

State University of New York at Buffalo
Department of Pediatrics
School of Medicine and Biomedical Sciences

2007 NHLBI SUMMER MINORITY STUDENT RESEARCH PROGRAM

OVERVIEW: A short-term research training experience will be provided to selected outstanding minority undergraduate and pre-clinical medical students during the summer of 2007. Students will work in the laboratories of distinguished senior faculty investigators and will participate in didactic conferences addressing developmental physiology and research methodology.

FOCUS: Basic science and clinical research issues related to the transition from intra-uterine to extra-uterine life with special emphasis on the cardiovascular, pulmonary and hematopoietic/immune systems.

DATES: **10 WEEKS:** May 23 – August 3, 2007

ELIGIBILITY: Under-represented minority students following their second year of undergraduate education or following their first or second year of medical education. Students in Post-Baccalaureate programs prior to Medical School are also eligible. Previous research experience is not required.

VISA STATUS: You must be a citizen or non-citizen national of the United States or have been lawfully admitted for permanent residence at the time of appointment. A non-citizen national is a person who, although not a citizen of the United States, owes permanent allegiance to the United States. They are generally persons born in lands which are not States, but which are under US sovereignty, jurisdiction, or administration (e.g., American Samoa). **Individuals on temporary or student visas are not eligible.**

PERMANENT RESIDENTS: A notary's signed statement must be submitted certifying that (1) the appointee has an Alien Registration Receipt card (I-151 or I-551) or (2) the appointee is in possession of other legal verification of such status. No statement is required for citizens or non-citizen nationals.

LIMITATIONS: Maximum of **20** participants to be selected (maximum 2-year participation in program as long as eligibility criteria is met)

STIPEND: total \$3,749 over 10 weeks

TRAVEL: Travel to and from Buffalo will be provided.

HOUSING: University housing will be provided for out of town students.

REQUIREMENTS:

- COMPLETED APPLICATION FORM
- SCHOOL TRANSCRIPTS
- LETTERS OF RECOMMENDATION

APPLICATION DUE: **ALL MATERIALS MUST BE RECEIVED BY MARCH 2, 2007.**

FOR FURTHER INFORMATION:

Dr. David Milling
Office of Multicultural Affairs
40 BIOMEDICAL EDUCATION BLDG.
3435 MAIN STREET
SUNY AT BUFFALO SCHOOL OF MEDICINE
AND BIOMEDICAL SCIENCES
BUFFALO, NEW YORK 14214

2007 NHLBI SUMMER MINORITY STUDENT RESEARCH PROGRAM

The Department of Pediatrics at the State University of New York at Buffalo's summer research experience funded by the NHLBI will begin in May 2007. This student research will provide introductory research experiences in the laboratories of senior faculty mentors in the area of developmental biology. This research program will address basic science and clinical research studies in the transition from intrauterine to extra-uterine life with special emphasis on the cardiovascular, pulmonary and hematopoietic/immune systems. A **maximum of twenty** students will be selected to participate in the summer of 2007.

The purpose of this program is to encourage promising minority students to pursue careers in medicine and biomedical research. Research activities will include direct laboratory experiences under the supervision of outstanding faculty mentors, didactic conferences on developmental physiology, research study design, and statistical analysis, and an introduction to the ethics of biomedical research.

The student research program will begin **May 23, 2007 and end August 3, 2007**. Alternative starting times can be arranged in advance when necessary but are discouraged. Weekly conferences will be attended by all of the participating students. In addition to the laboratory and educational programs, social events will be scheduled during the summer.

Enclosed in this informational packet are application forms and a listing of research mentors and their areas of research. Students are asked to select three potential research mentors/research areas in which they would like to participate and to list these selections in the application. Please note that research areas are subject to mentor availability. In addition to the completed application, students are required to submit college and medical school transcripts along with two letters of recommendation, indicating the student's level of motivation, independence, and academic abilities. Undergraduate students should request a letter of recommendation from a science instructor. A selection committee will notify students of their selection by the **end of March/beginning of April**. At the conclusion of his or her training, each student will present a summary of his or her research experience.

Students will be paid a stipend of **\$3,749** total. Travel to and from Buffalo will be provided. University housing will be provided for students from outside Buffalo.

Contacts: RoseAnn Klein
Department of Pediatrics
Telephone: (716) 878-7300 FAX: (716) 878-7339
E-mail: rklein@upa.chob.edu

Debbie Gidzinski
Office of Multicultural Affairs
SUNY/Buffalo, School of Medicine/Biomedical Sciences
Telephone: (716) 829-2802 FAX: (716) 829-2798
E-mail: gidzinsk@buffalo.edu

State University of New York at Buffalo
Department of Pediatrics
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**APPLICATION FOR 2007 NHLBI SUMMER MINORITY STUDENT
RESEARCH TRAINING PROGRAM**

Return this application and have a copy of your transcript sent no later than **March 2, 2007**

PLEASE PROVIDE COMPLETE INFORMATION (Please Type)

Name (last, first, middle): _____ Date: _____

Social Security Number: _____ E-Mail address: _____

Current Address: _____

Street: _____ City: _____ State/Zip: _____

Expected date of graduation: _____

Are you seeking a degree? Yes No Degree sought: _____

Month and year expected: _____

If moving at end of school, alternate phone number and an anticipated date of move: _____

Current phone: () _____ Cell Phone: () _____

Permanent address: (If different from above) Street: _____ City: _____

State/Zip: _____ phone number: () _____ Cell Phone: () _____

DOB: _____ Sex: _____ U.S. Citizen (Y/N): _____ Permanent Visa Status (Y/N): _____

Background (check one):

_____ African American _____ Native American _____ Hispanic American _____ Alaskan American
_____ Pacific Islander _____ Asian

Date available to start program (if not May 23): _____

EDUCATION: College/University - List All Schools Attended

Address: City/State _____ Dates attended: _____

Major field of study: _____ Date of graduation (or anticipated): _____

Medical School:

Address: _____ City: _____

State _____

Date of entry: _____ Discipline, Specialty or Field: _____

Are you seeking a degree: Yes No Degree sought: _____

Month and year expected: _____ Discipline, Specialty or Field: _____

RESEARCH PROJECT INFORMATION:

Please list in order of preference the research topic and faculty mentor you are interested in (no more than three – see attached list)

Research area:

Mentor:

- 1. _____
- 2. _____
- 3. _____

REFERENCES

Please list the names and addresses or telephone numbers of at least two faculty members you have asked to write letters of recommendations on your behalf. Undergraduate students should request a letter from a science instructor.

1. **Reference:** _____ Work phone: () _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Relationship: _____

2. **Reference:** _____ Work phone: () _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Relationship: _____

3. **Reference:** _____ Work phone: () _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Relationship: _____

Please have an official transcript sent from your college and medical school: (Required)

Signature _____

Date _____

Please send the completed application forms and materials to:

Office of Multicultural Affairs, SUNY at Buffalo, School of Medicine & Biomedical Sciences, 40 BEB, 3435 Main Street, Buffalo, NY 14214. Phone: (716) 829-2802.

Under separate cover, the letters of recommendations and transcripts should be sent to the above address. All Information must be received no later than **March 2, 2007**.

Contacts: RoseAnn Klein - Program Coordinator, Dept. of Pediatrics
Telephone: (716) 878-7300 FAX: (716) 878-7339 E-mail: rklein@upa.chob.edu

Debbie Gidzinski, SUNY at Buffalo, Sch of Medicine, **Telephone: (716) 829-2802**
E-Mail: gidzinsk@buffalo.edu

STATE UNIVERSITY OF NEW YORK AT BUFFALO
NHLBI Short-Term Training for Minority Students
Research Mentors and Areas of Interest
Summer 2007

RESEARCH MENTOR	RESEARCH FOCUS
Charles Berenson, M.D. Associate Professor of Medicine	The Role of Human Cellular Gangliosides as Receptors for Nontypeable " <i>Haemophilus influenzae</i> "
Glenna Bett, Ph.D. Assistant Professor – Gynecology-Obstetrics	Reproductive Electrophysiology
Piero Bianco, Ph.D. Assistant Professor of Microbiology and Immunology	Homologous recombination in mammalian cells
Lani Burkman, Ph.D. Assistant Professor in Research – Gynecology-Obstetrics	Drug effects on the ability of human sperm to prepare for fertilization
Barnali Chaudhuri, Ph.D. Assistant Professor – Structural Biology	Structure Biology of protein: tRNA interaction; Rare Amino Acids; Protein oligomeric assembly design
Vivian Cody, Ph.D. Research Professor of Medicine and Professor of Structural Biology	Protein Structure Determination: Thyroid Endocrinology
Lionel Coignet, Ph.D. Research Assistant Professor – Roswell Park Cancer Institute	FLJ13639 up-regulation/CD24 down-regulation as a new potential therapeutic approach in lung cancer
George DeTitta, Ph.D. Professor of Structural Biology	Crystallization of Biological Macromolecules
Richard W. Erbe, M.D. Professor of Pediatrics	Molecular Analytes in Dopamine Transmission
James Fallavollita, M.D. Associate Professor of Medicine	Pathophysiology of Viable, Dysfunctional Myocardium and its Relation to Sudden Death
Bradley Fuhrman, M.D. Professor of Pediatrics	Inhalation anesthetics and ventilator induced lung injury
*Michael Garrick, M.D. Professor of Biochemistry	Metal Metabolism, Nutrition and Toxicity
Debashis Ghosh, Ph.D. Associate Professor of Structural Biology and Biophysics	Structure of Microsomal Enzymes in Estrogen Biosynthesis and Structure-Based Inhibitor Design/Structure and Function of Interphotoreceptor Retinoid-Binding Protein/Rational Design of Peptide-Mimics of High Molecular Weight Melanoma Associated Antigen
Brydon Grant, M.D. Professor of Medicine, Physiology and Biophysics, and of Social and Preventive Medicine	
Richard Gronostajski, Ph.D. Professor of Biochemistry	Role of Nfib gene in perinatal lung maturation
Paul Knight, Ph.D.	The Pathogenesis of Acute Inflammatory Lung Injury

Professor of Microbiology/Anesthesiology	both Infectious and Non-Infectious I
Te-Chung Lee, Ph.D. Associate Professor of Biochemistry	Adult stem cell biology and applications
*Wilfredo Mojica, M.D. Assistant Professor of Clinical Pathology and Anatomical Sciences	Enabling high throughput profiling of human tissue specimens
Timothy Murphy, M.D. Distinguished Professor of Medicine	Bacterial Lung Infections
Randall Rasmusson, Ph.D. Associate Professor of Physiology	Tissue specific distribution of cardiac ion channels
Laurie Read, Ph.D. Associate Professor of Microbiology	Role of TbDss-1 in Mitochondrial RNA Processing in <i>Trypanosoma Brucei</i>
Jerry Richards, Ph.D. Assistant Professor of Pediatrics	Psychopharmacology, Behavioral Modification
*Tom Russo, M.D., C.M. Associate Professor of Medicine	Bacterial Modulation of Lung Inflammatory Response
James Roemmich, Ph.D. Assistant Professor of Pediatrics	Obesity, Physical Activity
Rita Ryan, M.D. Associate Professor of Pediatrics	Neonatal Lung Injury
L. Wayne Schultz, Ph.D. Assistant Professor of Structural Biology	Bioluminescence in Marine Dinoflagellates: Structure and Function
Stanley Schwartz, M.D., Ph.D. Professor of Medicine and Pediatrics	Immunopathogenesis of HIV Infections
David Shucard, Ph.D. Professor of Neurology and Pediatrics	Cognitive/Behavioral Neuroscience: Electrophysiology and Behavior in Both Animals and Man
Lee Ann Sinha, Ph.D. Assistant Professor of Biochemistry	Ets Factors and the Immune System
Edward Snell, Ph.D. Assistant Professor of Structural Biology	Understanding, Mitigation and the Use of Radiation Damage in Macromolecular X-ray Crystallography
Daniel Swartz, Ph.D. Research Assistant Professor	Vascular Tissue Engineering Cerebral Vascular Aneurysm Formation Vascular Remodeling in Hypertension
Mary Taub, Ph.D. Professor of Biochemistry	Kidney/Hypertension
Laurene Tumiel-Berhalter, Ph.D. Assistant Professor of Family Medicine and Social and Preventive Medicine	Community Based Research Program to Address Asthma in a Predominately Puerto Rican Population
Beatrice Wood, Ph.D. Associate Professor of Psychiatry and Pediatrics	Stress and Airway in Children with Asthma
*John Yeh, M.D. Professor of Gynecology and Obstetrics	Reproductive Biology

***Please note that mentors denoting an * means that the mentor is unsure about being able to participate in this year's program. If you are interested in the mentor, please write his/her name down as one of your choices just in case he/she is able to participate.**