The University of Texas System Office of Federal Relations 1750 Pennsylvania Ave. NW, Ste 900 Washington, DC 20006 202-955-9091-P 202-955-9039-F

UT System Neuroscience Council

UT Arlington



Dr. Hanli Liu **UT Arlington Bio Engineering Department**

Medical instrumentation and imaging, minimally invasive and non-invasive spectroscopy and imaging of tissue, optical diffuse imaging for cancer prognosis and brain activities.



Dr. Heekyeong Park **UT** Arlington Psychology

My research focuses on topics broadly directed at human memory and cognition. I am particularly interested in understanding how information is formed in episodic memory and how information is retrieved from memory. I have employed combined neuroscientific approach including fMRI.

UT Austin



Theresa A. Jones UT Austin Psychology Department

Neural plasticity across the lifespan, motor skill learning, mechanisms of brain and behavioral adaptation to brain damage, and glial-neuronal interactions



Dr. Robert Messing UT Austin Pharmacology & Toxicology

Messing's research is focused on disturbances in signal transduction that contribute to addiction, emotional disorders, and pain, with the goal of identifying new treatments.



Dr. Andy Dunn **UT** Austin **Biomedical Engineering** Optical microscopy; Functional brain imaging; Molecular imaging; Neuroscience



Dr. Kristen Harris

UT Austin

Neuroscience/ The Center for Learning and Memory

Our goal is to elucidate structural components involved in the cell biology of learning and memory. We study long-term potentiation (LTP) and its complement, long-term depression (LTD), in the developing and mature hippocampus because these phenomena have many of the physiological characteristics that are expected for

learning and memory in the brain. Our working hypothesis is synaptic plasticity that serves to modify synapses in the creation of new memories competes with homeostatic mechanisms that serve to prevent saturation of synaptic strength and neuropathology. Our focus has been on dendritic spines because they are the major postsynaptic targets of excitatory axons throughout the brain and because their structure and composition serve both synaptic plasticity and stabilizing homeostatic mechanisms.

UT Dallas



Dr. Theodore Price

UT Dallas

Neurobiology of Pain, Molecular Mechanisms of Plasticity, Neuropharmacology(School of Behavioral & Brain Sciences)

Dr. Price is the recipient of Young Investigator Awards from the American Pain Society and International Association for the Study of Pain, has published more than 50 peer-reviewed articles in international journals, serves as the pharmacology section editor for

European Journal of Pain, and is on the editorial board for Pain, Molecular Pain and The European Journal of Neuroscience. He is also a regular reviewer for National Institutes of Health and American Pain Society study sections. Dr. Price is interested in the fundamental principles underlying pain plasticity.



Dr. Robert Rennaker **UT Dallas** Bioengineering

Dr. Rennaker's research has two main foci. The first is the development of Neural Interface systems. Dr. Rennaker received and RO1 from NINDS for the development of a wireless distributed neural interface in May of 2009. The second research focus is systems level neuroscience. Dr. Rennaker has an R01 from NIDCD to study olfactory encoding of odorants. Other interests include auditory neuroscience, plasticity and attention.



Dr. John Hart **UT Dallas** School of Behavioral & Brain Sciences

Dr. Hart is the President of the Society for Behavioral and Cognitive Neurology and the Behavioral Neurology Section of the American Academy of Neurology. He is one of the world's foremost experts on how you store and access knowledge in your brain, known as semantic memory. In 1985, Dr. Hart was the lead author on the seminal paper published in the

prestigious journal Nature that established that knowledge is stored in the brain by categories.



Dr. Michael Rugg **UT Dallas** School of Behavioral & Brain Sciences

Dr. Rugg is a fellow of the American Association for the Advancement of Science and the Association for Psychological Science. He was awarded the Henri Hecaen Award for contributions to neuropsychology in 1989 and was elected a Fellow of the Royal Society in 1996. He is currently editor-in-chief of the international journal Neuropsychologia.

UT El Paso



Dr. Kyung-An (K.) Han UT El Paso **Biological Sciences**

Using a comprehensive research program that employs cellular, molecular, genetic, chemical, pharmacological and behavioral approaches, our goal is to explore the cellular and biochemical nature of neuromodulatory processes that are crucial for learning and memory, and behavioral adaptations to drugs of abuse.



Dr. Arshad M Khan **UT El Paso Biological Sciences**

Dr. Khan specializes in systems neuroscience, functional neuroanatomy, signal transduction, feeding control systems, glucosensing networks, diabetes, obesity, hypothalamic function, excitatory amino acid neurotransmission, neurochemistry, history of neuroscience, and neuroinformatics.



Dr. Laura O'Dell **UT El Paso Psychology**

Dr. O'Dell's research program is focused on the neural mechanisms that mediate addiction to drugs of abuse. Our laboratory combines neurochemical and molecular approaches with behavioral models to study the neural basis of addiction.

UT San Antonio



Dr. George PerryUT San Antonio
Biology Department

Dr. George Perry is a neuroscientist and Dean of the College of Sciences and Professor of Biology at the University of Texas at San Antonio. Perry is recognized in the field of Alzheimer's disease research particularly for his work on oxidative stress.

UT Southwestern



Dr. Steven WarachUT Southwestern
Neurology & Neurotherapeutics

Dr. Warach serves as Professor and founding Executive Director of the Seton/UT Southwestern Clinical Research Institute of Austin. The Institute's mission is to conduct patient-focused research and foster technology development and insights to improve health care through recruitment and development of outstanding clinical scientists and innovators; collaborations with university and

bioscience industry partners; and support of the clinical research infrastructure.



Dr. Mark GoldbergUT Southwestern
Neurology & Neurotherapeutics

Dr. Goldberg is committed to developing effective treatments for brain disease and injury to improve significantly patient quality of life. A physician, scientist, and teacher, Dr. Goldberg takes an interdisciplinary approach to complex nervous system disorders. His personal focus is on the injury of white matter, studying how nerve cells form new connections to neighboring cells after injury. Dr. Goldberg is a former President of the St. Louis-area American Heart Association and is a fellow of the American Heart Association Stroke Council.



Dr. Joe Takahashi UT Southwestern Neuroscience

Dr. Takahashi is Chair of the Department of Neuroscience and an Investigator of the Howard Hughes Medical Institute at UT Southwestern Medical Center. He currently holds the Loyd B. Sands Distinguished Chair in Neuroscience. Before moving to UT Southwestern, Dr. Takahashi was the Walter and Mary Elizabeth Glass Professor in the Life Sciences at Northwestern University. During his 26-year tenure at Northwestern, he held appointments as professor in the Department of Neurobiology and Physiology

on the Evanston campus and professor in the Department of Neurology at Northwestern University Medical School. In addition, he was also the director of the Center for Functional Genomics.

UT Medical Branch



Dr. Kelly DineleyUT Medical Branch
Neurology

Dr. Dineley specializes in Cognitive enhancement in early Alzheimer's disease, Nuclear receptors in cognitive enhancement, maintenance of abstinence from psychostimulant abuse, Hippocampal memory consolidation - ERK MAPK, Nicotinic acetylcholine receptors - amyloid- β interaction and Cognitive dysfunction resulting from chronic pain



Dr. Anish BhardwajUT Medical Branch
Neurology

Dr. Bhardwaj is the department chair for The Department of Neurology at University of Texas Medical Branch (UTMB) Dr. Bhardwaj specializes in neurology and primarily interested in Vascular Neurology, Neurocritical Care, Vascular Neurology (Stroke), Neurocritical Care--comprehensive care to critically ill neurological and neurosurgical patients



Dr. Kathryn CunninghamUT Medical Branch
Pharmacology and Toxicology

She is currently employing a cross-disciplinary, translational research approach that includes collaborative efforts with medicinal chemists, cell biologists and clinical scientists to discover neuromolecular targets for impulse control disorders and to develop these advances into new therapies for addiction and eating disorders. Her group has made numerous seminal observations and developed new technologies which are described in 92 peer-reviewed publications and 27

chapters, reviews and/or commentaries. Dr. Cunningham has mentored over 40 junior faculty, pre- and post-doctoral fellows with the result of more than 65 publications and 22 grants authored by mentees. Dr. Cunningham founded and created the vision for the Center for Addiction Research, implemented key strategies to expand research and mentoring activities, design and build new research space and infrastructure, recruit high caliber faculty, capture philanthropy, and optimize grant development and management programs. She was elected President of the College on Problems of Drug Dependence (CPDD) and served a 4-year stint on the Board of Directors. She serves on NIH study sections (1992-present; chair of CSR NMB, 2011-2013



Dr. Jin Mo ChungUT Medical Branch
Neuroscience & Cell Biology

Dr. Chung first came to UTMB in 1977 for postdoctoral study with Dr. Willis. In 1979, he returned to Korea to take a position as Assistant Professor of Physiology in the College of Medicine of Yonsei University in Seoul. He returned to UTMB in 1981 and rose to Professor with tenure in 1990. Dr. Chung's main research interests include the pathophysiological mechanisms of neuropathic pain and neurobiological mechanisms underlying acupuncture analgesia. Recent findings from Dr. Chung's lab indicate that reactive oxygen species (ROS), the primary

source of cellular oxidative stress, act as critical cellular signaling molecules in the spinal cord mediating various chronic pain. Present efforts are designed to unveil molecular mechanisms on how oxidative stress in the spinal cord is involved in generation and maintenance of chronic pain.

UT Health Sciences Center San Antonio



Dr. Jim LechleiterUT Health Sciences Center San Antonio
Department of Cellular and Structural Biology

Dr. Lechleiter joined the department in March, 2000. He served as a member of the National Science Foundation (NSF) Study Panels on Instrumentation Development for Biomedical Research and served on Signal Transduction and Regulation. He has also served as an adhoc member for multiple National Institutes of Health (NIH) Special Emphasis Panels and study sections including: "Radiation Study Section", "Cell Development and Function-5", "Cell Biology and Physiology" and "Membrane

Biology and Protein Processing". Dr. Lechleiter has extensive experience with imaging technology, its application towards current problems in cell biology and is the director of the institutional Optical Imaging facility.



Dr. Andrea GuffriedaUT Health Sciences Center San Antonio
Pharmacology

Dr. Giuffrida received his Ph.D. in Biology from the University of Catania (Italy) and had postdoctoral training at the University of Siena (Italy) and at the Neuroscience Institute in San Diego. His first faculty appointment was at UC Irvine before moving to the UT Health Science Center at San Antonio in 2003 and accepting a position in the Department of Pharmacology. He maintains a well-funded and productive research program with interests in the field of cannabinoid neuropharmacology and the role of this signaling system in psychomotor disorders such as

schizophrenia and Parkinson's Disease. He has published his work in top tier journals such as Nature and Nature Neuroscience. In 2011, Dr. Giuffrida received an AAAS Science and Technology Policy Fellowship and has spent the past year in the Office of the NIH Director focusing on policies to improve the research enterprise. Excited and inspired by his experience in Washington, D.C., Dr. Giuffrida and Vice President for Research David S. Weiss, Ph.D., began discussing how he might use this valuable experience to advance the research enterprise at our Health Science Center here in San Antonio.



Dr. David Morilak UT Health Sciences Center San Antonio Department Of Pharmacology

Dr. Morilak studies the negative impact of stress, and mechanisms for better treatment of stress-related psychiatric disorders. Dr. Morilak focuses is on the brain neurotransmitter norepinephrine (NE) and its role in a) acute behavioral, cognitive and endocrine responses to stress; b) adaptive and maladaptive responses to chronic stress; and c) regulatory mechanisms of action of psychotherapeutic drugs.



Dr. Timothy Duong UT Health Sciences Center San Antonio Research Imaging Institute

Dr. Duong's research focuses on the development and application of magnetic resonance imaging (MRI), spectroscopy (MRS), and speckle and optical imaging, to the study of brain and retinal anatomy, physiology and function in animal models and humans. They include: (1) novel methodologies to dynamically measure cerebral blood flow, tissue oxygen tension, blood volume; (2) high-resolution functional MRI techniques for mapping layer-specific and columnar organization; (3) blood blow, oxygenation and function of the retina; and (4) anatomical,

physiological and functional characterization and prediction of tissue fates in stroke, leading to improved therapeutic intervention.

MD Anderson Cancer Center



Dr. Patrick Dougherty MD Anderson Cancer Center Department of Pain Medicine - Research

Dr. Dougherty's research interest focuses on determining the mechanism of chemotherapy-induced peripheral neuropathy. This project is composed of parallel studies conducted in human patients and in animals. In the human studies he and his team are conducting psychophysical studies to define the sensory fibers that are involved in this pain condition. The animal studies are being conducted to define the central neurophysiological mechanisms that are altered following chemotherapy and to determine agents that may provide a

neuroprotective role. The current emphasis in each of these studies is to determine the role that immunederived cytokines play in this pathogenesis.



Dr. Annemieke Kavelaars MD Anderson Cancer Center Department of Symptom Research

Dr. Kavelaars is a professor in the Department of Symptom Research, Division of Internal Medicine. Dr. Kavelaars specializes in symptom research.

UT Health Sciences Center Houston

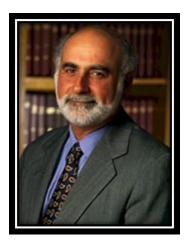


Dr. Harel ShouvalUT Health Sciences Center Houston
Neurobiology and Anatomy

Dr. Shouval's research focuses on identifying the rules by which changes in synaptic strength - believed to be the basis of learning, memory and development in the cortex - take place. These synapses are the means by which one neuron communicates with another, and changes in these weights are called synaptic plasticity. I concentrate on theoretical/ computational approaches to the study of synaptic plasticity and its implications on learning, memory and development. I study synaptic plasticity at many levels, from its molecular basis to its functional

implications and I believe that theoretical studies are essential for forming the link between these different levels of description.

the neural circuits and individual neurons.



UT Health Sciences Center Houston

Neurobiology and Anatomy

Dr. Byrne uses a variety of molecular, biochemical, biophysical,
electrophysiological and imaging techniques used to analyze the properties of

Dr. Jack Byrne



Dr. Jarek AronowskiUT Health Sciences Center Houston
Neurology

Dr. Aronowski focuses on Neuropharmacology and laboratory models of ischemic stroke and intracerebral hemorrhage His research involves understanding the cellular and molecular mechanisms underlying the pathology of acute cerebral ischemia, reperfusion injury and intracerebral hemorrhage, with emphasis on calcium related signal transduction, adenosine receptors, protein phosphorylation, transcription factors (specifically NF-kappaB, Nrf2 and PPAR) and neuroinflammation (including role of microglia in hematoma

resolution) Utilizing behavioral modalities in our rats, we are also investigating the effect of motor and cognitive activities on neuronal plasticity and functional recovery from stroke-induced brain damage.

UT Tyler



Dr. Teresa KennedyUT Tyler
School of Education

Dr. Kennedy currently serves as the President of the International Council of Associations for Science Education (ICASE), the Chair of the National Science Teachers Association (NSTA) International Advisory Board, and also serves on the Board of Directors for SCUBAnauts International, on the NOAA National Marine Sanctuaries Ocean for Life Program Steering Committee, and as the Texas State

Representative for the National Network for Early Language Learning (NNELL). Dr. Kennedy's research interests include online teaching and learning; content-based second language teaching and learning focused on science, mathematics and social studies; brain research in relation to second language acquisition and bilingualism; and Earth science, space science and engineering education.

UT System Vice Presidents for Research (VPRs)



Dr. Steve Aley **UT El Paso** Vice President for Research **Biological Sciences**

Dr. Aley is a researcher in the molecular biology and bioinformatics of Infectious Diseases and an innovator in undergraduate education in biology and biomedicine. Dr. Aley currently serves at the University of Texas at El Paso as Professor in Biological Sciences and Associate VP for Research. Dr. Aley specializes in Human parasitic protists, Proteomics and Genomics and STEM Education and pedagogy



Dr. Bruce Gnade UT Dallas Vice President for Research Chemistry

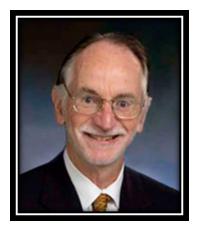
Dr. Gnade is an expert in researching electronic materials, with an emphasis on materials and processes for flexible electronics and thermoelectrics, field emission devices, radiation detectors, and thin-film electronics



Ms. Ellyn Perrone
UT Austin
Associate Vice President for Research
Federal Relations

Ellyn focuses on raising the university's national profile and increasing funding from federal agencies and Congress. She acts as liaison among university researchers, the U.S. Congress and federal agencies and conducts strategic program development planning to enhance research. Before joining The University of Texas at Austin as associate vice president for research, Ellyn was vice president for government relations for two years at Ohio State University,

where she coordinated all aspects of the university's relationship with federal, state and local government officials, representatives and agencies. Ellyn has also served as vice president for governmental affairs at Texas A&M University.



Dr. James GoodwinUT Medical Branch
Vice President for Research
Internal Medicine

Dr. Goodwin studies patterns of cancer care in the elderly, barriers to health care delivery in the elderly, and predictors of physical functioning and health in older populations.

(Not Pictured)
Toni D'Agostino
UT Medical Branch
Vice President of Research
Research Services

Toni is employed by UTMB in the department of Research Services. As Director of Sponsored Programs, she serves as the Institutional Official in all proposals and correspondence with external sponsors of research. Toni also works with UTMB leadership to develop programs that will assist faculty in finding and obtaining funding for their research projects. She also lectures on grantsmanship and compliance topics.

UT System



Dr. Patricia D. Hurn
UT System
Vice Chanceller for Research and Information

Vice Chancellor for Research and Information

Patricia D. Hurn, Ph.D., is Vice Chancellor for Research and Innovation at The University of Texas System. She serves as the chief health research officer to the UT System and its six academic health center campuses. Her focus is on building collaborative models of bio-health research, creating innovative science education programs and constructing technological systems and infrastructure for the mission of discovery. In addition to her UT System leadership role, Hurn is an active neuroscientist and is internationally known for her work in understanding the cellular and molecular basis of gender

differences in response to experimental brain injury.



Dr. Randy CharbeneauUT System
Assistant Vice Chancellor for Research

Dr. Charbeneau's research and teaching interests include groundwater hydrology, subsurface fate and transport of hazardous and radioactive wastes, groundwater pollution, dose and risk assessment, multiphase flow, and mathematical modeling. Recently funded research includes fate and transport of hazardous organic chemicals in the vadose zone, risk and performance assessment for a low level radioactive waste disposal facility, and evaluation of water quality impacts from highway construction and runoff through monitoring and laboratory investigations of performance of temporary and permanent

pollution control structures and sediment traps.



Dr. Dale Klein **UT System** Associate Vice Chancellor for Research

Dr. Klein is Associate Director of the Energy Institute and Associate Vice Chancellor for Research at the University of Texas System. Formerly he was Chairman of the Nuclear Regulatory Commission and also served as a member of the Commission. He has made more than 300 presentations and has written numerous technical editorials on energy issues that have been published in major newspapers throughout the United States.

UT System Office of Federal Relations

1750 Pennsylvania Avenue NW Suite 900 Washington, DC 20006 202-955-9091

Dr. Tom Jacobs tjacobs@utsystem.edu

Bill Shute wshute@utsystem.edu

Angela Godby agodby@utsystem.edu

Dr. Michelle Atchison matchison@utsystem.edu