It is our pleasure to present the Texas College of Osteopathic Medicine (TCOM) Research Directory. Our hope is that this directory will be used as a research resource to encourage and facilitate research collaboration and cooperation.

2014 was a year of great success for our TCOM researchers. Our research faculty demonstrated significant growth in research funding, publications and presentations. We experienced firsthand the importance of collaboration and team building in the success of research relationships as we worked to become the team of choice for education, discovery and health care. TCOM research teams leveraged the knowledge of UNT Health Science Center researchers from within our University’s five schools and nine Health Institutes of Texas and solidified partnerships with researchers and research institutes internal and external to our campus.

We remain firm in our commitment to build successful research partnerships, believing that collaboration is at the core of what we do. Our research faculty strive to accomplish TCOM’s mission to prepare tomorrow’s patient-centered physicians and scientists and to advance the continuum of medical knowledge, discovery and osteopathic medicine to provide comprehensive health care. As you page through the Research Directory, the breadth and depth of our TCOM researchers and the studies they conduct will become evident. We invite you to learn more about what our researchers do, and we encourage you to visit our website and contact our TCOM researchers and TCOM research office directly. Through research collaboration and team building, our goal is to continue to create solutions for a healthier community.

Don N. Peska, DO, MEd
Professor, Surgery
Dean, TCOM
Chief Medical Officer, UNT Health

Peggy Smith-Barbaro, PhD
Associate Professor, Obstetrics and Gynecology
Assistant Dean, TCOM Research
Riyaz Basha, PhD  
Associate Professor, Pediatrics

- Doctor of Philosophy. Faculty: Zoology (Division: Neurobiology), 1999; Sri Venkateswara University, India
- Master of Science. Faculty: Zoology (Division: Molecular Physiology), 1991; Sri Venkateswara University, India
- Bachelor of Science in Biology, 1989; Sri Venkateswara University, India

**RESEARCH STRENGTHS**

Riyaz Basha is an Associate Professor of Pediatrics with research expertise in the field of experimental therapeutics and cancer. His research focuses on examining aberrant expression of molecular markers associated with aggressive disease and poor prognosis for a variety of human malignancies. Ongoing research focuses on testing the combination of novel investigational agents with other standard therapeutic options (chemotherapy and/or radiation), and understanding the potential molecular pathways associated with proposed combinations. Novel therapeutic strategies involving small molecules, herbal products and their analogs are under testing through rigorous pre-clinical screening using models for leukemia, pancreatic, ovarian, prostate and central nervous system cancers.

**PROFESSIONAL SOCIETIES**

- American Association of Clinical Oncology
- American Association of Cancer Research
- American Association for Advancement of Science

**HEALTH INSTITUTES OF TEXAS**

- Focused on Resources for her Health, Education and Research (ForHer)
- Institute for Cancer Research (ICR)

**KEY WORDS**

- Cancer
- Experimental therapeutics
- Molecular markers

**KEY GRANTS AND CONTRACTS**

- 2014 Project RP0175: Novel Combination Therapy for Pancreatic Cancer: Translational Research Project, Shirley E. Noland Foundation
- 2014 Project RP0184: Tolfenamic Acid for Medulloblastoma Pre-clinical Study, Hyundai & Orlando Health (Orlando, FL)

**KEY PUBLICATIONS**


“Inventing new agents for cancer treatment is important. Enhancing the efficacy of current standard care and reducing side-effects is extremely important.”

Riyaz.Basha@unthsc.edu
Martha Felini, PhD
Associate Professor, Obstetrics and Gynecology

- Doctor of Philosophy, University of North Carolina-Chapel Hill
- Doctor of Chiropractic, Parker College of Chiropractic
- Master of Public Health, Texas A&M University
- Bachelor of Science, Purdue University

RESEARCH STRENGTHS

Dr. Felini is an epidemiologist whose research broadly focuses on gene and environment influences on cancer risk and disparities. Her strong methods background is evident through her development of robust statistical modelling systems using data from high-risk populations such as meat-factory workers and victims of trafficking and the sex trade. She has nearly a decade of experience working with interdisciplinary teams in the community to analyze outreach programs. Her work in this area resulted in the passing of Texas Senate Bill 484 and major funding from Cancer Prevention Research Institute of Texas to integrate prevention cancer screening for vulnerable, underserved women in substance abuse centers.

KEY WORDS
- Cancer
- Epidemiology
- Biomarkers

PROFESSIONAL SOCIETIES
- American Association of Cancer Research
- Society of Epidemiologic Research
- Brain Tumor Epidemiology Consortium

HEALTH INSTITUTES OF TEXAS
- Focused on Resources for her Health, Education and Research (ForHer)

KEY GRANTS AND CONTRACTS

- Establishing Cervical Cancer Screening in High Risk Women with Substance Use Disorders.
  - (PI) CPRIT
- Identification of Novel mAR to Explain an Epidemiological Finding in Gliomas: a Feasibility Study.
  - UNTHSC (PI)
- Cancer and Non-Cancer Mortality in Meat Workers.
  - (Co-Investigator) CDC/NCI, NIEHS, NIH

“By understanding the complex interplay between genes and environment, we can target our efforts toward eliminating cancer disparities.”

Martha.Felini@unthsc.edu

KEY PUBLICATIONS


Shane Fernando, PhD
Assistant Professor, Pediatrics

- Doctor of Philosophy, Epidemiology, UNT Health Science Center, 2013
- Master of Science, Epidemiology, University of Massachusetts-Amherst, 2009
- Bachelor of Science, Biology, University of Massachusetts-Amherst, 2005

Dr. Fernando is an Assistant Professor of Pediatrics with training in epidemiology. His community-based research is largely focused on the impact of health disparities in children and teens across various cultural, gender and socioeconomic parameters. Dr. Fernando has extensively studied body types and other risk factors for children and teens with early-onset type 2 diabetes mellitus. Most recently, Dr. Fernando initiated studies examining new ways to improve health literacy by delivering relevant and sound nutrition, asthma, and obesity prevention education to low-income disparate populations in Fort Worth through the use of the new Pediatric Mobile Clinic.

**RESEARCH STRENGTHS**

- Doctor of Philosophy, Epidemiology, UNT Health Science Center, 2013
- Master of Science, Epidemiology, University of Massachusetts-Amherst, 2009
- Bachelor of Science, Biology, University of Massachusetts-Amherst, 2005

**KEY PUBLICATIONS**


Eason, S., Fernando, S., Goudar, S., Sayers, M. Racial differences in total cholesterol levels of adolescent blood donors. Europrevent May 2014.


**KEY GRANTS AND CONTRACTS**

- Prospective and Retrospective Analysis of Carter BloodCare Data. Carter BloodCare
- Improving Health Education, Knowledge and Attitudes Among Teen Blood Donors. Carter BloodCare (Col)
- Psychological and Psychosocial Predictors of Type 2 Diabetes Mellitus Among Children 10-4 in Fort Worth. Intramural (Col)
- Factors Associated with Being at Risk for Type 2 Diabetes Among Mexican-American and Mexican Children. Intramural (Col)
- Stress and Hypertension as Risk Factors for Type 2 Diabetes Mellitus in Mexican and Mexican-American Children Between Ages 10-14 Years. Intramural Bridge Grant (UNTHSC/UAEM) (PI)

**KEY WORDS**

- Mobile care units
- Type 2 diabetes
- Pediatrics
- Health literacy

**PROFESSIONAL SOCIETIES**

- American Public Health Association
- Society of Epidemiologic Research
- Society of Pediatric and Perinatal Epidemiology
- The Obesity Society

**HEALTH INSTITUTES OF TEXAS**

- Texas Prevention Institute (TPI)
Susan Franks, PhD
Associate Professor, Family Medicine

- Doctor of Philosophy, Clinical Health Psychology/Behavioral Medicine, University of North Texas
- Master of Science, Psychology, University of North Texas
- Bachelor of Science, Medical Technology, University of Texas at Arlington

Dr. Franks is an Associate Professor of Family Medicine and licensed Clinical Health Psychologist with research interests in biological and psychological mediators of appetite regulation, obesity and their interface. Working across various age, cultural and gender groups, Dr. Franks has successfully developed and implemented brain-based interventions for the treatment of obesity. Of particular interest are Dr. Franks’ studies examining the role of the appetite-regulating hormone ghrelin and the stress hormone cortisol on regulation of eating behavior. Neurobehavioral aspects of appetite regulation as it overlaps with environmental stressors and the addictive process also have been investigated by Dr. Franks.

**RESEARCH STRENGTHS**

- Obesity
- Appetite regulation
- Stress
- Eating behavior
- Health disparities

**PROFESSIONAL SOCIETIES**

- American Psychological Association
- The Obesity Society
- American Society of Metabolic and Bariatic Surgery
- Texas Psychological Association
- Fort Worth Area Psychological Association

**HEALTH INSTITUTES OF TEXAS**

- Texas Prevention Institute (TPI)

**KEY PUBLICATIONS**


**KEY WORDS**

- Obesity
- Appetite regulation
- Stress
- Eating behavior
- Health disparities

**KEY GRANTS AND CONTRACTS**

- 2014 Project RP0161: Bridging the Gap in Obesity Prevention Through Community Oriented Primary Care (COPC). MetLife Foundation/American Academy of Family Physicians Foundation
- 2014 Project RP0160: Increasing Awareness of Cardiovascular and Diabetes Risk among High School Blood Donors. Carter Blood Care Foundation (Co-Investigator)
- 2010 Stomp for Life! A Community Based After School Program for Obesity Prevention. Coca-Cola Foundation/UNT HSC Foundation
- 2004 CDC Division of Diabetes Translation H75/CCH224044: DREAMS Substudy: Effects of Bariatric Surgery on Psychophysiological and Hormonal Regulation of Eating Behavior in Obesity

**NEW YEAR MESSAGES**

“In order to effectively address the obesity epidemic, we must unravel the complex interconnections between environmental conditions, neurobiological states, and motivational drives that ultimately determine nutritional health.”

Susan.Franks@unthsc.edu
Kimberly Fulda, DrPH
Associate Professor, Family Medicine

- Doctor of Philosophy, Clinical Research, UNT Health Science Center
- Master Degree, Epidemiology, UNT Health Science Center
- Bachelor of Science, Biomedical Science, Texas A&M University

RESEARCH STRENGTHS
Dr. Fulda is an Associate Professor of Family Medicine, Interim Executive Director of NorTex and the Associate Director of the Primary Care Research Center. Her areas of research expertise include determining the impact of health disparities on health outcomes of special needs populations. Dr. Fulda’s research examines health disparities, maternal and child health, and risk factors for children. Internationally, Dr. Fulda is collaborating with researchers at UAEM in Toluca, Mexico, in a study that addresses cultural parameters that are associated with risk factors for type 2 diabetes in Mexican and Mexican-American adolescents.

KEY PUBLICATIONS


**KEY WORDS**
- Maternal and child health
- Children with special health care needs
- Health disparities
- Access to care
- Epidemiology

**PROFESSIONAL SOCIETIES**
- Editorial Board, Texas Public Health Journal
- American Public Health Association
- North American Primary Care Research Group
- Texas Public Health Association
- Tarrant County Infant Health Network
- Tarrant County Obesity Prevention Policy Council

**HEALTH INSTITUTES OF TEXAS**
- Texas Prevention Institute (TPI)

**KEY GRANTS AND CONTRACTS**

- Increasing Awareness of Cardiovascular and Diabetes Risk Among High School Donors. Carter BloodCare Foundation. Role: Principal Investigator 10/01/2013-09/30/2014

- Environmental Research Project for Clostridium Difficile (C-diff). DFW Hospital Council Foundation. Role: Principal Investigator 05/01/2014 - 11/30/2014


- Bridging the Gap in Obesity Prevention Through Community Oriented Primary Care (COPC). American Academy of Family Physicians. Role: Co-Investigator 09/01/2013-08/31/2014

- Factors Associated with Being at Risk for Type 2 Diabetes Among Mexican-American and Mexican Children. 07/01/2012-12/31/2013


“Understanding the complexities of health disparities and how to eliminate them is essential for improving the health of our community.”

Kimberly.Fulda@unthsc.edu

**HEALTH INSTITUTES OF TEXAS**
- Texas Prevention Institute (TPI)
James Hall, PhD
Professor, Psychiatry and Behavioral Health

- Doctor of Philosophy, Psychology, Clinical, University of Nevada, Reno
- Bachelor of Arts, History, University of Iowa

RESEARCH STRENGTHS

Dr. Hall is Professor of Psychiatry and Behavioral Health and Director of the Memory Disorders Clinic. His research is focused on studying individuals who are likely to develop or have already developed cognitive impairment. Central to Dr. Hall’s cognitive impairment studies is the identification of blood-based biomarkers for early diagnosis of Alzheimer’s disease patients and neuropsychiatric symptoms associated with the disease. Dr. Hall also examines the role of depressive symptoms in a subset of individuals likely to develop cognitive impairment and uses these study results to test interventions designed to possibly prevent further cognitive decline.

KEY PUBLICATIONS


“Dementia is one of the greatest health care challenges of this century. My research focuses on identifying biomarkers that will aid in the diagnosis and treatment of dementia and the behavioral disturbances that accompany it.”

James.Hall@unthsc.edu
Dr. Johnson, Assistant Professor of Internal Medicine and Vice Chair of the University’s Institutional Review Board, is a translational aging researcher with specific expertise determining the relationship between depression and cognition in underserved Mexican American adults and elders. Dr. Johnson is the Co-PI of the Health and Aging Brain Study Among Latino Elders (HABLE), a cohort of over 500 elderly Hispanics. Dr. Johnson has recently created a risk score (DEPE) to identify individuals with depression-related cognitive decline. This work is important because we have now demonstrated that it is not “depression” per se that is related to risk for Mild Cognitive Impairment (MCI) and Alzheimer’s disease (AD), but rather this specific type of depression. Given that depression is a treatable condition, this work holds tremendous therapeutic potential for treating and preventing MCI and AD.

The goal of my work is to utilize the DEPE risk score to prevent and treat depression-related memory loss and Alzheimer’s disease.”

**KEY WORDS**
- Depression
- Cognition
- CBPR translational

**PROFESSIONAL SOCIETIES**
- National Association of Social Workers

**HEALTH INSTITUTES OF TEXAS**
- Institute of Aging and Alzheimer’s Disease Research (IAADR)

**KEY PUBLICATIONS**


**KEY GRANTS AND CONTRACTS**
- Structural Neuroimaging Biomarkers of a Depressive Endophenotype of MCI among Mexican-Americans. (IAADR) (2014)
- Community-Based Primary Care for the Elderly. Centers for Medicare & Medicaid Services 2014
- Genetic and Biomarker Study of Alzheimer’s Disease - Recruitment of Mexican-Americans into the Texas Alzheimer’s Research Consortium (TARC). Alzheimer’s Disease Program 2013
- Understanding the Influence of Depression on Diabetes in Mexican-Americans. The Hogg Foundation for Mental Health 2012
- Development and Validation of the Cumulative Environmental Exposure Index for Arsenic: A Novel Environmental Public Health Indicator. EPA 2012

**KEYWORDS**
- Depression
- Cognition
- CBPR translational

**PROFESSIONAL SOCIETIES**
- National Association of Social Workers

**HEALTH INSTITUTES OF TEXAS**
- Institute of Aging and Alzheimer’s Disease Research (IAADR)
Janice Knebl, DO
Professor, Internal Medicine
Chief and DSWOP Endowed Chair, Geriatric Medicine

- Doctorate of Osteopathic Medicine, Philadelphia College of Osteopathic Medicine
- Master of Business Administration, Texas Christian University
- Bachelor of Science, Biology, St. Joseph’s University, PA

RESEARCH STRENGTHS

Dr. Knebl is a Professor of Internal Medicine. As Chief and DSWOP Endowed Chair of Geriatric Medicine, Dr. Knebl brings her clinical expertise to a number of research teams studying aging, Alzheimer’s disease, and health care needs of geriatric populations. Dr. Knebl is an active member of the Texas Alzheimer’s Research and Care Consortium that is working to improve early diagnosis, treatment, and prevention. She has expertise in the study of subject recruitment of Alzheimer’s patients. She has also played an active role on a research team studying aging and balance-related issues.

KEY PUBLICATIONS


PROFESSIONAL SOCIETIES

- American Geriatrics Society
- American College of Physicians
- American Osteopathic Association
- American Medical Director’s Association
- American Academy of Hospice and Palliative Medicine

HEALTH INSTITUTES OF TEXAS

- Institute of Aging and Alzheimer’s Disease Research (IAADR)

KEY GRANTS AND CONTRACTS

- Reynolds Interprofessional Geriatrics Education and Training in Texas (GET-IT) Program (2013). Donald W. Reynolds Foundation
- 2013 Project RF9985: Discharge Planning and Care Coordination for Medicaid Eligible Elders. Centers for Medicare & Medicaid Services
- 2011 Project RF7017: The Texas Consortium Geriatrics Education Center. Baylor College of Medicine/HRSA
- 2010 Clin Trial RC0016: A Phase 3 Extension, Multicenter, Double-Blind, Long Term Safety and Tolerability Treatment Trial of Bapineuzumab (ABB-001, ELN115727) in Subjects with Alzheimer’s Disease who Participated in Study ELN115727-301 or in Study ELN115727-302 (Janssen Pharmaceuticals

“Our goal is to engage seniors in quality education, research, and clinical care programs that will ultimately become an integral part of the senior medical care in Fort Worth and across the state and nation.”

Janice.Knebl@unthsc.edu
Victor Kosmopoulos, PhD
Associate Professor, Orthopaedic Surgery

- Doctor of Philosophy, Mechanical Engineering, University of Vermont
- Master of Science, Mechanical Engineering, University at Buffalo
- Bachelor of Science, Mechanical Engineering, University at Buffalo

**Research Strengths**

As an Associate Professor in the Department of Orthopaedic Surgery, Dr. Kosmopoulos’ research interests center around the interdisciplinary and multi-scale (i.e., nano to macrostructure) investigation of bone tissue. His studies focus on bone as an adaptive composite structure. Applying his engineering background, Dr. Kosmopoulos’ research utilizes a variety of experimental and computational tools to study bone degeneration, fragility, fracture and healing and to address the multifactorial mechanisms governing the complex relationships between bone health and aging, disease, nutrition, trauma, and the mechanics of novel orthopaedic surgical interventions (e.g., fracture fixation, implant design).

**Key Publications**

- Experimental and Numerical Simulation of Microdamage and Failure of Thoracic Vertebral Trabecular Bone

**Key Words**

- Bone disease
- Spine
- Fracture fixation
- Finite element analysis

**Professional Societies**

- American Society for Bone and Mineral Research
- American Society of Biomechanics
- Orthopaedic Research Society
- International Society for the Study of the Lumbar Spine
- Biomedical Engineering Society

**Key Grants and Contracts**

- The Biomechanical Testing of Tension Band Fixation of Transverse Fractures of the Patella
- Multi-Scale Age-Related Changes in Bone Health
- Numerical Simulation of Bone Adaptation Following Kyphoplasty and Vertebroplasty for the Treatment of Osteoporotic Compression Fractures
- Experimental and Numerical Simulation of Microdamage and Failure of Thoracic Vertebral Trabecular Bone

“Using experimental and computational mechanics, I provide engineering solutions for today’s clinical challenges and hands-on training for tomorrow’s orthopaedic scientists.”

**Victor.Kosmopoulos@unthsc.edu**
John Licciardone, DO  
Professor, Medical Education  
Executive Director of the Osteopathic Research Center

- Doctor of Osteopathic Medicine, Kirksville College of Osteopathic Medicine  
- Master of Business Administration, Texas Christian University  
- Master of Science, Preventive Medicine, Ohio State University  
- Bachelor of Science, Chemistry, Fordham University

**KEY PUBLICATIONS**


**KEY GRANTS AND CONTRACTS**

- Osteopathic Manipulative Treatment of Somatic Dysfunction and Chronic Low Back Pain in Patients with Type 2 Diabetes Mellitus, American Osteopathic Association, 2013-2015
- Partnership to Enhance the Evidence for Osteopathic Medicine. Osteopathic Heritage Foundation, 2010-2015
- A National Study of Ambulatory Medical Care Provided by Osteopathic Physicians. Osteopathic Heritage Foundation, 2009-2010
- Midcareer Investigator Award in Osteopathic Medicine. National Institutes of Health, 2005-2010

**KEY WORDS**

- Low back pain  
- Osteopathic manipulative treatment and related research  
- Clinical epidemiology and evidence-based medicine

**PROFESSIONAL SOCIETIES**

- American College of Preventive Medicine  
- American Osteopathic College of Preventive Medicine  
- American Osteopathic Association

**RESEARCH STRENGTHS**

As Professor and Executive Director of the Osteopathic Research Center, Dr. Licciardone has extensive research expertise in the field of prevention and treatment of chronic low back pain, with specific strengths in conducting studies investigating the efficacy of spinal manipulation. Dr. Licciardone recently completed the largest clinical trial ever undertaken on osteopathic manipulative treatment (OMT). This five-year study demonstrated substantial improvement in low back pain and related functioning, while also documenting decreased use of prescription analgesic medication in those patients who received OMT.

“Low back pain affects 632 million persons worldwide and is the leading cause of disability. Our research is creating solutions to improve their health and lifestyles.”

John.Licciardone@unthsc.edu
Mark Mummert, PhD
Associate Professor, Psychiatry and Behavioral Health

- Doctor of Philosophy, Microbiology, University of Illinois
- Master of Science, Microbiology, University of Illinois
- Bachelor of Science, Molecular Biology, Ball State University

**RESEARCH STRENGTHS**

Dr. Mummert is an Associate Professor in the Department of Psychiatry and Behavioral Health. His research focuses on the impact of stress on physiological responses of the endocrine, nervous and immune systems with particular emphasis on skin disorders. Using mouse models, Dr. Mummert examines the impact of contact hypersensitivity (CHS), a T cell-mediated disorder, to measure stress responses and assess immune mediators and molecular pathways impacted by stress. The ultimate goal of this research is to understand the mechanistic underpinnings of skin inflammation that may ultimately prove useful in developing therapeutics of human disease.

**KEY WORDS**
- Psychological stress
- Skin
- Immune response
- Allergic contact hypersensitivity

**PROFESSIONAL SOCIETIES**
- American Association for the Advancement of Science
- Society for Investigative Dermatology
- American Association of Immunologists

**HEALTH INSTITUTES OF TEXAS**
- Institute for Cancer Research (ICR)

**KEY PUBLICATIONS**


**KEY GRANTS AND CONTRACTS**

- OMM Scientific Inc. [01/01/12-current] PI: Mummert Development of Anticancer vATPase Inhibitors
- Development of Anticancer vATPase Inhibitors. NIH R01-AR48840 (08/01/02-04/31/12) Hyaluronan-Mediated Regulation of Langerhans Cell Functions
- Hyaluronan-mediated Regulation of Langerhans Cell Functions. Acologix, Inc (07/01/00-06/30/03) Preclinical Study to Evaluate Pharmacological Activities of Pep-1, a Peptide Inhibitor of Hyaluronan-Mediated Cellular Trafficking
- Preclinical Study to Evaluate Pharmacological Activities of Pep-1, a Peptide Inhibitor of Hyaluronan-Mediated Cellular Trafficking. Galderma Pilot and Feasibility Program (04/01/06-03/31/07) Development of Hyalurondase Antagonists Using Phage Display
- Development of Hyaluronidase Antagonists Using Phage Display. NIH R03-AR47402 (08/15/99-07/31/02) Hyaluronan-Binding Peptide Inhibitors of Langerhans Cell Migration

“The goal of our research is to understand the mechanisms whereby psychological stress impacts skin diseases. Such an understanding should pave the way for new treatments.”

Mark.Mummert@unthsc.edu

22 TCOM.Research@unthsc.edu

23 UNTHSC
Vicki A. Nejtek, Ph.D.
Associate Professor, Family Medicine

- Doctor of Philosophy, Human Development - Cognitive & Behavioral Neuroscience, University of Texas at Dallas
- Postdoctoral Fellowship in Psychiatry, University of Texas Southwestern Medical Center at Dallas
- Master of Science, Cognitive and Behavioral Neuroscience, University of Texas at Dallas
- Bachelor of Arts, Psychology, University of Texas at Dallas

RESEARCH STRENGTHS

Dr. Nejtek is an Associate Professor of Family Medicine who conducts program evaluation and outcomes research in clinical populations at-risk for or diagnosed with co-occurring mood and substance-use disorders with and without chronic medical disease. Her research includes examining health status, prevention and intervention effectiveness and clinical recovery, by systematically analyzing variables that may impact therapeutic outcomes. Four distinct clinical populations currently being studied by Dr. Nejtek include veterans exposed to trauma and their families, indigent and homeless with co-occurring disorders, and at-risk school-age children who may have suffered adverse childhood experiences (ACEs). The underlying goal in all of her research paradigms is to identify variables that will predict and prevent pathological behaviors. In doing so, Dr. Nejtek’s investigations generate evidence-based data that clinicians can use to mitigate mental health decompensation, addiction relapse, and prevent the onset of negative behaviors in children and youth.

KEY PUBLICATIONS

Nejtek VA – Col NIH, “Health Disparities & Novel Biomarkers for HIV-1 Disease Progression.” Anuja Ghorpade - PI; K Vishwanatha Center Grant PI. 07/2012-06/2017

KEY WORDS

• Brain & behavioral health
• Cognitive decision-making
• Addiction
• Co-occurring disorders
• Neuropsychopharmacology

EDITORIAL BOARD MEMBER
• Journal of Dual-Diagnosis
• World Journal of Psychiatry
• Internet Journal of Mental Health
• Journal of Family Medicine

EXECUTIVE BOARD MEMBER
• Mental Health America of Tarrant County, Vice President of Scholarships

“Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.”
World Health Organization

Vicki.Nejtek@unthsc.edu
Sid O’Bryant, PhD
Associate Professor, Internal Medicine

- Master of Arts, Clinical Psychology, University at Albany, SUNY (2002)
- Bachelor of Science, Psychology, Louisiana State University (1998)

RESEARCH STRENGTHS

Dr. O’Bryant, Associate Professor of Internal Medicine and Interim Director of the Institute for Aging and Alzheimer’s Disease Research, has research expertise identifying Alzheimer’s disease (AD) blood-based biomarkers and developing a cross-validated, highly accurate blood test for AD. His research team is currently refining this algorithm, across serum, plasma and multiple assay platforms with the ultimate goal of generating a cost-effective method determining the need for follow-up neuroimaging or CSF biomarker analysis for AD. He heads an international working group, STAR-B, that generated the first-ever set of standards or best practices for blood-based AD biomarkers.

KEY WORDS
• Alzheimer’s disease
• Cognition
• Biomarkers
• Mexican American
• Translational

PROFESSIONAL SOCIETIES
• International Society to Advance Alzheimer’s Research and Treatment
• American Academy of Neurology
• National Academy of Neuropsychology
• International Neuropsychological Society
• American Psychological Association

HEALTH INSTITUTES OF TEXAS
• Institute of Aging and Alzheimer’s Disease Research (IAADR)

KEY GRANTS AND CONTRACTS

• Community-Based Primary Care for the Elderly, Centers for Medicare & Medicaid Services (2014)
• UTSW Alzheimer’s Disease Center Blood Biomarker Project, UT Southwestern Medical Center/NIH (2013)
• A Blood-Based Screening Tool for Alzheimer’s Disease, National Institute on Aging (2013)
• Genetic and Biomarker Study of Alzheimer’s Disease - Recruitment of Mexican Americans into the Texas Alzheimer’s Research Consortium Alzheimer’s Disease Program (2013)
• Development and Validation of the Cumulative Environmental Exposure Index for Arsenic: A Novel Environmental Public Health Indicator, Environmental Protection Agency (2012)

KEY PUBLICATIONS


“This line of work is important for our community and for society. Our goal is to revolutionize geriatric medicine with better diagnostics and better treatment.”

Sid.OBryant@unthsc.edu
Rita M. Patterson, PhD
Professor, Osteopathic Manipulative Medicine

- Doctor of Philosophy, Biomedical Science, University of Texas Medical Branch at Galveston
- Master of Engineering, Biomedical Engineering, Texas A&M University
- Bachelor of Science, Engineering Science, Baylor University

RESEARCH STRENGTHS

As Director of Research for the Department of Osteopathic Manipulative Medicine, Dr. Patterson’s research focuses on musculoskeletal function and its role in human performance. Her biomedical engineering perspective affords critical insight to a collaborative team of physicians, basic scientists, physical therapists and engineers evaluating rehabilitation treatments associated with abnormal motion. Unique to her research is the V-gait Caren system providing state-of-the-art computer-assisted rehabilitation environments through video motion capture, virtual reality and computational modeling. UNTHSC is one of only several university sites through the nation that houses this equipment.

KEY WORDS
- Orthopaedics
- Wrist
- Kinematics
- Biomechanics

PROFESSIONAL SOCIETIES
- American Society of Mechanical Engineers, Bioengineering Division
- Institute of Electrical and Electronics Engineers, Engineering in Medicine Society
- Orthopaedic Research Society
- International Wrist Investigator’s Workshop

KEY GRANTS AND CONTRACTS
- Patterson RM, PI, Effect of Osteopathic Manipulation on Postural Stability in the Elderly, TCOM Intramural Grant. 08/01/2008 – 08/31/2009
- Use of a Torque Range of Motion Device to Teach Evaluation of Somatic Dysfunction, Patterson, RM, PI, Mason, D, Collins, V, and Kominsky, Co-I’s, 2014 UNTHSC Innovations in Teaching Using Technology Seed Grant. 03/01/2014 – 08/31/2014
- Osteopathic Management of Leg Length Inequality with Heel Lift Therapy: Analysis of Altered Gait Kinematics, PI Mason, D., Patterson, Co-I, UNTHSC Seed. 10/01/2013 – 09/30/2014
- Patterson, RM, PI, Functional Hand Kinematics, American Osteopathic Association, #08-11-569. 09/01/2008 – 08/31/2009

KEY PUBLICATIONS


“The human body is a masterpiece of engineering and a work of art. Exercise and rehabilitation enable increased mobility and result in a better quality of life.”

Rita.Patterson@unthsc.edu
RESEARCH STRENGTHS

Dr. Qualls-Hampton is an Assistant Professor in the Department of Obstetrics and Gynecology with extensive training in epidemiology and biostatistics. Dr. Qualls-Hampton’s research focuses on the application of analytical methods to numerous subject matters, specifically mental health outcomes and factors that influence treatment completion and re-admission in minority populations; adolescent health behaviors; and barriers to preventive health care in vulnerable populations. Additionally, Dr. Qualls-Hampton has more than 15 years of experience in applying and teaching epidemiological methods, including secondary data analysis and evaluation research. Her ultimate goal is to influence policy considerations that will improve mental and physical health outcomes of vulnerable populations, particularly women of color.

KEY WORDS

- Minority women’s health
- Psychiatric epidemiology
- Substance abuse
- Large data set analysis
- Database design and construction
- Evaluation research methods

PROFESSIONAL SOCIETIES

- YWCA, Fort Worth & Tarrant County, Board Member
- Society for the Analysis of African-American Public Health Issues
- American Public Health Association
- National Association for the Advancement of Colored People
- South Central SAS Users Group (since 2009)

HEALTH INSTITUTES OF TEXAS

- Focused on Resources for her Health, Education and Research (ForHer)

KEY GRANTS AND CONTRACTS

- Sound Mind, Sound Body: Establishing Cervical Cancer Screening in High Risk Women with Substance Use Disorders. Cancer Prevention & Research Institute of Texas, 2014
- Building Bridges: Cancer Prevention Education for Refugee Women (Co-I), Cancer Prevention Research Institute of Texas, 2014
- Healthy Start Initiative: Eliminating Disparities in Perinatal Health (Co-I), US Health Resources Services Administration, 2014
- Alive! Primary Cancer Prevention in Tarrant County. Healthy Tarrant County Collaboration/ CPRIT 2013
- Systematic Review and Meta-Analysis to Evaluate the Effectiveness of Integrative Strategies for Adolescents with Comorbid Substance Use and Mental Health Issues. Robert Wood Johnson Foundation 2011
- Complementary and Alternative Medicine Use in Infertility Patients 2010

KEY PUBLICATIONS


“Continuing the conversation of racial and gender disparities in mental health and illness is essential to enhancement of health and health behaviors across the life course.”

Raquel.Qualls-Hampton@unthsc.edu
**Amy Raines Milenkov, DrPH**
Assistant Professor, Obstetrics and Gynecology

- Doctor of Public Health, Social & Behavioral Sciences, UNT Health Science Center
- Master of Public Health, Community Health, UNT Health Science Center
- Bachelor of Social Work, Social Work, University of Texas at Austin

**RESEARCH STRENGTHS**
Dr. Raines Milenkov is Assistant Professor in the Department of Obstetrics and Gynecology with expertise in maternal and child health. Her community-based research is focused on pregnancy and birth outcomes of vulnerable populations including refugee women, prostituting women, and women with previous adverse birth outcomes. Current funded projects include the development of an interconception care intervention for women with previous adverse outcomes, and cancer prevention outreach, education and screening in refugee women. She was recently appointed to the Texas Maternal and Morbidity Review Task Force and is currently the Chair of the Tarrant County Infant Health Network. Her current work builds upon years of front-line public health practice, strong professional and community partnerships and a great passion to identify and address gaps in knowledge and implement interventions for vulnerable populations of women, children and their families.

**KEY PUBLICATIONS**


**KEY WORDS**
- Pregnancy outcomes
- Preconception health
- Vulnerable populations
- Refugees
- Community outreach

**PROFESSIONAL SOCIETIES**
- Healthy Texas Babies Collaborative
- Tarrant County Infant Health Network, Chair
- Texas Maternal Mortality and Morbidity Task Force, Appointed Member
- Texas Refugee and Immigrant Women’s Association
- American Public Health Association

**HEALTH INSTITUTES OF TEXAS**
- Focused on Resources for her Health, Education and Research (ForHer)

**KEY GRANTS AND CONTRACTS**
- Healthy Start Initiative-Eliminating Disparities in Perinatal Health (PI) Health Resources & Services Administration, 2014-2019
- Building Bridges: Cancer Prevention Education for Refugee Women (PI), Cancer Prevention & Research Institute of Texas 2014
- Promoting Safe Sleep Practice in the Home Care of High Risk Infants (PI), 2014
- Make Every Day Mother’s Day, National Women’s Health Week (PI), DHHS - Office of Women’s Health 2013
- Prenatal Education and Outreach for Refugee Women (PI), Sid Richardson Foundation 2012
- Interconception Care Program (PI), Amon G. Carter Foundation, 2012

“Protecting and promoting the health and well-being of every woman and mother is an investment in the overall health and stability of a community and future generations.”

Amy.Raines-Milenkov@unthsc.edu
Brandy M. Roane, PhD
Assistant Professor, Internal Medicine

- Doctor of Philosophy, Health Psychology & Behavioral Medicine, University of North Texas
- Master of Science, Psychology, University of North Texas
- Bachelor of Arts, Psychology, University of Texas at Dallas

Key Publications


Key Grants and Contracts

- Prospective Study of Depressed Mood, Short Sleep and Serotonergic, NIH/NIMH (CoI) 2009-2014
- Increasing Sleep Duration: A Novel Approach to Weight Control, NIH/NCI (Consultant) 2009-2014
- Validation Study in Teens of a Weight Management Activity Monitor to Assess Sleep (PI), 2012-2013
- Adolescent Obesity: Role of Biological Processes and Social Rhythms (PI), 2013-2015
- Social and Biological Rhythms: A Novel Approach to Reducing Type II Diabetes Mellitus Risk in Teens (PI) 2014-2015
- The Impact of Depression on Sleep Disturbances Among Mexican-American Adults and Elders (PI), 2013-2015

Key Words
- Sleep
- Circadian rhythms
- Sleep disorders
- Adolescent
- Young adult

Professional Societies
- 2006 Member, Sleep Research Society
- 2007 Member, Association for Behavioral and Cognitive Therapies
- 2010 Member, Society of Behavioral Sleep Medicine

Health Institutes of Texas
- Focused on Resources for her Health, Education and Research (ForHer)
- Texas Prevention Institute (TPI)

Research Strengths

Dr. Roane, Assistant Professor of Internal Medicine, is a Certified Behavioral Sleep Medicine Specialist with specialization in sleep and behavioral medicine in teens, young adults and adult populations. Her research examines the combined influences of physiological, behavioral and social factors on health with particular focus on the links between sleep, subsequent psychopathology and chronic medical conditions. Current research projects include studies of sleep disorders in young adults genetically predisposed to depressed moods; the impact of pregnancy on sleep patterns; the role of circadian rhythms on teenage obesity; and developing effective health prevention and intervention treatments.

“Millions starve their bodies daily of sleep, a need like food, air, and water, despite the health implications. My goal – improve health and well-being by improving sleep.”

Brandy.Roane@unthsc.edu
KEY PUBLICATIONS


Arnold L, Burman S, Olivencia-Yurvati AH. Primary pulmonary leiomyosarcoma. JAOA. 2010 April; 110: 244-246


RESEARCH STRENGTHS

Dr. Yurvati is Professor and Chair of the Department of Surgery and serves as Adjunct Faculty in the Department of Integrative Physiology. He and his research partner, Robert Mallet, PhD, Professor of Integrative Physiology, are actively involved in several research projects, including a study designed to examine the role of pyruvate and erythropoietin as potential therapeutic agents for preventing brain damage during CPR using a pig model. Dr. Yurvati also conducts research internationally in conjunction with the University of Stratclyde Department of Biomedical Engineering in Glasgow.

KEY WORDS

• Clinical trials
• Cardiothoracic surgery
• Cardiopulmonary bypass
• Animal models
• Technology and applications

PROFESSIONAL SOCIETIES

• International College of Surgeons, Fellow
• American College of Osteopathic Surgeons, Fellow
• American College of Chest Physicians
• Texas Osteopathic Medical Association
• American Osteopathic Association

HEALTH INSTITUTES OF TEXAS

• Cardiovascular Research Institute (CRII)

KEY GRANTS AND CONTRACTS

• 2013 Clinical Trial RC0033: A Phase 3, Randomized, Single-blind, Controlled Trial of Topical Fibrocaps in Intraoperative Surgical Hemostasis. ProFibrix (2013)
• A Phase 3 Randomized, Double Blind, Vehicle Controlled Study Investigating the Safety and Efficacy of HP002-247 in the Treatment of Venous Leg Ulcers > 12 cm2 to 36 cm2. Healthpoint Ltd. (2012)
• ChemoFx Pro, a Post-Market Data Collection Study of Physician Reported Outcomes (2012) Precision Therapeutics
• Trial of MarrowStim PAD Kit for the Treatment of Critical Limb Ischemia (CLI) in Subjects with Severe Peripheral Arterial Disease (PAD), IDE Number BB-IDE-13996 ("Device") Biomet Biologics (2012)
• A Prospective, Single Arm, Open-Label Phase 2 Study to Characterize the Safety and Hemostatic Activity of Topical Fiocaps in Surgical Hemostasis Intercytex (2011)

“Research interests include ischemic reperfusion injury and the development of medical devices by collaboration with the University of Strathclyde, Glasgow, Scotland.”

Albert.Yurvati@unthsc.edu

Albert Yurvati, DO
Professor and Chair of Surgery

• Doctorate of Osteopathic Medicine, UNT Health Science Center
• Bachelor of Science, Health Science, California State University in Los Angeles
UNT Health Science Center conducts industry-sponsored clinical drug and device trials, and is committed to proving the safety and effectiveness of new treatments for today’s diseases and disorders. Along with many other sites across Texas and the United States, we are currently conducting clinical studies in multiple disciplines for some of the nation’s leading pharmaceutical and medical-device companies. Our research endeavors include the following areas: cardiovascular disease, Alzheimer’s, HIV, adult and pediatric vaccines, orthopaedic and pediatric interventions, vascular surgery hemostasis, gastrointestinal disorders, and diabetes-emergent conditions like venous leg ulcers and foot wounds.

As clinical research studies depend upon the participation of volunteers, education and subject recruitment are fundamental. In an effort to further engage the community, we are strengthening the network of health care opportunities through collaborative research efforts with area hospitals and clinics.

“Clinical research studies allow us to learn about the safety and effectiveness of a potential new drug, device or treatment, and also may contribute to an important aspect of patient care: improving the quality of life for those with debilitating illnesses.”

Wendy.Stoecker@unthsc.edu
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