



Dartmouth
GEISEL SCHOOL OF
MEDICINE

Office of
MEDICAL STUDENT
RESEARCH

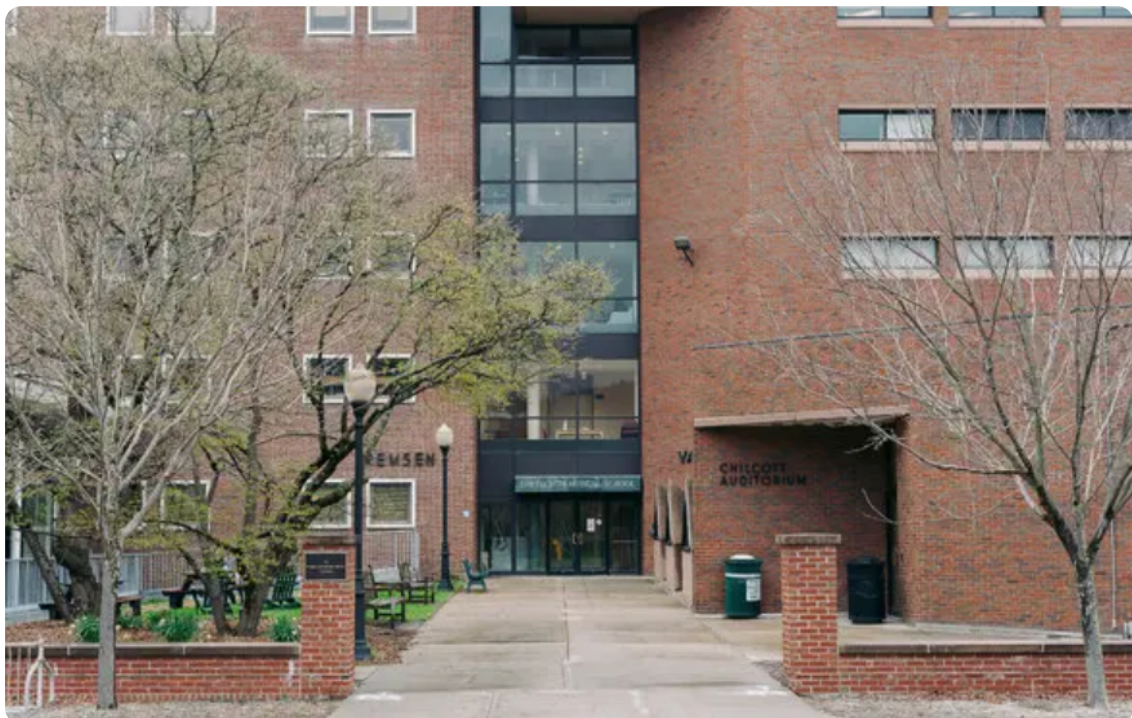
Weekly Newsletter

Jul 2, 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



2nd Annual Dartmouth Implementation Science Symposium Poster Session & Networking Reception

Call for Abstracts



We invite you to submit an abstract to be considered for the poster session at the

2nd Annual Dartmouth Implementation Science Symposium

Poster Session & Networking Reception

Wednesday, October 14

5:00PM- 7:00PM

Dartmouth-Hitchcock Medical Center

Learn more :

<https://geiselmed.dartmouth.edu/dcis/symposium2026/call-for-abstracts/>

Biomedical Data Science Seminar – July 9



DEPARTMENT OF BIOMEDICAL
DATA SCIENCE
GEISEL SCHOOL OF MEDICINE



Seminar

Eugene Demidenko, PhD
Professor
Biomedical Data Science
Geisel School of Medicine at Dartmouth

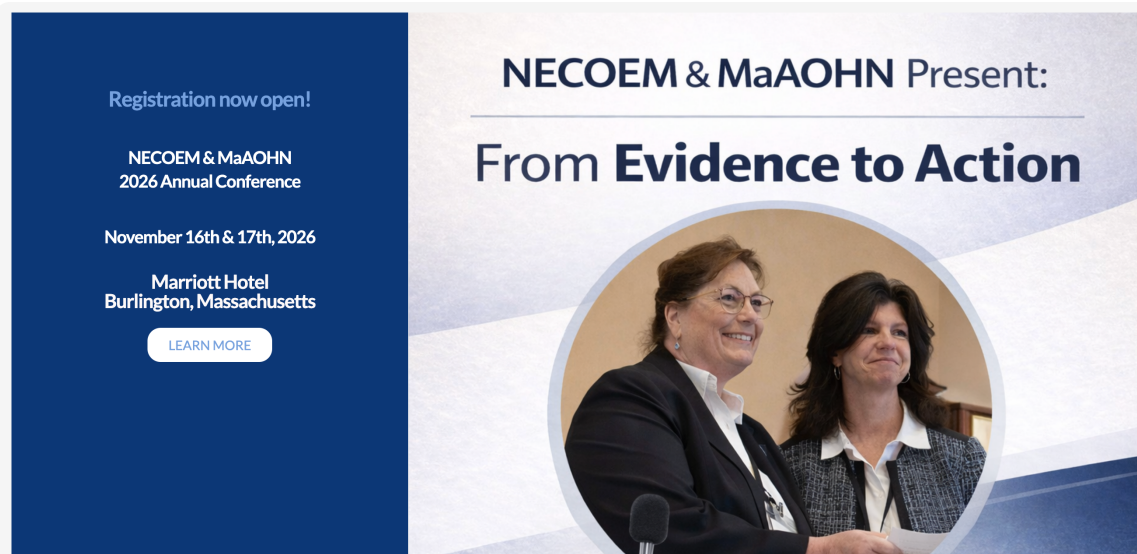
“Unheard and unseen genomic big data visualization”

Join us on Thursday, July 9, from 12:00–1:00 PM for **"Unheard and Unseen Genomic Big Data Visualization,"** presented by **Eugene Demidenko**. The seminar will explore innovative approaches to visualizing complex genomic data through animation and sonification.

Location: DHMC Auditorium H (Zoom available upon request)

Lunch: Light lunch provided on a first-come, first-served basis.

For Zoom details, contact biomedical.data.science@dartmouth.edu.



Call for Posters at NECOEM/MaAOHN Annual Conference

The 2026 Annual Conference of the New England College of Occupational & Environmental Medicine (NECOEM) and the Massachusetts Association of Occupational Health Nurses (MaAOHN), “**From Evidence to Action, Practical Solutions for Health Workforces**,” is on November 16th and 17th at the Marriott Hotel in Burlington, MA.

Eligible posters will compete for a Medlock Scholarship to pay for attendance at a future conference or educational activity relevant to occupational and environmental health. First, second, and third prizes will be awarded in the amounts of \$750, \$500, and \$250, respectively.

For questions, feel free to contact (david.s.cockrum@hitchcock.org) or Michela Capobianco, NECOEM Executive Director, at executive.director@necoem.org.

<https://necoem.org/upcoming-events/annual-conference-2026/poster-session-call-for-abstracts/>

Geisel Medical Students presenting at the ASTRO (Am Soc of Radiation Oncology) meeting

Multiple Geisel Medical School students have been selected to present oral abstracts at the premier international radiation oncology specialty meeting, the American Society for Radiation Oncology (ASTRO) Annual Meeting. The meeting will take place from September 26–30, 2026, in Boston.

<https://amportal.astro.org/search?searchtext=dartmouth&page=3>



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=5&y=2026&v=m>

13th International Shared Decision Making (ISDM) Conference

The 2026 International Shared Decision Making Conference will be held at **Dartmouth College** from July 7-10, 2026.

<https://sites.dartmouth.edu/isdm2026/>



ISDM 2026
A Wider Lens

Thinking bigger across primary care, cancer,
serious illness, and beyond

13th International Shared Decision Making Conference

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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Open Access Original Article

The 2025 Chikungunya Outbreak in Guangdong Province, China, and the Emerging Multi-pathogen Arboviral Threat in the Pearl River Delta

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Abstract

Background

From mid-June into late December 2025, China experienced its largest-ever Chikungunya virus (CHIKV) outbreak across Guangdong Province, a densely populated region of southeast China with extensive international travel and established *Aedes* mosquito populations. CHIKV, dengue virus (DENV), and Zika virus (ZIKV) share the same *Aedes* vectors, overlap in clinical presentation, and exhibit serologic cross-reactivity. We describe the epidemiology and integrated public health response to this outbreak, as well as future arboviral risks and mitigation strategies.

Materials and methods

We synthesized weekly surveillance data from the Guangdong Provincial Center for Disease Control and Prevention, national epidemiological and genomic data from the China CDC and World Health Organization, Hong Kong Observatory climate records, published literature, and government bulletins. Outbreak dynamics were analyzed using confirmed-case counts disaggregated by prefecture-level city and reporting week.

Results

Guangdong reported over 25,800 locally transmitted CHIKV cases across all 21 prefecture-level cities, with nationwide cases exceeding 29,500. The outbreak occurred in two distinct waves: an initial wave centered on Foshan City (July-August; 8,948 cases) that was successfully contained through a rapid, multi-level public health response; and a second, larger wave in Jiangmen City (September-October; 10,035 cases) temporally coincident with three tropical cyclones that made landfall within a 16-day span, creating widespread *Aedes* breeding habitat. No deaths were reported in Guangdong. The causative lineage was the Middle African Lineage within the East/Central/South African genotype, carrying *Aedes albopictus*-adaptive mutations (E1-A226V, E2-L210Q, E2-I211T) independently acquired through convergent evolution with the Indian Ocean Lineage. The persistence of cases into mid-December, combined with the warmest winter on record in the Pearl River Delta, raises concerns about overwintering mosquitoes and an early resurgence in 2026.

Conclusions

The 2025 Guangdong outbreak suggests that extreme weather events can overwhelm even well-executed arboviral responses and that the climate-vector-arbovirus interface represents a systems-level vulnerability requiring anticipatory preparedness. We advocate for typhoon-landfall-triggered vector control deployment, intensified genomic and entomological surveillance beginning in spring 2026, multiplex molecular diagnostics for concurrent CHIKV/DENV/ZIKV detection, obstetric and neonatal arboviral screening, and cross-jurisdictional coordination across the Pearl River Delta and beyond.

Categories: Environmental Health, Epidemiology/Public Health, Infectious Disease

Keywords: *aedes albopictus*, arbovirus, chikungunya virus, chikv, climate, epidemic preparedness, guangdong, outbreak, pearl river delta, typhoon



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.



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