

Pathway, Diversity, and Training Programs 2022

At GW SMHS and CNH (please send updates/corrections to Dr. Alison Hall, akhall@gwu.edu)

Pre-College

Health Careers Opportunity Program (HCOP) Led by Dr. Reamer Bushardt. Health sciences-focused high school academy through public-private partnership at TC Williams High School & partnership with Alexandria city public schools. Students in the academy are exposed to health care topics such as medicine and surgery, emergency health services, medical laboratory sciences, biomedical informatics, rehabilitative sciences, and pharmacy. 25 students per year. Health Resources and Services Administration grant.

The DC Health and Academic Prep Program (DC HAPP), led by Taylor Smith. Pre-college program for underrepresented, rising high school seniors (currently enrolled juniors) with an interest in a medical education and career. During a four-week summer experience and clinical internships during the academic year, DC HAPP scholars learn about potential healthcare professions, and are mentored through the college application process. The goal is to reduce health disparities and increase workforce equity by inspiring and preparing students from backgrounds underrepresented in medicine (URM) to become health professionals.

- Four-week summer experience and 14-week fall clinical shadowing experience for 16 rising high school seniors who attend public or public charter schools in the DC metropolitan area.
- DC HAPP scholars gain exposure to various healthcare professions, learn hands-on medical skills, identify and prepare a public health project (which is published through Himmelfarb Library), and are assisted in the college application process.
- DC HAPP is classified as special group with the GW Undergraduate Admissions office and scholars are provided fee waivers to apply for admission.

Year	Female	Male	1 st Gen College	Socio-economically disadvantaged	Attends GW Undergrad
2019	11	5	31%	38%	5
2020	12	4	25%	31%	1
2021	12	4	27%	33%	Cohort graduates in 2022

The GW SMHS Upward Bound Program, led by Janeale Gottlieb-George, serves grades 9-12 from partnered public and private charter schools in Wards 5, 6 and 7 in the District of Columbia.

The program goal is to increase the rate at which students complete secondary education (high school) and enroll in and graduate from colleges and universities. [Est. 1999]

- Serves 60 DC public and public charter high school students who meet low-income eligibility standards and who are first-generation college bound (neither parent holds a bachelor's degree) from Wards 7 and 8.
- Provides year-round weekly supplemental instruction in Math, Science, English and Foreign Language and offers out-of-state college tours.
- Has a special mentorship relationship with the GW MITM department.
- Upward Bound students have been selected as semi-finalists, finalists and awardees of Posse Foundation and QuestBridge national full-tuition college scholarships.
- In 2020 and 2021:
 - o 100% high school graduation rate (DC Public School graduation rate: 70.9%)

o 96% enrolled in post-secondary education (college or university).

Mentored Experience To Expand Opportunities in Research version High School led by Dr. Naomi Luban provides high school students from underrepresented groups the opportunity to participate in an experiential research project at Children's National Medical Center and its Children's Research Institute. This six-week summer experience is designed to encourage students to take the required steps toward careers in STEM and biomedical research fields. This program is supported by NIH R25 HD090722-02.

Colaco Scholar Program led by Dr. Naomi Luban. Philanthropically supported program takes 1 to 2 high school students from area high schools with specific interest in laboratory medicine and chemistry. Most students are recruited from private high schools in DC and Thomas Jefferson High in Virginia per the donor's requirements.

Discover Science with Dr. Bear Led by Dr. Naomi Luban. This STEAM focused program will bring preventative health, science, mathematics and robotics to children and families in out of school time using hands-on inquiry-based art and science activities in the DC Public Library System (available at seven DCPL branches with afterschool and weekend activities). The Dr. Bear's Cubs Summer Science experience runs from June 22-26, 2020 and will accept between 20-25 students entering grades 3 through 5. R25 GM129225-02.

College

Summer Program Advancing Research on Cancer (GW SPARC) led by Drs. Alison Hall and Edward Seto. GW-SPARC engages about 10 undergraduates from underrepresented backgrounds in a 10-week mentored summer research experience at the GW Cancer Center. The program fosters active engagement in cutting-edge research, exposure to contemporary cancer research techniques, understanding of health disparities and impact of cancer in different communities, and preparation for research careers.

Harlan Undergraduate Research Fellowship. Wilbur V. Harlan Research Fellowship program supports GW undergraduate biology majors with stipend of \$5,000 to support their independent research program in the laboratory of a member of the Department of Biological Sciences.

Luther Rice Undergraduate Research Fellowship supports GW undergraduates in discovery- and inquiry-based education throughout the undergraduate experience.

CRI Summer Student Program Informal program of medical student, doctoral, college, and some high school students linked to a CRI investigator, led by Dr Luban and Ms. Hildebrandt. Provides some stipends, a summer lecture program that covers all CTS competencies, Redcap and CITI training and allows students to shadow, attend grand rounds, clinical rounds and become a member of a research team. Summer poster session and awards. About 110 students. Contact Kersten Hildebrandt.

Graduate/ Medical Student

MD Pre-Matriculation Program, led by Dr. Grace Henry, is a four-week program for about a dozen incoming medical students who are invited by the Committee on Admissions to develop skills needed to successfully navigate through the medical school curriculum.

Mentored Experience To Expand Opportunities in Research (METEOR) program led by Dr. Hall offers a competitive fellowship for medical students from groups underrepresented in medicine who are interested in an academic research career to matriculate into GW's M.D. program. Up to 5 GW medical students appointed each year.

T32 HIV PeCoT-TP. Led by Drs. Maggirwar and Bosque. The George Washington University (GW) HIV Persistence, Comorbidities and Treatment Training Program (HIVPeCoT-TP) offers research opportunities and mentorship support to equip the next generation of biomedical researchers with the knowledge, analytical tools, and critical thinking skills to integrate multiple fields of biology in pursuit of HIV discovery.

The Clinical and Translational Research Scholarly Concentration, led by Drs. Alison Hall and Naomi Luban engages some 50 medical students each year in a longitudinal, in-depth research opportunity to form new mentors, explore new research areas, reinforce research skills and build new research competencies.

Gill and Health Services Research Fellowships. Competitive summer fellowship support for GW medical students to engage in research projects.

Diversity F31 predoctoral fellowships. IBS students have won several diversity F31 fellowships to support their dissertation research and mentorship.

Black Men in Medicine GW Chapter. Led by Dean Lorenzo Norris (MD), Dr. Howard Straker (PA), Dr. Jordan Dow (EMed Resident), Dr. Raymond Pla (Anesthesiology).

- Started in January 2017 by ODI office
- Meets first Saturday of each month
- Students include MS1-MS4, PA, and Virginia Commonwealth University (VCU) Black Men in Medicine Undergraduate Chapter
- March Topic: Preparing for Transitions: Classroom to Clinic, Clinic to Residency, Residency to Practice
- Upcoming topics:
 - o Dealing with microaggressions in the class and in the clinic
 - o Overcoming negative perceptions of Black males
 - o Overriding feelings of Imposter Syndrome

Postdoc/ Resident/Fellow

T32 Cancer Biology. Led by Drs. Seto and Lee, NIH funded program offers mentored research training opportunities in the GW Cancer Center. The CBTP is designed to equip the next generation of cancer biologists and clinician scientists with the knowledge, analytical tools, and critical thinking skills to integrate multiple fields of biology in pursuit of cancer research discoveries. 3 postdocs, 1+1 undergrad.

Building Up a Diverse Workforce for Biomedical Research, GW/CNH site led by Janice Blanchard. 9 postdocs and fellows participated in monthly sessions led by a near-peer, courses on grant writing and manuscript writing, mentoring, and networking events. Evaluation underway. We are working to institutionalize the "operations manual"

Children's National Stimulating Access to Research in Residency (CNStARR) Program Led by Drs. Teach and Massaro, Freishtat, to recruit and retain outstanding pediatric residents with demonstrated interest in pursuing research careers in NHLBI: sickle cell disease, congenital heart disease, and pediatric lung disease; NIAID HIV and immunology. 80% support for six

pediatric residents among two grants. Lisa Sheehy, Admin. NIH R38 AI140298-01 and NIH R38 HL143585-01.

Research, Education, and Advocacy in Child Healthcare (REACH) Informal Reach Resident Research Program Internal funding at CNHS for about 60 residents per year

Pediatric Resident Research Track. Internally supported track via ERAS match allowing up to 9 months of dedicated research time during residency training. Contacts Drs. An Massaro and Dewesh Agrawal.

T32 Primary Care Research. Led by Drs. Bushardt and Mallinson. The goal of the George Washington University (GW) Primary Care Research Training Program (P-CART) is to develop researchers who are prepared to generate, test, and disseminate primary care-oriented interventions that aim to improve health and health equity. 3 fellows.

T32 DC-IDDRC. District of Columbia T32 on Neurodevelopmental Disabilities Research, led by Dr. Tarik Haydar

T32 Clinical Pediatric Research Training for the Fetal-Neonatal Brain, led by Dr. Limperopoulos

T32 PHTMMRT. Rationale for the Pediatric Hematology and Transfusion Medicine Multidisciplinary Research Training Award at Children's National, led by Dr. Luban.

Junior Faculty

KL2 Mentored Career Development Core Scholars Led by Drs. Naomi Luban and Catherine Bollard. Select and train about 2 scholars per year, support from internal sources as well as Clinical and Translational Science Institute-CN KL2. NIH TR001877-03.

Pediatric Hematology and Transfusion Medicine Multidisciplinary Research Training at CNHS, led by Drs. Naomi Luban and Catherine Bollard. Focused on preparing trainees from diverse backgrounds for academic leadership and independently funded research careers. Each trainee in the program completes a Master's in Clinical and Translational Science (MsCTR) at the George Washington University (GWU) School of Medicine and Health Sciences or equivalent, and will devise, implement, and complete a research project under the joint oversight of a multidisciplinary mentorship team at the completion of the two- to three-year program T32 HL110841-06.

K12 Child Health Research Career Development Award at Children's National, led by Dr. Teach and Dr. Freishtat. Accepts 1 to 2 junior faculty members in pediatrics each year. K12 HD001399

Building the Next Generation of Academic Physicians SMHS faculty from both GW and CN participate in this organization committed to recruit women and under-represented minorities into careers in academic medicine.

K Special Interest Group Seminar Series. Quarterly career development seminar/workshop series focused on various aspects of career development including grant preparation, mentoring, responsible conduct of research and invited speakers.

Diversity Supplements to NIH Grants. We have a number of diversity supplements for undergraduates, graduate students, and diverse faculty.