2025

NEWSLETTER FOR

ANNUAL R38 MGH Diseases of Aging Pathway Via ETTER FOR Stimulating Access to Research in Residency **Program (StARR)**

Meet Our Leadership

PROGRAM DIRECTORS

- · Brad Hyman, MD, PhD
- Christine Ritchie, MD, MSPH
- Jay Vyas, MD, PhD







INTERNAL STEERING COMMITTEE

- Sherri-Ann Burnett-Bowie, MD
- Andrea Foulkes, ScD
- Bruce Yankner, MD, PhD







EXTERNAL ADVISORY BOARD

- Ana Maria Cuervo, MD, PhD
- Stephen Kritchevsky, PhD
- Jean Kutner, MD, MSPH







PROGRAM MANAGER

Hannah Puttre. PhD





this issue

Overview of Program

Meet Our Trainees

Announcements

Revitalizing the Physician-Scientist Pipeline.

At the beginning of 2023, the National Institute of Aging (NIA) awarded us with an R38 to start our MGH Diseases of Aging Pathway (DAP) StARR Program. The MGH DAP StARR leadership has selected two highly motivated residents from the Department of Medicine to support during the current 2025-2026 research year, which started in July.

MENTORS IN OUR PROGRAM

Participating research preceptors were recruited based on their scientific work, funding history, proven track-record of mentorship, scientific integrity, and span a variety of expertise relevant to the mission of the NIA.

Mentors span the Departments of Medicine, Neurology, Radiology, Psychiatry, Anesthesia, and the Hebrew Senior Life Institute of Aging

Residents are encouraged to form mentoring committees to facilitate the career development.

Interested in being a mentor? Reach out to our Program Manager, Hannah Puttre to learn more!

PROGRAM OVERVIEW

be physician-scientists who can advance medical science in a broad range of areas from basic science to clinical investigations. Internal medical and neurology residents apply for the R38 program by December 12th and are selected by late January. Participants receive salary support (in agreement with the MGB PGY payscale) and \$11,500 for coursework, professional development opportunities, travel, and

The primary goal of the program is to train residents to

The program includes the following:

other costs (e.g., computers, software, books).

Before Starting:

Creation of Individual Development Plan (IDP)

During Program:

- 80% effort toward research (20% clinical)
- Monthly programmatic curriculum
- Responsible Conduct of Research training
- Weekly meetings with mentors
- Regular meetings with leadership
- Publication preparation
- Presentations at conferences

After Program:

- Prepare publications
- Presentations at conferences
- **Annual Survey**

Example Curriculum

MENTORING

We bring in early career and senior investigators to share the importance of mentoring at various career stages.

TEAM SCIENCE

Collaborating as a team is a large part of science. Thus, we bring in physician-scientists to discuss the ins and outs of team science.

SCIENCE COMMUNICATIONS

Science communication is an important skill, our fellows spend 2-3 sessions learning from experts about how to conduct literature searches and write a scientific manuscript and grant writing.

LEADERSHIP AS A PHYSICIAN-SCIENTIST

Our Program Directors discuss the role of leadership skills in academic medicine and how to build these skills throughout your career.

CONDUCTING RESEARCH AS AN MD

We bring in investigators with an MD to discuss how to they negotiated for their research efforts and what it means to them.

ADVOCATING & NEGOTIATING FOR YOUR CAREER

We bring in Departmental leaders to provide tips on how to advocate for a career in academic medicine.

WORK-IN-PROGRESS

Resident-scholars are able to present their work throughout the research year informally to their peers in similar programs.

Interested in participating in seminars?
Reach out to our Program Manager,

Meet the DAP StARR Resident Scholars for the 2025-2026 Year



Enoch Chung, MD (Department of Medicine)

- Project title: Using Single Cell RNA to Understand Aging's Effect on Immune Checkpoint Inhibitor Treatments
- Mentor: Michael Dougan, MD, PhD (Gastroenterology)
- <u>Education</u>: BS from University of Washington (2018); MD from Boston University School of Medicine (2023)
- Clinical and Research
 Interests: Computational

 Research, Gastroenterology
 and Hepatology, Machine
 Learning and AI in Genetic
 Data
- <u>Future Plans</u>: Gastroenterology Fellowship



Yushan (Sophie) Pan MD, Department of Medicine

- Project Title: Understanding how frailty and functional status determines treatment outcomes in patients with CD and UC
- Mentor: Ashwin
 Ananthakrishnan MD,
 MPH (gastroenterology)
- <u>Education</u>: BA from University of Pennsylvania (2017), MD from Weill Cornell Medical College (2022)
- <u>Clinical and Research</u>
 <u>Interests</u>: epidemiology,
 inflammatory bowel disease
- <u>Future Plans</u>: Gastroenterology fellowship

Meet the DAP StARR Alumni

2023-2024 SCHOLARS

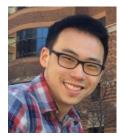
KATHERINE (KATIE) JOLIN, MD

Katie joined us from the
Department of Medicine. Her
project examined the motifbased graph analysis of
pathology spreading in the
aging brain and Alzheimer's



disease under the mentorship of Jorge Sepulcre, MD, PhD.

After completing her research year, she entered into radiology residency at Yale.



JASON C. YOU, MD, PHD

Jason joined from the Department of
Department of Neurology. His project
elucidated network dysfunction in
dementia with Lewy bodies
under the guidance of Drs. Alice Lam and
Stephen Gomperts. In July, Jason began
his epilepsy and cognitive neurology
fellowship at MGH.

2024-2025 SCHOLARS

HATEM ELLAITHY, MD

Hatem joined us from the Department of Medicine. His project explored the role of KAP-1 in PPM1D Mediated DNA damage response. He worked with Dr. Peter Miller and found KAP-1 to be an important mediator in this process. Upon completing his research year, Hatem is starting a Hematology/Oncology fellowship with the Dana Farber Cancer Institute and MGB.



DAVID ZHENG, MD

David joined us from the
Department of Medicine. He worked with Dr.
Russell Jenkins to explore the relation between
cellular aging and the efficacy of tumor-infiltrating
lymphocyte therapy for advanced melanoma. David
is completing his internal medicine residency at
MGH.

SUCCESSES FROM 2024-2025 YEAR

- Conferences and workshops attended include: American Society of Hematology Conference
- Select Publications and Presentations
 - Zheng DX, Bozym DJ, Tarantino G, Sullivan RJ, Liu D, Jenkins RW. Overcoming resistance mechanisms to melanoma immunotherapy. Am J Clin Dermatol 2025; 26(1): 77-96. PMID: 39636504
 - Hatem A. Ellaithy, MD, Valentina Nardi, MD, Harrison K. Tsai, MD, PhD, Carmen Da Silva, Peter G. Miller, MD, PhD and Gabriela S. Hobbs, MD, Clinical Features and Preliminary Investigation of PPM1D-Mutated Myeloproliferative Neoplasms, American Society of Hematology, December 2024, San Diego, CA. Presented by Hatem Ellaithy, MD
- Feedback from exit interviews:
 - Both scholars provided positive feedback about the leadership and structure
 - Scholars also provided valuable feedback on the timining of curriculum topics