

## **BASIC SCIENCE**

### **Biochemistry and Molecular Biology**

[Jane Clifford, Ph.D.](#)

**Research Interests:** Cellular response to DNA damage, regulation of gene expression, cellular proliferation and the cell cycle, cancer.

[Tara Davis, Ph.D.](#)

**Research Interests:** The role that the nuclear cyclophilins, targets of both clinical and physiological relevance, play in spliceosome assembly and regulation of splicing chemistry

[Eishi Noguchi, Ph.D.](#)

**Research Interests:** Genome maintenance mechanisms relevant to cancer biology, including DNA replication, cell cycle checkpoints, and chromatin structure; investigating the mechanisms required for preservation of genomic integrity

[Mauricio Reginato, Ph.D.](#)

**Research Interests:** Signal transduction mechanisms underlying matrix and growth factor regulation of breast epithelial biology and cancer; apoptotic signaling and differentiation.

[Keith Vosseller, Ph.D.](#)

**Research Interests:** Proteomic and biochemical studies on the post-translational regulation of signal transduction through site-specific modification of proteins by O-GlcNAc and phosphorylation

### **Neurobiology and Anatomy**

[Marie-Pascale Cote, Ph.D.](#)

**Research Interests:** Spinal cord injury

[Itzhak Fischer, Ph.D.](#)

**Research Interests:** Cellular and molecular strategies in promoting regeneration; structure and function of neuronal cytoskeleton

[Simon Giszter, Ph.D.](#)

**Research Interests:** Spinal cord organization and control of limb biomechanics

[Haviva Goldman, Ph.D.](#)

**Research Interests:** Bone quality and skeletal fragility

[Bruce Hirsh, Ph.D.](#)

**Research Interests:** 3D imaging and joint biomechanics

[John Houle, Ph.D.](#)

**Research Interests:** Neurotransplantation strategies to promote structural and functional recovery after spinal cord injury

[Ramesh Raghupathi, Ph.D.](#)

**Research Interests:** Cell death and plasticity after traumatic injury to the mature and immature brain

[Jed Shumsky, Ph.D.](#)

**Research Interests:** Behavioral assessment of recovery of function from spinal cord injury

[Veronica Tom, Ph.D.](#)

**Research Interests:** Modulation of extrinsic and intrinsic factors to promote axonal regeneration and plasticity

[Ying Jin, Ph.D.](#)

**Research Interests:** Axonal regeneration and functional recovery after spinal cord injury

## **Microbiology and Immunology**

[Elizabeth Blankenhorn, Ph.D.](#)

**Research Interests:** Genetic foundations for inherited susceptibility to autoimmune diseases, including diabetes, scleroderma and multiple sclerosis. Impact of genetics on wound healing and susceptibility to viral infection

[Tim Block, Ph.D.](#)

**Research Interests:** Molecular mechanisms of viral persistence and development of therapeutic strategies for hepatitis B virus (HBV) and herpes simplex virus (HSV)

[Pooja Jain, Ph.D.](#)

**Research Interests:** Dendritic cells in autoimmune and neuroinflammatory disease

[Sandhya Kortagere, Ph.D.](#)

**Research Interests:** Designing small molecule modulators of therapeutically relevant protein targets using structure based drug design methods

[Julio Martin-Garcia, Ph.D.](#)

**Research Interests:** HIV-1 envelope-mediated fusion and entry, HIV neurotropism and neuropathogenesis

[Pamela Norton, Ph.D.](#)

**Research Interests:** Development of novel antiviral drugs for use against hepatitis B virus (HBV) infection; host cell defenses against HBV infection

[Rick Rest, Ph.D.](#)

**Research Interests:** Molecular and cellular mechanisms of the pathogenesis of Neisseria gonorrhoeae, Neisseria meningitidis, and Bacillus anthracis

[Laura Steel, Ph.D.](#)

**Research Interests:** Development of RNAi-based therapies for hepatitis B virus (HBV) and HIV-1

[Ying-Hsiu Su, Ph.D.](#)

**Research Interests:** Understanding interactions between herpes simplex virus type 1 (HSV-1) and neurons during viral latency and reactivation; using nucleic acids in urine as diagnostic markers of cancer

[Akhil Vaidya, Ph.D.](#)

**Research Interests:** Understanding basic molecular functioning of malaria parasites with a view to developing new antimalarial drugs.

[Brian Wigdahl, Ph.D.](#)

**Research Interests:** Immunopathogenesis and neuropathogenesis of HIV-1 and HTLV-I infection, transcriptional regulation of retroviral expression, viral sequence diversity and correlations to disease, development of microbicidal agents

## **Pharmacology and Physiology**

[Janet Clark, Ph.D.](#)

**Research Interests:** Exploration of a relatively new model of depression in which chronic elevation of pro-inflammatory cytokines is accompanied by increased depressive-like behaviors

[Alessandro Graziano, Ph.D.](#)

**Research Interests:** Understanding the mechanisms of central nervous system plasticity that cause the emergence and maintenance of central pain after spinal cord injury or other chronic pain conditions

[Ole Mortensen, Ph.D.](#)

**Research Interests:** Understanding of how drugs of abuse and antidepressants interact with and modulate the function of the dopamine (DAT) and serotonin transporter (SERT) and to identify the cellular processes that are involved in regulating DAT and SERT function

## **CLINICAL DEPARTMENTS**

### **Cardiothoracic Surgery**

[J. Yasha Kresh, Ph.D.](#)

**Research Interests:** Cardiac remodeling (nano-macro scale) and mechanotransduction, heart-failure pathophysiology, myocardial repair and regeneration, cardiac function and replacement devices (TAH, LVADs), cardiovascular cellular and tissue engineering, biosensors

### **Emergency Medicine**

[Sharon Griswold-Theodorson, M.D., FACEP](#)

**Research Interests:** Asthma, emergency medicine procedures

[James Roberts, M.D., FACEP, FAAEM](#)

**Research Interests:** Emergency medicine, toxicology

[Mark Saks, M.D., FAAEM, MPH](#)

**Research Interests:** Medical education and neurologic emergencies

### **Family, Community and Preventive Medicine**

[David Berkson, M.D.](#)

**Research Interests:** Family medicine, sports medicine

### **Infectious Disease and HIV Medicine**

[Jeffrey Jacobson, M.D.](#)

**Research Interests:** Infectious diseases, HIV, immunology

### **Medicine**

[Michele Kutzler, Ph.D.](#)

**Research Interests:** Translational research in vaccinology, immunology and infectious disease

## Neurology

[Yuesong Gong, Ph.D.](#)

**Research Interests:** Alzheimer's disease

[Carol Lippa, M.D.](#)

**Research Interests:** Clinicopathologic mechanisms underlying neuronal death in neurodegenerative diseases

[Robert Schwartzman, M.D.](#)

**Research Interests:** Chronic pain with specific focus in complex regional pain syndrome (CRPS)

[David Tabby, D.O.](#)

**Research Interests:** Multiple sclerosis

## OB/GYN

[Karen Berkowitz, M.D.](#)

**Research Interests:** Meiosis, meiotic recombination, and chromosome segregation, processes that crucial to germ cell development and genome integrity

[Bernard Eskin, M.D.](#)

**Research Interests:** Hormonal variation disturbed by iodine deficiency and how these hormones affect breast tissues

## Pathology and Laboratory Medicine

[Claudio Torres, Ph.D.](#)

**Research Interests:** Aging

## Pediatrics

[Jahan Ara, Ph.D.](#)

**Research Interests:** Neonatal hypoxia; neurodegeneration

## Psychiatry

[David Bennett, Ph.D.](#)

**Research Interests:** Child and adolescent psychiatry

## **Radiology**

[Michael Hallowell, M.D.](#)

[Robert Koenigsberg, D.O.](#)

## **Radiation Oncology**

[Lydia Komarnicky, M.D.](#)

**Research Interests:** Breast, lung and eye tumors

[Jaganmohan Poli, M.D.](#)

**Research Interests:** Radiation oncology, prostate cancer

## **Surgery**

[Ari Brooks, M.D.](#)

**Research Interests:** Surgical oncology

[Suresh Joshi, M.D., Ph.D.](#)

**Research Interests:** Surgical site infections, bacterial pathogenesis and novel antibacterial agents, biodefense

[D. Scott Lind, M.D.](#)

**Research Interests:** Breast cancer and melanoma

[Juan Lucas Poggio, M.D., M.S., FACS, FASCRS](#)

**Research Interests:** Laparoscopic treatment of diverticulitis, inflammatory bowel disease and colorectal polyps, and anal sphincter incontinence

[Boris Polyak, Ph.D.](#)

**Research Interests:** Nanoparticles for drug delivery; regenerative medicine

[Michael Weingarten, M.D., M.B.A](#)

**Research Interests:** Wound healing, vascular Surgery

## **Women's Health Education Program**

[Ana Nunez, M.D.](#)

**Research Interests:** Girls' and women's health, minority women's health and culturally effective care

## **ADMINISTRATIVE DEPARTMENTS**

### **Office of Educational Affairs**

[Dennis Novack, M.D.](#)

**Research Interests:** Physician-patient communication

## **DREXEL UNIVERSITY**

### **COLLEGE OF ARTS AND SCIENCES, Bioscience and Biotechnology**

[Daniel Marena, Ph.D.](#)

**Research Interests:** Neurogenesis, Alzheimer's disease, developmental neurobiology in Drosophila

## **SCHOOL OF BIOMEDICAL ENGINEERING, SCIENCE AND HEALTH SYSTEMS**

[Wan Shih, Ph.D.](#)

**Research Interests:** Piezoelectric microcantilever biosensors development, piezoelectric finger development, quantum dots development, tissue elasticity imaging, piezoelectric microcantilever force probes

## **AFFILIATES**

### **LANKENAU INSTITUTE FOR MEDICAL RESEARCH**

[James Mullin, Ph.D.](#)

**Research Interests:** Role of gastrointestinal (tight junctional) leakiness in cancer, inflammatory disease, and drug delivery