

NIDDK Central Repository 20th Anniversary Workshop: Promoting Secondary Research to Accelerate Medical Breakthroughs and Innovation

September 19-20, 2023



# **Speaker Biographies**

## Juhi Chaudhari, M.P.H.

Juhi Chaudhari, MPH, is the Project and Data Manager of CKD-EPI CT (Chronic Kidney Disease – Epidemiology collaboration: Clinical Trials) and is based at Tufts Medical Center in Boston. She supports a multidisciplinary, global research group focused on using individual participant data to evaluate surrogate endpoints for future CKD trials. She has a wide range of experience in building and maintaining this large repository of data - from challenges in forming collaborations and obtaining data to harmonizing data for accurate meta-analyses. At the same time, she is grateful for and inspired by the determination of the scientific community to share data for making faster progress in varied disease domains. Ms. Chaudhari gained her Pharmacy training from the Institute of Chemical Technology, India and an MPH in Epidemiology and Biostatistics from Tufts Medical Center, Boston. With this blend in expertise, she is driven to study different aspects in the lifecycle of treatments. Previously, she worked in a University of Baltimore funded needle-exchange program called Lowell PEERRS aimed at stemming the opioid epidemic in the Merrimack Valley of Massachusetts, and in a green technology project at the National Chemical Laboratory, India to study methods for environment-friendly disintegration of runoff drugs.

#### James W. Checco, Ph.D.

James Checco grew up in Minnesota and obtained his B.A. in Chemistry and Mathematics from St. Olaf College in 2010. Checco received his Ph.D. in Chemistry from the University of Wisconsin-Madison in 2015 under the mentorship of Sam Gellman, where his research focused on developing methods to inhibit protein-protein interactions using non-natural peptide "foldamers". After completing his Ph.D., Checco was a Beckman Institute Postdoctoral Fellow at the University of Illinois at Urbana-Champaign under the mentorship of Jonathan Sweedler, where he studied the molecular functions of D-amino acid-containing neuropeptides. In 2019, Checco joined the Chemistry faculty at the University of Nebraska-Lincoln, where his lab studies the molecular details of cell-to-cell communication by endogenous peptides. The ultimate goals of this research are both to understand fundamental processes in cellular communication and to identify novel targets for therapeutic intervention. The Checco lab approaches problems using diverse interdisciplinary methods, including chemical peptide synthesis, mass spectrometrybased analysis of complex mixtures, and cell-based signaling assays.

#### Jennifer Darragh, MLIS

Jennifer (Jen) Darragh is a Senior Research Data Management Consultant in the Center for Data and Visualization Sciences in the Duke University Libraries. In this role provides training and consulting services designed around supporting the research data lifecycle including general best practices as well as specialized topics (human participants research) and tools (workflow and repository). Darragh also serves as one of the service coordinators and curators for the Duke Research Data Repository. She also serves as a member curator for the Data Curation Network. Prior to joining Duke University, Jennifer was the Data Services and Sociology Librarian at Johns Hopkins University, the Social and Behavioral Sciences Librarian at Virginia Commonwealth University and the Data Archivist for the Population Research Institute at Penn State University. Throughout her career, Jennifer has gained particular expertise in the management, use and archiving of sensitive social, behavioral and health sciences data and has written and presented extensively in these areas. She has held numerous professional offices and volunteer roles in the Association of College and Research Libraries (ACRL), the International Association for Social Sciences Information Services and Technology (IASSIST), and most recently as President of the Research Data Access and Preservation Association in 2021 (RDAP). She has a Bachelor of Arts degree in Psychology from Westminster College (PA) and a Master of Library and Information Sciences degree from the University of Pittsburgh.

Patricia Flatley Brennan, RN, Ph.D.

Patricia Flatley Brennan, RN, Ph.D., is the Director of the National Library of Medicine at the National Institutes of Health. NLM is a leader in biomedical informatics and computational health data science research and the world's largest biomedical library. Dr. Brennan holds a Master of Science in Nursing and a Ph.D. in Industrial Engineering. Brennan is a Fellow of American Institute for Medical and Biological Engineering, an elected member of the National Academy of Medicine and a fellow of the American Academy of Nursing, the American College of Medical Informatics, and the New York Academy of Medicine.

#### Jeffrey Grethe, Ph.D.

Dr. Jeffrey Grethe has more than 2 decades of experience in providing collaborative data environments to biomedical researchers in order to advance scientific inquiry leading to new discoveries and treatments of human disorders. Within the Center for Research in Biological Systems (CRBS; https://crbs.ucsd.edu) at the University of California, San Diego he is the Principal Investigator for the NIDDK Information Network (dkNET; https://dknet.org), which serves the needs of basic and clinical investigators by providing seamless access to large pools of data, information, and resources relevant to the mission of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). dkNET builds on an infrastructure foundation provided by the Neuroscience Information Framework (NIF; https://neuinfo.org), where Dr. Grethe, as Principal Investigator, led the development of the technical infrastructure. The infrastructure underlying NIF and dkNET, SciCrunch (https://scicrunch.org), now supports a number of research communities. SciCrunch was designed to allow communities of researchers to create focused portals that provide access to resources, databases, information and tools of relevance to their research areas. This work is being further extended via the Open Data Commons for Spinal Cord Injury (ODC-SCI; https://odc-sci.org) and the Open Data Commons for Traumatic Brain Injury (ODC-TBI; https://odc-tbi.org) which are developing a FAIR data platform for spinal cord injury and traumatic brain injury researchers and is currently being launched on the extended SciCrunch framework. Most recently, he has become involved with NIH's SPARC program where he is the Technical Lead for the Curation and Knowledge Management Core (K-Core). K-Core has developed a comprehensive and robust data submission, curation and publication pipeline on top of a core set of standards which have been developed for and approved by the SPARC community. A primary output of K-Core is the SPARC Knowledge Graph - a semantic store that combines information on SPARC datasets annotated according to the SPARC Minimal Information Standard (MIS) with functional and anatomical topologically based connectivity knowledge for the autonomic nervous system (ANS).

#### Marianne K. Henderson, M.S., CPC, PMP

Ms. Henderson is the Senior Advisor for Division Resources and Biobanking in the Division of Cancer Epidemiology and Genetics of the U.S. National Cancer Institute, NIH. She supports large program and contract management, and infrastructure planning for molecular epidemiology. She is active in the International Society for Biological and Environmental Repositories (ISBER) (President 2011-12 and Chair, OAC 2012-2019, Science Policy and Education and Training CoP). She has received the ISBER Founders Award and the ISBER Distinguish Leadership and Service Award for her dedication to biobanking globally. She is E&T Co-Chair of the WHO/IARC-led LMIC Biobank and Cohort Building Network (BCNet); She sits on the editorial board for Biopreservation and Biobanking. Ms. Henderson is actively involved in large-scale biospecimen process improvements in operations, technology transfer, sustainability and repository automation.

#### Michael Keller, Ph.D.

Michael Keller, Ph.D., is a Principal at Booz Allen Hamilton with over 20 years of experience conceptualizing and implementing large-scale data sharing and analytics platforms. He oversees a portfolio of work across the NIH and VA, bringing together multi-disciplinary teams of researchers, technologists, and data scientists to develop and deploy innovative data sharing and analytics solutions. He serves as the Program Director for the Booz Allen team supporting NIDDK's Central Repository. Prior to working at Booz Allen Hamilton, Dr. Keller conducted post-doctoral research at the United States Army Medical Research Institute for Infectious Disease at Ft. Detrick, Maryland. He completed his Bachelor of Science in molecular biology at Lehigh University and his Ph.D. in microbiology and immunology with an emphasis in molecular virology at the Wake Forest University School of Medicine.

#### Dawei Lin, Ph.D.

Dr. Dawei Lin serves as the Associate Director for Bioinformatics and acts as the Senior Advisor to the Director of the Division of Allergy (DAIT), Immunology, and Transplantation at NIAID, NIH. He oversees the data strategies for the Division and ensures their implementation through the coordination and funding of research and technology programs. At the NIH level, Dr. Lin is a leader in formulating comprehensive data policies concerning biomedical data resources, which encompasses data repositories, tools, and computational infrastructure. His responsibilities include funding for the immunology research and clinical data repository, ImmPort, as well as various Big Data initiatives. On an international scale, Dr. Lin co-chairs the Research Data Alliance (RDA)/World Data System (WDS) Certifications of Digital Repository Interest Group and is a board member of CoreTrustSeal, a standard body that certifies trustworthy data repositories. Furthermore, he spearheads the development and enactment of the TRUST Principles for digital repositories. Prior to his tenure at NIH, Dr. Lin established the Bioinformatics Core at the University of California Davis Genome Center. He also played an instrumental role in the modernization and operation of the Protein Data Bank (PDB) at the Brookhaven National Laboratory in New York. Dr. Lin earned his Ph.D. in Physical Chemistry from Peking University in China.

### Sejal Mistry, Ph.D.

Sejal Mistry is an M.D.-Ph.D. Candidate at the University of Utah School of Medicine's MSTP program. She completed her Ph.D. in Biomedical Informatics with a focus on machine learning, data mining, and translational informatics. Her research focuses on understanding the etiology of type 1 diabetes mellitus using advanced computational methods. Prior to joining the MSTP program at the University of Utah, Sejal completed her Bachelor of Arts in Biomathematics at Rutgers University and conducted pediatric malnutrition research as a Fulbright Scholar in Pune, India.

#### Rebekah Rasooly, Ph.D.

Rebecca Rasooly, Ph.D., is the director of the Division of Extramural within the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD). In this role, she is responsible for scientific leadership and overseeing policy and management for grants to support NICHD research and training. Dr. Rasooly has worked in the NIH extramural program since 1999 to stimulate, plan, direct, and evaluate biomedical research programs. From 2001 to 2017, Dr. Rasooly was the director of the Genetics & Genomics Program in the Division of Kidney, Urologic, and Hematologic Diseases at the National Institute of Diabetes and Digestive and Kidney Diseases and served as deputy director of the division for three years. Dr. Rasooly did her undergraduate work at Harvard University and received her Ph.D. in genetics from Michigan State University. After completing postdoctoral work at the Albert Einstein College of Medicine, she was a Clare Boothe Luce Assistant Professor of Biological Sciences at St. John's University, where she led a funded research program on chromosome segregation in Drosophila melanogaster.

## Prasanna Santhanam, M.D.

Prasanna Santhanam is an Associate Professor in Clinical Medicine and Oncology at the Johns Hopkins University School of Medicine.

Dr. Prasanna Santhanam received his M.B.B.S. from B.J. Medical College and his M.D. from the NHL Municipal Medical College, Ahmedabad India. He performed an internal medicine residency and a fellowship in endocrinology, diabetes, and metabolism at Joan C Edwards School of Medicine, Marshall University. He underwent additional training in nuclear medicine, at the Department of Radiology and Radiological Sciences at Johns Hopkins, to pursue his research and clinical interests in nuclear medicine and molecular imaging of endocrine glands and disorders.

His research focuses on new metabolic and molecular imaging techniques for endocrine tissues, AI (Artificial Intelligence) and other predictive analytical tools for early risk stratification of metabolic disorders like diabetes and hypertension. He has used NIH Central Repository datasets like LOOK AHEAD for answering some important research questions pertaining to cardiometabolic health.

#### **Erik Schultes**

Erik Schultes is an evolutionary biologist with a data-intensive research focus and has held previous academic appointments at the University of California Los Angeles, The Whitehead Institute for Biomedical Research at the Massachusetts Institute of Technology, and the Santa Fe Institute. Since 2018, Erik has been the FAIR implementation lead at the GO FAIR Foundation and is now Senior Researcher at the Leiden Academic Center for Drug Research. Erik is coauthor on the original publication of the FAIR Guiding Principles and has, since 2016, been working with a diverse, international community of stakeholders to develop FAIR data and services. This work included the development of the first accredited FAIR awareness training programs for executives and practical introductions to FAIR data stewardship for front-line data producers. Erik is also co-developer of numerous FAIR maturity evaluation services and is the architect of the now widely adopted Three-Point FAIRification Framework (M4Ms, FIPs, and FDPs) that is deployed in numerous international settings.

#### Xujing Wang, Ph.D.

Xujing Wang, Ph.D., is a Program Director at the Division of Diabetes, Endocrinology, & Metabolic Diseases (DEM) within the National Institute of Diabetes and Digestive and Kidney Diseases. Dr. Wang manages a research portfolio of projects that utilize big data and advanced data science technologies, and that develop computational, or joint computational and laboratory approaches, in diabetes endocrinology, and metabolic disease research. Additionally, she also manages a portfolio in beta cell death, stress and survival pathways. Currently Dr. Wang also serve as a project scientist in the NIH Nutrition for Precision Health, and Bridge2AI common fund programs. Prior to joining the NIDDK, Dr. Wang had been an associate professor at the University of Alabama at Birmingham, and assistant to associate professor at the Medical College of Wisconsin. Dr. Wang received her Ph.D. in physics and had postdoctoral training in biophysics and medical engineering.