Faculty Research Interests

Award-winning faculty at the Michael & Susan Dell Center for Healthy Living research a wide range of topics that explain and impact child health. They are driven by their curiosity about student participation at recess; patterns of youth vaping; benefits of access to healthy food; early childhood outcomes; state health trends; and many other health-related topics. In a changing world, our faculty are paving the way to a healthy future and ensuring communities have evidence-based information on which they can base their decisions.

■Deanna Hoelscher, PhD, RDN, LD, CNS, FISBNPA¹



- Behavior-based nutrition and physical activity education for children and families
- Obesity prevalence and prevention for Texas children and families
- Communication with legislators to inform health policy

Dennis Andrulis. PhD



- Health equity for racially and ethnically diverse populations
- Community resilience to consequences of climate change
- Collaboration with community groups to build accountable care communities

Courtney Byrd-Williams, PhD



- Health behaviors of young children, adolescents, and their families
- Youth health interventions that improve nutrition, physical activity, and oral health
- Breastfeeding support and outcomes as part of maternal and child health

■Ru-Jye (Lindi) Chuang, DrPH, MS



- Nutrition and oral health interventions for individuals from low-income populations
- Impact of evidence-based programs on child health promotion
- Health disparities in nutrition and oral health among low-income children

•Melissa Blythe Harrell, PhD



- Patterns of e-cigarette, cannabis, and other tobacco use among young people
- Youth risk factors for and health outcomes of tobacco and cannabis
- Behavioral interventions for young people in international settings (e.g., India)

■Natalia Heredia, PhD, MPH



- Behavioral lifestyle interventions in Latine and other underserved communities
- Multi-level predictors of dietary and physical activity behaviors
- Management of nonalcoholic fatty liver disease and other chronic diseases



Alexandra (Sandra) van den Berg, PhD, MPH²



- Food systems that decrease food insecurity and increase nutrition security
- Sustainable food systems at the local and global levels
- Interactions between planetary health and public health

Henry (Shelton) Brown, III, PhD



- Cost-effectiveness of substance use disorder and nutrition interventions
- Health insurance markets and broader health economics
- Online cost-effectiveness calculators to aid recovery organizations

Baojiang Chen, PhD



- Statistical applications in public health and behavioral sciences
- Method development for longitudinal, missing, and survival data analysis
- Child health statistics regarding tobacco control, nutrition, and physical activity

-Augusto César F. De Moraes, PhD, MS, BS



- Role of structural social inequities in heart health and brain development
- Impacts of malnutrition on cardiovascular health in pediatrics
- Relationship between environmental factors, lifestyle behaviors, and health outcomes

Emily T. Hébert, PhD



- Mobile technology as a vehicle for health behavior interventions
- Health behavior intervention access for socioeconomically disadvantaged populations
- Precision (personalized) interventions for substance use disorders

Ethan Hunt, PhD, MPH



- Childhood obesity prevention in underserved populations
- Disparities in health outcomes and life expectancies due to childhood trauma
- Adverse childhood experiences (ACEs) and adversity prevention

Steven Kelder, PhD, MPH



- Relationship between climate change and child health outcomes
- Behavioral epidemiology of oral health and tobacco/e-cigarette use in children
- School-based child health programs that support healthy eating and physical activity

Harold W. (Bill) Kohl, III, PhD³



- Individual and environmental determinants of physical activity
- Health consequences of physical activity and physical inactivity
- Prevention of noncommunicable diseases, such as heart disease, diabetes, and cancer

Dorothy Mandell, PhD



- Relationship between early experiences and later neurocognitive outcomes
- Parenting education about infant health and child safety
- Early childhood systems as the basis for optimizing development in Texas children

Sarah E. Messiah, PhD, MPH



- Ethnic group disparities in risk factors for and treatment of childhood obesity
- Relationship between childhood obesity and later health events
- Clinical and community programs that prevent childhood obesity

Christopher Pfledderer, PhD, MPH



- Barriers to and facilitators of meeting recommendations for the 24-hr activity cycle
- Optimizing the implementation and scale-up of childhood obesity interventions
- School-based physical activity interventions in rural communities

Nalini Ranjit, PhD³



- Epidemiology of social disparities in health behaviors and outcomes
- Analysis of data from complex interventions targeting diet and physical activity
- Evaluation of policies that address mental health and food insecurity

•Shreela V. Sharma, PhD, RD, LD



- Nutrition-related health disparities for individuals from low-income populations
- Behavioral epidemiology of diet-related chronic diseases in children
- Health behavior interventions for childhood obesity and oral health

■Irene Tami-Maury, DMD, DrPH, MS



- Cancer prevention and control in vulnerable, underserved populations
- Virtual research and training for health care providers and lay health workers
- Text messaging interventions for tobacco use by sexual and gender minority groups

Leah Whigham, PhD, FTOS



- Collective Impact Model as a tool for addressing obesity at a regional level
- Obesity treatment in primary care, food systems, and built environment
- School health and workplace wellness in relation to obesity

Kevin Lanza, PhD, MCRP



- Burden of extreme heat on low-income and racially/ethnically diverse populations
- Scalable policies that eliminate health inequities due to climate change
- Collaboration with community members to create practical health solutions

Dale Mantey, PhD, MPA



- Substance use/dependence among youth with an emphasis on tobacco and cannabis
- School-based interventions that reduce substance use by young people
- Quantitative research methods and statistics related to substance use

Divya Patel, PhD



- Maternal/child health epidemiology for underserved populations
- Reproductive health and access to contraception and pregnancy-related care
- Cancer prevention, with a focus on screening and human papillomavirus vaccine uptake

Adriana Pérez, PhD



- Application/development of biostatistical methods for missing and complex data
- Conduction of clinical and community trials, either individual or clustered
- Biostatistics in tobacco regulation and health research studies

Belinda Reininger, DrPH



- Roles and effectiveness of community health workers in health promotion
- Development of dietary and physical activity programs for Hispanic populations
- Analysis of implementation/effectiveness of community-wide health campaigns

Andrew Springer, DrPH



- Child and adolescent health promotion in the U.S. and Latin America
- Community health promotion planning and evaluation methods
- Socioecological influences on health behaviors in underserved communities

■Timothy Walker, PhD



- Physical activity promotion in schools and community settings
- Implementation strategy development to improve use of interventions
- Measure development for health promotion and implementation research

Anna Wilkinson, PhD



- Impulsivity and nicotine use as indicators of suicidal behaviors
- Impact of social media/acculturation on vape use by Mexican-American undergrads
- Relationship between e-cigarette use by college students and mental health