Outlook

Research Weekly Newsletter : Jun/11/2026

From Medical Student Research <Medical.Student.Research@dartmouth.edu>
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Dartmouth GEISEL SCHOOL OF MEDICINE | Office of MEDICAL STUDENT RESEARCH

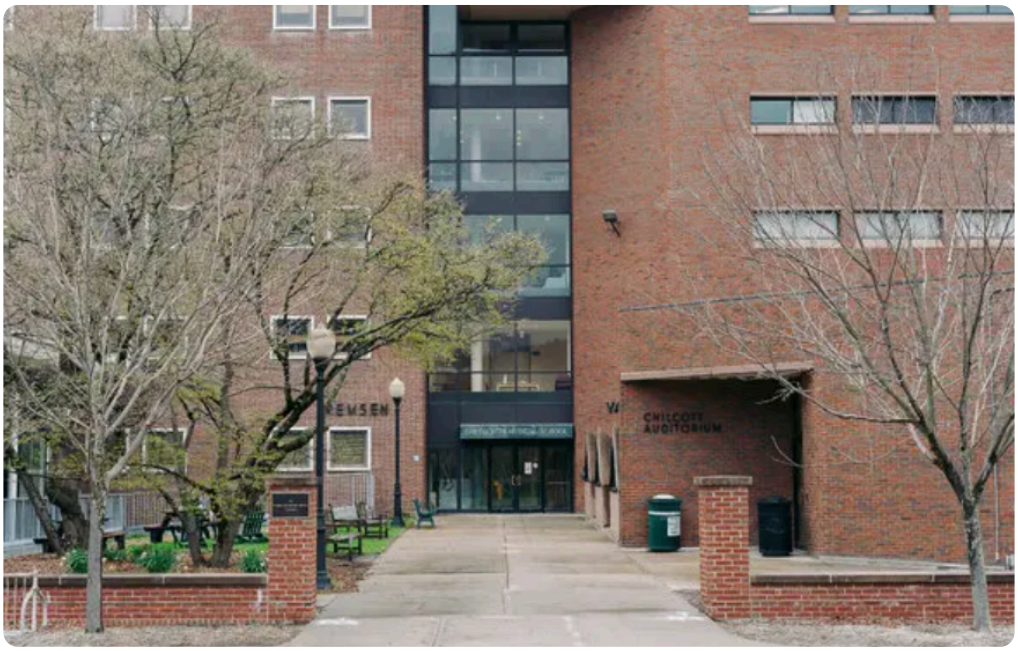
Weekly Newsletter

Jun 11, 2026

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



National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) training grant

Career Level: Doctoral & Medical Student

High School & Undergraduate Student | **Doctoral & Medical Student** | Post Doctorate | Junior Faculty | Established Investigator

Graduate students may be eligible for support from an NIDDK-funded training grant or from an individual fellowship (F31).

Medical students enrolled in an M.D., Ph.D. program are eligible for individual fellowship (F30) support. NIDDK also supports medical students for both short-term (2-3 months) and for year-long research experiences. For additional information, see: Medical Student Research Training Supplement

Contact NIDDK training program staff with questions well in advance of deadlines.

Learn more :
https://www.niddk.nih.gov/research-funding

https://www.niddk.nih.gov/research-funding/training-career-development/program-staff-contacts

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Robert McCollum Medical Student Scholarship in Epidemiology

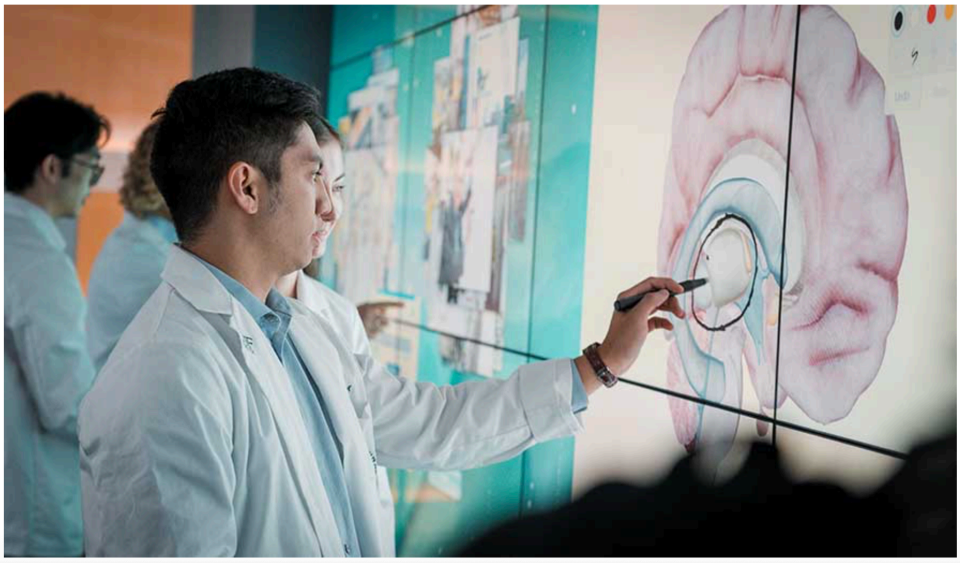
The Geisel School of Medicine is proud to offer the Dr. Robert McCollum Medical Student Scholarship in Epidemiology for Geisel Medical School students seeking a research opportunity or to attend conferences to present their research to further their careers.
Medical students at Geisel who are working with faculty of the Department of Epidemiology are eligible to apply for this scholarship fund.

Learn more :
https://geiselmed.dartmouth.edu/student-research/robert-mccollum-medical-student-scholarship-in-epidemiology/

Basic Cardiovascular Sciences Scientific Sessions 2026

https://professional.heart.org/en/meetings/basic-cardiovascular-sciences/

Medical Student Training to Enhance Oncology Research (METEOR)



The METEOR program provides research experiences at Moffitt for MD and DO medical students to build their knowledge of cancer research and research tools, and to enhance their trajectory toward a career in oncology translational medicine. The METEOR program includes both wet and dry lab training opportunities.

Actively enrolled in a regionally accredited allopathic (MD) or osteopathic (DO) medical school in the United States are eligible for this opportunity.

Learn more : https://www.moffitt.org/education/research-education-and-training/office-of-graduate-affairs/medical-student-training-to-enhance-oncology-research/

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

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=6&y=2026&v=m

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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/

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

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Post-vagus nerve stimulation mood and cognitive burden in dual epileptic–functional seizure patients

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ARTICLE INFO

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Cognition

ABSTRACT

Objective: To evaluate neuropsychiatric burden in the understudied population of patients with dual diagnoses of epileptic seizures (ES) and functional seizures (FS) who have received vagus nerve stimulation (VNS).
Methods: In this retrospective study, adults with dual diagnoses of ES and FS who underwent VNS at a tertiary care center between 2015 and 2024 were identified via ICD-10 codes and confirmed by video-electroencephalography (VEEG). Propensity score matching generated two control groups: (1) patients with ES only with VNS, and (2) patients with dual ES and FS without VNS. Longitudinal patient-reported outcomes, including seizure frequency, NDDI-E, and the QOLIE-31 Cognitive subscale, were analyzed using time-weighted averaging and nonparametric statistics.
Results: Eight patients with dual ES and FS who received VNS were matched to eight in each control group. The dual-diagnosis patients with VNS implants had significantly higher seizure frequency than those without VNS implants (median seizure frequency = 14.1 vs. 2.2, $p = 0.001$). Among patients with VNS implants, those with dual diagnoses had significantly greater depressive symptoms (median NDDI-E = 16.4 vs. 8.8, $p = 0.015$) compared to those with ES alone. Significant differences in cognitive quality of life were not observed.
Significance: Dual-diagnosis patients exhibited higher seizure reporting after VNS therapy compared to those without VNS and higher depressive burden compared to patients with ES alone, patterns that may reflect the underlying severity of FS-related comorbidity. These exploratory results support careful pre-implant counselling and highlight the need for prospective studies with baseline assessments to clarify outcomes in this complex population.

1. Introduction

Patients with epilepsy can experience comorbid functional seizures (FS), which mimic epileptic seizures (ES) in presentation and may stem from a complex interplay between psychological, neurobiological, and cognitive processes. While the term psychogenic non-epileptic seizures (PNES) has been used to refer to the same condition, FS is considered more validating and less stigmatizing for patients [1–3]. The rate of comorbid FS and ES is substantial but highly variable across studies. A 2018 *meta*-analysis estimated that 22 % (95 % CI 20–25 %) of patients with FS have coexisting epilepsy, and 12 % (95 % CI 10–14 %) of patients with epilepsy have coexisting FS, with reported ranges spanning 0–90 % and 1–62 %, respectively [4]. In inpatient epilepsy monitoring units (EMUs), FS account for as much as 20–40 % of monitored admissions/referrals [5–8].

ES and FS can be difficult to distinguish clinically, but they differ significantly in etiology and management. ES arise from structural, genetic, or infectious causes and typically exhibit abnormal epileptiform activity on EEG [9–14]. First-line treatment involves anti-seizure medications (ASMs). For the 30–40 % of patients with drug-resistant epilepsy (DRE), surgical neuromodulation (SNM), commonly vagus nerve stimulation (VNS), may be considered when surgical resection is not viable or fails to achieve seizure freedom [15–17]. In contrast, FS lack abnormal EEG correlates and are often associated with experiential risk factors such as trauma and psychological comorbidities including anxiety and PTSD [18–20]. The gold standard for diagnosis of FS is using

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Dartmouth Library Curated Database and Citation Resources

A variety of research support services provided by the Dartmouth Medical and Health Sciences Libraries

including information on data searching and management, systematic reviews and analysis, and data sharing and visualization.

For more information : https://researchguides.dartmouth.edu/medlibresources/home

Research & Data Support Resources at Dartmouth

- **Research Data Services (Dartmouth Libraries)**
  https://www.library.dartmouth.edu/research-create/data-services
  Support for statistical analysis, study design, and data management.
- **Research Computing (ITC)**
  https://rc.dartmouth.edu/data-science/
  Statistical consulting and advanced data services.
- **Copyright, and Publishing – Dartmouth Digital Commons**
  https://www.library.dartmouth.edu/research-create/publishing
  Guidance on student-led journals, scholarly communication, copyright, and publishing.
- **Dartmouth Writing Center – Graduate Writing Sessions**
  https://students.dartmouth.edu/writing-center/appointments/graduate-sessions
  Writing support for graduate students.

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