



Dartmouth
GEISEL SCHOOL OF
MEDICINE

**Office of
MEDICAL STUDENT
RESEARCH**

Weekly Newsletter

Vol 1 , Issue 2 , Jul 31 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

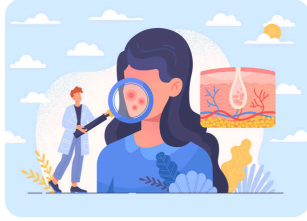


Recent News

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

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

Featured Opportunities



Emergency Medicine

Emergency Medicine at DH offers a wide range of 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



Neurology

1. HOBSCOTCH Program

Investigator: Dr. Elaine Kiriakopoulos, Neurology

Description:

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

2. ALS Retrospective Chart Review

Investigator: Dr. Mark A. Garret, Neurology

Description:

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



Medicine

Department of Medicine – Open Research Opportunities

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.

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

Research Opportunity Highlight: Pediatric Urology Lab

Faculty Mentor: Duncan Morhardt, MD, PhD

Department: Pediatric Urology

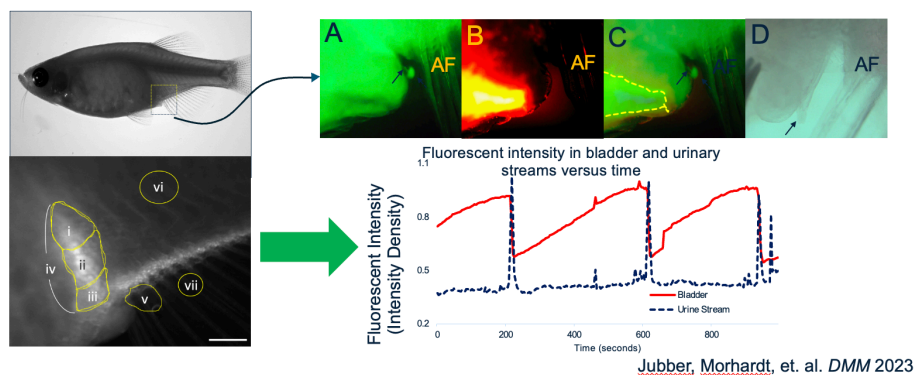
Project Title: *Immunohistochemical Analysis of Zebrafish Bladder*

Dr. Morhardt focuses on understanding the development of bladder function and urinary continence using zebrafish as a model system. Zebrafish offer unique advantages for studying innervation, protein expression, and pharmacology because they are transparent during development and allow higher throughput investigations.

These studies provide insight into rare but clinically significant events, such as the effects of environmental chemicals and rare diseases. The findings have broad clinical implications, ranging from genital malformation to bladder dysfunction in both children and adults.

Zebrafish urinary bladders are anatomically and functionally analogous to mammals

Pericardial injections of fluorescent dextran reveals separate urinary tract (above) and functional urinary bladder in zebrafish (below). **This sets the stage for using the transparent zebrafish to investigate numerous urologic diseases that cannot be examined in mammals**, informing emerging clinical and surgical management strategies.



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

Metrics: Managing Personal, Journal, and Article Impact

 *Wednesday, August 6 | 12:00–1:00 PM*

Learn how to evaluate and improve your research impact using tools like h-index, citation alerts, and altmetrics

<https://libcal.dartmouth.edu/event/14682830?hs=a>

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



Jack F. Donaghue, MD-MBA Candidate, Class of 2026

Jack Donaghue is a dual-degree MD-MBA student at Dartmouth's Geisel School of Medicine and Tuck School of Business. A native of Hershey, Pennsylvania, he earned his undergraduate degree in Neuroscience and Chemistry from Colgate University, where he also competed in Division I men's lacrosse. Prior to medical school, Jack conducted translational oncology research at NYU Langone and served as a clinical research assistant in cardiothoracic surgery. At Dartmouth, Jack has held several leadership roles, including CEO of Medicine in Motion, President of the General Surgery Interest Group, and Co-Chair of the Tuck Center for Health Care. He is also a consulting intern at Boston Consulting Group, supporting digital transformation initiatives to enhance provider workflows and patient experience. He plans to pursue a career in General Surgery.

Jack's research focuses on surgical outcomes, healthcare delivery, and cost efficiency. His work has been recognized at both regional and national levels, with awards from the Association for Program Directors in Surgery and the New England Surgical Society. His current projects include an analysis of cost variation in inpatient surgical care and its implications for operational improvement.

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/>

Original Article

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PeerTECH: a randomized controlled trial of a peer-led mobile health intervention to improve medical and psychiatric self-management for persons with serious mental illness

Karen L. Fortuna¹, Sunny Cui², Stephanie Lebby², Haiyi Xie³, Martha L. Bruce², Stephen J. Bartels⁴

¹Community and Family Medicine and of Health Policy and Clinical Practice, Geisel School of Medicine at Dartmouth, Lebanon, NH, USA;

²Department of Psychiatry, Geisel School of Medicine at Dartmouth, Hanover, NH, USA; ³The Mongan Institute, Massachusetts General Hospital, Boston, MA, USA

Contributions: (I) Conception and design: KL Fortuna; (II) Administrative support: S Cui, S Lebby, KL Fortuna; (III) Provision of study materials or patients: KL Fortuna; (IV) Collection and assembly of data: S Cui, S Lebby, KL Fortuna; (V) Data analysis and interpretation: S Cui, S Lebby, KL Fortuna, H Xie; (VI) Manuscript writing: All authors; (VII) Final approval of manuscript: All authors.

Correspondence to: Karen L. Fortuna, PhD, LICSW, Community and Family Medicine and of Health Policy and Clinical Practice, Geisel School of Medicine at Dartmouth, 1 Medical Center Drive, Lebanon, NH 03766, USA. Email: Karen.L.Fortuna@Dartmouth.edu.

Background: Certified peer support specialists (CPSs) can empower individuals with serious mental illness (SMI) to engage with mobile health interventions designed to improve medical and psychiatric self-management. This study pilot-tested PeerTECH, a digital, 12-session intervention adapted from Integrated Illness Management and Recovery and delivered by CPSs, to assess its feasibility, acceptability, and preliminary effectiveness in enhancing self-management among individuals with SMI compared to peer support as usual (PSAU).

Methods: A two-arm pilot randomized controlled trial was conducted with individuals diagnosed with SMI and at least one medical comorbidity. Participants were randomly assigned to either PeerTECH, a 12-week structured mobile health intervention delivered by CPSs, or PSAU (peer support without mobile technology). Outcome measures related to medical and psychiatric self-management were assessed at baseline and 12 weeks. Data was analysed using linear mixed-effects regression models to compare outcomes between groups. Feasibility and acceptability were evaluated by participant retention rates, intervention adherence, and participant-reported satisfaction.

Results: The study demonstrated that the randomized control trial design was feasible and acceptable, with 72.73% of approached patients consenting to participate. PeerTECH delivery was engaging, with 90% of participants initiating the intervention, approximately 80% completing it, and participants engaging in text exchanges on 70% of possible days, averaging 10 text exchanges. The intervention was found to be acceptable, with 100% of participants reporting satisfaction, and safe, with no adverse events. Statistically significant improvements were observed in PeerTECH compared to PSAU in physical health outcomes, as measured by the Patient-Reported Outcomes Measurement Information System (PROMIS) Global-10 Physical Health scores ($P=0.023$). Clinically meaningful improvements in the Integrated Management and Recovery Scale and PROMIS-derived utility scores (EuroQol 5-Dimension Scale, Health Utilities Index) were also observed.

Conclusions: The Peer-Led Mobile Health Intervention demonstrated feasibility and effectiveness in enhancing self-management among individuals with SMI and chronic comorbidities.

Trial Registration: This trial was registered at ClinicalTrials.gov (NCT04481737).

Keywords: Mobile health; serious mental illness (SMI); peer support; psychiatric self-management; digital health intervention

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doi: 10.21037/mhealth-24-64

View this article at: <https://dx.doi.org/10.21037/mhealth-24-64>



The Office of Medical Student Research provides access to multiple datasets that can be used for population-based research. These resources allow students and researchers to explore specific questions related to public health, health outcomes, and healthcare utilization.

Whether you're conducting a retrospective analysis or generating new hypotheses, these datasets offer valuable tools to support your research.

Resource link :

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

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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Geisel School of Medicine at Dartmouth
Office of Student Research
66 College St. , Remsen Medical Science Building , Room 230
Hanover, NH 03755-1404

603-646-5551

