

Downstate Medical Center – Office of Scientific Affairs

FACULTY MENTORS AND THEIR RESEARCH INTERESTS

§ - indicates current/recent sponsored research funding

** Unless otherwise noted, phone numbers are at the (718) 270- exchange **

COLLEGE OF MEDICINE - BASIC SCIENCE DEPARTMENTS

Department of Cell Biology

Janice L. Brissette, PhD (x3755) §

janice.brissette@downstate.edu

My laboratory is interested in the development and diseases of the skin. Within these broad subjects, we focus on the control of epithelial morphogenesis and seek a better understanding of how the skin: 1) creates and regenerates epithelial tissues, 2) directs different cell types to develop and function as units, 3) terminates tissue development, and 4) protects itself from uncontrolled cell growth. To gain insight into these processes, we are determining the molecular and cellular functions of two transcription factors -- Foxn1 (forkhead box n1) and Hr (hairless). In humans and mice, these factors are critical to skin morphogenesis, as Foxn1 promotes tissue development, while Hr arrests development and promotes quiescence. These factors thus play fundamental but distinct roles in the health of the skin and represent gateways through which to uncover global mechanisms of morphogenetic control.

Stephen Carleton, PhD (x3749)

steve.carleton@downstate.edu

Molecular analysis of gene expression in the developing chick heart, specifically the genetics or "switch on" of two cardiac-specific genes and two skeletal muscle-specific genes during critical stages of development. Collaborations on projects involved in genetic analysis (DNA fingerprinting) of *Mycobacterium tuberculosis*.

Brahim Chaqour, PhD (x8285) §

brahim.chaqour@downstate.edu

Research focus in the Chaqour lab is on the adaptive and maladaptive responses of cells and tissues to local and environmental stresses/injuries whether they are mechanical/physical in nature (e.g., tissue overdistension/stretch, hemodynamic or pressure overload and shear stress deformation) or chemical stresses imparted by hypoxia, hyperoxia and/or ischemia. These studies have direct clinical implications in congenital and acquired diseases of the nervous, urinary, cardiovascular and digestive systems as well as in tumorigenesis.

William J Chirico, PhD (x1308)

william.chirico@downstate.edu

Biogenesis of angiogenic factors and their roles in cardiovascular disease and cancer. Mechanism of chaperone-dependent protein folding and translocation into organelles.

Eva B Cramer, PhD (x1011) §

eva.cramer@downstate.edu

Development of i) a biotech incubator & park adjacent to the campus, and ii) a biotech expansion/manufacturing site at the Brooklyn Army Terminal.

John Danias, MD, PhD (x) §

john.danias@downstate.edu

Neuroprotection; Gene expression in glaucoma; Gene therapy in glaucoma; and Neuroregeneration

Richard Feinman, PhD (x2252)

rfeinman@downstate.edu

Mechanism of action of proteolytic enzymes and their inhibitors.

Computer models of operant conditioning.

Miriam H Feuerman, PhD (x1258)

miriam.feuerman@downstate.edu

Molecular mechanism that separates controlled normal growth from carcinogenesis. Study regulation of gene expression in liver regeneration and tumorigenesis.

Gregory Gick, PhD (x1265)

greg.gick@downstate.edu

Investigation of the molecular mechanisms underlying regulation of mammalian Na,K-ATPase subunit gene expression in response to hormones and ionic stimuli.

Christopher U Hellen, PhD (x1034) §

christopher.hellen@downstate.edu

The mechanism of cap-dependent initiation of translation in eukaryotes. Analysis of RNA-protein interactions that mediate initiation of translation by internal ribosomal entry on eukaryotic viral mRNAs, using hepatitis C virus and encephalomyocarditis virus mRNAs as models.

Sabina Hrabetova, PhD (221-5392) §

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Biophysical properties of the brain extracellular space important for neurotransmission, neurotrophic effects, drug delivery, general electric activity, and basic cellular homeostasis. Focus: role of glia and extracellular matrix. Interdisciplinary approach: imaging, electrophysiology, computer modeling.

Mahmood Hussain, PhD (x4790) §

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Molecular mechanisms of intestinal lipoprotein assembly.

Xian-Cheng Jiang, PhD (x6701) §

xian-cheng.jiang@downstate.edu

Create and use mouse models (transgenic, gene knock-out) for the studies of sphingomyelin (the second abundant phospholipid in the circulation system) metabolism and atherosclerosis. Use of transgenic approach to perform functional studies of two plasma lipid transfer proteins, phospholipid transfer protein (PLTP) and cholesteryl ester transfer protein (CETP).

Weijun Jin, MD (x5639) §

weijun.jin@downstate.edu

Plasma lipid metabolism; identifying how genes regulate hepatic and plasma lipoprotein levels; gene transfer, increase and decrease of protein expression; biochemistry of protease lipase and other enzymes.

John L Kubie, PhD (x2632) §

jkubie@downstate.edu

Study the role of the hippocampus in navigation, learning and memory, analyzing single-cell recordings from awake behaving rats. Study the relationships between the animals' position in space, the animals' experience and the firing of target cells. Other technical approaches involve analysis of navigation, the study of evoked potentials and the study of the effects of drugs or hormones on

neuronal firing properties.

Donald R Mills, PhD (x3815)

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Studying the conformation of messenger RNA as it relates to the regulation of protein synthesis. Also examining RNA protein interactions.

Camilo A Parada, PhD (x1143)

camilo.parada@downstate.edu

Mechanism(s) by which the HIV-encoded Tat protein, in conjunction with cellular factors, enhances transcription elongation from the HIV-1 promoter. Exploration of the contribution of Tat and cellular factors to HIV-1 transcription re-initiation, transcription through nucleosomes, and mRNA processing.

Tatyana Pestova, PhD (x1781) §

tatyana.pestova@downstate.edu

Mechanism of initiation of eukaryotic protein synthesis.

Christopher A J Roman, PhD (x1310) §

christopher.roman@downstate.edu

Lymphocyte development and renal cell carcinoma. We study transcription factors, cytokine pathways, and antigen receptor complexes that are important for lymphocyte development, the immune response, autoimmune disease, leukemia/lymphoma, and renal cancer, using transgenic/knock-out mouse models, primary mammalian cell culture systems, and somatic gene inactivation/retroviral transduction approaches.

Julie Rushbrook, PhD (x2647)

julie.rushbrook@downstate.edu

Structural characterization of fast myosin heavy chain isoforms associated with development and muscle fiber differentiation. Characterization of the four nonidentical subunits of mammalian mitochondrial NAD⁺ isocitrate dehydrogenase and 3-D analysis. Characterization of various human serum proteins associated with disease.

Frank R Scalia, PhD (x1018)

frank.scalia@downstate.edu

The imaging surface of the retina is mapped point for point onto the visual centers of the brain, providing the brain with a coherent view of the visual world. The formation of these visuotopic maps, which are essential for normal vision, is being studied during development and in models of optic nerve regeneration.

Haseeb A Siddiqi, PhD (x1610)

haseeb@downstate.edu

Host-parasite interactions, and mechanisms of pathogenesis and immunity in schistosomiasis; reproductive biology of schistosomes and mechanisms of chemoattraction in schistosome males and females; immune regulation in schistosomiasis and in sepsis; cytokines in infection and in local tissue injury.

Eduardo Mascareno, PhD

eduardo.mascareno@downstate.edu

Molecular mechanisms in cardiac development. Signal transduction pathways and transcription adaptation in myocardial hypertrophy and ischemia. The role of obesity and the inflammatory response, as major contributors in the development of chronic cardiovascular diseases,

such as cardiac hypertrophy, myocardial ischemia, and heart failure.

Gladys Teitelman, PhD (x2950) §
gladys.teitelman@downstate.edu

Type I diabetes results from the destruction of insulin producing cells (B cells) of the pancreas. The main focus is to establish an animal model of type I diabetes to identify B precursor cells and to study their differentiation into insulin cells of adults.

Fredric C Volkert, PhD (x3923)
fredric.volkert@downstate.edu

Development and evaluation of active learning strategies in medical education.

Department of Pathology

Juan Marcos Alarcon, PhD (718-613-8348)
<mailto:juanmarcos.alarcon@downstate.edu>

Project Title: Organization of Traces of Memory in the Hippocampus Circuit

Project Description: The goal is to study how synaptic circuits in the mouse hippocampus change upon a learned experience. By identifying and characterizing synaptic inputs that have been persistently changed by memory experiences, we will attempt to define the organization of memory traces at the circuit level.

General Hypothesis: Learned experiences persistently change the function of hippocampal circuits to store memory.

Laboratory techniques: Behavioral training of mice and ex vivo characterization of cellular and synaptic function via electrophysiology, immunohistochemistry, biochemistry/molecular biology methods.

Virginia M Anderson, MD (x1292)
virginia.anderson@downstate.edu

Morphologic alterations in pediatric and perinatal disease including the placenta in HIV disease, congenital malformations especially congenital heart disease.

Constantine Axiotis, MD (245-5371)
constantine.axiotis@downstate.edu

The expression of the multidrug resistance gene (MDR-P-glycoprotein) in human tumors; and the molecular pathology of breast cancer.

Randall L Barbour, PhD (x1661)
randall.barbour@downstate.edu

Development of real-time functional imaging technologies for early disease detection, monitoring response to therapy and evaluation of normal tissue functioning.

Helen G Durkin, PhD (x1295)
helen.durkin@downstate.edu

Studies of IgE responses of long term survivors with HIV-1 disease. Role of gut associated lymphoid tissue (GALT) in generation and suppression of IgE responses in humans (allergic, HIV+) and rodents. Attempting to determine how IgE responses can be eliminated, without interfering with humoral antibody responses of other isotopes (IgM, IgG, IgA) or cell mediated immune responses. Studies focus on role of bacterial cell wall components, cytokines, especially IL-6, and neuropeptides, especially substance P, in isotype specific suppression of IgE responses.

Alejandro Ivan Hernandez, PhD
ivan.hernandez@downstate.edu

Understanding the molecular mechanisms regulating long-term synaptic plasticity and the alterations of those mechanisms associated with neurodegenerative disorders and drug addiction.

Jenny Libien, MD (x6304)

jenny.libien@downstate.edu

My major research and clinical focus is examining cellular dysfunction and toxicity due to amyloid deposition in Alzheimer's disease and transthyretin amyloidosis. Two current projects are 1. how alterations in PARP1, an enzyme necessary for long-term memory, may contribute to memory impairment in Alzheimer's disease and 2. A study of the deposition of transthyretin amyloid in tissues leading to polyneuropathy and cardiomyopathy in the elderly.

Josef Michl, MD (x1643)

josef.michl@downstate.edu

Study of the cells involved in host defense mechanism against infectious agents and tumors, and of carcinogenesis in the exocrine pancreas in animals and man: Establishment of novel *in vitro* and *in vivo* disease models for the identification of unique disease-specific molecules for the development of early diagnostic approaches and effective therapeutic tools for this disease.

Maja Nowakowski, PhD (x2206)

maja.nowakowski@downstate.edu

Systemic and local pulmonary immunity in lung diseases, including HIV-1 disease, tuberculosis and chronic inflammatory disease. The role of macrophage-derived nitric oxide in lung diseases, including asthma, HIV-1 disease, tuberculosis, and chronic inflammatory disease. Effects of virus infection on macrophage physiology and immune functions.

Martin J Salwen, MD (x1689)

martin.salwen@downstate.edu

Define outer limits of laboratory test analyses. Develop programs for interpretive analysis of clinical laboratory data using rule-based logic and pattern analysis. Programs have incorporated modules for instruction in testing strategies for differential evaluation of patients. Programs have been developed for erythrocytosis. Strategies for rapid bacterial identification in sepsis.

Department of Physiology and Pharmacology

Burton M Altura, PhD (x2194)

burton.altura@downstate.edu

Focus on magnesium in cardiovascular biology, both in animals and human subjects. Involved in new diagnostic and prognostic test development, and new medical devices. Studies biochemical and molecular physiological processes in atherogenesis and stroke. Primary cultured vascular smooth muscle, endothelial and glial cells are used.

Peter J Bergold, PhD (x3927) §

peter.bergold@downstate.edu

Interested in the role of gene expression in the pathophysiology of neuronal disorders, particularly stroke and epilepsy.

John Chapin, PhD (x1339)

john.chapin@downstate.edu

Develop and utilize technologies for neurophysiologically recording from large populations of neurons in sensory and motor areas of the brain. Computer techniques for online extraction of coded information in the brain are used to control external devices such as robot arms.

Diana L Dow-Edwards, PhD (x3987) §

diana.dow-edwards@downstate.edu

Use neuro-imaging and neuropharmacologic techniques to study the effect of drug exposure during brain development. The overall hypothesis is that the actions of drugs, typically cocaine or similar drugs, alters the functional maturation of the brain.

David J Erlij, MD, PhD (x2243)

david.erlij@downstate.edu

Hormonal regulation of membrane transport.

Steven E Fox, PhD (x2177)

steven.fox@downstate.edu

Study the EEG theta rhythm in rats to understand how it influences information processing by the hippocampus. Theta rhythm occurs during movement and is paced by cholinergic neurons that project from the medial septal nuclei to the hippocampus. The degeneration of these basal forebrain cholinergic neurons is probably the cause of the memory deficit of Alzheimer's patients.

Joseph T. Francis, PhD (x6337) §

joseph.francis@downstate.edu

My research interest is centered on developing a fully integrated Brain Machine Interface (BMI) for the control of prosthetic limbs. I feel that our best chance of accomplishing such a goal will involve a unique strategy and point of view, one that can be gained by exploiting several experimental models. Much of my work involves rats, monkeys and humans making reaching movements while interacting with robotic systems. The robotic systems are used to produce novel dynamical situations allowing me to ask questions about motor learning and how different brain regions respond to such learning.

Ellen Hsu, PhD (x1154) §

ellen.hsu@downstate.edu

Immunoglobulin gene expression and regulation.

Douglas Ling, PhD (x4631) §

douglas.ling@downstate.edu

The potentiation of GABAergic inhibition by nootropic (cognition-enhancing) drugs induced by changes to inhibitory cell function. Injury-induced changes in synaptic function that lead to epileptiform activity, using a model of acute neuro-trauma.

William Lytton, MD (x1339) §

bill.lytton@downstate.edu

Modeling electrophysiological processes pertinent to epilepsy and modeling abstract neural networks to understand recovery from stroke and the basis of cognitive processes. Development and application of new conceptual and technical tools to integrate the top-down techniques of artificial neural networks with the bottom-up techniques of detailed neural modeling.

Hillary Michelson, PhD (x3182)

hillary.michelson@downstate.edu

Studying the connectivity of the inhibitory circuit in the hippocampus and the maturation of GABA mediated inhibition.

Nicholas Penington, PhD (x3399)

nicholas.penington@downstate.edu

Study the regulation of nerve cells in the brain that release the neurotransmitter (5-HT) and focus on central serotonergic (5-HT) neurotransmission and neuropharmacology. Studies of the molecular level on the signal transduction pathways in these nerve cells and investigations of how drugs interact with a single receptor system, capable of modulating two different ion channels simultaneously.

Katherine L Perkins, PhD (x2772)

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Synaptic transmission in the hippocampus -interneuron networks,

epileptiform activity, depolarizing GABA response.

Alan P Rudell, PhD (x1150)

alan.rudell@downstate.edu

Electrical brain responses to recognizable images (words, pictures, faces) are recorded and related to acquired perceptual skills (*e.g.*, reading ability).

Todd Sacktor, MD (x3933) §

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The role of protein kinase C isozymes in long-term synaptic plasticity (LTP & LTD), and their relationship to memory.

Sheryl S Smith, PhD (x1339) §

sheryl.smith@downstate.edu

Modulation of hippocampal and olivo-cerebellar circuits by neuroactive steroids. Currently investigating steroid-induced changes in synaptic physiology induced by alterations in GABAA receptor subunit composition. Behavioral correlates, such as anxiety and seizure susceptibility, are also under investigation. Possible clinical relevance for PMS and catamenial epilepsy.

Armin Stelzer, MD (x3873)

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Intracellular regulation of ligand-gated receptors. Activity-dependent modification of the inhibitory circuit.

Mark Stewart, MD, PhD (x1167)

mark.stewart@downstate.edu

We study the causes and consequences of seizure activity using *in vivo* and *in vitro* animal models. With brain slice studies, we explore the cellular and circuit properties of hippocampal and parahippocampal cortical neurons. In whole animal studies we explore the autonomic nervous and immune system consequences of seizures. ANS and immune system consequences are also studied in patients from our Epilepsy Monitoring Unit.

Henri Tiedge, PhD (x1370) §

henri.tiedge@downstate.edu

Sorting and intracellular targeting of neuronal RNA.. Local protein synthesis in neurons. Regulation of gene expression in neurons by trans-synaptic activity.

Keith Williams, PhD (x4610)

keith.williams@downstate.edu

Structure, function, and regulation of glutamate receptors.

Robert KS Wong, PhD (x1339) §

bob.wong@downstate.edu

Transmitter modulation of hippocampal neuronal network mechanisms of epileptogenesis.

COLLEGE OF MEDICINE - CLINICAL DEPARTMENTS

Department of Anesthesiology

Dennis Dimaculangan, MD

dennis.dimaculangan@downstate.edu

1. Study comparing the effects of PCEA vs. periarticular single shot injection (SSI) vs. continuous periarticular infiltration (CPI) of local anesthetic, on top of a standard multimodal post-operative pain management strategy, on pain and rehabilitation outcomes in patients undergoing total hip replacement surgery.
2. Liposomal bupivacaine versus continuous saphenous nerve block supplement with single-dose local infiltration analgesia for pain control after total knee arthroplasty.

Rebecca S Twersky, MD, MPH

rebecca.twersky@downstate.edu

1. Quality Control Review of the ASA classification of patients undergoing moderate sedation by non-anesthesiologists. Retrospective chart review.
2. Should Ambulatory Surgery and Day of Surgery Admission Patients Discontinue Angiotensin Converting Enzyme Inhibitors (ACEI's) and Angiotensin Receptor Blockers (ARB's) Preoperatively?

Ming Zhang, MD/PhD

Ming.Zhang@downstate.edu

1. Complement Expression Profiles in Human Cord Blood.
2. Determining the Mechanism of Ischemia Reperfusion Injury in Human Intestinal Tissue.
3. Animal models of ischemia: to examine the innate immune responses to ischemia in genetically-modified animals.

James Cottrell, MD

james.cottrell@downstate.edu

1. Development of novel amnesic agents using a strategy of blocking PKM activity.
2. Effects of anesthetics on excitability, metabolism, intracellular signaling pathways and molecular biological changes in pyramidal neurons before and after hypoxia.
3. Toward a mechanism underlying the effects of neonatal sevoflurane on neuropsychiatric-like behavioral changes.

Ira Kass, PhD

ira.kass@downstate.edu

1. Effects of anesthetics on excitability, metabolism, intracellular signaling pathways and molecular biological changes in pyramidal neurons before and after hypoxia.
2. Mechanisms of neonatal sevoflurane-induced learning and behavioral deficits.
3. Toward a mechanism underlying the effects of neonatal sevoflurane on neuropsychiatric-like behavioral changes.

Samrat Worah, MD

samrat.worah@downstate.edu

1. Determining the Mechanism of Ischemia Reperfusion Injury in Human Intestinal Tissue.
2. Quality Control Review of the ASA classification of patients undergoing moderate sedation by non-anesthesiologists.
3. A randomized, open label, multi-center, parallel-group, exploratory study to evaluate the efficacy of intravenous brivaracetam and intravenous phenytoin in subjects experiencing non-convulsive electrographic seizures. Sponsor: UCB Biosciences Inc.

Ketan Shevde, MD

ketan.shevde@downstate.edu

1. Insulin sensitivity in hyperglycemic patients: A comparative study of ESRD versus non-ESRD patients. Pilot study.
2. Implementation of Perioperative Carvediolol and N-Acetylcysteine Protocol within the CT-ICU setting as a means of decreasing Post-op mortality, Incidence of Atrial Fibrillation, and overall ICU and Hospital Stay.

Kimberly Craven, MD

kimberly.craven@downstate.edu

Determining the Mechanism of Ischemia Reperfusion Injury in Human Intestinal Tissue.

Daisy Lin, PhD

daisy.lin@downstate.edu

Toward a mechanism underlying the effects of neonatal sevoflurane on neuropsychiatric-like behavioral changes.

Panayiotis Tsokas, MD

Panayiotis.Tsokas@downstate.edu

Development of novel amnesic agents using a strategy of blocking PKM activity.

Ivan Velickovic, MD

ivan.velickovic@downstate.edu

Complement Expression Profiles in Maternal Human Cord Blood.

Audree Bendo, MD

audree.bendo@downstate.edu

1. Implementation of Perioperative Carvediolol and N-Acetylcysteine Protocol within the CT-ICU setting as a means of decreasing Post-op mortality, Incidence of Atrial Fibrillation, and overall ICU and Hospital Stay.
2. Perceived Barriers to Acceptance of Regional Anesthesia by Patients at SUNY DMC

Department of Dermatology

Neil Brody, MD, PhD (x1229)

neilbrody@aol.com

Isolation and characterization of molecules made by tumor cells that alter immune responsiveness or enhance tumor survival. Studying effects of sunlight on immune system.

Sharon Glick, MD (x1229)

glicksharon@aol.com

Projects in pediatric dermatology.

Edward R Heilman, MD (x1229)

eheliman@ameripath.com

Prognostic indicators of malignant melanoma.

Wei-Li Lee, PhD (x2170)

wei-li.lee@downstate.edu

Using an *in vitro* leukocyte-endothelial cell model system to evaluate potential anti-inflammatory properties of compounds with special regard for the skin. Using an *in vitro* leukocyte-endothelial cell model system to evaluate potential anti-inflammatory properties of compounds with special regard for the skin. To study the relationship between neuropeptides (NP) and pro-inflammatory cytokines with a primary interest in NP-induced skin inflammation via Th-1/Th-2/Th-17 signaling pathways.

Eve J Lowenstein, MD, PhD (x1229)

evlow13@yahoo.com

Projects in dermatology.

Department of Emergency Medicine

Bonnie Arquilla, DO (270-3216)

Arquibon@aol.com

Disaster Medicine, Surge Capacity Planning, Vulnerable Populations, Drill Design and Execution. Ethics of disaster care.

Lorenzo Paladino, MD (245-3318)

L_Paladino@msn.com

Trauma, Airway.

Richard Sinert, DO (245-2973)

richard.sinert@downstate.edu

Trauma, Hemorrhagic Shock, Asthma, Diabetes, Hypertension, Renal

Failure, Statistics, Evidence-Based Medicine.

Shahriar Zehtabchi, MD (245-4790)

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Neurological emergencies, Trauma, Hemorrhagic Shock, and Evidence-Based Medicine.

Department of Family Practice

Margaret Donat, MD (x2560)

margaret.donat@downstate.edu

Preventive care in family medicine; immunizations and complications in primary care.

Richard Sadovsky, MD (x2441)

richard.sadovsky@downstate.edu

Studies reviewing the ability of a clinical office to enroll entire families and to use entire families as the focus of treatment; effective medical writing skills; effective patient education; evaluating patient understanding of a disease. Sexual health of the older patient.

Miriam Vincent, MD (x2443)

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Appropriateness and standard of care for ambulatory NIDDM (Non-Insulin Dependent Diabetes Mellitus); preventive care in family practice (MTV); alcohol and substance abuse screening in family practice; influenza and pneumococcal vaccination: compliance, barriers, practice. Osteoporosis screening, evaluation and treatment in primary care. Diabetic neuropathy (screening, diagnosis and treatment).

Department of Medicine

MaryAnn Banerji, MD (x1542, x1698)

maryann.banerji@downstate.edu

Diabetes and cardiovascular disease, diabetes prevention, insulin resistance and insulin secretion, HIV and diabetes, endocrinology.

Olca Batuman, MD (x1500)

olca.batuman@downstate.edu

Molecular mechanisms that regulate angiogenesis (new blood vessel formation) in multiple myeloma (a common blood cell tumor).

Molecular mechanisms that regulate behavioral response to stress.

Mohamed Boutjdir, MD (718-630-2891)

mohamed.boutjdir@downstate.edu

Electrophysiology of cardiac ion channel's structure/function and channelopathies. Cardiac arrhythmias associated with autoimmune diseases; and cardiovascular health disparity research.

Erdal Cavusoglu, MD (x3273)

erdal.cavusoglu@downstate.edu

Analysis of FIIIR/JAM in patients undergoing coronary angiography.

Jack A DeHovitz, MD (x1069) §

jack.dehovitz@downstate.edu

Cohort studies of HIV-infected women.

HIV epidemiology in Eastern Europe and Central Asia

Paul Dreizen, MD (x1155)

paul.dreizen@downstate.edu

Molecular mechanism of actomyosin cross-bridge cycle in skeletal and cardiac muscle and its regulation by tropomyosin. NMR relaxation studies and molecular modeling of protein interactions using model systems.

Eli A Friedman, MD (x1584) §

eli.friedman@downstate.edu

Epidemiology of diabetic kidney disease. Blocking diabetic vascular complications.

Donald A Gerber, MD (x1455)

donald.gerber@downstate.edu

Interaction between lupus-inducing drugs (e.g., hydralazine and procainamide) and leukocyte oxidants (i.e., hypochlorite and hydrogen peroxide) and the effect of this interaction on protein structure.

Ellen M Ginzler, MD, MPH (x2529) §

ellen.ginzler@downstate.edu

Long-term, prospective study of the clinical course, prognosis and response to therapy in a large cohort of patients with systemic lupus erythematosus. Specific studies have been done related to lupus nephritis, premature atherosclerosis, and complications of therapy.

A Ross Hill, MD (x1770)

ross.hill@downstate.edu

Clinical studies on TB, e.g., retrospective case series and prospective study involving patients in DOT (directly observed therapy) program. Longstanding interest in respiratory physiology (mechanics, resp. muscles, control of breathing).

Rauno O Joks, MD (x1662)

rauno.joks@downstate.edu

Anti-inflammatory properties of tetracycline antibiotics. Role of complement proteins in allergic diseases.

Development of allergic diseases in immigrants to Brooklyn.

David Landman, MD (x3790)

david.landman@downstate.edu

Investigations include molecular epidemiology of nosocomial infections and studies involving the mechanisms of antibiotic resistance; evaluations of the activity of new investigational compounds are also conducted.

Sheldon Landesman, MD (x3034)

sheldon.landesman@downstate.edu

Prospective study of HIV infected pregnant women and their offspring, the natural history of perinatally acquired HIV, the effect of retrovirals on cardiac function and the development of mitochondrial syndromes in children.

Jason Lazar, MD (x1568)

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Alcoholic cardiomyopathy; effect of action potential duration in ischemia.

Allen J Norin, PhD (x2516)

allen.norin@downstate.edu

Role of the novel vesicle associated gene product, "Haymaker," in growth and differentiation of normal and malignant cells. Receptor-ligand interactions involved in cytolytic lymphocyte destruction of tumor cells and organ grafts, in particular, the role of

"Haymaker" and its cognate receptor in Natural Killer lymphocyte mediated cytotoxicity. Diagnosis of allograft rejection using (1) molecular probes of lymphocyte activation and (2) optical bead microarrays / Luminex for detection of anti HLA antibodies.

Louis Saliccioli, MD (x1568)

louis.saliccioli@downstate.edu

Evaluation of large and small vessel vascular function and cardiac function in cardiovascular disease with the use of non-invasive techniques.

Moro O. Salifu, MD (x1584)

moro.salifu@downstate.edu

[Anna Babinska, PhD (x4049)]

anna.babinska@downstate.edu

Investigation of molecular mechanisms underlying cellular homeostasis by studying the role of phosphorylation/dephosphorylation systems in platelet function; mechanisms of platelet activation by stimulatory antibodies directed against novel platelet membrane glycoproteins; and collaborative clinical studies investigating the role of platelet-activating factor (PAF) in pediatric NEC, PAF in learning and memory, and abnormal platelet activation mechanisms in kidney dysfunction.

Man Seok Oh, MD (x1565)

man.oh@downstate.edu

Whole body acid-base balances.

Edward Quadros, PhD (x4203)

edward.quadros@downstate.edu

Molecular, genetic and biochemical aspects of Vitamin B12 metabolism. Purification and cloning of vitamin B12 binding proteins and their receptors.

Targeted cancer therapy based on B12 and folate pathways using monoclonal antibodies.

Folate metabolism. Folate in pregnancy, fetal development, neural tube defects and autism.

John Quale, MD (x)

john.quale@downstate.edu

Investigations include molecular epidemiology of nosocomial infections and studies involving the mechanisms of antibiotic resistance; evaluations of the activity of new investigational compounds are also conducted.

TK Sreepada Rao, MD (x1394)

AIDS and kidney disease; erythropoietin in kidney disease.

Steven M Weiss, MD (x4181)

weiss@nychhc.org

Investigating the possible relationships between Chlamydia pneumoniae infection and atherosclerosis and asthma.

Department of Neurology

Charles K. Abrams, MD, PhD (x1270) §

charles.abrams@downstate.edu

My lab studies mechanisms of human central and peripheral nervous system diseases associated with mutations in connexins (gap junction proteins). I also study the roles of gap junctions in peripheral nerve regeneration and inherited peripheral neuropathy.

Brian J Anziska, MD (x2502)

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Comparison of neurology undergraduate education in different medical schools using parameters such as overnight calls, and examination modalities.

Yaacov Anziska, MD (x2734)

yaacov.anziska@downstate.edu

HIV and toxic neuropathies, peripheral nerve injuries.

Alison Baird, MD (x3213) §

alison.baird@downstate.edu

Studying the predictors of clinical and tissue outcome after stroke and predictors of stroke risk. Methods used include neurovascular imaging (MRI, MRA, and CT) and cellular and molecular profiling of the peripheral blood (gene expression profiling and flow cytometry). Development and evaluation of novel diagnostic and therapeutic approaches for stroke.

Satyakam Bhagavati, MD (x2841)

satyakam.bhagavati@downstate.edu

Skeletal muscle generation from embryonic stem cells: Isolation of skeletal muscle stem cells from murine embryonic stem cells, studying their in vitro differentiation and proliferation characteristics and their ability to generate physiologically normal skeletal muscle after transplantation into dystrophic mice.

Ivan Bodis-Wollner, MD (x2975) §

ivan.bodis-wollner@downstate.edu

Vision and visual cognition suffer in dopaminergic deficiency states, such as in Parkinson's disease (PD). Our research studies evaluate electrophysiological neural network properties of dopaminergic circuits mediating vision, saccadic eye movements and visual cognition. In addition, we study retinal impairment in PD, using optical coherence tomography, an in vivo imaging technique of the retina.

Geetha Chari, MD (x2959)

geetha.chari@downstate.edu

Epilepsy clinical studies. Study of EEG in preterm neonates'

Roger Q Cracco, MD (x2051)

roger.cracco@downstate.edu

Magnetic stimulation of nervous system.

Joan Cracco, MD (x2035)

joan.cracco@downstate.edu

Neonatal EEG: Wireless novel microEEG for neonatal monitoring

Howard Crystal, MD (x2748) §

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Cognitive changes in HIV. Genetics of substance abuse in HIV. Computational models of working and procedural memory.

Radha Giridharan (x2042)

radha.giridharan@downstate.edu

Strokes in sickle cell disease. Clinical research in pediatric neurology topics.

Paul J Maccabee, MD (x2430)

paul.maccabee@downstate.edu

Physical modeling, *in vitro* studies of nerve excitation using neuromagnetic stimulation. Developing clinical methods to detect abnormalities in the cauda equina and also the entire neuroaxis.

Lisa Merlin, MD (x3957)

lisa.merlin@downstate.edu

Hippocampal electrophysiology: examination of the role of metabotropic glutamate receptors in seizure production and epileptogenesis, with the aim to develop ways to prevent epilepsy in at-risk patients and suppress seizures in refractory patients.
The examination of various modalities to improve education in medical neuroscience

Herman Moreno, MD (x1338) §

herman.moreno@downstate.edu

Use of fMRI in mouse models of neurodegenerative disease such as Alzheimer's and Down's syndrome to study brain metabolism, as an early marker of the disease. Basic electrophysiology and single cell calcium signaling to study brain circuit abnormalities in neurodegenerative disease in multiple mouse models.

Arthur L. Rose, MD (x3209)

arthur.rose@downstate.edu

Fragile-X syndrome: Mode of action of FMRP in the central nervous system and the mechanism of "toxic" FMR1 mRNA activity in carriers.

Daniel Rosenbaum, MD (x2051) §

daniel.rosenbaum@downstate.edu

The focus of the lab is to study the underlying mechanisms of ischemic cell death. By obtaining a better understanding of the events that occur at a molecular level, therapies aimed at reducing neuronal damage may be developed. Specifically, we are focusing on the role of apoptosis in neuronal ischemia. The laboratory utilizes both cerebral and retinal models. Another area of focus is neural stem and progenitor cells. The adult mammalian brain contains neural stem and progenitor cells that can proliferate, self-renew, and generate all of the cellular elements of the brain including neurons. During the past few years techniques have been developed that make it possible to isolate and expand, from developing or even adult CNS tissue, cells with properties characteristic of early neural multipotent progenitor or stem cells. These techniques have opened interesting new possibilities for the use of cells for CNS transplantation, neural replacement, and brain repair. This project will bring the rapidly expanding area of progenitor cells to bear on the problems of stroke and cerebral ischemia.

Richard Rubenstein, PhD (x2019) §

richard.rubenstein@downstate.edu

The laboratory is studying the molecular and biochemical basis of neurodegenerative diseases including Alzheimer's disease with a major focus on prion diseases. These diseases share a feature of abnormal protein aggregation. Molecular, biochemical, immunological and cell biological approaches are being employed to address the disease-specific issues of neuropathogenesis, neuroprotection and neuroregeneration. The development of novel ultra-sensitive assays for biomarker detection useful for disease diagnosis, prognosis and for monitoring the effectiveness of therapeutic intervention.

Helen Valsamis, MD (x1356)

helen.valsamis@downstate.edu

Investigations on the prevention of post-traumatic epilepsy.

Department of Obstetrics & Gynecology

Ovadia Abulafia, MD (x2057) §

ovadia.abulafia@downstate.edu

Thrombophilia in gynecologic malignancies; Albumin levels as prognosticators of risk in gynecologic malignancies; Adequacy of hysterectomy in patients with positive endocervical curettage; incidence of BRCA1 and BRCA2 in African-American women with gynecologic cancer.

Alan Gintzler, PhD (x2129) §

alan.gintzler@downstate.edu

Biochemical basis of narcotic addiction. Sex steroid modulation of intrinsic pain attenuating systems. Signal transduction and narcotic addiction.

Ozgul Muneyyirci, MD (x3788) §

ozgul.muneyyirci-delale@downstate.edu

Causes and factors of endometriosis in order to prevent it. Currently looking at markers for endometriosis to diagnose and treat endometriosis in its early stages (during teenage years). Also comparing different treatments for endometriosis.

Vijaya Nacharaju, PhD (x2064)

vijaya.nacharaju@downstate.edu

Estrogen and progesterone metabolites in urine and saliva, 11beta steroid dehydrogenase and aromatase in endometrial carcinoma.

Department of Ophthalmology

Monica Dweck, MD (x1961)

monica.dweck@downstate.edu

Lacrimal and orbital disease.

Jeffrey Freedman, MD, PhD (x1961)

Elucidation of the mechanisms of inflammatory fibrosis in glaucoma.

Douglas Lazzaro, MD (x3380)

douglas.lazzaro@downstate.edu

Corneal research.

E.C. Lazzaro, MD (x1962)

Ophthalmic manifestations of syphilis.

Department of Orthopedic Surgery & Rehabilitation Medicine

Sanjeev Agarwal, MD (x1892)

sanjeev.agarwal@downstate.edu

Interventional physiatry and pain management.

Tsai Chao, MD (x1892)

tsai.chao@downstate.edu

Physical medicine and rehabilitation, acupuncture.

Seung Park, MD (x1892)

seung.park@downstate.edu

Physical medicine and rehabilitation.

Carl Paulino, MD (x3200)

carl.paulino@downstate.edu

Scoliosis and deformity, total disc replacement, spine surgery.

Paul Pipia, MD (x1892)

paul.pipia@downstate.edu

Physical medicine and rehabilitation; orthotics and prosthetics.

Subrata Saha, PhD (x8652)
subrata.saha@downstate.edu

Biomechanics of musculoskeletal system; biomaterials; sports injury; electrical stimulation for bone healing; osteoporosis; orthopedic implant testing; mechanical properties of bone and bone cement; bioethics; health care delivery.

William Urban, MD (x2055)
william.urban@downstate.edu

Sports medicine studies; athletic injuries; strength of sutures; ligament biomechanics; arthroscopic surgery; shoulder and knee surgery.

Department of Otolaryngology

Richard M. Rosenfeld, MD, MPH (x1638)
richrosenfeld@msn.com

1. AAO-HNS clinical practice guideline on adult sinusitis
2. AAO-HNS clinical practice guideline on acute otitis media
3. AAO-HNS clinical consensus statement on chronic pediatric rhinosinusitis
4. Methodology for clinical consensus statements
5. Multiple ongoing projects assisting otolaryngology residents with research design, systematic review, and data analysis
6. Outcome measures for the surgical treatment of cholesteatoma: a systematic review

Krishnamurthi Sundaram, MD (x1638)
krishsun@aol.com

RLN reinnervation in a rat model.

1. Marital status and survival in head and neck cancer in Brooklyn.
2. Review of flaps in salvage nasopharyngectomy.
3. SUDEP: study of RLN function in sudden death during epileptic seizures.

Nira Goldstein, MD, MPH (x1638)
nira.goldstein@downstate.edu

1. Developmental delay in young children with sleep-disordered breathing before and after tonsil and adenoid surgery
2. Angioedema – Prospective Study
3. Cost-benefit analysis of polysomnography versus CAS-15 for pediatric sleep-disordered breathing
4. The prevalence of sleep-disordered breathing in children with asthma and its behavioral consequences
5. The risk of sleep-disordered breathing in former preterm children
6. The impact of adenotonsillectomy on pediatric asthma

Boris Bentsianov, MD (x1638)
drblb@aol.com

1. Systematic review of nasopharyngoscope cleaning techniques

Marina Boruk, MD (x1638)
dr.boruk@gmail.com

1. Effectiveness of intranasal steroids in treatment and prevention of disease recurrence in chronic rhinosinusitis with nasal polypsis (CRS).

Sydney Butts, MD (x1638)
sydney.butts@downstate.edu

1. American Academy of Otolaryngology-Head and Neck Surgery Foundation, Health Services Research Grant. Perceptual assessment of velopharyngeal dysfunction by otolaryngology residents. July 1, 2013-June 30, 2014.
2. Epidemiological factors associated with orofacial clefting in New York City. Principal Investigator-Sydney C. Butts, MD. Collaborators-Simone Reynolds MPH PhD, Michael Joseph MPH PhD.

Natalya Chernichenko, MD (x1638)

natalya.chernichenko@downstate.edu

1. A novel xenograft zebrafish model of perineural invasion
2. Predictors of survival and recurrence of oropharyngeal SCCa at a tertiary care KCHC
3. Prevalence of EBV positive nasopharyngeal carcinoma in Caribbean population
4. Epithelioid hemangioma of the mandible: a case report and review of the literature
5. Rosai-Dorfman disease of the nasopharynx: a case report and review of literature
6. Marital status and survival in head and neck cancer in Brooklyn

Matthew Hanson, MD (x1638)

matthew.hanson@downstate.edu

1. Outcome measures for the surgical treatment of cholesteatoma: a systematic review

Richard Kollmar, PhD (221-6559)

richard.kollmar@downstate.edu

1. Molecular genetics of otolith formation in the zebrafish
2. Restoration of recurrent-laryngeal-nerve function after injury in a rat model

Alice Lin, MD (x1638)

alice.jo.lin@gmail.com

1. Epithelioid hemangioma of the mandible: a case report and review of the literature
2. Flap reconstruction of the nasopharynx: a review of the literature

Joshua Silverman, MD, PhD (x1638)

Joshua.silverman@downstate.edu

1. Restoration of recurrent- laryngeal-nerve function after injury in a rat model
2. Angioedema – Prospective Study
3. Systematic review of treatment of adult laryngotracheal stenosis

Abraham Shulman, MD (x1638)

1. Noise induced tinnitus animal model. Efficacy of Calpain antagonists in Neuroprotection; Neurodir/GAbadur ; Animal/ Drug Protocol. Wayne State University Department of Otolaryngology
2. TBI animal model of epilepsy effect of Neurodur/ Gabadur
3. Measurement of Intracranial pressure with an external non-invasive positioned ear canal device:
 - Marchbanks Cerebral and Cochlear Fluid Pressure (CCFP)
 - Analyser unit – The tympanic membrane displacement test(TMDT)- in tinnitus Subjects presumed to have an elevated Intracranial pressure

Department of Pediatrics

J.V. Aranda, MD, PhD, FRCPC (x1912)

jaranda@downstate.edu

Molecular and clinical pharmacology of Retinopathy of Prematurity; clinical drug trials in newborns, NSAIDs for the newborn, Caffeine clinical pharmacology, novel drug therapies in newborns. (Will provide general advice and discussion on clinical and translational research and potential funding sources)

K.D. Beharry (x1475)

kbeharry@downstate.edu

Molecular and clinical pharmacology of Retinopathy of Prematurity; Molecular signaling in Angiogenesis in human endothelial cell cultures, Intermittent hypoxia and hyperoxia in oxygen induced retinopathy in the neonatal rat model, NSAIDs for the newborn, Caffeine and NSAIDs for Retinopathy

Stacy Blain, PhD (x4471)

stacy.blain@downstate.edu

Cell cycle progression, focusing on the cyclin cdks and their inhibitors, Cip/Kips.

Vadim Bronshtein, MD (x1912)

vbronshtein@downstate.edu

Hypothermia and hypoxic ischemic encephalopathy (HIE)
Novel interventions for HIE in the neonatal rat model

Elka Jacobson-Dickman, MD (1697)

ejacobson-dickman@downstate.edu

Research Interests: The Genetics of Puberty

Antoni D'Souza, MD (718 270 4236)

antoni.d'souza@downstate.edu

Role of prebiotics, probiotics and synbiotics in neonatal necrotizing enterocolitis. Mediators of inflammation, toll like receptors in neonatal necrotizing enterocolitis.

Stanley Fisher, MD (x1625)

stanley.fisher@downstate.edu

Aminoguanidine and effect on oxidative stress and neuroprotection

Margaret R Hammerschlag, MD (x3097)

margaret.hammerschlag@downstate.edu

Current research is concentrated on the epidemiology, immunology, diagnosis and treatment of infections due to *Chlamydia pneumoniae*. This includes investigation of the relationship to reactive airway disease, at cytokine production, mouse model of *C. pneumoniae* infection and atherosclerosis, reactive airway disease. Antibiotic treatment trials. Diagnosis and treatment of *C. trachomatis* infections in infants and adolescents. Sexually transmitted diseases and sexual abuse.

Ivan Hand, MD, MS, FAAP (718 245-4754) :

handi@nychhc.org

Research interests include: Breastfeeding, Neonatal and Infant Nutrition, Neonatal clinical trials

Zachary Ibrahim, MD (x1912)

zibrahim@downstate.edu

Novel wireless MicroEEG for continuous brain monitoring in newborns
ACE ontogeny in neonatal lung

Robert Karp, MD (718 245-3612)

robert.karp@downstate.edu

Nutrition, lead poisoning: relation of immunization status to physical growth, hematologic status and lead level.

Stephan A. Kohlhoff, MD (x7588)

skohlhoff@downstate.edu

Chlamydial infections in children, immune responses to respiratory infections in children with asthma or allergies, antimicrobial agents, clinical trials in children, emergency preparedness.

Scott T Miller, MD (x1692) §

scott.miller@downstate.edu

Clinical aspects of pediatric sickle cell disease.

Jae L. Min, MD (x1912)

Jae.min@downstate.edu

Nebulized curosurf in newborns, caffeine and lung mechanics in newborns

Madu Rao, MD (x1524), madu.rao@downstate.edu

Asthma: epidemiology, mortality trends in Brooklyn. Sleep: obstructive sleep apnea in children - demographics, pulmonary hypertension lung physiology in sicklers prone to lung disease (consultant for national cooperative study).

Steven M. Schwarz, MD, FAAP, FACN, AGAF, (x8968)

email address: steven.schwarz@downstate.edu

RESEARCH INTERESTS: Cytokine regulation in intestinal inflammation; Effects of omega-3 fatty acids in parenteral nutrition-associated liver disease; Gastroesophageal reflux disease; Clinical and demographic characteristics in Eosinophilic Esophagitis; Obesity and upper gastrointestinal tract symptoms and disease

Amy Suss, MD (x1625)

amy.suss@downstate.edu

Research In Adolescent :

-STI's,

-High Risk Behaviors

-Vaccine Prevention

Jiliu Xu, MD (x8968)

jiliu.xu@downstate.edu

Pathogenesis and intervention in Necrotizing enterocolitis, gangliosides for inflammatory bowel diseases

Department of Psychiatry

Carl Cohen, MD (287-4806) §

carl.cohen@downstate.edu

Research on anxiety and depression of older Afro-Americans and Afro- Caribbeans residing in Brooklyn. Evaluation of minority dementia patients and their caregivers. Schizophrenia and aging: comparison of Afro-Americans and Caucasians living in nursing homes. Use of telehealth in care of dementia patients. Frailty in dementia patients

Jeremy Coplan, MD (x2022) §

copstat00@aol.com

Nonhuman primate models of early life stress as pertains to human depression and anxiety disorders, using diffusion tensor imaging, magnetic resonance spectroscopy, neuroendocrine CSF profiles including corticotropin releasing-factor, HPA axis and gene expression. Investigating the role of neurogenesis in antidepressant action in nonhuman primate models of depression. Performing rodent studies focused on the role of neurogenesis and segregation. Performing clinical studies in patients with bipolar depression and panic disorder.

Daniel Cukor, PhD (x2077) §

daniel.cukor@downstate.edu

Behavioral medicine research. Health Disparities Research. Cognitive behavioral intervention in chronic renal disease, non-compliance and development of depression treatment for the chronically ill. Sleep Disorders, obstructive sleep apnea treatment compliance, insomnia. Medical student research.

Steven Friedman, PhD, ABPP (x1750)

steven.friedman@downstate.edu

Cross-cultural issues in the diagnosis and treatment of anxiety disorders. Sexual dysfunctions.

Michael Garrett, MD (x2022) §

michael.garrett@downstate.edu

Clinical research examining the phenomenology of psychosis and lack of insight in mental illness, with emphasis on auditory hallucinations. Psychoanalytic conceptions of psychosis. Cognitive behavioral treatment of schizophrenia.

Amjad Hindi, MD (x2022)

amjad.hindi@downstate.edu

Interest primarily in schizophrenia research; this includes: first episode schizophrenia and effectiveness of antipsychotic treatment; chronic schizophrenia and effectiveness of medications; schizophrenia in the elderly and quality of life and general health issues; and finally the subjective ethnography of patients with schizophrenia.

Bernice Porjesz, PhD (x2911) §

bernice.porjesz@downstate.edu

Neurophysiology of brain function in humans. Genetics of brain function. Genetic study of alcoholism and related disorders.

Ramotse Saunders, MD (x3077)

ramotse.saunders@downstate.edu

Neurophysiology in humans. Utilization of event-related potentials and event-related oscillations in various experimental paradigms.

Nina R Schooler, PhD (917-543-2740) §

nina.schooler@downstate.edu

Clinical trials of medications for schizophrenia. Development of a novel assessment method for assessing psychopathology in schizophrenia. Studies of medication adherence.

Ramaswamy Viswanathan, MD, DMSc
(x2352)

ramaswamy.viswanathan@downstate.edu

Psychosocial factors and treatment adherence in GYN-Oncology, and in HIV; decisional capacity; death anxiety and coping; ethical conflicts in medicine and resolution.

Department of Radiation Oncology

Kwang N Choi, MD (x1591)

kwang.choi@downstate.edu

Continuous infusion chemotherapy with hyperfractionated irradiation for locally advanced cancers. Combined chemotherapy and irradiation in cancer treatments.

Christopher Lange, DPhil (x1050)

christopher.lange@downstate.edu

Cellular basis of organismal radiation: lethality and aging. Cellular radiation lethality in terms of DNA DSB repair kinetics. Chromosome structure-DNA organization. Physical chemical/biophysical methods for DNA size measurement.

Marvin Rotman, MD (x2181) §

marvin.rotman@downstate.edu

Clinical trials with the Radiation Therapy Oncology Group. Gynecology Oncology Groups: chemotherapy and radiation.

Department of Radiology

Michael Herskowitz, MD (x1996)

michael.herskowitz@downstate.edu

Studying patency of dialysis grafts after thrombolysis. Also studying patency of dialysis grafts after placing metallic stent prosthesis at sites of recurrent stenosis.

Sundeep Mangla, MD (x4141) §

sundeep.mangla@downstate.edu

Intracranial aneurysms (imaging, public health, therapy); brain arteriovenous malformations (imaging, public health, therapy); cerebrovascular occlusive disease, angioplasty and stenting; robotics, endoluminal diagnosis and intervention; acute stroke and cerebral perfusion (imaging, physiology, and therapy); nanotechnology and biomedical engineering; prospective outcomes research; basic translational research; radiologic imaging research, prospective and retrospective.

Arnold Strashun, MD (x1632)

arnold.strashun@downstate.edu

Intraoperative sentinel node analysis by nuclear medicine agents (monoclonal antibodies). Evaluation of tinnitus and evaluation of migraine with cerebral perfusion scintigraphy. Scintigraphic evaluation of en bloc cadaveric double renal transplants.

Daniel L Zinn, MD (x2552)

dan.zinn@downstate.edu

Use of Doppler (Color and Power) in testicular torsion analysis. Medical education through medical and diagnostic imaging.

Harry L Zinn, MD (x1603)

harry.zinn@downstate.edu

Topics in genitourinary cross-sectional imaging.

Department of Surgery

Joshua Burack, MD (x1981)

joshua.burack@downstate.edu

Lung cancer screening in the underserved
The effect of surgeon and hospital factors in outcomes following cardiac surgery in New York State
Living anatomy of the human body - a video text.

Dale A Distant, MD (x1898)

dale.distant@downstate.edu

Immunosuppression in renal transplantation; diabetic uremia.

Lisa S Dresner, MD (x1953)

lisa.dresner@downstate.edu

Critical care; microvascular reactivity.

John G Kral, MD, PhD (x1955) §

john.kral@downstate.edu

Insulin resistance metabolic syndrome; obesity, diabetes; adipose tissue; insulin resistance; vagal function.

Theophilus Lewis, MD (x2155)

theophilus.lewis@downstate.edu

Nutrition support.

Thomas McIntyre MD (x1421)

Thomas.mcintyre@downstate.edu

surgery and public health, surgical disparities, global surgery

Gainosuke Sugiyama, MD (x6718)

gainosuke.sugiyama@downstate.edu

Research area of interest: outcome based research using nationwide data base, surgical outcome in patients with ESRD, surgical outcome in patients with HIV, healthcare disparity in patients undergoing surgery in inner city, robotic surgery outcome.

Nabil Sumrani, MD (x1898)

nabil.sumrani@downstate.edu

Renal transplantation and diabetes.

Department of Urology

Jeffrey Weiss, MD (x2554)

jeffrey.weiss@downstate.edu

Brian K. McNeil, MD (x2554)

briankeithmcneil@gmail.com

The department is engaged in a broad range of clinical research involving all aspects of urology. Topics include various aspects of BPH, prostate cancer, laparoscopic surgery, voiding dysfunction, sexual dysfunction, community outreach/education programs, and other areas."

Division of Humanities in Medicine

Kathleen E Powderly, PhD (x3322)

kathleen.powderly@downstate.edu

Ethical and legal issues in HIV disease. Ethical issues for first responders in the era of terrorism; history of medicine; perinatal ethical issues.

SCHOOL OF PUBLIC HEALTH

Department of Epidemiology & Biostatistics

Elizabeth Helzner, PhD (347-557-1107)

elizabeth.purchasehelzner@downstate.edu

Epidemiology of aging, neuroepidemiology, and chronic disease epidemiology, specifically age-related hearing loss and Alzheimer's Disease.

Pascal J Imperato, MD (x1056)

pascal.imperato@downstate.edu

Clinical outcomes research. Population studies.

Michael A. Joseph, PhD, MPH (x1061)

michael.joseph@downstate.edu

HIV/AIDS in the black community, cancer and social epidemiology, and international public health capacity development.

Michael Szarek, PhD, MS (804-7834) Statistical research interests include missing data issues in illness-death models and surrogate endpoints in cardiovascular and oncology clinical trials. Additional interests in worldwide regulatory policies and strategies for the design and conduct of clinical trials.

Michael Walsh, PhD

michael.walsh@downstate.edu

The occurrence of toxocariasis in the urban environment and its potential association with poor lung function and poor cognitive development in children. Also, the relationship between arthropod-borne and zoonotic infections and hydrogeography, forest fragmentation, and climate in New York State.

Department of Community Health Sciences

Aimee Afable-Munsuz, PhD, MPH (x6397)

aimee.afable-munsuz@downstate.edu

Focus on understanding and documenting how migration and chronic exposure to US environment influences the development of obesity and diabetes in US immigrants. Also, how obesity and diabetes prevention programs, previously demonstrated to be efficacious in clinical trials, to high-risk, under-served and/or working class populations.

Denise M. Bruno, MD, MPH (x2954)

denise.bruno@downstate.edu

Interests include general pediatric issues, including vaccinepreventable illnesses, environmental exposures (lead, mercury), asthma, obesity, teen pregnancy and learning difficulties. In addition, currently working to identify specific factors that contribute to parents' decision-making about vaccines for their children.

Tracey E. Wilson, PhD (x3746)

tracey.wilson@downstate.edu

Behavioral intervention and evaluation research, HIV/STI prevention, behavioral issues related to women's sexual and reproductive health.

Department of Environmental & Occupational Health Sciences

Laura A. Geer, PhD, MHS (221-5267)

laura.geer@downstate.edu

The use of biological markers of exposure and effect to study maternal and perinatal exposures to chemicals. Epidemiologic study of the association between maternal environmental and occupational exposures and infant health outcomes. Other research interests include dermal exposure assessment in occupational and environmental settings, psychosocial risk factors of exposure, and risk assessment and communication.

Mira M. Gricesheff, PhD, MS (x1790)

mira.grice@downstate.edu

Examination how work/family conflict impacts the mental and physical health of women following childbirth and how the experience of domestic violence can influence workforce participation.

Paul A. Landsbergis, PhD, EdD, MPH

(x1075)

paul.landsbergis@downstate.edu

The epidemiologic study of occupational stress, work organization, psychosocial factors, socioeconomic status, hypertension, cardiovascular disease, psychological distress and the changing nature of work - including current trends such as downsizing, outsourcing, restructuring, privatization, lean production, new public management, part-time and temporary work, and increasing work hours and job demands.

COLLEGE OF HEALTH RELATED PROFESSIONS

COLLEGE OF NURSING

**** Unless otherwise noted, phone numbers are at the (718) 270- exchange ****