



Dartmouth
GEISEL SCHOOL OF
MEDICINE

Office of
MEDICAL STUDENT
RESEARCH

Weekly Newsletter

Sep 25, 2025

The Student Research Office is actively supporting medical students throughout their research journey, serving as a central resource to help navigate onboarding requirements and connect with opportunities across departments. The office regularly shares active research projects and offers guidance on how to get involved.

Students are strongly encouraged to visit the office at **Remsen 230** for any research-related information and to begin their research journey.

Contact: Medical.Student.Research@dartmouth.edu



The Geisel School of Medicine Events Calendar

Students are encouraged to check the Events Calendar to stay updated on upcoming research talks and Grand Rounds sessions.

<https://geiselmed.dartmouth.edu/calendar/index.php?m=9&y=2025&d=22>

Upcoming Grand Rounds

Medicine Grand Rounds (Louis B. Matthews Memorial Lecture)

Date/Time: Friday, 9/26/2025 | 8:00 – 9:00 AM (light breakfast at 7:30 AM)

Topic: *A Multimedia Survey of Houston Methodist's Center for Performing Arts*

Medicine: Medical Applications and Outcomes

Dermatology Grand Rounds

Date/Time: Friday, 9/26/2025 | 12:00 – 1:00 PM

Topic: *Photodynamic Therapy: Protocol Innovations and Expanding Indications*

(Presenter: Nardin Awad, MD)

Psychiatry Grand Rounds

Date/Time: Tuesday, 9/30/2025 | 8:00 – 9:00 AM

Pediatric Grand Rounds

Date/Time: Wednesday, 10/1/2025 | 8:00 – 9:00 AM

For more info and details : <https://geiselmed.dartmouth.edu/calendar/index.php?m=9&y=2025&d=22>

Recent News

Geisel Launches Learning Collaboratives for Flourishing in Medical

Education <https://geiselmed.dartmouth.edu/news/2025/geisel-launches-learning-collaboratives-for-flourishing-in-medical-education/>

New Report Describes Rural Health Challenges and Action Steps

<https://geiselmed.dartmouth.edu/news/2025/new-report-describes-rural-health-challenges-and-action-steps/>

Medical Students Share Research Projects at Grand Rounds

<https://geiselmed.dartmouth.edu/news/2025/medical-students-share-research-projects-at-grand-rounds/>



Featured Opportunities



Internal Medicine - Quantitative Projects

Dr. Catherine Saunders :
Quantitative Projects

ICU Triggers Paper – Analyze quantitative data to study whether palliative medicine consultation trigger models for ICU patients at Dartmouth changed outcomes.

Patient Discussion Topic Preferences Paper – Analyze data on an agenda-setting intervention for palliative medicine patients and care partners to



Psychiatry Research

Faculty in **Biological Psychiatry** are advancing understanding of brain function, behavior, and mental health through innovative approaches:

Jurandir J. Dalle Lucca, PhD – organoids, cerebral systems, neurotrauma, neuroimmunology

Mehmet Dokucu, MD, PhD – therapeutic brain stimulation

identify preferred discussion topics and characteristics.

Students interested in these research opportunities are encouraged to contact Medical.Student.Research@dartmouth.edu for more information and guidance.

Wilder Doucette, MD, PhD – PTSD, TBI, decision making, psychedelics, brain stimulation

Juliette Madan, MD, MS – neuroimmune psychiatry, gut-brain axis, microbiome studies, neurodevelopment

Robert M. Roth, PhD, ABPP-CN – executive functions, schizophrenia, Parkinson's disease, cannabis, cognition, neuropsychiatric symptoms

Heather Wishart, PhD – cognition, pain, fatigue, multiple sclerosis, cancer, brain tumors, neuroimaging, neuropsychology

Diana Wallin, PhD (Research Scientist) – neuroimaging, animal imaging, animal behavior

Students interested in these research opportunities are encouraged to contact Medical.Student.Research@dartmouth.edu for more information and guidance.



Research in Diagnostic Radiology

Robert Jeffery Fellowship

The Robert F. Jeffery Student Fellowship in Radiology is a one-year opportunity for M2, M3 and M4 Geisel students at DHMC, combining clinical, educational, and research experiences. Recipients receive an annual stipend.

Application Deadline: December 15 (for the following year)

<https://geiselmed.dartmouth.edu/student-research/hospital-specialty-specific-research-opportunities/>

Samuel D. Pressman Fellowship in Medical Imaging, Precision Health & AI

This fellowship offers Geisel M.D., Ph.D., M.S., and M.P.H. students the chance to conduct research at the intersection of imaging, AI, and precision health.

Fellows receive mentorship from Radiology and CPHAI faculty, present at Grand Rounds, and work toward publication.

Applications Open: Fall 2025 (Updated deadlines and timelines will be shared soon.)

Requirements: Specific Aims (≤ 0.5 pg), Research Proposal (≤ 1.5 pg), CV, and transcript.

Contact: Dr. Jessica Sin – jessica.m.sin@hitchcock.org

Students interested in these research opportunities are encouraged to contact Medical.Student.Research@dartmouth.edu for more information and guidance.

NIH Medical Research Scholars Program (MRSP)

The NIH Medical Research Scholars Program (MRSP) is a comprehensive, year-long research enrichment opportunity for creative, research-focused medical, dental, and veterinary students. The program takes place at the NIH intramural campus in Bethesda, MD.

Application Now Open: Sept 1, 2025 – Dec 1, 2025

Informational Webinar

October 9, 2025

1PM EST

REGISTER <https://events.gcc.teams.microsoft.com/event/26525df6-6603-45d6-b767-e8b3d9673e1e@14b77578-9773-42d5-8507-251ca2dc2b06>

More information can be found at: [NIH Medical Research Scholars Program \[cc.nih.gov\]](https://cc.nih.gov).

Application Now Open: Sept 1, 2025 – Dec 1, 2025
[Click to Apply](#)

National Institutes of Health Medical Research Scholars Program

The premier pre-doctoral training program, shaping the future of health by inspiring careers in biomedical research as clinician-scientists

World Class Research
Access to the technical and clinical resources of over 300 NIH laboratories

Mentorship
Close supervision of research project by senior NIH investigator

Career Development
Curriculum of lectures, rounds, journal clubs, and leadership forums

Networking
Connect with leading national experts across varied career fields

Eligibility
For U.S. citizens and permanent residents currently enrolled in an LCME accredited medical, AOA accredited osteopathic, CODA accredited dental, or AVMA accredited veterinary programs, and in their 2nd, 3rd, or 4th year. Interested students should have strong interest in conducting basic, clinical, or translational research.

Informational Webinar
October 9, 2025
1PM EST
[REGISTER](#)



 Office of Clinical Research Training and Medical Education
Contact: MRSP@mail.nih.gov

Follow us!
[@NIHClinicalCntr](#) 



2025 ACP New Hampshire Chapter Annual Scientific Meeting
Friday, October 17, 2025, | Hilton Garden Inn | Lebanon, NH

<https://www.acponline.org/about-acp/chapters-regions/united-states/new-hampshire-chapter/news-meetings#2025>

Interested in Global Health?

The **Center for Global Health Equity (CGHE)** is accepting applications for the **2025–26 Co-designed Community-based Internship (CCI)** from **Aug 15–Sept 15, 2025**.

This program offers students the chance to collaborate with international partners on research, education, advocacy, or clinical projects that advance health equity in underserved communities.

Key Details:

Internships: Dec 15, 2025–Jun 15, 2026

Minimum In-Country Time:

- o **Summer break:** At least 6 weeks
- o **M3 or M4 electives:** At least 4 weeks
- o **MPH students:** 4–6 weeks

Funding: \$3,200–\$4,000 (based on duration)

Applications require faculty and host sponsor statements. Only currently enrolled students are eligible.

HVC at Dartmouth: Empowering Students in Research



Dartmouth
Health

Heart and Vascular Center
DARTMOUTH HITCHCOCK MEDICAL CENTER



HVC at Dartmouth Health is sharing resources and supporting students to explore their research interests. Monthly meetings are held on the **second Monday of each month, 5–6 PM**, in the Vascular Surgery Conference Room (subject to change).

Student-focused sessions cover:

- How to find a research mentor
- Exposures, outcomes, and overlooked factors
- Effect size and its importance
- Surviving survival analysis
- Reading and interpreting observational studies

All students, residents, and fellows are welcome. Please let HVC at Dartmouth know if you plan to attend!

Stephen Marsh Tenney, M.D., Medical Student Fellowship

The Department of Molecular and Systems Biology at Geisel School of Medicine invites applications for the Stephen Marsh Tenney, M.D., Medical Student Fellowship. This annual award supports one year of full-time research for an M.D. student, preferably with a faculty mentor in the Department of Molecular and Systems Biology, though research in any Geisel department is eligible.

The fellowship provides a \$43,000 grant (\$40,000 stipend and \$3,000 for research expenses). Interested students for the 2026–2027 academic year (April 2026–March 2027) should discuss their plans with a potential mentor and submit a CV, a two-page research summary, and a mentor letter to Cheryl Bush (Cheryl.A.Bush@Dartmouth.edu)

For more details and faculty mentors, visit
<https://geiselmed.dartmouth.edu/msb/faculty/>

Formerly UCSF GreenHealth Lab, now based at Dartmouth Cancer Center, is welcoming students to participate.

Our research focuses on advancing sustainability and equity across the cancer care continuum. Current priority areas include:

- Healthcare Carbon Footprint
- Decarbonizing Cancer Care
- Medical Waste Reduction
- Sustainability and Cost
- Climate Health Equity
- Sustainable Transportation
- Sustainable Radiology
- Climate and Medical Education (Climate MedEd)
- Energy and Medicine

Interested? Please contact **Katie Lichter** at **Katie.Lichter@ucsf.edu** and include your CV.

Looking for something else?

To learn about additional ongoing research projects, **visit our website** or **reach out to our office**. <https://geiselmed.dartmouth.edu/student-research>

We're here to help you find opportunities that match your interests and goals.

Upcoming Events

Research Education Series

Co-curricular interdisciplinary seminars

When: October 2nd – | 7:00 AM – 8:00 AM

Where: Chilcott

Topic – How to Design a Research Study by Dr. Timothy Gardner

Dartmouth Health Biomedical Research Day

When: Wednesday, October 8, 2025 | 8:00 AM – 5:00 PM

Where: Dartmouth Hitchcock

A full-day event highlighting innovative biomedical research across departments.

Open to all faculty, staff, trainees, and students.

Annual Medical Student Research Poster Night

Date: Wednesday, October 22, 2025 , **Time:** 5:30 PM – 7:30 PM

Location: DHMC – Williamson Levels 3 & 4

Important : Poster Submission Deadline: October 9, 2025 (for printing)

Research Awards



Best Clinical Poster



Best Foundational Poster



Best Medical Education Poster



Best DEI Poster

Dartmouth Radiation Oncology & Applied Sciences Research Retreat



Saturday, October 4, 2025 | 7:30 AM – 12:00 PM (ET)



DHMC Auditorium H & Webex

Investigators and students are invited to present their research. Each presenter will have 20 minutes (max 20 slides).

Interested in presenting?

Email your **title slide** (name, department/center, title, research focus, collaborators, and future directions) to **Dr. Charles Thomas** ,
<mailto:Charles.R.Thomas@hitchcock.org> as soon as possible.

Call for Posters – NECOEM & MaAOHN 2025 Annual Conference

The 2025 Annual Conference of the New England College of Occupational & Environmental Medicine (NECOEM) and the Massachusetts Association of Occupational Health Nurses (MaAOHN) will be held December 4–5 at the Westford Regency Inn & Conference Center, Westford, MA.

A poster session will take place on December 4 from 5:45–7:30 PM.

Abstracts may be submitted electronically via the [Call for Abstracts link](#). This is a great opportunity to share your research and compete for the first-ever “Outstanding Poster Presentation Award.”

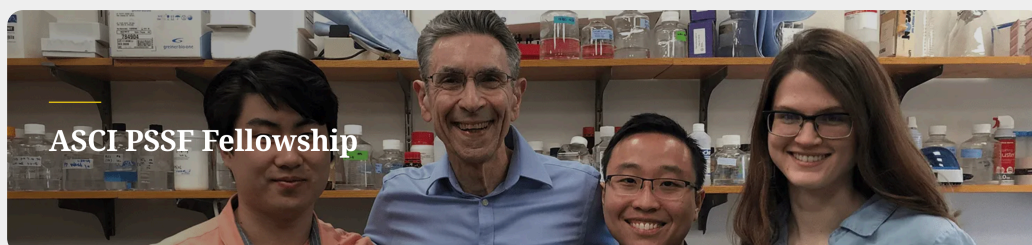
For questions, feel free to contact Michela Capobianco, NECOEM Executive Director, at executive.director@necoem.org.



NECOEM AC 2025 POSTER PRESENTATIONS CALL FOR ABSTRACTS

[Submit Abstract](#)

[ACOEM COI Form](#)



ASCI PSSF Fellowship

2026-2027 ASCI PSSF Fellowship

The American Society for Clinical Investigation (ASCI) invites nominations for the 2026-2027 Physician-Scientist Summer/Fellowship (PSSF) program. This 12-month fellowship provides medical students with an immersive, mentored research experience in basic, translational, or applied biomedical research.

Fellows receive a \$42,000 stipend plus \$8,000 for health insurance and travel, access to monthly seminars, and complimentary registration to the AAP/ASCI/APSA Joint Meeting.

Eligibility & Key Points:

- is a single-degree allopathic (MD) or osteopathic (DO) medical student interested in a dual career in research and patient care. They may not be enrolled in a combined MD/PhD program, a PhD program, a PharmD, an ScD program, or have completed a PhD, PharmD, or an ScD in a laboratory-based science.
- may apply during any year of their medical school studies; applicants in the last year of school must defer graduation until the completion of the fellowship year.
- can commit to 12 months of continuous, full-time laboratory research with minimal interruptions.
- is a United States citizen and U.S. permanent resident currently enrolled in a medical school in the United States.
- is not required to have prior laboratory research experience.

How to Apply:

Interested students should send their **CV and a letter of research interest** to Medical.Student.Research@dartmouth.edu by **September 30, 2025**.

7th Neurology Research Day

Friday, November 21, 2025
11:00 am - 4:30 pm
at DHMC (Auditorium E & F)



Come join us to learn more about the remarkable array of research, scholarship and creative activities conducted by faculty, staff and students at Dartmouth Health and Dartmouth College

Neurology Grand Rounds

Keynote Speaker: M. Elizabeth Ross, M.D., Ph.D.

Nathan E. Cumming Professor of Neurology and Neuroscience

Chair, Neuroscience Graduate Program

Director, Center for Neurogenetics

Weill Cornell Medicine

- | | |
|------------------|---|
| 11:00 - 11:50 AM | Poster Session & Lunch
<i>(Lunch and afternoon refreshments will be provided)</i> |
| 12:00 - 1:00 PM | Neurology Grand Rounds: Dr. M. Elizabeth Ross |
| 1:10 - 2:10 PM | Neurology Residents Presentations |
| 2:30 - 3:30 PM | Research update from Neurology, Psychiatry, Neurosurgery, and other departments from DHMC and Dartmouth College |
| 3:30-4:30 PM | Poser Session |

Sponsored by the Diamond Endowment Program at Department of Neurology
Dartmouth Health and Geisel School of Medicine at Dartmouth College



Student Spotlight



Anthony Tsai - MD Candidate, Class of 2028

Anthony Tsai is a second-year medical student at the Geisel School of Medicine at Dartmouth and a member of the editorial board of the *Graduate Medical Scholar Journal*. His research journey began at Northwestern University and during his gap years as a research technician, where he studied potential therapeutics for renal osteodystrophy and CKD-associated osteoporosis. He co-authored a manuscript showing the role of fibroblast growth factor 23 (FGF23) in bone loss and presented at national meetings, including ASBMR and ASN Kidney Week.

At Geisel, Anthony continues translational bone and renal research, focusing on how FGF23 affects osteoprogenitor differentiation and the impact of acute kidney injury on bone health. He is interested in orthopedic surgery and aims to integrate his research background into improving musculoskeletal outcomes in patients with renal disease.

Scholarly Manuscripts by Geisel Students

Geisel students continue to drive innovation through research, contributing to peer-reviewed publications across clinical medicine, global health, and more. Their scholarly work reflects a deep commitment to scientific inquiry and advancing patient care. Each year, our students co-author numerous manuscripts, showcasing their passion for discovery and academic excellence.

Students are requested to submit their published manuscripts to be archived in the Student Manuscript section of the website.

Implementation of Electronic Medical Record Interventions to Maximize Opioid Disposal after Surgery in Routine Clinical Practice

Yash Deshmukh, BS, Mateo L Amezcua, BA, Brendan W Barth, MD, Robin R Cotter, MD, Richard J Barth Jr, MD, FACS

BACKGROUND: Despite guideline-directed opioid prescribing after operation, many patients retain excess opioids. Leftover pills increase the risk for misuse, diversion, and dependency. It is unclear whether interventions applied in routine clinical practice can increase excess opioid disposal rate.

STUDY DESIGN: All adult patients at our institution with postoperative opioid prescriptions were identified in general surgery, otolaryngology, plastic surgery, neurosurgery, urology, and transplant surgery. Disposal rates for 453 preintervention patients (operation between March 1, 2023, and June 30, 2023) were compared with 545 intervention patients (operation between October 1, 2023, and January 31, 2024). Pre- and postintervention patients were called 1 to 3 months after operation and asked about excess opioids. Interventions include (1) opioid disposal information sheets provided after operation; (2) opioid disposal reminder delivered via patient portal in electronic medical record (EMR); and (3) best practice alert triggered in EMR at postoperative visit reminded providers to discuss opioid disposal.

RESULTS: Opioid disposal outcomes were obtained from 70% (699 of 998) of patients. Fifty-four percent (375 of 699) had excess opioids. The percentage of patients disposing of their excess opioids increased from 30% (39 of 130) preintervention to 83% (204 of 245) postintervention ($p < 0.00001$). Forty-seven percent (247 of 545) of postintervention patients had discussions with their providers after a best practice alert fired at their postoperative visits. Patients who had a provider discussion were more likely to dispose of excess opioids than those who only received an information sheet and patient portal reminder (92% vs 70%, $p < 0.00001$).

CONCLUSIONS: Interventions easily incorporated into the EMR as part of routine clinical practice can markedly increase excess opioid disposal rates after operation. When information on opioid disposal and patient portal reminders are combined with disposal discussions with providers at the postoperative visit, opioid disposal rate of >90% can be achieved. (J Am Coll Surg 2025;240:898–906. © 2024 by the American College of Surgeons. Published by Wolters Kluwer Health, Inc. All rights reserved.)

Opioid use disorder involves the misuse or diversion of prescribed opioids or the use of illicit synthetic opioids. Over the past 2 decades, this disorder has reached epidemic

proportions in the US. In 2022, there were 90,000 drug overdose deaths and 70% of these involved opioids.¹ Many patients begin using opioids through legitimate

Disclosure Information: Nothing to disclose.

Disclosures outside the scope of this work: Dr Barth receives direct compensation from, holds equity interest in, and is on the Board of Directors of CairnSurgical, Inc. CairnSurgical, Inc is developing a guidance system for breast-conserving surgery invented by Dr Barth. Dr Barth is named on patents for this system.

Presented at the 105th Annual Meeting of the New England Surgical Society, Burlington, VT, September 2024.

Received September 25, 2024; Revised November 5, 2024; Accepted November 6, 2024.

From the Dartmouth Geisel School of Medicine, Hanover, NH (Deshmukh, Amezcua, Barth); and Department of Surgery, Dartmouth-Hitchcock Medical Center, Lebanon, NH (Cotter, Barth).

Correspondence address: Richard J Barth Jr, MD, FACS, Department of Surgery, Dartmouth-Hitchcock Medical Center, 1 Medical Center Dr, Lebanon, NH 03766. email: Richard.J.Barth.Jr@hitchcock.org

Supplemental digital content is available for this article.

GMSJ

GMSJ is a student-led publication dedicated to showcasing the research, insights, and perspectives of medical students. It offers a hands-on opportunity to gain experience in academic publishing, including research dissemination, peer review, and scholarly writing—valuable skills for future careers in academic medicine.

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- Biomedical and Basic Science Research
- Medical Education and Training
- Health Policy and Ethics

- Nutrition and Lifestyle Medicine
- Medical Technology and Device Development

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<https://gmscholars.com/index.php/gmsj/index>

THE FOUNDERS & EDITORS-IN-CHIEF



Aryna C. Armand, MS
Geisel School of Medicine at Dartmouth College

Aryna Armand is a third-year medical student at the Geisel School of Medicine with a strong foundation in research and biotechnology. She earned her bachelor's degree in Biology from the University of San Diego, where she conducted bench research on molecular mechanisms involved in cancer biology, sparking her passion for scientific discovery. She later earned her master's in Biotechnology from Johns Hopkins University.

Aryna's research experience spans basic science, clinical research, and surgical innovation. At Children's Hospital Los Angeles, she contributed to translational research projects aimed at improving pediatric neuroblastoma outcomes, and at Geisel, she is involved in research within the plastic surgery department, focusing on advancements in reconstructive techniques. Her interests include plastic surgery, medical device development, and the integration of technology in surgical innovation, with a focus on improving patient care and expanding access to life-changing procedures.

Contact: aryna.c.armand@gmscholars.com



Matin Bikaran, BS
Geisel School of Medicine at Dartmouth College

Matin Bikaran is a third-year medical student at the Geisel School of Medicine at Dartmouth with a strong foundation in research and clinical medicine. He earned his bachelor's degree in Microbial Biology with Highest Distinction from the University of California, Berkeley.

Matin's research experience spans interventional radiology and immunology. At UCSF, he led an NIH ROI-funded project in genomic immunology, and at Geisel, he is exploring innovative radiological techniques for the treatment of complex medical conditions. His interests include interventional radiology, oncology, and the intersection of clinical medicine and innovation, with a focus on advancing patient care and outcomes.

Contact: matin.bikaran@gmscholars.com



The Office of Medical Student Research provides access to multiple datasets that can be used for population-based research.

Resource link :

<https://geiselmed.dartmouth.edu/student-research/datasets-for-research/>

The Office of Medical Student Research provides access to Poster Resources and template

<https://geiselmed.dartmouth.edu/student-research/poster-resources/>



DH Academic Scholar Year Opportunities

Some Geisel students choose to take an additional year to engage in scholarly work within a department or section at Dartmouth-Hitchcock (DH) or The Dartmouth Institute (TDI).

More information:

<https://geiselmed.dartmouth.edu/student-research/hospital-specialty-specific-research-opportunities/>



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