

## **Planetary Health Postdoctoral Fellow**

The Lauterbur, Nunez, and Pespeni research groups in the Department of Biology at the University of Vermont (UVM), invite applications for the inaugural cohort of the prestigious **Planetary Health Postdoctoral Fellowship**. This full-time (1.0 FTE), 12-month postdoctoral position offers a unique opportunity to join a growing cohort of fellows as part of UVM's Planetary Health Initiative - to explore the interdependence of human well-being and the health of the environment. This is a one-year position with the possibility of a second year, contingent on successful performance. The program emphasizes collaborative and interdisciplinary research, leveraging the strengths of the Lauterbur, Nunez, and Pespeni labs.

The Planetary Health Postdoctoral Fellow will conduct innovative research focused on modeling evolutionary and ecological infectious disease dynamics within the broader context of Planetary Health. Specific areas of interest include, but are not limited to: (i) The intersection of ecosystem dynamics, host and/or pathogen evolution, and predictive modeling, (ii) Integrating questions across biological scales, such as eco-epidemiology and host-pathogen coevolution, which may make use of existing datasets and resources from UVM research groups. Existing data sets include reference and population resequencing bat genomes and sea star genomes, transcriptomes, and microbiomes. Research projects may align with the programs of one or more of the mentors (Lauterbur, Nunez, and Pespeni) or focus on a system proposed by the Fellow. In addition to research, the fellow will develop and teach one seminar-style course on a topic and at a level of their choosing with the support of a chosen mentor, allowing for flexibility to align teaching with their expertise and interests.

As part of an expanding cohort of fellows, the successful applicant will benefit from collaboration with peers and engagement in a vibrant academic community. The Vermont Advanced Computing Center (VACC) at UVM supports large-scale computation and high-throughput AI and machine learning workflows. The Department of Biology at UVM is home to nationally recognized and award-winning faculty, offering a supportive environment for interdisciplinary research and professional growth. Applicants who contribute to UVM's strategic priorities of the planetary health initiative (<https://www.uvm.edu/planetaryhealthinitiative>), as well as UVM's "Our Common Ground" principles (<https://www.uvm.edu/president/our-common-ground>), are strongly encouraged to apply.

### **Minimum Qualifications:**

*The successful candidate should:*

- Hold a Ph.D. degree in biology, ecology, evolutionary biology, computer science, physics, or another relevant field;
- Candidates up to 5 years post Ph.D. will be considered;

### **Preferred Qualifications:**

- Some postdoc experience in a relevant field is preferred.

### **Responsibilities:**

*The successful candidate will assume a range of responsibilities that include:*

- Maintaining an active research portfolio focused on infectious disease modeling and planetary health, utilizing existing datasets from Dr. Pespeni, Dr. Nunez, and/or Dr. Lauterbur, or developing their own research initiatives.
- Developing and teaching one course at a level and on a topic of their choosing.

- Publishing research findings in peer-reviewed journals, contributing to the advancement of knowledge in the field.
- Presenting research findings at conferences, meetings of scholarly societies, and professional associations relevant to their research goals.

**Training opportunities:**

*The successful candidate will receive training on:*

- Making progress towards securing external funding to support ongoing and future research endeavors.
- Strategies for achieving success in teaching endeavors while maintaining a highly active research portfolio.
- Building and maintaining interdisciplinary collaborations across the university.
- The fellow will be part of a growing cohort and will have access to a network of support across the program.

**Compensation:**

This is a fully benefited position with a minimum salary of \$61,000 during the fellowship period, and determined based on experience. In addition, fellows will receive minimum \$5,000 annually for travel expenses and professional development activities.

**Application requirements:**

1. A cover letter that summarizes your research experience and goals, including addressing UVM's Our Common Ground values (<https://www.uvm.edu/president/our-common-ground>),
2. Your CV,
3. A statement of research describing how your research experience and skills will contribute to Planetary Health research (<https://www.uvm.edu/planetaryhealthinitiative>) at the intersection of evolutionary biology and ecology of infectious disease, especially how you might benefit from and contribute to one or more of the mentoring labs,
4. A one page statement summarizing the candidate's teaching philosophy, including any intersection with UVM's Our Common Ground values,
5. One to three representative publications or preprints (if available).

Send applications in a single pdf, with statements in the above order, by email to [joaquin.nunez@uvm.edu](mailto:joaquin.nunez@uvm.edu), [elise.lauterbur@uvm.edu](mailto:elise.lauterbur@uvm.edu), and [melissa.pespeni@uvm.edu](mailto:melissa.pespeni@uvm.edu). Please use the subject line: Planetary Health Postdoctoral Fellowship Application. Application review will begin March 17. Three letters of recommendation will be requested for a short list of finalists.

**Research Profiles of the Mentors:**

Lauterbur: <https://www.uvm.edu/cas/biology/profile/m-elise-lauterbur>

Nunez: <https://www.uvm.edu/cas/biology/profile/joaquin-nunez>

Pespeni: <https://www.uvm.edu/cas/biology/profile/melissa-pespeni>

**The University**

Established in 1791, the University of Vermont is considered a public-ivy and consistently ranked as one of the top public universities in the United States. Our academic programs combine faculty-student relationships most commonly found in a small liberal arts college with the resources of a land-grant research institution. UVM's tradition of equity and social justice

extends not only to faculty, staff, and students, but is also reflected in a commitment to environmentally sound and sustainable practices and Our Common Ground values (<https://www.uvm.edu/president/our-common-ground>).

### **The College**

The Department of Biology is situated within the College of Arts and Sciences (CAS). In CAS, students experience the connectedness and accessibility of a small liberal arts college within a high caliber public research institution. Whether students are pursuing the Fine Arts, the Humanities, Natural Science and Mathematics or Social Sciences, they have a place here, in the College of Arts and Sciences' academic ecosystem.

### **The Department**

The UVM Biology Department is a broad, basic science department whose faculty members' research spans a range of core disciplines including biochemistry, cell biology, genetics, neuroscience, as well as ecology and evolution. The Department of Biology is composed of award-winning faculty, stimulating coursework, and inspired students who are training to answer some of our world's biggest questions. We know that hands-on experience is the key to learning, so our department is devoted to providing interactive opportunities to apply coursework in real-life, real-time settings. Our faculty enjoy international reputations, bringing their scholarship and productive research efforts into the undergraduate experience, providing opportunities for research from the introductory to advanced level that engage and challenge students and promote critical thinking skills. For more information about the department, see: <https://www.uvm.edu/cas/biology>

### **The Community**

UVM is located in Burlington, Vermont, which is rated as one of the best small cities in the country. The greater Burlington area has an increasingly diverse population of about 125,000 and enjoys a panoramic setting on the shore of Lake Champlain, between the Green Mountains of Vermont and the Adirondack Mountains of New York State. The surrounding area provides an environment rich in cultural, civic and recreational activities. Vermont has a deep history of social activism and political participation. It offers many opportunities for collaborative partnerships in community and state-wide human service and social change organizations in multiple fields of practice, including state agencies.

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