2019 Annual Research Report

Prepared by the Texas A&M University School of Public Health Office of Research

The SPH Office of Research mission is to provide efficient, effective administration and support for research activities of the faculty and staff of the School of Public Health.
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Annual Research Overview

Research is an integral part of the mission of the Texas A&M School of Public Health (SPH). SPH faculty, staff, and students actively engage in a diverse array of sponsored and unsponsored research projects. This report summarizes SPH sponsored projects, publications, presentations, and awards for calendar year 2019 (CY 2019).

**Highlights:** During 2019, two new large-scale multi-year projects were funded that include SPH researchers as leaders or key personnel: the Blue Cross Blue Shield Moonshot project and the State of Texas Medicaid 1115 waiver evaluation project. The 14th annual Dr. Jean Brender student poster competition was held during National Public Health Week in April. The Office of Research continued to engage researchers through a variety of educational and other programming and concluded the funding for the final round of Research Enhancement and Development Initiative (REDI) seed grants. Darin Garrett joined the Office of Research as new Program Coordinator in Fall 2019 and, among other valuable contributions, co-developed a new “Students to Faculty (S2F)” program to match students interested in research opportunities with SPH faculty researchers.

**Internal Funding Initiatives:** The Texas A&M University President’s Excellence Fund continued to sponsor two campus-wide opportunities – the Triads for Transformation (T3) for new multi-component pilot project collaborations offering $30,000 each to build a proof of concept and larger X-grants with competitive awards ranging from $500,000 to $1,500,000. SPH faculty continued to submit proposals and receive funding for these collaborative projects in 2019.

**2019 New & Continued Sponsored Research Funding Sources:** SPH researchers secured highly-competitive extramural research funding from federal and state governments, foundations, and other sources. Funding sources in 2019 included, among others: the Cancer Prevention Research Institute of Texas (CPRIT), National Science Foundation (NSF), National Institutes of Health (NIH), United States Department of Agriculture (USDA), Health Resources and Services Administration (HRSA), U.S. Department of Veterans Affairs (VA), Texas Department of State Health Services (DSHS), and the Robert Wood Johnson Foundation (RWJ). A categorical summary of SPH funding and scholarly output is provided below.

**CY 2019 SPH Research Statistics**

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Research Expenditures</strong></td>
<td>$ 6,767,693</td>
</tr>
<tr>
<td><strong>Total Grants &amp; Contracts</strong></td>
<td>119</td>
</tr>
<tr>
<td>Federal</td>
<td>72</td>
</tr>
<tr>
<td>State</td>
<td>18</td>
</tr>
<tr>
<td>Foundations / Private</td>
<td>10</td>
</tr>
<tr>
<td>Contracts</td>
<td>11</td>
</tr>
<tr>
<td>Internal</td>
<td>8</td>
</tr>
<tr>
<td>Publications</td>
<td>201</td>
</tr>
<tr>
<td>Presentations</td>
<td>154</td>
</tr>
<tr>
<td>Posters</td>
<td>106</td>
</tr>
</tbody>
</table>
Internal Grants and Funding Awards

The Texas A&M University President's Excellence Fund is a 10-year, $100 million program designed to support faculty and build upon Texas A&M University's commitment to the three pillars of advancing transformational learning; enhancing discovery and innovation; and expanding impact on our community, state, nation, and world. Awards include both the Triads for Transformation (T3) and President's Excellence Award (X) Grants.

Similar to funding offered through the President's Excellence Fund, the Program to Enhance Scholarly and Creative Activities (PESCA) were directed towards research and scholarly projects that could result in a significant external funding award. 2019 was the final year that PESCA funding was offered at TAMU.

**T3: Texas A&M Triads for Transformation:** is a multidisciplinary seed-grant program designed to foster new research and scholarship by moving excellent ideas from a vision to proof of concept. This program builds interdisciplinary teams to develop long-term research and scholarship collaborations. **SPH faculty members in BOLD text.**

- **Algorithms for Opioid Use Prediction Derived From Daily Computer Use Patterns of Office Workers**
  - Benden, Mark E, EOH
  - Zoh, Roger S, EPI/BIO
  - Liu, Jyh C, Engineering

- **Assessing and Remediating Health and Safety Issues In Children’s Play Spaces in Resort Settings**
  - Maddock, Jason E, EOH
  - Suess Raeisinafchi, Courtney, AgriLife
  - Spengler, John O, HPCHS

- **Framing Gun Control as a Suicide Prevention Measure: Influencing Health Education, Public Perception**
  - Lueck, Jennifer A, Liberal Arts
  - Callaghan, Timothy H, HPM
  - Dunaway, Johanna L, Liberal Arts

- **Miniaturized Photonic Crystal Bio-Sensors For Sensitive and Label-Free Detection of Bio-Markers**
  - Schuessler, Hans A, Science
  - Lin, Paotai, Engineering
  - Carrillo, Genny, EOH

- **The Burden of Crop and Livestock Disease-Associated Production**
  - Colwell, Gregory B, HPCHS
  - Budke, Christine M, Veterinary Medicine & Biomedical Sciences
  - Fischer, Rebecca, EPI/BIO

- **The Role of Malat1 and Nrf2 in Regulating diabetogenic Effects of Early Life Air Pollution Exposure**
  - Johnson, Natalie M, EOH
  - Rodrigues Hoffmann, Aline, Veterinary Medicine & Biomedical Sciences
  - Ferdinand, Alva O., HPM

**Program to Enhance Scholarly and Creative Activities (PESCA).**

Sponsored by the Division of Research at Texas A&M, (Awarded January 30, 2019). **SPH faculty members in BOLD text**

- **Examining Contextual Risk Factors of Smoking during Pregnancy and Postpartum Smoking Relapse among Rural, Low-Income Maternal Women.**
  - Ping Ma, HPCHS
  - Maria Perez-Patron, EPI/BIO
  - Lei-Shih Chen, Education and Human Development

- **Using a Mixed-Methods Approach to Examine Contextual Factors about Unintentional Injury Risk among Children with Special Healthcare Needs.**
  - Ping Ma, HPCHS
  - Dalun Zhang, Education and Human Development
Texas A&M President’s Excellence Fund: X Grants

The X Grant program was designed to bring faculty of Texas A&M together across disciplines. The program’s goal is to unlock creative and imaginative ideas that will address important problems in areas that will significantly impact the most important challenges facing global society. SPH faculty members in BOLD text.

Digital Twin City for Age-friendly Communities: Crowd-biosensing of Environmental Distress
Ahn, Changbum R, Architecture
Chaspari, Theodora, Computer Science & Engineering
Ham, Youngjib, Construction Science
Lee, Chanam, Landscape Architecture & Urban Planning
Manser, Michael P., Texas A&M Transportation Institute
Preeti Zanwar, EPI/BIO
Tan, Shuman, Texas A&M Transportation Institute

Mitigating Mental Health Stigma in Higher Education through Complementary Facilitated Dialogues
Sasangohar, Farzan, Industrial & Systems Engineering
Covey, Mary A, Vice President for Student Affairs
Kash, Bita A, HPM
Liberzon, Israel, Psychiatry
McCord, Carly E, Psychiatry
McDonald, Anthony, Industrial & Systems Engineering
Ranjana Mehta, Industrial & Systems Engineering
Rao, Arjun, Industrial & Systems Engineering
Schmit, Cason D, HPM
Research Centers CY 2019

**Key Accomplishments**

CPHA led the Texas Active for Life® Coalition with over 150 state-wide members to focus on campus, community, clinical and corporate partners on healthy aging issues.

CPHA received the 2019 Redefining American Healthcare Award from the Healthcare Leadership Council for its Texas Active for Life® Program.

CPHA received the 2019 Community ConnecTivity Award from Tivity Health for their rural health programming.

CPHA expanded its funding and strategic initiatives to include more corporate and industry partners such as Pfizer Vaccines, Birkland Current, Clairvoyant Networks, and STATinMED Research.

CPHA Co-Director Matthew Smith received the 2019 Mentorship Award from the American Academy of Health Behavior.

CPHA was a finalist for the 2019 ASPPH Harrison Spencer Award.

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**Key Accomplishments**

Jane N. Bolin and Alva Ferdinand presented SRHRC research on rural health disparities at four legislative briefings held at the U.S. Capitol.

SRHC researchers (Bolin, Ferdinand, and Callaghan) were invited to present their work at events sponsored by the Harvard T.H. Chan School of Public Health, Rural Health Research Gateway, HRSA National Conferences, and Rural Healthy People Diabetes Benchmarking conversations with the CDC.

Jane Bolin wrote an article about Rural Hospital Closings for *The Conversation*.

In conjunction with the TAMU College of Medicine, Family Residency Program, the CPRIT-funded breast, cervical, and colorectal cancer screening and prevention grants, SRHRC provided clinical services, outreach, training, and education in many predominantly rural and underserved Texas counties.
Research Centers CY 2019 continued…

Key Accomplishments

The Texas A&M Ergonomics Center conducted video analysis of cashier positions for assessment of occupational health and safety outcomes, determining strategies to minimize injury while the employee completes their assigned tasks. This analysis has the potential to impact millions in the retail industry.

In conjunction with several industry partners, such as Dell computers, the Texas A&M Ergonomics Center developed a worldwide integration plan for smart building technology including WELL certification (program for healthy buildings that focuses on employees’ health and wellness). This facility management plan was deployed worldwide for 165,000+ employees.

The Ergonomics Center continues to submit patent applications for new health sensors in the office environment that can detect anomalies in health status, and an additional patent (Benden) for electronic sitting/standing desks, and anti-fatigue devices that are licensed by Varidesk® (now Vari®) for commercialization.

Key Accomplishments

CHOT celebrated its 11th year of collaboration with 16 sponsored projects spanning population health, analytics, innovative technology, improving the patient experience, care coordination, and access to care analysis.

In spring 2019, CHOT hosted a strategic planning meeting to prepare for the Phase III Industry/University Cooperative Research Center grant.

TAMU faculty progressed in their project work focused on best practices in connecting and utilizing databases in large health systems to better manage patient populations and treatments.
Key Accomplishments

CCHD conducted regional health assessments including the Brazos Valley Health Assessment of an eight county Brazos Valley region and the St. Luke’s Health-Memorial Health Assessment of an eight county East Texas region.

CCHD began evaluating the Hogg Foundation’s Well-being in Rural Communities initiative, which funds community-driven activities aimed at improving the mental and emotional well-being of citizens.

CCHD continued state-wide evaluation and capacity building efforts to prevent sexual violence and provide tele-assisted medical forensic exams to survivors of sexual assault through multiple projects including the Texas Rape Prevention and Education Evaluation project, the Texas Tele-forensic Remote Assistance Center, and the Telehealth Center for Sexual Assault Forensic Medical Examination.

CCHD continued capacity building of Community Health Workers (CHW) through certification and/or direct training of approximately 850 CHWs and CHW Instructors as well as the development of curricula and evaluations in partnership with the American Cancer Society, Texas Department of State Health Services, and National Rural Health Association.

Key Accomplishments

The USA Center facilitated the first Tribal Preparedness Workshop in South Dakota to promote collaboration among the Sioux Tribes in the event of a public health disaster.

The long-standing partnership between the USA Center, the South Dakota Department of Health, and the Sioux Tribes in South Dakota led to a new contract with the Texas Department of State Health Services to build relationships between the Center for Health Emergency Preparedness and Response and each of the three federally-recognized tribes in Texas. The goal of this project is to promote coordination between the state and tribe in planning for and responding to emergencies affecting the public’s health.

Prior to the first reported cases of COVID-19 in Texas, the Department of State Health Services Center for Health Emergency Preparedness and Response requested the USA Center stand up support efforts to engage sector partners to better understand broader concerns during the planning phase.
Research Programs CY 2019

Program for Asthma Research & Education
Director: Genny Carrillo, M.D., ScD

Program on Global Health Research
Director: Brian Colwell, Ph.D

Program for Reproductive Health & Child Health
Director: Maria Perez-Patron, Ph.D

Program for the Environment & Sustainability
Director: Virender Sharma, Ph.D

Program on Health Law & Policy
Director: Cason Schmit J.D.
Co-Director: J.O. Spengler Ph.D, J.D.

Program on Public & International Engagement for Health
Director: Bernard Appiah, DrPH
New Extramural Funding Awards* for CY 2019

*Awards Received by SPH Investigators as PI or Co-PI with initial funding or start dates in CY 2019


Martinez, Denise. Mitchell, Stacey (PI). The fiscal Year 2020 Activities of a Project Focused on Disseminating Smoking Cessation Outreach Strategies and Educational Activities Across the State of Texas TX DSHS. $55,000 (2019-2020).


Quiram, Barbara. DSHS Texas Tribal Preparedness Texas Department of State Health Services. $37,703 (2019-2020).


Bolin, Jane. Ferdinand, Alva.
Southwest Rural Health Research Center: Rural Health Research Grant Program Cooperative Agreement, Health Resources and Services Administration (HRSA). $2,816,714 (2016-2020).

Southwest Rural Health Research Center Year 3 Project 4: Midterm Examination of Healthy People 2020: Comparisons across the Urban-Rural Continuum in Meeting National Mortality Objectives. $105,004 (2018-2019).

Ferdinand, Alva. Callaghan, Timothy.
Southwest Rural Health Research Center Year 3 Project 5: Webinar of Project 4 Results. $16,714 (2018-2019).

Callaghan, Timothy. Washburn, David. Schmit, Cason.

Radcliff, Tiffany.
**Ory, Marcia (PI). Ledric Sherman (PI).**

**Ory, Marcia.**

**Ory, Marcia.**
Healthy South Texas, State of Texas. $4,560,000 (2018-2019).

**Ory, Marcia (PI), Lee, Chanam (PI), Zhu, Xuemei (PI).**

**Ory, Marcia.**
SUSTAIN for Better Health and Health Care for Older Adults, DHHS Administration for Community Living (ACL). $895,189 (2016-2019).

**Ory, Marcia. Smith, Matthew.**

**Ory, Marcia (CoPI). Lee, Chanam. Zhu Xuemei**
Dementia-Friendly Communities to Promote Active Living in Persons with AD/ADRD. Administrative Supplement. $281,495 (2018-2020).

**Ory, Marcia.**
GamePlan4Care: Web-based Delivery System for REACH II. Baylor Research Institute. $ 63,156 (2018-2023).

**Ory, Marcia (PI). Lee, Chanam (PI), Li, Weh (PI).**

**Ory, Marcia (PI). Lee, Chanam (PI), Zhu, Xuemei (PI).**

**Ory, Marcia (Co-PI). Purcell (Co-PI).**
Teens Think Smart: A Novel Approach to Preventing Opioid Misuse Among Adolescents in Rural Texas. USDA/NIFA. $97,782 (2019-2021).

**Ory, Marcia (PI).**

**Ory, Marcia (PI).**
Improved AD/ADRD Assessment Sensitivities Using a Novel In-Situ Sensor Systems. $701,497 (2019-2021).

**Smith, Matthew. Ory, Marcia (Co-PIs).**

**Smith, Matthew.**
Smith, Matthew.

Smith, Matthew.
Evidence-Based Programs and Healthcare Utilization in Florida. Florida Health Networks. $50,000 (2018-2020).

Smith, Matthew. Ory, Marcia
No Falls Partnership, United Way Tarrant County; DHHS - Administration for Community Living. $96,000 (2017-2020).

CENTER FOR HEALTH ORGANIZATION TRANSFORMATION

Kash, Bita.
Innovative Managing Director, National Science Foundation

Kash, Bita.

Kash, Bita.

CHOT Membership Agreements:

Children’s National Medical Center. $150,000 (2018-2021).

College of Medicine Practice Plan, Texas A&M Health Science Center. $150,000 (2018-2021).

CHOT Site Contributions:
The University of Louisville. $20,000. (2017-2019).

The University of Washington. $20,000 (2017-2020).

The University of Alabama-Birmingham. $60,000 (2017-2019).

ERGONOMICS CENTER

Benden, Mark.
Texas A&M University Occupational Safety & Health Training Program (competitive 5 year renewal), NIOSH. $750,000 (2018-2023).

Benden, Mark. (Co-I).
NSF ERC PATHS-UP with Center for Remote Health and Systems Technology. $10,000,000 (2017–2022).

Benden, Mark.
Impact of Varidesk® usage and gamification concept on sedentary behavior at Texas A&M University, Varidesk. $75,000 (2018-2021).

Mehta, Ranjana. (PI). Peres, Camille (Co-PI).

Peres, Camille.
Center for Community Health Development

Clark, Heather.

McKyer, E. Lisako.

McKyer, E. Lisako.

USA Center for Rural Public Health Preparedness

Quiram, Barbara.
Cause of Death Online Trainings, Texas Department of State Health Services. $750,000 (2017-2020).

Quiram, Barbara.

Quiram Barbara.

Quiram Barbara.

Quiram, Barbara.
Texas Hurricane Response Hub Technical Assistance Center. Texas Health Institute. $52,000 (2019-2020).
Other Active Grants & Contracts


**Carrillo, Genny**. Health Outcomes of Water Insecurity in Urban Mexico: A Pilot Project, Texas A&M University CONACYT Program. $4,000 (2017-2019).

**Colwell, Brian**. Youth Tobacco Education Project, Texas Department of State Health Services (DSHS). $713,393 (2003-2019).


**McDonald, Thomas (Co-PI)**. Prioritizing Risks from Oil Spills, National Academy of Sciences. $700,000 (2017-2019).


**Kum, Hye-Chung**. EAGER: Collaborative Research: A Benchmark Data Linkage Repository, TEES / National Science Foundation. $39,928 (2017-2020).

**McMaughan, Darcy**. Developing a Provider Tool to Improve Health Care Transition Outcomes through the Promotion of Medical Homes for CSHCN, Texas Department of State Health Services (DSHS). $180,000 (2017-2019).

**Mendoza, Itza**. Influence of contaminant antibiotics on antibiotic resistance in soils, Texas A&M University PESCA Program. $25,000 (2017-2020).

**Mendoza, Itza**. Spread of Contaminant Antibiotics and Antibiotic Resistance in Soils Due to Extreme Weather Events, Texas A&M University CONACYT Program. $12,000 (2017-2020).

**Mendoza, Itza**. Farmworkers’ Risk of Exposure to Antibiotic-resistant Bacteria in Soils, Southwest Center for Agriculture Health, Injury Prevention, and Education / NIOSH. $18,500 (2017-2019).


Sharkey, Joseph R. Salud Para Usted y Su Familia [Health for You and Your Family]: Family-Focused Childhood Obesity Prevention through a Systems-Oriented Multilevel Approach in Arizona, New Mexico, and Texas Border Area, United States Department of Agriculture (USDA) National Institute of Food and Agriculture. $4,904,638 (2015-2020).

Sharkey, Joseph R. Empowering Rural Communities and Families: Preventing Chronic Disease through Experiential Nutrition Education, United States Department of Agriculture (USDA) National Institute of Food and Agriculture. $322,000 (2017-2019).


Castillo EC, Campos-Bowers M, Ory M. Expanding Bicycle Infrastructure to Promote Physical Activity in Hidalgo County, Texas. Preventing Chronic Disease 2019; 16:E126.


(64) *Hala A, McIntosh W, and McKyer L. P99 Effectiveness of m-Health to Promote Physical Activity in Healthy College Students: A Randomized Controlled Trial. *Journal of Nutrition Education and Behavior* 2019; 51(7): S77.


(4) Alaniz A and Burdine J. Rural Community Engagement. Texas A&M Rural and Community Health Institute, College Station, Texas. May 21, 2019.


(11) Burdine J. A Peek at Rural Community Engagement. Texas A&M Rural and Community Health Institute, College Station, Texas. May 20, 24, and 28, 2019.


(38) **Griffith JM.** “A Picture is Worth a Thousand Words” and a Great Assessment Tool: Using Photo Journals in a Foundational Course. Transformational Teaching and Learning Conference, College Station, Texas. May 2, 2019.


(49) **Kash BA.** Outcomes Research: Highlights, Projects, and a Deep Dive into Hospital Readmissions. Clinical Science & Translational Research Grand Rounds, College Station, Texas. February 5, 2019.


(51) **Kum H-C** and Ragan E. exploring the use of Interactive Interfaces and Feedback Mechanisms to Enhance Privacy in Data Workers through Information Accountability. 2019 Symposium on Usable Privacy and Security, Santa Clara, California. August 11–13, 2019.


(65) Mier N. Applying the Project-Based Learning Approach in a Capstone Course: Lessons Learned. Transformational Teaching & Learning Conference, College Station, Texas. May 1, 2019.


(82) Pickens A. The Importance of Professional Communication Mentoring in Project-Based Course Components. Transformational Teaching and Learning Conference, College Station Texas. May 1-2, 2019.


(84) Quinn C, Ory M and Smith M. Chronic Disease and Collaborative. Healthier Texas Summit, Austin, Texas. October 17-18, 2019.


(97) Sentell T, Agner J, Irvin L, Starr R, Pirkle C, Maddock J and Buchthal O. Building a Culture of Health: Insights from 18 Years of a Multisector, Theory-Based, Statewide Program to Prevent Chronic Disease in Hawaii. 23rd World Conference on Health Promotion, Rotorua, New Zealand. April 7-11, 2019.


(104) Sharma VK. High-Valent Iron Species (Ferrates) in Environmental Remediation. Department of Biological and Environmental Chemistry, Faculty of Humanity-Oriented Science and Engineering, Kindai University, Fukuoka, Japan. September 30, 2019.


(123) Sharma VK. Ferrates in Purification of Water and Wastewater. College of Urban and Environmental Sciences, Peking University, Beijing, China. April 29, 2019.


(125) Sharma VK. Ferrate Treatment Technology: Oxidation and Coagulation of Pollutants and Inactivation of Microorganisms. Chemistry Department, Kunming University for Science and Technology, Kunming, China. April 26, 2019.


(149) Xu X. Air Pollution and Adverse Pregnancy Outcomes. Toxicology Seminar at the Texas A&M University Interdisciplinary Faculty of Toxicology, College Station, Texas. April 17, 2019.


Posters

*indicates student-engaged research


(36) Giannouchos T and Ohsfeldt RL. Cost-Effectiveness Analysis of Erenumab versus Topiramate for Patients with Chronic Migraines to Identify the Cost-Effective Price Threshold in Greece. International Society for Pharmacoeconomics and Outcomes Research, New Orleans, Louisiana. May 18-22, 2019.


Faculty Research Interests by Department

Health Promotion and Community Health Sciences

Burdine, James Ph.D Interim Department Head / Professor
Community Health Development; Community Organization and Assessment; Community Health Status Assessment. Measurement of factors influencing community capacity for population health improvement and community health development strategies, particularly community health needs assessment.

Clark, Heather DrPH Director of Public Health Practice / Research Associate Professor.

Colwell, Brian Ph.D Professor
Social Ecology and Health Behavior; Seminar on Alcohol, Tobacco, and Other Drugs. Adolescent smoking cessation; school health education; youth smoking prevention; adolescent mental health and substance abuse.

Dowdy, Diane Ph.D Instructional Assistant Professor
Public Health Interventions. Childhood Obesity aimed at prevention or reduction, physical activity programs to community settings; physical activity, and aging.

Delgado-Rendon, Angelica Ph.D Instructional Assistant Professor
Entertainment education projects such as telenovelas and fotonovelas to educate communities about various health topics.

Flores, Krystal Ph.D Instructional Assistant Professor
Maternal and Child Health, Border Health (Rio Grande Valley, TX), Adolescent Pregnancy Prevention along the Texas - Mexico Border, Health disparities among vulnerable populations (including Latinas, adolescents, and immigrant children).

Garcia, Robert Ph.D Instructional Assistant Professor
Community-based approaches to cancer prevention in Latino populations (the US and abroad), Development of culturally appropriate and relevant interventions for diverse populations, Creation of community, academic, and government collaborations to improve health outcomes, Tobacco regulatory science, Tobacco use disparities, Cancer disparities.

Jones-McKyer, Ellisa Ph.D Associate Dean for Climate & Diversity / Professor
Minority health issues and health disparities; Parental influences on child health behaviors and outcomes; Socioecological factors of health behaviors.

Ma, Ping Ph.D. Assistant Professor

Mier, Nelda Ph.D Instructional Assistant Professor
Chronic Disease Prevention, Quality of Life through Behavioral Change in Mexican Americans of all ages living in Texas-Mexico border region, Physical Activity Among Mexican Americans, Intervention Research to Enhance Physical Activity Patterns, Diabetes Prevention Among Children and Adults in Border Region, Promotoras Model (Community Health Workers) in Border Regions.

Sharkey, Joe Ph.D Professor
Social and Behavioral Research Methods; Program Evaluation; Mixed-Methods Research; Environment and Policy Assessment. Food access and food choice in underserved areas, food insecurity and hunger, childhood obesity, and effects of structural and individual characteristics on nutrition, physical activity, and health outcomes, promotora empowerment, community-engaged approached to population health.

Spengler, John Ph.D, J.D. Professor
Active living policy and obesity prevention, Legal and policy issues around injury prevention, physical activity, and the built environment. Risk management policy and implementation in sport and recreation.

Stasi, Selina DrPH Instructional Assistant Professor
Access to and physical activity promotion within underserved communities and communities of color, through community-based research, asset mapping, and GIS analysis. Research regarding physician-based physical activity counseling, prescription and referral, and youth engagement and empowerment to combat disparities in physical activity and health. Linkages between community, clinic, and church, and the role public health practitioners play to leverage resources between them all.

Tai-Seale, Tom DrPH Instructional Associate Professor
Social and Behavioral Determinants of Health; Program Planning; Program Evaluations; The Biology of disease. Local health systems development and community empowerment of chronic disease prevention; program planning and evaluation for the prevention and control of chronic disease; health behavior coaching.
Epidemiology & Biostatistics

Clendenin, Angela Ph.D Instructional Assistant Professor
Risk Communication; Decision Analysis; Emergency Management and Emergency Communications; Cultural/Social Influences on Communication/Decision-Making; Public Health Preparedness and Response for Refugee Populations; Communications Measurement and Assessment; Teaching as Research.

DuPont-Reyes, Melissa Ph.D Assistant Professor
Childhood Violence Victims and Psychological and Developmental Repercussions of Childhood Violent Crimes or Events. Spanish Media and Health Outcomes.

Garcia, Tanya Ph.D Assistant Professor
Genetic Mixture Models; High-dimensional Inference; Measurement Error; Mixed Models; Neurodegenerative Diseases; Nonparametric Models; Semiparametric Models; Survival Analysis.

Fischer, Rebecca Ph.D Assistant Professor

Gorman, Dennis Ph.D Professor
Alcohol and Drug Availability and Violence; Alcohol and Drug Prevention Policies; System Methodologies; Science and Pseudoscience in Public Health Research.

Han, Daikwon Ph.D Associate Professor
Spatial Epidemiology; GIS & Spatial Analysis Methods; Environmental Health/ Exposure Science; Environmental Justice and Health Disparities; Healthcare Access; Population Studies/Spatial Demography.

Han, Gang Ph.D Associate Professor

Kalbasi, Shaida Ph.D Instructional Assistant Professor
Health Disparities, Women's Health, Quality of care for Immigrants, and Racial Minorities, Effect of Discrimination, and Race Relations on Health outcomes.

Perez-Patron, Maria Ph.D Research Assistant Professor.

Regan, Annette Ph.D Assistant Professor
Andreyeva, Elena Ph.D Assistant Professor
Health economics, Spatial nature of the healthcare market, Urban/regional/rural economics, Health Insurance effects on policies of healthcare delivery, Risky health behaviors.

Bolin, Jane Ph.D, J.D., R.N Professor.
Health Law and Ethics, Regulatory Compliance; Cancer Screening and Prevention; Diabetes Self-Management; Chronic Disease Management; Interdisciplinary and Translational Research; Rural Health Research;

Callaghan, Timothy Ph.D Assistant Professor

Carrino, Gerard Ph.D Instructional Professor.

Côté, Murray Ph.D Program Director/ Associate Professor

Ferdinand, Alva Ph.D, J.D. Assistant Professor
Impact of laws and other policies relative to public health outcomes such as roadway safety, obesity, and access to care. Other interests include state and federal regulation of health care and community health development.

Griffith, Jennifer. DrPH Associate Dean for Academic Affairs/ Instructional Associate Professor.

Hatala, Jeffrey. Ph.D Program Director/ Instructional Associate Professor
Public health systems and service research; Rural health, health policy, and vulnerable populations; Nutrition, physical activity, obesity and related conditions; Educational pedagogy in health professions.

Kash, Bita MBA, Ph.D Professor
Organizational capacity for change and transformation; Change implementation in healthcare; Healthcare strategic planning and marketing; Quality and Cost of Care.

Kum, Hye-Chung, Ph.D Associate Professor
Data science for health care; population and health informatics; analysis of big data; decision support systems for health policy and management. Machine Learning.

Lin, Sherry Ph.D Instructional Assistant Professor
Preventive Care Services; Disabilities Research; Vulnerable Populations.

McMaughan, Darcy Ph.D Assistant Professor
Access to Care for Children and Youth with Special Health Care Needs; Community Participation, Independent Living and Social Integration for People with Disabilities; Quality of Care in Long Term Supports and Services; Assessment of Functional Ability and Care Needs.

Morrisey, Michael Ph.D Department Head, Professor
Employer-sponsored Health Insurance; Affordable Care Act; Medicare & Medicaid; Effects of Legislation on Health and Health Care; Hospital Economics; Price Transparency in Health Care.

Ohsfeldt, Robert Ph.D Regents Professor
Cost-Effectiveness and Cost Models; Economics of Health Behavior; Impact of Health Sector Regulation.

Quiram, Barbara Ph.D Professor
Public Health Infrastructure; Health System Service Quality; Public Health Workforce Development; Rural Community Health System Planning and Development; Rural Community Disaster Planning.

Radcliff, Tiffany Ph.D Associate Dean for Research / Professor.
Health Economics; Health Policy; Health Services Research; Improving Quality of Care in Long-term Care; Access to Care for Rural and Other Underserved Populations; Improving Care, Processes and Outcomes; Disaster Preparedness and Response; Veterans Healthcare; Economic Evaluation.

Ramirez, Gilbert Ph.D Professor
Systematic Review and Meta-Analytic Methodology; Decision Making Sciences; Evidence-Based Practice.

Schmit, Cason J.D. Research Assistant Professor
Law as a Social Determinant of Health; Health Information Technology; Health Information Exchanges; Privacy, Confidentiality, and Security of Health Information; Public Health Reporting and Surveillance; Pharmacists' Vaccination Authorities.

Tomaszewski, Lesley Ph.D Instructional Assistant Professor
Social Learning and Identity Formation; Gender in the Workplace; Andragogy and Curriculum Development.

Washburn, David Sc.D Assistant Professor
Global Health; Health Policy; Health Systems Analysis; Strategic and Capital Planning; The Diffusion of Innovations; Decision-Making Behavior; Access to Care.
Environmental & Occupational Health

Appiah, Bernard Ph.D Assistant Professor
Public Health Communication/Writing, Global Health, Public Health Research Methods, Patient/Health Advocacy. Public Engagement; Communication; mHealth and Mass Media Interventions for Behavior Change; Global Health; Knowledge Dissemination; Design, Implementation, and Evaluation of Socio-behavioral Interventions; Social Network Analysis; Mixed Methods.

Benden, Mark Ph.D Department Head, Associate Professor
Human Factors, Safety Engineering, Process Safety Management, and Ergonomics Office worker obesity, classroom ergonomics and childhood obesity, medical device development and testing, and rehabilitation engineering.


Cizmas, Leslie Ph.D Instructional Assistant Professor. Basic Environmental Toxicology, Global Health.


Johnson, Natalie Ph.D Associate Professor Environmental & Occupational Diseases, Environmental Health & Toxicology, Mechanisms of Disease Prevention. Environmental carcinogens; Environmental health disparities; Exposure to foodborne (aflatoxins) and environmental carcinogens (polycyclic aromatic hydrocarbons); Chemoprevention; Development of biomarkers of exposure to traffic-related air pollution; Prenatal exposure to air pollution and associated epigenetic changes; Dietary interventions to prevent environmentally-induced asthma; Population-based animal models of allergic airway disease.

Maddock, Jay Ph.D Professor Health, Wellness, and Physical Activity, Diet, Social-Ecological Approaches to Increasing Physical Activity; Nutrition, Tobacco Use, and Global Health.

McDonald, Thomas Ph.D Regents Professor Environmental Measurements/Chemistry. Environmental chemistry, petroleum geochemistry, and general organic chemistry.


Ory, Marcia Ph.D Regents & Distinguished Professor / Associate Vice President for Strategic Partnerships (TAMHSC) / Public Health Interventions. Aging and Health promotion. Chronic Disease Management; Health Technology and Community Engagement. Translational research.

Peres, S. Camille Ph.D Associate Professor Human Factors, Research Methods, Alternative Displays. Biomechanics of Human-computer interactions, Design guidelines for auditory displays, and usability of home health care technology. Worker safety, human systems integration, human systems engineering, ergonomics, procedures, engineering psychology, occupational safety.

Pickens, Adam Ph.D Instructional Assistant Professor Occupational Safety, Industrial Hygiene, Ergonomics, and Biomechanics. Ergonomic tool development; Occupational safety screening/tool development, Upper extremity modeling; Manual materials handling, and Occupational biomechanics

Antonio Rene Ph.D Associate Professor Occupational/Environmental, Chronic Disease Epidemiology

Sansom, Garret Ph.D Research Assistant Professor. Environmental health policy and planning, Community Resilience, Sustainable development, and public health, Field research methods, Community engagement strategies

Sharma, Virender Ph.D Professor Environmental, Physical, Analytical Chemistry. Iron-Based Oxidants (Ferrates and Ferrites), Kinetics and Mechanism of High-Valant Transition Metals, Advanced Oxidation Methods, Solar-Based Photoactive Materials in Water Treatments, Green Synthesis of Nanoparticles, Formation, Fate, and Toxicity of Nanoparticles in the Aquatic Environment.

Smith, Matthew Ph.D Associate Professor. Health Risk Behaviors Across the Life Course; Evidence-based Programming for Older Adults; Program Evaluation; Measurement; Survey Research Methodology. Public health systems and service research; Rural health, health policy, and vulnerable populations; Nutrition, physical activity, obesity, and related conditions; Educational pedagogy, particularly around writing skills in health professions.
2019 Faculty Research Excellence Award Recipient - Xiaohui Xu Ph.D

Dr. Xiaohui Xu, Ph.D, was presented the 2019 Faculty Research Excellence Award by the SPH Associate Dean for Research, Dr. Tiffany Radcliff. Dr. Xu is an environmental epidemiologist who exemplifies a collaborative, interdisciplinary approach to research. His research focuses on the health effects of global and emerging environmental issues, creating healthier environments, and reducing hazardous environmental exposures along with some secondary work in cancer. He is a part of a team that received approximately $1.4 million from the inaugural Texas A&M University X-grant program that is developing a “Breath on-a-chip” spectrometer for exhaled breath analysis. He received a REDI grant from the SPH and a T3 grant from Texas A&M. At the time of the award, his H-index on Google Scholar was 37 with almost 3,500 citations of his publications. He has been invited to present his research at state, national and international conferences and continues to mentor several graduate students and faculty in epidemiology and biostatistics.

2019 Active Funding

Xu, Xiaohui.
Air Pollution and Alzheimer's disease and Related Outcomes, George Washington University. $797,656 (2018-2022)

2019 Publications


2019 Student Research Awards

14th Annual Dr. Jean Brender Student Research Poster Contest award recipients:

Undergraduate:
1st: Kaytlyn Salmons
2nd: Kalina Zahariev

Graduate:
1st: Nikita Sandeep Wagle
2nd: Hannah Hoffman
3rd: Deb Kellstedt DrPH (tie) Katie Kirsch

SPH Award for Research Excellence

Doctoral:
Xiao Zhang (Ph.D.—May 2019)

Masters:
Aparajita Sudan