



Dartmouth
GEISEL SCHOOL OF
MEDICINE

Office of
MEDICAL STUDENT
RESEARCH

Weekly Newsletter

Aug 7, 2025

The Student Research Office is actively functioning to support medical students throughout their research journey. It serves as a central resource to help students navigate onboarding requirements and connect with research opportunities across departments. The office regularly shares active research projects and provides guidance on how to get involved. Students are encouraged to reach out or visit the office to explore available opportunities.

Contact info: **Medical.Student.Research@dartmouth.edu**



Recent News

[Geisel School of Medicine Students Selected as 2025-26 Schweitzer Fellows](#)

[Geisel Celebrates Health Sciences Education Class of 2025](#)



DARTMOUTH HITCHCOCK MEDICAL CENTER

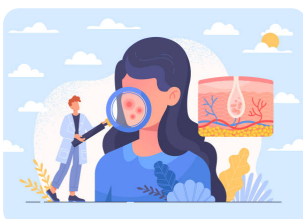
Medical Student Research Fair 2025

Join us for the 1st Annual Medical Student Research Fair, featuring representatives from all clinical faculty departments !

DATE: THURSDAY, SEPTEMBER 4, 2025
TIME: 5 PM - 7 PM
LOCATION: DHMC, AUDITORIUMS E & F

Refreshments and foods will be provided.

Featured Opportunities



Emergency Medicine

Emergency Medicine at DH offers a wide range of



Department of Medicine

**Open Research
Opportunities**



Rheumatology

**Rheumatology
Research**

research and scholarly opportunities, including wilderness and rural medicine, EMS, critical care transport, and system-based QI projects. Additional areas may include ultrasound-guided procedures, substance use, telehealth, narrative medicine, and global health initiatives.

Students can also engage in publication writing, curriculum development, and innovative clinical research alongside EM faculty.

Interested students can reach out to Dr. Zachary Soucy, DO and Melissa

There are multiple ongoing research projects available for medical student involvement in the Department of Medicine.

Opportunities span **quantitative, qualitative, mixed methods, systematic reviews, manuscript writing, and programming**, including work in a neurocognitive lab.

For more information or to get connected, please contact **Lori Henault** at *Lori.E.Henault@hitchcock.org*.

Opportunities – 2025

Are you a student interested in autoimmune disease, immunology, or translational research?

Join one of our diverse Rheumatology Research Projects exploring cutting-edge questions in both adult and pediatric care, including:
Projects span clinical, translational, and health services research, with opportunities for data analysis, patient chart review, lab-based assays, and protocol development. Contact for the medical student research coordination

- Sladjana Skopelja-Gardner, PhD ,
Sladjana.Skopelja-Gardner@dartmouth.edu

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 year-long, mentored research opportunity for medical, dental, and veterinary students in their 2nd, 3rd, or 4th year. Applications open **September 1, 2025**, and the deadline is **December 1, 2025**.

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

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.

Application Opens September 1st
Application Deadline is December 1, 2025



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



Follow us!
[@NIHClinicalCntr](https://twitter.com/NIHClinicalCntr)



Research Opportunity Highlight: Neurology

1. HOBSCOTCH Program

Investigator: Dr. Elaine Kiriakopoulos, Neurology

HOBSCOTCH (HOMe-Based Self-Management and Cognitive Training CHanges Lives) supports patients with neurodegenerative conditions. Dr. Kiriakopoulos is expanding the model to new populations.

Student Responsibilities: Serving as a memory coach or assisting with home-based memory training for patients.

2. ALS Retrospective Chart Review

Investigator: Dr. Mark A. Garret, Neurology

Participate in a chart review study focusing on ALS patients to identify trends in disease progression and treatment outcomes.

Student Responsibilities: Conducting retrospective chart reviews.

Apply Now: 2025–26 Co-designed Community-based Internship (CCI)

The Center for Global Health Equity is now accepting applications for the 2025–26 CCI program (Aug 15 – Sept 15, 2025). This funded opportunity allows students to engage in interdisciplinary global health projects that advance health equity in underserved communities.

Timing: Internships must start between Dec 15, 2025 – June 15, 2026

Duration: 4–8 weeks, depending on program

Funding: \$3,200–\$4,000

Required: Sponsor statements from Geisel faculty + local site

CCI APPLICATION OPENS AUGUST 15TH - SEPTEMBER 15TH

1

PREVIEW CCI APPLICATION

2

SEE STUDENT CCI BLOGS

3

REVIEW CCI FAQs

4

WATCH CCI VIDEO

5

**IDENTIFY GLOBAL HOST ORG/PARTNER
& GEISEL FACULTY SUPERVISOR**

6

**CO-DESIGN PROJECT WITH HOST &
SUPERVISOR TO MEET COMMUNITY NEEDS -
WITH CLEAR TIMELINE & DELIVERABLE(S)**

**SUBMIT A BRILLIANT &
FLAWLESS APPLICATION
BY SEPT. 15TH**



Pathology research projects open to medical student participation-

- **Novel diagnostics for skeletal muscle and peripheral nerve pathology**, George Zanazzi, MD PhD
- **Genomics and genome informatics, cytology, machine learning**, Lou Vaickus, MD PhD
- **Genomics and genome informatics,, hematology oncology, machine learning** , Parth Shah, MD
- **“Combining multiomic and multimodal techniques for early prediction of treatment-outcomes and prevent recurrence in cancer”**, Shrey Sukhadia, PhD
- **Pediatrics, genomics**, Nidhi Shah, MBBS

Administrative contact for student research coordination- Marcy Hall .

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

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

Medical Student Research Fair –

When: Thursday, September 4, 2025 at 5:00 PM

Where: DHMC Auditoriums E & F

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

When: Thursday, October 23, 2025 | 11:00 AM – 8:00 PM

Where: DHMC

Celebrate the research achievements of your peers and share your own work at this key Geisel tradition.

Research Education Series

Co-curricular interdisciplinary seminars

When: September 4th– | 7:00 AM – 8:00 AM

Where: Chilcott

Topic - **How to Start Clinical Research**

Learn about research design, grant writing, IRB processes, and more from experienced faculty.

Upcoming Research Workshops – August

PubMed Basics

 *Monday, August 11 | 12:00–12:45 PM*

Get hands-on tips to search PubMed more effectively and develop strong search strategies. <https://libcal.dartmouth.edu/event/14665117?hs=a>

Student Spotlight



Stephanie Lebby, MD Candidate, Class of 2028

A former U.S. Ski Team member, Stephanie Lebby's passion for health and well-being began early. After earning a Psychology degree from Dartmouth College, she completed a Master's in Physical Activity and Wellness Science at UVM, where she studied the mind-body connection and lifestyle's role in overall health. She later worked as a research coordinator at DHMC's Weight & Wellness Center and Culinary Medicine Program, where she saw how factors like environment and behavior shape health outcomes particularly in underserved rural areas.

Now at Geisel, Stephanie continues to champion wellness as a class Wellness Representative and researcher. Her work includes promoting student physical activities such as integrating walking pads into study spaces and conducting research in Orthopaedics on patient goal setting and outcomes. Outside of medicine, she enjoys skiing, biking, hiking, running, surfing, and cooking with friends living the very wellness she strives to inspire in others.

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. <https://geiselmed.dartmouth.edu/student-research/research-papers-by-geisel-students/>

Real-time identification of life-threatening necrotizing soft-tissue infections using indocyanine green fluorescence imaging

Gabrielle S. Ray,^{a,b,†} Samuel S. Streeter,^{a,b,†} Logan M. Bateman,^c Jonathan Thomas Elliott,^{a,b,c} Eric R. Henderson,^{a,b,c,*} and NEFARIOUS Study Group

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ABSTRACT. **Significance:** Necrotizing soft-tissue infections (NSTIs) are life-threatening infections with a cumulative case fatality rate of 21%. The initial presentation of an NSTI is non-specific, frequently leading to misdiagnosis and delays in care. No current strategies yield an accurate, real-time diagnosis of an NSTI.

Aim: A first-in-kind, observational, clinical pilot study tested the hypothesis that measurable fluorescence signal voids occur in NSTI-affected tissues following intravenous administration and imaging of perfusion-based indocyanine green (ICG) fluorescence. This hypothesis is based on the established knowledge that NSTI is associated with local microvascular thrombosis.

Approach: Adult patients presenting to the Emergency Department of a tertiary care medical center at high risk for NSTI were prospectively enrolled and imaged with a commercial fluorescence imager. Single-frame fluorescence snapshot and first-pass perfusion kinetic parameters—ingress slope (IS), time-to-peak (TTP) intensity, and maximum fluorescence intensity (IMAX)—were quantified using a dynamic contrast-enhanced fluorescence imaging technique. Clinical variables (comorbidities, blood laboratory values), fluorescence parameters, and fluorescence signal-to-background ratios (SBRs) were compared to final infection diagnosis.

Results: Fourteen patients were enrolled and imaged (six NSTI, six cellulitis, one diabetes mellitus-associated gangrene, and one osteomyelitis). Clinical variables demonstrated no statistically significant differences between NSTI and non-NSTI patient groups (p -value ≥ 0.22). All NSTI cases exhibited prominent fluorescence signal voids in affected tissues, including tissue features not visible to the naked eye. All cellulitis cases exhibited a hyperemic response with increased fluorescence and no distinct signal voids. Median lesion-to-background tissue SBRs based on snapshot, IS, TTP, and IMAX parameter maps ranged from 3.2 to 9.1, 2.2 to 33.8, 1.0 to 7.5, and 1.5 to 12.7, respectively, for the NSTI patient group. All fluorescence parameters except TTP demonstrated statistically significant differences between NSTI and cellulitis patient groups (p -value < 0.05).

Conclusions: Real-time, accurate discrimination of NSTIs compared with non-necrotizing infections may be possible with perfusion-based ICG fluorescence imaging.

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Keywords: fluorescence-guided surgery; dynamic contrast-enhanced fluorescence imaging; indocyanine green imaging; necrotizing soft-tissue infections

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The Geisel School of Medicine *Community of Scholars* Program Structured Support for Medical Student Research & MD Research Scholars Program

The *Geisel MD Research Scholars Program*, established in honor of Dean Emeritus Duane Compton, is a pre-eminent, selective, non-degree-granting research program at the Geisel School of Medicine. The MD Research Scholars Program is one

pillar of Geisel's **Community of Scholars Program (LCME Element 3.2)**. The Geisel MD Research Scholars will build on Geisel's broad-based interdisciplinary research education curriculum by providing advanced research training for the most promising Geisel students, to be designated MD Research Scholars. Upon Dean Compton's retirement, the program will be renamed as the Compton Research Scholars program.

For more information

[:https://geiselmed.dartmouth.edu/student-research/medical-student-compton-research-scholars/](https://geiselmed.dartmouth.edu/student-research/medical-student-compton-research-scholars/)

Questions? Reach out to the Medical Student Research Office.



GMSJ Coming Soon!

We are excited to share that Graduate Medical Scholars Journal (GMSJ) is pending launch in September, 2025 !

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.

 **Learn more and explore the journal:**

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



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