

Research Projects for Medical Students

Date posted: September 2022

1. The UNC-Chapel Hill Medical Students Training in Aging Research (MSTAR) summer program is now accepting applications for Summer 2023. The UNC-CH MSTAR program provides medical students with an enriching experience in aging-related research and geriatrics. As a nationally-recognized training center for aging research, our program has an outstanding track record, with many of our students publishing first author manuscripts and winning awards at national meetings. With a network of more than 70 research mentors across the Department of Medicine and the schools of the health sciences, we are able to offer a diverse array of potential research projects for students. Potential projects may include research conducted specifically in older populations, as well as research on health-related conditions that intersect with aging (e.g., cardiology, oncology, ophthalmology, etc.).

An important priority for our program is to diversify the pipeline of medical students and trainees committed to advancing the fields of aging and geriatrics research. Representation of medical students and trainees from underrepresented backgrounds is key in addressing health disparities in the diverse population of older adults seen in our healthcare system. Therefore, students who are members of underrepresented ethnic or racial groups, students with disabilities, and students from disadvantaged backgrounds whose background and experience are likely to diversify the research or medical question being addressed are encouraged to apply.

All first-year medical or osteopathic students in good academic standing are eligible to apply. Students on temporary or student visas are not eligible, per NIH requirements.

Applications will be due Sunday, January 22, 2023 by 11:59 pm EST. If interested in applying, please reach out to one of our program directors or program coordinator:

- Ellen Roberts, PhD, Co-Associate Director (ellen_roberts@med.unc.edu)
- Joshua Niznik, PharmD, PhD, Co-Associate Director (jdniznik@email.unc.edu)
- Kristen Ruck, Program Coordinator (MSTAR@med.unc.edu)

2. Research Opportunities for Medical Students at U.S. Schools

OVERVIEW OF THE PROGRAM: The PSSF Medical Scholars Research Fellowship (MSRF) provides research opportunities and mentoring to students who aspire to become physician-scientists and are dedicated to making fundamental discoveries that improve health. The MSRF is a key component of PSSF's mission to revitalize, grow and support the career pathway for physician-scientists. The fellowship supports one year of mentored, rigorous research training in fundamental biomedical research. All applicants **must be nominated by the medical school dean**. The medical school dean can **nominate only one applicant** in any competition year.

STIPEND AND ALLOWANCES: For the 2023 fellowship year, the total amount awarded to each Medical Student Fellow is \$50,000. The annual stipend is \$42,000. In addition to the stipend, the award includes an allowance of \$8,000 for health insurance and travel expenses.

ELIGIBILITY: The MSRF is open to United States citizens and U.S. permanent residents only. Prior research experience is not required. Single-degree medical students interested in a dual career in research and patient care are eligible. Members of minority groups underrepresented in medicine and science are particularly encouraged to apply.

APPLICATIONS: Applicants are responsible for selecting a research mentor at any academic or nonprofit research institution in the United States, except for a government laboratory. Research proposal preparation is a key component of the application process. The application deadline is January 11, 2023.

Additional information can be found on our website below.

[MSRF | The Physician-Scientist Support Foundation \(thepps.org\)](https://thepps.org)

WEBINAR: We will host two informational webinars about the MSRF program and applications. If you want to follow this webinar, please **RSVP** by contacting us at MinLee@thepps.org.

Date posted: May 2022

3. Early lactation outcomes among patients with chronic kidney disease: a retrospective cohort study

Co-Principal Investigators: Nandakishor Kapa, MD (Nephrology) and Anna Sadovnikova, PhD, IBCLC (Lactation)

Background:

Breastfeeding is protective against maternal heart disease, hypertension, and diabetes. Given that heart disease, hypertension, and diabetes all negatively impact kidney health, it is imperative that all pregnant women who desire to breastfeed, including those with underlying kidney disease, receive lactation support in the peripartum period.

Existing literature on pregnant patients with chronic kidney disease (CKD) focuses exclusively on pregnancy-associated maternal and neonatal outcomes such as maternal morbidity, infant birth weight, infant's gestational age at birth, and subsequent maternal-infant hospitalizations. Breastfeeding has been actively discouraged in the CKD patient population primarily due to a perceived incompatibility of maternal medications with milk production or infant health. As a result, there are no data on lactation outcomes in patients with CKD. Yet, most maternal medications commonly used for CKD management are not contraindicated during lactation.

There is a need to characterize the early lactation outcomes of the patient population at the UC Davis Health System that presents during pregnancy with CKD so that we can better understand the barriers to lactation that may exist in this population.

Objectives:

The primary objective is to determine the early lactation outcomes of patients with CKD during their birth hospitalization at UC Davis. Secondary objectives include characterizing the population of pregnant women with CKD who deliver at UC Davis and describing the infant feeding experiences in this population during their birth hospitalization.

Medical student's role and responsibilities:

- Pediatric and maternal chart review
- Drafting and review of manuscript, with opportunity for co-authorship
- Gain appreciation for the multidisciplinary care coordination from internal medicine, nephrology, OBGYN, pediatrics, and lactation that is required for the maternal-infant dyad during the peripartum period
- Weekly check-in meeting with PIs

