Thomas Hawn, MD, PhD, SEATRAC Leadership, UW

Tom's laboratory examines why individuals have different susceptibility to infections and whether these insights can lead to novel treatment and vaccine strategies. Studies include examining the functional and clinical significance of human variation in the innate immune system and its regulation of susceptibility to tuberculosis and other infections. His laboratory defines and characterizes the cellular function of genetic polymorphisms in innate immune response genes and the mechanisms of how they regulate susceptibility to human infection with al goal of elucidating novel therapeutic strategies.

Chetan Seshadri, MD, SEATRAC Leadership, UW

Dr. Seshadri received his MD from Rutgers New Jersey Medical School and completed his residency in Internal Medicine at Duke University. He served as a field doctor for Medecins sans Frontieres (Doctors Without Borders) prior to fellowship training in Infectious Diseases at Massachusetts General Hospital and the Brigham & Women's Hospital. He currently leads SEATRAC, a translational research program whose focus is to understand the factors required for protective immunity against Mycobacterium tuberculosis.

Kevin Urdahl, MD, PhD, SEATRAC Leadership, Seattle Children's Research Institute

Dr. Urdahl graduated from Concordia College (Moorhead, Minnesota), and earned an MD and a PhD in Microbiology/Immunology from the University of Minnesota. He completed a Pediatrics residency and an Infectious Diseases fellowship at Seattle Children's Hospital, and his postdoctoral work in Immunology at the University of Washington. He started his career as a primary investigator in the Department of Pediatrics at the University of Washington before joining the Center for Infectious Disease Research in 2010 (formerly known as the Seattle Biomedical Research Institute), which is now part of the Seattle Children's Research Institute. Dr. Urdahl also continues to be an attending physician in Pediatric Infectious Diseases at Seattle Children's Hospital.

Rhea Coler, PhD, SEATRAC Leadership, Seattle Children's Research Institute

Dr. Coler received her PhD from the University of Washington, MSc from the London School of Hygiene and Tropical Medicine (LSHTM) and BSc from McGill University. She is a member of the Center for Global Infectious Disease Research at Seattle Children's Research Institute; a professor in the Department of Pediatrics, Division of Infectious Diseases; and an adjunct professor in the Department of Global Health, Interdisciplinary Doctoral Program in Pathobiology, University of Washington. Her research is supported by grants from NIH's National Institute of Allergy and Infectious Diseases and a variety of local and international biotechnology companies. She is MPI of SEATRAC, scientific advisor at HDT Bio, expert working group member of the Infectious Diseases Clinical Research Consortium (IDCRC) and her lab is a Vaccine Treatment Evaluation Units (VTEUs) site.

Andrew Fiore-Gartland, PhD, SEATRAC Leadership, Fred Hutch

Dr. Fiore-Gartland is a biostatistician and computational biologist seeking to understand immune responses induced by vaccination, with the goal of identifying the specific responses that mediate protection. He has expertise in analysis of multiparameter flow cytometry, T cell receptor repertoire sequencing, and transcriptomic biomarkers. As a faculty member of the NIH HIV Vaccine Trials Network (HVTN) and Co-Director of the Vaccine and Immunology Statistical Center (VISC) he leads a team of statisticians and data scientists that conduct collaborative quantitative research to accelerate vaccine and biomarker development for TB, HIV, COVID-19, malaria and other diseases.

David Sherman, PhD, SEATRAC Leadership, UW

Dr. Sherman is a Professor and Department Chair of the Department of Microbiology in the University of Washington School of Medicine in Seattle. He earned his PhD in Biochemistry from Vanderbilt University, and performed post-graduate work at the Rockefeller University and at Washington University in St. Louis. His laboratory studies the molecular genetics, systems biology and pathogenesis of M. tuberculosis, and is also engaged in drug discovery efforts for mTB. Dr. Sherman played a lead role in the discovery and early development of the anti-TB agent pretomanid. In addition, his laboratory defined the mutation responsible for attenuation of the world's most widely used vaccine, BCG.

Nitin Baliga, PhD, Institute for Systems Biology

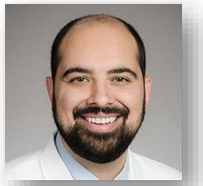
Dr. Baliga did his early schooling in Mumbai, India, where he received a B.Sc. in Microbiology (1992) from Ruia College within the Mumbai University system. Dr. Baliga did his early schooling in Mumbai, India, where he received a B.Sc. in Microbiology (1992) from Ruia College within the Mumbai University system. Together with collaborators at the University of Washington, and the Lawrence Berkeley Laboratories, he is now elucidating the biological networks underlying social interactions and fuel production by microbes.

Arielle Butts, PhD, Research Scientist IV Seattle Children's Research Institute

Over the course of her career, Arielle has worked across the drug discovery pipeline with several pathogens of critical importance. She has been a part of Dr. Tanya Parish's lab for over six years where her work focuses on compound screening and mechanistic characterization of novel compounds with activity against intramacrophage M. tuberculosis. Prior to joining the Parish lab, Arielle worked with multiple human fungal pathogens and focused on target selection and validation, assay development, compound screening, and mechanistic characterization for novel antifungals.

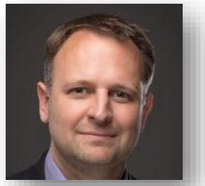
Adrienne Shapiro, MsC, MD, PhD, SEATRAC Consultant, UW

Dr. Shapiro is an Assistant Professor in the Departments of Global Health and Medicine (Division of Allergy and Infectious Diseases). Her research focuses on strategies to improve diagnosis and prevention of tuberculosis (TB), particularly in people with HIV and in low and middle-income country settings. Her current projects include a randomized controlled trial of community-based TB preventive therapy delivery, a study to develop optimized TB diagnostic algorithms using novel point-of-care tools, and TB vaccine and vaccine acceptability studies. Dr. Shapiro is a member of several international guideline committees for TB treatment and diagnostics. She sees patients at Harborview Medical Center as an infectious diseases consultant and HIV primary care provider.



Bijan Ghassemieh, MD

Dr. Ghassemieh is a pulmonologist and critical care doctor at the University of Washington. He has a subspecialty clinical expertise in tuberculosis. He is the Senior Staff Physician at the Seattle & King County Public Health TB Clinic, the Medical Director for Washington State TB ECHO (Extension for Community Healthcare Outcomes), and the Seattle site co-PI for the US CDC TB Trials Consortium.



Paul Drain, MD, PhD, SEATRAC Leadership, UW

Dr. Drain's research group focuses on development, evaluation and implementation of diagnostic testing and clinic-based screening, including novel point-of-care technologies, to improve clinical care and patient-centered outcomes for TB and HIV in resource-limited settings. He is the Director of Clinical and Translational Research at the International Center for Clinical Research (ICRC) at the University of Washington. He currently teaches in the School of Public Health, and for medical students. He research has been supported by several institutes of the NIH, the Infectious Disease Society of America, Bill and Melinda Gates Foundation, the US CDC, the US Department of Defense, the NIH Center for AIDS Research, and more.

Javeed Shah, MD, SEATRAC Consultant, UW

The Shah Lab is interested in understanding the factors that influence host immune responses to TB. In particular, we are focused on ways that macrophages, the primary cell infected by M. tuberculosis, can maintain function during prolonged infection. To this end, the Shah Lab has identified the critical stress response gene, TOLLIP, as a TB susceptibility gene that influences macrophage function over time. Our lab is dedicated to pursuing how these genes and others like them influence TB pathogenesis using a combination of human population-based methods and small animal models.

Jerry Cangelosi, PhD

Jerry Cangelosi is a Professor Emeritus of Environmental and Occupational Health Sciences, School of Public Health, University of Washington. His research activities in the academic, for-profit, and not-for-profit sectors have generated 10 patents and over 100 publications on tuberculosis and related diseases, food- and water-borne pathogens, respiratory diseases including COVID-19, and healthcare-associated infections. These activities share a strong emphasis on translation and global health impact. His research consortium was the first to describe oral sampling strategies (tongue swabs) for high-throughput, non-invasive tuberculosis case detection in clinical and community settings.

Erin McConnell, MPH, Treatment Action Group

As a senior TB project associate, Erin works to capacitate and support community advisory boards that help shape the TB research and dissemination globally. Erin joined TAG in 2022 after working in infectious disease drug development, teaching English abroad, and policy analysis for medicine access, disability, and justice.

John Green, Author

John Green is the New York Times bestselling author of Looking for Alaska, An Abundance of Katherines, Paper Towns, The Fault in Our Stars, Turtles All the Way Down, The Anthropocene Reviewed and the brand new book Everything is Tuberculosis. He is one half of the vlog brothers on YouTube and co-creator of educational series Crash Course. EVERYTHING IS TUBERCULOSIS: The History and Persistence of Our Deadliest Infection traces the journey of a young tuberculosis patient in Sierra Leone woven together with the scientific and social histories of how this disease has shaped our world and how our choices will shape the future of tuberculosis.

David Horne, MD, MPH, UW

Associate Professor in the Division of Pulmonary, Critical Care & Sleep Medicine and Adjunct Associate Professor of Global Health at the University of Washington, Dr. Horne is a staff physician at the TB Control Program, Public Health – Seattle & King County. Dr. Horne's broad research interests are in various aspects of tuberculosis and latent tuberculosis infection, including transmission, epidemiology, diagnosis, and dissemination of best practices.

Jason Simmons, MD, PhD, UW

Dr. Simmon's research interests include exploring human cohorts with rare immune outcomes to better understand natural resistance to infection with the hope that protective pathways may be identified for therapeutic targeting. With a focus on Mycobacterium tuberculosis (Mtb), the agent that causes human tuberculosis infection, he combines results from genetic association studies with findings from macrophages exposed to Mtb in vitro to identify novel host resistance pathways. His additional interests include better defining immune reactions that complicate and are commonly seen in leprosy.

Engi Attia, MD, MPH, UW

Dr. Engi Attia received her medical degree from the University of Texas Southwestern Medical Center and a Master's in Public Health from the University of Washington. She completed her Fellowship in Pulmonary and Critical Care Fellowship here at the University of Washington. Engi's research interests involve the intersection of chronic lung disease and HIV infection. In collaboration with TREE at the Coptic Hope Center in Nairobi, Kenya, she is examining chronic lung diseases and associated risk factors among individuals with HIV infection, with a particular interest in adolescents with vertically-acquired HIV.

Jen Ross, MD, MPH, UW

Assistant professor in the Departments of Medicine and Global Health, and a staff physician at VA Puget Sound Health Care System, Dr. Ross received her MD and MPH from Oregon Health and Science University. Dr. Ross completed her residency at University of California, San Francisco and a fellowship in infectious diseases at University of Washington. Dr. Ross is the recipient of several prestigious awards.

Sylvia LaCourse, MD, MPH SEATRAC Leadership, UW

Dr. LaCourse's research focuses on improving TB screening, diagnosis, and prevention in peripartum people and children in high HIV-burden settings. Additional research interests include SARS-CoV-2 in peripartum people. Dr. LaCourse is a GWACh (Global Women, Adolescent, and Child health) scientific lead, Kenya Research and Training Center (KRTC) faculty member, and TB ECHO faculty. She is committed to inclusion as an IMPAACT (International Maternal Pediatric Adolescent AIDS Clinical Trials Network) TB Scientific Committee mentored junior investigator, and International Union Against TB and Lung Disease Maternal Child Health Working Group Scientific Co-Lead.

Josh Herbeck, PhD

Josh Herbeck is a Senior Program Officer for Data Analytics & Modeling in the HIV/TB Program Strategy Team at the Gates Foundation, and an Affiliate Associate Professor in the Department of Global Health at the University of Washington. He received his PhD at the University of California, Berkeley, followed by a postdoctoral fellowship in HIV evolution and epidemiology at the University of Washington. His research interests are in phylogenetics, epidemic modeling, and infectious disease prevention.

Sarah Iribarren, PhD, RN, UW

Dr. Iribarren's program of research focuses on developing innovative patient-centered approaches to bridge gaps between patients and health care professionals to improve clinical outcomes. In particular, her efforts have focused on TB and HIV prevention and treatment management within low- and middle-income settings and amongst disadvantaged populations. During doctoral studies, Dr. Iribarren was a Fogarty International Clinical Research Scholar in Argentina.

Rafael Hernandez, MD, PhD, Seattle Children's Research Institute

Dr. Hernandez, MD, PhD, is a member of the Center for Global Infectious Disease Research (CGIDR) at Seattle Children's Research Institute and an acting instructor in the Department of Pediatrics, Division of Infectious Diseases, at the University of Washington. He also provides patient care as an attending physician in pediatric infectious diseases at Seattle Children's Hospital. The Hernandez Lab uses a combination of genetics, molecular biology, cell culture models and animal models to probe the interactions between mycobacterial pathogens and host immune cells.

Grace John-Stewart MD, PhD, UW

Professor in the Departments of Global Health, Medicine, Epidemiology and Pediatrics at University of Washington. Her research focuses on advancing infectious diseases research in women, adolescents and children, as part of a collaborative research in Kenya. This work has included clinical trials, molecular epidemiology, implementation science, and large-scale evaluations. She is Co-Director of the UW Center for Global Health of Women, Adolescents and Children (UW Global WACh), an Associate Director of UW/Fred Hutch Center for AIDS Research (CFAR), and a member of the Kenya Research and Training Center.