CURRICULUM VITAE

Joseph Webb

Boston University Graduate Medical Sciences Chobanian & Avedisian School of Medicine 72 East Concord Street Boston, MA 02118 Jdwebb@bu.edu (603) 854-2092 Josephdwebb.com

RESEARCH INTERESTS

Clinical Epidemiology and Patient Outcomes, Infectious Disease Surveillance, One Health, Human-Environment Interactions, Translational Research in Healthcare

EDUCATION

Current Boston University School of Medicine *Master of Science, Medical Sciences*

2024 University of Vermont

Bachelor of Arts, Biology with Minor in Chemistry

Patrick Leahy Honors College Scholar

GRANTS & AWARDS

2022 | Summer Undergraduate Research Fellowships Program Leahy Summer Scholar 2022 | UVM Summer Research Stipend

PROFESSIONAL EXPERIENCE

2024-present | Melody Pines Summer Camp | Manchester, NH

Emergency Medical Technician

- Provide comprehensive medical care to campers and staff, managing injuries, illnesses, and emergent conditions in a remote camp setting.
- Foster a welcoming healthcare environment by collaborating with camp staff to implement safety protocols, ensure continuity of care, and educate campers on injury prevention and wellness, promoting early positive healthcare experiences.
- Maintain detailed medical records and coordinate with parents and external providers for follow-up care when necessary.

2022-2024 | University of Vermont Department of Biology | Burlington, VT

Honors Undergraduate Researcher

- Identified invertebrates to analyze species abundance patterns across land use.
- Led an independent thesis on tick-borne disease pathogen prevalence, collecting and analyzing over deer ticks (Ixodes scapularis) from state forests across New England.
- Performed PCR extractions to detect the presence of *Borrelia burgdorferi*, *Anaplasma phagocytophilum*, and *Babesia microti* in deer tick populations.
- Developed a custom weather data aggregator to model climate change impacts on tickborne disease prevalence by analyzing temperature and precipitation trends.

2021 | Canobie Lake Park | Salem, NH

Emergency Medical Technician

- Delivered urgent medical care to park guests, handling a range of situations from minor injuries to life-threatening emergencies, including cardiac arrests.
- Led and mentored a team of EMTs through orientation and ongoing training, ensuring they were equipped to handle high-pressure situations with skill and confidence.
- Managed daily operations, overseeing emergency response logistics, coordinating with park management, and maintaining a seamless, efficient medical team presence throughout the park.

VOLUNTEER EXPERIENCE

2023-2024 | Burlington Community Justice Center | Burlington, VT

Youth Restorative Justice Advocate

- Engaged in restorative meetings with youth offenders to explore accountability, empathy, and the impact of their actions, while creating a safe, non-judgmental space for self-reflection.
- Applied strategic communication techniques to help youth manage stress and express themselves clearly, ensuring effective and respectful conversations.

2022-2023 | **UVM Department of Physics** | Burlington, VT

Physics Study Coordinator

- Organized and led weekly review sessions for undergraduate physics students, collaborating with faculty to develop study materials and highlight practice problems.
- Witnessed student progress, deepening appreciation for peer-to-peer learning and fostering a supportive academic community.

TEACHING EXPERIENCE

2022-2024 | University of Vermont

Undergraduate Teaching Assistant

- 2024-2024 | Exploring Biology
 - Lead weekly laboratory sessions, guiding students in hands-on experiments, providing comprehensive explanations oof biological concepts.
 - Host regular office hours to offer personalize assistance, clarify doubts, and support students to understand principles of biology; actively contribute to shaping their academic growth.
- 2022-2024 | Communication Methods
 - Facilitated a weekly instructional session focused on imparting, brainstorming, and assessing effective communication skills at an intermediate level, emphasizing versatility across diverse contexts.
 - o Graded presentations, created quizzes, and assisted in facilitating group work.
- Fall 2021 | Foundation: Communication Methods
 - o Guided a weekly session dedicated to evaluating fundamental communication technique across unique scenarios, tailored for a foundational level of proficiency.
 - o Graded presentations, created quizzes, and assisted in facilitating group work.

POSTERS & PRESENTATIONS

- Joseph Webb, Olivia Biasetti, Ellen Martinsen, Nicholas Gotelli, "Evaluating the Impact of Climatic Factors on Tick-Borne Pathogen Prevalence: Insights from Ixodes scapularis and its Borrelia burgdorferi, Anaplasma phagocytophilum, and Babesia microti Pathogens" UVM Student Research Conference (April 2024, Burlington Vermont). Poster Presentation.
- Olivia Biasetti, Emily Beasley, Joseph Webb, Ellen Martinsen, "*Tick-borne pathogen dynamics in Vermont blacklegged ticks (Ixodes scapularis) and white-footed mice (Peromysus leucopus)*". UVM Student Research Conference. (April 2024, Burlington Vermont). Poster Presentation.
- Joseph Webb, George Ni, Emily Beasley, Nicholas Gotelli, "*Demographic Shifts and Ecological Interactions: Small Mammal and Invertebrate Co-Occurrence and Avoidance in a Changing Vermont*" Northeast Natural History Conference (April 2023, Burlington, Vermont). Oral Presentation.

LEADERSHIP

2021-2022 | UVM Patrick Leahy Honors College | Burlington, VT

Marketing Manager, Peer Mentors

- Served as the primary point of contact for incoming freshmen, providing support in physical, social, and academic advising. Actively engaged in orientation activities and weekly events to ensure a smooth transition for new students.
- Managed all aspects of advertising, including both online and physical mediums, from the inception of marketing material to their distribution, promoting program initiatives.
- Maintained program records and established an automated notification system.

PROFESSIONAL COURSES, TRAINING & DEVELOPMENT

2023 | Elliot Hospital | Physician Shadowing

- Accumulated 110 hours of shadowing experience with emergency room physicians and trauma surgeons, offering a firsthand perspective of patient care, clinical procedures, and healthcare teamwork within the hospital environment.
- Participated in a Morbidity and Mortality conference, gaining insights into hospital administration, quality improvement initiatives, and critical assessment of medicine.

PROFESSIONAL MEMBERSHIPS

• Microbiology Society | 2023-Present

COLLABORATORS

2023 | Ellen Martinsen, PhD | University of Vermont

• Coordinator of the Wildlife Pathogens Lab and primary advisor to my honors thesis.

2021 | Nicholas Gotelli, PhD | University of Vermont

• Course professor and lab coordinator. Advisor to NENHC and my honors thesis.