

2025 Seattle DROP Presenter Bios

May 6, 2025

WELCOME AND INTRODUCTIONS

Karen Peterson, Director, Office of Scientific Career Development, FHCC



Dr. Karen Peterson is the Director, Office of Scientific Career Development and the Scientific Ombuds at the Fred Hutchinson Cancer Center. She started at the Fred Hutch as a postdoctoral fellow in 1995 and transitioned into postdoc and grad student professional development in 1999. Karen is a former member of the Board of Directors and Advisory Council for the National Postdoctoral Association and the author of the Nature Guide to Life Science Careers. She received the 2024 National Postdoctoral Association Distinguished Service Award and the 2020-2021 Seattle Association for Women in Science Award for Excellence in Professional Development Education.

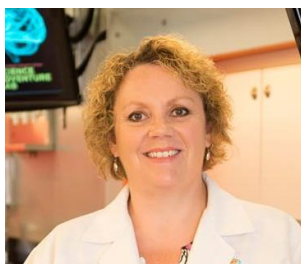
Bill Mahoney, Associate Dean for Student and Postdoctoral Affairs; Director, *Molecular Medicine & Mechanisms of Disease (M3D)* PhD Program; Associate Professor of Laboratory Medicine & Pathology, UW School of Medicine



Dr. Bill Mahoney has a long-standing interest in professional development, focusing on graduate students, postdoctoral fellows, and junior faculty at UW. As Associate Dean in the Graduate School (since 2019), he provides leadership to the Office of Student & Postdoctoral Affairs (OSPA) to support inclusive learning environments across the UW educational ecosystem. He leads efforts related to graduate student and postdoctoral fellow recruitment and support throughout their educational journey, holistic mentorship, and career exploration and guidance.

Dr. Mahoney is an Associate Professor of Laboratory Medicine & Pathology (DLMP) in the School of Medicine. He joined the UW community as a postdoctoral fellow in 2004 and followed the academic tract to establish his independent research laboratory in cardiovascular development & regeneration. Dr. Mahoney transitioned to focusing on mentoring graduate students by directing the interdepartmental *Molecular Medicine and Mechanisms of Disease (M3D)* PhD program. This led to a more holistic attention to professional development towards careers in STEM by working with URM pipeline programs for graduate students and postdoctoral fellows. Nationally, Dr. Mahoney is a member of the Board for the National Postdoctoral Association (NPA), where he served as Vice Chair for 3 years. In this role, he represents and advocates on behalf of ~20k postdoctoral fellows and more than 250 organizational partners. In addition, he is a member of the Graduate Career Consortium (GCC), an organization providing an international voice for graduate-level career and professional development leaders.

Amanda Jones, Senior Director, Education Initiatives, SCRI



Dr. Amanda Jones is the Senior Director for Education Initiatives at Seattle Children's Research Institute (SCRI). She is the founder of the Science Education Department which offers several programs that range from hands-on science for K-12 students, internships for high school and undergraduate students, to training programs for postdoctoral scholars. She is guided in her work by the clear need to invest in inspiring, supporting, and training the next generation of leaders in science and medicine, especially those from historically underrepresented backgrounds. She was instrumental in launching the Invent@SC Postdoctoral Scholars program and as Assistant Director, oversees operations, hiring, visa support, programmatic policies, and collaborator agreements.

She chairs of the postdoctoral advisory group at SCRI, a group of faculty and administrative leaders tasked with overseeing the postdoctoral training experience including curriculum and training activity, mentor requirements and standards, post doc recruiting efforts, and compensation and rewards. She also serves as the administrative lead of the SCRI postdoc committee, which organizes professional development and networking activities and provides input to the faculty advisory group regarding the postdoc experience.

Russ Lackey, MS, Director of Education, Institute of Translational Health Sciences



Mr. Lackey is the Director of Education at the Institute of Translational Health Sciences (ITHS) where he works to support the education and training needs of the WWAMI clinical and translational science workforce through structured training and continuing education programs. He is committed to promoting educational partnerships to build collaborative, inclusive learning communities. Mr. Lackey has been involved in clinical and translational workforce development activities since 2018. Prior to this, he held positions in both secondary and undergraduate education after earning his MS in Biology from Texas Tech University.

THE IMPORTANCE OF FINDING THE RIGHT MENTOR PANEL

Christy McKinney, Associate Professor, Pediatrics, UW and Principal Investigator, SCRI



Christy McKinney, PhD, MPH is an Associate Professor of Pediatrics in the School of Medicine at the University of Washington and a Principal Investigator at Seattle Children's Research Institute. She is an epidemiologist and translational scientist focused on generating new knowledge and tools that directly translate into improved feeding and growth, and better health of vulnerable infants and young children. She is committed to helping the next generation of scientists grow and develop. She is PI of several NIH grants including the ITHS KL2 program and a training grant based in Ghana. She oversees early career development awards at Seattle Children's Research

Institute.

Beth Lawlor, Professor, Pediatrics, SCRI



Dr. Elizabeth (Beth) R. Lawlor is a Professor of Pediatrics and Adjunct Professor of Pathology at the University of Washington School of Medicine, the Associate Director of the Ben Towne Center for Childhood Cancer Research at Seattle Children's Research Institute, and an affiliate member of the Fred Hutch Cancer Center (FHCC). Dr. Lawlor also serves as associate program leader for Cancer Basic Biology in the FHCC/UW/SCH NCI Comprehensive Cancer Center Consortium.

Dr. Lawlor completed her MD and PhD degrees in Canada at McMaster University and the University of British Columbia, respectively. Following clinical training in pediatrics and pediatric hematology-oncology & bone marrow transplantation and a post-doctoral research fellowship in cancer biology, she joined Children's Hospital Los Angeles and the University of Southern California. From 2010-2020, Dr. Lawlor led her research program in pediatric sarcoma biology at the University of Michigan. While at Michigan, Dr. Lawlor served as program director for the interdepartmental PhD program in Cancer Biology, Cancer Biology T32 program leader, and as Associate Director for Education and Training at the Rogel Cancer Center. In 2020, Dr. Lawlor moved her lab to Seattle Children's Research Institute where she is director of the pediatric hematology-oncology T32 for physician scientists. Her lab continues to study the biology of Ewing sarcoma, an aggressive bone tumor that peaks in children and young adults. As a dual-trained MD and PhD physician-scientist, Dr. Lawlor is committed to educating the next generation of cancer scientists and she is passionate about creating a diverse and inclusive workforce who will together advance pediatric oncology research and care.

Harmit Malik, Professor, Basic Sciences, FHCC



Dr. Harmit Malik studies genetic conflict, the competition between genes and proteins with opposing functions that drives evolutionary change. His research could have implications for a range of diseases, from HIV to cancer. As part of this work, his team developed an approach for identifying genes that divide one species from another, which could help solve the riddle of how new species evolve. Dr. Malik also studies the evolutionary processes that drive our body's interactions with viruses, including contemporary scourges like HIV as well as ancient viruses whose fossils litter our genome. With Hutch colleagues, he has characterized the rapidly evolving interface between proteins on human cells and viruses that make us sick. This work has highlighted surprising deviations from "textbook" models of these interactions, and it is revealing gene variants that could influence our susceptibility to infection. The Malik lab has helped train nearly 20 postdoctoral fellows, many of whom now run their own independent laboratories in institutions across US and Europe. In 2018, Dr. Malik was awarded the 2018 Jim McDougall mentoring award by the Student Postdoc Advisory Committee at Fred Hutch Cancer Center.

POSTDOCTORAL RESEARCHER PANEL

Rose Bosire, Postdoctoral Fellow, FHCC



Dr. Rose Bosire is a postdoctoral researcher in the Adeyemi Lab at the Fred Hutchinson Cancer Center. Her research is focused on characterizing the role of long noncoding RNA in replication stress response and its contribution to chemotherapy resistance. She is currently funded by the Washington Research Foundation. Outside of the lab she enjoys hiking and trying new restaurants

Christian Arias Reyes, Postdoctoral Fellow, SCRI



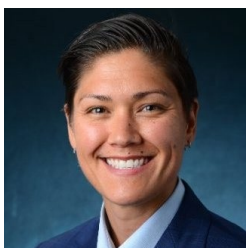
Dr. Christian Arias Reyes is a postdoctoral researcher in the Ramirez lab at Seattle Children's Research Institute, where he investigates how mitochondrial acclimatization to high altitude could be harnessed to treat neurodegenerative diseases. Originally from Bolivia, Dr. Arias has pursued academic and research training in Bolivia, Spain, Canada, and the United States, earning his PhD in Cell and Molecular Biology from Laval University in Canada. His scientific work spans international collaborations with institutions in Latin America, North America, and Europe. Throughout his career, Dr. Arias has mentored undergraduate and graduate students from a variety of cultural and institutional backgrounds. He has supervised research internships and thesis projects from Bolivian, Canadian, and Mexican universities, often facilitating cross-institutional collaborations between North and South America. At SCRI, Dr. Arias plays an active role in the Postdoctoral Advisory Committee (PDAC), where he contributes to initiatives that enhance the postdoctoral experience and promote inclusive, supportive research environments.

Arianna Gomez, Postdoctoral Fellow, UW



Dr. Arianna Gómez (she/her/ella) is a postdoctoral researcher at the University of Washington in the Musculoskeletal Systems Biology Lab, where she is studying the role of *rank* in bone development and aging using zebrafish. She is currently a postdoc fellow on the UW Biological Mechanisms of Healthy Aging T32 Training Program. Dr. Gómez mentors' trainees in and out of the lab and volunteers for STEM organizations that seek to promote the advancement of individuals from historically marginalized groups. In her spare time, she likes to play volleyball and take walks around Seattle neighborhoods.

Amber Ismael, Senior Program Manager, Office of Scientific Career Development, FHCC



Dr. Amber Ismael (she/they) is a Senior Program Manager in the Office of Scientific Career Development at the Fred Hutchinson Cancer Center in Seattle, WA. She helps graduate students and postdocs achieve their career goals by providing career and professional development, emphasizing interactive, experiential, and peer learning to provide a more personalized and fulfilling experience. Her experiences as a Ph.D. student and postdoc give her an understanding of early-career scientists' hurdles, and she continues to partner closely with trainees to understand their changing needs. Amber advocates nationally for postdocs, having served as a co-chair for the

National Postdoctoral Association Resource Development Committee, and seeks to improve the postdoctoral experience by providing resources and recommendations for postdocs and those who support them. Amber also supports those in the field of career and professional development as the co-chair of the Graduate Career Consortium Professional Development Committee. Out in the wild, you will find Amber exploring the Pacific Northwest with her family, cycling, trail running, cross-country skiing, or trying to cook the perfect pizza.

Lunch with Visa and Recruiter Experts

Amy Garrett-Cowan

Charles Smarr, Faculty Recruiter, Human Resources, FHCC



Dr. Charles Smarr is a Faculty Recruiter in the Human Resources Department at the Fred Hutchinson Cancer Center in Seattle, WA. Following graduate and postdoctoral training in immunology, Charles joined Fred Hutch as a scientific recruiter. His experience as a technician, student and postdoc allows him to understand the needs of scientific staff and PIs to build and maintain research groups. In recent years he has taken on a new role as the Faculty Recruiter for Fred Hutch, while continuing to support scientific staffing.

FHCC Faculty Talks Breakout Session

Alice Berger, Associate Professor, Human Biology, FHCC

FHCC faculty talk title: Understanding lung cancer biology and therapy using functional genomics



Dr. Alice Berger, Ph.D., is an Associate Professor in the Human Biology Division at Fred Hutch Cancer Center in Seattle, WA. The Berger lab is focused on improving the outcomes of lung cancer patients through discovery of the genomic determinants of lung cancer initiation and therapeutic response. Dr. Berger was part of the team that discovered and characterized important lung cancer driver mutations including RIT1 and MET exon 14 skipping. The Berger lab applies state-of-the-art functional genomic technology such as CRISPR knockout screens, CRISPR prime editing, single cell RNA-sequencing, and long-read transcriptome sequencing to identify novel cancer driver mutations and understand mechanisms of resistance to cancer therapies.

Eric Collisson, Assistant Professor, Human Biology, FHCC

FHCC faculty talk title: Directing Immunity in Pancreatic Adenocarcinoma



Dr. Eric Collisson is a medical oncologist who studies how genetics and immune environment shape the behavior of lung and pancreatic cancers. Differences in the genetics and molecular characteristics within a tumor and between tumors in the same patient can influence how they progress and respond to therapy. Dr. Collisson studies the role of tumor genetic drivers, and how a tumor's genetics intersect with its immune environment to help it sidestep immune attack. In his clinical practice, Dr. Collisson applies new technologies in the service of precision medicine, revealing how a patient's genetics influence their susceptibility to cancer, and how the genetics of their tumor influences treatment response.

David MacPherson, Professor, Human Biology, FHCC

FHCC faculty talk title: Small cell lung cancer: biology and new therapies



The MacPherson lab applies genomic approaches and in vivo models to understand the biology of small cell lung cancer (SCLC). We study patient tumor samples and mouse models and make extensive use of functional genetic screens in our interrogation of genes that drive SCLC initiation, progression and response to therapy.

Daniel Blanco-Melo, Assistant Professor, Vaccine and Infectious Disease, FHCC

FHCC faculty talk title: Multiomic characterization of past viral infections

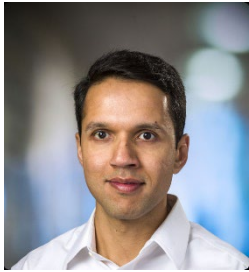


Dr. Daniel Blanco-Melo is an Assistant Professor in the Vaccine and Infectious Disease Division at Fred Hutchinson Cancer Center and holds a joint appointment in the Herbold Computational Biology Program within the Public Health Sciences Division. He is also a faculty member in the Department of Global Health and the Department of Microbiology at the University of Washington. Dr. Blanco-Melo earned his Bachelor of Science in Genomics from Universidad Nacional Autónoma de México (UNAM), his Ph.D. in Biological Sciences at The Rockefeller University and a postdoctoral fellowship at the Icahn School of Medicine at Mount Sinai. His research focuses on

understanding the mechanisms and evolution of animal antiviral strategies by characterizing the properties of past viral infections.

Rasi Subramaniam, Professor, Basic Sciences, FHCC

FHCC faculty talk title: Decoding RNA regulatory networks in human cells by RNA-linked CRISPR screening



Dr. Subramaniam studies the biology of RNA molecules with a specific focus on mRNA translation and stability. His group uses computational modeling and high throughput experiments to identify mechanisms regulating RNA fate and to design RNAs with desired functional characteristics. His research has been recognized with an NSF CAREER award and an NIH Director's Transformative Research Award. Dr. Subramaniam holds a PhD in theoretical physics from the University of Chicago and an undergraduate degree in materials engineering from the Indian Institute of Technology Madras.

Kamen Simeonov, Assistant Professor, Public Health Sciences, FHCC

FHCC faculty talk title: Single-cell lineage recording of cancer metastasis



The Simeonov Lab develops molecular recorders – engineered tools that enable cells to log aspects of their own biology directly into their DNA – to study cancer evolution. While tumors are known to harbor extensive genetic, epigenetic, and transcriptional heterogeneity, identifying which cell states drive aggressive behaviors like metastasis remains a major challenge. To address this, we build recording systems (e.g. [macsGESTALT](#)) that capture critical information on lineage relationships and signaling exposures within developing tumors. By coupling these recorders with single-cell sequencing, we are able to reconstruct the natural histories of tumors and pinpoint the cellular trajectories that underlie metastasis and therapeutic resistance. In this talk, I will describe how these tools work and how we use their output to produce insights into the biology of pancreatic cancer metastasis, while highlighting potential wetlab and computational projects in the lab.

SCRI Faculty Talks Breakout Session

Note: the speakers are organized by Center affiliation at SCRI

Ben Towne Center for Childhood Cancer and Blood Disorders Research

Scientists at the Ben Towne Center for Childhood Cancer and Blood Disorders Research have a singular mission: to discover and translate research advances that lead to new cures for children, adolescents and young adults with cancer. Using state-of-the-art tools and knowledge, our investigators are generating critical new insights into the biology of childhood cancer and harnessing the power of the immune system to create new cures.

<https://www.seattlechildrens.org/research/centers-programs/childhood-cancer/>

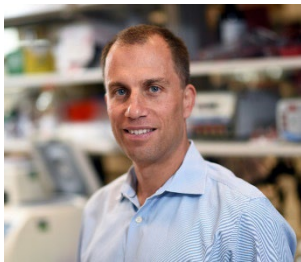
Dr. Joelle Straehla



Joelle Straehla, M.D. is a principal investigator at Seattle Children's Research Institute and a pediatric oncologist in the Brain Tumor Program at Seattle Children's Hospital. She is an Assistant Professor of Pediatrics and an Adjunct Assistant Professor of Bioengineering at the University of Washington. The Straehla lab seeks to advance drug delivery technologies for pediatric cancers, with a special interest in cancer nanomedicine. In the clinic, she cares for children with brain and spinal cord tumors, and is involved locally and nationally in consortia focused on improving brain tumor drug delivery through collaborative research.

Dr. Straehla received her M.D. from Northwestern University, then completed her pediatric residency training at Seattle Children's Hospital/University of Washington. She completed a fellowship in pediatric hematology/oncology at Dana-Farber/Boston Children's Cancer and Blood Disorders Center, where she gained additional training in biological and chemical engineering in the laboratory of Dr. Paula Hammond at Massachusetts Institute of Technology. Prior to joining Seattle Children's in 2024, she was an Instructor of Pediatrics at Harvard Medical School, and a Charles W. (1955) and Jennifer C. Johnson Clinical Investigator at MIT's Koch Institute for Integrative Cancer Research. Her goal is to harness cutting edge engineering methods to improve outcomes for children with cancer.

Dr. Andras Heczey



Dr. Heczey is a physician scientist with ~15-year-experience in basic, translational, and early phase clinical research evaluating chimeric antigen receptor expressing T cells and Natural Killer T cells to treat children and adults with solid tumors. He is joining Seattle Children's / Seattle Children's Research Institute as professor of pediatrics and the scientific director of translational research of Seattle Therapeutics starting August 1st 2025. His work has been funded by peer-reviewed competitive sources including federal (NIH/NCI), state (Cancer Prevention and Research Institute of Texas) and NGO (American Cancer Society, V Foundation,

ALSF, St. Baldrick's etc) mechanisms. His team's research has been published in high impact journals including Nature Medicine, Blood, Cancer Immunology Research and this year in Nature. He has mentored post-doctoral researchers since 2014 and graduate students since 2022. Dr. Heczey is married to Mary Austin MD, a pediatric surgeon, they have three children (7, 12 and 14), a cat and a hedgehog. The family loves the outdoors, especially swimming, biking and running.

Norcliffe Foundation Center for Integrative Brain Research

Researchers in the renowned Norcliffe Foundation Center for Integrative Brain Research (NFCIBR) are playing a pivotal role in the rapid evolution of neuroscience research. Our diverse researchers are unraveling the mechanisms of neurological, developmental, psychiatric, autonomic and metabolic disorders, working to integrate this knowledge at the genetic, molecular, cellular, network and behavioral levels.

<https://www.seattlechildrens.org/research/centers-programs/integrative-brain-research/>

Center for Global Infectious Disease Research

CGIDR is one of the largest pediatric infectious disease research programs globally. Our cross-disciplinary team of researchers are working to find solutions to infectious diseases that can pose risks to our communities, and disproportionately impact children and those in poverty.

Members of CGIDR work to understand, treat and prevent a wide spectrum of infectious diseases, making notable advances in HIV/AIDS, tuberculosis, malaria, human papillomavirus, group B streptococcus and SARS-CoV-2 (the source of COVID-19).

<https://www.seattlechildrens.org/research/centers-programs/global-infectious-disease-research/>

Center for Child Health, Behavior and Development

Our center brings together a diverse and talented group of research scientists with different backgrounds with a singular

purpose: to work collaboratively to address major issues that affect the health of children everywhere.
<https://www.seattlechildrens.org/research/centers-programs/child-health-behavior-and-development/>

Center for Clinical and Translational Research

The Center for Clinical and Translational Research (CCTR) is home to more than 400 research faculty and staff members from over 30 subdivisions and is the hub for clinical investigation and therapeutic development at SCRI. The center plays an integral role locally, nationally and internationally in turning scientific discoveries into improved treatments for children. Building on a history of ground-breaking achievements, CCTR investigators and staff are working together to develop next generation therapies for a wide range of pediatric diseases and disorders.

<https://www.seattlechildrens.org/research/centers-programs/clinical-and-translational-research/>

Center for Immunity and Immunotherapies

As world leaders in gene therapy and editing, cellular therapy and protein therapeutics, the Center for Immunity and Immunotherapies (CIIT) is pioneering research that could revolutionize treatment for hundreds of rare and common genetic disorders, curing disease at the source. CIIT researchers are working toward a day when kids won't need these lifelong treatments. Instead, they'll get a cell therapy — a single infusion of cells that addresses a disease's cause and, ideally, cures it forever.

<https://www.seattlechildrens.org/research/centers-programs/immunity-and-immunotherapies/>

Center for Developmental Biology and Regenerative Medicine

Scientists at the Center for Developmental Biology and Regenerative Medicine have a singular mission: to heal damage caused by childhood developmental abnormalities and acquired illnesses by studying the body's response to injury.

<https://www.seattlechildrens.org/research/centers-programs/developmental-biology-regenerative-medicine/>



Nicholas Chavkin, PhD, is an assistant professor in the Center for Developmental Biology and Regenerative Medicine in the Department of Pediatrics, Division of Cardiology at the University of Washington School of Medicine. The primary interest of the Chavkin Lab at Seattle Children's Research Institute is to better understand dynamic cardiac tissue resilience during heart disease, with the ultimate goal of identifying therapeutic strategies that increase resilience to stressors on the heart.

Chavkin received his PhD from the University of Washington, Department of Bioengineering, in the lab of Dr. Cecilia Giachelli. He then trained as a postdoctoral fellow under the mentorship of Dr. Karen Hirschi and Dr. Kenneth Walsh, starting at Yale

University and continuing through a lab move to the University of Virginia. Chavkin was awarded an American Heart Association Career Development Award in 2023.

Center for Respiratory Biology and Therapeutics

The Center for Respiratory Biology and Therapeutics brings together scientific research teams to build a transformative “bench to bedside and back” effort to drive the next phase of discoveries and novel therapeutics for pediatric respiratory diseases.

<https://www.seattlechildrens.org/research/centers-programs/respiratory-biology-and-therapeutics/>