Speaker Profiles

David Brenner, M.D., Dean, UCSD School of Medicine

David Brenner, M.D., a distinguished physician-scientist, is Vice Chancellor for Health Sciences and Dean of the School of Medicine at the University of California, San Diego. In this role, Dr. Brenner leads the UC San Diego School of Medicine, Skaggs School of Pharmacy and Pharmaceutical Sciences, UCSD Medical Center and UCSD Medical Group. Dr. Brenner is a leader in the field of gastroenterological research, specializing in diseases of the liver. He is widely respected as a translational scientist whose work bridges the laboratory and clinical settings. He has focused on understanding the molecular pathogenesis of fibrotic liver disease and the genetic basis of liver disorders as the foundation for improving prevention and treatment of liver disease. He is recognized as an outstanding clinician and teacher. For five years he was Editor-in-Chief of Gastroenterology, the premier journal in the field. He was recruited to UC San Diego from the Columbia University Medical Center College of Physicians and Surgeons, where from 2003-2007 he was Samuel Bard Professor and Chair of the Department of Medicine, a Member of the Herbert Irving Comprehensive Cancer Center, a Member of the Columbia University Institute of Nutrition, and Physician-in-Chief of New York Presbyterian Hospital/Columbia. He earned his M.D. from the Yale University School of Medicine. After completing his residency at Yale-New Haven Medical Center, he served as a research associate in the Genetics and Biochemistry Branch of the National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases of the National Institutes of Health. He first joined UC San Diego in 1985 as a gastroenterology fellow, later joining the medical school faculty, and serving as a physician at the Veterans Affairs San Diego Healthcare System. He also served as a Pew Scholar in the Biomedical Sciences and a Clinical Investigator in the VA system. In 1993 he became Professor and Chief of the Division of Digestive Diseases and Nutrition at the University of North Carolina at Chapel Hill, where he continued to earn accolades for his patient care and research.

Dennis Carson, M.D., Director, Moores Cancer Center

Dennis Carson, M.D. is Director of the Rebecca and John Moores UCSD Cancer Center and Professor of Medicine at UCSD School of Medicine. He is also Associate Dean for Cancer Affairs and holder of the Chugai Pharmaceutical Chair in Cancer. Dr. Carson is perhaps best known for his landmark work in developing the agent 2-chlorodeoxyadenosine, or 2-CdA, for the treatment of hairy cell leukemia. This drug, now marketed as Leustatin, is the treatment of choice for this disease and has resulted in long term, complete remissions in about 75 percent of patients, often after just a single infusion. It is also effective in other lymphoid cancers, multiple sclerosis and psoriasis.

David Cheresh, Ph.D., Moores Cancer Center

David Cheresh studies the mechanism of action of signaling networks that regulate cancer growth and metastasis and focuses on new strategies for biologically-based drug development. In particular, he studies how integrins and growth factor receptors promote, cell survival, angiogenesis and tumor invasion. His work has lead to the development of several drugs now in various stages of clinical development. Cheresh together with scientists at Applied Molecular Evolution developed a humanized antibody (Vitaxin) directed to integrin avb3 which is now being developed by Astra Zeneca. In collaboration with Merck Darmstadt, Cheresh developed an integrin antagonist (Cilengitide) targeting integrins anb3 and anb5 that has now produced significant survival benefit in glioblastoma patients

and has lead to the first integrin targeted drug to enter Phase III clinical trials for cancer. David Cheresh was the scientific founder of TargeGen a San Diego based biotechnology company which developed a number of small molecules based in part on discoveries made in the Cheresh laboratory. Recently, TargeGen was acquired by Sanofi Aventis who is developing a highly selective JAK2 inhibitor discovered by TargeGen scientists. Most recently, Cheresh and his colleagues have developed a novel scaffold based chemistry approach to stabilize kinases in their inactive state. These studies have lead to the discovery of a first in class Raf inhibitor that has distinct advantages relative to ATP mimetics of RAF. Cheresh and his colleagues at UCSD have founded a new start up company (Kinagen) which focuses on the discovery of allosteric inhibitors of kinases such as those targeting Raf and other important molecules/pathways relevant to cancer and inflammatory disease.

Laura Esserman, M.D., M.B.A., Carol Franc Buck Breast Care Center, UCSF Helen Diller Family Comprehensive Cancer Center

Dr. Laura Esserman, MD, MBA, is a Professor of Surgery and Radiology at UCSF and is the Director of the Carol Franc Buck Breast Care Center, an interdisciplinary clinical program where clinical research and quality improvement is integral to care. She is the clinical leader of the Breast Oncology Program of the NCI designate Comprehensive Cancer Center. She is founder and faculty leader of the program in Translational Informatics spanning the disciplines of bioinformatics, medical and clinical informatics, systems integration, and clinical care delivery. In 1996, she started the Center of Excellence for Breast Cancer Care to integrate clinical care and research, automate tools for the capture of patient and clinical data, and develop systems to tailor care to biology, patient preference, and performance. Dr. Esserman is nationally and internationally known as a leader in breast cancer and has published over 150 articles. She is the Principle Investigator of the I-SPY Trial program, a multi-site neoadjuvant clinical trial that has evolved into a model for translational research and innovation in clinical trial design. Dr. Esserman is currently developing a University of California-wide breast cancer initiative designed to follow 400,000 women from screening through treatment and outcomes incorporating the latest in molecular testing and web-based tools into the course of care called the ATHENA Project.

Kelly Frazer, Ph.D., Moores Cancer Center

Kelly A. Frazer, PhD, joined UCSD to serve as the founding chief of the new Division of Genome Information Sciences for the Department of Pediatrics. In this role, Dr. Frazer works closely with physicians in the Department of Pediatrics, the Moores UCSD Cancer Center and Rady Children's Hospital as well as with scientists in the Health Sciences. Dr. Frazer was formerly a professor of Molecular and Experimental Medicine at the Scripps Research Institute and director of genomic biology at The Scripps Genomics Medicine Program at Scripps Health. There she established Next Generation Sequencing capabilities and advanced sample preparation methods for population-based, targeted sequencing studies. She also conducted functional genomics studies to characterize genetic markers associated with human diseases. Prior to Scripps, Dr. Frazer served as vice president of genomics at Perlegen Sciences in Mountain View. There she focused on array-based re-sequencing of 50 human genomes, in order to map out the common elements of genetic diversity. During this time, Dr. Frazer worked with other scientists to develop the content now publicly available in the "HapMap," or human haplotype map. She also directed several whole genome association scans to identify genetic markers associated with human diseases and human variance in drug response. Dr. Frazer earned undergraduate degrees in chemistry and biology at UCSC. She then went to UCSF where she received her PhD degree in genetics in 1993. From 1993 to 1997, she was a post-doctoral fellow at Lawrence Berkeley Laboratory in the Life Sciences Division and then worked as a staff scientist in the Genome Sciences Department there until 2000. During this time, she directed implementation of the cross-species comparative DNA visualization tool, VISTA. Dr. Frazer is a frequent reviewer on NIH-review panels, she is also a member of the NIH Genome Research Resources Committee and

presently serves on the Expert Scientific Panel for the genome-wide association program being led by the National Human Genome Research Institute.

Elaine Fuchs, Ph.D., The Rockefeller University
Dr. Fuchs, head of Rockefeller University's Laboratory of Mammalian Cell Biology and Development, has received a number of honors and awards, including most recently the 2011 Albany Medical Center Prize in Medicine and Biomedical Research for her contributions toward realizing the vast potential of stem cells to treat or reverse disease. Other awards include the 2010 L'Oreal-UNESCO Award in the Life Sciences and Charlotte Friend Memorial Lecture Award from the American Association for Cancer Research, the National Medal of Science in 2009, the Bering Award and the Federation of American Societies for Experimental Biology Award for Scientific Excellence in 2006, the Dickson Prize in Medicine in 2004, the Novartis/Drew Award in Biomedical Research in 2003, the Cartwright Award from Columbia University in 2002 and the Women in Cell Biology Senior Women's Career Achievement Award in 1997. She is a member of the National Academy of Sciences and its Institute of Medicine, the American Academy of Arts and Sciences and the American Philosophical Society. She was named one of the Nation's Outstanding Scientists by the White House in 1985 and holds honorary doctorates from the University of Illinois and the Mount Sinai and New York University Medical Schools. Specifically, Dr. Fuchs's lab is interested in the molecular pathways that determine cell fate, and how embryonic and adult stem cells establish unique programs of gene expression that determine when they divide and what types of cells they develop into. Recent work in the Fuchs lab has shown that a structure at the base of each strand of hair, the hair follicle, uses a two-step mechanism to activate its stem cells and order them to divide. The mechanism provides insights into how repositories of stem cells may be organized in other body tissues for the purpose of supporting organ regeneration. Another major focus of the Fuchs lab is to understand how these stem cells differentiate into hair follicles, skin epidermis and sebaceous glands. They have shown that BMP and Wnt signaling pathways act in opposition and need to be turned on and off at the right time and at the right place for adult skin stem cells to become hair follicles, and that these pathways control distinct transcription factors that may be key components in developing new treatments for thinning hair. Most recently, they have shown how epigenetic modifications collaborate with transcription factors to influence the development and differentiation of the skin's multiple layers, revealing new insights into how stem cells might limit their tissue options during embryonic and postnatal development.

Garret Hampton, Ph.D., Sr Dir Oncology Biomarker Development, Genentech Research and Early Development, Genentech
Dr Hampton is a graduate of Trinity College Dublin, Ireland (B.A. Honors), and Imperial Cancer Research Fund / University of London received, where he received his Ph.D. in Cancer Genetics with Sir Walter Bodmer. Following a postdoctoral fellowship at the Center for Human Genome Research at the Salk Institute for Biological Studies, La Jolla, CA, Garret served as Head, Section of Human Carcinogenesis, Ludwig Institute for Cancer Research, San Diego and Assistant Professor of Medicine at University of California San Diego. Garret moved to the biopharmaceutical sector in 1997, joining Genos Biosciences as Director of Genetics; and subsequently the Genomics Institute of the Novartis Research Foundation (GNF) in San Diego, as Director of Cancer Biology Discovery and Oncology Therapeutic Area Leader. He joined Celgene Corporations' Research Division in February 2006 as Executive Director, Molecular Medicine, and was responsible for initiating and leading the translational sciences efforts at the San Diego, San Francisco and Summit, New Jersey, Research sites. Garret most recently joined Genentech's Research and Early Development (gRED) Group in June 2009 as Senior Director and Head of Oncology Biomarker Development. In this role, Garret is responsible for leading the Oncology Pharmacodynamic (PD), Predictive biomarker and Companion diagnostics groups and for defining and implementing the strategy for biomarker development in oncology early development.

Catriona Jamieson, M.D., Ph.D., Division of Hematology-Oncology, Stem Cell Research, Moores Cancer Center

Catriona Jamieson, M.D., Ph.D. is Assistant Professor of Medicine in the Division of Hematology-Oncology and Director for Stem Cell Research at Moores UCSD Cancer Center. Dr. Jamieson specializes in myeloproliferative disorders (MPDs) and leukemia. Myeloproliferative neoplasms are a family of uncommon but not rare degenerative disorders in which the body overproduces blood cells. Myeloproliferative neoplasms can cause many forms of blood clotting including heart attack, stroke, deep venous thrombosis, and pulmonary emboli and can develop into acute myelogenous leukemia. Although some effective treatments are available, they are laden with serious side effects. In addition, individuals can become resistant to the treatments. Dr. Jamieson studies the mutant stem cells and progenitor cells in myeloproliferative neoplasms. These cells can give rise to cancer stem cells. Cancer stem cells may lie low to evade chemotherapy and then activate again later, causing disease progression and resistance to treatment. Her goal is to find more selective, less toxic therapies.

Michael Karin, Ph.D., UCSD

Dr. Karin made seminal contributions to the discipline of signal transduction describing how extracellular stimuli, including growth factors, cytokines, tumor promoters and UV radiation, regulate gene expression in eukaryotic cells. Starting with cloning of the human metallothionein IIA gene and analysis of its promoter, Karin and coworkers were the first to identify cis elements that mediate induction of cellular genes by stress signals, glucocorticoids and tumor promoters. This resulted in identification of several transcription factors, including AP-1, that recognize these cis elements. AP-1 was subsequently shown by Karin and coworkers to be composed of Jun and Fos proteins. This provided one of the first demonstrations that nuclear protooncoproteins function as transcription factors. Analysis of the mechanisms by which growth factors and UV radiation induce AP-1 activity led to identification of a major signaling pathway (the JNK MAP kinase cascade), elucidation of the mechanisms by which protein phosphorylation controls transcription factor activity and an explanation for the ability of membrane associated oncoproteins, such as Ras, to modulate gene transcription. Karin and coworkers have also described how proinflammatory stimuli regulate the activity of transcription factor NF-kB and identified the IkB kinase (IKK) complex, which they have shown to be a major regulator of innate immunity and inflammation. Genetic analysis of IKK function resulted in identification of a novel signaling pathway that controls development of the mammalian epidermis. Karin and coworkers were also the first to biochemically identify a cell type specific transcription factor (GHF-1/Pit1), demonstrate its kinship to homeodomain proteins and provide important insights to the mechanism of tissue specific gene expression.

Thomas Kipps, M.D., Ph.D., Professor, Medicine

Dr. Kipps research focuses on 4 areas: 1) Human B cell physiology with emphasis on B cell antigen presentation, accessory molecules involved in cognate T-cell <-> B-cell interactions, signal transduction, and immunoglobulin gene expression, 2) Human B cell lymphoproliferative diseases with emphasis on pathogenic mechanisms, immunoglobulin gene expression, and innovative forms of immunotherapy, 3) In vitro or in vivo somatic cell transfection or transduction using plasmid DNA or viral expression vectors for gene immunotherapy of neoplastic disease, and 4) structure-function studies of immunoglobulin or accessory molecules involved in signal transduction or cognate cell-cell interactions. Dr. Kipps is deputy director of the UCSD Comprehensive Cancer Center, and also directs the CLL Research Consortium, a multi-institution research program sponsored by the National Cancer Institute to study chronic lymphocytic leukemia (CLL). The consortium brings together the nation's top scientists from different disciplines--genetics, cell biology, biochemistry, immunology and pharmacology--to conduct an integrated program of basic and clinical research focused on CLL.

Wendy Levin, M.D., M.S., Pfizer
Dr. Levin did her undergraduate and graduate work at UCLA with Dr. Dennis Slamon, focusing on Her-2/neu and its applications to breast cancer. After medical school, she did her Hematology/Oncology Training at the Fred Hutchinson Cancer Research Center in Seattle, where her attention turned to stem cells in the benign and malignant settings. She joined the Pfizer Translational Oncology group in 2007, where her focus is on Proof of Mechanism studies for the Early Development Oncology Portfolio. She is also the Global Clinical Lead for the Hedgehog Program which is currently in Phase 1 Hematology Trials, where she is hoping to eradiate cancer stem cells.

Alan Lewis, Ambit Biosciences
Dr. Lewis most recently served as President and CEO of the Juvenile Diabetes Research Foundation (JDRF), the leading charitable funder and advocate of type 1 diabetes research worldwide. Prior to JDRF, Dr. Lewis was President and CEO of Novocell where he contributed significantly to achieving the Company's leadership position in developing stem cell technologies for the treatment of diabetes. Previously, Dr. Lewis served as CEO and Director of Signal Pharmaceuticals, an early pioneer in kinase drug discovery, which he guided through a successful acquisition by Celgene in 2000 and went on to become President of the Signal Research Division at Celgene. Dr. Lewis previously held the position of Vice President of Research at Wyeth-Ayerst, where he spent 15 years leading research efforts in diabetes, CNS, cardiovascular, inflammatory, allergy and bone metabolism diseases. Dr. Lewis received a B.Sc. in Physiology and Biochemistry from Southampton University, a Ph.D. in Pharmacology from the University of Wales, and completed his postdoctoral fellowship at Yale University.

Debra Mayo, Pharm. D., M.H.A.
is Senior Director and Group Leader of Medical Communications and Education at Cephalon, Inc. in Frazer, PA, where she has worked for the past 4 years. In addition to practicing clinical pharmacy for 12 years, with a concentration in oncology, and infectious disease, Deb has industry experience serving in various roles within Medical Affairs-Medical Science liaison, Medical Information, Medical Communications, and Medical Education. Additionally, in her role as Medical/Pharmacy Director for a Medical Communication company, she learned publication planning and developed medical education content for accredited and non-accredited initiatives. Deb graduated from Temple University School of Pharmacy, with a BS in Pharmacy, St Joseph's University with an MS in Healthcare Administration and Education, and a Pharm. D from the University of Florida.

Langdon Miller, MD., Gilead Sciences
Langdon Miller, M.D. has been an Executive Vice President of R&D at Calistoga Pharmaceuticals, Inc. since August 1, 2010. Dr. Miller served as Chief Medical Officer of PTC Therapeutics Inc., since July 2003. He joined PTC from Pharmacia Corporation where he served as Vice President of Global Clinical Research in Oncology. Dr. Miller developed and led multiple clinical research programs, including those culminating in the successful registration of epirubicinin as adjuvant therapy for early breast cancer and irinotecan as first-line therapy for metastatic colorectal cancer. Dr. Miller was the primary or senior author of eight New Drug Applications (NDAs) and led six presentations before the Food and Drug Administration's Oncologic Drugs Advisory Committee (ODAC). Dr. Miller serves as a Member of Advisory Board of Gloucester Pharmaceuticals Inc. Previous to his experience at Pharmacia, Dr. Miller was a Senior Investigator at the National Cancer Institute (NCI) where he provided strategic direction for NCI-sponsored trials. Dr. Miller has held clinical positions at Stanford University and the University of California at San Francisco and received his M.D. from Northwestern

University Medical School in Chicago, Illinois. He completed an internal medicine residency at the University of Minnesota and a medical oncology fellowship at Stanford University.

Barbara Parker, M.D., Medical Director of Oncology Services, Moores Cancer Center
Dr. Parker received her M.D. degree from Stanford University and completed her internal medicine and medical oncology training at the University of California, San Diego (UCSD). She joined the faculty in the Hematology/Oncology division of the UCSD Department of Medicine. She then moved to Ligand Pharmaceuticals as the Director of Oncology Clinical Research, rising to the level of Senior Medical Director of Clinical Research. She returned to UCSD as Professor of Clinical Medicine in 1999. She is currently the Medical Director of Oncology Services at the Moores UCSD Cancer Center. Dr. Parker is interested in novel therapies for the treatment of breast cancer, the impact of diet on breast cancer outcomes and quality of life issues of breast cancer survivors. She is the Principal Investigator for the Cancer and Leukemia Group B (CALGB) clinical trials at UCSD and serves on the Prevention Committee of CALGB. Dr. Parker is the Medical Director (Principal Investigator, Dr. John Pierce) for the WHEL Diet Study of over 3000 breast cancer survivors and collaborates with Dr. Sonia Ancoli-Israel in studies of sleep and fatigue in breast cancer patients undergoing chemotherapy.

Christian Rommel, Ph.D., Intellikine
Christian Rommel serves as Intellikine's Chief Scientific Officer. Dr. Rommel is responsible for the company's research, drug discovery and preclinical development strategy. Prior to joining Intellikine in 2007, Dr. Rommel was Head of Target Research at Merck-Serono in Geneva, Switzerland, where he led several drug development projects and collaborations and provided support for both small molecule and protein-based therapeutics across therapeutic areas. Previously, Dr. Rommel was a senior scientist with Regeneron Pharmaceuticals. He received his doctorate in Molecular Oncology/Signal Transduction from the Max-Planck-Institute, Berlin-Dahlem, Germany and the Institute of Medical Virology, University of Zurich, Switzerland. He has a long standing interest in PI3K/Akt/mTOR as a pathway for therapeutic development. His research led the way for isoform-selective PI3K inhibitors, cross-talk between PI3K and related pathways and the validation of mTOR kinase inhibitors for cancer. He's the editor of "PI3K in health and disease" published in 2010.

Duane Roth, CONNECT
Duane J. Roth is Chief Executive Officer and member of the Board of CONNECT. CONNECT is the globally recognized public benefits organization fostering entrepreneurship in the San Diego region by assisting new business formation of technology and life sciences companies. CONNECT has been directly involved with over 1,500 companies since its inception in 1985 and these companies have secured over $10 billion in funding. Mr. Roth serves on a number of advisory committees and boards of the University of California, including the President's Board on Science and Innovation, the UC San Diego Sulpizio Cardiovascular Center (past Chair), the Skaggs School of Pharmacy and Pharmaceutical Sciences, the Preuss Charter School (Chair), the California Institute for Telecommunications and Information Technology (Calit2), the Health Sciences advisory board and the UC San Diego Foundation Board of directors (past Chair). He also serves on the San Diego State University College of Business (past Chair), and the Sciences & Engineering Advisory Board. Mr. Roth is a member of the Executive Board for the California State University (CSU) Professional Science Master's Program. Mr. Roth is active in the San Diego community serving as co-Chair of the Regional Housing Working Group, and as a member of the Advisory Council for Math for America. Mr. Roth was appointed to the Independent Citizens Oversight Committee for the California Institute of Regenerative Medicine (CIRM) as Vice Chair by Governor Arnold Schwarzenegger and he also serves as a member on the Governor's Commission for Jobs and Economic Growth. Mr. Roth is a graduate of Iowa Wesleyan College, where he serves as a trustee.

Judith Varner, Ph.D., Moores Cancer Center

Judith Varner, Ph.D., Moores Cancer Center The Varner Lab studies the molecular mechanisms by which the tumor microenvironment promotes tumor growth and metastasis. Our most recent focus is on understanding the roles that inflammation, angiogenesis and lymphangiogenesis play in promoting tumor growth and spread. Tumor inflammation promotes angiogenesis, immunosuppression and tumor growth, but the mechanisms controlling inflammatory cell recruitment to tumors are not well understood. Our lab recently found that chemoattractants activating G-protein coupled receptors (GPCRs), receptor tyrosine kinases (RTKs) and Toll-like/IL-1 receptors (TLR/IL1Rs) all promote tumor inflammation by activating the PI3-kinase isoform p110? in Gr1+CD11b+ myeloid cells. PI3kinase gamma then activates integrin ?4?1 to promote myeloid cell trafficking to tumors and subsequent angiogenesis and immunosuppression. We have determined that antagonists of PI3kinase gamma and integrin ?4?1 are potent suppressors of tumor inflammation, angiogenesis, growth and metastasis.

David Webb, Ph.D., Research, Celgene

Dr. Webb joined Celgene-San Diego in September, 2003 as Vice President, Research. Between 1995 and 2003, he held a series of senior management positions in several biotechnology companies where he developed and led drug discovery programs focused on inflammation, asthma, cancer and diabetes. These included Syrrx which he joined in 2001 as Vice President of Drug Discovery; OSI Pharmaceuticals (Corporate Vice President, Drug Discovery 1999-2001) and Cadus Pharmaceutical Corporation where he was Vice President of Research and Chief Scientific Officer at from 1995 to 1999 and adjunct professor of Microbiology and Immunology at New York Medical College. From 1987 to 1995, Dr. Webb was at Syntex, Inc where he held the positions of Distinguished Scientist and later, Director, Institute of Immunology and Biological Sciences and was a Consulting Professor of Cancer Biology at Stanford University. Dr. Webb was a member of the Department of Cell Biology at the Roche Institute of Molecular Biology from 1973 to 1987 and was Adjunct Professor of Human Genetics at Columbia University College of Physicians and Surgeons. Dr. Webb was a member of the Board of Directors of Axiom Biotechnologies, Inc. from 1998 to 2000 and a member of its Scientific Advisory Board from 1999-2002. He has published over 200 peer reviewed publications and abstracts and has served on numerous editorial boards in the field of Immunology. In addition he has been a member of Study Sections for NSF, ACS, NIH and the VA. Dr. Webb received his Ph.D. from Rutgers University and was a Dernham Junior Fellow in Cancer Research at UCSF before joining the Roche Institute.