Center for Innovative Drug Discovery

2016

San Antonio

Drug Discovery Symposium

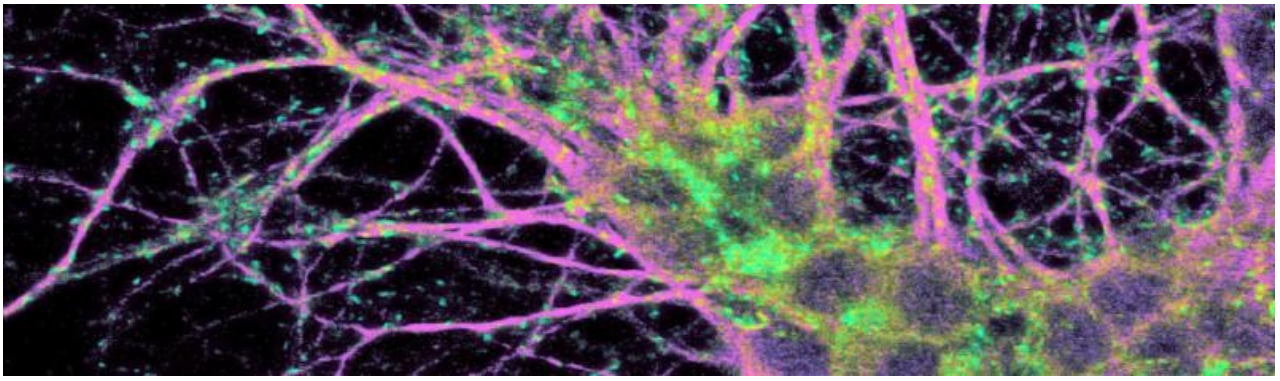
Target Discovery and Drug Development in Texas

June 9th and 10th 2016

8:00 AM –5:00 PM

UTSA Main Campus, University Center, Denman Ballroom

UTCIDD.org



Day 1

8:00 AM-8:30 AM: Continental Breakfast and Registration

8:30 AM-8:45 AM: **Welcome from Symposium Co-Chairs**

Stanton F. McHardy, Ph.D., Co-Director, Center for Innovative Drug Discovery, Director, Max and Minnie Tomerlin Voelcker Medicinal Chemistry Core Facility, UTSA

Matthew Hart, Ph.D., Director, Center for Innovative Drug Discovery High Throughput Screening Core Facility, UTHSCSA

8:45-9:00 AM: Introductory remarks

Dean George Perry, Ph.D., Semmes Foundation Distinguished University Chair in Neurobiology, Dean of the College of Sciences and Professor of Biology, UTSA

9:00 AM-9:50 AM: Plenary Keynote Presentation, Chair: Stanton McHardy, Ph.D.

9:00 AM-9:50 AM: Craig Lindsley, Ph.D., William K. Warren, Jr. Chair in Medicine, Professor of Pharmacology and Chemistry, Director, Medicinal Chemistry, Vanderbilt University " Neuroscience Drug Discovery in an Academic Environment "

9:50 AM-10:10 AM: Coffee Break

10:10 AM-12:10 PM: Session One, Chair: Bruce Nicholson, Ph.D.

Identifying and Characterizing Molecular Drug Targets

10:10 AM-10:40 AM: Michael White, Professor, Cell Biology, Associate Director, Simmons Comprehensive Cancer Center, Sherry Wigley Crow Endowed Chair in Cancer Research, Grant A. Dove Distinguished Chair for Research in Oncology UT Southwestern Medical Center "Targeting mechanistic subtypes of neoplastic disease"

10:40 AM-11:10 AM: Gaston Habets, Ph.D., Sr. Director of Assay & Research Operations, Plexxikon Inc. "From drug targets to INDs, a cycle driven by Scaffold-Based Drug Discovery"

11:10 AM-11:40 AM: Peter J. A. Davies, M.D., Ph.D., Professor & Director, Center for Translational Cancer Research, Institute of Biosciences and Technology, Texas A&M Health Science Center, Houston & Kevin Dalby, Professor of Chemical Biology & Medicinal Chemistry , The University of Texas Austin "The Gulf Coast Consortium Combinatorial Drug Discovery Program"

11:40 AM-12:10 PM: Gregory Cuny, Ph.D., Assistant Professor of Medicinal Chemistry, Department of Pharmacological and Pharmaceutical Sciences, University of Houston "CpIMPDH: A Molecular Target for Cryptosporidiosis"

Day 1

12:15 PM-1:30 PM Lunch

1:30 PM-3:00 PM: Session Two, Chair: Matthew Hart, Ph.D.

Assay Development and Identifying Lead Compounds

1:30 PM-2:00 PM: Bruce Posner, Ph.D. Director, HTS/RNAi Screening Core, Professor, Biochemistry Department, U.T. Southwestern Medical Center "Identification and Characterization of Potentiators of Tissue Regeneration"

2:00 PM-2:30 PM: Stan Watowich, Ph.D., Associate Professor, Department of Biochemistry & Molecular Biology, UTMB Galveston Title "DrugDiscovery@TACC: using a supercomputer web portal to find novel inhibitors of dengue and obesity diseases"

2:30 PM-3:00 PM: Conor Caffrey, Associate Professor, Center for Discovery and Innovation in Parasitic Diseases, Skaggs School of Pharmacy and Pharmaceutical Sciences, University of California San Diego "Identifying hits and leads for (neglected) parasitic diseases of poverty at the CDIPD"

3:00 PM-3:30 PM: John Hart, Ph.D., Ewing Halsell/President's Council Distinguished Chair in Biochemistry, UTHSCSA "Towards inhibitors of CARDS toxin, a M. pneumoniae virulence factor involved in walking pneumonia and asthma"

3:30 PM-3:50 PM Coffee Break

3:50 PM-5:00 PM: Session Three , Chair: Stan McHardy, Ph.D.

Medicinal Chemistry and Drug Discovery

3:50 PM-4:20 PM: Stephen Martin, Ph.D., M. June and J. Virgil Waggoner Regents Chair in Chemistry, Department of Chemistry, UT Austin "Progress toward a Novel Approach to Treat Neurodegenerative Diseases"

4:20 PM-4:50 PM: Jef De Brabander, Ph.D., Julie and Louis Beecherl Jr. Chair in Medical Science, Department of Biochemistry, UT Southwestern "The First Targeted Approach Towards APC-Mutated Colon Cancer: From Discovery Biology To Pre-Clinical Efficacy"

5:00 PM-7:00 PM Wine and Cheese Social and Poster Session

Day 2

8:00 AM-8:30 AM Continental Breakfast

8:30 AM-10:45 AM: Session Four, Chair: Doug Frantz, Ph.D.

Developing Novel Therapeutic Approaches to Cancer

8:30 AM-9:00 AM: Phil Jones, Ph.D., Executive Director and Head of Drug Discovery, Institute for Applied Cancer Science, MD Anderson "'Institute For Applied Cancer Science, Developing the Next Generation of Oncology Agents for Targeted Patient Populations"

9:00 AM-9:30 AM: Graham Beaton, Ph.D., Vice President Medicinal Chemistry, Curtana Inc. "Cancer Stem Cell Targeted Therapeutics for the Treatment of Glioblastoma and Other Brain Cancers"

9:30 AM-9:55 AM: Rong Li, Ph.D., Professor, Department of Molecular Medicine, UTHSCSA "Targeting ER-beta Signaling as a Novel Anticancer Therapy"

9:55 AM-10:20 AM: Susan Mooberry, Ph.D., Professor, Greehey Distinguished Chair in Targeted Molecular Therapeutics, Department of Pharmacology, UTHSCSA "Drug Discovery for Triple Negative Breast Cancers"

10:20 AM-10:40 AM Coffee Break

10:40 AM-12:30 PM: Session Five, Chair: Veronica Galvan, Ph.D.

Therapies in Regenerative Medicine and Brain Health

10:40 AM-11:10 AM: Bob Messing, M.D., Associate Dean for Research Development at Dell Medical School, Department of Pharmacology, UT Austin Dell Medical School "Targeting protein kinase C epsilon to develop novel therapeutics against pain and addiction"

11:10 AM-11:40 PM: Thomas Knott, Ph.D., CSO, Cytocentrics Inc. "Cellular physiology of patient derived cells as a future diagnostics"

11:40 PM-12:10 PM: George Perry, Ph.D., Semmes Foundation Distinguished University Chair in Neurobiology, Dean of the College of Sciences and Professor of Biology, UTSA Title "Oxidative stress: a therapeutic window to Alzheimer disease"

12:10 PM-12:35 PM: Luke Lairson, Assistant Professor of Chemistry, Department of Chemistry, The Scripps Research Institute, California Campus Title "Phenotype-based discovery of therapeutics, targets and mechanisms"

Day 2

12:35 PM-1:45 PM Lunch

1:45 PM-3:30 PM: Session Six, Chair: Steven Saville, Ph.D.

Infectious Disease

1:45 PM-2:15 PM: Rob Davey, Ph.D., Interim Chair, Scientist and Ewing Halsell Scholar, Department of Virology and Immunology, Texas Biomedical Research "High throughput compound screening at high containment: new targets for Ebolavirus therapy"

2:15 PM-2:40 PM: Jose Lopez Ribot, Ph.D., Professor, Margaret Batts Tobin Distinguished Chair, Department of Biology, UTSA "Anti-virulence approaches for antifungal drug development"

2:40 PM-3:05 PM: Phil LoVerde, Ph.D., Professor, Department of Biochemistry and Pathology, UTHSCSA "Genetic basis of drug resistance in Schistosoma, development of novel therapeutics and biomarkers for human schistosomiasis"

3:05 PM-3:30 PM: Kirsten Hanson, Ph.D., Assistant Professor, Department of Biology, UTSA "*Plasmodium* liver stage phenotypic profiling for antimalarial drug discovery"

3:30-3:45 PM Coffee Break

3:45-4:45 Panel Discussion

Panel Facilitators:

Stan McHardy

Doug Frantz

Panel Members:

Craig Lindsley

Phil Jones

Jef De Brabander

5:00 **Adjourn**

Craig Lindsley

Craig W. Lindsley, Ph.D. is the Co-Director and Director of Medicinal Chemistry for the Vanderbilt Center for Neuroscience Drug Discovery (VCNDD) and running for the role of Academic Councilor for the MEDI division. Craig graduated in 1992 from California State University, Chico with a B.S. in Chemistry, received his Ph.D. degree in Chemistry from the University of California, Santa Barbara (Lipshutz), in 1996, and pursued postdoctoral studies at Harvard University (Shair). In 2001, Craig accepted a position at Merck & Co where he pioneered, in positions of increasing responsibility, the development of allosteric ligands for Akt, mGlu5 and M1, providing critical proof-of-concept compounds that validated the mechanism of allosteric modulation and clinical candidates. In 2006, Craig accepted an Associate Professor position in Pharmacology and Chemistry at Vanderbilt University, and promoted to Full Professor in 2009. In that same year, Craig became the founding Editor-in-Chief of ACS Chemical Neuroscience and was also awarded the ASPET-Astellas Award for Translational Pharmacology. In 2013, Craig was awarded the Portoghese Lectureship from the ACS MEDI division and the Journal of Medicinal Chemistry for impact in the field of medicinal chemistry, and in 2014, received the John J. Abel Award in Pharmacology from ASPET. Craig holds over 60 issued US patents and has published over 400 manuscripts and another 140 published patent applications.

Michael White

Dr. White is an adjunct Professor of Cell biology at UT Southwestern Medical Center and VP and CSO of Tumor Biology at Pfizer. For the past 20 years his group has been focused on decoding oncogene mechanisms of action and identifying generalizable principles of cell regulation. His group's current primary focus is genomics guided medicine with mechanism-based therapies.

Gaston Habets

Positions and Employment
2016-present: Sr. Director of Assay and Research Operations, Plexxikon Inc., Berkeley, CA
Project manager preclinical projects, team leader for assay and screening
2012-2016: Director, Assay and Screening, Plexxikon Inc., Berkeley, CA
Team leader for in house biochemical and cell biological testing, management of outsourced preclinical efficacy studies, contributed to multiple INDs including PLX3397 and PLX4032 programs
2004-2011: Senior Scientist II, Head of Assay and Screening, Plexxikon Inc., Berkeley, CA
Team leader for in house biochemical and cell biological assay development and compound characterization. Contributed to 8 INDs including PLX4032 program
2002-2003: Senior Scientist I, Drug Discovery, Plexxikon Inc., Berkeley, CA
Project leader of Plexxikon's collaboration with Genentech, Delivered lead candidates on time and on target within six months.
2001-2002: Scientist, Cellular Pharmacology, Syrrx Inc, San Diego, CA
Development of biochemical and cell biology assays for Syxx drug discovery program
2000-2001: Scientist, Therapeutic Virus Research, Onyx Pharmaceuticals, Richmond, CA
Team member of Onyx 015 program
1999-2000: Scientist, Small Molecule Therapeutics, Onyx Pharmaceuticals, Richmond, CA
Team member of Onyx-Bayer collaboration that identified and developed Nexavar (sorafenib)
1998-1999: Associate Scientist, Onyx Pharmaceuticals, Richmond CA USA, Target discovery Ras-program.

Peter J.A. Davies

Alkek Chair and Director, Center for Translational Cancer Research
Associate Dean, Graduate Program
Executive Associate Director, Institute of Biosciences and Technology
Texas A&M Health Sciences Center
Houston, Texas

Dr. Davies, a distinguished pharmacologist and molecular endocrinologist, holds the rank of Professor, Texas A&M Institute of Biosciences and Technology. He holds faculty cross appointments in theDepartment of Clinical Cancer Prevention at UT MD Anderson Cancer Center (UTMDACC) and Department of Pharmacology at Baylor College of Medicine (BCM) and is jointly appointed as co-Director of the National Natural Toxins Research Center (NNTRC) at TAMU-Kingsville. Previously Dr. Davies served for a number of years as the Provost and Executive Vice-President for Research at The University of Texas Health Science Center at Houston. Dr. Davies is the Director of the John S. Dunn Gulf Coast Consortium (GCC) for Chemical Genomics, a multi-institutional collaborative research program, comprising of Texas A&M Health Science Center, UT MD Anderson Cancer Center, Rice University, The University of Texas at Austin (UT-Austin), Baylor College of Medicine and The Methodist Hospital Research Institute, funded by the Cancer Prevention and Research Institute of Texas (CPRIT) to support the high-throughput drug discovery research. Dr. Davies recently was awarded a $6 million grant from CPRIT to support a Combinational Drug Discovery Program, a program to provide library screening technologies and advanced imaging resources to support the development of novel combinatorial therapies for the treatment of cancer. Dr. Davies' scientific interests have included extensive studies on the molecular basis of hormone and drug action with a particular emphasis on the biology and pharmacology of retinoids. More recently, in his capacity as Co-Director of the NNTRC, he has applied state-of-the-art genomic, proteomic and aptamer technologies to probe the therapeutic potential of protein and peptide toxins present in snake venoms as well as the development of novel anti-venom technologies for the treatment of snakebite.

Kevin Dalby

Dr. Dalby is the Johnson and Johnson Centennial Professor or Pharmacy, in the Division of Chemical Biology and Medicinal Chemistry in the College of Pharmacy at The University of Texas at Austin. He is an expert in protein kinase biochemistry, signaling and enzymology. His laboratory has uses pre-steady-state kinetics and chemical biology approaches to elucidate the function of protein kinases.

Conor Caffrey

Conor Caffrey received his PhD from University College Dublin, Ireland, in 1994. After post-doctoral training at the University of Heidelberg and UC San Francisco, and a faculty appointment at the University of Aberystwyth, Wales, he was recruited in 2001 to the newly established UC San Francisco's Center for Discovery and Innovation in Parasitic Diseases (www.cdipd.org), a center dedicated to the preclinical and translational development of drugs for parasitic (neglected) diseases of poverty. Conor remained with the Center after its relocation in 2014 to the Skaggs School of Pharmacy and Pharmaceutical Science at UC San Diego where he is an Associate Professor. Conor's particular disease areas are schistosomiasis, hookworm disease and African trypanosomiasis. Three broad themes underpin his research: (1) the identification and validation of protein targets for drug development; (2) the pre-clinical and translational development of drugs, including the development and application of associated technologies (e.g., high-content and high-throughput screening); and (3) development of point-of-care diagnostics. His multidisciplinary research programs engage bioinformati.

Gregory Cuny

Assistant Professor of Medicinal Chemistry
Department of Pharmacological and Pharmaceutical Sciences
College of Pharmacy
University of Houston
Houston, TX 77204, USA
E-mail: gdcuny@central.uh.edu
URL: http://www.uh.edu/pharmacy/directory-home/pps-faculty/greg-cuny/

Dr. Cuny obtained his PhD in Organic Chemistry from the Massachusetts Institute of Technology, Cambridge, Massachusetts in 1992. He worked in industry for nine years before returning to academics at Brigham & Women's Hospital and Harvard Medical School. In 2012, he moved to the University of Houston's College of Pharmacy. His research interests are in medicinal chemistry, synthetic methods development and natural product synthesis.

Bruce Posner

Dr. Posner received his Ph.D. in biochemistry with Professor Stephen Benkovic at Penn State University in 1994 and then carried out an NIH-sponsored post-doctoral fellowship with Professor Alfred G. Gilman at the University of Texas' Southwestern Medical Center (UTSMC). Subsequently, he joined Pfizer, Inc as a Principal Scientist in the High Throughput Screening Center of Emphasis. During his 9 year tenure there, he led over 60 HTS campaigns and identified more than 20 hit-to-lead starts for early drug discovery programs. Two of these chemical series were submitted to first-in-human clinical trials. His efforts resulted in his recognition with Pfizer's Discovery Recognition Award 2004 and subsequent promotion to Senior Principal Scientist. In 2009, he joined the biochemistry faculty at UTSMC as an associate professor and the director of the High Throughput Screening (HTS) Core. In this capacity, he leads the core facility efforts to aid in the discovery and the early stage, pre-clinical development of new small molecule therapeutics. He has co-authored over 18 publications (papers and patents) since joining UT Southwestern in 2009. His efforts at UT Southwestern have contributed to the licensing of 4 candidate small molecules to 3 pharmaceutical companies .

Stan Watowich

Stan Watowich is an Associate Professor in the Department of Biochemistry and Molecular Biology at the University of Texas Medical Branch at Galveston (UTMB). His current research efforts merge advanced computational and structural biology approaches to develop treatments for infectious diseases and obesity. He was a founding member of UTMB's renowned Sealy Center for Structural Biology, launched UTMB's Molecular Therapeutics Initiative, and spearheaded UT's "Successful Entrepreneurship" program. He serves as consultant for drug discovery projects in developing countries, most recently working with scientists in Colombia to discover new drugs to combat Leishmaniasis. He received his B.A. from Carleton College, his Ph.D. from University of Chicago, and did post-doctoral studies at Harvard University before migrating south and joining the faculty of UTMB.

John Hart

Dr. Hart's lab uses single crystal X-ray diffraction, together with other biophysical methods, to characterize the structure and action of biological macromolecules important to human health. There are multiple research fociin the laboratory and several of these reflect the long-standing interest in metalloproteins. Examples include the intron debranching enzyme (Dbr1), matrix metalloproteinase-13 (MMP-13), copper-zinc superoxide dismutase (SOD1), and the copper chaperone for superoxide dismutase (Ccs1). Dr. Hart's lab is also interested in bacterial pathogenesis (CARDS toxin, Pgp3) and they seek mechanisms to combat schistosome parasites that infect humans. They are actively engaged in structure-based drug design. Dr. Hart serve as Director of the X-ray Crystallography Core Laboratory at UTHSCSA (http://xray.uthscsa.edu). The mission of the X-ray Core Lab is to bring structure determination technology to all researchers so that they may obtain structures of their own proteins of Interest.

Stephen Martin

A native of New Mexico, Stephen Martin received his B. S. in chemistry from the University of New Mexico, whereupon he went to Princeton University where he received his Ph. D. After postdoctoral years at the University of Munich and Massachusetts Institute of Technology, he joined the faculty at The University of Texas at Austin in 1974, where he currently holds the M. June and J. Virgil Waggoner Regents Chair in Chemistry. His research interests lie broadly in organic and bioorganic chemistry and chemical biology. He is renown for his work in a broad arena of the synthesis of biologically-active heterocyclic natural products and for studies of energetics and structure in protein-ligand interactions. More recently he has focused on the design and synthesis of small molecules that may be used as molecular probes to study biological function and as potential leads to treat various diseases, including cancer, neurodegeneration and neurological disorders. He has received a number of awards, including the NIH Career Development Award, an American Cyanamid Academic Award, the Alexander von Humboldt Prize, an Arthur C. Cope Scholar Award, a Japanese Society for the Promotion of Science Award, a Wyeth Research Award, and most recently the International Society of Heterocyclic Chemistry Senior Award; he is also a fellow of the American Association for the Advancement of Science. He is the regional editor of Tetrahedron for the Americas and Chairman of the Executive Board of Editors of Tetrahedron Publications. He has published over 310 scientific papers in primary journals together with several patents, reviews, and book articles. He is also co-author of the popular undergraduate laboratory book Experimental Organic Chemistry: A Miniscale and Microscale Approach. On the all too rare occasions that he is not engaged in professional activities, he enjoys music, travel, fly fishing, photography, and being with his wife and daughter.

Jef De Brabander

Jef K. De Brabander is a native of Belgium where he pursued his undergraduate and graduate studies at the University of Ghent (with Prof. M. Vandewalle, Ph.D. 1993). Following postdoctoral studies with the late Wolfgang Oppolzer at the University of Geneva (94-95) and Paul Wender at Stanford University as a NATO and Fulbright-Hays fellow (95-96), he began his independent career at the University of Geneva. In 1998, he was recruited to the University of Texas Southwestern Medical Center at Dallas, where he was promoted to Full Professor in 2007 and appointed Co-Director of the "Chemistry and Cancer Scientific Program" of the Simmons Comprehensive Cancer Center. He currently holds the Julie and Louis Beecherl, Jr., Chair in Medical Science, and in 2014 was elected as a Fellow of the American Association for the Advancement of Sciences. Jef De Brabander was an Alfred P. Sloan Foundation Fellow (2001-03), received the "Journal Award" from the editorial boards of Synlett and Synthesis (2006) and an Academic Development Award from the Chemistry Council of Merck Research Laboratories (2004-08). He is currently a consultant for Revolution Medicines, Inc., and is serving on the Scientific Advisory Boards of SunnyLife Pharmaceuticals, Reata Pharmaceuticals, SynAlpha Therapeutics, and Elizabeth Therapeutics, of which the latter three companies he co-founded. Dr. De Brabander has documented his scientific contributions in over 70 peer-reviewed publications and 13 patents, and at >40 major conferences and named lectureships. Jef De Brabander was a member of the National Institutes of Health Study Section, the Chair of the 51st Gordon Research Conference on Natural Products (Tilton, New Hampshire, July 2010) and the ESF-COST conference on Natural Products Chemistry, Biology and Medicine III (Maratea, Italy, September 2010).

Phil Jones

Philip Jones is the Executive Director and Head of Drug Discovery at the Institute for Applied Cancer Science (IACS) within MD Anderson Cancer Center. IACS is a fully integrated small molecule drug discovery and development unit embedded within the comprehensive cancer center, with a mission to bring new therapies to patients. Employing a bench-at-bedside approach the Institute's synergistic approach relies on three key components: an experienced team of professional drug discovery scientists, real-time access to insights gained by the best physician-scientists in the nation, and a clinically informed, patient-oriented research programs.

Dr. P. Jones has more than fifteen years of drug discovery research experience from Merck at three locations worldwide, prior to moving to MD Anderson in 2011. During his career, Dr. Jones led several of Merck's oncology drug discovery programs, overseeing cross-functional project teams that successfully delivered novel candidates into ongoing clinical trials. These include the PARP inhibitor niraparib now out-licensed to Tesaro and currently completing phase. He was also involved in the successful development of Raltegravir, the first-in-class HIV integrase inhibitor.

Dr. Jones received his Ph.D. in organic chemistry from the University of Nottingham, UK, and completed his post-doctoral research at Philipps-Universität Marburg, Germany.

Graham Beaton

Dr. Beaton is Vice President of Medicinal Chemistry and Drug Discovery at Curtana Pharmaceuticals. He has over 25 years of experience in the biotechnology and pharmaceutical industry, the past 16 years of which have been in the successful management of research teams. He has significant experience in all aspects of drug discovery, including medicinal chemistry, program management and organic synthesis. His industrial career began at Amgen and continued at CombiChem Inc., DuPont Pharmaceuticals, Deltagen Inc., Neurocrine Biosciences and Optimer Pharmaceuticals. At Neurocrine, Dr. Beaton led research teams that identified multiple development candidates in H1-antihistamine and GnRH antagonist programs and clinical candidates in the antihistamine program. Prior to Curtana, Dr. Beaton became President and a Founder of Epigen Biosciences, a biotechnology incubator located in San Diego, focused on the discovery and development of early stage assets. Dr. Beaton has established expertise in small business administration and fund raising through grant writing. These skills contributed to the establishment of Curtana in Austin through a contract award from the Cancer Prevention Research Institute of Texas. Dr. Beaton did his postdoctoral work in chemistry and biochemistry at the University of Colorado at Boulder. He was educated in the UK receiving BSc. and Ph.D. degrees in Chemistry from The University of Birmingham. He has authored or co-authored over 30 peer-reviewed publications, is an inventor on more than 10 patents and serves on several National Institutes of Health grant review panels.

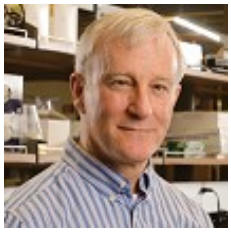
Rong Li

Dr. Li's research focuses on breast cancer biology. His laboratory previously demonstrated the transcriptional regulatory and chromatin remodeling activities of the breast cancer susceptibility gene product BRCA1, and their connections with the tissue-specific tumor suppression function of BRCA1. Other research projects in Dr. Li's laboratory include the impact of stroma on breast cancer development and progression, and the role of ER-beta signaling in antitumor functions. Dr. Li has published close to 70 scientific papers, many in high-impact journals including *Nature*, *Cell*, *Genes Dev*, *Cell Rep*, *Nat Commun*, *PNAS*, and *J Clin Invest*. Dr. Li has served on several NIH study sections and other review panels for federal and private funding agencies. He is currently a regular member on the NIH Tumor Microenvironment (TME) study section. He serves on the Program Committee of the San Antonio Breast Cancer Symposium, the world's largest breast cancer symposium. Since 2008, Dr. Li has been the Co-Leader of the Cancer Development and Progression (CDP) Program of the NCI-designated Cancer Therapy and Research Center (CTRC).

Susan Mooberry

Dr. Susan Mooberry earned her B.S. degree in Biology from St. Lawrence University in Canton NY and her Ph.D. in Pharmacology at the Medical University of South Carolina in Charleston SC. She completed postdoctoral training in molecular oncology at the Cancer Research Center of Hawaii at the University of Hawaii where she then moved into a faculty position in the Natural Products Program. In Hawaii she collaborated with many natural products chemists and together they identified many new microtubule targeting compounds, including one that advanced to clinical trials. In 2000 she moved to the Texas Biomedical Research Institute where she built natural products chemistry capabilities in her laboratory. In 2008 she became a Professor of Pharmacology at the University of Texas Health Science Center at San Antonio (UTHSCSA) where she currently leads a productive and collaborative group with many outstanding collaborators. She is the Co- leader of the Experimental Therapeutics Program of the Cancer Therapy & Research Center at UTHSCSA, an NCI-designated cancer center. She currently holds the Greehey Distinguished Chair in Molecular Therapeutics. Her research is focused on the discovery of more effective therapies for the treatment of breast cancer, with a primary focus on the discovery and understanding the mechanisms of action of diverse microtubule targeting agents. She has published over 110 peer reviewed articles, reviews and book chapters and holds 7 patents on new classes of microtubule targeting agents. Dr. Mooberry has served on scientific review panels for national and international organizations. She is currently the Principal Investigator of multiple grants from the National Cancer Institute.

Bob Messing



Dr. Robert Messing serves as the Associate Dean for Research Development, Dell Medical School at The University of Texas at Austin. Dr. Messing came to UT Austin as the Henry M. Burlage Centennial Endowed Professor in the College of Pharmacy. He continues as a Professor in the College of Pharmacy and as Associate Director of the Waggoner Center for Alcoholism and Addiction Research in the College of Natural Sciences.

Dr. Messing received his BA in History in 1974 and his MD in 1979, both from Stanford University. He trained in Internal Medicine from 1979-1981 at the University of Virginia, and then in Neurology at University of California, San Francisco from 1981-1984, where he served as Chief Resident from 1983-1984. Dr. Messing joined the Ernest Gallo Clinic and Research Center as a Postdoctoral Fellow in 1984 and then as a Principal Investigator in 1986. He currently serves on several scientific advisory and grant review boards, including the NIAAA Advisory Council.

Dr. Messing's primary discipline is neuroscience and his major interests are in addiction, pain, anxiety and mood disorders. His laboratory uses a variety of molecular and circuit mapping techniques in rodents to study the role of specific signaling proteins and circuits in which they reside in regulating behavior. The ultimate goal of this work is to determine if these proteins are drug targets for treating neuropsychiatric disorders. Dr. Messing's major contributions include determining that protein kinase C epsilon, protein kinase C delta, N-type voltage-dependent calcium channels, and the type 1 equilibrative nucleoside transporter regulate ethanol intoxication and self-administration in mice. His research on protein kinase C epsilon in particular has led to ongoing efforts to develop inhibitors of this enzyme as potential treatments for pain, anxiety, and alcohol and nicotine addiction.

George Perry

George Perry, Ph.D., is Dean of the College of Sciences and the Semmes Foundation Distinguished University Chair in Neurobiology at the University of Texas at San Antonio. He obtained his Ph.D. from Scripps Institution of Oceanography in 1979 and received a postdoctoral fellowship in the Department of Cell Biology at Baylor College of Medicine where he laid the foundation for his observations of abnormalities in cell structures. Dr. Perry is distinguished as one of the top Alzheimer's disease researchers with over 1,000 publications, one of the top 100 most-cited scientists in neuroscience and behavior, and one of the top 25 scientists in free radical research. He is editor for numerous journals and is editor-in-chief for the Journal of Alzheimer's Disease. Internationally recognized, he is a Foreign Correspondent Member of the Spanish Royal Academy of Sciences, the Academy of Science Lisbon, and a Foreign Member of the Mexican National Academy of Sciences. He is also a recipient of the National Plaque of Honor from the Republic of Panama Ministry of Science and Technology. Dr. Perry's research is primarily focused on how Alzheimer's disease develops and the physiological consequences of the disease at a cellular level. He is currently working to determine the sequence of events leading to damage caused by and the source of increased oxygen radicals along with routes to provide more effective treatment.

Luke Lairson

Luke Lairson obtained his B.Sc. from the University of Guelph in 2002 and his Ph.D. from the University of British Columbia in 2007. In 2007, Luke was awarded a Visiting Scientist Fellowship by the Royal Society to conduct research in the laboratory of Prof. Ben Davis at the University of Oxford. Luke subsequently received a CIHR postdoctoral fellowship to conduct research in the laboratory of Prof. Peter G. Schultz at the Scripps Research Institute (TSRI). During this time he gained valuable skills in the fields of stem cell biology and high throughput screening. In 2010, Luke continued to work with Peter Schultz as a Principal Investigator in the high throughput screening group at the Genomics Institute of the Novartis Research Foundation (GNF). He then moved back to TSRI as an Assistant Professor in the Department of Chemistry. He is also the Director of High Throughput Discovery and a Principal Investigator at the California Institute for Biomedical Research (Calibr).

Rob Davey

Dr. Davey is interested in understanding how viruses like Ebola virus penetrate the cell membrane and establish infection. In addition, the Davey laboratory has developed efficient, high-throughput small compound screening techniques that can be used in the high containment laboratory and have been applied to Ebola and Lassa fever viruses. Through this work he conducts both academic and contract work on small molecule therapeutics against these and other viral hemorrhagic fever viruses in the BSL4 maximum containment laboratory at Texas Biomedical Research Institute, San Antonio. This work has resulted in exciting findings towards potential drug candidates to combat Ebola virus as well as a better understanding of the cell biology of virus uptake.

Dr. Davey has over 25 years of expertise in virology and has been studying Ebola virus since 2006; his recent work has been published in high-impact journals that include PLoS Pathogens, PNAS and Science, which was featured on the cover page.

Thomas Knott

Dr. Thomas Knott is an innovative technology driven entrepreneur who founded Cytocentrics, a high-tech scientific instrumentation and biotech company specializing in the field of ion channel electrophysiology more than 10 years ago. He currently serves as the Chief Scientific Officer at Cytocentrics Inc., San Antonio, TX. Dr. Knott single-handedly developed Cytocentrics instrument for ion channel analysis, the CytoPatch™4, demonstrating a more complete feature set in patch clamp capabilities than any existing manual patch clamp system (whole cell voltage clamp and current clamp, perforated patch clamp, extracellular and intracellular perfusion, temperature control, fast ligand gated ion channels, mechano-stimulation, GLP, and network capability). Dr. Knott continues to manage the technical developments of the CytoPatch technology and heads the Cytocentrics GLP test facility for cardiac safety screening. While accumulating twenty years of experience in electrophysiology and fourteen years of experience in patch clamp instrumentation, Dr. Knott has initiated and participated in several multi-million dollar individual and joint research projects. He is the author of eight patents and multiple scientific publications. Thomas goal is to finally bring the patch clamp technology into diagnostic.

Jose Lopez Ribot

Dr. Jose L. Lopez-Ribot is a Professor of Microbiology and the Margaret Batts Tobin Distinguished Chair at The University of Texas at San Antonio (UTSA) and the South Texas Center for Emerging Infectious Diseases. He received his Pharm.D. and Ph.D. in Microbiology degrees from the University of Valencia (Spain) in 1991. Dr. Lopez-Ribot's research has provided important insights into the pathogenesis of candidiasis, the main fungal infection affecting an increasing number of immune- and medically-compromised patients. His work encompasses from the basic biology of the cell wall, biofilm formation, adhesion and morphogenetic conversions, to the use of animal models to better understand virulence and host responses, to the more clinical aspects such as antifungals, drug resistance and vaccines, with the ultimate goal of devising new strategies for the diagnosis, prevention and treatment of candidiasis. He is an author of more than 160 publications (over 11,500 citations) and several patents, and has received funding from NIH, DoD, AHA, different foundations and pharmaceutical companies. He has served as the President of the Medical Mycological Society of the Americas, and provided extensive service to his discipline as a grant reviewer for NIH, AHA, NSF, VA and many other different national and international funding agencies, as well as an associate editor and editorial board member for multiple Microbiology and Mycology journals.

Phil LoVerde

Dr. Philip T. LoVerde is a Professor at the University of Texas Health Science Center in San Antonio, Texas. His research interests are in host-parasite interactions, especially those that involve the human blood fluke, Schistosoma. His current research involves vaccine development, role of signal transduction in schistosome-host interactions, interplay between male and female parasites that results in female reproductive development, role of host genes in infection outcomes, genomics and genetic approach to identifying drug resistant genes. He serves as Editor and on the editorial boards of 10 journals. He has a history of service as a consultant for the National Institutes of Health, US AID, the World Health Organization and the Wellcome Trust. He has received a number of honors such as Distinguished Professor at the State University of New York He has published over a 180 papers.

Kristen Hanson

B.A. and M.S. from the University of Chicago. PhD work in Drosophila developmental biology at the MRC Laboratory of Molecular Biology / University of Cambridge, UK. Postdoctoral fellow with Maria Mota (Plasmodium biology and host-parasite interactions) at the Instituto de Medicina Molecular in Lisbon, Portugal. Dr. Hanson joined UTSA as an assistant professor in late 2014. Work in the Hanson lab is currently funded by the Bill and Melinda Gates Foundation and the Military Health Institute at UTHSCSA.

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