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2017-2019

REVIEW

REPORTING PERIOD

(JUNE 2017 - MAY 2019)
I am pleased to write this executive summary outlining the Department of Epidemiology and Biostatistics’ progress during the two academic years between June 2017 and May 2019. This document illustrates the success of the department as it continues to grow its teaching mission, competes in an ever competitive funding environment, produces a high volume of peer-reviewed scientific publications, and serves on numerous committees, boards, and health organizations across campus, state, and elsewhere.

During the 2 year reporting period, the department included 30 different faculty members and specialists who are currently assisted by 5 full time staff members. During this period the department faculty were investigators on 32 different projects and grants that generated over $12 million of extra-mural funding, about three-quarters of which was from the National Institute of Health (NIH) – the most important source of medical research funding in the US. This dollar amount represents nearly a $3 million increase over the amount generated in the prior biennial report (2014-2016). Of this $12 million dollars about two-thirds ($8 million) was directly brought into our department. The collaborative and inter-disciplinary nature of our department’s work is illustrated by the fact that 75% of the research funds involve work with other departments across campus or at other universities.

Our educational mission now includes 4 distinct graduate programs: an MS degree in Epidemiology, PhD degree in Epidemiology, MS degree in Biostatistics, and a new PhD degree program in Biostatistics. We also continue to provide an undergraduate minor program in Global Public Health and Epidemiology, and teach an epidemiology course as part of the new online Nurse Practitioner program. We also lead the teaching effort in biostatistics and epidemiology to the ~190 medical students enrolled each year at CHM. During the reporting period 9, 10, and 8, students graduated from the MS (Epidemiology), PhD (Epidemiology) and MS (Biostatistics) programs, respectively. During this period we also added a PhD (Biostatistics) program. The total number of students enrolled in any of the 4 graduate programs during the 2 year period was just over 100. We are of course, proud of all of our graduates but are particularly heartened by the number of graduates who go on to higher level graduate programs in epidemiology and public health, post doctoral training positions, junior faculty positions, as well as employment in the public health and research sectors.

The ultimate end point of our research is the publication of our findings in the peer-reviewed literature. Our department faculty have again excelled publishing over 250 peer reviewed publications during the 2 year reporting period by across a wide spectrum of journals – including many in the top journals in the specific fields of study.

To summarize, this report highlights our collective commitment to the mission of the college and university to improve our knowledge of health, disease, and well-being. To do this we strive to continue to generate extramural funding to support our research, to train and mentor a cadre of students committed to the mission of public health and medical research, and to spread the gospel of the importance of epidemiology and biostatistics across the campus and state. Our commitment to this mission is unwavering and we look forward to generating another report in 2 years that documents our continued upward trajectory of contributions to the “science of public health”.

Mathew J Reeves BVSc, PhD, FAHA
Professor and Interim Chair
FACULTY

(Department and Community Based)

SPECIALISTS & CURRENT STAFF
DEPARTMENT FACULTY (2017-2019)

*as of May 2019 either retired or accepted position outside of the department

**JAMES C. (JIM) ANTHONY, MSc, PhD**
**PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS**

Winner of multiple awards for mentoring of new and early stage investigators, Jim also is recognized for high impact work in neuropsychiatry and the behavioral & social sciences at their intersections with epidemiology. His work yields increasingly definitive evidence on suspected hazards attributed to tobacco, alcohol, and internationally regulated drugs such as cannabis, cocaine, and the opioids, and their prevention. His work on Alzheimer’s type and other dementias also is highly cited.

**DAVID A. BARONDESS, PhD**
**ASSOCIATE PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS**

Dr. Barondess’ research is centered on the intersection of drug dependence epidemiology and skeletal health and disease. A main interest is exploring ethnic disparities, gene-environment interactions, ageing, and socioeconomic factors vis-à-vis patterns of drug/polydrug use, including tobacco-alcohol exposures. This drug-drug combination focus underpins a longer-term research interest in the epidemiology of, the variability in, adolescent growth and development.

**ANDREW BENDER, PhD**
**ASSISTANT PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS**

Andrew R. Bender is a cognitive neuroscientist who uses MRI neuroimaging to study brain structure and function in healthy aging and in neurodegenerative disease. This research applies structural equation modeling to investigate the neural correlates of age-related changes in learning and memory and the physiological and psychosocial modifiers of longitudinal aging trajectories. Dr. Bender also collaborates with colleagues in Communications and Human Medicine on research and proposal development.

**AHNALEE BRINCKS, PhD**
**ASSISTANT PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS**

Fascinated by heterogeneity in response to intervention, Dr. Brincks has spent her career trying to better understand how and for whom preventive interventions are effective. Her most recent work is in two areas: (1) causal mediation analysis, and (2) the design and analysis of adaptive interventions and Sequential Multiple Assignment Randomized Trials (SMART).
HONGLEI CHEN, MD, PHD
PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr. Chen studies the natural history and etiology of neurodegenerative diseases. He leads research in several large prospective cohorts to ascertain environmental and genetic causes of Parkinson’s disease and to characterize high risk populations through research on prodromal symptoms and biomarkers. Dr. Chen’s research receives supports from the NIH, DoD and private foundations. Dr. Chen teaches neuroepidemiology every two years.

GUSTAVO DE LOS CAMPOS, PhD
PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Gustavo de los Campos is a Professor in the Department of Epidemiology and Biostatistics. His background and research interests center on quantitative and statistical genetics with a focus on the analysis and prediction of complex traits and diseases. His research involves methods and software development for the analysis of big omic data and applications across different traits and diseases in humans as well as in plants and animals.

JOSEPH GARDINER, PhD
PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr. Gardiner has been a faculty member at MSU since 1978 where his primary research interests are in outcomes research, survival analysis, clinical trials and cost-effectiveness analysis. He has published widely on methodological aspects of statistics as well as in many applied areas. Dr. Gardiner is a Fellow of the American Statistical Association, and an Elected Member of the International Statistical Institute.

* HECTOR GONZÁLEZ, PhD
ASSOCIATE PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Hector M. González is a licensed neuropsychologist with clinical research training and experiences in Alzheimer’s Disease Research Centers. He acts as PI of the Study of Latinos-Investigation of neurocognitive aging (SOL-INCA), examining genomics and midlife cardiometabolic risks for Mild Cognitive Impairment (MCI) and Alzheimer’s disease and related dementias (ADRD) among diverse Latinos in the United States. Dr. González’ research focuses on general Latino health, with emphases in body systems associated with brain aging, health, decline, and neurocognitive disorders.

CLAUDIA HOLZMAN, DVM, MPH, PhD
PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr. Holzman’s research focuses on pregnancy outcomes, women’s health, and health equity. She has been Principal Investigator (PI) of an NIH-funded, longitudinal study, the Pregnancy Outcomes and Community Health (POUCH) Study, which began by enrolling 3,019 women at mid-pregnancy from 52 clinics in 5 Michigan communities and now follows mothers to middle age to examine health trajectories.
CHENXI LI, PhD
ASSISTANT PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr Li's primary research works focus on statistical analysis of interval-censored failure time data and multivariate survival analysis including competing risks analysis, frailty models and multi-state models. His research interests also include quantile regression, longitudinal data analysis and statistical genetics. Beside methodological research in biostatistics, Dr Li has been collaborating with medical researchers at MSU in grant applications, data analyses and manuscript writing.

QING LU, PhD
ASSOCIATE PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr. Lu's research is within the field of statistical genetics, with a strong interest in developing and applying statistical methods for analyzing large-scale human genetic data. One line of research is on the development and application of statistical methods for risk prediction research. In parallel with the risk prediction research, he is also interested in developing new methods for high-dimensional genetic association analysis.

ZHEHUI LUO, PhD
ASSOCIATE PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

With a PhD in economics and an M.S. in statistics, Dr. Luo has extensive experience in epidemiological studies and health services research, collaborating with a broad range of investigators in a multidisciplinary environment. Her primary research interest is to develop new econometric and statistical methodologies for causal inference and estimating heterogeneous treatment effects in comparative effectiveness research with observational data.

CLAIRE MARGERISON, PhD
ASSOCIATE PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Claire Margerison is an Associate Professor in the Department of Epidemiology and Biostatistics. Dr. Margerison's research focuses on understanding the determinants of racial/ethnic and socioeconomic disparities in women's health across the life course, with a particular focus on preconception, pregnancy, and postpartum health.

NIGEL PANETH, MD, MPH
PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr. Paneth studies childhood neurodevelopmental handicap in relation to exposures in pregnancy and the perinatal period. His recent nested case-control study found inflammatory and other gene sets elevated in newborns who later developed cerebral palsy, compared to controls. For commoner developmental disorders, such as autism spectrum disorder and cognitive impairment, he assembles and follows pregnancy cohorts with archived biological material to examine influences on disease or development. He teaches 2 courses – Introductory Epidemiology and Perinatal Epidemiology.
*JANET OSUCH, MD, MS
PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Janet Rose Osuch (M.D., 1979, Michigan State University (MSU); M.S. 2000, MSU) is Professor of Surgery and Epidemiology at MSU and has served as Assistant Dean of Preclinical Curriculum in the College of Human Medicine since 2006. She currently practices breast cancer risk counseling and conducts research in environmental epidemiology. She is the author of several journal articles on breast cancer, topics in medical education, and the health effects of in utero DDE and PCB exposure.

DOROTHY PATHAK, PhD, MS
PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr. Pathak has been involved in epidemiologic and biostatistical research for the past 35 years. The principal focus of her research is breast cancer etiology and prevention. She is the PI of an NCI-funded international study of breast cancer in women of Polish ancestry evaluating contributions of nutritional exposures to breast cancer risk. She has published about the dual effect of pregnancy on breast cancer risk, the cross-over in breast cancer incidence for young Black and White women, as well as on the serotonergic mediation of estrogen-related physiology and pathology.

JAMES PIVARNIK, PhD
PROFESSOR OF KINESIOLOGY AND EPIDEMIOLOGY AND BIOSTATISTICS

James Pivarnik is a professor of Kinesiology and Epidemiology & Biostatistics, Director of the Center for Physical Activity and Health and the MSU Research Integrity Officer. As an exercise physiologist and epidemiologist, he studies the exercise responses of females, particularly during pregnancy, and children, both healthy and those with chronic diseases. His focus is on the role of physical activity in reducing the risk factors for chronic disease development (e.g., cardiovascular disease) and morbidity and mortality.

MAT REEVES, BVSc, PhD
PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Mat Reeves studies quality of care and outcomes using large scale stroke registries, and conducts clinical studies including trials designed to improve transitional care for stroke survivors after they leave the hospital. His training includes a veterinary degree from the University of Liverpool, U.K., a MS from Colorado State University, a PhD from University of Pennsylvania, and applied public health training (E.I.S.) from the CDC (Atlanta). He has authored over 220 peer-review publications.

* MAHDI SAEED, DVM, MPH, PhD
PROFESSOR OF LARGE ANIMAL SCIENCES, EPIDEMIOLOGY AND BIOSTATISTICS

Mahdi Saeed is a professor of Epidemiology and Infectious Diseases at the Departments of Epidemiology and Biostatistics and Large Animal Clinical Sciences. Dr. Saeed’s research has been focused on epidemiology, risk factors, and pathogenesis of infectious disease in humans and animals. He has successfully invented an effective vaccine to diarrheal disease in humans and animals that is caused by enterotoxigenic E. coli, which warranted a full patent from the US. Department of Comerce.
NICOLE TALGE, PhD
ASSISTANT PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Nicole Talge is a developmental psychologist investigating links between pregnancy health and the development of childhood cognitive and socio-emotional problems. Her most recent efforts investigate the antecedents and consequences associated with global markers of gestational health (e.g., birth weight for gestational age; preterm birth). A major area of interest involves understanding the source(s) of variability in childhood behavioral outcomes following exposure to perinatal health risks.

DAVID TODEM, MSPH, PhD
ASSOCIATE PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr. Todem’s current line of research in methods revolve around the following topics: 1) Models for longitudinal, clustered and functional data; 2) Inferential techniques for non-identifiable models in the context of non-random missing data paradigm; and 3) Testing procedures for evaluating mixture models. Primary applications are in the area of Alzheimer’s disease, Cancer, and Dental Caries research.

KRISTEN UPSON, PhD, MPH
ASSISTANT PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Kristen Upson is an epidemiologist whose research focuses on the role of environmental factors in the development of endometriosis, uterine fibroids, adenomyosis, and menstrual disorders – gynecologic conditions that can have a substantial impact on the quality of women’s lives. The environmental factors she has studied include soy formula feeding during infancy and exposure to legacy pesticides, plasticizers Bisphenol A and phthalates, and toxic metals during the reproductive years.

ANA VÁZQUEZ, PhD
ASSISTANT PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr. Vazquez’s research focuses on the development, use, and implementation of omic-based statistical methods for human health, (e.g., cancer, obesity, exercise, and heart health). Her projects include (1) Omic Integration: The re-mapping of pan-cancer tumors to reveal more profound molecular similarities among them, (2) The development of genomic-based statistical methods and software for prediction of traits; and (3) Genetics of Response to Interventions, including physical exercise.

ELIZABETH (BETSY) WASILEVICH, PhD, MPH
ASSISTANT PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr. Wasilevich’s research examines health services for the diagnosis and management of chronic disease. Her work focuses on understanding the determinants of high quality and efficient health care during treatment, survivorship, and end of life periods for persons with cancer. She also leads studies to identify opportunities to improve clinical asthma management and emergency department care.
COMMUNITY BASED FACULTY

DEBRA FURR-HOLDEN, PhD
PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr. Debra Furr-Holden is an epidemiologist with expertise in drug and alcohol dependence epidemiology, prevention science and environmental strategies and structural intervention for violence, alcohol, tobacco and other drugs. In the last decade her work has focused in large part on developing environmental strategies and structural interventions for violence, alcohol, tobacco and other drug prevention in high-risk and urban settings. She is the Interim Director of the Division of Public Health.

KELLY HIRKO, PhD
ASSISTANT PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Kelly Hirko is an Assistant Professor in the Department of Epidemiology and Biostatistics, based in Traverse City. Her research utilizes plasma biomarkers and tumor markers to characterize the underlying biological mechanisms in the etiology of breast cancer and to better understand breast tumor heterogeneity. Dr. Hirko’s research interests also include examining cancer disparities and identifying risk factors for aggressive subtypes of breast cancer, including inflammatory breast cancer.

JEAN KERVER, PhD, MSc, RD
ASSISTANT PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Jean Kerver is a nutritional epidemiologist and a registered dietitian who spends her time developing ways to support healthy lifestyle behaviors for families living in poverty or facing other challenges. Kerver’s primary research interest involves studying how the food a woman eats during pregnancy affects not only her health, but also the long-term development of her child. Dr. Kerver’s position is located in Traverse City as part of MSU’s community-based medical campus network.

LIXIN WANG PhD
ASSISTANT PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr. Zhang is a molecular epidemiologist focused on studying infectious diseases. He is interested in understanding the emergence, transmission and maintenance of pathogens and antibiotic resistance in the populations by incorporating molecular data into population-level analyses, and in turn, developing effective prevention strategies. Over the years, Dr. Zhang has studied various pathogens associated with diarrhea, tuberculosis, otitis media, COPD, sepsis, and urinary tract infections.
ALLAN KOZLOWSKI, PhD, BSc (PT)
ASSISTANT PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Allan J. Kozlowski, Ph.D., B.Sc (PT), is the Director of Outcomes Research at the John F. Butzer Center for Research & Innovation, Mary Free Bed Rehabilitation Hospital, and an Assistant Professor in the Department of Epidemiology and Biostatistics, Michigan State University College of Human Medicine. He received his B.Sc. in physical therapy in 1991 and his Ph.D. in Rehabilitation Sciences in 2010, both from the University of British Columbia. He practiced as a physical therapist and rehabilitation manager in work disability prevention before completing his doctorate in Rehabilitation Sciences.

TODD LUCAS, PhD
ASSOCIATE PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr. Lucas is a social and health psychologist whose research considers psychosocial causes of racial health disparities. He is particularly focused on stress and preventive health behavior pathways, such as cancer screening. Dr. Lucas's research is intervention-focused and especially considers psychological justice - the causes and resulting health and social consequences of perceiving injustice for individuals and communities.

MIEKA SMART, PhD
ASSISTANT PROFESSOR OF EPIDEMIOLOGY AND BIOSTATISTICS

Dr. Smart's research is focused on global alcohol policy evaluation and genomic research participation among marginalized populations. Dr. Smart promotes cross-cultural student and professional development via peer-to-peer experiential learning. Since 2011, more than 150 students and faculty have participated in her global public health topics courses. She is Director of Leadership in Medicine for the Underserved, a competitive certificate program for medical students at the MSU Flint campus.

SPECIALISTS

MADELEINE LENSKI, MS
RESEARCH ASSISTANT, DEPARTMENT OF EPIDEMIOLOGY AND BIOSTATISTICS

Madeleine Lenski has been a Research Specialist at MSU for over 15 years, as both study manager and PI for perinatal and cerebral palsy research studies, both international and domestic. These projects have largely focused on etiology and outcomes of very premature births and of cerebral palsy, including follow-up at preschool and school age.
CURRENT STAFF

JILL HAMILTON / Chair Assistant; Business Administrator

MARY ANN VIGIL / Department Administrator; F.O.

LINDA WALTERS / Information Technology

MARK WATRICH / Information Technology

DARCIE ZUBEK / Office Assistant
FIGURE 1: BREAKDOWN OF ALL CONTRACT OR GRANT FUNDING BY SOURCE

In the 2 year reporting period our department’s faculty participated as principal or co-investigators in biomedical research related contract and grants contracts totaling $12,149,676. Approximately 75% of these funds were from the National Institutes of Health.
The total amount of extramural funding that remained in our department totaled $8,435,253. This amount excludes sub-contracts and funding directed to outside of the department.
Much of our research is collaborative and inter-disciplinary that often involves interacting with research teams across campus and/or at other universities. Approximately two-thirds of our research funding involves investigators at other universities.
## EXTRAMURAL RESEARCH GRANTS 2017-2019

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<th>INVESTIGATORS</th>
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<tr>
<td>National Inst of Health</td>
<td>R21 - Research</td>
<td>Trajectories of Teacher Stress: the roles of coping and prior exposure to trauma</td>
<td>Brophy-Herb, Holly; Vallotton, Claire; Brincks, Ahnalee</td>
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<td>National Inst of Health</td>
<td>R01 - Research</td>
<td>Pesticides, Olfaction, and Neurodegeneration Among US Farmers</td>
<td>Chen, Honglei; Luo, Zhehui</td>
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<td>US Dept of Defense</td>
<td>Research</td>
<td>Airborne Pollutants as Triggers of Parkinson’s Disease via the Olfactory System</td>
<td>Chen, Honglei; Gardiner, Joseph</td>
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<td>Centers for Disease Control &amp; Prevention</td>
<td>Public Service</td>
<td>Flint Lead Exposure Registry (FLEXR)</td>
<td>Hanna-Attisha, Mona; Sadler, Richard; Rosenman, Kenneth; Paneth, Nigel; Oberst, Kathleen; Luo, Zhehui; Kasten, Eric; Jones, Nicole; Crawford, Martha</td>
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<tr>
<td>Munson Medical Center - US Department of Health and Human Services</td>
<td>Subcontract - Public Service</td>
<td>CORE: Community Opioid Recovery Expansion</td>
<td>Kerver, Jean</td>
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<td>Michigan Health Endowment Fund</td>
<td>Research</td>
<td>Food as Medicine for Older Adults Health Conditions</td>
<td>Kerver, Jean; Luo, Zhehui</td>
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<td>Shirley Ryan Ability Lab - National Institute of Health</td>
<td>Research</td>
<td>Defining Trajectories of Linguistic, Cognitive-Communicative and Quality of Life Outcomes in Aphasia</td>
<td>Kozlowski, Allan</td>
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<td>Michigan Dept of Education</td>
<td>Research</td>
<td>Conductive Education Evaluation Project (CEEP)</td>
<td>Lenski, Madeleine; Paneth, Nigel</td>
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<td>University of North Carolina at Chapel Hill - National Institute of Health</td>
<td>Subcontract - Research</td>
<td>Environment, Epigenetics, Neurodevelopment &amp; Health in Extremely Preterm Children</td>
<td>Lenski, Madeleine; Paneth, Nigel</td>
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<td>National Inst of Health</td>
<td>R03 - Research</td>
<td>New Survival Analysis Methods for Longitudinal Studies of Childhood Dental Caries</td>
<td>Li, Chenxi</td>
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<td>Project Description</td>
<td>Principal Investigators</td>
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<tr>
<td>National Inst of Health</td>
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<td>Computational Efficient Statistical Tools for Analyzing Substance Dependence Sequencing Data</td>
<td>Lu, Qing; Anthony, James</td>
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<td>National Inst of Health</td>
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<td>Methods and Software for High-dimensional Risk Prediction Research</td>
<td>Lu, Qing; Li, Chenxi; Bozoki, Andrea; Bender, Andrew</td>
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<td>Blue Cross Blue Shield of Michigan Foundation</td>
<td>Research</td>
<td>An evaluation of the BCBSM/BCN C.L.I.M.B pilot program for opioid use disorder</td>
<td>Luo, Zhehui; Wasilevich, Elizabeth</td>
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<td>University of Michigan - National Institute of Health</td>
<td>Subcontract - Research</td>
<td>Community-level determinants of suicidal behavior: Preliminary evidence from California</td>
<td>Margerison, Claire</td>
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<td>AbbVie Inc</td>
<td>Research</td>
<td>MSU Women’s Outcomes Research and Knowledge (WORK) Cohort</td>
<td>Missmer, Stacy; Todem, David; Johnson, Jennifer; Fazleabas, Asgerally</td>
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<td>Michigan Dept of Health &amp; Human Services - Michigan Dept of Community Health</td>
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<td>FY19 INTEGRATED CARE ASSESSMENT</td>
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<td>FY19 FLINT WATER EVALUATION</td>
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<td>Catalyzing collaboration on air pollution and adverse birth outcomes in Michigan</td>
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<td>Wayne State Univ, University of MI, HFHS, MDHHS</td>
<td>Research</td>
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<td>National Inst of Health</td>
<td>UG3 - Research</td>
<td>Prenatal Exposures and Child Health Outcomes: A Statewide Study</td>
<td>Paneth, Nigel; Zhang, Lixin; Tomlinson, Thomas; Talge, Nicole; Racicot, Karen; Kever, Jean; Hirko, Kelly; Hanna-Attisha, Mona; Comstock, Sarah; Barondess, David</td>
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<td>Institution</td>
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<td>National Inst of Health</td>
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<td>Prenatal Exposures and Child Health Outcomes: A Statewide Study</td>
<td>Paneth, Nigel; Zhang, Lixin; Tomlinson, Thomas; Talge, Nicole; Racicot, Karen; Kerver, Jean; Hirko, Kelly; Comstock, Sarah</td>
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<td>Michigan Dept of Health &amp; Human Services</td>
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<td>Michigan Stroke Registry Consultation Project</td>
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<td>Patient-Centered Outcomes Research Institute</td>
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<td>Improving Care Transitions for Acute Stroke Patients Through a patient-centered Home Based Case Management Program</td>
<td>Reeves, Mathew; Freddolino, Paul; Hughes, Anne; Woodward, Amanda; Coursaris, Constantino; Swierenga, Sarah</td>
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<td>National Inst of Health</td>
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<td>Longitudinal Analysis of Dental Caries Indices in Inner-City African-American Children</td>
<td>Todem, David</td>
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<td>National Inst of Health</td>
<td>R00 - Research</td>
<td>Influence of Diet, Iron Stores, and Toxic Metals on Uptakes and Effects on Uterine Fibroid Risk in African American Women</td>
<td>Upson, Kristen</td>
</tr>
<tr>
<td>University of Alabama at Birmingham - National Institute of Health</td>
<td>Subcontract - Research</td>
<td>Translational Genomics of Hyperuricemia</td>
<td>Vazquez, Ana</td>
</tr>
<tr>
<td>Amer Nurses Foundation Inc</td>
<td>Research</td>
<td>Symptom Evaluation and Management of Childhood Cancer Survivors: Targeting Vincristine-Induced Peripheral Neuropathy</td>
<td>Wyatt, Gwen; Brincks, Ahnalee; Wasleyevich, Elizabeth</td>
</tr>
<tr>
<td>Blue Cross Blue Shield of Michigan Foundation</td>
<td>Research</td>
<td>Antibiotic Use During Pregnancy and Antibiotic Resistance in Offspring</td>
<td>Comstock, Sarah; Zhang, Lixin</td>
</tr>
<tr>
<td>National Inst of Food &amp; Agriculture</td>
<td>Research</td>
<td>Impact of ceftiofur use on antibiotic resistant bacterial populations in dairy cattle</td>
<td>Manning, Shannon; Zhang, Lixin; Sordillo-Gandy, Lorraine; Ruegg, Pamela; Norby, Bo; Erskine, Ronald</td>
</tr>
<tr>
<td>Michigan Health Endowment Fund</td>
<td>Research</td>
<td>An Integrated Model for Personal Assistants Research and Training (IMPART)</td>
<td>Luz, Clare; Swierenga, Sarah; Luo, Zhehui</td>
</tr>
</tbody>
</table>

* Bolded names indicate departmental faculty
WE’RE A WISE INVESTMENT FOR MICHIGAN 2017-2019

$5,406,000
GENERAL FUND
Department Budget

$1,079,000
TUITION FROM OUT OF STATE STUDENTS
Approximation based on student place of origin

$9,420,000
GRANT FUNDS BROUGHT INTO THE STATE OF MICHIGAN
Excludes funds paid to subcontractors outside of Michigan and grants from Michigan-based funding sources

$10,228,000
TOTAL FUNDS AWARDED*
Includes funds paid to subcontractors outside of Michigan and grants from Michigan-based funding sources

* Our department faculty participated as lead investigator or co-investigator in grants totaling this amount.
GRANTS SUPPORTING RESEARCH AND CAREER DEVELOPMENT AWARDS

NIDA R25 James C. Anthony, PhD (PI)
National Hispanic Science Network Early Stage Career Mentoring for NIDA Research (ESCM-NIDA)
Supports 7 ESCM Post Doc Fellows

NIH/NHLBI K01 Claire Margerison, PhD (PI)
Pregnancy and Beyond: Windows into Disparities in Women’s Cardiovascular Health

NIH/NINR R00 Kristen Upson, PhD (PI)
Influence of Diet, Iron Stores, and Toxic Metals on Uptakes and Effects on Uterine Fibroid Risk in African American Women
STUDENTS
ACTIVE, GRADUATED, & NEWLY ENROLLED
(JULY 2017 - JUNE 2019)
Our faculty members are actively engaged in service to professional organizations as well as many communities at-large. Examples include:

**STUDY SECTIONS AND REVIEW PANELS**

- Society for Pediatric & Epidemiologic Research abstract reviewer
- Centers for Disease Control Maternal and Child Health Epidemiology Conference abstract reviewer
- Centers for Disease Control, Special Emphasis Panel (Pregnancy Exposures & Birth Defects: DD-18-001)
- NRCS (Nursing and Related Clinical Sciences) Study Section in persona meeting (October 2-3, 2017)
- NCI ZCA1 SRB-X(A1) special emphasis panel teleconference review (April 26, 2018)
- Department of Defense Parkinson's Research Program, 2017
- Scientific Review Panel, American Brain Foundation, 2017
- Neurological Foundation of New Zealand grant review
- Reviewer for the Biotechnology and Bioscience Research Council (United Kingdom)
- NIH: NIDA Study Section Grant Reviews
- AAAS, Kingdom of Saudi Arabia Grant Reviews
- NIH/NINDS. ZNS1 SRB G19 Special emphasis panel. 2018
- Michigan Nutrition Network at the Michigan Fitness Foundation
  - Review Panel for Award of Supplemental Nutrition Assistance Program Education (SNAP-Ed) Partner Projects
- Pennsylvania Department of Health Formula Grants Final Performance Review. Ad hoc Reviewer
- Nazarbayev University Research Council in Astana, Kazakhstan. Ad hoc Reviewer.
- NIH ZRG1 PSE-W (55) R. Ad hoc Reviewer
- Medical Research Council, UK, 2017 Reviewer, Research Grant Application
- Tobacco Policy Research Centers Review Panel (special panel) May 2018 and September 2018
- Society for Prevention Research annual conference abstract reviewer
- MRC United Kingdom grant review. Spring 2018
- General Research Council grant review (Hong Kong), Spring 2018 & Spring 2019
- BMRD study section. March 2018
- German Research Council grant review
- Lake Forest College, academic careers panelist, April 2019
- BCBSM Foundation grant review. September 2018
- British Medical Research Council grant review. January 2019
- One NIH review anonymization study reviewer. February 2019
- Chair, Michigan ECHO grant review committee
- NIH, IRAP study section, ad hoc member (June 27-28, 2019)
• International Conference on Urban Health. Munyono, Uganda. Panel Chair.
• NIAID Special Emphasis Panel ZAI1 AWA-M (M1), Nov. 2018
• NIH CSR Anonymization Survey Study Section. August 2018 – April 2019
• American Stroke Association International Stroke Conference, Abstract reviewer
• American Heart Association Quality of Care and Outcomes Research (QCOR) Conference, Abstract reviewer
• NIH StrokeNet Trial study section, ad hoc reviewer
• New Zealand Neurological Foundation, grant reviewer
• Welsh Stroke Research platform, grant reviewer
• Health and Biomedical Sciences review panel for the Strategic Partnership Grant (SPG) program, 2019-
• American Brain Foundation Scientific Review Panel, 2017-
• NIEHS 2020/01 ZES1 LAT-S (K1) 1 Career Development in K Applications II (Oct 2019)
• NIEHS K99/R00 - ZES1 LWJ K (K8) 2, July 2019
• CDC Peer Review Panel TS 18-004: Identify, Analyze, and Evaluate Potential Risk Factors for Amyotrophic Lateral Sclerosis, June 2018
• USAMRMC Department of Defense Parkinson’s Research Program, Oct 2017 (TUA-GEI panel)

PROFESSIONAL ORGANIZATIONS- ADMINISTRATIVE ROLE

• Communication Chair, Optimization of Biological and Behavioral Interventions Special Interest Group, Society of Behavioral Medicine
• Chair, Terminology Task Force, Measurement Networking Group, ACRM
• Chair-Elect, Measurement Networking Group, ACRM (from October 2017)
• Secretary, Measurement Networking Group, ACRM (to October 2017)
• Chairman, Credentials Committee, College on Problems of Drug Dependence, Continuing Appointment through term
• Leadership Team, Optimization of Behavioral and Biobehavioral Interventions Special Interest Group of the Society for Behavioral Medicine
• Chair, Credentials Committee, College on Problems of Drug Dependence
• Chair, Rema Lapouse Awards Committee, American Public Health Association
• Executive Board, Society for Pediatric and Perinatal Epidemiologic Research

REVIEW AND ADVISORY BOARDS

• Munson Health Care Population Health Advisory Board member
• Shape Up North (SUN) Advisory Council member
• PLOS ONE Statistical Advisory Board
• Shape Up North Advisory Council
COMMUNITY EDUCATION

- Michigan Science Olympiad, Disease Detectives Event Coordinator
- Association of Community Cancer Centers (ACCC), Munson Medical Center
- Brain Awareness Day at Marble Elementary School – Society for Neuroscience and MSU Neuroscience outreach to two 3rd grade classes
- Northern Michigan Vaccine Preventable Disease Taskforce
- Tobacco Free Coalition of the North
- Cancer Research Consortium of West Michigan
- East Lansing Public School’s Wellness Committee
- Michigan Chapter of Scholars Strategy Network

CONSULTATIONS

- Michigan Department of Health and Human Services, maternal and child health epidemiologic issues
- Pediatric Public Health Program in Flint, assessing and remediating the adverse health effects of the water contamination
- External Advisor, Screening to Improve Health in Very Premature Infants in Europe (SHIPS) Study, INSERM, Paris
- Grant review consulting for the Health-Related Community-Based Participatory Research Small Grants program of the ASCEND Center for Biomedical Research at Morgan State University
- Consultant to Research Committee & Visiting Scholar, Pine Rest Mental Health Services, Grand Rapids, Michigan
- Michigan Stroke Registry, Michigan Department of Health and Human Services

COMMITTEES

- Research Steering Committee, Pine Rest Mental Health Center
- Northern Michigan Vaccine Preventable Task Force member
- Infant Mortality Executive Committee, MDHHS
- Member, Executive Steering Committee, National Hispanic Science Network.
- International Committee, College on Problems of Drug Dependence
- Scientific Program Committee, World Psychiatric Association Section on Epidemiology and Public Health, Columbia University, New York, May 2018
- “CHPAMS Best Paper Award” committee
- National Eye Institute, Special Emphasis Committee. 2017
- Michigan Chapter of Scholars Strategy Network
- Data Safety Monitoring Board
- Steering Committee, Concentration on National Hispanic Science Network
- Scientific Program Committee, Concentration on National Hispanic Science Network
- International Programs Committee, College on Problems of Drug Dependence
- World Psychiatric Association Section on Epidemiology and Public Health
- International Federation of Psychiatric Epidemiology
- NIH ECHO publications committee
• Mentoring Planning Committee, Nutrition Epidemiology Research Interest Section, American Society for Nutrition
• Perinatal Regional Collaborative
• Perinatal Substance Use Disorder Committee
• Northern Michigan Vaccine Preventable Task Force
• Michigan Department of Health & Human Services, Division of Family, Maternal, and Child Health, Population Health and Community Services
• Young Ambassador, World Endometriosis Society
• National Quality Forum’s Maternal Mortality and Morbidity
• American Stroke Association, Stroke Systems of Care Committee
• American Heart Association, QCOR Scientific and Clinical Education Lifelong Learning Committee (SCILLC)
• American Stroke Association, Stroke Performance Oversight Committee (SPOC)
• Scientific Program Committee, 2020 Grand Challenges in Parkinson’s disease: When and how does it start? Grand Rapids

EDITORIAL BOARDS

• BMC Genetics, Associate Editor
• Frontiers in Applied Genetic Epidemiology
• Developmental Medicine and Child Neurology
• Journal of Pharmacoepidemiology
• EC Dental Science
• International Journal of Environmental Protection and Policy
• Annals of Dentistry and Oral Diseases
• Circulation: Cardiovascular Quality and Outcomes, Guest Editor
• Polish Journal of Human Nutrition and Metabolism
• Stroke. Health Policy and Outcomes Research, Section Editor
• International Journal of Environmental Protection and Policy
• International Journal of Statistics in Medical Research
• Journal of Pharmacoepidemiology
• Scientifica: Infectious Diseases
• Human Reproduction, Associate Editor
• American Journal of Epidemiology

WORKSHOPS

• Pine Rest Mental Health Center, Depression for Excellence Workshop. 2017
• Pine Rest Mental Health Center, Partnership to Solve Behavioral Access Workshop. 2017
• Novartis Inc, Workshops on Survival Analysis, Hyderabad, India
• Novartis Inc, Workshops on Survival Analysis, East Hanover, NJ; Basel, Switzerland
• PHIELD Workgroup: A Model for Connecting Pharmacists with Multiple Disciplines to Solve Public Health Problems. American Association of Colleges of Pharmacy Annual Meeting Nashville, TN
• “Getting SMART About Adaptive Interventions” Institute of Education Sciences Summer Research Training Institute, June 2017, Washington, D.C. University of Michigan, March 2019
FACULTY PUBLICATIONS

June 2017- May 2019

SINCE IT IS DIFFICULT TO DETERMINE EXACTLY WHEN PUBLICATIONS OCCUR, THIS LIST MAY CONTAIN PUBLICATIONS THAT OCCUR BEFORE OR AFTER THESE DATES.
Arranged alphabetically by first author: (255 Publications)


Culverson RC, Saccone NL, Horton AC ...et al Holzman C. Collaborative meta-analysis finds no evidence of a strong interaction between stress and 5-HTTLPR genotype contributing to the development of depression. Mol Psychiatry 2018;23(1):133-142.


Ford S, Buscemi J, Hirko KA, Laitner M, Newton RL, Jonassaint C, Fitzgibbon M, Klesges LM. “Society of Behavioral Medicine (SBM) urges Congress to ensure efforts to increase and enhance broadband internet access in rural areas.” *Translational Behavioral Medicine*, March 2019


Li, C. Doubly Robust Weighted Log-Rank Tests and Renyi-Type Tests Under Non-random Treatment Assignment and Dependent Censoring. Statistical Methods in Medical Research., 28(9), 2649-2664 Sep 2019 DOI: 10.1177/096228021885926 PMID: 29984622

Li, C. Two-Sample Tests for Survival Data from Observational Studies. *Lifetime Data Analysis*, 24(3), 509-531 Jul 2019 DOI: 10.1007/s10985-017-9408-1 PMID: 28849359


Parker MA, Lopez-Quintero C, Anthony JC. Young, American Indian or Alaskan Native, and born in the USA: are at excess risk of starting extra-medical prescription pain reliever use? PeerJ. 2018 Oct 8;6:e5713. doi:10.7717/peerj.5713. eCollection 2018. PubMed PMID: 30324016; PubMed Central


Impact factor: 2.26


Strutz KL, Dunietz GL, Holzman C, Catov JM; authors. Re: Moderately elevated blood pressure during pregnancy and odds of hypertension later in life: The POUCHmoms longitudinal study potential mechanism for pregnant and non-pregnant hypertension: Author’s Reply. BJOG 2018; 125(3):388


