Tenth Annual Cancer Biology Research Retreat

June 12, 2019

MSTF Atrium and Leadership Hall

University of Maryland Baltimore

Sponsored by

University of Maryland Marlene and Stewart Greenebaum Comprehensive Cancer Center

University of Maryland School of Medicine Graduate Program in Life Sciences

NIH/NCI T32 Training Program in Cancer Biology

University of Maryland BioPark

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Cover art by Pavlos Anastasiadis

WELCOME

Welcome to the Tenth Annual Cancer Biology Research Retreat at the University of Maryland. This is an opportunity for graduate students, postdoctoral and clinical research fellows and faculty involved in cancer research to interact and share research ideas and techniques in an informal and relaxed environment. The Organizing Committee would like especially to thank the Retreat Sponsors for their financial support and the Alumni, Dr. Mathew Hall, and Dr. Frank McCormick for their participation in today's Research Retreat.

Enjoy the day,
Michele Vitolo, Ph.D.

Cancer Biology Research Retreat Organizing Committee

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Toni Antalis, Ph.D., Faculty Advisor
Jennifer Aumiller, MEd**,** Director, GPILS/OPS Career and Professional Development and Office of Postdoctoral Scholars
Renee Cockerham, Ph.D., Program Manager, GPILS/OPS Career and Professional Development and Office of Postdoctoral Scholars
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TABLE OF CONTENTS

PROGRAM

8:30am – 9:30am Check-In, Poster Set-up, and Continental Breakfast, MSTF Atrium

Morning Speaker, Leadership Hall

9:30am -10:30am Introduction

Michele Vitolo Ph.D., Assistant Professor of Physiology, SOM

Mathew D. Hall, Ph.D.

NCATS Chemical Genomics Center, Division of Pre-Clinical Innovation, National Center for Advancing Translational Sciences

"Assays to lead the way: Approaches to cancer therapeutic discovery"

Coffee and Poster Viewing, MSTF Atrium

10:30am -11:00am Coffee and Poster viewing

Alumni Career Panel, Leadership Hall

11:00am -12:30pm Short summaries of current careers and discussions with Alumni

Moderator: **Tierra Johnson**

Amanda Boggs, Ph.D. - AAAS Science and Technology Policy Fellow, U.S. Department of State

Jessica Brusgard, Ph.D. - Biomedical Life Scientist, Leidos

Emily Cheng, Ph.D. - Principal Research Scientist, Battelle Memorial Institute

Kathryn Hodge Driesbaugh, Ph.D. - Program Director, Coriell Institute for Medical Research

Marey Shriver, Ph.D. - Director, Office of Research Career Development, University of Maryland School of Medicine

Jim Steinhardt, Ph.D. - Scientist I, Antibody Discovery and Protein Engineering, AstraZeneca

Lunch, MSTF Atrium

12:30pm – 1:30pm Lunch and Poster Viewing

Keynote Speaker, Leadership Hall

1:30pm – 1:40pm Introduction

Toni M. Antalis, Ph.D. Professor of Physiology; Associate Director of Training and Education, Marlene and Stuart Greenebaum Comprehensive Cancer Center; Director, Program in Molecular Medicine, GPILS, SOM

1:40pm – 2:40pm **Frank McCormick, Ph.D.**

Professor, Helen Diller Family Comprehensive Cancer Center and Dept. of Cellular and Molecular Pharmacology, UCSF
David A. Wood Distinguished Professorship of Tumor Biology and Cancer Research

"New approaches to targeting Ras"

Poster Session, MSTF Atrium

2:45pm – 3:00pm **Paul Joseph**
Bio-techne Representative

"Getting accurate and reproducible data: The power of Bio-techne to drive cancer research"

3:00pm – 3:45pm Poster Session – Students and Postdoctoral Fellows presentations and judging

3:45pm – 4:45pm Poster Session – Presenters may now view other posters

Awards Ceremony for the Cancer Biology Retreat, MSTF Atrium

4:45pm – 5:00pm Awards

Keynote Speaker

Frank McCormick, PhD, FRS, DSc(Hon)

UCSF Helen Diller Family Comprehensive Cancer Center

Frank McCormick, PhD, is a Professor at the UCSF Helen Diller Family Comprehensive Cancer Center. Prior to joining the UCSF faculty, Dr. McCormick pursued cancer-related work with several Bay Area biotechnology firms and held positions with Cetus Corporation (Director of Molecular Biology, 1981-1990; Vice President of Research, 1990-1991) and Chiron Corporation, where he was Vice President of Research. In 1992 he founded Onyx Pharmaceuticals, a company dedicated to developing new cancer therapies, and served as its Chief Scientific Officer until 1996. At Onyx Pharmaceuticals, he initiated drug discovery efforts that led to the approval of Sorafenib in 2005 for treatment of renal cell cancer, and for liver cancer in 2007, and the approval of ONYX-015 in 2006 in China for treatment of nasopharyngeal cancer. In addition, Dr. McCormick's group led to the identification of the CDK4 kinase inhibitor, Palbociclib, approved for treating advanced breast cancer. Dr. McCormick's current research interests center on ways of targeting Ras proteins and their regulators, including the NF1 protein neurofibromin.

Dr. McCormick holds the David A. Wood Chair of Tumor Biology and Cancer Research at UCSF. He is the author of over 330 scientific publications and holds more than 20 issued patents. He was Director of the Helen Diller Family Comprehensive Cancer Center from 1997 to 2014. He also served as President, 2012- 2013, for the American Association for Cancer Research. Since 2013, Dr. McCormick has led the National Cancer Institute's Ras Initiative at the Frederick National Laboratories for Cancer Research overseeing the national effort to develop therapies against Ras-driven cancers. These cancers include most pancreatic cancers, and many colorectal and lung cancers, and are amongst the most difficult cancers to treat.

Dr. McCormick is a Fellow of the Royal Society and a member of the National Academy of Sciences.

Morning Speaker

Mathew D. Hall, Ph.D.

NCATS Chemical Genomics Center, Division of Pre-Clinical Innovation, National Center for Advancing Translational Sciences"

Matthew Hall is currently Branch Chief for the NCATS Chemical Genomics Center, National Center for Advancing Translational Sciences (NCATS), National Institutes of Health's (NIH) in Rockville, Md., and he also serves as biology group leader there. Hall, who joined NCATS in 2015, leads a team of biologists who develop and optimize both biochemical and cell-based assays for automate, small-molecule, high-throughput screening in collaboration with NIH intramural and extramural partners. He is currently co-chair of the National Cancer Institute's (NCI) Chemical Biology Consortium. Hall's research portfolio has an emphasis on oncology but covers a diverse range of other human pathologies and diseases.

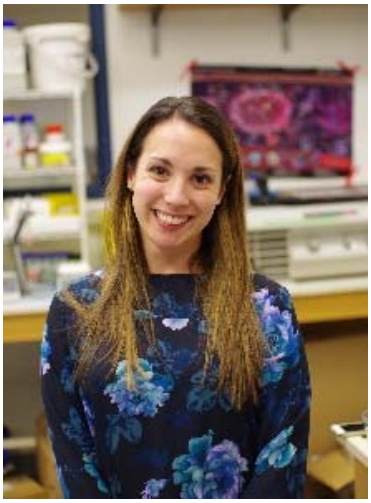
Hall received his B.Sc. (Hons) and Ph.D. in the School of Chemistry at the University of Sydney, in the laboratory of Professor Trevor W. Hambley. His doctoral work included six months in the Nuffield Division of Clinical Laboratory Sciences at Oxford University. After a year working under Valeria Culotta at Johns Hopkins Bloomberg School of Public Health under an American Australian Association Sir Keith Murdoch Fellowship studying metal transporters, Hall moved to the NCI Laboratory of Cell Biology under Michael M. Gottesman. At NCI, Hall used his chemical and genetic experience to work on the experimental therapeutics, the clinically challenging phenomenon of cancer multidrug resistance, and developed models for studying drug penetration across the blood-brain barrier.

Alumni Career Panel

Jessica Brusgard, Ph.D.
Biomedical Life Scientist, Leidos

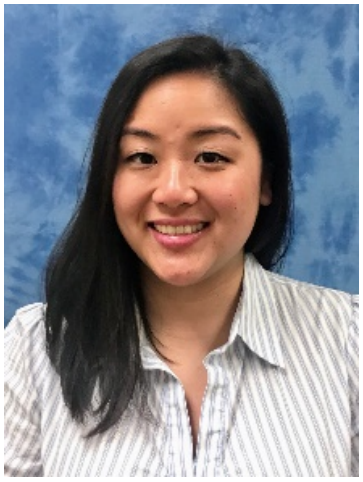
Dr. Brusgard obtained her Ph.D. in Molecular Medicine (Cancer Biology track) in December 2014 at the University of Maryland School of Medicine. While completing her Ph.D., she quickly came to realize that she did not want to spend the rest of her life at a lab bench; however, she still loved science! Dr. Brusgard is a Biomedical Scientist at Leidos on a government contract that provides program support to the Department of Defenses (DoD's) Congressionally Directed Medicine Research Programs (CDMRP). She is currently the Scientific Manager of the Breast Cancer Research Program (BCRP) assisting in preparing funding opportunity announcements, maintaining programs, organizing programmatic review meetings, writing research highlights, and performing portfolio analyses among other tasks.

Amanda E. Boggs, Ph.D.
AAAS Science and Technology Policy Fellow
U.S. Department of State
Bureau of African Affairs



Dr. Amanda Boggs is an American Association for the Advancement of Science (AAAS) Science and Technology Policy Fellow at the U.S. Department of State. She serves as the junior human rights, democracy, and governance officer in the Office of Economic and Regional Affairs within the Bureau of African Affairs. The Department of State's Bureau of African Affairs is focused on the development and management of U.S. policy concerning the African continent. Amanda earned her B.S. in Biology from Villanova University and her doctoral degree in Molecular Medicine from the Graduate Program in Life Sciences (GPILS) at the University of Maryland Baltimore. Prior to her role as an AAAS Fellow, Amanda held a postdoctoral fellowship in the Department of Pathology and Laboratory Medicine at the University of Pennsylvania School of Medicine. There, she investigated the role of the TIPE family of proteins in inflammation and cancer progression, specifically focusing on skin and colon cancer. She also served as the co-chair of the Community Service and Outreach Committee of the University of Pennsylvania Biomedical Postdoctoral Council.

Emily Cheng, Ph.D.
Principal Research Scientist, Battelle Memorial Institute



Emily Cheng, Ph.D. is a Principal Research Scientist in the In Vitro Assay Services group at Battelle Memorial Institute in Aberdeen, MD. Battelle conducts research and development, designs and manufactures products, and delivers critical services for government and commercial customers at major technology centers and national laboratories around the world. Dr. Cheng earned her undergraduate degree from the Massachusetts Institute of Technology in Cambridge, Massachusetts, and her doctoral degree in Molecular Medicine from the Graduate Program in Life Sciences at the University of Maryland Baltimore. Under the mentorship of Dr. Jeffrey Winkles, she studied the role of the TNF receptor Fn14 in lung cancer. Prior to enrolling in graduate school, Emily worked as a laboratory technician at the University of Maryland Baltimore.

Kathryn H. Driesbaugh, PhD
Program Director, Coriell Institute for Medical Research

Dr. Driesbaugh joined Coriell Institute for Medical Research located in Camden, NJ in 2017 as a Program Manager. Coriell is renowned for generating world-class biomaterials and conducting groundbreaking research in biobanking, personalized medicine and stem cell biology. Currently, Dr. Driesbaugh is a Program Director and serves as Principal Investigator of the Congenital Heart Disease GEnetic NEtwork Study (CHD GENES) Biorepository at Coriell, the Huntington's Disease (HD) Community Repository and the National Eye Institute (NEI) Age-Related Eye Disease Study (AREDS) Repository and as well as other collections managed by Coriell. Dr. Driesbaugh earned her undergraduate degree from Albright College in Reading, Pennsylvania, and her doctoral degree in Molecular Medicine from the Graduate Program in Life Sciences in the Cancer Biology Track at the University of Maryland Baltimore and completed a joint postdoctoral fellowship at the University of Pennsylvania in the department of Surgery and the Children's Hospital of Philadelphia in the department of Pediatric Cardiology where she studied genetic and molecular mechanisms associated with cardiac valve diseases using a biobank of cardiac surgical specimens.

Marey Shriver, Ph.D.

Director, Office of Research Career Development, University of Maryland School of Medicine

Dr. Marey Shriver is an Assistant Professor in the Department of Biochemistry and Molecular Biology and is the new Director for the Research Career Development Program at the University of Maryland School of Medicine. In her current position she provides research and professional support for early stage faculty. Dr. Shriver specializes in early project conception, including developing a clear research question and testable hypothesis. She previously served as research administrator in the Office of Research Affairs in the School of Medicine. She received her PhD in Molecular Medicine from the University of Maryland School of Medicine and completed a Postdoctoral Fellowship at Johns Hopkins University School of Medicine.

Jim Steinhardt, Ph.D.

Scientist I, Antibody Discovery and Protein Engineering, AstraZeneca

Dr. James Steinhardt completed his undergraduate studies in Biomedical Engineering at Johns Hopkins and then received his Ph.D. in Molecular Medicine at the University of Maryland Baltimore. For his postdoctoral studies, he designed multi-specific broadly neutralizing antibodies for HIV (bNAbs) under the mentorship of Dr. Yuxing Li at the Institute for Bioscience and Biotechnology Research (IBBR) in Rockville, MD. Dr. James Steinhardt currently works within the Antibody Discovery and Protein Engineering department at AstraZeneca in Gaithersburg, MD. His work primarily focuses on antibody engineering for technology development and pipeline support.