Conducting research while in medical school 2022-2023*

Fern Tsien, Ph.D.

Assistant Dean for Medical Student Research

Associate Professor Department of Genetics

School of Medicine, LSUHSC-New Orleans



Summer research opportunities between L1-L2

- LSUHSC Summer Research Internship Program
 - Paid internship for 8 weeks https://www.medschool.lsuhsc.edu/genetics/ summer_med_students.aspx
- Research Elective MCLIN198 (Summer)
 - Unpaid, more flexile hours, receive course credit
- Paid opportunities outside LSUHSC
 (e. g., NIH, Diversity in Clinical Trials
 Program funded by Bristol Myers Squibb)



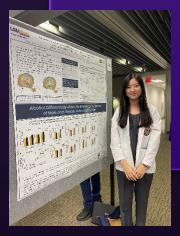
Experimental Design & Analysis

Basic principles of experimental design and biostatistics for first-year medical students

Elective Course
1 Hour – Graded Credit

Data Collection & Organization
Data Analysis & Basic Statistics
Present & Interpret Graphical Data
Strong Experimental Design
Preclinical & Clinical Research

LSU Health NEW ORLEANS Become Equipped with Essential Skills in Preparation for Competitive Research Internships & Residencies



Stephanie Lee – L2 NIH T35 Fellow

NIH T35 Summer Alcohol Research Internship (2023)

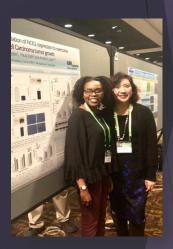
Recommended for Future Physician-Scientists

PHYSIO 110 – Spring 2023 Scott Edwards, PhD Physiology - MEB 7208 sedwa5@lsuhsc.edu

Text: 619-241-3380

L2-L4 Continuing your research - at LSUHSC

- Research electives
 - ► Registration for MCLIN per each semester of research
- ▶ Honors program
 - ► Apply in August for September acceptance
 - ▶ Present yearly progress report
 - ► Yearly presentation at poster session
 - ▶ Presentation at national conferences
 - ▶ Publication submission by graduation
 - ► Receive Honors in Research recognition during graduation and in transcript
- Longitudinal selective
 - ▶ Contact Dr. Catherine Hebert



Honors Program student Dr. Charity Sylvester at the American Association of Cancer Research (AACR) National Conference



Continuing your research L2-L4

Following the research many students:

- Maintain contact with mentors, laboratory personnel, and other interns
- Receive letters of references/recommendations
- ▶ Publish in scientific or medical journals
- Present at national conferences



L1/L2 Summer programs outside LSUHSC (part 1)*

- https://diversityinclinicaltrials.org/application-information-1#efc2ee96-11c3-42c4-982d-7068ba983e3e
- ► https://www.afar.org/grants/mstar
- ► https://vascular.org/svs-foundation/programs-and-awards/student-research-fellowship-0
- https://www.hematology.org/awards/medical-student/honors-award
- https://www.hematology.org/awards/medical-student/minoritymedical-student-award-program
- https://www.alphaomegaalpha.org/programs/carolyn-l-kuckeinstudent-research-fellowship/
- https://www.nref.org/en/Research/Medical-Student-Fellowships
- https://www.abta.org/medical-student-summer-fellowships/
- ► https://www.mdanderson.org/education-training/degrees-programs/summer-research-programs/first-year-medical-student-program.html

^{*} Even if funded by outside sources, some research projects can be done at LSUHSC. Refer to their websites for details.

L1/L2 Summer programs outside LSUHSC (part 2)*

- https://csnsonline.org/fellowship_student.php
- https://www.nyam.org/fellows-grants/grants-awards/student-grants/david-erogers-student-fellowship-award/
- https://www.endocrine.org/awards/research-experiences-for-graduate-and-medical-students
- ► <u>file:///C:/Users/fmille/Downloads/FAER-MSARF-Summer-Program-Information 2023.pdf</u>
- https://nmfonline.org/scholarships-programs/programs-portfolio-overview/
- https://case.edu/medicine/education/undergraduateeducation/undergraduate-summer-research/heart-lung-and-blood-hlb-summerresearch-program
- ► https://www.stjude.org/education-training/predoctoral-training/internships/pediatric-oncology-education-poe-program.html#f0a9d1297ad478f0999c1db9c4e7d4b53c72ee36d2726316aebea34210665d79=2
- * Even if funded by outside sources, some research projects can be done at LSUHSC. Refer to their websites for details.

L1/L2 Summer programs outside LSUHSC (part 3)*

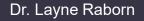
- https://www.gold-foundation.org/programs/student-summerfellowships/how-to-apply/
- https://www.astro.org/Patient-Care-and-Research/Research/Funding-Opportunities/ASTRO-Medical-Student-Fellowship-Award
- https://www.childrensmercy.org/departments-andclinics/orthopedics/summer-scholarship-program/
- https://www.medschool.umaryland.edu/sport/
- https://www.vumc.org/diabetescenter/srtp
- https://www.feinberg.northwestern.edu/sites/pmr/education/medicalstudents/summer-externship.html
- https://siteman.wustl.edu/research/training/opportunities/graduate/programs/summer/
- https://crtc.wustl.edu/programs/predoctoral/tl1predoc/summer-visitingprogram-scholarship/
- https://winnawards.smapply.io/

^{*} Even if funded by outside sources, some research projects can be done at LSUHSC. Refer to their websites for details.

L2/L3 or L3/L4 Year-long programs outside LSUHSC

- ▶ NIH Medical Scholars Program
 - ► https://clinicalcenter.nih.gov/training/mrsp/
 - ► Annual stipend \$41,000







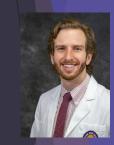
Victoria Huynh

- ► Sarnoff Cardiovascular Research Fellowship
 - ▶ https://www.sarnofffoundation.org/page/Fellowship_Info
 - ▶ Annual stipend \$35,000, up to \$8,000 for travel



Ben Bonner

- ► Center for Clinical and Translational Science (CCTS)
 - ▶ https://www.uab.edu/ccts/training-academy/research-fellowships/tl1
 - ► Annual stipend \$25,836 plus \$1,500 in travel



Jake Dorion

- Diversity in Research Program, National Medical Fellowships and scholarships
 - https://nmfonline.org/scholarships-programs/programs-portfolio-overview/
- ▶ Physician Scientist Support Foundation (PSSF) Medical Scholars Research Fellowship; only one per institution, needs to be nominated by the dean
 - https://www.thepssf.org/msrf/
 - ▶ Annual stipend \$42,000 plus \$8,000 for health insurance and travel



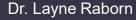
NIH Medical Scholars Program

- ▶ https://clinicalcenter.nih.gov/training/mrsp/
- ► Annual stipend \$41,000
- ▶ Dr. Layne Raborn (2020-2021 participant)
- ► Contact info: laynenr123@gmail.com
- ► Victoria Huynh (2021-2022 participant)
- ► Contact info: vhuyn2@lsuhsc.edu











Victoria Huynh



Sarnoff Cardiovascular Research Fellowship

2021-22 Sarnoff Fellows



Benjamin Bonner

Medical School: Louisiana State University Health Sciences, New Orleans

Sponsor: Kurt Varner, MD

Host Institution: Massachusetts General Hospital

Preceptor: Christopher Nguyen, MD

- Annual stipend \$35,000, up to \$8,000 for travel https://www.sarnofffoundation.org/page/Fellowship_Info
- ► Current L3 Ben Bonner (2021-2022 participant)
- ► Contact info: bbonn4@lsuhsc.edu

Center for Clinical and Translational Science (CCTS)

- https://www.uab.edu/ccts/trainingacademy/research-fellowships/tl1
- ► Deadline is every November.
- ► Annual stipend \$25,836 plus \$1,500 in travel
- ► Jake Dorion (2022-2023 participant)
- ▶Contact info: jdoir4@lsuhsc.edu



Jake Doiron
LSU Health Sciences Center
School of Medicine
Pharmacology and
Experimental Therapeutics

Diversity in Research Program, National Medical Fellowships and scholarships

- ► https://nmfonline.org/scholarships- programs/programs-portfolio-overview/
- Scholarship, Service, and Research Opportunities deadlines are later in the spring semester. Please be on the lookout for deadlines.
- https://nmfonline.org/scholarships-programs/service-learning-programs/farediversity-scholar-program/
- https://nmfonline.org/scholarships-programs/service-learning-programs/jj-nmf-aim-scholarship
- https://nmfonline.org/scholarships-programs/service-learning-programs/pclp/

Physician Scientist Support Foundation (PSSF) Medical Scholars Research Fellowship

- ▶ One year program.
- ▶ Research can be in LSUHSC or outside institution.
- ▶ One applicant per institution.
- Needs to be nominated by the dean.
- ► Let Dr. Tsien and Dr. Lazarus if you are interested in applying to this program <u>ASAP</u> so we can nominate you.
 - ► https://www.thepssf.org/msrf/
 - ► Annual stipend \$42,000 plus \$8,000 for health insurance and travel

Min Lee, Program Officer Medical Scholars Research Fellowship Physician-Scientist Support Foundation

P: 703-409-0884

W: www.thepssf.org E: MinLee@thepssf.org

Additional L2/L3 or L3/L4 Year-long programs outside LSUHSC

- https://crtc.wustl.edu/programs/predoctoral/tl1predoc/
- https://www.niehs.nih.gov/careers/research/med-students/index.cfm
- https://www.sarnofffoundation.org/page/Fellowship_Info
- ► https://clinicalcenter.nih.gov/training/mrsp
- ► https://www.hematology.org/awards/medical-student/physician-scientist-award
- ► https://vascular.org/trainees-students/training/research-opportunities/william-h-pearce-md-vascular-surgery-student
- https://nmfonline.org/scholarships-programs/programs-portfolio-overview/
- ► https://www.chop.edu/pages/benjamin-fox-orthopaedic-research-scholar-award
- https://www.hopkinsmedicine.org/orthopaedicsurgery/education/fellowships/poggi-peds-fellowship.html
- https://www.rpbusa.org/rpb/grants-and-research/grants/grants-forindividuals/medical-student-fellowship/
- https://oto.wustl.edu/education/medical-students/t32-predoctoral-training-program/
- https://keck.usc.edu/otolaryngology/training-education/medical-studenteducation/clinician-scientist-training-program-for-medical-students

Questions?

- ▶ Dr. Fern Tsien fmille@lsuhsc.edu
- ▶ Dr. Cathy Lazarus claza1@lsuhsc.edu