ONE-YEAR MEDICAL STUDENT
RESEARCH FELLOWSHIP
INFORMATION

Prepared by
The Office of Student Research
Yale University School of Medicine

October 2018
The Office of Student Research was established to assist students with the planning, implementation and completion of research leading to a thesis. This office provides three types of stipend support for student investigators. These are: 1) Summer Research Stipends, 2) Short-Term Student Research Stipends, and 3) One-Year Medical Student Research Fellowships. The School encourages many students to consider a fifth year of medical school and devote it exclusively to research training. Dr. Forrest directs the Yale Endowed Fellowships. Dr. Forrest is available, by appointment, to advise and assist students in these applications.

Dr. Cohn is a former Sarnoff Medical Student Research Award recipient. Sarnoff Fellows conduct one year of cardiovascular research at an institution, located within the United States, other than the medical school in which they are enrolled. She is available, by appointment, to discuss the Sarnoff Award and applications.

Robert Harper-Mangels is the Assistant Dean and Fulbright Program Adviser for Yale Graduate School of Arts and Sciences and Professional School students.

Dr. Cantley is the Scientific Contact for the Yale Center for Clinical Investigation (YCCI) Multidisciplinary Predoctoral Training Program. This program is a one year fellowship opportunity for predoctoral students in Medicine, Nursing, Public Health and Engineering who are engaged in translational research and committed to team science that crossed disciplinary boundaries.

Dr. Shenoi is an Assistant Professor of Medicine in Infectious Diseases, and a previous recipient of Fogarty and Fulbright awards, who conducts clinical research in South Africa, Liberia, and Ukraine. She is available to discuss opportunities for global health research. The Yale Endowed/Sponsored Fellowships (Gardner, Gershon, & Hirsch) are available to support international work.
Overview of One-Year Medical Student Research Fellowships

Approximately 30-35 students per year receive competitive one year medical student research fellowships funded by various sources through separate applications arranged by the Office of Student Research. The stipends vary from $22,000 to $37,000 per year. Sources of funding are as follows:

1. **YCCI Multi-Disciplinary Pre-Doctoral Training Program in Translational Research**
   The YCCI Multidisciplinary Pre-doctoral Training Program is a one year research fellowship that students conducting translational research may apply to. Additional information and application instructions can be found at: https://medicine.yale.edu/ycci/education/predoc/

2. **Sarnoff Award**
   This is a one year fellowship in cardiovascular related research awarded to students upon application to do research at another research facility in the United States. A separate application is required. For further details please email Dr. Lauren Cohn at lauren.cohn@yale.edu. For further information see http://www.sarnofffoundation.org/?page=Fellowship_Info&hhSearchTerms=Fellowship+and+Applications

3. **Yale Endowed One-Year Student Research Fellowships**
   The Office of Student Research funds named endowed research fellowships through this mechanism. A separate application is required. For additional information please either stop by or call (785-6633) the Office of Student Research. Additional information is available at the Office of Student Research website at https://medicine.yale.edu/education/research/student/fundingop/oneyearfellowships/yalefellowships.aspx

4. **NIH Medical Research Scholars Program**
   This program builds on the focus and goals of the NIH Clinical Research Training Program and the HHMI-NIH Research Scholars Program of training the next generation of medical researchers and providing research opportunities in basic, clinical, translational, population health research. For further information see: https://clinicalcenter.nih.gov/training/mrsp/

5. **NIH-NIDDK Medical Student Research Training Fellowship**
   The NIH-NIDDK Medical Student Research Training Program will support up to three medical students per year in association with NIDDK sponsored Centers and NIDDK funded training grants at Yale School of Medicine. For additional information please visit the Office of Student website at https://medicine.yale.edu/education/research/student/fundingop/oneyearfellowships/nihtraining.aspx

6. **American Heart Association: Founders Affiliate Medical Student Research Program**
   The American Heart Association Health Sciences Student Research Project is designed to encourage advanced health science students to consider a career in cardiovascular research. Please contact Mary Gonzalez at MGonzalez@heart.org for additional information and application packet. For further information see: https://www.heart.org/en/affiliates/founders-affiliate-student-research-opportunities
7. **American Heart Association: Predoctoral Fellowship**
To enhance the integrated research and clinical training of promising students who are matriculated in pre-doctoral or clinical health professional degree training programs and who intend careers as scientists, physician-scientists or other clinician-scientists, or related careers aimed at improving global cardiovascular health.
Electronic submission to Grants@Heart: https://professional.heart.org/professional/ResearchPrograms/ApplicationInformation/UCM_443316_Predoctoral-Fellowship.jsp

8. **American Society of Hematology: ASH Physician-Scientist Career Development Award**
The Physician-Scientist Career Development Award provides an opportunity for first-, second-, and third-year medical students to gain experience in hematology research under the mentorship of an ASH member and to learn more about the specialty.
For further information see: http://www.hematology.org/Awards/Medical-Student/400.aspx.

9. **Global Health Equity Scholars Fellowship**
The Global Health Equity Scholars Program is an initiative between Yale University, University of California at Berkeley, and Stanford and Florida International Universities, to support one year research training of post and predoctoral fellows at 12 partnering international institutions. The overall goal of the program, sponsored by the Fogarty International Center and affiliated NIH institutes (R25 TW009338), is to generate a new and young cadre of global health researchers, educators, and professionals who will be prepared to address the new challenges in global health.
For further information see: https://publichealth.yale.edu/research/training/ghes/index.aspx

10. **Gates/Cambridge**
Supports 1-3 years of graduate-level research or study in any degree program at Cambridge.
Eligibility: up to 30 years old; no citizenship restrictions; separate competitions for US and non-US applicants.
For further information, see: http://www.gatescambridge.org/about

11. **Fulbright**
Supports one year of graduate-level research, whether as part of formal degree programs or individual research projects in many of over 140 host countries.
Eligibility: US citizens.
For further information see: https://yale.communityforce.com/Funds/Search.aspx

12. **Luce**
Supports one year internships, including medical research, in Asia for applicants with little or no experience in Asia.
Eligibility: US citizens; not older than 29 years of age.
For further information, see http://studentgrants.yale.edu; www.hluce.org/lsprogram.aspx

13. **NIH-Marshall**
Supports 2-3 years of graduate-level research or study in any degree program in the UK. Features
special partnerships with Imperial College, London, and US National Institutes of Health, among others. Eligibility: US citizens; up until three years after graduating from their undergraduate institution. For further information, see: http://studentgrants.yale.edu; www.marshallscholarship.org/

14. Rhodes
Supports 1-3 years of graduate-level research or study in any degree program at Oxford. Eligibility: restricted to citizens of the US, selected British Commonwealth countries, and Germany. US applicants may be no older than 24 years of age. For further information, see: http://studentgrants.yale.edu; www.rhodeshouse.ox.ac.uk
IMPORTANT:

• Students interested in one-year medical student research fellowships are encouraged to apply for more than one source of funding. Our office will discuss multiple funding choices with students so that they will have an excellent chance of receiving a one year medical student research fellowship. Our goal is to have every deserving Yale medical student receive funding.

• Additional information on all fellowships is available through the Office of Student Research, ESH 310. Please note: If you are interested in applying to any of the one year medical student research fellowships, please contact Donna Carranzo at donna.carranzo@yale.edu as there may be additional forms that are required to be completed through Yale's Office of Sponsored Projects before the fellowship application can be submitted to the funding agency.

ALL APPLICATIONS REQUIRE A PROGRESS LETTER FROM THE ADVISOR. (MSPE: MEDICAL STUDENT PERFORMANCE EVALUATION FORMERLY CALLED THE DEAN’S LETTER). STUDENTS SHOULD CONTACT DEANNA CALVERT IN THE OFFICE OF STUDENT AFFAIRS at deanna.calvert@yale.edu 4 weeks prior to the application deadline specified.
Sarah Amalraj  
Class of 2020  
Sarah was a Howard Hughes Medical Institute (HHMI) Medical Research Fellow during the 2017-2018 academic year and has a second year of HHMI funding for the 2018-2019 academic year.  
Project title: **Myelin regulatory factor (MYRF) plays an unexpected role in left-right patterning and cardiac development: A patient based discovery.**  
Yale mentor: Dr. Mustafa Khokha, Department of Pediatrics.  Please contact Sarah at sarah.amalraj@yale.edu

Prince Antwi  
Class of 2019  
Prince was a National Institutes of Health- Clinical Translational Science Award Multidisciplinary Pre-Doctoral Training Program in Translational Research (NIH CTSA TL1) Fellow during the 2017-2018 academic year.  
Project title: **Identifying EEG patterns that predict suitability to drive in patients with subclinical generalized spike-wave discharges.**  
Yale mentor: Dr. Hal Blumenfeld, Department of Neurology.  Please contact Prince at prince.antwi@yale.edu

Whitney Fu  
Class of 2019  
Whitney was a James G. Hirsch, M.D., Yale Endowed Medical Student Research Fellow for the 2017-2018 academic year.  
Project title: **Ischemia-reperfusion injury induces complement dependent activation of peripheral T helper cells.**  
Yale mentor: Dr. Dan Jane-Wit, Department of Internal Medicine.  Please contact Whitney at whitney.fu@yale.edu

Peter Hetzler  
Class of 2019  
Peter was a Yale School of Medicine Medical Student Fellow for the 2017-2018 academic year.  
Project title: **A national perspective of physicians' attitudes toward the legalization and implementation of physician-assisted suicide.**  
Yale mentor: Dr. Lydia Dugdale, Department of Internal Medicine.  Please contact Peter at peter.hetzler@yale.edu

Joongyu Song  
Class of 2019  
Joongyu was a National Institutes of Health-National Institute of Diabetes and Digestive and Kidney Diseases Fellow for the 2017-2018 academic year.  
Project title: **Metabolic Inflexibility Revisited: Muscle Substrate Oxidation is Dissociated from Muscle Insulin Resistance.**  
Yale mentor: Dr. Gerald I. Shulman, Department of Internal Medicine.  Please contact Joongyu at joongyu.song@yale.edu
Mike Wang  
Class of 2020  
Mike was a Yale/Leon Rosenberg, M.D., Medical Student Research Fund in Genetics and Jane Danowski Weiss Family Foundation Fellow during the 2017-2018 academic year and has a second year of funding as a William U. Gardner Memorial Student Research Fellow for the 2018-2019 academic year. Project title: The role of macrophage arginase in lactate-mediated immune suppression of the tumor microenvironment. Yale mentor: Dr. Oscar Colegio, Department of Dermatology. Please contact Mike at mike.wang@yale.edu

Nick Wilcox  
Class of 2019  
Nick was a Howard Hughes Medical Institute Medical Research Fellow during the 2017-2018 academic year. Project title: Distinct hypoxia-induced translational profiles of embryonic- and adult-derived macrophages; implications in cardiac injury and repair responses to ischemia. Yale mentor: Dr. Jeffrey Bender, Department of Internal Medicine. Please contact Nick at Nicholas.wilcox@yale.edu
Common Questions and Answers

Q. If I am interested in Clinical Research, which programs should I apply to?
A. You should apply to either the YCCI Multi-Disciplinary Pre-Doctoral Training Program in Translational Research, American Heart Association, Sarnoff, American Society of Hematology.

Q. If I am interested in Laboratory Research, which programs should I apply to?
A. NIH Medical Research Scholars Program, Sarnoff Fellowship, Yale Endowed.

Q. Which program should I apply for if I want to do research at NIH in Bethesda?
A. Medical students wishing to engage in research at NIH in Bethesda should apply to the NIH Medical Research Scholars Program.

Q. What are the essential elements for obtaining a competitive award?
A. 1. Quality of the research environment, including record of the mentor.
   2. Quality of the proposed project
   3. The initiative and interest of the student
   4. Overall quality of the application

Q. Shall I apply for more than one source of funding?
A. YES! We encourage everyone to apply for more than one source of funding. All applicants should plan to apply to the NIH-NIDDK Program at Yale, Sarnoff, American Heart Association, and use other means of support as a backup.

NOTE: A MEDICAL STUDENT PERFORMANCE EVALUATION FORMERLY CALLED THE DEAN'S LETTER IS REQUIRED FOR ALL APPLICATIONS.
<table>
<thead>
<tr>
<th>Award</th>
<th>Location of Research</th>
<th>Number of Awards</th>
<th>Stipend</th>
<th>Apply To</th>
<th>Application Due OSR</th>
<th>Institution Deadline</th>
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<tbody>
<tr>
<td>Yale Center for Clinical Investigation (YCCI) Multi-Disciplinary Pre-Doctoral Training Program in Translational Research</td>
<td>Yale</td>
<td>Up to 3</td>
<td>$24,324</td>
<td>Yale Center for Clinical Investigation</td>
<td>N/A</td>
<td>Tentative 04/05/2019</td>
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<td>Samoff</td>
<td>Other</td>
<td>UL</td>
<td>$32,000</td>
<td>Dr. Lauren Cohn</td>
<td>N/A</td>
<td>01/10/2019</td>
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<td>Yale Endowed: Anonymous, Danowski, Gardner, Gershon, Hirsch, Rosenberg</td>
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<td>$24,324</td>
<td>OSR</td>
<td>04/05/2019</td>
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<td>$37,000</td>
<td>NIH on-line</td>
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<td>01/11/2019</td>
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<td>NIH-NIDDK Medical Student Research Training Fellowship</td>
<td>Yale</td>
<td>1 per T32 grant at Yale</td>
<td>$24,324</td>
<td>OSR</td>
<td>12/10/2018 &amp; 03/08/2019</td>
<td>01/15/2019 &amp; 04/16/2019</td>
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<td>American Heart Association Founders Affiliate Medical Student Research Program</td>
<td>Yale</td>
<td>UL</td>
<td>$22,000</td>
<td>OSR &amp; American Heart Association</td>
<td>11/16/2018</td>
<td>12/03/2018</td>
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<td>American Heart Association Predoctoral Fellowship</td>
<td>Yale</td>
<td>UL</td>
<td>$24,324</td>
<td>OSR &amp; American Heart Association via Grants@Heart</td>
<td>4 weeks before AHA Deadline</td>
<td>Tentative 07/2019</td>
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<td>American Society of Hematology: ASH Physician-Scientist Career Development Award</td>
<td>Yale</td>
<td>UL</td>
<td>$32,000</td>
<td>OSR &amp; American Society of Hematology</td>
<td>12/10/2018</td>
<td>1/15/2019</td>
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<td>Global Health Equity Scholars Fellowship</td>
<td>International</td>
<td>UL</td>
<td>$24,324</td>
<td>Apply at Yale through <a href="http://ghes.berkeley.edu/contact/">http://ghes.berkeley.edu/contact/</a></td>
<td>N/A</td>
<td>11/15/2018</td>
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<td>Fulbright</td>
<td>International</td>
<td>UL</td>
<td></td>
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<td>For further information contact Robert Harper-Mangels</td>
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<td>Gates, Cambridge, NIH-Marshall, Rhodes</td>
<td>International</td>
<td>UL</td>
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<td>For further information contact the Yale Center for International and Professional Experience</td>
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