<sup>2</sup>, Kounosuke Itagaki<sup>1</sup>, Sakura Yoshida<sup>1</sup>, Morio Nakayama<sup>1</sup> (<sup>1</sup>Grad. Sch. Biomed. Sci., Nagasaki Univ., <sup>2</sup>Pharm. Sci., Sojo Univ.)

Survivin を標的としたがんの SPECT イメージングを目的とした 4,6-diaryl-3-cyano-2-pyridinone の開発

淵上 剛志<sup>1</sup>、石川 夏海<sup>1</sup>、溝口 達也<sup>1</sup>、原武 衛<sup>2</sup>、板垣 昇之介<sup>1</sup>、吉田 さくら<sup>1</sup>、中山 守雄<sup>1</sup>（長崎大院・医歯薬、<sup>2</sup>崇城大・薬）

## 17 Chemotherapy and endocrine therapy

Room P Oct. 6 (Thu.) 15:50-16:35

J/E

### P17-1 Natural substances (1)

天然抗がん物質 (1)

Chairperson: Kazuo Shin-ya (BRD, AIST)

座長：新家 一男（産総研・創薬基盤・最先端バイオ技術探求）

#### P-1379 Papyracillic acid and penicillic acid show preferential cytotoxicity under nutrient-deprived conditions.

Isao Momose, Hayamitsu Adachi, Manabu Kawada (Inst. Microb. Chem., Numazu)

Papyracillic acid および penicillic acid による栄養飢餓選択性の細胞毒性

百瀬 功、安達 勇光、川田 学（微化研・沼津）

#### P-1380 Development and utilization of bioenergetic profiling system for drug discovery

Yushi Futamura, Harumi Aono, Makoto Kawatani, Makoto Muroi, Hiroyuki Osada (Chemical Biology Research Group, RIKEN CSRS)

エネルギー代謝プロファイリングを用いたがん代謝阻害薬の探索研究

二村 友史、青野 晴美、川谷 誠、室井 誠、長田 裕之（理研CSRS・ケミカルバイオロジー）

#### P-1381 Taheebo tea suppresses the growth of human endometrial carcinoma in mouse xenograft model.

Hirofumi Ando, Tsutomu Miyamoto, Hiroyasu Kashima, Hisanori Kobara, Yasushi Yamada, Shotaro Higuchi, Koichi Ida, David H. Mvunta, Takuma Hayashi, Tanri Shiozawa (Department of Obstetrics and Gynecology, Shinshu University School of Medicine)

タヒボ茶はマウス異種移植モデルにおいてヒト子宮内膜癌の増大を抑制する

安藤 大史、宮本 強、鹿島 大靖、小原 久典、山田 靖、樋口 正太郎、井田 耕一、David H. Mvunta、林 琢磨、塩沢 丹里（信州大学医学部産科婦人科学教室）

#### P-1382 p53-dependent growth suppression of cancer cells by coccoquinones

Daisuke Tatsuda<sup>1</sup>, Manabu Kawada<sup>1,2</sup>, Isao Momose<sup>2</sup> (<sup>1</sup>Inst. Microb. Chem., Lab. Onc., <sup>2</sup>Inst. Microb. Chem., Numazu)

新規化合物 coccoquinones による p53 依存的な細胞増殖抑制

立田 大輔<sup>1</sup>、川田 学<sup>1,2</sup>、百瀬 功<sup>2</sup>（<sup>1</sup>微化研・第1生物活性、<sup>2</sup>微化研・沼津）

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### P17-2 Natural substances (2)

天然抗がん物質 (2)

Chairperson: Yutaka Yamada (Dept. of Rad. Effe. Res., Natl. Inst. Rad. Sci., QST)

座長：山田 裕（量研機構・放医研・放射線影響）

#### P-1383 Danshen suppresses growth of malignant pleural mesothelioma.

Hisao Nagaya<sup>1,2</sup>, Azumi Nakamura<sup>1</sup>, Takeaki Miyata<sup>1</sup>, Tsunehiro Oyama<sup>1</sup>, Akinobu Gotoh<sup>1</sup> (Lab. Cell & Gene Therapy, Hyogo College Med., <sup>2</sup>Traditional Med. Res., Chinese Med. Confucius\_Inst. at Hyogo College Med.)

悪性胸膜中皮腫に対する丹参の抗腫瘍効果

長屋 寿雄<sup>1,2</sup>、中村 安澄<sup>1</sup>、宮田 功彰<sup>1</sup>、小山 倫浩<sup>1</sup>、後藤 章暢<sup>1</sup>（<sup>1</sup>兵庫医科大学・先端研・細胞・遺伝子治療部門、<sup>2</sup>兵庫医科大学中医薬孔子学院・先端中医薬研）

#### P-1384 Mammea E/BB induces cell apoptosis in human leukemic cell lines

Methee Rungrajsakul<sup>1,3</sup>, Aroonchai Saiai<sup>2</sup>, Chadarat Ampasavate<sup>3</sup>, Siriporn Okonogi<sup>3</sup>, Colleen A. Sweeney<sup>4</sup>, Songyot Anuchapreeda<sup>5</sup> (<sup>1</sup>Dept. of TCM., Alternative Med. College., Chadrakasem Rajabhat Univ., Thailand., <sup>2</sup>Dept. of Chemistry, Chiang Mai Univ., Thailand., <sup>3</sup>Dept. of Pharm Sci., Chiang Mai Univ. Thailand., <sup>4</sup>Dept. of Biochem & Mol., UC Davis School of Med., USA., <sup>5</sup>Dept. of Med. Tech. Chiang Mai Univ. Thailand.)

#### P-1385 Baicalein induces cell cycle arrest in nasopharyngeal carcinoma

Thana Narkthong<sup>1</sup>, Tavan Janvilisri<sup>1</sup>, Supeecha Kumkate<sup>2</sup>, Alisa Damnernsawad<sup>2</sup> (<sup>1</sup>Dept. of Biochem., Mahidol Univ., <sup>2</sup>Dept. of Biol., Mahidol Univ.)

#### P-1386 Nobiletin and 5-demethylnobiletin suppress c-KIT expression via ERK pathway and inhibit cell proliferation in AML cells

Pei-Yi Chen<sup>1</sup>, Yu-Ting Chen<sup>2</sup>, Reuy-Ho Kao<sup>3</sup>, Ming-Jiuan Wu<sup>4</sup>, Mi-Hsueh Tai<sup>5</sup>, Chi-Tang Ho<sup>6</sup>, Jui-Hung Yen<sup>2</sup> (<sup>1</sup>Ctr. of Medical Genetics, Buddhist Tzu Chi General Hosp., Taiwan, <sup>2</sup>Dept. of Molecular Biology and Human Genetics, Tzu Chi Univ., <sup>3</sup>Dept. of Hematology-Oncology, Buddhist Tzu Chi General Hosp., <sup>4</sup>Dept. of Biotechnology, Chia-Nan Univ. of Pharm. and Sci., <sup>5</sup>Dept. of Food Science, Rutgers Univ., USA)

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### P17-3 Synthetic anticancer compounds (1)

合成抗がん物質 (1)

Chairperson: Manabu Kawada (Inst. Microbial Chem. Lab. Oncology)

座長：川田 学（微化研・第一生物活性）

#### P-1387 Therapeutic effect of a new curcumin analog on cutaneous T cell lymphoma, and its mechanism

Koji Fukuda, Masahiro Inoue, Kazuhiro Shimizu, Taichi Yoshida, Daiki Taguchi, Hiroyuki Shibata (Dept. Clinical Oncol., Akita Univ. Graduate Sch., Med.)

新規クルクミンアナログによる皮膚T細胞性リンパ腫の制御

福田 耕二、井上 正広、島津 和弘、吉田 泰一、田口 大樹、柴田 浩行（秋田大・院医・臨床腫瘍学）

#### P-1388 The relevance of CD133 to radioresistance, migration and invasion ability in clinically relevant radioresistant cell

Yoshihiro Fujii<sup>1</sup>, Ken Ohnishi<sup>1</sup>, Manabu Fukumoto<sup>2</sup>, Yoshikazu Kuwahara<sup>2</sup>, Masatoshi Suzuki<sup>2</sup> (<sup>1</sup>Dept. Radio.Sci.Ibaraki Pref.Univ.Health Sci., <sup>2</sup>Dept. of Path., IDAC, Tohoku Univ.)

CD133陽性CRR細胞の放射線抵抗性の要因と遊走・浸潤能との関連性

藤井 義大<sup>1</sup>、大西 健<sup>1</sup>、福本 学<sup>2</sup>、桑原 義和<sup>2</sup>、鈴木 正敏<sup>2</sup>（茨城県立医療大・保健医療・放射、<sup>2</sup>東北大・加齢研・病態臓器）

#### P-1389 Effects of glycolysis inhibition by 2-deoxyglucose on the protein expression in the pancreatic cancer cell line

Kousuke Ishino<sup>1</sup>, Mitsuhiro Kudo, Wei-Xia Peng, Shoko Kure, Kiyoko Kawahara, Yoko Kawamoto, Taeko Kitamura, Takenori Fujii, Kiyoshi Teduka, Ryuichi Wada, Zenya Naito (Dept. Integr. Diag. Path., Nippon Med. Sch.)

2-デオキシグルコースによる糖解系阻害が膵癌細胞株のタンパク発現に及ぼす影響

石野 孔祐、工藤 光洋、彭 炳霞、吳 壮香、川原 清子、河本 陽子、北村 妙子、藤井 雄文、手塚 潔、和田 龍一、内藤 善哉（日本医大・院医・統御機構診断病理）

#### P-1390 Antimitotic Effect and Complex of Non-mitotic Effect on Tumor Biology of Eribulin Mesilate in Soft Tissue Sarcoma Models

Satoshi Kawano<sup>1</sup>, Makoto Asano<sup>2</sup>, Yusuke Adachi<sup>2</sup>, Junji Matsui<sup>2</sup> (<sup>1</sup>Halichondrin Res., Oncology Tsukuba Res. Dept., Eisai Co., Ltd., <sup>2</sup>Biol. Res., Oncology Tsukuba Res. Dept., Eisai Co., Ltd.)

エリブルリンメシル酸塩による悪性軟部腫瘍（軟部肉腫）モデルでの分裂抑制作用を含む多様なメカニズムによる抗腫瘍効果

河野 智<sup>1</sup>、浅野 誠<sup>2</sup>、安達 雄亮<sup>2</sup>、松井 順二<sup>2</sup>（エーザイ株式会社・ハリコンドリン研究室、<sup>2</sup>エーザイ株式会社・バイオロジー研究室）

#### P-1391 Mechanism of anti-cancer effects induced by benzimidazoles C299-1

Yoshifumi Ohno<sup>1</sup>, Ruirong Yi<sup>2</sup>, Weiwei Chen<sup>2</sup>, Zheng Tian<sup>2</sup>, Shuhan Guo<sup>2</sup>, Qisen Li<sup>2</sup>, Xue Ma<sup>2</sup>, Akiko Suganami<sup>2,3,4</sup>, Yutaka Tamura<sup>3,4</sup>, Akio Matsumoto<sup>5</sup>, Shoji Matsumoto<sup>6</sup>, Kengo Saito<sup>7</sup>, Hiroshi Shirasawa<sup>2</sup> (<sup>1</sup>Dept. Mol. Virol., Chiba Univ., Sch. Med., <sup>2</sup>Dept. Mol. Virol., Chiba Univ., Grad. Sch. Med., <sup>3</sup>Dept. Bioinfor., Chiba Univ., <sup>4</sup>Dept. Integr. Diag. Path., Nippon Med. Sch., <sup>5</sup>Mol. Chirality Res. Ctr., Chiba Univ., <sup>6</sup>Dept. Pharm., Chiba Univ., <sup>7</sup>Dept. Med. Oncol., Thomas Jefferson Univ.)

ベンゾイミダゾール誘導体 C299-1 による癌細胞傷害機序の解析

大野 吉史<sup>1</sup>、蟻 端栄<sup>2</sup>、陳 健巍<sup>2</sup>、田 錦<sup>2</sup>、郭 曙翰<sup>2</sup>、李 斉森<sup>2</sup>、馬 雪<sup>2</sup>、菅波 晃子<sup>2,3,4</sup>、田村 裕<sup>3,4</sup>、松本 明郎<sup>5</sup>、松本 祥治<sup>6</sup>、齋藤 謙悟<sup>7</sup>、白澤 浩<sup>2</sup>（<sup>1</sup>千葉大・医・分子ウイルス学、<sup>2</sup>千葉大・医・生命情報科学、<sup>3</sup>千葉大・分子キラリティ研究センター、<sup>4</sup>千葉大・医・薬理学、<sup>5</sup>千葉大・工・共生応用化学、<sup>7</sup>トマスジェファーソン大・腫瘍内科）

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P17-4

**Synthetic anticancer compounds (2)**  
合成抗がん物質 (2)

Chairperson: Takeo Usui (Faculty of Life & Environmental Sciences, Univ. of Tsukuba)  
 座長: 真井 健郎 (筑波大・生命環境)

**P-1392 Studies on the creation of novel anticancer drugs targeting nicotinamide phosphoribosyltransferase**

Kiyotaka Katsuragi<sup>1</sup>, Yoko Ogino<sup>1</sup>, Akira Sato<sup>1,2</sup>, Takahiro Oyama<sup>3</sup>, Hideaki Abe<sup>3</sup>, sei-ichi Tanuma<sup>1,2</sup> (<sup>1</sup>Fac.of Pharm.Sci., Tokyo Univ. of Sci., <sup>2</sup>Genome and Drug Res. Ctr., Tokyo Univ. of Sci., <sup>3</sup>Hinoki shinyaku Co., Ltd)

**Nicotinamide phosphoribosyltransferase を標的とした新規制がん剤の創製研究**

葛城 肇貴<sup>1</sup>、荻野 暢子<sup>1</sup>、佐藤 聰<sup>1,2</sup>、大山 貴央<sup>3</sup>、阿部 英明<sup>3</sup>、田沼 靖一<sup>1,2</sup> (<sup>1</sup>東京理大薬・生化学、<sup>2</sup>東京理大ゲノム創薬研セ、<sup>3</sup>ヒノキ新薬(株))

**P-1393 Elucidation of anti-mesothelioma effect of vitamin E derivatives through histone modification**

Haruka Ueno<sup>1</sup>, Ayami Sato<sup>2,3</sup>, Tomohiro Yano<sup>3</sup> (<sup>1</sup>Grad.Sch. Food Life Sci, Toyo Univ, <sup>2</sup>Grad.Sch. Phar Sci, Chiba Univ, <sup>3</sup>Life Innovation, Toyo Univ)

**ヒストン修飾を介したビタミンE誘導体の抗中皮腫作用の解明**  
上野 はるか<sup>1</sup>、佐藤 綾美<sup>2,3</sup>、矢野 友啓<sup>3</sup> (<sup>1</sup>東洋大・院・食環境、<sup>2</sup>千葉大・院・薬、<sup>3</sup>東洋大・ライフイノベーション)**P-1394 Design, synthesis and biological evaluation of Triostin A and its analogues**

Kota Koike<sup>1</sup>, Tasuku Hirayama<sup>1</sup>, Kensuke OKuda<sup>1,2</sup>, Hideko Nagasawa<sup>1</sup> (<sup>1</sup>Dept. Pharm. & Med. Chem., Gifu Pharm. Univ., <sup>2</sup>Laboratory of Bioorganic & Natural Products Chemistry, Kobe Pharm. Univ.)

**トリオスチンA及び誘導体の合成と生理活性評価**

小池 晃太<sup>1</sup>、平山 祐<sup>1</sup>、奥田 健介<sup>1,2</sup>、永澤 秀子<sup>1</sup> (<sup>1</sup>岐阜薬大・薬・薬化学、<sup>2</sup>神戸薬大・薬・薬化学)

**P-1395 PAI-1 (plasmin activator inhibitor 1) as a therapeutic target for ovarian cancer**

Erika Nakatsuka<sup>1</sup>, Kenjiro Sawada<sup>1</sup>, Koji Nakamura<sup>1</sup>, Akihiko Yoshimura<sup>1</sup>, Yasuto Kinose<sup>1</sup>, Seiji Mabuchi<sup>1</sup>, Akiko Itai<sup>1,2</sup>, Tadashi Kimura<sup>1</sup> (<sup>1</sup>Dept. Ob-Gyn, Osaka Univ., <sup>2</sup>IMMD Inc., Tokyo, Japan)

**PAI-1 (プラスミノーゲン活性化抑制因子1) 阻害剤の卵巣がん治療への可能性の検討**

中塚 えりか<sup>1</sup>、澤田 健二郎<sup>1</sup>、中村 幸司<sup>1</sup>、吉村 明彦<sup>1</sup>、木瀬 康人<sup>1</sup>、馬淵 誠士<sup>1</sup>、板井 昭子<sup>1,2</sup>、木村 正<sup>1</sup> (<sup>1</sup>大阪大学・医・産婦人科、<sup>2</sup>(株) 医薬分子設計研究所)

**P-1396 Targeting the EWS-FLI1 fusion gene by pyrrole-imidazole polyamide DNA alkylator in Ewing sarcoma cells**

Atsushi Takatori<sup>1</sup>, Shintaro Iwata<sup>2</sup>, Kiriko Hiraoka<sup>1,3</sup>, Sakthisri Krishnamurthy<sup>1,3</sup>, Hiroyuki Yoda<sup>1,3</sup>, Takayoshi Watanabe<sup>1</sup>, Yoshinao Shinozaki<sup>1</sup>, Miwa Tanaka<sup>4</sup>, Takuro Nakamura<sup>4</sup>, Hiroki Nagase<sup>1,3</sup> (<sup>1</sup>Div. Cancer Genetics, Chiba Cancer Ctr. Res. Inst., <sup>2</sup>Div. Orthopedic Surg., Chiba Cancer Ct, <sup>3</sup>Grad. Sch. Med. & Pharm. Sci., Univ. Chiba, <sup>4</sup>Div. Carcinogenesis, Cancer Institute, JFCR)

**EWS-FLI1 融合遺伝子を標的としたPIポリアミドDNAアルキル化剤によるEwing肉腫の治療戦略**

高取 敦志<sup>1</sup>、岩田 慎太郎<sup>2</sup>、平岡 桐子<sup>1,3</sup>、クリシュナムーティ サクティシリ<sup>1,3</sup>、養田 裕行<sup>1,3</sup>、渡部 隆義<sup>1</sup>、篠崎 喜脩<sup>1</sup>、田中 美和<sup>4</sup>、中村 卓郎<sup>4</sup>、永瀬 浩喜<sup>1,3</sup> (<sup>1</sup>千葉がんセ・研・がん遺伝、<sup>2</sup>千葉がんセ・整形外科、<sup>3</sup>千葉大・院・医学薬学府、<sup>4</sup>がん研究会・がん研・発がん)

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P17-5

**Anticancer drug and cell death (1)**  
抗がん剤と細胞死 (1)

Chairperson: Masato Enari (Div. of Refractory & Advanced Cancer Res., Natl. Cancer Ctr. Res. Inst.)  
 座長: 江成 政人 (国立がん研究セ・研・難治進行がん)

**P-1397 Macrolides Block Autophagy Flux and Cause Cell Death under Amino Acid-Depleted Condition in Head and Neck Cancer Cells**

Kazuhiro Hirasawa<sup>1</sup>, Shota Moriya<sup>2</sup>, Kana Miyahara<sup>3</sup>, Masaki Hiramoto<sup>2</sup>, Kyoaki Tsukahara<sup>2</sup>, Keisuke Miyazawa<sup>2</sup> (<sup>1</sup>Dept. of Otolaryngol., Tokyo Med. Univ., Tokyo, Japan, <sup>2</sup>Dept. of Biochem., Tokyo Med. Univ., Tokyo, Japan, <sup>3</sup>Dept. of Breast Oncol., Tokyo Med. Univ., Tokyo, Japan)

**アミノ酸飢餓状態下で、マクロライド系抗腫瘍薬はオートファジー阻害により頭頸部癌細胞株の細胞死を誘導する**

平澤 一浩<sup>1</sup>、森谷 昇太<sup>2</sup>、宮原 か奈<sup>3</sup>、平本 正樹<sup>2</sup>、塚原 清彰<sup>2</sup>、宮澤 啓介<sup>2</sup> (<sup>1</sup>東京医科大学耳鼻咽喉科学分野、<sup>2</sup>東京医科大学生化学分野、<sup>3</sup>東京医科大学乳腺科学分野)

**P-1398 Therapeutic effects of hybrid liposomes against mouse model of colorectal cancer *in vivo* due to long term accumulation**

Hideaki Ichihara, Masaki Okumura, Yoko Matsumoto (Div. of Applied Life Science, Sojo)

**大腸がんモデルマウスに対するハイブリッドリポソームの長期間集積による治療効果**

市原 英明、奥村 真樹、松本 陽子 (崇城大学・生物生命・応用生命)

**P-1399 Mechanisms of different sensitivities of cancer cells against suppression of de-poly(ADP-ribosylation)**

Yusuke Takai<sup>1</sup>, Akira Sato<sup>1,2</sup>, Hideaki Abe<sup>3</sup>, Takahiro Oyama<sup>3</sup>, Sei-ichi Tanuma<sup>1,2</sup> (<sup>1</sup>Fac. Pharm. Sci., Tokyo Univ. Sci., <sup>2</sup>Genome & Drug Res. Ctr., Tokyo Univ. Sci., <sup>3</sup>Hinoki shinyaku Co., Ltd)

**ポリ(ADPリボース) 分解抑制に対するがん細胞の感受性の差異メカニズム**

高井 祐輔<sup>1</sup>、佐藤 聰<sup>1,2</sup>、阿部 英明<sup>3</sup>、大山 貴央<sup>3</sup>、田沼 靖一<sup>1,2</sup> (<sup>1</sup>東京理大・生化学、<sup>2</sup>東京理大ゲノム創薬セ、<sup>3</sup>ヒノキ新薬(株))

**P-1400 Nonactin exhibited synthetic lethality with β-catenin mutation via DR5 signaling**

Yuki Shikata, Masaki Kiga, Etsu Tashiro, Masaya Imoto (Dept. of Biosci. & Bioinfo., Fac. of Sci. & Tech., Keio Univ.)

**ミトコンドリア脱共役剤ノナクチンによるβ-catenin 変異がんに対する合成致死誘導機構解析**

四方 雄貴、木我 真基、田代 悅、井本 正哉 (慶應大・理工)

**P-1401 Mechanisms of anticancer effect on sonodynamic therapy in combination with DEG and microbubbles**

Hirotomo Shibaguchi<sup>1</sup>, Naoto Shirasu<sup>1</sup>, Motomu Kuroki<sup>2</sup>, Shin'ichiro Yasunaga<sup>1</sup> (<sup>1</sup>Dept. Biochem., Faculty Med., Fukuoka Univ., <sup>2</sup>Sch. Nursing, Faculty Med., Fukuoka Univ.)

**がん超音波力学療法における超音波感受性物質DEGと増感剤microbubbleの組合せによる抗腫瘍効果の作用機序**

芝口 浩智<sup>1</sup>、白須 直人<sup>1</sup>、黒木 求<sup>2</sup>、安永 晋一郎<sup>1</sup> (<sup>1</sup>福岡大・生化学、<sup>2</sup>福岡大・医・看護)

Chairperson: Fumiaki Koizumi (Dept. of Lab. Med., Tokyo Metropolitan Komagome Hosp.)

座長：小泉 史明（がん・感染症セ・都立駒込病院・臨床検査）

**P-1402 Essential role of oxaloacetate and autophagy in L-asparaginase-treated acute lymphoblastic leukemia cells**

Hiroyoshi Takahashi<sup>1,2</sup>, Jun Inoue<sup>1</sup>, Kimiyoshi Sakaguchi<sup>2</sup>, Masatoshi Takagi<sup>3</sup>, Shuki Mizutani<sup>3</sup>, Johji Inazawa<sup>3</sup> (<sup>1</sup>Dept. Mol. Cytogenet., Tokyo Medical and Dental Univ., <sup>2</sup>Dept. Pediatr., Hamamatsu Univ. Sch. Med., <sup>3</sup>Dept. Pediatr., Tokyo Medical and Dental Univ.)

急性リンパ性白血病細胞における L-asparaginase 投与時のオキサロ酢酸とオートファジーの役割

高橋 寛吉<sup>1,2</sup>、井上 純<sup>1</sup>、坂口 公祥<sup>2</sup>、高木 正穂<sup>3</sup>、水谷 修紀<sup>3</sup>、稻澤 譲治<sup>3</sup>（<sup>1</sup>東京医科歯科大・分子細胞遺伝、<sup>2</sup>浜松医大・小児科、<sup>3</sup>東京医科歯科大・小児科）

**P-1403 Dclk1 positively regulates gemcitabine-induced Chk1 phosphorylation in human pancreatic cancer cells**

Daichi Kawamura, Yoshihiro Takemoto, Arata Nishimoto, Naruji Kugimiya, Junichi Murakami, Kazuhiro Ueda, Kimikazu Hamano (Department of Surgery and Clinical Science, Yamaguchi Univ.)

ヒト膵癌細胞において Dclk1 はゲムシタビン誘導性の Chk1 リン酸化を正に制御する

河村 大智、竹本 圭宏、西本 新、釣宮 成二、村上 順一、上田 和弘、濱野 公一（山口大学大学院医学系研究科器官病態外科学）

**P-1404 Numerical simulation to analyze the cancer status and to predict the effect of anticancer drug from 2D angiography image**

Katsuya Nagayama<sup>1</sup>, Ichiro Miura<sup>2,3</sup> (<sup>1</sup>Kyushu Institute of Technology, <sup>2</sup>Obihiro asso. Hospital Dep. of Pathology, <sup>3</sup>Juntendo Univ. human body pathology)

2D がん画像からの数値シミュレーションによる状態分析と抗がん剤治療の効果予測

永山 勝也<sup>1</sup>、三浦 一郎<sup>2,3</sup>（<sup>1</sup>九州工業大学、<sup>2</sup>帯広協会病院 病理診断科、<sup>3</sup>順天堂大学 人体病理病態講座）

**P-1405 The novel anthraquinone derivative ATQ induces death of PC3 cells through SIRT 1-dependent pathways**

Chin-Chia Hsu (Dept. of Life Sci., TCU)

**P-1406 Induction of autophagy by *Momordica charantia* via the sirtuin 1-mediated pathways in breast cancer cells**

You-Ying Lin (Dept. of Life Sci., TCU)