



Optum Epidemiology experts

John D. Seeger, PharmD, DrPH

Chief Scientific Officer

Dr. John Seeger joined Optum in 2001. In addition to his role as chief scientific officer for Optum Epidemiology, Dr. Seeger is adjunct faculty at the Harvard T.H. Chan School of Public Health. Dr. Seeger received a PharmD from the University of Arizona, a Master of Public Health from the University of Michigan and a Doctor of Public Health from the Harvard School of Public Health. Trained as a clinical pharmacist, Dr. Seeger spent 3 years on the faculty of the University of Illinois at Chicago, and also completed a residency in pharmacy practice. He served 5 years on the faculty at Harvard Medical School, Division of Pharmacoepidemiology. Dr. Seeger's research interests are predictors of drug therapy and the application of research methods that incorporate these predictors. He has worked extensively with propensity scores and related methods that seek to mitigate confounding by modeling drug therapy. He has applied these methods to research on a wide range of therapeutic areas, including diabetes and rheumatologic, cardiovascular, neurologic and gastrointestinal disorders, and vaccine safety and drug effects in pregnancy. Most of this work has involved the application of health insurance claims data as a foundation for studies of post-marketing drug safety. However, the availability of new data resources, such as electronic health records, has expanded the range of questions that can be addressed through observational techniques and correspondingly expanded the scope of Dr. Seeger's work. He has authored or co-authored more than 100 peer-reviewed articles and is a long-standing member, past president and Fellow of the International Society for Pharmacoepidemiology.

Florence T. Wang, ScD

Vice President, Epidemiology

Dr. Florence Wang joined Optum in 2007. She received a joint Doctor of Science in epidemiology and environmental health in 2005 and a Master of Science in Epidemiology in 2001 from the Harvard School of Public Health. Her

previous research focused on occupational surveillance, determinants of heavy metal burden, and environmental and genetic risk factors of cognitive decline, hearing loss and other health outcomes related to aging. Prior to joining Optum Epidemiology, she was a post-doctoral fellow in the Department of Environmental Health at the Harvard School of Public Health. At Optum, Dr. Wang has led prospective and retrospective cohort studies, nested case control studies, and studies in signal detection, comparative effectiveness and case algorithm development. Her work has been in the areas of vaccines, maternal and infant outcomes, neurology, oncology and cardiovascular disease.

Jessica M. Franklin, PhD

Principal Consultant, RWE

Dr. Jessica M. Franklin joined Optum in 2020 after 10 years as a faculty member in the Division of Pharmacoepidemiology and Pharmacoeconomics at Brigham and Women's Hospital and Harvard Medical School. Dr. Franklin has extensive experience in designing and leading studies of the effectiveness, safety and utilization of medications from large health care databases, including health insurance claims and electronic health records. She led the development and application of a wide range of novel methods in pharmacoepidemiology, such as automated variable selection and model building methods for propensity score adjustment, measures for evaluating covariate balance, and methods for incorporating free text data into model building through natural language processing (NLP). Dr. Franklin also cofounded the FDA and NIH-funded RCT DUPLICATE project focused on producing an empirical evidence base for the validity of real-world evidence on medications. She has authored or co-authored more than 150 articles in peer-reviewed medical, epidemiology and biostatistics journals. Dr. Franklin received a Bachelor of Science in mathematics from the University of Georgia and a doctorate in biostatistics from Johns Hopkins Bloomberg School of Public Health.

Andrea K. Chomistek, MPH, ScD

Senior Scientist

Dr. Andrea Chomistek joined Optum in 2018. She earned a Master of Public Health in epidemiology from the University of Michigan in 2006 and a Doctor of Science in epidemiology from the Harvard School of Public Health in 2011. She completed her postdoctoral training in the Department of Nutrition at the Harvard School of Public Health. Prior to joining Optum Epidemiology, Dr. Chomistek was an assistant professor in the Department of Epidemiology and Biostatistics in the School of Public Health at Indiana University-Bloomington. Her prior research focused on the relationship between physical activity and cardiovascular disease, as well as measurement of physical activity in epidemiological studies. She has published her work in top cardiology journals including the *Journal of the American College of Cardiology* and *Circulation*. At Optum, Dr. Chomistek has led studies in the areas of endometriosis, osteoporosis, pregnancy and migraine.

Najat J. Ziyadeh, MPH

Director of Epidemiology

Najat Ziyadeh joined Optum in 2001. She earned both her Master of Arts in medical science and Master of Public Health in epidemiology and biostatistics from Boston University in 2001. Prior to joining Optum Epidemiology, she conducted clinical research on the effects of angiogenesis inhibitors on human tumor growth and metastasis, chronic obstructive pulmonary disease, and described the smoking, drinking and dieting behaviors of adolescents based on sexual orientation. She has extensive experience in the analysis and reporting of large-scale post-marketing safety research studies for the pharmaceutical industry using a variety of health insurance claims databases. Her work at Optum has been in the areas of diabetes, cardiovascular disease, female health and antibiotic use.

Kandace L. Amend, PhD, MPH

Senior Epidemiologist

Dr. Kandace Amend joined Optum in 2007. She received a Master of Public Health in epidemiology from Tulane School of Public Health and Tropical Medicine in 1997, and a doctorate in epidemiology from University of Michigan School of Public Health in 2004. Prior to joining Optum Epidemiology group, Dr. Amend was an assistant professor at Mount Sinai School of Medicine with an appointment in the Department of Oncological Sciences. Her research focused primarily on the molecular epidemiology of breast cancer

to improve the understanding of racial disparities among African-American and Caucasian women with the disease. At Optum she has led retrospective studies using claims data focused on eye conditions, influenza, asthma, rhabdomyolysis, progressive multifocal leukoencephalopathy and vaccines.

Elizabeth J. Bell, PhD, MPH

Senior Epidemiologist

Dr. Elizabeth Bell joined Optum in 2018. She received her Master of Public Health and doctorate in epidemiology from the University of Minnesota in 2011 and 2015, respectively. At the University of Minnesota, Dr. Bell focused on identifying novel risk factors for cardiovascular diseases including stroke and venous thromboembolism. Prior to joining Optum, she completed a postdoctoral fellowship at Mayo Clinic in pharmacoepidemiology where she leveraged electronic health records to conduct research on drug safety. At Optum, Dr. Bell has led retrospective studies using claims and electronic health record data focused on drug safety, particularly in the areas of oncology, pregnancy and vaccines. She has published her work in top journals, including *Stroke*, *Mayo Clinic Proceedings*, *Heart* and *The American Journal of Medicine*.

Brandon J. Diessner, PhD, MPH

Senior Epidemiologist

Dr. Brandon Diessner joined Optum in 2020. He received his doctorate in epidemiology and biostatistics from the University of Minnesota in 2020 and his Master of Public Health in epidemiology from the University of Minnesota in 2016. Prior to joining Optum, his work focused on assessing risk factors for the development and progression of sarcomas, a rare group of connective tissue cancers that disproportionately occur early in life. At Optum, Dr. Diessner has led studies using claims and electronic health record data, particularly in the areas of oncology, neurology, respiratory disease and infectious disease. He has published in top journals including *JCO Precision Medicine*, *JAMA* and *The Journal of Urology*.

Katherine C. Hughes, ScD

Senior Epidemiologist

Dr. Katherine Hughes joined Optum in October 2018. She received her ScD in epidemiology from the Harvard T. H. Chan School of Public Health in 2016. Before joining Optum Epidemiology, she completed a postdoctoral fellowship in the Department of Nutrition at the Harvard T. H. Chan School of Public Health. Her previous work focused on the epidemiology of neurodegenerative diseases, particularly Parkinson's disease. Specifically, she conducted research on nutritional and genetic risk factors for Parkinson's disease, as well as projects related to identifying prodromal Parkinson's disease. Her work has been published in *Neurology*, *Journal of Neurology*, *Neurosurgery & Psychiatry* and *Movement Disorders*.

Rachel P. Ogilvie, PhD, MPH

Senior Epidemiologist

Dr. Rachel Ogilvie joined Optum in 2019. She received her doctorate in epidemiology from the University of Minnesota in 2017 and her Master of Public Health from Emory University in 2013. Prior to joining Optum Epidemiology, she was a Postdoctoral Scholar in Translational Sleep Medicine at the University of Pittsburgh. Her previous work focused on the epidemiology of sleep and cardiometabolic disease. Her work at Optum has focused on opioids and vaccines. She has published her work in top journals including *JAMA*, *The Lancet*, *Vaccine* and *Epidemiology*.

Ryan M. Seals, MS, ScD

Senior Epidemiologist

Dr. Ryan Seals joined Optum in 2019. He received his Master of Science in biostatistics and Doctor of Science in epidemiology from the Harvard T.H. Chan School of Public Health. His doctoral research focused on the incidence and etiology of neurodegenerative disease with an emphasis on occupational and environmental risk factors. Prior to joining Optum, he was an NIH postdoctoral research fellow at the Harvard T.H. Chan School of Public Health in neurostatistics. He has published numerous peer-reviewed articles in top journals including *Epidemiology*, *the American Journal of Epidemiology*, *Environmental Health Perspectives* and *Neurology*.

Lauren S. Peetluk, PhD, MPH

Epidemiologist

Dr. Lauren Peetluk joined Optum in 2022. She received her doctorate in epidemiology from Vanderbilt University in 2021. She received her Master of Public Health in epidemiology and biostatistics from Boston University School of Public Health in 2017. Prior to joining Optum Epidemiology, she worked as a research instructor in the Vanderbilt Department of Medicine Division of Infectious Diseases. Her previous research focused on understanding the drivers of unfavorable tuberculosis treatment outcomes, specifically developing prognostic models for tuberculosis treatment outcomes and applying causal inference methods to examine the impact of clinical characteristics on end-of-treatment outcomes. She has published in top journals, including *Clinical Infectious Diseases* and the *Journal of Infectious Diseases*.

Claire H. Pernar, ScD, MPH

Epidemiologist

Dr. Claire Pernar joined Optum in 2021. She received her Doctor of Science in epidemiology from the Harvard T.H. Chan School of Public Health in 2018 and her Master of Public Health from the University of Michigan School of Public Health in 2011. Prior to joining Optum Epidemiology, she was a research scientist in the Department of Epidemiology at the Harvard T.H. Chan School of Public Health. Her previous work focused on cancer epidemiology and prevention, including prostate cancer epidemiology, molecular tumor biomarkers, physical activity and quality of life. She has published in top journals including *European Urology* and the *American Journal of Epidemiology*.

Bora Plaku-Alakbarova, ScD

Epidemiologist

Dr. Bora Plaku-Alakbarova joined Optum in 2021. She received her ScD in epidemiology from the Harvard T.H. Chan School of Public Health in 2020 and her Master of Science from the University of Massachusetts Lowell in 2013. Prior to joining Optum Epidemiology, she was a research scientist in the Department of Environmental Health at the Harvard T.H. Chan School of Public Health. Her previous work has focused on childhood organochlorine chemical exposures and male puberty, as well as workplace stress among health care workers and patient outcomes. She has published in top journals, including *Chemosphere* and *Safety and Health at Work*.

Laura Yochum, MPH

Epidemiologist

Laura Yochum has been with Optum Epidemiology since 2014 where she works in the areas of diabetes, cardiovascular disease and pregnancy. She received her Master of Public Health in Epidemiology from the University of Minnesota School of Public Health. Prior to joining the Epidemiology group, Yochum was an epidemiologist at Cancer Research UK. She also conducted research on nutrition and cardiovascular disease including dietary flavonoids and antioxidant vitamins. She has published her work in the *American Journal of Epidemiology* and *The American Journal of Clinical Nutrition*.

Jennifer J. Yland, PhD, MS

Epidemiologist

Dr. Jennifer Yland joined Optum in April 2023. She received her doctorate in epidemiology from the Boston University School of Public Health in 2023 and her Master of Science in epidemiology from the Harvard T.H. Chan School of Public Health in 2018. Her previous research focused on the use of observational data to emulate randomized trials assessing the safety of medications used before and during pregnancy. Her work has evaluated a variety of medications including contraceptives, anti-diabetic agents, asthma medications, and vaccines. Dr. Yland has published in top journals, including *The BMJ*, the *American Journal of Epidemiology*, *Epidemiology*, and *Human Reproduction*.



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