**GUIDELINES FOR SHORT-TERM RESEARCH FUNDING**

**National Heart, Lung, Blood Institute (NHLBI)** for underrepresented minority students (African-American, Hispanic/Latino, and/or Native American)

The NHLBI grant is administered by the Combined Degree and Physician Scholar Programs Office and provides short term research funding for Perelman medical students. To be considered for funding, your project must meet the guidelines of the grant, as described below.

**NATIONAL HEART, LUNG, BLOOD INSTITUTE (NHLBI)**

*Appointments are for 2 or 3 months (8 weeks minimum) of full-time, continuous research. 6-8 students can be appointed per year. Only African American, Hispanic/Latino and Native American students are eligible.* This short-term grant is funded by the NHLBI and is specifically dedicated to underrepresented minority students. The grant is primarily intended for basic science research in areas related to heart, lung, and blood, but the grant can also support a limited number of students doing clinical research. The Program Director is Dr. Horace DeLisser and interested students should contact him directly at [delisser@pennmedicine.upenn.edu](mailto:delisser@pennmedicine.upenn.edu).

# Guidelines:

* Only U.S. citizens or permanent residents, working with faculty members who hold full appointments of Assistant Professor or above at the University of Pennsylvania are eligible for funding.
* No more than two students per mentor can be funded; exceptions require PI approval.
* **Students must be engaged in full-time (minimum of 40 hours/week), continuous research for 2 or 3 months (8 weeks minimum – no exceptions; maximum 6 months). Time off for vacation is not permitted during the 2 or 3 month grant period.**
* Students who receive grant funding may not accept any additional funding to conduct the research project during the grant period (i.e. no double-dipping).
* Students who receive grant funding may not accept any additional payment or funding (i.e. an additional job) during the months of the project unless **prior permission** is obtained from the research mentor and Dr. Horace DeLisser (PI of the grant). Students interested in obtaining permission to receive additional payment or funding must complete the additional job form and submit to Francia Portacio ([francia.portacio@pennmedicine.upenn.edu](mailto:francia.portacio@pennmedicine.upenn.edu)) in the Combined Degree Office.
* Students must have an approved **IRB or IACUC** protocol prior to beginning their research project.
* Students and the University of Pennsylvania must abide by NIH guidelines.
* MD-MTR, MD-MSCE and MD-PhD students are not eligible.
* **Senior students** interested in applying for the NHLBI grant should contact Francia Portacio in the Combined Degree Office. The following guidelines have been developed for MS4 students interested in doing research during residency interview season:

- The grant period can be 2 or 3 months of full-time (minimum of 40 hours/week) research.

- If 3 months, 2 of those months must be contiguous within 4 months (e.g. Nov, Dec, Feb.).

- No more than 5 business days off for residency interviews during the 3 months.

- The student is required to provide a plan of their residency interviews (i.e. exact dates) one month prior to starting the research project. Send to Francia Portacio ([francia.portacio@pennmedicine.upenn.edu](mailto:francia.portacio@pennmedicine.upenn.edu)).

- Please note that we are limited in our flexibility. While we know you interview for residency, we cannot compromise the research experience that is intended by this grant.

* The NHLBI grant can be used to support a Scholarly Pursuit project.

**APPLICATION PROCESS**

1) Perelman medical students must identify a mentor and work with that individual to develop a specific research proposal in an area related to heart, lung, and blood. For ideas, contact Francia Portacio ([francia.portacio@pennmedicine.upenn.edu](mailto:francia.portacio@pennmedicine.upenn.edu)) for a **Potential Mentor List**.

2) Complete the application.

**The application has four parts:**

**a) cover sheet** (see next page)

**b) research proposal *written by the student***

**c) information provided *by the mentor* (i.e. mentor form and NIH biosketch)**

**d) IRB or IACUC protocol approval documentation** (if necessary for your project)or, at least, notification of stage in approval process. (Note: Students must have an approved IRB or IACUC protocol prior to beginning their research project.)

3) **Submit application to Francia Portacio** in the Combined Degree Office, **via email** to [francia.portacio@pennmedicine.upenn.edu](mailto:francia.portacio@pennmedicine.upenn.edu).

In your research proposal it is vital that you clearly identify **your own investigative role** in the work, and briefly outline the goals of your project. Students can not be funded for work that is limited to data collection, conducting questionnaires, chart review, etc. You must be engaged in analysis and, ideally, project design as well. Your work must be fundamental and investigative, not merely interpretive. Also, note that two to three months is a very brief time in which to conduct research. It is essential that you and your mentor outline realistic goals for the period of the project.

Funding decisions are made by the PI, Dr. Horace DeLisser. After submitting a proposal, applicants may be interviewed by the PI or a member of the Advisory Committee. The Combined Degree Office will provide you with information about arranging the interview.

Most, if not all projects, will require IRB or IACUC protocol approval. Students do not need to have the approved protocol prior to **applying** to the grant. However, if appointed, students are required to have the approved IRB or IACUC protocol prior to **beginning** their research project.

If you receive funding, you are obligated to inform the Office of Combined Degree and Physician Scholar Programs immediately if there are any changes to the duration or content of the project. In addition, as a condition of accepting the award, you must give a presentation at the **fall STER Symposium**, provide a final **evaluation and report** at the end of the funded period, and **acknowledge the NHLBI grant** (NHLBI R25-HL084665) as the primary funding source in any formal presentations or publication. You will also be expected to participate in regular lab meetings, training in ethical conduct of research, and other relevant activities. In addition, you are obligated to respond promptly to any request for information from NIH or from the Combined Degree and Physician Scholar Programs Office during your project and after your project has been completed. The granting agencies will require long-term follow up on all trainees, so you will be required to provide the office with information even after you graduate.

**(Application form attached)**

**APPLICATION FORM FOR**

**SHORT-TERM RESEARCH GRANT FUNDING**

**Cover Sheet**

**PLEASE COMPLETE THE FOLLOWING:**

Applying for: NHLBI

**Student:**

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ If MS4: is this your scholarly pursuit project? PennID #:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Yes \_\_\_\_ No \_\_\_\_

E-mail address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ If yes, you must complete an arranged activity

Year in Medical School:\_\_\_\_\_\_\_\_\_\_\_\_ form at: <http://my.med.upenn.edu>

**Proposed Mentor**:

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Department:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Dates of Proposed Research Activity**:

From (m/d/yr)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(m/d/yr)

Months of funding requested (circle one): 2 3

Title of Proposed Project:

NIH requires that we provide sex/gender, racial and ethnic data regarding students who receive grant funding. Please provide this information below for reporting purposes:

Sex: (circle one) Female Male

Ethnic Category: (circle one) Hispanic/Latino not Hispanic/Latino

Racial Categories: (circle all that apply)

American/Indian/Alaska Native

Asian

Native Hawaiian or Other Pacific Islander

Black or African American

White

Have you ever received any other funding for research from NIH? (circle one) Yes No

If yes, please specify the program or grant and the dates during which you were supported:

# IN ADDITION TO THIS FORM PLEASE SUBMIT:

1. Your project proposal
2. The short term research proposal mentor form (completed and signed by mentor)
3. Your mentor’s biosketch
4. IRB or IACUC protocol approval documentation (if necessary for your project) or, at least, notification of stage in approval process. (Note: Students must have an approved IRB or IACUC protocol prior to beginning their research project.)

**APPLICATION FORM FOR**

**SHORT-TERM RESEARCH GRANT FUNDING**

**Project Proposal (Student)**

Please attach a 3 page, concisely written description of the proposed research using the format below. (*Please note that it is expected that you will write this proposal. For instance, it can not include excerpts lifted directly from a mentor’s research grant. Your own investigative role should be clearly described.)*

*a. Specific Aims*

First, state the hypothesis to be tested. Second, state what the specific research proposed in this application is intended to accomplish.

*b. Background and Significance*

State (1) the fundamental problem motivating this area of research, and (2) the importance of your project, i.e., how your specific aims will contribute to the solution of this problem.

*c. Research Design*

Describe the designed experiments/procedures to be used to accomplish the specific aims, along with a realistic, estimated timetable.

*d. Methods*

Describe the techniques that will be used and how data will be collected, analyzed, and interpreted (less than ½ page). Descriptions should be brief, for example: “ I will use standard immunoprecipitation techniques, *in vitro* translation…etc, which are already used routinely in the lab of Dr.\_\_\_\_”.

*e. Mentorship*

Describe the mentorship you will receive while working on this project. How often will you be meeting with your faculty mentor? Are there other individuals in the lab who will play a role in mentoring you? If so, please list them and explain the roles they will play in guiding your research.

*f. Relevance to Heart/Lung/Blood*

Briefly describe the relevance your project has to heart/lung/blood (i.e. the scope of the NHLBI grant)

**APPLICATION FORM FOR**

**SHORT-TERM RESEARCH GRANT FUNDING**

**Mentor Form**

Please note that mentors must be **full time Penn faculty holding the rank of Assistant Professor or above.** A mentor may not have more than two students funded from this mechanism working for the same time period.

In addition, please be aware that as a requirement of the training program **students will be expected to participate in lab meetings, relevant seminar series and/or journal clubs and ethics training.** Summer students will give a **brief presentation** at the Short Term Elective Research Symposium and **mentors will be strongly encouraged to attend.** The student will also need to provide awritten report, and **the mentor will provide an evaluation at the end of the funded period.**

**PLEASE COMPLETE THE FOLLOWING:**

Name of mentor:

Name of student:

1. Please provide a brief description of the role the student played in developing his/her proposal and/or choosing the project.

2. Please describe your plans for mentoring the student. How often will you be meeting with him/her? Are there other individuals in the lab available to assist the student, and if so what roles will they play? Will the student be expected to attend lab meetings, journal clubs, etc.?

3. Please attach a copy of your NIH biosketch

4. Please sign below to indicate

-that you have read the student’s proposal and have approved it

-that you take responsibility for overseeing this student’s project and will provide an evaluation at the end of the project

-that you ensure acknowledgement of the NHLBI R25-HL084665 grant as a primary funding source in all of the student’s formal presentations and publications

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mentor signature date