Biographical Sketches

David Balshaw, Ph.D.
Program Director, Emerging Technologies
National Institute of Environmental Health Sciences

Dr. Balshaw received training in pharmacology and biophysics from the University of Cincinnati and University of North Carolina at Chapel Hill. He is a program director in the Center for Risk and Integrated Sciences, part of the Division of Extramural Research and Training at the National Institute of Environmental Health Sciences (NIEHS), one of the U.S. National Institutes of Health (NIH). He is the primary scientist responsible for emerging technologies with particular emphasis on developing innovative approaches to improving exposure and risk assessment and enabling high data-content techniques to define the biological response to environmental exposures. Dr. Balshaw is responsible for planning, directing, and administration of NIEHS-funded translational research programs in (1) bioengineering, integrated systems, and computational methods to understand complex systems; (2) development of novel sensor technologies for comprehensive environmental exposure assessment; (3) validation of emerging biomarkers of exposure, susceptibility, and effect including development of databases; and (4) application of innovative "omics" research for reducing risk of exposure and disease. His activities include leadership roles in the NIH Genes, Environment, and Health Initiative Exposure Biology Program, and the NIEHS DISCOVER Program; he is also heavily involved in several interagency and international activities in environmental health.

David Berrigan, Ph.D., M.P.H.
Biologist
National Cancer Institute

Dr. Berrigan has been a biologist in the Office of the Associate Director of the Applied Research Program since 2003. He previously served as a Cancer Prevention Fellow with funding from the Division of Cancer Prevention from 1999 to 2003. Before coming to NCI, he was a postdoctoral fellow and lecturer at the University of Washington and at La Trobe University in Melbourne, Australia, with funding from the National Science Foundation and the U.S. Department of Agriculture.

Dr. Berrigan received a B.A. from Reed College in 1983, an M.S. from University of California, Davis, in 1987, his Ph.D. in biology from the University of Utah in 1993, and his M.P.H. from University of California, Berkeley, in 2000. His recent research has examined energy balance, carcinogenesis, physical activity, and acculturation, using a mix of animal models, population data, and methodological studies aimed at improving survey data and incorporating GIS tools and data layers into survey datasets. He has authored or coauthored papers in Science; Carcinogenesis; JNCI: Journal of the National Cancer Institute; American Naturalist; PNAS: Proceedings of the National Academy of Sciences; American Journal of Preventive Medicine, and some 30 other journals.

He has been on the editorial board of the journal Functional Ecology; a reviewer for the National Institutes of Health (NIH), NSF NSERC, and other funding agencies; and a peer reviewer for many journals. He was on the program committee for the 2007 Active Living Research Conference, and received NIH Merit Awards in 2004 and 2005. Dr. Berrigan is strongly committed to research aimed at...
health for all via environments and institutions that foster healthy behaviors, preventive services, and health care regardless of demographic or economic circumstances.

**Regina Bures, Ph.D.**  
Program Official, Demographic and Behavioral Sciences Branch  
National Institute of Child Health & Human Development

Dr. Bures received her Ph.D. in sociology, with a specialization in demography, from Brown University, and a Postbaccalaureate Certificate in Geographic Information Systems (GIS) from the Pennsylvania State University. Before joining NICHD in 2010, she was a faculty member at the University of Florida. Dr. Bures’s research interests include families and the life course, health disparities and inequality, migration, and public policy. At NICHD Dr. Bures oversees the Demographic and Behavioral Sciences Branch’s portfolios on health and the environment (including social, urban/rural, neighborhoods, GIS, and remote sensing), internal migration and population distribution, and race and ethnicity.

**Jarvis T. Chen, Sc.D., S.M.**  
Research Scientist  
Department of Society, Human Development, and Health  
Harvard School of Public Health

Dr. Chen is a research scientist in the Department of Society, Human Development, and Health at the Harvard School of Public Health. As a social epidemiologist, his research focuses on racial/ethnic and socioeconomic disparities in health and the diverse pathways by which social experience and environmental exposures give rise to population patterns of health and disease. Along with his colleague, Dr. Nancy Krieger, and the Public Health Disparities Geocoding Project, he has applied geocoding and linkage to georeferenced data to enhance the data available in public health surveillance systems and developed spatial and spatio-temporal models for mapping of health disparities. Dr. Chen’s methodologic interests include multilevel and geospatial modeling techniques, methods for handling missing data, and techniques for visual display of quantitative data.

**Wilson M. Compton, M.D., M.P.E.**  
Director of the Division of Epidemiology, Services and Prevention Research  
National Institute on Drug Abuse

Dr. Compton is director of the Division of Epidemiology, Services and Prevention Research at the National Institute on Drug Abuse (NIDA) of the National Institutes of Health. In this position, he manages a complex research program of national and international scope with over $250 million in annual funding. Prior to joining NIDA, Dr. Compton was associate professor of psychiatry and director of the Master of Psychiatric Epidemiology Program at Washington University in St. Louis as well as medical director of Addiction Services at the Barnes-Jewish Hospital in St. Louis. Dr. Compton received his undergraduate education from Amherst College. He attended medical school and completed his residency training in psychiatry at Washington University. He is a member of the Alpha Omega Alpha honor society as well as numerous professional organizations. He has been the principal or co-principal investigator of multiple federally funded grants focusing on the epidemiology of drug abuse, HIV prevention, and co-occurring mental and drug-use disorders. In these areas of research, Dr. Compton has authored over 100 articles and chapters, and multiple diagnostic interviews.
Paul K. Courtney, M.S.
Biomedical Informatics Coordinator
National Cancer Institute

Mr. Courtney is the biomedical informatics coordinator for NCI’s Division of Cancer Control and Population Sciences (DCCPS) in the Office of the Director (OD). He consults with program directors and other staff on data standards and harmonization as well as alignment with NCI’s caBIG® program, engages in projects as a team member in order to provide guidance on issues of informatics and knowledge management, and leads projects where informatics tools and infrastructure are key elements.

A major focus of his efforts over the last 2 years has been leading the development of the Consumer Health Portal (CHP), a Web site aligned with the Federal Government’s mandate to increase public access to high-value data (data.gov). CHP is designed to present complex, evidence-based population health data primarily for consumers, but also applicable to public health planners, population scientists, and policy makers. The goal of CHP is to demonstrate the value of enabling access to tools for analysis and visualization of data drawn from publicly available public health datasets such as BRFSS (Behavioral Risk Factor Surveillance System), HINTS (Health Information National Trends Survey), NHIS (National Health Interview Survey), and SEER (Surveillance, Epidemiology, and End Results Program), linked to other regional and national data for cancer prevention and control. CHP utilizes the principles of linked data and the semantic Web.

Mr. Courtney’s interests include knowledge management, terminology harmonization, data standards, human-computer interfaces, ontology development, and systems science. He has been working in the biomedical informatics field since he started in the field at Dartmouth Medical School in 2000. He earned a B.S. in physics and an M.S. in materials science and engineering at Stanford University in 1977.

Ellen Cromley, Ph.D.
Assistant Clinical Professor
Department of Community Medicine and Health Care
University of Connecticut School of Medicine

Dr. Cromley is a medical geographer. She completed a B.A. in urban and environmental studies at Case Western Reserve University, an M.A. in geography from Ohio State University, and a Ph.D. in geography from the University of Kentucky. She co-authored GIS and Public Health (2002) with Sara McLafferty. The second edition will be published in 2011. She began her career at Hunter Health Plan in Lexington, Kentucky, a Neighborhood Health Center, and worked for Appalachian Regional Hospitals before her career as a professor in the Department of Geography, University of Connecticut. She spent 4 years as senior research associate at The Institute for Community Research in Hartford, Connecticut, as an investigator on grants funded by the National Institute of Alcohol Abuse and Alcoholism (alcohol as a factor in sexual risk behavior among young men in slum communities of Mumbai, India), the National Institute on Drug Abuse (housing status and stability among low-income drug users in Hartford), and the National Institute of Mental Health (delivery of a multi-level intervention to promote female condom use). She has been a consultant on a research project funded by the National Cancer Institute (environmental factors affecting physical activity in older women). Dr. Cromley has served as a career-development award mentor for researchers at M.D. Anderson Cancer Center and the University of Connecticut Center for Health, Intervention, and Prevention seeking to integrate geographic methods and geographic information systems (GIS) into their work. She served as a member of the NIH Community-Level Health Promotion study section.
William F. Davenhall, M.A.
Global Manager, Health and Human Services
Esri

Mr. Davenhall leads the health and human services team at Esri, a geographic information system (GIS) software developer. His users include thousands of health and human service professionals across public health authorities, hospitals and health systems, community hospitals, academic medical centers, social service and safety-net organizations, national health research centers, and health-related philanthropic foundations across the globe. He has more than 30 years of experience in using geographic and demographic information to solve business, health, and social problems. His knowledge and experience in creating new and useful health intelligence out of existing clinical and administrative data streams and workflows are extensive. Mr. Davenhall also has held executive leadership roles in hospitals, medical clinics, human service agencies, health trade associations, research and consulting organizations, software technology companies, and health data organizations generating information for research and policy analysis. He earned a master’s degree in sociology with a concentration in medical behavioral science and was a recipient of a National Institute of Mental Health (NIMH) Traineeship at the University of Kentucky Medical Center in Lexington. His health-related research interests have included family resiliency, health data quality, health care fraud, and social service integration. He has served on the boards of various organizations including higher education, national research councils, professional and industry groups, and citizen advocacy groups. Mr. Davenhall has authored many publications on the use of GIS by health professionals and has contributed to several textbooks in the field. He recently presented at TedMed and is a regular blogger on the subject of “geomedicine” within the health section of the Huffington Post.

Bethany Deeds, Ph.D., M.A.
Deputy Branch Chief
Epidemiology Research Branch
Division of Epidemiology, Services and Prevention Research
National Institute on Drug Abuse

Dr. Deeds is a deputy branch chief within the Epidemiology Research Branch, Division of Epidemiology, Services and Prevention Research at the National Institute on Drug Abuse, where she manages the social epidemiology of drug use and methods and measurement portfolios including spatial epidemiology. Dr. Deeds’ program area covers research related to substance use, HIV, and violence, including: social environment (e.g., school, workplace, neighborhood/community, institutions); drugs and crime; macro-social determinants of health (e.g., poverty, globalization, urbanicity, etc.); homelessness and housing; violent victimization; drug markets; social networks, climate and norms; and public health law and policy research related to substance use.

Brenda K. Edwards, Ph.D.
Associate Director, Surveillance Research Program
National Cancer Institute

Dr. Edwards has been associate director of the Surveillance Research Program and its predecessor organizational unit since 1989. She has been involved in cancer prevention and control since the program’s formative days early in the 1980s. Dr. Edwards began her affiliation with NCI in 1978 as a researcher in cancer treatment clinical trials and 4 years later joined the team conducting some of the first cancer prevention trials. Prior to coming to NCI, Dr. Edwards was on the faculty of a
Midwestern medical school, where she was involved in community-based and environmental/occupational studies.

Dr. Edwards received her Ph.D. in biostatistics from the University of North Carolina at Chapel Hill. Her research has focused on the full spectrum of cancer surveillance research, including risk factors, patterns of care, behavioral studies and survivorship, statistical methodology, and analytic activities. The surveillance system at NCI provides the research resource base for monitoring the nation’s cancer burden, interpreting cancer data, and measuring progress in cancer control. During the past few years, the focus has been directed toward enhancing coordination of the U.S. public-private cancer surveillance enterprise and integrating systems to measure progress in cancer control, maintain the integrity and quality of the Surveillance, Epidemiology, and End Results (SEER) Program as a national research resource, disseminate cancer surveillance data, and improve the quantitative assessment of health disparities.

Dr. Edwards has received the Calum S. Muir Memorial Award and other recognition for her work in cancer surveillance and registration. She has co-authored more than 80 peer-reviewed publications.

Arthur Getis, Ph.D., M.S., B.S.
Distinguished Professor of Geography Emeritus
San Diego State University

Until he retired in May 2004, Dr. Getis was the Stephen and Mary Birch Foundation Endowed Chair of Geographical Studies at San Diego State University. He is now Distinguished Professor of Geography Emeritus at SDSU. He is a past president of the University Consortium for Geographic Information Science (UCGIS) and the Western Regional Science Association (WRSA). He has served on a number of university faculties including the University of Illinois at Urbana-Champaign (1977–90), Rutgers University (1963–77), and Princeton University (1971–74). Together with Professors Manfred Fischer of Vienna and Antonio Paez of McMaster, he edits the Journal of Geographical Systems. Currently, with the support of NIH, he is doing research on the transmission of dengue fever in Peru and Thailand, with National Science Foundation funding on patterns of fertility in Egypt, and with National Institute of Child Health & Human Development support on women’s health in Ghana. He has received the Walter Isard Distinguished Scholarship award from the North American Regional Science Association, Distinguished Scholarship honors from the Association of American Geographers, and the Aageenbrug Award from the GIS Specialty Group of the AAG. He has been elected a Fellow in the WRSA, Regional Science Association International, and the UCGIS. He has published over 100 articles, chapters, and reviews in refereed journals, including several articles with J.K. Ord, the statistician, in which they develop local statistics. In addition, he is engaged in spatial analytic research designed to address issues emanating from the use of large datasets. He and his co-authors (J.M. Getis and J.D. Fellmann) have produced the leading introductory college geography textbook in the United States, now in its 13th edition.

Michael Goodchild, Ph.D.
Professor of Geography
University of California, Santa Barbara

Dr. Goodchild is professor of geography at the University of California, Santa Barbara, and director of UCSB’s Center for Spatial Studies. He received his B.A. degree in physics from Cambridge University in 1965 and his Ph.D. in geography from McMaster University in 1969, and has received four honorary doctorates. He was elected a member of the National Academy of Sciences and foreign member of the Royal Society of Canada (2002), member of the American Academy of Arts & Sciences (2006), and Foreign Member of the Royal Society and Corresponding Fellow of the British Academy.
(2010); and in 2007 he received the Prix Vautrin Lud. He was editor of Geographical Analysis between 1987 and 1990 and editor of the Methods, Models, and Geographic Information Science section of the Annals of the Association of American Geographers from 2000 to 2006. He serves on the editorial boards of 10 other journals and book series, and has published more than 15 books and 400 articles. He was chair of the National Research Council’s Mapping Science Committee from 1997 to 1999, and currently chairs the Advisory Committee on Social, Behavioral, and Economic Sciences of the National Science Foundation. His current research interests center on geographic information science, spatial analysis, and uncertainty in geographic data.

Paul J. Gruenewald, Ph.D.
Scientific Director
Senior Research Scientist
Prevention Research Center, Pacific Institute for Research and Evaluation

Dr. Gruenewald received his Ph.D. in experimental psychology from Duke University in 1978 and has been active in alcohol and drug research for the past 30 years. His research focuses upon social-ecological models of alcohol and drug problems in community settings, mathematical models of alcohol, drug use and related risks, policy evaluation, and methods for community-based preventive intervention research. He served as component director and lead evaluator on the National Institute on Alcohol Abuse and Alcoholism (NIAAA) rCommunity Prevention Trials renvironmental prevention intervention project, the first community-based preventive intervention demonstrating the effectiveness of environmental programs for the reduction of alcohol problems. Dr. Gruenewald received a National Institutes of Health Merit Award to support continued studies of alcohol outlets and violence and an NIAAA advanced research projects contract to design rEcosystem Models of Alcohol-Related Behaviors,òboth projects in which he advanced the application of mathematical models and Bayesian spatial statistics to studies of the ecologies of alcohol and drug problems. Dr. Gruenewald is currently principal investigator on the rEnvironmental Approaches to Prevention research center grant from NIAAA and has just completed the rAssessing the Development of Drug Markets Using Bayesian Space-Time Modelsòfrom the National Institute on Drug Abuse (NIDA).

Geoffrey Jacquez, M.S., Ph.D.
President, BioMedware
Chair, TerraSeeer
Adjunct Associate Professor of Environmental Health Sciences
The University of Michigan

Prior to founding BioMedware in 1994, Dr. Jacquez was a research associate at the Stony Brook Research Foundation at the State University of New York (SUNY). Dr. Jacquez has led several successful software development efforts in the area of spatial and space-time data analysis, simulation, and modeling. He is internationally recognized in the field of GIS and health, and holds four patents with one pending for unique software innovations he conceived and developed. He has been funded by NIH to develop several innovative geospatial health software systems, including BoundarySeeer, ClusterSeeer and the Space-Time Intelligence System (STIS). His current interests include the use of commercial residential histories in health research, protection of confidentiality using homomorphic encryption technologies, impacts of geocoding positional error on geospatial health and exposure assessments, the accurate detection of disease clusters, and the estimation of lag processes (e.g., cancer latencies) for space-time disease models for use in cancer control and surveillance. He has several NIH-funded projects in progress including studies of bladder, breast, and pancreatic cancers.
Mei-Po Kwan, Ph.D.
Distinguished Professor of Social and Behavioral Sciences
Professor of Geography
Professor of Public Health
Ohio State University

Dr. Kwan is director of the Geographic Analysis Core of an NIH-funded center at the Ohio State University. She is also an adjunct professor of epidemiology and biostatistics in the School of Medicine at Case Western Reserve University and a fellow of the American Association for the Advancement of Science. She received the 2005 UCGIS Research Award from the University Consortium for Geographic Information Science (UCGIS) and AAG Distinguished Scholarship Honors from the Association of American Geographers (AAG). Dr. Kwan is editor of the Annals of the Association of American Geographers and associate editor of Geographical Analysis. She is currently a charter member of the Community Influences on Health Behavior Study Section of the Center for Scientific Review (NIH), and a member of two committees of the Transportation Research Board (U.S. National Academies). Her research interests include geographic information science, access to health care, the effect of sociogeographic context on health behaviors and outcomes, protection of geoprivacy through geographic masking, and human activity-travel behavior in space-time. She has developed innovative GIS-based 3D geovisualization and geocomputational methods for the analysis of activity-travel diary and GPS data. Kwan has recently received five NIH grants totaling $10.2 million as a principal investigator or co-PI. One of these projects seeks to promote innovative interdisciplinary research on population and health at the Ohio State University. The other projects examine the health risks of female sex workers, adolescent participation in high-risk drug use, tobacco cessation in Ohio smokers, and methods for health behavior research.

Eugene Lengerich, V.M.D., M.S.
Professor, Public Health Sciences
Director, Community Sciences and Health Outcomes Core
The Pennsylvania State University

Dr. Lengerich is an epidemiologist with expertise in community-based participatory research, public health informatics, and spatial distribution of disease. Much of his research has focused upon infectious diseases, injuries, and chronic diseases, including cancer, stroke, and diabetes. His research has been funded by the National Cancer Institute, Centers for Disease Control and Prevention (CDC), Health Resources and Service Administration, Lance Armstrong Foundation, American Cancer Society, and Pennsylvania Department of Health. In the area of disease surveillance, he has led efforts to establish a model GIS/Atlas for state-based cancer control and to develop software for exploratory spatial data analysis. Dr. Lengerich is the director of the Community Sciences and Health Outcomes Core, Penn State Hershey Cancer Institute, which provides support to investigators for the development of population-, clinic-, and community-based research in cancer prevention and control in central Pennsylvania and northern Appalachia. Dr. Lengerich is the director of the Appalachian Cancer Scholars Program, a training program for junior faculty in cancer prevention and control in Appalachia. Since 2004, Dr. Lengerich has been the principal investigator of the Northern Appalachia Cancer Network, which was recognized nationally in 2009 by the Association of Public and Land-Grant Universities for its engaged cancer research. Prior to joining the faculty of Penn State University in 1998, he was the state chronic disease epidemiologist of North Carolina and an epidemiologist for the CDC. He has served on numerous Federal, State, and professional committees and authored more than 60 manuscripts in the peer-reviewed literature.
Amy Lobben, Ph.D.
Associate Professor
University of Oregon

Dr. Lobben is an associate professor of geography at the University of Oregon. She teaches GIScience, Visualization, and Experimental Design. In her lab, the Spatial and Map Cognition Research Lab, she and her students work on research focused on user studies in GIScience and behavioral geography. Specific areas of interest are in map use, navigational map reading, and performance patterns both within and between groups. Because ecologically valid tasks are necessarily complex, she measures these constructs in several ways, including: traditional in-lab and in-field behavioral measures, qualitative measures (focus groups, semi- and structured interviews, eye-tracking, and fMRI).

One of her current NIH grants, funded by the National Eye Institute (NEI), includes as one of the project tasks the development and testing of soundscape minimal GIS designed for use by students and adults who are blind or low vision. The project goals include not only development of the prototype GIS, but also in-classroom testing of the interface, use, and deliverability. In addition, as part of a larger spatial thinking project, this soundscape GIS will be used to enhance spatial thinking skills in students who are blind or low vision.

Jonathan Mayer, Ph.D.
Professor of Epidemiology and Geography
University of Washington

Dr. Mayer is professor of epidemiology, geography, internal medicine (Division of Allergy and Infectious Diseases), global health, family medicine, and health services, all at the University of Washington in Seattle. He has served on numerous committees at the National Academy of Sciences. He has also been on numerous NIH and Institute of Medicine (IOM) committees.

His current research includes the epidemiology and molecular/spatial clustering in tuberculosis patterns and the development of new methods for TB identification; HIV: climate change and health; and health service delivery in urban slum communities in developing countries. He is also working on the epidemiology of pain and several clinical projects involving malaria prophylaxis and travelers’ diarrhea. He is also president of a nongovernmental organization that works in the largest slum in Ghana on basic public health issues, including the development of new methods of surveillance and control of TB chains of transmission.

Dr. Mayer earned his B.A. in history and urban studies at the University of Rochester and his M.A. and Ph.D. at the University of Michigan. He was visiting professor of population and international health at the Harvard School of Public Health.

Dr. Mayer also does creative writing pertaining to his work in the slums of Ghana.

Jean McKendry, Ph.D., M.A., B.A.
Senior Researcher
Association of American Geographers (AAG)

Dr. McKendry joined the AAG staff as senior researcher in April 2010, where she is contributing to research, education, and outreach projects related to GIS, professional development, careers, diversity, and climate change. Prior to joining the AAG, Dr. McKendry was a principal scientist with the University of Idaho, College of Natural Resources. Based in Washington, DC, she worked on a wide range of cooperative programs with the National Park Service (NPS), other Federal Agencies, and nongovernmental organizations (NGOs). She helped establish and develop a national NPS Social Science Program. As deputy national coordinator for the Cooperative Ecosystem Studies Units (CESU) Network, she worked with 13 Federal Agencies and more than 200 universities across 17 CESUs to
promote collaboration on research, technical assistance, and education. Dr. McKendry also helped coordinate the Canon National Parks Science Scholars Program, working with the American Association for the Advancement of Science (AAAS) and Canon U.S.A., Inc. She has participated in applied research projects, such as developing a series of socioeconomic atlases for national parks, and currently serves on the board of the Cartography and Geographic Information Society (CaGIS). She has co-authored scientific papers, articles, and workbooks on cartography, GIS, biodiversity, and resource management. Dr. McKendry received a B.A. in political science from the University of Arizona and an M.A. and Ph.D. in geography from Clark University, where her focus was on cartography and GIS applied to resource management decision-making.

Sara McLafferty, Ph.D.
Professor
University of Illinois at Urbana-Champaign

Dr. McLafferty is professor of geography at the University of Illinois at Urbana-Champaign. She obtained her B.A. from Barnard College and M.A. and Ph.D. degrees in geography from the University of Iowa. Her research investigates place-based disparities in health and access to health services and employment opportunities for women, immigrants, and racial/ethnic minorities in the United States. An ongoing multidisciplinary project examines the impact of inequalities in spatial and social accessibility to health services on racial disparities in prostate and colorectal cancer outcomes in Chicago. Dr. McLafferty has also written about the use of GIS and spatial analysis methods in exploring inequalities in health and access to health care. Her books include GIS and Public Health (with Ellen Cromley), A Companion to Health and Medical Geography (with Tim Brown and Graham Moon), Geographies of Women’s Health (with Isabel Dyck and Nancy Lewis), and Location Strategies for Retail and Service Firms (with Avijit Ghosh). Her publications have appeared in a wide range of geography, epidemiology, and urban studies journals. She is currently associate editor of Health and Place and serves on the editorial boards of the Annals of the Association of American Geographers, Geographical Analysis, Spatial and Spatiotemporal Epidemiology, and Transactions in GIS.

Jeremy Mennis, Ph.D.
Associate Professor
Temple University

Dr. Mennis (Ph.D., Geography, Pennsylvania State University, 2001) is an associate professor in the Department of Geography and Urban Studies at Temple University. He is a geographic information scientist with interests in how geographic processes can be represented and analyzed computationally. Recent research focuses on modeling contextual neighborhood and social network effects on human behavioral outcomes related to mental health, adolescent substance use, and juvenile drug offense delinquency and recidivism. Dr. Mennis’s research has been funded by NIH, National Institute of Justice, National Science Foundation, and National Aeronautics and Space Administration, as well as by internal grants from Temple University, and has appeared in journals such as International Journal of Geographical Information Science, Drug and Alcohol Dependence, and American Journal of Psychiatry. He currently serves on the editorial board of Annals of the Association of American Geographers, as well as several other journals, and on the boards of directors of the University Consortium for Geographic Information Science (UCGIS) and the Geographic Information Systems Certification Institute (GISCI). He is past chair of the Geographic Information Systems and Science Specialty Group of the Association of American Geographers (AAG).
Lee Rivers Mobley, Ph.D.
Senior Research Fellow in Spatial Science and Health Economics
Director, Populomics, Spatial and Systems Science Program
Molecular Epidemiology, Genomics, Environment and Health (MEGEH) Center
Discovery and Analytical Sciences
RTI International (Research Triangle Institute)

Dr. Mobley is a senior fellow in spatial science and health economics at RTI, with a Ph.D. in economics. Current work focuses on developing geospatial databases and cyberinfrastructure to facilitate using spatial analysis for populomics and population science research. Publication topics include: building spatial decision support systems, analysis of health markets, socio-ecological and multilevel modeling of health behaviors and outcomes, health disparities, analysis of spatial clustering in behavioral risk factors associated with coronary heart disease in low-income women, analysis of how urban sprawl impacts obesity and cardiac risk in low-income women, spatial regression analysis of access to preventive care services by the elderly and diffusion of endoscopy technology, analysis of reasons why the elderly disenrolled from their Medicare health maintenance organizations (HMOs), and analysis of why insurance firms joined the Medicare preferred provider organization (PPO) demonstration. As principal investigator on a National Cancer Institute R01 grant (R01CA126858-01A1) she led development of an extensive geospatial database (https://rtispatialdata.rti.org) and used it to conduct analysis of the many reasons why older people do not get regular breast or colorectal cancer screening. Dr. Mobley’s areas of continued research interest include: spatially enabled analysis of socio-ecological problems where place and space are important; translational research in populomics science, which combines genomics, metabolomics, microbiology, health communication, psychology, community-based participatory research, and spatial humanities; assessments of health markets and development of community risk profiles; spatial analysis applied to evaluations of interventions and natural experiments; and building spatial decision support systems combining databases, knowledge bases, and analytic tools.

Wendy J. Nilsen, Ph.D.
Health Scientist Administrator
Office of Behavioral and Social Sciences Research
National Institutes of Health

Dr. Nilsen joined the staff of the NIH Office of Behavioral and Social Sciences Research (OBSSR) as a health science administrator in June 2009. Her primary focus at OBSSR is on the science of human behavior and behavior change, including: adherence, the mechanisms of behavior change, utilizing mobile technology to better understand health and effectively intervene, and behavioral interventions in complex patients in primary care. More specifically, she is the chair of the Adherence Network, a trans-NIH effort to enhance and develop the science of adherence. She is also very active in the area of mHealth research (i.e., mobile technology to improve health). Her work includes: convening a meeting to address barriers to the utilization of mobile technology in behavioral and social science research; serving on numerous Federal mHealth initiatives; and leading an upcoming mHealth training institute. She is also a member of the Science of Behavior Change executive working group. The project is an initiative funded through the Common Fund to develop a framework for understanding the mechanisms of behavior change. Dr. Nilsen also chairs the Integrating Health Strategies workgroup at NIH that supports the science of behavioral treatments for complex patients in primary care. In addition to her primary responsibilities, she is involved in many ongoing behavior change initiatives, both within NIH and with other Federal Agency partners.
Linda Williams Pickle, Ph.D.
Principal and Chief Statistician
StatNet Consulting, LLC

Dr. Pickle has over 30 years of experience developing better statistical methods and data visualization tools for analyzing and presenting health-related data, particularly by geographic area. While at the National Center for Health Statistics and the National Cancer Institute, she published more than 150 articles in the medical and statistical literature and three major atlases showing the geographic patterns of disease rates. She recently published *Visualizing Data Patterns with Micromaps* with Daniel B. Carr, a book describing methods to link graphs and maps so that geographic and attribute patterns can be examined simultaneously. Dr. Pickle coordinated GIS activities at NCI during 1999–2007, including establishment of a GIS Special Interest Group open to all at NIH, development of a Web site to disseminate GIS tools and information (gis.cancer.gov), inclusion of tools for spatial data exploration on a major NCI data-dissemination Web site (statecancerprofiles.cancer.gov) and organization of a workshop to elicit external input for GIS-related grants at NCI. Her research in spatial statistical models led to improved techniques for modeling incidence rates at the U.S. county level, taking into account spatial hierarchies and correlations. This method has now been adopted by the American Cancer Society to predict the number of new cancer cases in the current year for their *Cancer Facts and Figures* annual publication, the most cited cancer publication in the world. Dr. Pickle retired from NCI in 2007 to start a consulting company specializing in statistical models and visualization tools for spatial data.

D. Rebecca Prevots, Ph.D., M.P.H.
Epidemiologist
National Institute for Allergy and Infectious Diseases
National Institutes of Health

Dr. Prevots is the head of the Epidemiology Unit in the Laboratory of Clinical Infectious Diseases in the Division of Intramural Research at the National Institute for Allergy and Infectious Diseases. Dr. Prevots received her Ph.D. and M.P.H. from the University of Michigan. Upon completion of her degrees she joined the Epidemic Intelligence Service at the Centers for Disease Control and Prevention in Atlanta, Georgia. During that time she was involved in a range of research studies related to the risk factors, dynamics, and spread of infectious diseases, in the areas of vaccine-preventable diseases and well as HIV/AIDS. From 2000 to 2002, she was seconded to the Pan American Health Organization in Brasilia, Brazil, where she worked with the Ministry of Health on surveillance and research related to measles elimination and rubella control. Since 2003 Dr. Prevots has worked as an epidemiologist in NIAID and has been involved in a range of infectious disease research studies, with a focus on mycobacterial disease, including tuberculosis and nontuberculous mycobacterial disease. Because the nontuberculous mycobacteria are environmental organisms, efforts are underway to map climatic and other environmental variables with nontuberculous mycobacterial disease distribution. Through collaboration with other intramural investigators, as well as independent analysis of morbidity and mortality datasets (hospital discharge, Medicare), the epidemiology group seeks to elucidate risk factors for disease as well as spatio-temporal patterns for infectious disease spread. Other diseases and conditions of interest include malaria, as well as fungal and mycobacterial coinfections.

Michael Ratcliffe, M.Litt.
Assistant Division Chief for Geocartographic Products and Criteria
Geography Division, U.S. Census Bureau

Mr. Ratcliffe is assistant division chief for Geocartographic Products and Criteria, Geography Division, U.S. Census Bureau, where he is responsible for mapping, preparation of TIGER/Line files, and
other geographic products, as well as programs related to the development of concepts and criteria for geographic areas for use in tabulating census and survey data. He has worked in both the Geography and Population Divisions, primarily on programs related to places, metropolitan and micropolitan statistical areas, and urban/rural definitions. Mr. Ratcliffe received his bachelor’s degree in geography from the University of Maryland and a master of letters in geography from the University of Oxford.

Jill Reedy, Ph.D., M.P.H., RD
Nutritionist
National Cancer Institute

Dr. Reedy is a nutritionist in the Risk Factor Monitoring and Methods Branch of the Applied Research Program within the Division of Cancer Control and Population Sciences at the National Cancer Institute. She is a program lead for the Diet and Physical Activity Program for the NIH-wide Genes, Environment, and Health Initiative, and working group member for the National Collaborative on Childhood Obesity Research. Her primary research interests include dietary pattern analysis, dietary surveillance, new technologies for dietary assessment, and measures of the food environment. Dr. Reedy worked with colleagues at NCI and the U.S. Department of Agriculture to design the Healthy Eating Index 2005 and has compared it with other diet quality indexes, tested its predictive validity, and applied it as a measure of the food environment. She also developed a Web-based compilation of community-level measures of the food environment (available at www.riskfactor.cancer.gov/mfe) and is a program director for the Obesity Policy Research: Evaluation and Measures Program Announcement (available at http://grants.nih.gov/grants/guide/notice-files/PA-10-027.html).

Dr. Reedy earned her Ph.D. in nutrition at the University of North Carolina at Chapel Hill and her M.P.H. at the University of California, Berkeley. She is a registered dietitian and previously worked as a consultant with the California Nutrition Network, regional manager at the Dairy Council of California, and pediatric clinical dietitian.

Douglas Richardson, Ph.D., M.A., B.G.S.
Executive Director
Association of American Geographers

Dr. Richardson is the executive director of the Association of American Geographers. He was previously the founder and president of GeoResearch, Inc., which invented, patented, and developed the first interactive real-time GPS/GIS mapping technologies, resulting in far-reaching changes in the way geographic information is now collected, mapped, integrated, and used within geography and in society more broadly. He has conducted extensive research in the science, applications, and technologies of geography, and has implemented numerous large-scale integrated GPS and GIS systems around the world. Dr. Richardson has worked together with NIH biomedical researchers in several institutes and recently co-edited the book, Geography and Drug Addiction, as part of a productive and long-term collaboration with researchers at the National Institute on Drug Abuse.

Elisabeth Dowling Root, Ph.D.
Assistant Professor
Department of Geography and Institute of Behavioral Science
University of Colorado at Boulder

Dr. Root’s research explores geographical patterns of health and disease using quantitative spatial methodologies to understand the socioeconomic and environmental determinants of human health. She is particularly interested in the complex interactions between demographic, socioeconomic
and environmental factors that influence human health and how we can quantify these factors and interactions to better understand health outcomes and the impact of health interventions. Dr. Root combines traditional epidemiological study design, spatial statistical methods as well as geographic information systems, and remote sensing technology to explore spatio-temporal patterns of chronic and communicable diseases. Her current research focuses on neighborhood determinants of child health and well-being; the influence of social/spatial networks in health behavior and disease diffusion; the long-term impact of health promotion activities; and understanding the drivers behind spatial variation in post-intervention health outcomes. Prior to receiving her Ph.D., Dr. Root worked at RTI, International, applying geographical methods (GIS and spatial statistics) to health services research projects primarily for the Centers for Medicare & Medicaid Services, Administration for Healthcare Research and Quality, and the Centers for Disease Control and Prevention.

Gerard Rushton, Ph.D.
Professor
University of Iowa

Dr. Rushton is professor of geography and adjunct professor of health management and policy at the University of Iowa. His current research projects are supported by the National Cancer Institute, the American Society of Clinical Oncology, and the Iowa Department of Education. His work addresses issues of mapping the burdens of cancer, especially in Iowa, and on developing infrastructures for measuring accessibility to specialized health services. His research has been published in the Annals of the Association of American Geographers, Statistics in Medicine, Public Health Reports, Transactions in GIS, Journal of the Urban and Regional Information Systems Association, Annual Review of Public Health, International Journal of Health Geographics, Social Science & Medicine, Journal of Medical Systems, and other journals. His most recent book is Rushton et al. 2008, Geocoding Health Data: the use of geographic codes in cancer prevention, research and practice; by CRC Press. At the University of Iowa, he teaches courses in the geography of health, spatial analysis and location models, and population geography. He is a member of the Association of American Geographers and the American Public Health Association. He is a member of the editorial boards of the International Journal of Health Geographics and the Journal of Geographical Systems. He recently served as an appointed member of the NIH Review Panel: Community Influences on Health Behavior. In 1998, the Association of American Geographers awarded him Honors for Distinguished Scholarship in Geography, for scholarly contributions to geographical theory and practice concerning revealed space preference, location-allocation modeling, and GIS-related decision support systems, and for applied research in community planning and facility location throughout the world.

Amy Seitz, M.P.H.
Research Assistant
Epidemiology Unit, Laboratory of Clinical Infectious Diseases
National Institute of Allergy and Infectious Diseases

Ms. Seitz is currently a research assistant in the Epidemiology Unit of the Laboratory of Clinical Infectious Diseases at the National Institute of Allergy and Infectious Diseases. She received her M.P.H. from Emory University in 2007 and is currently a Ph.D. epidemiology student at George Washington University. While at Emory University, she worked part time at the Centers for Disease Control and Prevention participating in research on Chagas disease and intestinal helminthes in Peru. After graduating from Emory, she began working with the U.S. Naval Medical Research Unit in Cairo, Egypt. She initially became interested in spatial epidemiology and GIS while working on a project designed to understand health utilization practices in Egypt. GIS was a useful tool for this project because it allowed the health workers a way to randomly select and mark locations for household surveys. In 2008, she
joined the epidemiology unit of the Laboratory of Clinical Infectious Diseases at NIH as a research assistant. While at NIH, she has participated in a variety of research projects involving the epidemiology and spatial-temporal distribution of diseases.

David Stinchcomb, M.A., M.S.
Senior Health Systems Specialist
Westat, Inc.

Mr. Stinchcomb recently joined Westat as a senior health consultant. Previously, he was the chief of the Surveillance Systems Branch in the Division of Cancer Control and Population Sciences at the National Cancer Institute and director of the Surveillance, Epidemiology, and End Results (SEER) Program. His undergraduate degree is in mathematics and statistics. He has an M.S. in computer science from the University of California, Berkeley, and an M.A. in geography from Texas State University. Mr. Stinchcomb held senior leadership positions in the computer industry prior to changing course and pursuing his love for geography. Before coming to the NCI, he was a geographer with the Center for Health Statistics at the Texas Department of Health. He is an active advocate of the use of geospatial methods in health applications, with specific interests in cartography, geo-visualization, and spatial statistics.

Daniel Sui, B.S., M.S., Ph.D.
Professor of Geography
Distinguished Professor of Social & Behavioral Sciences
Director of the Center for Urban & Regional Analysis (CURA)
Ohio State University

Dr. Sui is currently a professor of geography, distinguished professor of Social & Behavioral Sciences, and director of the Center for Urban & Regional Analysis (CURA) at the Ohio State University. He is also an adjunct professor at the John Glenn School of Public Affairs, Department of City & Regional Planning, and College of Public Health at OSU. Prior to assuming his current positions at OSU in July 2009, Dr. Sui was a professor of geography (1993–2009) and holder of the Reta A. Haynes endowed chair (2001–2009) at Texas A&M University. He holds a B.S. (1986) and M.S. (1989) from Peking University and Ph.D. from the University of Georgia (1993). His current research interests include GIS-based spatial analysis and modeling for urban, environmental, and public health applications; volunteered geographic information and the detection of transient communities on real-time social web; and legal and ethical issues of using geospatial technologies in society. Dr. Sui has authored/co-authored four books and more than 100 articles in these areas and was a 2009 Guggenheim Fellow. He is also a current member of the U.S. National Mapping Science Committee and serves as editor-in-chief for GeoJournal.

Zaria Tatalovich, Ph.D.
Surveillance Research Program
National Cancer Institute

Dr. Tatalovich is a health statistician in the Surveillance Research Program of the Division of Cancer Control and Population Sciences at the National Cancer Institute. Her primary areas of expertise are GIS/spatial analysis and visualization of population based cancer data, environmental exposure modeling, and built environment health. Her research combines geospatial technologies and standard statistical and geostatistical methods in the investigation of cancer risk associated with the exposure to adverse social and environmental conditions. She obtained her Ph.D. in geography from the University
of Southern California in 2006. She also holds an M.A. in geography and an M.A. and B.S. in psychology. She has published peer-reviewed articles and book chapters, and has earned awards for her contribution to geostatistical modeling of potential ultraviolet exposure.

Daniel Wartenberg, Ph.D.
Director of the Division of Environmental Epidemiology
Occupational Medicine at the Robert Wood Johnson Medical School

Dr. Wartenberg is professor and director of the Division of Environmental Epidemiology in the Department of Environmental and Occupational Medicine at the Robert Wood Johnson Medical School, University of Medicine and Dentistry of New Jersey (UMDNJ), and a professor in the Division of Epidemiology in the UMDNJ School of Public Health. His main research interests are the development and application of novel approaches to the study of environmental risk, pollution, and public health, with particular emphasis on geographic variation, disease clustering and the application of Geographic Information Systems (GIS). He often works with communities confronting local environmental challenges.

Carolyn Williams, Ph.D., M.P.H.
Chief, Epidemiology
Division of AIDS
National Institute of Allergy and Infectious Diseases

Dr. Williams joined the Epidemiology Branch of the Basic Sciences Program in February 2000 and became branch chief in 2003. She currently oversees a range of clinical epidemiology projects including the Multicenter AIDS Cohort Study (MACS), a study of men who have sex with men in the United States; the Women’s Interagency HIV Study (WIHS), women with or at risk for HIV; and the International epidemiology Databases to Evaluate AIDS (IeDEA), a large collaborative clinical database program to advance our understanding of the global HIV epidemic. Dr. Williams is the program officer for the two U.S.-funded trials to evaluate the efficacy of male circumcision as an HIV prevention method. In addition, she is an editor of the contributed graduate textbook *Infectious Disease Epidemiology: Theory and Practice, Second Edition*, Nelson and Williams, editors, 2005.

John P. Wilson, Ph.D.
Professor of Geography and Director, Spatial Sciences Institute
University of Southern California

Dr. Wilson is professor of geography at USC, where he directs the Spatial Sciences Institute as well as the Geographic Information Science & Technology Graduate Programs and GIS Research Laboratory, and also holds adjunct appointments as professor in the School of Architecture and in the Viterbi School of Engineering’s Departments of Computer Science and Civil & Environmental Engineering. He founded the journal *Transactions in GIS* in 1996 and has served as editor-in-chief since its inception. He has served on the editorial boards of *Applied Geography* (1992–2001) and the *Annals of the Association of American Geographers* (2006–2009). He has chaired the Research Committee of the University Consortium for Geographic Information Science (2002–2005), served on the board of directors (2003–2006) and as president from 2006 to 2007, and is an active participant in the UNIGIS International Network, a worldwide consortium of 12+ institutions that collaborate on the development and delivery of online geographic information science academic programs. His research is focused on the modeling of environmental systems and makes extensive use of GIS software tools, fieldwork, spatial analysis techniques, and computer models. He has published numerous books and articles on these
topics, including two edited volumes *Terrain Analysis: Principles and Applications* (John Wiley and Sons, New York, 2000) and the *Handbook of Geographic Information Science* (Blackwell Publishers, Oxford, 2007). Much of this work is collaborative and multidisciplinary in character, with the general goal of improving our knowledge and understanding of human impact on both the natural and built environments.

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**Li Zhu, Ph.D.**  
Mathematical Statistician  
Surveillance Research Program  
Division of Cancer Control and Population Sciences  
National Cancer Institute

Dr. Zhu received a B.S. degree in geography from Peking University in China. She came to the United States to pursue advanced study in the area of statistics and received her Ph.D. in biostatistics from the School of Public Health, University of Minnesota, in 2000. After that she served as visiting assistant professor in the Department of Health Evaluation Sciences, College of Medicine, Pennsylvania State University, before moving to Texas A&M University as a tenure-track assistant professor. She held a joint appointment in the Department of Epidemiology and Biostatistics, School of Rural Public Health, and in the Department of Statistics, College of Science at Texas A&M. She was promoted to tenured associate professor there. She joined the National Cancer Institute in August 2009. Her main research interests include spatio-temporal model development via hierarchical Bayesian approaches, disease mapping, and spatial epidemiology. She is currently working on projects that combine advanced statistical hierarchical modeling and computing with geographic information system tools to understand the impact of cancer control interventions, and geographic or spatial-temporal, economic, social, behavioral, and other factors on the cancer burden.