



## SPURS: A Biomedical Research Program Columbia University College of Physicians and Surgeons

*(For Students at CUNY Senior Colleges)*

The Summer Program for Under-Represented Students (“SPURS”), a Biomedical Research Program, is designed to provide under-represented minority undergraduates from the City University of New York (“CUNY”) senior colleges with summer research fellowship experiences on the campus of, and under the mentorship of, faculty from the Columbia University College of Physicians & Surgeons.

The goal of this program is to provide meaningful training in biomedical research and to reinforce the SPURS Intern’s interest in pursuing a career in biomedical research which will lead to advanced degrees (Ph.D., M.D./ Ph.D. or M.D.).

The SPURS Intern will be assigned to work closely with an advanced post-doctoral, senior member of a laboratory. Since the SPURS Intern will have already established a substantial interest in biomedical research and will have significant prior experience in laboratory investigation, it is anticipated that the emphasis will be on training in novel techniques specific to the proposed research program, hypothesis generation, designing experiments to test the hypothesis, data evaluation, preparation of results for presentation at laboratory meetings, and preparation of a poster for presentation at a poster session at the end of the summer research fellowship. Emphasis will be placed on training the SPURS Intern in the fundamental approaches to research and exploring the various options available for pursuing graduate degrees to further promote a career in medicine or biomedical research.

In addition to specific training in the chosen research area, the SPURS Intern will receive, as necessary, in-depth coaching in the methods of biomedical research including: design and analysis of experiments, critical reading of the scientific literature through journal clubs, preparation of abstracts and manuscripts describing the results of experiments, career counseling, and research ethics.

Participation as a SPURS Intern will include a stipend and housing accommodations (if requested).

---

**Required application documents must be postmarked no later than January 29, 2010.**

Mail application to: Dr. Andrew R. Marks, Professor and Chair

Department of Physiology & Cellular Biophysics and Pharmacology, Russ Berrie Pavilion | 5th floor | Room 520

Columbia University College of Physicians & Surgeons, 1150 St. Nicholas Avenue, N.Y., N.Y. 10032

(Application Form, Statement of Purpose, Resume and any inquiries may be emailed to: [ad2388@columbia.edu](mailto:ad2388@columbia.edu))

# SPURS: A Biomedical Research Program

## Columbia University College of Physicians and Surgeons

*(For Students at CUNY Senior Colleges)*

### APPLICATION

---

#### **Requirements**

- Completed application form
- Official academic transcript
- Two evaluation letters
- Statement of purpose (3 pages maximum)
  - Indicate reason for applying & prior related research experience
  - Outline the nature of your interest in summer research and proposed research topic
  - Describe future education and career goals
- Resume  
(include honors, awards, & other recognitions)

#### **Eligibility**

- 3.0 grade point average (GPA) or better
- African American
- Hispanic American
- Native American
- Pacific Islander

### PROGRAM DESCRIPTION

---

#### **Faculty**

Students will be assigned a faculty mentor with whom the student will conduct directed research in an area of mutual interest.

#### **Weekly Seminars & Workshops**

In addition to research, interns will participate in weekly seminars and workshops. During the weekly seminars, students will have regular opportunities to discuss their research projects.

#### **Meetings**

Meetings with staff and mentors will provide an informal setting for discussions of varied topics, such as: opportunities in academia and the nature and rewards of an academic career.

#### **Accommodations**

Housing will be provided at Columbia's Morningside Heights campus. Summer Research Fellows are expected to make their own arrangements for meals.

**No meal plan is provided.**

#### **Stipend**

\$3,000.00 stipend for living expenses beyond the cost of housing.

---

**Required application documents must be postmarked no later than January 29, 2010.**

Mail application to: Dr. Andrew R. Marks, Professor and Chair

Department of Physiology & Cellular Biophysics and Pharmacology, Russ Berrie Pavilion | 5th floor | Room 520  
Columbia University College of Physicians & Surgeons, 1150 St. Nicholas Avenue, N.Y., N.Y. 10032  
(Application Form, Statement of Purpose, Resume and any inquiries may be emailed to: [ad2388@columbia.edu](mailto:ad2388@columbia.edu))

## 2009 Program Application

(Please type or print legibly in ink)

*(For Students at CUNY Senior Colleges)*

\_\_\_\_\_  
Last Name                                      First Name                                      Middle Name                                      Social Security Number

College \_\_\_\_\_ Cumulative GPA \_\_\_\_\_

Academic Major/Minor \_\_\_\_\_ Expected Graduation Year \_\_\_\_\_

Intended field of graduate study \_\_\_\_\_

Area(s) of proposed summer research (be as specific or general as you'd like)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Permanent Address**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Current Address** (*same as permanent address*)  
**or Valid Until**            /            /

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone (home) \_\_\_\_\_ Telephone (cell) \_\_\_\_\_

Date of Birth \_\_\_\_\_ City & Country of Birth \_\_\_\_\_ Email \_\_\_\_\_  
*print clearly*

**Sex:**  Male  Female    **Current Status:**  Sophomore     Junior    Other \_\_\_\_\_  
*please specify*

**Ethnicity:**  African American     Hispanic American     Native American     Pacific Islander    Other \_\_\_\_\_  
*please specify*

Are you in a MARC program?  YES     NO                      Are you in a MBRS program?     YES             NO

Will you be applying for SUMMER HOUSING at Columbia University?                       YES             NO

**Required application documents must be postmarked no later than January 29, 2010.**

Mail application to: Dr. Andrew R. Marks, Professor and Chair

Department of Physiology & Cellular Biophysics and Pharmacology, Russ Berrie Pavilion | 5th floor | Room 520

Columbia University College of Physicians & Surgeons, 1150 St. Nicholas Avenue, N.Y., N.Y. 10032

(Application Form, Statement of Purpose, Resume and any inquiries may be emailed to: ad2388@columbia.edu)

## Letter of Evaluation

*(Please give to faculty sponsor)*

*(For Students at CUNY Senior Colleges)*

### TO THE APPLICANT

Please give this form to a professor/faculty advisor, along with an envelope marked "Evaluation Letter." Ask the sponsor to seal this form and the letter of evaluation in an envelope, sign across the seal, and return it to you or forward it to Columbia at the address listed below. If the envelope is returned to you, do not open the envelope or break the seal. Make certain that the sealed envelope containing this form and your letter of evaluation, along with your completed application package, is delivered to the address below, or postmarked by, **January 29, 2010. (No late submissions will be considered)**

\_\_\_\_\_  
*Last Name*

\_\_\_\_\_  
*First Name*

\_\_\_\_\_  
*Middle Name*

\_\_\_\_\_  
*Social Security Number*

\_\_\_\_\_  
**Department or Program**

\_\_\_\_\_  
**Name of academic sponsor**

*Under the Family Education Rights & Privacy Act of 1974 (Buckley Amendment), which gives registered students the right to inspect and review their educational records, students may waive their right to see specific confidential statements and letters of evaluation, in the belief that applicants, and the persons from whom they request evaluations, may wish to preserve the confidentiality of those evaluations, we are giving you an opportunity to sign one of the following statements:\**

**(1) I waive my right to examine this letter.\***

Please check

**(2) I do not waive my right to examine this letter.\***

Please check

\_\_\_\_\_  
*(Your Signature)*

\_\_\_\_\_  
*(Your Signature)*

### TO THE ACADEMIC ADVISOR

How long you have known the applicant and in what capacity? \_\_\_\_\_

How would you rate the applicant's overall preparation and aptitude for this program?

Top 5%

Top 10%

Top 25%

Top 50%

Below 50%

*This form is submitted to you for an opinion of the applicant's undergraduate work. In a **separate letter on your institution's letterhead**, we ask you to please discuss candidly the applicant's abilities, progress, and scholarly potential. Please seal and sign the back flap of the envelope; return the evaluation to the applicant or forward the letter by January 29, 2010 to:*

Dr. Andrew R. Marks, Professor and Chair Department of Physiology & Cellular Biophysics and Pharmacology, Russ Berrie Pavilion|  
5th floor | Room 520 | Columbia University College of Physicians & Surgeons, 1150 St. Nicholas Avenue, N.Y., N.Y. 10032.

**\*Note:** If the applicant requesting this evaluation has signed **neither** of the statements above this letter will be available for the applicant's examination.

\_\_\_\_\_  
*Signature*

\_\_\_\_\_  
*Name (print)*

\_\_\_\_\_  
*Title*

\_\_\_\_\_  
*Department*

\_\_\_\_\_  
*Date*

# Letter of Evaluation

*(Please give to faculty sponsor)*

*(For Students at CUNY Senior Colleges)*

## TO THE APPLICANT

Please give this form to a professor/faculty advisor, along with an envelope marked "Evaluation Letter." Ask the sponsor to seal this form and the letter of evaluation in an envelope, sign across the seal, and return it to you or forward it to Columbia at the address listed below. If the envelope is returned to you, do not open the envelope or break the seal. Make certain that the sealed envelope containing this form and your letter of evaluation, along with your completed application package, is delivered to the address below, or postmarked by, **January 29, 2010. (No late submissions will be considered)**

\_\_\_\_\_  
*Last Name*

\_\_\_\_\_  
*First Name*

\_\_\_\_\_  
*Middle Name*

\_\_\_\_\_  
*Social Security Number*

\_\_\_\_\_  
**Department or Program**

\_\_\_\_\_  
**Name of academic sponsor**

*Under the Family Education Rights & Privacy Act of 1974 (Buckley Amendment), which gives registered students the right to inspect and review their educational records, students may waive their right to see specific confidential statements and letters of evaluation, in the belief that applicants, and the persons from whom they request evaluations, may wish to preserve the confidentiality of those evaluations, we are giving you an opportunity to sign one of the following statements:\**

**(1) I waive my right to examine this letter.\***

Please check

**(2) I do not waive my right to examine this letter.\***

Please check

\_\_\_\_\_  
*(Your Signature)*

\_\_\_\_\_  
*(Your Signature)*

## TO THE ACADEMIC ADVISOR

How long you have known the applicant and in what capacity? \_\_\_\_\_

How would you rate the applicant's overall preparation and aptitude for this program?

Top 5%

Top 10%

Top 25%

Top 50%

Below 50%

*This form is submitted to you for an opinion of the applicant's undergraduate work. In a **separate letter on your institution's letterhead**, we ask you to please discuss candidly the applicant's abilities, progress, and scholarly potential. Please seal and sign the back flap of the envelope; return the evaluation to the applicant or forward the letter by January 29, 2010 to:*

Dr. Andrew R. Marks, Professor and Chair Department of Physiology & Cellular Biophysics and Pharmacology, Russ Berrie Pavilion|  
5th floor | Room 520 | Columbia University College of Physicians & Surgeons, 1150 St. Nicholas Avenue, N.Y., N.Y. 10032.

**\*Note:** If the applicant requesting this evaluation has signed **neither** of the statements above this letter will be available for the applicant's examination.

\_\_\_\_\_  
*Signature*

\_\_\_\_\_  
*Name (print)*

\_\_\_\_\_  
*Title*

\_\_\_\_\_  
*Department*

\_\_\_\_\_  
*Date*