Medical Student
Summer Research and Work Opportunity Directory

The following Upstate faculty will mentor research and/or supervise work activities by SUNY Upstate medical students during this summer. This is not an exhaustive list; faculty not listed below may also be willing to mentor/supervise students during the summer. Faculty are listed alphabetically under their department of primary appointment. The following departments/offices are listed (in this order)

- Department of Anesthesiology
- Department of Biochemistry and Molecular Biology
- Department of Cell and Developmental Biology
- Center for Bioethics and Humanities
- Center for Emergency Preparedness
- Clinical Campus/Binghamton
- Community Hospital Cosmetic Plastic Reconstructive Surgery
- Community Outreach & Global Health Education
- Curriculum Office
- Department of Emergency Medicine
- Department of Family Medicine
- Department of Medicine
- Department of Microbiology/Immunology
- Department of Neurology
- Department of Neuroscience and Physiology
- Department of Neurosurgery
- Department of Obstetrics/Gynecology
- Onondaga County Department of Health
- Department of Ophthalmology
- Department of Orthopedic Surgery
- Department of Otolaryngology and Communication Services
- Department of Pathology
- Department of Pediatrics
- Department of Pharmacology
- Department of Physician Assistant Studies (CHP)
- Department of Psychiatry
- Department of Public Health and Preventive Medicine
- Department of Radiation Oncology
- Department of Radiology
- Department of Surgery
- Department of Urology
- Office of Multicultural Affairs and CSTEP
- Upstate Poison Control Center

Department of Anesthesiology

Danielle Masursky, PhD

Research Key Words: Medical record review, data collection, database entry, assisting with management of studies, budget preparation, informed consent, patient evaluation, protocol review.
Contact: (315) 464-4867; masurskd@upstate.edu

Department of Biochemistry and Molecular Biology

David Amberg, PhD

Research Key Words: regulation of the actin cytoskeleton by actin associated proteins, development of genomics approaches for uncovering cytoskeleton related gene sets and uncovering mechanisms of aging as mediated by oxidative damage to the cytoskeleton.
Contact: (315) 464-8727; ambergd@upstate.edu

Wenyi Feng, PhD

Research Key Words: chromosomal DNA replication, origin and chromosomefragile site mapping, genome instability in both the yeast and human genomes.
Contact: 464-8701; fengw@upstate.edu

Patricia Kane, PhD

Research Key Words: regulation of cellular pH; pH regulation and oxidative stress; biochemistry, genetics and cell biology of membrane transporters
Contact: (315) 464-8742; kanepm@upstate.edu

Mark Schmitt, PhD

Research Key Words: Cancer; Cell cycle control; RNA processing; mitochondria.
Contact: (315) 464-8713; schmittm@upstate.edu

B.N. Singh, PhD

Research Key Words:
1) Biochemical and immunological roles of a major cell surface glycoconjugate, lipophosphoglycan (LPG) in the infection process. Biochemical characterization of *Trichomonas vaginalis* -LPG molecule. Immune regulation in female reproductive epithelial cells by LPG. Galectin binding and LPG signaling in the human vaginal and cervical epithelial cells. Sexually transmitted disease, trichomonad pathogenesis, glycocojugates.
2) Endometriosis: Biochemical and molecular understanding of endometriosis.
Contact: (315) 464-5398; singhb@upstate.edu

Robert West, PhD.

Research Key Words/Work Opportunities: Teaching assistant in summer Molecular & Cellular Principle of Medicine (MCP) course. Duties include daily sessions with students in the course, preparing learning aids to help students grasp the material better, and working with an education specialist and the course directors to develop strategies for assisting the summer students. The position requires a solid aptitude for material taught in MMCP, good communication skills, and an ability to work well with others. Previous teaching/tutoring experience is a plus, but not required.
Contact: (315) 464-8722; westr@upstate.edu

Department of Cell and Development Biology

N. Barry Berg, PhD

Research Key Words/Work Opportunities: Three positions:
1) Prosector: prepare prosections and special dissections for gross anatomy class.
2) Teaching Assistant: act as a teaching assistant for Physical Therapy Gross Anatomy. Duties include

assisting in the dissection laboratory, conducting review sessions, presentation of prosections.
Contact: (315) 464-4349; bergn@upstate.edu

Scott Blystone, PhD
Research Key Words: hematology/oncology/inflammation/infectious diseases, cell adhesion and motility, cytoskeleton.
Contact: (315) 464-8512; blystons@upstate.edu
Lab Web Site: http://www.upstate.edu/cdb/blyston/index.html

Mira Krendel, PhD
Research key words: analysis of the roles of the actin cytoskeleton and vesicular trafficking in kidney disease; mouse models of focal segmental glomerulosclerosis; molecular mechanisms of cell motility and cell adhesion.
Contact: 315-464-8527, krendelm@upstate.edu

Thomas Poole, PhD
Research Key Words: angiogenesis, vasculogenesis, growth factors,
endothelial cells, neurons, ALS, quail embryos.
Contact: 1319 Weiskotten Hall; (315) 464-8562; poolet@upstate.edu

Dennis Stelzner, PhD
Research Key Words: Spinal cord injury, axonal regeneration, recovery of function, neural development.
Contact: 119 Weiskotten Hall; (315) 464-8594; stelznerd@upstate.edu

Center for Emergency Preparedness

Dr. William Grant, EdD
Research Key Words/Work Opportunities: variety of program activities including involvement in on-going Emergency Medicine clinical research activities, involvement in preparedness training activities with other agencies including local, state, and federal as well as with the Air National Guard; and injury prevention. Specific available activities vary by stage of research projects. Interested students should contact Dr. Grant prior to committing to the program to discuss specific activities available.
Contact: (315) 464-4365; grantw@upstate.edu

Clinical Campus, Binghamton

Richard Hk. Wu, MD
Key Words/Work Opportunities: Pre-diabetes; identification, characterization, and follow-up . Identify through referral bases, pediatric aged patients with persistent impaired glucose tolerance (IGT), perform critical testing to identify possible etiologies, and establish a data base for longer term followup. Using newer technologies, look at patterns of glucose fluctuations and develop criteria for their evolution, should decompensation into types 1 or 2 diabetes occur.
Contact: wur@upstate.edu

Christopher Ryan, MD; Program Director of Primary Care, **Medical Director, Broome County Health Department**
Key Words/Work Opportunities: current research activities are directed toward (1) designing and testing a valid and reliable parental questionnaire to detect functional fecal retention in children and (2) investigating the association between functional fecal retention and attention deficit hyperactivity disorder, with a long-term goal of relieving the latter by treating the former. *(3) there may also be opportunities, in collaboration with the Broome County Health Department, to study the distribution and circulation of used cribs, and how this may relate to infant death from entrapment and suffocation.
Contact: cryan@binghamton.edu

Community Hospital Cosmetic Plastic Reconstructive Surgery

Tabaie, MD

Research Key Words/Work Opportunites: plastic/hand surgery.
Contact: Community General Hospital, (315) 492-5815

Community Outreach and Global Health Education

Susan B. Stearns, PhD

Research Key Words/Work Activities:
1. Work with the Food Bank of CNY on their "Garden in a Bucket" community gardening project. Assist the National Kidney Foundation conduct blood pressure screenings at the local farmers' markets. Participate in a study of the patient population of the local Amaus Clinic with its medical director, Dr. Satterly. Assisting Dr. Stearns to prepare the bus tour and community outreach lecture for the upcoming student orientation.
2. Coordinate summer outreach programs for office: includes contacting two new programs , initiating new projects, and creating volunteer descriptions for incoming MSI students.
3. Work with staff at the Center for New Americans to set up health education programs that will be delivered by medical students. Work at a summer camp at Bell grove Baptist Church as instructor participating in delilveringthe "Kids in Control" program in conjunction with the National Kidney Foundation.
Contact: (315) 464-8807; stearnss@upstate.edu

Curriculum Office

Lynn Cleary, MD

Research Key Words/Work Activities
1. Set up and conduct survey of recent Upstate graduates re their Upstate experience, and expand database and analysis of AAMC graduation questionnaire results.
2. Analyze one of the integrated curriculum themes (prevention, geriatrics, end-of-life, cultural competency, etc.)
3. Develop resource file of funding sources for educational projects, and participate in writing grant proposals to funding sources for specific projects (Clinical Skills program, Advising program [Advisory Dean program, Career advising, Student academic support])
4. Expand electronic curriculum database, working with Curriculum Office, course and clerkship directors.
5. Analyze perceptions of residency program directors about our graduates. Do our students make good residents? We have evaluations completed by residency directors. Do they yield confident data on this point? Can we revise the form in the future to improve the quality and quantity of its information? The students should have some experience in organizing scientific data for analysis, and preferably some statistics background.
6. Examine gender differences on performance in medical schools. Our data indicate poorer female scores on Step 1 vs. 2, in spite of equivalent grade-point-averages- how come?. Examine hypothesis that women do better than the men on "clinical" measures in the curriculum.
7. Examine the reliability of the grading system. In each course we divide the medical class into 5 groups (H, HP, P, C, F). This has an impact on the Dean's letter, class rank, and election to AOA. Is there statistical justification for a more refined measure than Pass/Fail?
8. Clerkships now uniformly assign scores for 10 clinical competencies. Is there reliability and validity to this process, so that a summary of a student's clinical competencies be included as part of the Dean's letter, as recommended by the AAMC.
Contact: (315) 464-5387; clearyl@upstate.edu

Educational Communications Office

Joseph C. Smith

Research Key Words/Work Opportunities
1. Work with Curriculum Office and Educational Communications to expand videotaping of lectures in core courses and clerkships in College of Medicine and evaluate outcomes.
2. Work with course and clerkship directors to disseminate information and skills in Blackboard, an electronic course management system.
Contact: Joe Smith: (315) 464-4860; smithm@upstate.edu

Department of Emergency Medicine

Susan M. Wojcik, PhD, ATC

Research Key Words/Work Opportunities: Academic Associate position in the Emergency Department. Identify patients eligible for ongoing research projects and work with emergency department physicians and nurses to confirm patient eligibility; assist physicians in completion of study enrollment forms; complete study procedures, to include consenting patients, completing case report forms, conducting patient testing as per research protocol, conduct follow-up phone calls, and data entry.
Contact: (315) 464-6192; wojciks@upstate.edu

Department of Family Medicine

Research Key Words/Work Opportunities: Student will work with several faculty members in the Department of Family Medicine affiliated Family Medicine Residency Program at St. Joseph's Hospital Health Center in Syracuse, NY. Student will be assigned to assist with one or more of the following projects, depending on interest and skills:

- Production of a web-based tutorial introduction to the United States healthcare delivery system for entering first-year residents and upper level medical students.
- Creation of new clinical care templates for the NextGen® Electronic Medical Record and field testing for "user-friendliness".
- Learning basic principles of advocacy for family medicine and production of educational materials.

Supervision: David Kolva, MD (david.kolva@sjhsyr.org or 315-448-5537)

Assistance with additional smaller projects may be included.
Supervision: Christopher Morley, PhD (morleycp@upstate.edu)

Department of Medicine

Sharon Brangman, MD

Work Opportunities: Screen patients for office visit. Perform Mental Status/ Geriatric Depression testing. Procedures: Obtain urine for analysis, ear lavage for cerumen, ambulate patients, oxygen saturation testing, and finger stick glucose testing. New patient reminder calls. Make medical record requests. Filing. Assist with office based research projects. Attend geriatric conferences and lectures. Shadow geriatric faculty/ fellow. Participate in family meeting.
Contact: Kay Frank, MPA: (315) 464-5678; frankk@upstate.edu

Robert Carhart, MD

Research Key Words/Work Opportunities: This position requires administrative tasks under the supervision of the Clinical Research Associate. These tasks will include completing routine paperwork and IRB documentation, questionnaires and common regulatory paperwork requested by study Sponsors. Also under the supervision of the Clinical Research Associate, this position will include study subject screening which will require the candidate to use protocol-specific inclusion and exclusion criteria to find potential study participants from the Division of Cardiology's patient population. Data entry, filing, scheduling of study visits and other administrative tasks as needed.
Contact: Annie Pennella: : pennella@upstate.edu

Peter Cronkright, MD
Research Key Words/Work Opportunities: student research assistant for the SC HOPE migrant care program. The role of the student is to assist in organizing and operating a mobile clinic for migrant farm workers on local farms. The clinic is a joint effort of the County Health Department and SUNY Upstate Medical University. Students will participate in clinical improvement projects to be completed during the summer. Active participants of SC HOPE and Spanish-speaking students will be given priority.
Contact: cronkrip@upstate.edu

Michael Cynamon, MD
Research Key Words/Work Opportunities: Evaluate the potential in vitro activities of new alanine racemase inhibitors and dihydrofolate reductase inhibitors against common bacterial pathogens.
Contact: VA Hospital; Michael.Cynamon@med.va.gov

Dipak Dube, PhD
Research Key Words: role of a novel tropomyosin in cardiac myofibrillogenesis and in Familial Hypertrophic Cardiomyopathy. The long-term goal of our laboratory is to understand the mechanism of myofibrillogenesis in relation to cardiogenesis as well as to various cardiovascular diseases. The cardiac mutant Mexican axolotl (salamander) forms defective hearts that do not beat due to a lack of sarcomeric tropomyosin protein, as well as organized myofibrils. Various artificially created mutants of the tropomyosin cDNA will be fused to green fluorescent protein and the expression construct will be transfected into normal mutant salamander hearts. The organization of myofibrils will be examined by confocal microscopy. Currently, our major emphasis is to understand the strural/functional relationship of TPM1kappa, a novel striated muscle isoform of tropomyosin found in various vertebrates like axolotl, chicken, and humans. Summer student(s) will examine the expression of TPM1kappa in chicken and axolotl by western blot analysis, confocal microscopy, real-time RT-PCR, etc.
Contact: (315) 464-8563; dubed@mail.upstate.edu

Lisa Kaufmann, MD
Research Key Words/Work Opportunities: assist in writing a book on a new behavioral treatment of obesity and other eating disorders. Duties could include literature searches, formatting of instructional and assessment tools to be included in the book, and fact checking, setting up web site, participating in clinical research projects on eating disorders and breast cancer treatments, including interviewing patients.
Contact: (315) 464-6052 or kaufmanl@upstate.edu

Robert Roger Lebel, MD, FACMG
Research Key Words/Work Opportunities: Dr. Lebel sees patients who are pregnant, newborn, children, adolescents and adults. He seeks to clarify the genetic components and etiologies of clinical disorders. Research consists in recognition of syndromes and diseases, which sometimes lead to descriptive reports and sometimes to collaborative efforts with laboratory geneticists to define molecular and chromosomal underpinnings of disease.
Contact: lebelr@upstate.edu

Jyotirmoy Nandi, PhD
Research Key Words: two projects:
(1) role of nitric oxide in gastrointestinal injury. The underlying mechanisms in gut injury in various clinical conditions are unclear, but in certain experimental animal models, NO appears to play a role. We are studying injury associated metabolic acidosis on NO production and increased inducible NO synthase (iNOS) in rats. The student will partake in use of immunoblotting techniques with iNOS-specific antibody and measurement of gut injury parameters.
(2) role of NSAIDs and protein kinase C (PKC) in modulating parietal cell function." This project involved the study of the underlying mechanisms of NSAIDs or nonsteroidal anti-inflammatory drugs on H+ section. We will examine the parietal cell (PC) signal transduction system in isolated rabbit PC with emphasis on PKC. The student will be involved in the preparation of PC and gastric glands and measurements of certain enzymes.
Contact: Dr. Nandi: (315) 464-5796; nandij@upstate.edu

Andras Perl, MD./PhD
Research Key Words: pathogenesis of autoimmune diseases such as systemic lupus erythematosus, multiple sclerosis, and insulin-dependent diabetes mellitus. We have identified candidate autoantigens, and molecularly cloned and mapped them to disease-linked genomic loci. Present work is focused on the role of these genes in conferring disease susceptibility through molecular mimicry and interference with apoptosis pathways.
Contact: (315) 464-4194; http://web.upstate.edu/~perla and email: perla@upstate.edu

Michael William Roe, PhD
Research Key Words/Work Activities: Student will learn basic and intermediate laboratory skills including tissue culture, solution preparation, molecular biology assays, biosensor technology applications, and real-time confocal microscopy. Research will focus on a problem in pancreatic B-cell physiology and pathophysiology related to Type II diabtetes.
Contact: (315) 464-1571; roem@upstate.edu

Ruth Weinstock, MD/PhD
Research Key Words/Work Opportunities:
(1) Students needed to recruit subjects for TrialNet, a national study of the natural history of type 1 diabetes. The subjects are relatives of persons who already have type 1 diabetes. The students will also help to provide annual follow up with those already enrolled. The students will have the opportunity to attend our regularly scheduled conferences and expand their knowledge of type 1 diabetes, its etiology, and its treatment.
Contact: Dr. Irene Sills: (315) 464-5726; sillsi@upstate.edu
(2) Students needed to participate in enrolling patients for the Type 1 Diabetes Exchange. Students will participate in subject recruitment (patients with type 1 diabetes) and review of their Medical Records at the Joslin Diabetes Center. Students will also have the opportunity to attend our regularly scheduled conferences and expand their knowledge of diabetes.
Contact: Ruth S. Weinstock MD PhD (315) 464-5740; weinstor@upstate.edu

Department of Microbiology/Immunology

Allen Silverstone, PhD
Research Key Words: Immunotoxicology; PCBs and Dioxins: Epidemiology; Flow cytometry: Diabetes.
Contact: (315) 464-5871; silversa@upstate.edu

Department of Neurology

Robert Beach, MD/PhD
Research Key Words: neurostimulation, neuroimaging, clinical trials, epilepsy, EEG, clinical neurophysiology, photosensitivity, gamma knife.
Contact: (315) 464-5360; beachr@upstate.edu

Deborah Bradshaw, MD
Work Opportunities: assist Neurology residency program team in compiling data for research on predictors of success in residency and practice. The work consists of extensive record review, extraction of data, inputting data into spreadsheet and assistance with analysis and interpretation of results. There is potential for co-authorship on publications related to medical education and training.
Contact: (315) 464-5357; bradshad@upstate.edu

Burk Jubelt, MD
Research Key Words: the following areas of research are available:
1. Clinical Multiple Sclerosis research projects: Registering patients for the NYS Multiple Sclerosis Consortium and testing patients (9 hole peg test, 25 ft walk, etc) for various Multiple Sclerosis Trials.
2. Drs. Burk Jubelt and Paul Massa: Translational research on SHP-1 levels in Multiple Sclerosis.
Contact: (315) 464-5357; jubeltb@upstate.edu

Smita Kittur, MD
Research Key Words: molecular genetics, psychological testing of patients with Alzheimer's disease, neuroimmunological effects of herbal compounds in neuronal cultures, DNA and RNA extraction, PCR, cell culture, gene expression, ELISA, effect of herbal compounds in mouse model of multiple sclerosis.
Contact: (315) 476-7461 x4008; kitturs@upstate.edu

Julius Gene Latorre, MD/MPH
Research Key Words: Acute Stroke, Intracerebral Hemorrhage, Brain death, Neurocritical care, Status Epilepticus, Subarachnoid hemorrhage, Neuromonitoring,
Work Opportunities: Students will participate in retrospective studies in the neurocritical care regarding predictors of clinically relevant outcomes, efficacy of treatment, and sensitivity of diagnostic testing. The work consists of extensive chart review and data gathering. There is potential for co-authorship on publications and abstract presentation in regional and national conferences.
Contact: (315) 464-5014; latorrej@upstate.edu

Jeremy Shefner, MD/PhD
Research Key Words: evaluate experimental treatments for patients with ALS (Lou Gehrig's Disease), assisting with clinical and physiological assessment and record maintenance.
Contact: (315) 464-5022; shefnerj@upstate.edu

Department of Neuroscience and Physiology

Russell Durkovic, PhD
Research Key Words: role of neurogenesis in recovery from spinal cord injury in salamander.
Contact: (315) 464-7738; durkovir@upstate.edu

Brian Howell, PhD
Research Key Words: Investigate the binding partners for STK25, a neuronal polarity protein. STK25 is a serine/threonine kinase that is required for neuronal polarization. We hypothesize that STK25 works by recruiting molecules to the Golgi apparatus to effect the flow of membrane to developing processes. To identify binding partners, a yeast two hybrid screen will be carried out. The isolates from this screen will be validated by co-immunoprecipitation assays.
Contact: (315) 464-8151; howellb@upstate.edu

Barry Knox, PhD
Research Key Words: Color Vision, Eye Development, Retinal Diseases.
Contact: (315) 464-8719; knoxb@upstate.edu

Frank Middleton, PhD
Research Key Words/Work Opportunities: Participate in follow up studies to identify and validate candidate genes involved in development of ADHD, Parkinson's disease, ethanol-induced brain damage or schizophrenia. Training opportunities span many levels and include microarray-based analysis of RNA and DNA, in vitro cell culture work, animal models, and bioinformatics. Students could also receive training in psychiatric screening, neuropsychological assessment, and MRI-based neuroimaging of human subjects.
Contact: (315) 464-7721; middletf@upstate.edu ; www.upstate.edu/psych/cnpg

Eric Olson, PhD
Research Key Words/Work Opportunities: We study the cellular and molecular events that initiate the development of the cerebral cortex. Disruption of early cortical development by mutation or exposure to toxins causes permanent alterations to cortical structure in later life and leads to mental retardation and epilepsy. We use mouse models and RNAi to understand how individual genes control the shape and movement of immature neurons during early brain development. Techniques include: in utero surgery, confocal microscopy, 2 photon microscopy, cell culture, biochemistry and molecular biology.
Contact: (315) ;olsone@upstate.edu

Department of Neurosurgery

Blair Calancie, PhD
Research Key Words: behavioral evaluations of rat hindlimb and tail position during rope-walk using videotaped images and a 2-D image analysis system.
Contact: (315) 464-9935; calancib@upstate.edu

Dawn Post, PhD
Research Key Words: brain tumor lab, brain tumor therapy using oncolytic viruses or inhibitors of the Epidermal Growth Factor Receptor (EGFR) pathway.
Contact: (315) 464-9370; postd@upstate.edu

Daniel Ts'o, PhD
Research Key Words: physiology lab, physiological techniques and functional imaging in studies of the visual system and higher cortical function.
Contact: (315) 464-5531; dan@tsolab.org

Department of Obstetrics/Gynecology

Shawky Badawy, MD
Research Key Words/Work Opportunities: Assist in literature research for several projects including:
1.Hypothalmic pituitary dysfunction
2. Endometriosis
3. Congenital uterine anomalies
Contact: (315) 470-7907; badawys@upstate.edu

Sandra Lane, PhD
Research Key Words/Work Opportunities: Research Key Words/Work Activities: To produce a descriptive evaluation of the Amaus Clinic, which is a free medical clinic that was founded in 2007 to provide basic medical care to uninsured, low-income adults.
Contact: (315) 443-2048; sdlane@syr.edu or lanes@upstate.edu

Robert Roger Lebel, MD, FACMG
Research Key Words/Work Opportunities: Dr. Lebel sees patients who are pregnant, newborn, children, adolescents and adults. He seeks to clarify the genetic components and etiologies of clinical disorders. Research consists in recognition of syndromes and diseases, which sometimes lead to descriptive reports and sometimes to collaborative efforts with laboratory geneticists to define molecular and chromosomal underpinnings of disease.
Contact: (315) 464-7561; lebelr@upstate.edu

Onondaga County Department of Health

Cynthia Morrow, MD
Research Key Words/Work Opportunities: public health, preventive medicine, infectious disease, population health issues, outbreak investigations, infant mortality, program evaluation. Students attend regularly scheduled staff meetings, senior staff meetings, press conferences, educational conferences and relevant public health clinics as part of their study. At the end of the experience, students will be better able to understand the demand for an evidence-based approach to the delivery of public health services; the economic pressures of delivering services in the era of scarce resources; and the increasing need for a community-based approach as an essential and practical component of health in individuals. Independent public health projects (community, national or international) are expected.
Contact: Cynthia Morrow, MD, MPH; 315-435-3155

Department of Ophthalmology

Ann Barker-Griffith, M.D.
Work Opportunities: basic science research at the Eye Pathology Laboratory to study surface morphology of the trabeculum, and also vitreo-macular attachments by electron microscopy.
Contact: (315) 464-7156 (Carolyn Buckbee); or barkerga@upstate.edu (Dr. Ann Barker-Griffith)

Mary Ann Jardin
Work Opportunities: basic eye screening, H + P, refraction at University Vision Center.
Contact: (315) 464-5253; jardinm@upstate.edu

Carol A. Miller
Work Opportunities: research support at the Center for Vision Research. Requires at least a six week commitment.
Contact: (315) 464-5253; millerca@upstate.edu

Department of Orthopedic Surgery

John Cannizzaro, MD
Research Key Words/Work Opportunities: organize and collect data for a miniscal tear project.
Contact: (315) 464-4472; cannizzj@upstate.edu

Timothy Damron, MD
Research Key Words; "Post-radiation MRI bony changes in patients with soft-tissue sarcomas." Work to complete the above clinical project, as well as assist in the laboratory when needed for various projects.
Contact: (315) 464-8654; damront@upstate.edu

Brian J. Harley, MD
Research Key Words: 1) distal radius fractures, 2) wrist ligament injuries 3) scaphoid fractures 4) web-based patient education 5) open fractures, 6) post-traumatic extremity reconstruction. Students will assist in clinical and/or basic science research projects related to orthopaedic surgery, hand surgery and trauma reconstruction. The student should be interested in both research and clinical work. The student will have the opportunity to shadow in the clinical setting and operating room in addition to their research responsibilities.
Contact: (315) 464-8632; harleyb@upstate.edu

Danielle Katz, MD
Research/Clinical Key Words: pediatric orthopedics, perthes disease, cerebral palsy
Contact: (315) 464-8646 (Roxanne); katzd@upstate.edu

Kenneth Mann, PhD
Research Key Words: hands-on research in orthopedic biomechanics, total joint replacement, bone tumors, animal models of total joint replacement, fracture fixation in osteoporotic bone, improving surgical techniques, devices to limit weight bearing during fracture healing
Contact: (315) 464-9963; mannk@upstate,edu

Bryan Margulies, PhD
Research Key Words: keywords: bone development, growth plate, pediatric tumor, adult tumor bone metastases, tumor therapy, biomechanics, injury repair, stem cells, cell migration, cell signaling.
Contact: (315) 464-4007; margulib@upstate.edu

Christopher Neville, PT, PhD

Research Key Words: hands-on research in clinical orthopedic biomechanics, Current projects include: 1) foot/ ankle kinematic model to study tendon behavior, 2) wrist/ hand model to study movement in subjects with Spinal Cord Injury.
Contact: (315) 464-9966; nevillec@upstate,edu

Megan Oast
Research Key Words: orthopedic tissue engineering, mesenchymal stem cells, functional bone defect repair, angiogenesis, osteonecrosis, fetal basis of adult disease, fetal skeletogenesis.
Contact: 315-464-9955; oestm@upstate.edu

Nathaniel Ordway, MS
Research Key Words: Lab based research evaluating the spine and associated surgical procedures.
Contact: (315) 464-6462; ordwayn@upstate.edu

Kathryn Palomino, MD
Research Key Words/Work Opportunities: assist MD in examining patients, evaluating and ordering studies, application of casts and splints.
Contact: (315) 464-8641; palomink@upstate.edu

Matthew Scuderi, MD
Research/Clinical Key Words: orthopedics, shoulder, knee, instability, rotator cuff tear, supports medicine, biomedical studies, outcome/biostatistics studies.
Contact: (315) 464-8611; scuderim@upstate.edu

R. Bruce Simpson, MD
Research/Clinical Key Words: orthopedic trauma, fracture healing, outcomes research.
Contact: (315) 464-8612; simpsonr@upstate.edu

Joseph Spadaro, PhD
Research Key Words: bone density, osteoporosis, bone loss after injury/immobilization; non-invasive stimuli of bone cells, skeletal growth, remodeling and repair (--electromagnetic, ultrasound, mechanical loading); effects of ionizing radiation on bone.
Contact: (315) 464-6625; spadaroj@upstate.edu

Mike Sun, MD
Research/Clinical Key Words: orthopedic surgery, spine surgery, bone biology, biomechanics, cadaveric studies, spine surgery clinical outcome
Contact: (315) 464-8621; sunm@upstate.edu

Frederick Werner
Research Key Words/Work Opportunities: Upper and lower extremity biomechanical studies, orthopedic injuries, wrist motion.
Contact: (315) 464-6468; wernerf@upstate.edu

Department of Otolaryngology and Communication Services

Robert Kellman, MD
Research Key Words/Work Opportunities: use a wide variety of sterological sampling techniques to collect data; process various types of tissues including bone and cartilage for electron microscopy; statistical analysis of data.
Contact: (315) 464-7281; kellmanr@upstate.edu

Michael Lyon, PhD

Research Key Words/Work Opportunities: assist in research project on connexins in laryngeal tissues. General lab routine, wash glassware, prep tissues, etc.
Contact: (315) 464-7253; lyonm@upstate.edu

Sherard Tatum, MD
Research Key Words/Work Opportunities: This is a clinical rotation providing exposure and research opportunities in Facial Plastic and Reconstructive Surgery. The primary focus is congenital anomalies. The participant will spend time in outpatient clinics including interdisciplinary craniofacial clinic as well as in the operating room. There is one on one mentoring time with the faculty and time with residents and fellows. A clinical research project is encouraged. The participant also has access to the other activities of the Otolaryngology Department.
Contact: (315) 464-4636; tatums@upstate.edu

Department of Pathology

Jerrold Abraham, MD
Research Key Words: environmental and occupational pathology studies including: scanning electron microscopy and electron microprobe analysis of tissues and materials, such as Gadolinium deposition in tissues from patients receiving Magnetic Resonance Imaging (MRI) contrast agents, particulate air pollution, analysis of occupational and other lung disease cases, Inner City Asthma Project, updating website with current and interesting case reports. For more information, visit website at http://www.upstate.edu/pathenvi/.
Contact: (315) 464-7143; abrahamj@upstate.edu

Robert Stoppacher, MD, Onondaga County Medical Examiner
Research Key Words/Work Opportunities: assist pathologists, forensic investigators and morgue technicians with various duties. This may involve inventory/id of samples/specimens, observing procedures and other related tasks. May also perform duties related to computerization of case files. There are opportunities to observe autopsies and death scene investigations.
Contact: Catherine Unger, (315) 435-3163 x2232

Jannie Woo, PhD
Work Opportunities: Assist with ongoing updating of new materials into four existing web sites in Pathology:
· Pathology 201 (http://www.cc.upstate.edu/path/)
· Department of Pathology (http://www.upstate.edu/pathology/)
· Pathology Residents Web site (http://pathed.upstate.edu:8080/path_confern/frame.htm)
· Andrology Web site (http://pathed.upstate.edu/andro_web/cvframe.htm)
The Pathology 201 Web site, formerly the Pathology 200 Web site, was developed specifically as a study aid for the second year medical students learning Pathology. Contents include case studies, image reviews, lectures in PowerPoint format or regular outline format with images, and tutorial modules that are relevant to the Pathology 201 Course. The Department of Pathology web site consists of faculty profiles, clinical laboratory test procedures, anatomic and clinical pathology report modules, and related patient services. This web site is linked to an Andrology (Infertility) Service web site and a Pathology Residents web site, both of which are independent and fully functioning entities. New materials for the web sites include pathology teaching/learning materials and clinical laboratory and pathology related modules. Interested student taking this position will be involved in scanning and touch-up of images, text entry by typing or cutting-and-pasting, and database development for display of information on the Internet. Knowledge and/or experience with PhotoShop would be helpful but not essential. Programming or HTML scripting not required. This will be a learning experience for anyone interested in the organizational aspect of Web site development and its ongoing maintenance.
Contact: (315) 464-6717; wooj@upstate.edu

Department of Pediatrics

Steven Blatt, MD
Key Research Words/Work Opportunities: Students will assist in ENHANCE Services for Children in Foster Care, a unique service within University Pediatric & Adolescent Center at UHCC. Primary activities will be to assist faculty in clinical research of health care for children in foster care. Students will gain significant patient care experience at ENHANCE and in general pediatrics at UHCC.
Contact: (315) 464-5831; blatts@upstate.edu

Ann Botash, MD
Research Key Words/Work Opportunities: data collection - cases of child abuse; work with child abuse team & community agencies to examine medical trends of children seen in clinic. Opportunities to develop independent clinical research projects in child abuse and to attend pediatric conferences and clinical activities.
Contact: (315) 464-2045; botasha@upstate.edu

Nienke Dosa, MD, MPH
Research Key Words/Work Opportunities: Attend outpatient clinics for children and adolescents with developmental disabilities. Participate in research that focuses on how information technology can improve the care of these children during the transition to adulthood. Participate in community programs that link medical care with habilitation services for individuals with developmental disabilities and their families. Opportunities to develop independent research projects using either qualitative or quantitative research methods will be provided. Students with a public health interest are encouraged to apply.
Contact: (315) 464-7603. dosan@upstate.edu

Teresa Hargrave, MD, MPH, FAAP
Research/Work Opportunities: Child and Adolescent Psychiatric research for Primary Care Physicians. Enabling Primary Care Physicians to better manage and assess mild to moderate psychiatric issues in their practice.
Research/Work Opportunities: Research preschool mental resource availability in Central New York.
Contact: (315) 464-3266; hargravt@upstate.edu

Robert Kanter, MD
Research Key Words: health services research in pediatric critical care; regional pediatric hospital resources, hospital emergency preparedness. For more information, visit website at
http://www.upstate.edu/facultyresearch/index.php?EmpID=KvKvTZEJ
Contact: (315) 464-7611; kanterr@upstate.edu

Robert Roger Lebel, MD, FACMG
Research Key Words/Work Opportunities: Dr. Lebel sees patients who are pregnant, newborn, children, adolescents and adults. He seeks to clarify the genetic components and etiologies of clinical disorders. Research consists in recognition of syndromes and diseases, which sometimes lead to descriptive reports and sometimes to collaborative efforts with laboratory geneticists to define molecular and chromosomal underpinnings of disease.
Contact: (315) 464-7561; lebelr@upstate.edu

Gregory Liptak, MD/MPH
Work Opportunities: Analysis of large national dataset examining children who have blindness as well as children who have autism. It would also include shadowing in the various programs including Autism, Child Development, Genetics, Healthy Lifestyles, Physical disabilities, and Spina Bifida.
Contact: (315) 464-7561; Liptakg@upstate.edu

Elizabeth Nelsen, MD
Research key words/work opportunities: Primary work will involve assisting with research in pediatric procedural management, including procedure observation, data collection and recording, and literature searching. Students will also have ample opportunity to gain patient care experience in general pediatrics and attend pediatric conferences.

Contact: (315) 464-2045; nelsene@upstate.edu

Leonard Weiner, MD
Research Key Words/Work Opportunities: 1) computer data entry for project involving viral infections in children and clinical correlates to those infections, 2) laboratory research projects in viral pathogenesis. Position requires some relevant experience.
Contact: (315) 464-6331; weinerl@upstate.edu

Department of Pharmacology

Arkady Pertsov, PhD
Research Key Words: cardiac electrophysiology, arrhythmias, fluorescence imaging and computer modeling of cardiac propagation.
Contact: (315) 464-7986; pertsova@upstate.edu

M. Saeed Sheikh, MD/PhD
Research Key Words/Work Opportunities: Research Key Words/Work Opportunities: Work will be full time in a Cancer Research laboratory. It will involve different cellular and molecular techniques to answer specific questions regarding development of new drugs as novel cancer therapeutic approach. Techniques that will be used at the job include cell culture using different cancer tissues (breast, lung, prostate and colon), cell death and survival assays, western blotting and enzymatic assays. Work will be done under the supervision of Dr. Sheikh and other people working in his lab.
Contact: (315) 464-8015; sheikhm@upstate.edu

Richard Veenstra, PhD
Research Key Words: gap junctions, ion channels, patch clamp, cardiac electrophysiology
Work Opportunities: Learning of variety of cell culture, mRNA and protein detection, fluorescence microscopy, and patch clamp electrophysiology techniques to examine the function of connexin40, connexin43, and other gap junction proteins. Specifically, learn to transiently and stably express fluorescent protein-tagged connexin proteins in N2a and Hela cells to monitor their gap junction properties. Work will primarily involve testing the structure-function relationships of connexin proteins, the calcium regulation of cardiac gap junctions, and the effects of clinical HDAC inhibitors or putative gap junction agonists on cardiac electrophysiological properties.
Contact: (315) 464-5145; veenstrr@upstate.edu

Department of Physician Assistant Studies (College of Health Professions)

Sandra Banas, MS RPA-C
Work Opportunities: Work with PA faculty and students to assist and facilitate gross anatomy dissections during the summer Gross Anatomy Course. Assist PA faculty in setting up and proctoring practical exams. Requires an extremely solid knowledge base for gross anatomy dissections and must have completed Gross Anatomy course with a minimum grade of high honors.
Contact: (315) 464-6871; BanasS@upstate.edu

Department of Psychiatry

Adekola Alao, MD
Research Key Words: sickle cell disease; psychopathology chronic pain; traumatic brain injury; internet and psychiatry,
and CL psychiatry.
Contact: (315) 464-5631; alaoa@upstate.edu

Kevin Antshel, PhD
Research Key Words/Work Opportunities: Project including data collection, management, and manuscript preparation; child/adolescent psychiatry; ADHD and Learning Disabilities describe my research foci.
Contact: (315) 464-3117; antshelk@upstate.edu

Mantosh Dewan, MD
Work Opportunities: health care economics, comparison of treatments, data collection & analysis.
Contact: (315) 464-3105; dewanm@upstate.edu

Wanda Fremont, MD
Research Key Words/Work Opportunities: Assist faculty in the division of Child Psychiatry Outpatient Clinic with patient contact. Attend conference and lectures, list of reading materials in order to assist with research projects.
Contact: (315) 464-3175; fremontw@upstate.edu

Stephen Glatt, PhD
Research Key Words/Work Opportunities: Projects in the realm of psychiatric genetic epidemiology, including both "wet" and "dry" lab work oriented toward discovering and characterizing genetic risk factors and biomarkers for major mental illnesses, including schizophrenia, bipolar disorder, and autism.
Contact: (315) 464-7742, glatts@upstate.edu

Brian Johnson,
Research Key Words/Work Opportunities: Neuropsychoanalysis of addiction, drug dreams, underlying issues in chronic pain.
Contact: (315) 464-3130

Wendy Kates, PhD
Research Key Words: identification of the neuroanatomic, neuropsychiatric, and neuropsychological phenotypes of children with genetic disorders; anatomic and functional brain imaging. Completing volumetric measurements of brain regions on digitized brain MRI images. Learn imaging software tools and principles of neuroimaging research.
Contact: (315) 464-3270; katesw@upstate.edu

Marvin Koss, MD
Research Key Words/Work Opportunities: coordinating the Dr. Ellen Cook Jacobsen Endowed Fellowship, which will provide an exposure to psychiatry in the setting of consultations to inpatients at University Hospital and VA Medical Center and patients in the University Hospital Emergency Department. Applications are due 3/15/10.
Contact: (315) 464-5631, kossm@upstate.edu

Zsuzsa Szombathyne Meszaros, MD, PhD
Research Key Words: Lupus, schizophrenia, alcohol and nicotine dependence. Opportunity to learn about neuropsychiatric testing, functional neuroimaging, and the conduct of clinical trials. Data entry, data cleaning, basic statistical analyses using SPSS, help with publications and presentations.
Contact: (315) 464-1705; meszaroz@upstate.edu

Paula Trief, PhD
Research Key Words: diabetes, regimen adherence, marital relationships, and depression. Participate in development of couples' diabetes intervention or primary care-based obesity intervention.
Contact: (315) 464-3120; triefp@upstate.edu

Steven Youngentob, PhD
Research Key Words: the consequences of fetal ethanol or nicotine experience on neural plasticity and post-natal drug seeking behavior; ethanol or nicotine experience-induced neural plasticity in adolescent animals and adult abuse

Contact: (315) 464-7758; youngens@upstate.edu

Department of Public Health and Preventive Medicine

Donna Bacchi, MD, MPH

Research Key Words/Work Opportunities:

1. Work with the CNYMPH Director to develop a bank of public health news highlights that can go on the CNYMPH home page under "news and announcements" on a rotating basis. Students with MPH preferred
2. Work with the Maternal and Child health division at the Onondaga County Health Dept. on a number of activities devoted towards the prevention of infant mortality and reducing racial and ethnic disparities. Past projects have included: working with public health nurses who provide obstetrical care and case management coordination to pregnant inmates; working with the Project Director and staff to write a proposal for a study on lead exposure in pregnancy, analyzing death certificated for a SIDS/Co-sleeping study, developing and analyzing a physician survey on parental co-sleeping patient education. Students will become familiar with the Healthy Start project and pick an intervention that attracts their attention, and use the experience to write a manuscript for publication. There will also be exposure to a wide variety of other public health activities. Anyone interested in obtaining an MPH or having more exposure to public health will benefit from this experience.

Contact: Donna R. Bacchi, MD, MPH: 315-464-1530; bacchid@upstate.edu

Paula Rosenbaum, PhD

Key Research Words: epidemiology and biostatistics; student participation in study design, clinical data collection, as well as data base set up, organization and management. Data interpretation and summarization for presentation. Projects change periodically.

Contact: (315) 464-4430; rosenbap@upstate.edu

Department of Radiation Oncology

Peter Hahn, PhD

Research Key Words: cancer biology and radiation oncology.

Contact: (315) 464-5956; hahnp@upstate.edu

Seung Hahn, MD

Research Key Words: Gamma Knife Project, analyzing effectiveness of Gamma Knife Surgery in the management of brain tumors, metastatic malignancies and functional disorders.

Contact: (315) 464-5991; hahns@upstate.edu

Sandra Hudson, PhD

Research/Work Opportunities: the study of programmed cell death for cancer research utilizing the combination of radiation and molecular targeted therapies. Areas of interest are lung cancer, breast cancer and lymphoma.

Contact: (315) 464-6843; hudsons@upstate.edu

Department of Radiology

Andrzej Krol, PhD

Research Key Words/Work Opportunities: tomographic reconstruction of CT, and SPECT data, tracer kinetic modeling of PET and MR data.

Contact: (315) 464-7054; krola@upstate.edu

Student Affairs Office

Julie White, PhD

Research Key Words/Work Opportunities: the following five projects are proposed:

1. Develop resource file of International Health opportunities for use by interested students and faculty, perform needs survey.
Contact: Sue Stearns: (315) 464-8577; stearnss@upstate.edu
2. Analyze survey data from premed applicants to determine why students choose to come to Upstate, or why not. What is attractive/unattractive about our school? Are there trends over the past few years.
Contact: Jennifer Welch: (315) 464-4570; welchj@upstate.edu

Department of Surgery

Gregory Fink, MD

Research Key Words: methods to limit ischemic damage during a MI; investigating the effects of cardiopulmonary bypass in small animal model. Aid in planning of experiments, as well as the actual completion of these experiments and analysis of data.
Contact: (315) 464-5812; finkg@upstate.edu

Research Key Words/Work Opportunities: A collaborative project investigating the organization of atrial fibrillation after cardiac surgery. Our previous research has identified that the presence of fibrosis with the left atrium, as well as changes in ion channel expression are associated with the development of atrial fibrillation after cardiac surgery.

Research Key Words/Work Opportunities: Assist with data acquisition and analysis. Identify histological differences on left and right atrial biopsies from patients who previously underwent cardiac surgery. Using light microscopy, measure the atrial muscle cell size, amount of fatty infiltration, as well as the presence of amyloid plaques. Run RT-PCR reactions looking for fibrosis markers from within atrial tissue. These laboratory activities will be supervised by Michael Swartz, a graduate student at SUNY Upstate, as well as Dr. Steve Taffet, a faculty member of the department of microbiology and immunology.
Contact at: (315) 464-6255; finkg@upstate.edu

Vivian Gahtan, MD and Kristopher Maier, PhD: Vascular Research Laboratories

Research Key Words: Vascular smooth muscle cell, migration, intimal hyperplasia, atherosclerosis, diabetes, cellular signal transduction.
The Division of Vascular and Endovascular Services in the Department of Surgery has opportunities for summer research in the field of the cellular mechanisms of vascular disease. Currently, we are examining the role of extracellular matrix proteins in the development of intimal hyperplasia and atherosclerosis. We are using techniques to determine the cellular mechanisms by which these proteins induce vascular smooth muscle cell migration and proliferation as well loss of endothelial cell junctional integrity and apoptosis. We are particularly interested in the mechanisms of accelerated atherosclerosis in diabetes and the role of hyperglycemia in augmenting vascular dysfunction. The student would work in the Vascular Research Laboratories employing multiple techniques to examine this complex process. Dr. Gahtan is Chief of the Division and an expert in vascular disease, extracellular matrix proteins and vascular smooth muscle cell migration. Dr. Maier is a vascular biologist and an expert in intracellular signal transduction. This opportunity could potentially result in authorship and abstracts and peer reviewed research manuscripts.
Contact: 315-464-6241; gahtanv@upstate.edu, maierk@upstate.edu

Dilip Kittur, MD

Research Key Words/Work Opportunities: Kidney and heart transplant rejection, molecular analysis of vascular injury in transplanted organs, angiogenesis in cancer, transplantation, and other diseases.
Contact: (315) 464-6297; kitturd@upstate.edu

Charles Lutz, MD

Research Key Words/Work Opportunities: two ongoing clinical research projects: 1) A retrospective review of Upstate's off-pump coronary artery bypass series and 2) a review of Upstate's minimally invasive and robotic series. There are also other clinical research opportunities as Upstate is now part of the Society of Thoracic Surgeons (STS) National Database, a powerful clinical research database. The student

will also have an opportunity to observe cardiac surgical procedures as well as observe the cardiac surgery intensive care unit and interact with the cardiac surgical team.
Contact: (315) 464-6255; lutzc@upstate.edu;

Kristopher Maier, PhD
Research Key Words/Work Opportunities: The work study student will be involved in an ongoing project examining the effect of extracellular matrix proteins on vascular smooth muscle cell proliferation and migration. This position will require the student to maintain good laboratory practices, a laboratory notebook and clear communication with the supervisor. The student will be expected to learn basic laboratory techniques and participate in weekly laboratory meetings. There will also be required reading to familiarize the student with student's research project. The student will also analyze data and put it into a presentable format.
Contact: (315) 882-1495; maierk@upstate.edu

Gary Nieman
Research Key Words/Work Opportunities: The students will be involved with NIH funded experiments utilizing large animal translational research models. Our laboratory is set up similar to an operating room and intensive care unit (ICU). Animals (pigs) will be surgically instrumented for vascular access and other surgical procedures similar to a patient in the ICU. Students will be instructed in large animal surgery and management of the critically ill animal. On many occasions students will be given the opportunity to analyze data generated in an independent fashion. Many students have written first author abstracts from these data that were subsequently published in medical journals and presented by the student at an international meeting. Key words: acute respiratory distress syndrome (ARDS), acute lung injury (ALI), sepsis, septic shock, ventilator induced lung injury (VILI), critical care, large and small animal surgery.
Contact: (315) 464-6302; niemang@upstate.edu

Department of Urology

Jay E. Reeder, Ph.D.
Research Key Words: Bladder cancer, prostate cancer, interstitial cystitis, painful bladder syndrome, pelvic organ prolapse, near-infrared imaging in surgery. The Department of Urology has on-going basic science, translational, and clinical research in all aspects of Urology. In vitro and in vivo models of disease are used as well as clinical specimens and data. Student work opportunities can be tailored to individual expertise, education, and interests. An effort is made to give students experience with everything from experimental design through report preparation. Specific tasks include chart review, molecular biology and genomic techniques, proteomics, animal surgery and imaging.
Contact Dr. Reeder at 315-464-6104; reederj@upstate.edu

Office of Multicultural Affairs and CSTEP

Nakeia Y. Chambers
Work Opportunities:
1. Conduct research on cultural sensitivity in education, as well as, curriculum infusion as it relates to diversity. The information and data collected will be used for the development of workshops and grants. The daily responsibilities will include but not limited to the following: Internet research, article reviews, program assessment. Phone interviews, distributing surveys, and developing a final report. Assistant will also participate in program planning and grant writing.
Contact will be with students from various schools within the Syracuse City School District. Also contact with personnel at Syracuse University, SUNY ESF, and the Syracuse City School District.
2. General responsibilities for Learning Academy Instructor with the Science and Technology Entry Program (CSTEP): Create and implement lesson plans that increase students' participation and performance in middle or high school science courses and New York State Regents Exams. Develop and design innovative and creative activities that have real life applications. Design an academic syllabus for

the course that parallels New York State Department of Education Learning Standards. Work with the students to initiate their research topics and begin the process.
Contact: (315) 464-8834; chambern@upstate.edu

Upstate Poison Control Center

Michele Caliva, RN

Research Key Words/Work Opportunities: after an initial orientation , student will participate in all aspects of Upstate Poison Control Center; opportunity to participate in Research Projects, Community-Based Poison Prevention activities, and Professional Education Programs.
Contact: (315) 464-7073; calivat@upstate.edu

For more information, contact Barbara Humphrey: (315) 464-4322; humphreb@upstate.edu
Update: 9/17/10