

Undergraduate Summer Research Experience

Summer Application Instructions

The Summer Research Program, sponsored by the School of Graduate Studies (SGS), is designed to provide research experience for <u>undergraduate students</u> interested in **careers in Biomedical Research**. The program provides a 10-week period of full-time laboratory research, under the direction of a SGS faculty member. In addition, graduate faculty members give <u>weekly presentations</u> describing their research and the opportunities for graduate study in their respective programs. Students make <u>oral presentations</u> of the results of their summer research at the end of the 10 week period. To be considered for the program you must be a **U.S. citizen or Permanent resident** to apply provide the following documents:

- 1. A completed application
- 2. Official Transcript from all universities/colleges attended/attending.
- 3. Two Letters of Recommendation (preferably one from your advisor and one science faculty member).

There is no tuition cost for the program; accepted students will receive a fellowship of \$4000 (no housing) \$3000 (with housing) for the ten-week period (May 29, 2018 – August 3, 2018). Only complete applications will be reviewed. Maximum of 10 qualified candidates will be accepted. Application deadline: Tuesday, February 28, 2018.

Please return all correspondence to:

RUTGERS-School of Graduate Studies
Undergraduate Summer Research Experience
c/o Mayra Barreto
185 South Orange Avenue
Medical Science Building, Room C-696
Newark, New Jersey 07103

If you have any questions concerning this program, please contact the School of Graduate Studies at (973) 972-4511; or e-mail your inquiries to Mayra.barreto@rutgers.edu.

Note: The University requires that all participants in this program have health insurance. Proof of insurance will be required prior to the program start date. Also, if you are using a PO Box address for your mailing address then you must submit a street address for the permanent address. Use of two PO Box addresses will not be accepted.

RUTGERS does not discriminate in admissions or access to its programs and activities on the basis of race/color, ethnicity, national origin, religion/creed, disability, age, marital status, sex, sexual orientation or veteran's status.



School of Graduate Studies Summer Research Experience for Undergraduate Students Application

RUTGERS does not discriminate in admissions or access to its programs and activities on the basis of race/color, ethnicity, national origin, religion/creed, disability, age, marital status, sex, sexual orientation or veteran's status

To be considered for the program you must be a Citizen or Permanent Resident of the United States

1. 1	Name								
Maili	ng Address								
Number and Street					City, State & Zip				
Telep	ohone ()			Email Address					
Permanent Address									
Number and Street									
City,	State			Zip	If NJ resident, county				
Socia	al Security #			Housing Ne	eded? ☐Yes ☐No				
Name of person to contact in an emergency: Telephone Number: ()									
									3. [
4. Responses to these questions are voluntary and will be kept confidential. Failure to furnish this information will not adversely affect the status of the application.									
Date of Birth: Sex: Male Female									
☐ American Indian/Alaskan Native ☐ African American ☐ Mexican American ☐ White (Non Hispanic) ☐ Other (Specify) ☐ Puerto Rican: ☐ Mainland ☐ Commonwealth									
5. (College/University								
ľ	Mailing Address								
		(Number	and Street))	(City, State & Zip)				
	Present classificat Current GPA:	ion: Freshman		Sophomore	☐ Junior				
	i. If your education has been interrupted, list in detail your activities during intervening period (use a separate page if necessary)								
_									
7. H	Have you had an i	introductory course in:	Biology (d	circle one) Y N	Chemistry (circle one) Y N				
8. H	Have you taken th	e Graduate Record Exar	mination?	Yes	□ No				
	Date:	Score: Verbal		Quant	itative				

9.	In which of the following bio	medical fields are you intereste	ed? (indicate your	top three choices by num	bering them from 1-3)		
	_Bio Terrorism	Biochemistry/Molec	ular Biology	Cancer Bio	ology		
	_Cell Biology	Drug Discovery		Immunology			
	Microbiology	Molecular Genetics			Molecular Medicine		
	_Neuroscience	Stem Cell					
10.	Which degree would best	describe your career goal:	☐ Ph.D. ☐ M.I		🗌 Undecided		
11. Letters of Recommendation-please indicate the names of two faculty members (one should be advisor) who you have asked to submit letters of recommendation.							
	1)		2)				
	Na	 me	,	Name			
	completed):	y misrepresentation in this ap	plication will be su	fficient cause for rejection	on of this application, or		
with	the Student Right to Know a	and Campus Security Act, RUT Building 5, P.O. Box 170, News	GERS's Annual Se	ecurity Report is available	from the Department of		
Signa	ature		Dat	te:			
9							



ESSENTIAL FUNCTION / TECHNICAL STANDARDS FOR SGS

Technical Standards refer to non-academic requirements that are essential for meeting the academic requirements of the program. Within any area of specialization, students must demonstrate competence in those intellectual and physical tasks that together represent the fundamentals of biomedical research in their chosen discipline. Enrollment is contingent on the result of certain medical laboratory test (e.g., TB) and fulfillment of immunization requirements. For details see the RUTGERS website: http://academicaffairs.rutgers.edu/sites/academicaffairs/files/RBHS%20Student%20Immunizations%20and%20Health%20Requirements%20Rev%20February2017v2.pdf

The Ph.D. and M.S. degree programs in biomedical sciences at the RUTGERS School of Graduate Studies, Health Science Campus-Newark require a laboratory-based research dissertation. Granting of these degrees implies that the recipient has demonstrated a base of knowledge in the field and the ability to independently apply that knowledge to solve a particular problem by forming hypotheses, designing and conducting experiments, interpreting the experimental results, and communicating the results and their interpretation to the scientific community. Thus, a candidate for the Ph.D. or M.S. degrees, as well as the M.B.S. degree, which does not require a dissertation, must possess abilities and skills that allow for observation, intellectual and conceptual reasoning, motor coordination, and communication. The use of a trained intermediary is not acceptable in many situations in that a candidate's judgment will be based on someone else's power of selection and observation.

A student whose behavior or performance raises questions concerning his or her ability to fulfill the essential functions may be required to obtain evaluation and/or testing by a health care provider designated by the School, and to provide the results to the Campus Student Health Service for the purpose of determining whether the student is fit to pursue the educational program. If the student is deemed fit to pursue the program, the School reserves the right to require actions recommended by the health care provider, including further testing, counseling, monitoring, leave of absence, etc.

Observation

The candidate must be able to acquire knowledge by direct observation of demonstrations, experiments, and experiences within the laboratory and instructional setting. Examples are physiological or pharmacological responses in animals, studies of microbiological cultures and organisms, identification of normal and abnormal cells or tissues through a microscope, and interpretation of results obtained on various instrumentation.

Intellectual/Conceptual Abilities

The candidate must be able to measure, calculate, analyze, reason, integrate and synthesize information to solve problems.

Motor Skills

The candidate must possess motor skills necessary to perform procedures required for experimentation within the chosen discipline. These skills may include, but are not limited to, surgery in animals, handling of animals, transfer of microorganisms to various mediums, preparing chemical and often toxic materials and solutions, preparation of anatomical specimens for microscopic examination, manipulating electronic and other complex equipment. Such actions require coordination of muscular movements and functional use of the senses of touch and vision.

Communication

The candidate must be able to communicate and discuss his or her experimental hypotheses and results to the scientific community, both in scientific journals or directly at scientific meetings, seminars, or in the laboratory to the research team

Behavioral and Social Attributes

The candidate must possess the emotional and mental health required for full utilization of his or her intellectual abilities, the exercise of good judgment, the prompt completion of responsibilities inherent in managing a scientific laboratory, the ability to function under the stress inherent in biomedical research, and the ability to understand and comply with ethical standards for the conduct of research.



Address:

Request for recommendation for the Summer Research Experience for Undergraduate Students This section to be completed by the applicant (PLEASE PRINT OR TYPE) Last name ______ First _____ Middle ______ Degree program and field of study______ AGREEMENT RESPECTING CONFIDENTIALITY; I waive ___, I do not waive __, my right to access this recommendation under the Family Education rights and Privacy Act of 1974,20 U.S.C.A. par 1232g (a)(1). Signature ______ Date To the Recommender: The person above is applying for admission to the Rutgers – School of Graduate Studies – Newark campus. Please provide your assessment of the applicant's aptitude for graduate study, with specific reference to academic performance, intellectual ability, communicative skills, and motivation. Your letter of recommendation should be on letterhead paper and sent to us at the above address. Please return this form, signed by the applicant, with your letter. Recommender's Name: Title: