

Division of Intramural Research

NAEHS Council Update

June 2024

Chief of the Center for Climate Change and Health Research

NIEHS is recruiting a Senior Investigator to serve as Chief of a new Center for Climate Change and Health Research (CCCHR) at NIEHS in the Division of Intramural Research (DIR). The CCCHR is a new trans-NIH center focused on advancing our understanding of the impact of climate change on human health. The goals of the CCCHR are to: 1) create a central hub that will facilitate research on the health impacts of climate change; 2) build a cadre of IRP scientists interested in Climate Change and Health (CCH) research and foster cross-cutting and convergent research partnerships; and 3) support the research and career development of both junior and experienced scientists interested in CCH research. The successful candidate will bring dynamic vision and leadership to the CCCHR while serving as a catalyst for innovation for climate change research across the NIH Intramural Research Program. The candidate will be responsible for overseeing the center's research operations, building partnerships with other NIH Institutes, Centers, and Offices, and providing scientific leadership to IRP investigators with joint appointments to the CCCHR. Applicants conducting research focused on understanding the biological mechanisms underlying the effects of climate change on health are encouraged to apply. The ideal candidate will be tenure-eligible based on an outstanding academic record of achievement, leadership capabilities, and broad interests in CCH research. The successful candidate for this position will also maintain an active independent research program. Dr. Paul Wade, Senior Investigator and Chief of the Epigenetics and Stem Cell Biology Laboratory serve as chair of the search committee which launched May 24, 2023.

Tenure-Track Investigator in the Immunity, Inflammation and Disease Laboratory

NIEHS is recruiting a Tenure-Track Investigator to study fundamental mechanisms by which immune and inflammatory responses are triggered and regulated in the lung and other organs and contribute to disease, with a particular focus on asthma, host defense/innate immunity, lung fibrosis, and cardiovascular disease. In addition to building upon current strengths, areas of special interest for future growth of IIDL include: (i) immunometabolism (programming of the immune response by changes in cellular metabolic pathways); (ii) mucosal immunity (lung, gut, other) including the heterogeneity, ontogeny, and/or function of immune, epithelial, and stromal tissue-resident cells; and (iii) systems biology of the immune response. However, we enthusiastically welcome applications from outstanding scientists in all fields of immunology. The successful candidate is expected to lead an innovative, independent research program exploring the mechanism of immune responses that enhances our understanding of the effects of the environment on human health. Applicants should have a Ph.D., M.D. and/or equivalent doctoral degree with at least 3 years of postdoctoral research experience in their field and an outstanding publication record. The emphasis will be on identifying an exceptional scientist with an innovative and productive research program. Dr. Anant Parekh, Senior Investigator and Chief of the Signal Transduction Laboratory serves as chair of the search committee which launched February 27, 2023.

DIR STAFF UPDATES

Chief of the Administrative and Research Services Branch

Ms. Amy Doster was appointed Chief of the Administrative and Research Services Branch in DIR in January 2024. She previously served as Chief of the Administrative Management Branch at the National Institute on Drug Abuse (NIDA). Ms. Doster brings a wealth of administrative experience having served at NIH in a variety of capacities including as Director of the Division of Administrative Services in the NIH Office of Extramural Research and as an Administrative Officer in the National Heart Lung Blood Institute, the National Institute of Allergy and Infectious Disease and at the Warren Grant Magnuson Clinical Center.

New Tenure-Track Investigators

Dr. Julieta Lischinsky from the Neuroscience Institute at New York University Grossman School of Medicine joined the Neurobiology Laboratory as an Earl Stadtman Tenure Track Investigator on January 16, 2024. Dr. Lischinsky will initiate an independent program focused on developing and applying innovative neuroscience approaches to elucidate how social sensory information is encoded and impacts behavior across developmental stages and how these mechanisms are disrupted during early life adversity and in psychiatric conditions, such as autism spectrum disorder (ASD). She has also been selected as a member of the NIH Distinguished Scholars Program.

Dr. Rajula Elango from Harvard Medical School joined the Genome Integrity and Structural Biology Laboratory as a tenure-track investigator on January 28, 2024. Dr. Elango will initiate an independent research program focused on studying DNA damage and repair pathways and how environmental stressors impact these processes. She has also been selected as a member of the NIH Distinguished Scholars Program.

Medical Director of the Clinical Research Unit

Dr. Lawrence Kirschner has accepted an offer to join NIEHS as a Senior Clinician in the Clinical Research Branch (CRB) and to serve as Medical Director of the NIEHS Clinical Research Unit (CRU) and Director of Clinical Operations for the [NIEHS Personalized Environment and Genes Study](#) (PEGS) on the NIEHS campus in Research Triangle Park, North Carolina. Dr. Kirschner is a physician-scientist and clinical endocrinologist with expertise in treating patients with pituitary and adrenal tumors (including adrenal cancer and pheochromocytoma), and inherited syndromes that cause endocrine tumors or other endocrine dysfunction. Prior to joining NIEHS, he served as a Professor of Internal Medicine in the Division of Endocrinology, Diabetes and Metabolism at The Ohio State University College of Medicine in Columbus, Ohio. Dr. Kirschner has a tentative start date in August 2024.

DIR COMMITMENT TO DIVERSITY, EQUITY, INCLUSION AND ACCESSIBILITY

NIH Distinguished Scholars Program

Dr. Julieta Lischinsky (NL) and Dr. Rajula Elango (GISBL) were selected to participate in the NIH Distinguished Scholars Program based on their demonstrated commitment to lowering barriers to participation in science for individuals traditionally underrepresented in science. Drs. Lischinsky and Elango join four DIR Investigators selected to previous DSP cohorts: Drs. Joseph Rodriguez (ESCBL), Benedict Anchang (BCBB), Jason Watts (ESCBL) and Carlos Guardia (RDBL) as well as Dr. Dondrae Coble (CMB Chief) a Senior Scientist member of the DSP cohort.

DIR Diversity, Equity, Inclusion and Accessibility (DEIA) Working Group

A voluntary working group of more than 50 members including administrative, scientific, and scientific support employees, trainees, and contractors representing all DIR Laboratories and Branches has been organized and is co-chaired by Dr. Raja Jothi, Senior Investigator in ESCBL and Dr. Steven Tuyishime, Assistant Scientific Director. This working group has been charged with proposing recommendations to the Scientific Director to improve and enhance diversity, equity, inclusion, and accessibility throughout the DIR workforce. Initial recommendations were provided to the Scientific Director and DIR Council in late 2022 and an action plan is currently being developed to prioritize and implement new policies and programs in 2023.

The working group is divided into four thematic subgroups each with two co-leaders:

Subgroup 1: Recruitment and Retention (Joe Rodriguez and Yesenia Rodriguez)

Subgroup 2: Career Development (Jackson Hoffman and Vince Guerrero)

Subgroup 3: Performance, Evaluation, and Recognition (Justin Kosak and Francesco DeMayo)

Subgroup 4: Outreach and Engagement (Anne Marie Jukic and Steven Tuyishime)

INTERNATIONAL ACTIVITIES IN DIR FOR FY 2023

Collaborative Research Projects

- Dr. Benedict Anchang (Biostatistics and Computational Biology Branch) collaborated with Dr. Idowu Aimola at the Africa Centre of Excellence for Neglected Tropical Diseases and Forensic Biotechnology at Ahmadu Bello University in Zaria, Nigeria on development of a Nigerian maternal-fetal single-cell atlas. This collaboration was supported in part by 1ZIAES103350.
- Dr. John Cidlowski (Signal Transduction Laboratory) collaborated with Drs. Jenny Fiedler and Marcella Hermosa at the University of Chile in Santiago, Chile to study the physiology and pathophysiology of glucocorticoids. This collaboration was supported in part by 1ZIAES090057.
- Drs. Donald Cook and Hideki Nakano (Immunity, Inflammation and Disease Laboratory) collaborated with Dr. Ana-Maria Lennon- Duménil at the Institut Curie in Paris, France on shape-sensing mechanisms for dendritic cell migration in homeostasis. This collaboration was supported in part by 1ZIAES102025.
- Dr. Guohong Cui (Neurobiology Laboratory) collaborated with Dr. Ying Zhang at the First Hospital of Jilin University in Changchun, China on neural mechanisms of deep brain stimulation and impact of physical exercise on Parkinson's disease. These collaborations were supported in part by 1ZIAES103310.
- Dr. Francesco DeMayo (Reproductive and Developmental Biology Laboratory) collaborated with Dr. Haengseok Song at CHA University, Seongnam in Gyeonggi, South Korea on the role of CFP1 in governing uterine epigenetic landscapes to intervene in progesterone responses in uterine physiology and suppression of endometriosis. This collaboration was supported in part by 1ZIAES103311.
- Drs. Serena Dudek and Georgia Alexander (Neurobiology Laboratory) collaborated with Dr. Tristan Stober of Ruhr-Universität in Bochum, Germany on a project titled “Perineuronal nets on CA2 pyramidal cells and parvalbumin-expressing cells differentially affect hippocampal dependent memory”. This collaboration was supported in part by 1ZIAES100221.
- Dr. Kelly Ferguson (Epidemiology Branch) collaborated with Dr. Vincent Jaddoe at the Erasmus Medical Center in Rotterdam, The Netherlands on The Generation R Cohort as a NIEHS Resource. This collaboration was supported in part by 1ZIAES101575.
- Dr. Michael Fessler (Immunity, Inflammation and Disease Laboratory) collaborated with Dr. Lisa Pang at University of Edinburgh in Midlothian, Scotland, United Kingdom on cell signaling mechanisms in host defense. This collaboration was supported in part by 1ZIAES102005.

- Dr. Carlos Guardia (Reproductive and Developmental Biology Laboratory) collaborated with Dr. Erica Watson at the Centre for Trophoblast Research at the University of Cambridge, United Kingdom on mechanisms of placental response to environmental stressors. This collaboration was supported in part by 1ZIA103370.
- Dr. Quaker Harmon (Epidemiology Branch) collaborated with Dr. Liv Kvalvik in the Department of Global Public Health and Primary Care, University of Bergen, Norway on pregnancy history at age 40 and later cardiovascular disease mortality and twin pregnancies and maternal/infant health. These collaborations were supported in part by 1ZIAES049003.
- Drs. Patricia Jensen and Nicholas Plummer (Neurobiology Laboratory) collaborated with Dr. Luciane H. Gargaglioni Batalhão at São Paulo State University-UNESP/FCAV, Jaboticabal, Brazil to study the role of locus coeruleus noradrenergic neurons in developmental regulation of breathing patterns and thermoregulation. This collaboration was supported in part by 1ZIAES102805.
- Dr. Anton Jetten (Immunity, Inflammation and Disease Laboratory) collaborated with Dr. Thomas Mercher at the Université Paris Saclay, France on the role of GLIS2 in pediatric acute megakaryoblastic leukemia. Dr. Jetten also collaborated with Dr. Pilar Santisteban, Instituto de Investigaciones Biomédicas "Alberto Sols", Universidad Autónoma de Madrid (UAM), Madrid, Spain on GLIS3 regulation of thyroid hormone biosynthetic genes in coordination with other thyroid transcription factors. Dr. Jetten also collaborated with Dr. Robert Tuckey at the University of Western Australia, Perth, Australia on the biological effects of CYP11A1-derived vitamin D derivatives in the skin and with Dr. Gilbert Vassart, Institut de Recherche Interdisciplinaire, Université Libre de Bruxelles, Brussels, Belgium on the role of GLIS3 in enteroendocrine cells. Dr. Jetten also collaborated with Dr. Jean-Pierre Benitah at Université Paris-Saclay, France on circadian regulation of CaV1.2 expression by ROR α in the mouse heart. These collaborations were supported in part by ZIAES101585, and 1ZIAES101586.
- Dr. Xiaoling Li (Signal Transduction Laboratory) collaborated with Dr. Shuang Tang of Fudan University Shanghai Cancer Center, China on ⁶⁸Ga-FAPI PET imaging in metastatic colorectal cancer. This collaboration was supported in part by 1ZIAES102205.
- Dr. Geoffrey Mueller (Genome Integrity and Structural Biology Laboratory) collaborated with Dr. Josefina Zakzuk at the University of Cartagena, Cartagena de Indias, Colombia on GST cross-reactive allergens. This collaboration was supported in part by 1ZIAES102906.
- Dr. Robert Oakley (Signal Transduction Laboratory) collaborated with Dr. Alicia D'Souza at Imperial College London, United Kingdom on the role of cardiac Glucocorticoid receptor in mediating the diurnal rhythm in ventricular arrhythmia susceptibility. This collaboration was supported in part by 1ZIAES090057.
- Dr. Lisa Rider (Clinical Research Branch) collaborated with Dr. Janine Lamb at the University of Manchester, Manchester, UK, and Dr. Chris Amos at Baylor College of Medicine on Myositis genetics by GWAS and Immunochip. Dr. Rider also collaborated with Dr. Helga Sanner at Oslo University, Norway on Norwegian Mother-Baby Study and Risk Factors in Juvenile Arthritis. She also collaborated with Dr. Sarah Tansley at University

- of Bath, United Kingdom and Dr. Lucy Wedderburn at the University College of London, United Kingdom on discovery of Myositis autoantibodies in juvenile myositis. Dr. Rider also collaborated with Dr. Angelo Ravelli at the IRCCS Istituto G. Gaslini in Genoa, Italy on a "treat to target" approach for juvenile dermatomyositis. Dr. Rider also collaborated with Dr. Lorenzo Cavagna at the Fondazione I.R.C.C.S. Policlinico San Matteo, Pavia, Italy, on classification criteria of antisynthetase syndrome. These collaborations were supported in part by 1ZIAES101074 and 1ZIAES101081.
- Dr. Dale Sandler (Chief, Epidemiology Branch) collaborated with Dr. Anthony Swerdlow at the Institute of Cancer Research, London, UK, Dr. Hazel Nichols at the University of North Carolina at Chapel Hill, and investigators participating in the NCI Cohort Consortium, to identify contributors to breast cancer risk among premenopausal women. This collaboration was supported in part by 1ZIAES044005.
- Dr. Robin Stanley (Signal Transduction Laboratory) collaborated with Dr. Alan Warren at the University of Cambridge, Cambridge, UK, on structural and functional studies of RNA Processing Machines. This collaboration was supported in part by 1ZIAES103247.
- Dr. Paul Wade (Epigenetics and Stem Cell Biology Laboratory) collaborated with Drs. Hidetoshi Kono of Chiba University, Japan and Hitoshi Kurumizaka of University of Tokyo, Japan on studies of structural and dynamic changes of nucleosomes upon GATA3 binding. This collaboration was supported in part by 1ZIAES101965.
- Dr. Clarice Weinberg (Biostatistics and Computational Biology Branch) collaborated with Dr. Liv Kvalvik at the University of Bergen, Norway on pregnancy complications and cardiovascular disease in women. She also collaborates with Drs. Anthony Swerdlow and Minouk Schoemaker and other members of the Premenopausal Breast Cancer Collaborative Group. These collaborations were supported in part by 1ZIAES040007 and 1ZIAES040006.
- Dr. Carmen Williams (Reproductive and Developmental Biology Laboratory) collaborated with Dr. Rebecca Robker The University of Adelaide, Australia on the effect of oxidative stress on embryo telomere length. Dr. Wei Xie at Tsinghua University, Beijing, China and Dr. Richard Schultz at the University of California, Davis on the roles of OBOX proteins in zygotic genome activation. Dr. Williams also collaborated with Dr. Johnny Kim at the Max Planck Institute for Heart and Lung Research in Bad Nauheim, Germany on the role of DUXBL in zygotic genome activation. These collaborations were supported in part by 1ZIAES102985.
- Drs. Darryl Zeldin and Matthew Edin (Immunity, Inflammation and Disease Laboratory) collaborated with Dr. Tim Warner and Dr. Jane Mitchell at the William Harvey Research Institute, Queen Mary University of London, United Kingdom, to measure eicosanoids in mice and humans with cyclooxygenase deficiency. Drs. Zeldin and Edin also collaborated with Dr. Jacques Behmoaras at Imperial College London, United Kingdom, to study the role of eicosanoids in type 2 diabetes and non-alcoholic fatty liver disease. Additionally, they collaborated with Dr. John Seubert at the University of Alberta, Edmonton, Canada to study the role of sEH in cardiac physiology and with Dr. Marilena Crescente at the Manchester Metropolitan University in Manchester, United Kingdom on the role of prostaglandins in platelet biology. These collaborations were supported in part by 1ZIAES025034.

International Meetings Organized

- Dr. Francesco DeMayo (Reproductive and Developmental Biology Laboratory) organized the annual meeting for the Society of Reproductive Investigations in Brisbane, Australia that was held March 21-25, 2023.
- Dr. Lisa Rider (Clinical Research Branch) organized the annual meeting of the International Myositis Assessment and Clinical Studies Group that was held in San Diego, California on November 10, 2023.
- Dr. Humphrey Yao (Reproductive and Developmental Biology Laboratory) organized the 9th International Symposium on the Biology of Vertebrate Sex Determination that was held in Kona, Hawaii on April 17-21, 2023.
- Dr. Darryl Zeldin (Immunity, Inflammation and Disease Laboratory) organized the 19th International Winter Eicosanoid Conference that was held in Baltimore, Maryland on October 15-17, 2023. He also is serving as an organizer for International Conference on Lipid Mediators in Health and Disease that will be held in Bethesda, Maryland on October 8-10, 2025.

Work with International, Multinational or Regional Foreign Organizations

- Dr. Chandra Jackson (Epidemiology Branch) served on the Global Sleep Health Task Force for the World Sleep Society. This work was supported in part by 1ZIAES103325.
- Dr. Anne Marie Jukic (Epidemiology Branch) partnered with Natural Cycles, an international organization that coordinates global data collection efforts related to female reproductive health.
- Dr. Geoffrey Mueller (Genome Integrity and Structural Biology Laboratory) was elected Secretary of the World Health Organization / International Union of Immunological Societies (WHO/IUIS) Allergen Nomenclature Subcommittee. This multi-national organization consists of experts from 5 continents and aims to maintain a consistent list of existing and new allergens with references to their exact sequences and publications. This activity was supported in part by 1ZIAES102906.
- Dr. Lisa Rider (Clinical Research Branch) served as a member of the International Myositis Assessment and Clinical Study (IMACS) Group which seeks to standardize the conduct and reporting of myositis clinical studies and engage in collaborative myositis research studies. She also served on the International Myositis Society (iMyoS). These efforts were supported in part by 1ZIAES101074 and 1ZIAES101081.
- Dr. Dale Sandler (Chief, Epidemiology Branch) is one of 4 investigators leading the Premenopausal Breast Cancer Collaborative Group. Other PIs are Hazel Nichols (University of North Carolina), and Anthony Swerdlow and Minouk Schoemaker (The Institute of Cancer Research, London, UK). This is an international consortium of more than twenty prospective cohort studies investigating factors associated with risk for breast

cancer diagnosed among women under age 50. This work is supported in part by 1ZIAES044005.

Dr. Humphrey Yao (Reproductive and Developmental Biology Laboratory) served as the elected Director for the Society for the Study of Reproduction.

Foreign Delegations Hosted

No Activities to Report

International Capacity Building

No Activities to Report