Program

International Academy for Advanced Oncology

IAAO

国際フォーラム2015

Forefront of Oncology Care:
Discovery, Development and HTA

2015年7月24日（金） 12:55~17:25
25日（土） 8:30~15:25
六本木アカデミーヒルズ49

CHAAO
Chugai
Academy for
Advanced Oncology

Forefront of Oncology Care: Discovery, Development and HTA

Friday, Jul 24, 2015　12:55 ～ 17:25

Opening Remarks P.3

12:55 Osamu Nagayama, Chairman (Chugai Academy for Advanced Oncology)

1. Epigenetics P.4

13:00 **Epigenetic Therapy – A Means to Prime for Responses to Immune Checkpoint and Other Cancer Therapies?**
Speaker: Stephen B. Baylin (Johns Hopkins University, USA)
Chair/Moderator: Chikashi Ishioka (Tohoku University, Japan)

13:50 **Targeting Epigenetic Mechanisms in Cancer**
Speaker: Scott Armstrong (Memorial Sloan-Kettering Cancer Center, USA)
Chair/Moderator: Kiyohiko Hatake (Cancer Institute Hospital, Japan)

2. Molecular Targets and Therapy P.16

14:40 **Adaptive and Acquired Resistance**
Speaker: Neal Rosen (Memorial Sloan-Kettering Cancer Center, USA)
Chair/Moderator: Kohei Miyazono (The University of Tokyo, Japan)

15:25 **Break**

15:55 **Comprehensive Genomic Profiles of Small Cell Lung Cancer and Other Pulmonary Neuroendocrine Tumors**
Speaker: Julie George (University of Cologne, Germany)
Chair/Moderator: Hiroyuki Mano (The University of Tokyo, Japan)

16:40 **The Evolution of Genotypic Characterization and Targeted Therapy in Lung Cancer**
Speaker: Bruce E. Johnson (Harvard Medical School, USA)
Chair/Moderator: Mitsuaki Yoshida (Japanese Foundation For Cancer Research, Japan)

17:25 **RECEPTION *at Roppongi Hills Club, 51F***

オフィシャル言語　»　英　語
ドレスコード　»　ビジネスカジュアル

Saturday, Jul 25, 2015 8:30 ～ 15:25

3. Radiation and Thyroid Cancer P.34

8:30 **Radiation and Thyroid Cancer; lessons learned from Hiroshima, Nagasaki and Chernobyl to Fukushima**
Speaker: Shunichi Yamashita (Nagasaki University, Japan)
Chair/Moderator: James A. Fagin (Memorial Sloan-Kettering Cancer Center, USA)

9:10 **Molecular Pathogenesis of Radiation-Induced and Sporadic Thyroid Cancers: Implications for Mechanism-Based Therapies**
Speaker: James A. Fagin (Memorial Sloan-Kettering Cancer Center, USA)
Chair/Moderator: Shunichi Yamashita (Nagasaki University, Japan)

4. Progress in Breast Cancer Therapy P.46

9:55 **Hormone Resistant Breast Cancer**
Speaker: Sarat Chandarlapaty (Memorial Sloan-Kettering Cancer Center, USA)
Chair/Moderator: Masakazu Toi (Kyoto University, Japan)

10:40 **Break**

11:00 **Translational Approaches to Optimizing Breast Cancer Therapy**
Speaker: Leif Ellisen (Harvard Medical School, USA)
Chair/Moderator: Yuko Kitagawa (Keio University, Japan)

5. "Usefulness" of New Medicines P.58

11:45 **Dealing with the Successes and Failures of Targeted Therapy**
Speaker: Bruce A. Chabner (Harvard Medical School, USA)
Chair/Moderator: Makoto Ogawa (Aichi Cancer Center, Japan)

12:30 **Lunch**

13:00 **Health Technology Assessment in Cancer: Driving Efficiency and Efficacy, but at what cost?**
Speaker: Patrick Johnston (Queen's University Belfast, UK)
Chair/Moderator: Yasuhiro Fujiwara (National Cancer Center, Japan)

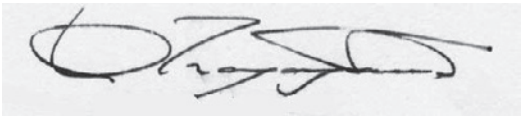
6. Tumor Immunotherapy P.70

13:45 **Immunotherapy for Lung Cancer and New Treatment Paradigm**
Speaker: Alan B. Sandler (Genentech Inc., USA)
Chair/Moderator: Nagahiro Saijo (Japanese Society of Medical Oncology, Japan)

14:35 **CAR Therapy: The CD19 Paradigm and Beyond**
Speaker: Michel Sadelain (Memorial Sloan-Kettering Cancer Center, USA)
Chair/Moderator: Ryuzo Ueda (Aichi Medical University, Japan)

Opening Remarks

Osamu Nagayama
Chairman, Chugai Academy for Advanced Oncology
(CHAAO), Incorporated Association



As chairman of Chugai Academy for Advanced Oncology (CHAAO), I would like to express my sincere thanks to all the distinguished guests, experts and investigators -- both from overseas and Japan -- for participating in the International Academy for Advanced Oncology (IAAO) 2015.

This forum marks the sixth opportunity for us to organize IAAO. Each time the number of participants has increased, with this year setting another record of more than 230 people. We are very happy and honored to know that more and more experts are interested in IAAO and value this event.

I would like to express my heartfelt appreciation to the IAAO Advisory Board members, Dr. Chabner, Dr. Johnston, Dr. Fujiwara, Dr. Hatake, Dr. Ishioka, Dr. Kitagawa, Dr. Mano, Dr. Toi and Dr. Ueda. The hard work and dedication of the Board has once again put together an outstanding program filled with internationally respected speakers.

The theme of this year's meeting is "Forefront of Oncology Care: Discovery, Development and HTA". As in the previous two meetings, the program will focus on immunotherapy, a field where expectations continue to grow. We will also address a broad range of topics including the epi-genetics of cancer cells, state-of-the-art treatments for breast cancer, the future of molecular targeted therapy, radiation, and thyroid cancer. In addition to scientific topics, we will discuss Health Technology Assessment (HTA), one of the most high-profile subjects representing the intersection between the regulatory field and social requirements.

As you can see, we have a full slate of fascinating sessions. I am confident that everyone will find numerous opportunities to share their knowledge and deep insights across a wide range of fields.

In closing, let me once again thank you for sparing time in your busy schedules to attend IAAO. Our sincere wish is to make this a highly informative and engaging forum where researchers and academics can exchange valuable information. As always, the ultimate goal is to achieve cancer treatments that allow patients to confront cancer proactively and with hope.

Session 1

Epigenetics

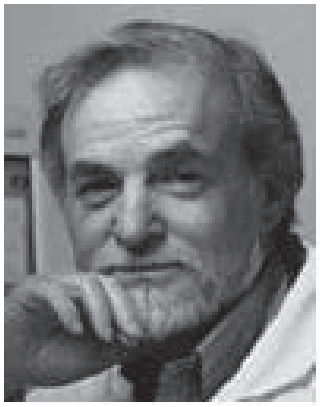
1-1. Epigenetic Therapy-A Means to Prime for Responses to Immune Checkpoint and Other Cancer Therapies?

Speaker: Stephen B. Baylin (Johns Hopkins University, USA)

1-2. Targeting Epigenetic Mechanisms in Cancer

Speaker: Scott Armstrong (Memorial Sloan-Kettering Cancer Center, USA)

Title: Epigenetic Therapy – A Means to Prime for Responses to Immune Checkpoint and Other Cancer Therapies?



Stephen B. Baylin, MD
Deputy Director, The Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University, USA

Speaker

Chikashi Ishioka, MD
Professor, Institute of Development, Aging and Cancer, Tohoku University, Japan

Chairman

Stephen B. Baylin, MD

Profile

Stephen B. Baylin, M.D., is the Deputy Director of The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins and the Virginia and D.K. Ludwig Professor of Oncology and Medicine. He is Chief of the Cancer Biology Division and Associate Director for Research of the Center. Born in 1942 in Durham, North Carolina, Baylin attended Duke University, and earned his medical degree at its Medical School, where he completed his internship and first year residency in Internal Medicine. Then he worked for two years at the National Heart and Lung Institute of the National Institutes of Health (NIH). In 1971 he joined the departments of Oncology and Medicine at the Johns Hopkins University School of Medicine.

His research interests include cellular biology and genetics of cancer, specifically epigenetics or genetic modifications other than those in DNA that can affect cell behavior, and silencing of tumor suppressor genes and tumor progression. His research also includes the mechanisms

through which variations in tumor cells derive, and cell differentiation in cancers such as medullary thyroid carcinoma and small cell lung carcinoma.

In 2009, Baylin was recognized by ScienceWatch.com as the most highly-cited scientist in the field of epigenetics. He and colleague Dr. James Herman occupy the top two spots on the citations list, which is a measure for scientific impact and influence. For the last 20 years, Baylin and colleagues have studied the role of epigenetic gene silencing in the initiation and progression of human cancer. His work has emphasized the concept that, from initiation to progression, cancer is an epigenetic, not only a genetic disease.

The studies define gene DNA hypermethylation and associated transcriptional silencing as an alternative to mutations for gene inactivation. Baylin and colleagues have been developing the translational implications of their work. They collaborate in studies aimed at deriving and implementing cancer biomarkers and therapeutic strategies for cancer. This work adds to the understanding of cancer biology, but the potential of the translational implications is to improve screening, diagnostic, prevention, and therapeutic approaches to cancer.

Recent Publications (CHAAO selected)

Juo YY, Gong XJ, Mishra A, Cui X, **Baylin SB**, Azad NS, Ahuja N. Epigenetic therapy for solid tumors: from bench science to clinical trials. Epigenomics. 2015 Apr;7(2):215-35.

Vendetti FP, Topper M, Huang P, Dobromilskaya I, Easwaran H, Wrangle J, **Baylin SB**, Poirier JT, Rudin CM. Evaluation of azacitidine and entinostat as sensitization agents to cytotoxic chemotherapy in preclinical models of non-small cell lung cancer. Oncotarget. 2015 Jan 1;6(1):56-70

Frank P. Vendetti; Michael Topper; Peng Huang; Irina Dobromilskaya; Hariharan Easwaran; John Wrangle; **Stephen B. Baylin**; J.T. Poirier; Charles M. Rudin Evaluation of azacitidine and entinostat as sensitization agents to cytotoxic chemotherapy in preclinical models of non-small cell lung cancer Oncotarget. 2015; 6 (1):56-70.

Calmon MF, Jeschke J, Zhang W, Dhir M, Siebenkäs C, Herrera A, Tsai HC, O'Hagan HM, Pappou EP, Hooker CM, Fu T, Schuebel KE, Gabrielson E, Rahal P, Herman JG, **Baylin SB**, Ahuja N. Epigenetic silencing of neurofilament genes promotes an aggressive phenotype in breast cancer. Epigenetics. 2015 Jul 3;10(7):622-32.

Nishant Agrawal; Rehan Akbani; B. Arman Aksoy; Adrian Ally; Harindra Arachchi; Sylvia L. Asa; J. Todd Auman; Miruna Balasundaram; Saianand Balu; **Stephen B. Baylin**; et al. Integrated Genomic Characterization of Papillary Thyroid Carcinoma Cell. 2014; 159 (3):676-690.

Jeffrey S. Huo; **Stephen B. Baylin**; Elias T. Zambidis Cancer-like epigenetic derangements of human pluripotent stem cells and their impact on applications in regeneration and repair. Current Opinion in Genetics and Development. 2014;28:43-49.

Ying Cui; Frederick Hausheer; Robert Beaty; Cynthia Zahnow; Jean Pierre Issa; Frederick Bunz; **Stephen B. Baylin** A recombinant reporter system for monitoring reactivation of an endogenously DNA hypermethylated gene. Cancer Research. 2014;74(14):3834-3843.

Hariharan Easwaran; Hsing-Chen Tsai; **Stephen B. Baylin** Cancer Epigenetics: Tumor Heterogeneity, Plasticity of Stem-like States, and Drug Resistance. Molecular Cell. 2014;54(5):716-727.

Title: Targeting Epigenetic Mechanisms in Cancer

Scott Armstrong, MD, PhD
Vice Chair for Basic and Translational Research,
Department of Pediatrics; Grayer Family Chair
Director, Memorial Sloan-Kettering Cancer Center; USA

Speaker

Kiyohiko Hatake, MD, PhD
Chief, Department of Hematology, Cancer Institute Hospital,
Japanese Foundation for Cancer Research (JFCR), Japan

Chairman

Scott Armstrong, MD, PhD

Profile

Dr. Armstrong received his MD and PhD from the University of Texas Southwestern Medical School. He completed his residency at Children's Hospital Boston and fellowship at both Children's and Dana-Farber. He has published in top journals, including Nature, Science, Nature Genetics, and Cancer Cell, and received Scholar Awards from the American Society of Hematology and the Leukemia and Lymphoma Society. He received the Wilson S. Stone Memorial Award from the M.D. Anderson Cancer Center in 2006, which recognizes a young researcher who has made outstanding contributions to biomedical sciences in the United States. This year he received the McCulloch and Till Award from the International Society of Experimental Hematology, which recognizes emerging international leaders in stem cell biology.

He is the Director of the Leukemia Center at Memorial Sloan Kettering Cancer Center (MSK), where he also serves as Vice Chair for Basic and Translational Research in Pediatrics and as a full member of the MSK Cancer Biology and Genetics Program. His research focuses on the biology and epigenetics of a class of leukemias initiated by mixed lineage leukemia (MLL) gene translocations. Throughout his career, Dr. Armstrong has sought to uncover unique insights into the origin and properties of cancer stem cells, the signaling pathways sustaining cancer cell self-renewal, and the epigenetic mechanisms dependent on MLL-fusion oncogenes.

Among Dr. Armstrong's most notable achievements was discovery of mixed lineage leukemia (MLL), a rare, lethal blood cancer that strikes infants in their first year and tically distinct from other acute lymphoblastic leukemias (ALL). This work led to the development of new therapies that are now being tested in patients. In related research, Dr. Armstrong recently identified changes in chromosome structure as a critical initial step in leukemia development which has prompted a search for therapies that can reverse this process and eradicate leukemia cells.

Recent Publications (CHAAO selected)

Chen CW, **Armstrong SA**. Targeting DOT1L and HOX Gene Expression in MLL-Rearranged Leukemia and Beyond. Exp Hematol. 2015 Jun 25. pii: S0301-472X(15)00194-0.

Kühn MW, **Armstrong SA**. Designed to kill: novel menin-MLL inhibitors target MLL-rearranged leukemia. Cancer Cell. 2015 Apr 13;27(4):431-3.

Danis E, Yamauchi T, Echanique K, Haladyna J, Kalkur R, Riedel S, Zhu N, Xie H, Bernt KM, Orkin SH, **Armstrong SA**, Neff T. Inactivation of Eed Impedes MLL-AF9 Mediated Leukemogenesis Through Cdkn2a-Dependent and Cdkn2a-Independent Mechanisms in a Murine Model. Exp Hematol. 2015 Jun 25. pii: S0301-472X(15)00213-1.

Chen CW, Koche RP, Sinha AU, Deshpande AJ, Zhu N, Eng R, Doench JG, Xu H, Chu SH, Qi J, Wang X, Delaney C, Bernt KM, Root DE, Hahn WC, Bradner JE, **Armstrong SA**. DOT1L inhibits SIRT1-mediated epigenetic silencing to maintain leukemic gene expression in MLL-rearranged leukemia. Nat Med. 2015 Apr;21(4):335-43.

Stubbs MC, Kim W, Bariteau M, Davis T, Vempati S, Minehart J, Witkin M, Qi J, Krivtsov AV, Bradner JE, Kung AL, **Armstrong SA**. Selective Inhibition of HDAC1 and HDAC2 as a Potential Therapeutic Option for B-ALL. Clin Cancer Res. 2015 May 15;21(10):2348-58.

Kühn MW, Hadler MJ, Daigle SR, Koche RP, Krivtsov AV, Olhava EJ, Caligiuri MA, Huang G, Bradner JE, Pollock RM, **Armstrong SA**. MLL partial tandem duplication leukemia cells are sensitive to small molecule DOT1L inhibition. Haematologica. 2015 May;100(5):e190-3.

Heidel FH, Arreba-Tutusaus P, **Armstrong SA**, Fischer T. Evolutionarily conserved signaling pathways: acting in the shadows of acute myelogenous leukemia's genetic diversity. Clin Cancer Res. 2015 Jan 15;21(2):240-8.

Mar B, Bullinger L, McClean K, Grauman P, Harris M, Stevenson K, Neuberg D, Sinha A, Sallan S, Silverman L, Kung A, Nigro L, Ebert B, **Armstrong SA**. Mutations in epigenetic regulators including SETD2 are gained during relapse in paediatric acute lymphoblastic leukaemia. Nature Communications. 2014 Mar 24;5:3469.

Santos M, Faryabi R, Ergen A, Day A, Malhowski A, Canela A, Onozawa M, Lee J, Callen E, Gutierrez-Martinez P, Chen H, Wong N, Finkel N, Sharrow S, Rossi D, Ito K, Ge K, Aplan P, **Armstrong SA**, Nussenzweig A, , DNA-damage induced differentiation of leukemic cells as an anti-cancer barrier. Nature, advanced online publication 2014 Jul 27.

Deshpande AJ, Deshpande A, Sinha AU, Chen L, Chang J, Cihan A, Fazio M, Chen CW, Zhu N, Koche R, Dzhekieva L, Ibáñez G, Dias S, Banka D, Krivtsov A, Luo M, Roeder RG, Bradner JE, Bernt KM, **Armstrong SA**. AF10 regulates progressive H3K79 methylation and HOX gene expression in diverse AML subtypes. Cancer Cell. 2014 Dec 8;26(6):896-908.

Session 2

Molecular Targets and Therapy

2-1. Adaptive and Acquired Resistance

Speaker: Neal Rosen (Memorial Sloan-Kettering Cancer Center, USA)

2-2. Comprehensive Genomic Profiles of Small Cell Lung Cancer and Other Pulmonary Neuroendocrine Tumors

Speaker: Julie George (University of Cologne, Germany)

2-3. The Evolution of Genotypic Characterization and Targeted Therapy in Lung Cancer

Speaker: Bruce E. Johnson (Harvard Medical School, USA)

Title: Adaptive and Acquired Resistance

Neal Rosen, MD, PhD
Director, Center for Mechanism-Based Therapeutics
Enid A. Haupt Chair in Medical Oncology
Member, Program in Molecular Pharmacology and Chemistry, Memorial Sloan-Kettering Cancer Center, USA

Speaker

Kohei Miyazono, MD, PhD
Professor and Chair, Department of Molecular Pathology, Graduate School of Medicine, The University of Tokyo, Japan

Chairman

Neal Rosen, MD, PhD

Profile

Dr Neal Rosen is the Director of the Center for Mechanism-Based Therapeutics at Memorial Sloan-Kettering Cancer Center, where he is also a Member in the Program in Molecular Pharmacology and Chemistry and the incumbent of the Enid A Haupt Chair in Medical Oncology.

Dr Rosen's major interests are the identification and study of the key molecular events and growth signaling pathways responsible for the development of human cancers, and the use of this information for the development of mechanism-based therapeutic strategies. Dr. Rosen has played a leading role in the development of inhibitors of tyrosine kinasemediated signaling and has pioneered the concept that feedback reactivation of parallel signaling pathways is a common cause of adaptive resistance to selective pathway inhibitors.

Recent work from the Rosen laboratory included the elucidation of the mechanism whereby RAF inhibitors are selectively effective in mutant BRAF tumors. These mechanistic studies predicted several of the cellular mechanisms whereby tumors develop resistance to vemurafenib and other selective RAF inhibitors. This work, in addition to other recent studies by the Rosen laboratory on the consequences of relief of negative feedback by oncoprotein

inhibitors, has also led to multiple clinical trials of combination therapies at Memorial Sloan-Kettering and other cancer centers in the United States and internationally that have shown promising early results.

Dr Rosen received his undergraduate degree in chemistry from Columbia College and an MD/PhD in Molecular Biology from the Albert Einstein College of Medicine. He completed a residency in Internal Medicine at the Brigham and Women's Hospital, and postdoctoral training and a fellowship in Medical Oncology at the National Cancer Institute. He was on the senior staff of the Medicine Branch at the NCI prior to joining the faculty of Memorial Sloan-Kettering Cancer Center.

Recent Publications (CHAAO selected)

Tricker EM, Xu C, Uddin S, Capelletti M, Ercan D, Ogino A, Pratilas CA, **Rosen N**, Gray NS, Wong KK, Janne PA. Combined EGFR/MEK Inhibition Prevents the Emergence of Resistance in EGFR mutant Lung Cancer. Cancer Discov. 2015 Jun 2. pii: CD-15-0063

Harding JJ, Catalanotti F, Munhoz RR, Cheng DT, Yaqubie A, Kelly N, McDermott GC, Kersellius R, Merghoub T, Lacouture ME, Carvajal RD, Panageas KS, Berger MF, **Rosen N**, Solit DB, Chapman PB. A Retrospective Evaluation of Vemurafenib as Treatment for BRAF-Mutant Melanoma Brain Metastases. Oncologist. 2015 May 8. 2014-0012.

Bosch A, Li Z, Bergamaschi A, Ellis H, Toska E, Prat A, Tao JJ, Spratt DE, Viola-Villegas NT, Castel P, Minuesa G, Morse N, Rodón J, Ibrahim Y, Cortes J, Perez-Garcia J, Galvan P, Grueso J, Guzman M, Katzenellenbogen JA, Kharas M, Lewis JS, Dickler M, Serra V, **Rosen N**, Chandarlapaty S, Scaltriti M, Baselga J. PI3K inhibition results in enhanced estrogen receptor function and dependence in hormone receptor-positive breast cancer. Sci Transl Med. 2015 Apr 15;7(283):283.

Schwartz S, Wongvipat J, Trigwell CB, Hancox U, Carver BS, Rodrik-Outmezguine V, Will M, Yellen P, de Stanchina E, Baselga J, Scher HI, Barry ST, Sawyers CL, Chandarlapaty S, **Rosen N**. Feedback suppression of PI3Kα signaling in PTEN-mutated tumors is relieved by selective inhibition of PI3Kβ. Cancer Cell. 2015 Jan 12;27(1):109-22.

Obenauf AC, Zou Y, Ji AL, Vanharanta S, Shu W, Shi H, Kong X, Bosenberg MC, Wiesner T, **Rosen N**, Lo RS, Massagué J. Therapy-induced tumour secretomes promote resistance and tumour progression. Nature. 2015 Apr 16;520(7547):368-72.

Yaeger R, Cercek A, O'Reilly EM, Reidy DL, Kemeny N, Wolinsky T, Capanu M, Gollub MJ, **Rosen N**, Berger MF, Lacouture ME, Vakiani E, Saltz LB. Pilot trial of combined BRAF and EGFR inhibition in BRAF-mutant metastatic colorectal cancer patients. Clin Cancer Res. 2015 Mar 15;21(6):1313-20.

Elkabets M, Pazarentzos E, Juric D, Sheng Q, Pelossof RA, Brook S, Benzaken AO, Rodon J, Morse N, Yan JJ, Liu M, Das R, Chen Y, Tam A, Wang H, Liang J, Gurski JM, Kerr DA, Rosell R, Teixidó C, Huang A, Ghossein RA, **Rosen N**, Bivona TG, Scaltriti M, Baselga J. AXL mediates resistance to PI3Kα inhibition by activating the EGFR/PKC/mTOR axis in head and neck and esophageal squamous cell carcinomas. Cancer Cell. 2015 Apr 13;27(4):533-46.

Chapman PB, Solit DB, **Rosen N**. Combination of RAF and MEK inhibition for the treatment of BRAF-mutated melanoma: feedback is not encouraged. Cancer Cell. 2014 Nov 10;26(5):603-4.

Okada T, Sinha S, Esposito I, Schiavon G, López-Lago MA, Su W, Pratilas CA, Abele C, Hernandez JM, Ohara M, Okada M, Viale A, Heguy A, Socci ND, Sapino A, Seshan VE, Long S, Inghirami G, **Rosen N**, Giancotti FG. The Rho GTPase Rnd1 suppresses mammary tumorigenesis and EMT by restraining Ras-MAPK signalling. Nat Cell Biol. 2015 Jan;17(1):81-94.

Title: Comprehensive Genomic Profiles of Small Cell Lung Cancer and Other Pulmonary Neuroendocrine Tumors

Julie George, PhD
Research associate at the Department of Translational Genomics, Medical Faculty, University of Cologne, Cologne, Germany

Speaker

Hiroyuki Mano, MD, PhD
Professor, Department of Cellular Signaling, Graduate School of Medicine, The University of Tokyo, Japan

Chairman

Julie George, MD, PhD

Profile

Julie George joined the research department of Prof. Dr. Roman Thomas in 2011 and has since investigated the genomic alterations in lung cancer with the use of next generation sequencing techniques. Her research focused on understanding neuroendocrine tumors of the lung, specifically focusing on the study of small cell lung cancer. She coordinated a worldwide collaboration to collect rare surgical specimen of SCLC patients and performed large-scale whole genome and transcriptome sequencing on over 100 cases. Julie will present on the genomic profiles of small cell lung cancer and draw comparisons to other pulmonary neuroendocrine tumors.

Education

2008 – 2011: Ruperto Carola University, Heidelberg, Germany; Ph.D., Doctor of Natural Sciences
2005 – 2007: Medical University of Luebeck, Germany; Master of Science, Molecular Life Science

2002 – 2005: Medical University of Luebeck, Germany; Bachelor of Science, Molecular Biotechnology

Research

2011 – now: University of Cologne, Department of Translational Genomics, Cologne, Germany/
Max-Planck Institute of Neurological Research, Cologne, Germany
2008 – 2011: German Cancer Research Center, Heidelberg, Germany;
Research: Innate Immunity and cancer
2006 – 2007: Max-Planck Institute for Biophysics, Frankfurt am Main, Germany;
Research: Structural biology
2006: University of Madison, Institute of Molecular Virology, Madison, WI, USA;
Research: Virology
2004 – 2005: Medical University of Luebeck, Department of Biochemistry, Luebeck, Germany; Research: Structural Biology, Virology

Awards - Scholarships

2014 American Association for Cancer Research; Scholar in Training Award
2011 – 2012 Max Planck society, Germany; Postdoctoral fellowship
2008 – 2011 German cancer research center, Heidelberg, Germany; Ph.D. fellowship

References

George J., et al. (2015). Comprehensive genomic profiles of small cell lung cancer. (accepted, Nature)

Peifer, M., Fernández-Cuesta, L., Sos, M.L., **George, J.**, Seidel, D., Kasper, L.H., Plenker, D., Leenders, F., Sun, R., Zander, T., et al. (2012). Integrative genome analyses identify key somatic driver mutations of small-cell lung cancer. Nat. Genet. *44*, 1104–1110.

Fernandez-Cuesta, L., Peifer, M., Lu, X., Sun, R., Ozretić, L., Seidel, D., Zander, T., Leenders, F., **George, J.**, Müller, C., et al. (2014). Frequent mutations in chromatin-remodelling genes in pulmonary carcinoids. Nat. Commun. *5*, 3518.

Fernandez-Cuesta, L., Sun, R., Menon, R., **George, J.**, Lorenz, S., Meza-Zepeda, L.A., Peifer, M., Plenker, D., Heuckmann, J.M., Leenders, F., et al. (2015). Identification of novel fusion genes in lung cancer using breakpoint assembly of transcriptome sequencing data. Genome Biol. *16*, 7.

Schultheis, A.M., Scheel, A.H., Ozretić, L., **George, J.**, Thomas, R.K., Hagemann, T., Zander, T., Wolf, J., and Buettner, R. (2015). PD-L1 expression in small cell neuroendocrine carcinomas. Eur. J. Cancer *51*, 421–426.

Title: The Evolution of Genotypic Characterization and Targeted Therapy in Lung Cancer

Speaker

Bruce E. Johnson, MD
Director of the Lowe Center for Thoracic Oncology at Dana-Farber Cancer Institute and Brigham and Women's Hospital
Professor of Medicine at Harvard Medical School, USA

Chairman

Mitsuaki Yoshida, PhD
Managing Director, Research Unit, Japanese Foundation of Cancer Research, Japan
Professor Emeritus, The University of Tokyo, Japan

Bruce E. Johnson, M.D.

Profile

Dr. Johnson is the Chief Clinical Research Officer at the Dana-Farber Cancer Institute and have organized and run clinical trials for more than 30 years. He is also the Principal Investigator of the Dana-Farber/Harvard Cancer Center (DF/HCC) Lung Cancer SPORE and the Leader of the DF/HCC Lung Cancer Program at the DF/HCC responsible for identifying basic science discoveries that have a potential impact on defining the pathogenesis of lung cancer and their potential therapeutic implications. He has been the faculty advisor and mentor for more than 30 academic hematology/oncology trainees. This includes 9 full professors who hold academic positions around the world. He has included publications with these investigators that have been published over the past 30 years. He actively advise trainees on the translational aspect of their research, provide advice on preclinical trial design, and help incorporate preclinical observations into the design of lung cancer clinical trials. He will also provide his extensive expertise in manuscript, grant writing, guide trainees in their search and choice of faculty positions, and help identify appropriate sources of independent funding. He regularly meet with trainees to discuss progress, grant

proposals and plan the transition to research independence. Furthermore, He follows the trainees academic careers and provide active advice and guidance during their professional development.

Dr. Johnson was elected to the ASCO Board of Directors and received the ASCO Cancer Foundation's Translational Research Professorship in 2008. In 2010 he received the IASLC (International Association for the Study of Lung Cancer) Scientific Award, given to an IASLC scientist for "life-time scientific contribution in thoracic malignancy research and who has also contributed to the organization's development". In 2010 he was one of the leaders of the team that was awarded the AACR (American Association for Cancer Research) Team Science Award. This "recognizes an outstanding interdisciplinary research team for its innovative and meritorious science that has advanced or likely will advance our fundamental knowledge of cancer or a team that has applied existing knowledge to advance the detection, diagnosis, prevention, or treatment of cancer".

Selected Recent Publications

Cancer Genome Atlas Research Network. Comprehensive genomic characterization of squamous cell lung cancers. Nature. 2012 Sep 27;489(7417):519-25.

Nishino M, Dahlberg SE, Cardarella S, Jackman DM, Rabin MS, Ramaiya NH, Hatabu H, Jänne PA, **Johnson BE.** Volumetric tumor growth in advanced non-small cell lung cancer patients with EGFR mutations during EGFR-tyrosine kinase inhibitor therapy: Developing criteria to continue therapy beyond RECIST progression. Cancer. 2013 Nov 1;119(21):3761-8.

Johnson BE, Kabbinavar F, Fehrenbacher L, Hainsworth J, Kasubhai S, Kressel B, Lin CY, Marsland T, Patel T, Polikoff J, Rubin M, White L, Yang JC, Bowden C, Miller V. ATLAS: Randomized, Double-Blind, Placebo-Controlled, Phase IIIB Trial Comparing Bevacizumab Therapy With or Without Erlotinib, After Completion of Chemotherapy, With Bevacizumab for First-Line Treatment of Advanced Non-Small-Cell Lung Cancer. J Clin Oncol. 2013 Nov 1;31(31):3926-34.

Kris MG*, **Johnson BE**,*, Berry LD, Kwiatkowski DJ, Iafrate JA, Wistuba II, Varella-Garcia M, Franklin WA, Aronson SL, Su PF, Shyr Y, Camidge DR, Sequist LV, Glisson BS, Khuri FR, MD, Garon EB, Pao W, Rudin C, Schiller J, Haura EB, Socinski M, Shirai K, Chen H, Giaccone G, Ladanyi M, Kugler K, Minna JD, Bunn PA. Using multiplexed assays of oncogenic drivers in lung cancers to select targeted drugs. JAMA. 2014 May 21;311(19):1998-2006.*Designates co-first authors

Dahlberg SE, Shapiro GI, Clark JW, **Johnson BE**. Evaluation of statistical designs in phase I expansion cohorts: the Dana-Farber/Harvard Cancer Center experience. J Natl Cancer Inst. 2014 Jun 24;106(7).

Session 3

Radiation and Thyroid Cancer

3-1. Radiation and Thyroid Cancer; lessons learned from Hiroshima, Nagasaki and Chernobyl to Fukushima

Speaker: Shunichi Yamashita (Nagasaki University, Japan)

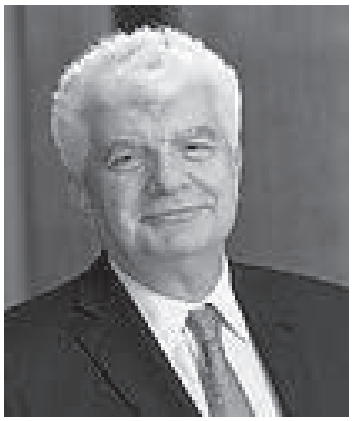
3-2. Molecular Pathogenesis of Radiation-Induced and Sporadic Thyroid Cancers: Implications for Mechanism-Based Therapies

Speaker: James A. Fagin (Memorial Sloan-Kettering Cancer Center, USA)

Title: Radiation and Thyroid Cancer; lessons learned from Hiroshima, Nagasaki and Chernobyl to Fukushima

Shunichi Yamashita, MD, PhD
Trustee and Vice President, Nagasaki University, Japan
Part-time Vice President, Fukushima Medical University,Japan

Speaker



James A. Fagin, MD
Chief, Endocrinology Service and Member, Human Oncology and Pathogenesis Program, Memorial Sloan-Kettering Cancer Center

Chairman

Shunichi Yamashita, MD, PhD

Profile

Graduated from Nagasaki University School of Medicine in March 1978 and spent almost three years from July 1984 to March 1987 as an endocrine research fellow at the Cedars-Sinai Medical Center, Los Angeles. In 1990, Dr. Yamashita became Professor of Molecular Medicine and International Radiation Health at the Atomic Bomb Disease Institute, Nagasaki University School of Medicine. He has been deeply involved in Chernobyl and Semipalatinsk medical aid projects for more than 20 years. Professor Yamashita is the Adviser to the Governor of Fukushima Prefecture on Health Risk Management immdeiately immediately after the Fukusihma NPP accident. He has been dispatched from Nagasaki University to Fukushima for two years since the Fukushima NPP accident and is now the Vice-Director of Radiation Medical Science Center for the Fukushima Health Management Survey, Fukushima Medical University.

Since April 2013, he has been at a current position of Nagasaki University. He is the Director of the WHO collaborating center for research on Radiation Emergency Medical Preparedness and Response Network, the member of Science Council of Japan and the member of the Nuclear Disaster Expert Group of the Prime Minister Office of Japan. He is the former President of Japan Thyroid Association.

Specialty: Endocrinology and Thyroidology, and Radiation Disaster Medicine

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Main research topics are radiation-induced thyroid carcinogenesis at the standpoint of molecular epidemiology and genetics on Chernobyl (1, 2) and clinical studies in Fukushima after the nuclear power plant accidents, respectively (3).

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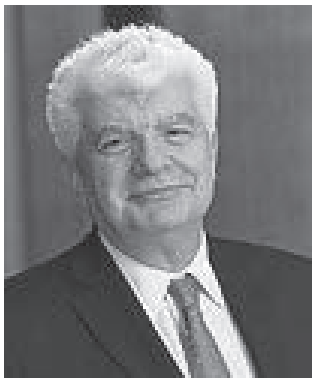
3. **Yamashita S**: Tenth Warren k. Sinclair keynote address-the fukushima nuclear power plant accident and comprehensive health risk management. Health Phys 106(2): 166-180, 2014

Title: Molecular Pathogenesis of Radiation-Induced and Sporadic Thyroid Cancers: Implications for Mechanism-Based Therapies



James A. Fagin, MD
Chief, Endocrinology Service and Member, Human Oncology and Pathogenesis Program, Memorial Sloan Kettering Cancer Center, USA

Speaker

Shunichi Yamashita, MD, PhD
Trustee and Vice President, Nagasaki University, Japan
Part-time Vice President, Fukushima Medical University, Japan

Chairman

James A. Fagin, MD

Profile

James A. Fagin is Chief of the Endocrinology Service and a Member of the Human Oncology and Pathogenesis Program at Memorial Sloan-Kettering Cancer Center in New York, and a Professor of Medicine at Weill Medical College of Cornell University. He has had a long standing interest in the pathogenesis of thyroid neoplasms. His laboratory focuses on thyroid cancer genomics, on the development of mouse models to understand the biology of these tumors, on the identification of specific therapies directed at key thyroid oncoproteins, and on understanding mechanisms of response and resistance to targeted therapies.

He is a former member and chair of the NIH Endocrinology Study Section. In addition to serving on a number of Editorial Boards, he is a former Associate Editor of *Endocrinology*, former Editor (Americas) for *Clinical Endocrinology (Oxford)* and former Editor-in-Chief of *Endocrine-Related Cancer*. Dr. Fagin is a member of the American Society of Clinical Investigation and the Association of American Physicians. He was the recipient of the Merck Prize of the European Thyroid Association, the Sidney H. Ingbar Distinguished Lectureship Award of the American Thyroid Association, the Clinical Endocrinology Trust Lectureship of the Society of

Endocrinology in the UK, and in 2014 received the Clinical Investigator Award of the Endocrine Society. He is also a past-president of the American Thyroid Association.

1975-1976 Medical Intern, Rawson Hospital, Buenos Aires, Argentina
1977-1981 Senior House Officer in General Medicine, Horton General Hospital, and Royal Post-Graduate Medical School, Hammersmith Hospital; Medical Registrar, West Middlesex Hospital, UK
1981-1983 Fellow, Endocrinology, Hospital Italiano, Buenos Aires, Argentina.
1983-1985 Fellow, Endocrinology, VA Wadsworth Medical Center, UCLA School of Medicine
1985-1986 Research Scientist, Cedars-Sinai Medical Center, UCLA School of Medicine
1986-1992 Assistant Professor of Medicine, Cedars-Sinai Medical Center, UCLA School of Medicine
1992-1995 Associate Professor of Medicine, UCLA School of Medicine
1995-2006 Director, Division of Endocrinology and Metabolism, University of Cincinnati College of Med
1995-2006 James Heady Professor of Medicine, Cell Biology, Neurobiology and Anatomy, U. Cincinnati.
2006- Chief, Endocrine Service, Memorial-Sloan Kettering Cancer Center
2006- Member, Human Oncology and Pathogenesis Program, MSKCC
2007- Professor of Medicine, Weill Cornell Medical College
2007- Faculty, Gerstner Sloan Kettering Graduate School

Recent Publications (CHAAO selected)

Xing M, Alzahrani AS, Carson KA, Shong YK, Kim TY, Viola D, Elisei R, Bendlová B, Yip L, Mian C, Vianello F, Tuttle RM, Robenshtok E, **Fagin JA**, Puxeddu E, Fugazzola L, Czarniecka A, Jarzab B, O'Neill CJ, Sywak MS, Lam AK, Riesco-Eizaguirre G, Santisteban P, Nakayama H, Clifton-Bligh R, Tallini G, Holt EH, Sýkorová V. Association between BRAF V600E mutation and recurrence of papillary thyroid cancer. J Clin Oncol. 2015 Jan 1;33(1):42-50.

Malaguarnera R, Chen KY, Kim TY, Dominguez JM, Voza F, Ouyang B, Vundavalli SK, Knauf JA, **Fagin JA**. Switch in signaling control of mTORC1 activity after oncoprotein expression in thyroid cancer cell lines. J Clin Endocrinol Metab. 2014 Oct;99(10):E1976-87.

Cancer Genome Atlas Research Network. Integrated genomic characterization of papillary thyroid carcinoma. Cell. 2014 Oct 23;159(3):676-90.

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Gild ML, Landa I, Ryder M, Ghossein RA, Knauf JA, **Fagin JA**. Targeting mTOR in RET mutant medullary and differentiated thyroid cancer cells. Endocr Relat Cancer. 2013 Aug 21;20(5):659-67.

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Session 4

Progress in Breast Cancer Therapy

4-1. Hormone Resistant Breast Cancer

Speaker: Sarat Chandarlapaty (Memorial Sloan-Kettering Cancer Center, USA)

4-2. Translational Approaches to Optimizing Breast Cancer Therapy

Speaker: Leif Ellisen (Harvard Medical School, USA)

Title: Hormone Resistance Breast Cancer

Sarat Chandarlapaty, MD, PhD
Assistant Member, Memorial Sloan Kettering Cancer Center, USA
Assistant Professor, Weill Cornell Medical College, New York, USA

Speaker

Masakazu Toi, MD, PhD
Professor, Department of Surgery, Graduate School of Medicine, Kyoto University, Japan

Chairman

Sarat Chandralapaty, MD, Ph.D

Profile

Dr. Sarat Chandralapaty is a board-certified medical oncologist with a practice devoted to treating patients with breast cancer. His laboratory and clinical research both focus on developing new treatment strategies against breast cancers that develop resistance to standard treatments. This involves studies designed to understand the molecular mechanisms underlying resistance and to identify new molecular targets that may inform novel therapeutic approaches

The goal of his research program is to develop a detailed understanding of the dysregulation of growth factor signaling pathways that can mediate both transformation and tumor resistance to targeted therapies and utilize these findings to devise more effective clinical strategies. His approach spans from biochemical and cell biological research into fundamental aspects of PI3K signaling, applied studies such as developing unique or resistant cancer models and assessment of the biologic basis of drug activity, and clinical trial based investigations into biomarkers and novel therapeutic agents. Major ongoing research projects:

a. Elucidation of feedback signaling modules regulated by the PI3K-AKT-mTOR

pathway and their role in restricting tumorigenesis and mediating resistance of established tumors to PI3K pathway targeted inhibitors.

b. Study of the biologic effects of ESR1 alterations in breast cancer biology and resistance to targeted therapy.
c. Assessment of mechanisms of resistance to hormonal and anti-HER2 therapies utilizing clinical samples and laboratory models and development of novel pharmacologic strategies for overcoming resistance.

Recent Publications (CHAAO selected)

Bosch A., Li Z., Bergamaschi A., Ellis H., Toska E., Prat A., Tao J., Spratt D.E., Viola-Villegas N.T., Castel P., Minuesa G., Morse N., Rodon J., Ibrahim Y., Cortes J., Perez-Garcia J., Galvan P., Grueso J., Guzman M., Katzenellenbogen J., Kharas M., Lewis J.S., Dickler M., Serra V., Rosen N., **Chandarlapaty S.**, Scaltriti M., Baselga J. PI3K inhibition results in enhanced estrogen receptor function and dependence in hormone receptor-positive breast cancer. Science Translational Medicine, Sci Transl Med. 2015 Apr 15;7(283):283ra51

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Gala K, **Chandarlapaty S**. Molecular pathways: HER3 targeted therapy. Clin Cancer Res. 2014 Mar 15;20(6):1410-6.

Jhaveri K, **Chandarlapaty S**, Lake D, Gilewski T, Robson M, Goldfarb S, Drullinsky P, Sugarman S, Wasserheit-Leiblich C, Fasano J, Moynahan ME, D'Andrea G, Lim K, Reddington L, Haque S, Patil S, Bauman L, Vukovic V, El-Hariry I, Hudis C, Modi S. A phase II open-label study of ganetespib, a novel heat shock protein 90 inhibitor for patients with metastatic breast cancer. Clin Breast Cancer. 2014 Jun;14(3):154-60.

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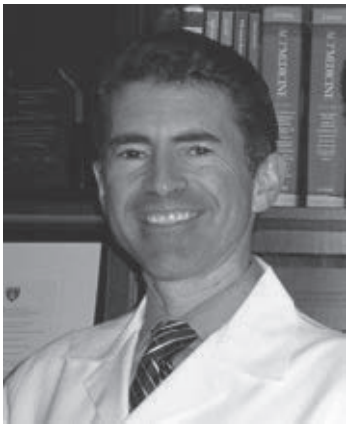
Title: Translational Approaches to Optimizing Breast Cancer Therapy



Leif Ellisen, MD, PhD
Professor of Medicine
Harvard Medical School, USA

Speaker

Yuko Kitagawa, MD, PhD
Professor, Department of Surgery, Graduate School of Medicine, Keio University, Japan

Chairman

Leif Ellisen, MD, PhD

Profile

Dr. Ellisen is the Program Director of Breast Medical Oncology and a researcher at the Massachusetts General Hospital (MGH) Cancer Center, and Professor of Medicine at Harvard Medical School. Basic breast cancer research in the laboratory focuses on altered transcription factor function and cellular signaling in cancer initiation and progression, while their translational research emphasizes the application of germline and somatic tumor genetic testing for cancer risk and therapeutic prediction. He is dedicated to training and mentoring the next generation of successful cancer clinicians and scientists, through work focused in the fields of cancer biology, translational therapeutics, and cancer genetics. He directs a clinical research program involving 13 breast cancer physicians and >30 active clinical trials. He serves on numerous grant review committees and editorial boards, and his work on personalized cancer medicine has been featured in the news media including the *Wall Street Journal* and the ABC Evening News

Academic Appointments

2001- 2007	Assistant Physician, MGH
2002-2007	Assistant Professor of Medicine, Harvard Medical School
2007-	Associate Physician, MGH
2007-2014	Associate Professor of Medicine, Harvard Medical School
2014-	Professor of Medicine, Harvard Medical School

References

Research in his laboratory focuses on identifying mechanisms and clinical predictors of therapeutic response and resistance in cancers of the breast and other organs. Approaches include germline sequencing, and molecular analysis of primary and metastatic tumors coupled to preclinical models. Work to be discussed includes emerging markers of chemotherapy response, and new tools to study metastatic tumor evolution through circulating tumor cell analysis.

Isakoff SJ, Mayer EL, He L, Traina TA, Carey LA, Krag KJ, Rugo HS, Liu MC, Stearns V, Come SE, Timms KM, Hartman AR, Borger DR, Finkelstein DM, Garber JE, Ryan PD, Winer EP, Goss PE, **Ellisen LW**. TBCRC009: A Multicenter Phase II Clinical Trial of Platinum Monotherapy With Biomarker Assessment in Metastatic Triple-Negative Breast Cancer. J Clin Oncol. 2015 Apr 6. pii: JCO.2014.57.6660

Chabner BA, **Ellisen LW**, Iafrate AJ. Personalized medicine: hype or reality. Oncologist. 2013 Jun;18(6):640-3.

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Session 5

"Usefulness" of New Medicines

5-1. Dealing with the Successes and Failures of Targeted Therapy

Speaker: Bruce A. Chabner (Harvard Medical School, USA)

5-2. Health Technology Assessment in Cancer: Driving Efficiency and Efficacy, but at what cost?

Speaker: Patrick Johnston (Queen's University Belfast, UK)

Title: Dealing with the Successes and Failures of Targeted Therapy

Bruce A. Chabner, MD
Professor of Medicine, Harvard Medical School
Director of Clinical Research, MGH Cancer Center,
Massachusetts General Hospita, USA

Speaker

Makoto Ogawa, MD
Emeritus President, Aichi Cancer Center, Japan

Chairman

Bruce A. Chabner, MD

Profile

Dr. Bruce Chabner is a Professor of Medicine at Harvard Medical School and Director of Clinical Research at the Massachusetts General Hospital Cancer Center. Dr. Chabner graduated *summa cum laude* from Yale College in 1961. He received his M.D. from Harvard University *cum laude* in 1965.

Dr. Chabner has had extensive experience in the field of cancer drug discovery and development. After joining the National Cancer Institute (NCI) in 1971, he participated in the training of clinical and research fellows there for the following 24 years, including three years (1976-1979) as Chief of the Clinical Pharmacology Branch; two years (1979-1981) as Director of the Clinical Oncology Program; and, in 1981, one year as Acting Director, and for 13 years as permanent Director of the Division of Cancer Treatment, NCI.

In 1995, he joined the Massachusetts General Hospital as Clinical Director of its cancer center

and Chief of Hematology/Oncology. With the formation of the Dana-Farber/Harvard Cancer Center, he assumed responsibilities as Associate Director for Clinical Sciences of that consortium, which includes the Massachusetts General Hospital, Brigham & Women's Hospital, Dana-Farber Cancer Institute and Beath Israel Deaconess Medical Center.
He has authored and edited the numerous textbooks of internal medicine, hematology, oncology and pharmacology.

Dr. Chabner has received numerous awards, including Phi Beta Kappa, Alpha Omega Alpha, the Public Health Service's Distinguished Service Medal, the Karnofsky Award of the American Society for Clinical Oncology and the Bruce F. Cain Award for Drug Development of the American Association for Cancer Research. In 2006, he was the first recipient of the Bob Pinedo Award for Contributions to Improvement in the Care of Cancer Patients.

Dr. Chabner is a senior editor for the Oncologist and serves on the executive advisory boards for some of the industry's leading innovators in drug development. In 2006, Dr. Chabner received a presidential appointment to the National Cancer Advisory Board at the National Cancer Institute.

Recent Publications (CHAAO selected)

Chabner BA. Two decades of the oncologist. Oncologist. 2015 Jan;20(1):1-2.

Percac-Lima S, Cronin PR, Ryan DP, **Chabner BA**, Daly EA, Kimball AB. Patient navigation based on predictive modeling decreases no-show rates in cancer care. Cancer. 2015 May 15;121(10):1662-70

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Fojo AT, Bates SE, **Chabner BA**. Clinical trial results: Sharing results, speeding discoveries. Oncologist. 2013;18(7):779.

Chabner BA, Ellisen LW, Iafrate AJ. Personalized medicine: hype or reality. Oncologist. 2013 Jun;18(6):640-3.

Title: Health Technology Assessment in Cancer: Driving Efficiency and Efficacy, but at What Cost?

Patrick G. Johnston, MD, PhD
President and Vice-Chancellor, The Queen's University Belfast, UK

Speaker

Yasuhiro Fujiwara, MD, PhD
Director-General, Strategic Planning Bureau of the National Cancer Center, Japan

Chairman

Patrick G. Johnston, MD, PhD

Profile

Prof. Johnston is President and Vice-Chancellor, Queen's University Belfast. Prof. Johnston has published over 250 research articles and 5 books, and holds over 25 patents. His research is focused on cellular signalling pathways in human colorectal cancer, primarily related to molecular targeted cancer, therapeutics, personalised cancer medicine and mechanisms of drug resistance.

He received his medical degree with distinction from University College Dublin in 1982, followed by his PhD in Medicine in 1988. He obtained a fellowship at the National Cancer Institute (NCI USA) in 1987 where he pursued further clinical training in medical oncology and doctoral studies in molecular pharmacology, drug resistance and drug development.

In 1997 he moved to Queen's University Belfast as Professor of Oncology and became Director of the Centre for Cancer Research and Cell Biology in 2004. He became Dean of the School of Medicine, Dentistry and Biomedical Sciences at Queen's University Belfast.in 2007. In 2014 he has become vice-chancellor and President of Queen's University Belfast.

He has been awarded many national and international awards, is a Fellow of the Academy of Medical Sciences, and sits on a number of influential national and international scientific and government advisory boards. He was appointed chair of the Translational Research Group of the Medical Research Council (MRC) in 2012. He received the 2013 international Bob Pinedo Cancer Care Prize. He also serves on the Cancer Research UK (CR-UK) science executive/advisory board. Outside his academic work, Prof Johnston is a founder of Northern-Ireland based Almac Diagnostics and the Society for Translational Oncology which is headquartered in Durham, North Carolina

Recent Publications(CHAAO selected)

Johnston PG. Identification of clinically relevant molecular subtypes in colorectal cancer: the dawning of a new era. Oncologist. 2014 May;19(5):568-73.

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Carson R, Celtikci B, Fenning C, Javadi A, Crawford N, Perez-Carbonell L, Lawler M, Longley DB, **Johnston PG**, Van Schaeybroeck S. HDAC Inhibition Overcomes Acute Resistance to MEK Inhibition in BRAF-Mutant Colorectal Cancer by Downregulation of c-FLIPL. Clin Cancer Res. 2015 Mar 26

Schmid D, Fay F, Small DM, Jaworski J, Riley JS, Tegazzini D, Fenning C, Jones DS, **Johnston PG**, Longley DB, Scott CJ. Efficient drug delivery and induction of apoptosis in colorectal tumors using a death receptor 5-targeted nanomedicine. Mol Ther. 2014 Dec;22(12):2083-92.

Lawler M, Le Chevalier T, Murphy MJ Jr, Banks I, Conte P, De Lorenzo F, Meunier F, Pinedo HM, Selby P, Armand JP, Barbacid M, Barzach M, Bergh J, Bode G, Cameron DA, de Braud F, de Gramont A, Diehl V, Diler S, Erdem S, Fitzpatrick JM, Geissler J, Hollywood D, Højgaard L, Horgan D, Jassem J, Johnson PW, Kapitein P, Kelly J, Kloezen S, La Vecchia C, Löwenberg B, Oliver K, Sullivan R, Tabernero J, Van de Velde CJ, Wilking N, Wilson R, Zielinski C, Zur Hausen H, **Johnston PG**. A catalyst for change: the European cancer Patient's Bill of Rights. . Oncologist. 2014 Mar;19(3):217-24.

Session 6

Tumor Immunotherapy

6-1. Immunotherapy for Lung Cancer and New Treatment Paradigm

Speaker: Alan B. Sandler (Genentech Inc., USA)

6-2. CAR Therapy: The CD19 Paradigm and Beyond

Speaker: Michel Sadelain (Memorial Sloan-Kettering Cancer Center, USA)

Title: Immunotherapy for Lung Cancer and New Treatment Paradigm

Alan B. Sandler, MD
Principal Medical Director
Product Development – Oncology,
Genentech Inc., USA

Speaker

Nagahiro Saijo, MD, PhD
Executive Officer of Japanese Society of Medical Oncology, Japan

Chairman

Alan B. Sandlar, MD

Profile

Undergraduate and Graduate:

1974-1976 Miami University
1976-1980 Bachelor of Science in Pharmacy (Cum Laude), University of Toledo
1983-1987 Doctor of Medicine, Rush Medical College, Chicago

Postgraduate Training:

1987- 1990 Internal Medicine Residency: Yale-New Haven Hospital, Yale School of Medicine
1990 –1992 Medical Oncology Fellowship, Yale-New Haven Hospital,Yale School of Medicine
2011 Leadership Development for Physicians in Academic Health Centers, Harvard School of Medical Oncology Fellowship,

Administrative:

Indiana University
1992 – 2000 Medical Director, Thoracic Oncology Program (Indiana University)
1992 – 2000 Leader, Multidisciplinary Clinic Dedicated to the Treatment of Malignancies Involving the Lungs and Esophagus (Indiana University)
1995 – 2000 Medical Director, Hematology/Oncology Services (Johnson Memorial Hospital)

Vanderbilt University
2000 – 2009 Medical Director, Thoracic Oncology (Vanderbilt University)
2000 – 2009 Leader, Multidisciplinary Clinic Dedicated to the Treatment of Malignancies Involving the Lungs and Esophagus (Vanderbilt University)
2000 – 2009 Medical Director, Vanderbilt-Ingram Cancer Center Affiliate Network
2005 – 2009 Co-Director, Center for Management Research in Healthcare, Vanderbilt University

Genentech:

2013 Extended member, Lung Disease Area Strategy
2013-present Principal Medical Director
2014-present Global Development Team Leader PDL1, Thoracic Oncology

Honors and Awards:

1979 Rho Chi Pharmacy Honor Society
1979-1980 Citation: The National Dean's List - 3rd Edition
1987 Alpha Omega Alpha - Honor Medical Society
2011 -2012 “Best Doctors” – US News & World report

Recent Publications(CHAAO selected)

Langer CJ, Socinski MA, Patel JD, **Sandler AB**, Schiller JH, Leon L, Hazard SJ, Ramalingam SS. Isolating the Role of Bevacizumab in Elderly Patients With Previously Untreated Nonsquamous Non-Small Cell Lung Cancer: Secondary Analyses of the ECOG 4599 and PointBreak Trials. Am J Clin Oncol. 2015 Jan 24.

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Rogosin S, **Sandler AB**. Beyond bevacizumab: antiangiogenic agents. Clin Lung Cancer. 2012 Sep;13(5):326-33

Title: CAR Therapy: The CD19 Paradigm and Beyond

Michel Sadelain, MD, PhD
Director, Center for Cell Engineering & Gene Transfer and Gene Expression Laboratory; Stephen and Barbara Friedman Chair, Memorial Sloan-Kettering Cancer Center, USA

Speaker

Ryuzo Ueda, MD, PhD.
Professor Emeritus, Senior Adviser, Nagoya City University, Japan
Professor, Dept. of Tumor Immunology, Aichi Medical University, Japan

Chairman

Michel Sadelain, MD, PhD

Profile

Dr. Sadelain is a geneticist working in the area of gene transfer-the notion of treating a disease by inserting a healthy gene in place of one that is malfunctioning or missing. Dr. Sadelain is trying to insert genes into bone marrow cells and T lymphocytes to reduce the risk of graft-versus-host disease, while preserving the antileukemic effect of the bone marrow transplantation. Another of Dr. Sadelain's goals is to enhance the use of T lymphocytes as therapeutic tools by targeting them to cancer cells, making sure they go where they should in the body to kill tumor cells. Sadelain is seeking to improve gene transfer and gene expression in blood-forming cells and cells of the immune system. His ultimate goal is to use gene transfer mediated by retroviruses to create improved treatments for genetic disorders, such as sickle cell anemia, and for cancer.

Dr. Michel Sadelain, M.D, Ph.D., is Scientific Co-Founder of Juno Therapeutics Inc. Dr. Sadelain serves as Head of the Gene Transfer and Gene Expression Laboratory at Memorial

Sloan-Kettering Cancer Center (MSKCC). Dr. Sadelain's research focuses on novel approaches to enhance T cell costimulation and function. His clinical program focuses on B cell malignancies as well as solid tumors. He is the incumbent of the Stephen and Barbara Friedman Chair and the founding director of the Center for Cell Engineering at MSKCC. He served on the board of directors of the American Society of Gene Therapy from 2004 to 2007 and serves on the editorial boards of Molecular Therapy, Human Gene Therapy and Gene Therapy. Dr. Sadelain serves as Member of Scientific Advisory Board at Biocurex Inc. and TMune Therapeutics, Inc.

Recent Publications (CHAAO selected)

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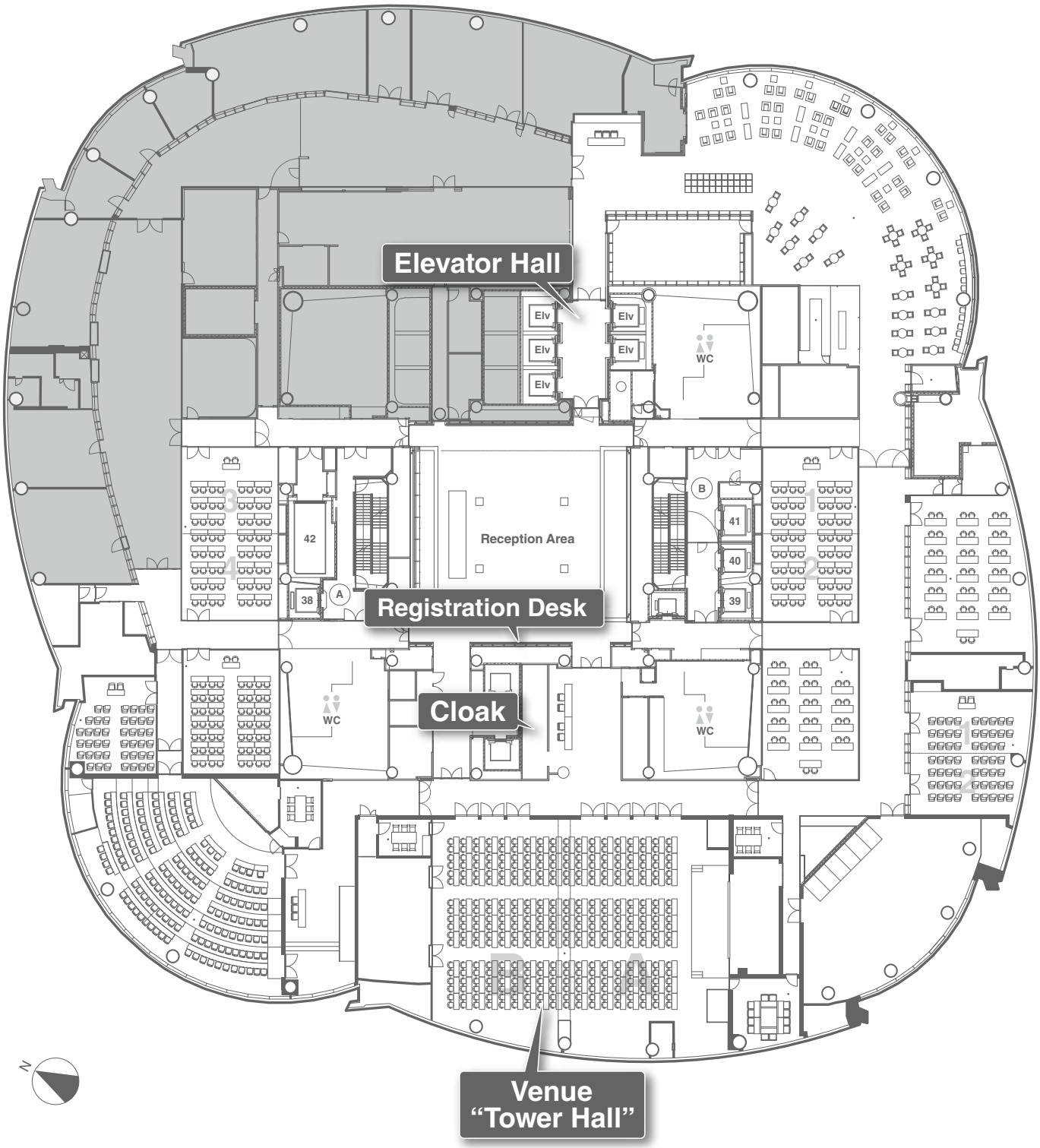

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