



The German Center for Research and Innovation (GCRI), and Eucor, The European Campus cordially invite you to a panel on:

Shaping the Future World of Health

Innovation panel connects science, patients, policy and economy

June 13, 2018

6:30 p.m. - 8:00 p.m.

with

Prof. Dr. Christoph Borner Institute of Molecular Medicine, University of Freiburg and Eucor, The European Campus

> **Dr. Hubert Pakula** Dana-Farber Cancer Institute

Prof. Dr. Hartmut Land University of Rochester

Dr. Marion Hitchcock Bayer AG, Strategic Alliance Management

Dr. David J. Shields East Coast Centers for Therapeutic Innovation, Pfizer Worldwide Research & Development, New York

moderated by

Dr. Markus Lemmens University of Freiburg and Eucor,

The European Campus, New York Office

Please <u>RSVP by June 11</u>. Registration is required to attend the panel discussion.

Location: 871 United Nations Plaza, New York, NY 10017





Medicine and Life Sciences are two vast areas of scientific inquiry and research. A constant flow of discoveries, theories and therapeutic approaches produces immense amounts of data and information. How can researchers and health care providers keep up? How can they know which approach is the right one for the individual patient? In comes Precision Medicine (PM), which utilizes modern technological approaches such as big data analysis, artificial intelligence and additive manufacturing, to name just a few. As a contemporary answer to an age-old problem, PM holds the promise of tailoring therapeutic approaches to specific patients, their unique biography and even their DNA. The question is, can it live up to the hype?

In its brand-new series on "Precision Medicine" (June 2018 to December 2019) the German Center for Research and Innovation examines the four core areas: (1) diagnostics, (2) data mapping of diseases, (3) targeted therapies and, finally, (4) individualized drugs. This exchange of new knowledge, ideas and solutions among all stakeholders will contribute to a transatlantic dialogue between the US and Germany on science, teaching, corporate work, policy support and patient's expectations

The inaugural event, June 13, will set the stage by looking at the big picture: What can we expect from precision medicine? Where are we headed in the future world of health? Join the discussion with experts from the universities of Freiburg and Rochester, the Dana-Farber Cancer Institute and the two global pharma companies Pfizer, USA, and Bayer, Germany!

The panel is followed by a networking reception.

Speakers:

Christoph Borner is Director of the International Master Program of Biomedical Sciences between the Universities of Buenos Aires, Argentina, and Freiburg, Germany (Double Master Degree), Director of the Spemann Graduate School of Biology and Medicine of the Excellence Initiative for the Advancement of Science, University of Freiburg, and full professor University of Freiburg, Institute of Molecular Medicine. Christoph has strong links into advanced education and the governance of science and research: Since 2014 he is deputy representative for academic self-regulation ("Ombudsperson") of the University of Freiburg, and since 2013 he works e.g. as a professor and tutor in biology for the Business and Administration study track of California Miramar University in Nairobi, Kenya. Christoph got his diploma in Biology at



University of Basel, Switzerland, followed by his PhD in Biochemistry at University Medical School, Basel, and the habilitation in Biochemistry at University of Fribourg, Switzerland. He holds a Doctor honoris causa (Dr. h.c.) of the University of Buenos Aires, Argentina.





Hubert Pakula is Research Fellow at Dana-Farber Cancer Institute (DFCI), Boston, MA. He completed his PhD within an international research group for molecular oncology in June 2015. He worked as a PhD student in Dr. Walter Birchmeier's laboratory at the Max Delbrueck Center for Molecular Medicine (MDC) in Berlin, Germany, dedicated to promoting translational oncology. During his PhD he was involved in two translational projects; the first one "Progenies of Lgr5+ Hair Follicle Stem Cells Contribute to Wnt/ β -catenindriven Basal Cell Carcinoma Development in the Murine Skin", and the second "Function of Gab1 and MAPK Signaling in Hair Cycle and Stem Cell Quiescence". His research included molecular (genomic, protein expression, in vivo studies) and clinical results. Hubert has a strong background in



signaling pathways and cancer stem cell biology in both basic and clinical research. His first postdoctoral training was conducted at Brigham and Women's Hospital where Dr. Pakula worked on castration-resistant luminal cells active for Wnt signaling (LGR5+ cells) as cells of origin of castration-resistant prostate cancer (CRPC). His current research, conducted at DFCI focuses on understanding the molecular and cellular basis of tumor microenvironment of prostate cancer. His research approach comprises of combining novel molecular pathology techniques such as ex vivo 3D organoid cultures, multiplexed immunohistochemistry, and advances in image analysis. He is recipient of Career Development Award for SPORE/A. David Mazzone Research Awards Program. Previous position: Research Fellow, Brigham and Women's Hospital, Boston, MA.

Hartmut Land's laboratory has been studying molecular mechanisms underlying multi-step carcinogenesis and oncogene cooperation for the past 25 years. He has been fortunate to contribute pioneering work on the role of oncogenes in cancer during the last three decades. The impact of his work is demonstrated by a ranking among the 250 most cited scientists in Molecular Biology and Genetics in the world and by the election as a member of the European Molecular Biology Organization (EMBO). Lands research is predominantly funded by the National Cancer Institute of the National Institutes of Health. Through analysis of the molecular mechanisms underlying oncogene cooperativity his laboratory has shown that the combined effect of multiple oncogenic mutations is mediated through synergistic regulation of so-



called 'cooperation response genes' (CRGs). Notably, these non-mutated genes downstream of oncogenic mutations are critical to the emergence of the cancer cell traits shared among diverse types of cancer. A large fraction of CRGs is involved in the regulation of various aspects of cell metabolism, and currently they are investigating the regulation of cancer cell homeostasis by CRGs with the goal of identifying new rational approaches to cancer intervention capable of delivering interventions targeting cancer cell homeostasis independent of the tumors' mutational status. Hartmut is Professor of Oncology and of Biochemistry and Biophysics, University of Rochester Medical Center, Rochester, NY, since 1999, followed as the Scientific Director, James P. Wilmot Cancer Center, University of Rochester Medical Center, University of Rochester Medical Center, University of Rochester, Network Medical Center, University of Rochester Medical Center, University of Rochester Medical Center, University of Rochester Medical Center, James P. Wilmot Cancer Center, University of Rochester Medical Center, James P. Wilmot Cancer Center, University of Rochester Medical Center, Rochester, James P. Wilmot Cancer Center, University of Rochester Medical Center, Rochester, James P. Wilmot Cancer Center, University of Rochester Medical Center, Rochester, James P. Wilmot Cancer Center, University of Rochester Medical Center, Rochester, James P. Wilmot Cancer Center, University of Rochester Medical Center, Rochester.





Marion Hitchcock is a Strategic Alliance Manager in Bayer's Global External Innovation & Alliances group. The function's mission is to provide access to innovation and generate value through innovative partnering and alliance management. The function serves Drug Discovery & Development in Bayer Pharma R&D. In her current role, Marion is responsible for the Strategic Partnership with the Johns Hopkins University, in particular for the ophthalmic research collaboration with the Wilmer Eye Institute in Baltimore/USA, where she oversees a portfolio of 5 joint research projects aiming at new therapeutics for retinal diseases. Based at Bayer's East Coast Innovation Center in Cambridge, MA, Marion has spearheaded establishing Bayer's new East Coast Innovation Center and is engaging with key academic partners as well



as members of the local innovation ecosystem. For example, Marion is currently organizing local events, such as Scientific Workshops and AdBoards for Cardiovascular Research in the greater Boston area. Marion received her Ph.D. in Organic Chemistry from the Technical University Berlin, Germany, in 1998. Thereafter she conducted her postdoctoral research at the Scripps Research Institute at La Jolla, California, and started her industrial scientific career at Bayer in 2000.

David Shields is Executive Director at the Pfizer Centers for Therapeutic Innovation (CTI), leading CTI partnering in New York, Boston and Europe. CTI is a pioneering open innovation model featuring an entrepreneurial network of leading academic medical centers and disease foundations. CTI scientists partner with academic investigators to conduct joint drug discovery with the ultimate goal of moving a therapeutic hypothesis through Proof-of-Mechanism. This collaboration vehicle features shared decision-making, aligned incentives and the opportunity to bring the full R&D resources of Pfizer together with the cutting edge science of the investigator to develop medicines faster and transform traditional drug discovery. Dr. Shields holds a BSc(Hons) in Biomedical Sciences from University College Cork, Ireland and a PhD in



Biochemistry from the University of Alberta, Canada. Subsequent to his graduate studies, Dr. Shields conducted post-doctoral training at The Scripps Research Institute and University of California, San Diego, and was a Research Project Scientist at Moores UCSD Comprehensive Cancer Center. Dr. Shields has led research groups across portfolio stages at Pfizer from Target Discovery to Translational Research, led Combination and Resistance Strategy for Pfizer Oncology Research and is the Pfizer Lead for the public/private ITCC-P4 Pediatric Oncology consortium project.





Markus Lemmens has worked for nearly three decades in Berlin, Vienna, London and New York – first as a publisher followed as founder, CEO and coowner of Lemmens GmbH (Education, Science, Technology), KBHF GmbH at the KIT - Karlsruhe Institute of Technology (R&D Energy) and Edutron GmbH (Information Technology); all companies are located in Germany. He brings additional expertise as a consultant in the fields of higher education management, governance in science, research and technology. Since 2000 Markus has expanded his activity as a university lecturer (research management, governance of science and science marketing) in Germany and Switzerland. He works as research consultant for startup ventures in education, science and the humanities, too. Based in New York since 2013,



Dr. Lemmens has served as North America representative for several European universities and is currently the Director of the Liaison Office North America at University of Freiburg and Eucor – The European Campus. His university degrees are in political science and law.