Postdoctoral Scholar Employee - Demography
University of California Berkeley

Job Title	Postdoctoral Scholar Employee - Demography
Department	
Institution	University of California Berkeley
	Berkeley, California
Date Posted	Dec. 16, 2024
Application Deadline	02/15/2025
Position Start Date	Available immediately
Job Categories	Post-Doc
Academic Field(s)	Dermatology
Apply Online Here	https://apptrkr.com/5866316
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Job Description	

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Position overview Position title: Postdoctoral Scholar
Salary range: The UC postdoc salary scales set the minimum pay determined by experience level at appointment. See the following table for the current salary scale for this position: https://www.ucop.edu/academic-personnel-programs/_files/2024-25/oct-2024-scales/t23.pdf. The current minimum salary range for this position is $66,737-$74,425. Salaries above the minimum may be offered when necessary to meet competitive conditions.

Percent time: Full time

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Anticipated start: March 1, 2025

Position duration: 2 years

Application Window
Open date: December 11, 2024

Most recent review date: Thursday, Dec 26, 2024 at 11:59pm (Pacific Time)
Applications received after this date will be reviewed by the search committee if the position has not yet been filled.

Final date: Saturday, Feb 15, 2025 at 11:59pm (Pacific Time)
Applications will continue to be accepted until this date, but those received after the review date will only be considered if the position has not yet been filled.

Position description

Position Overview:
The Department of Demography at the University of California, Berkeley, invites applications for a Postdoctoral Scholar position in the research group of Prof. Ayesha Mahmud. This position is part of a new NIH-funded project titled "Novel Data and Approaches for Dynamic Modeling of Human Behavior and Infectious Disease Ecology." The successful candidate will work on several studies focused on understanding how human behavior and demographic dynamics interact with climate change to influence the spread and evolution of infectious diseases.

Research Background:
Human behavior, along with the social and demographic forces that shape human interactions, plays a critical role in the transmission and evolution of infectious diseases. Understanding these dynamics is especially important in the context of climate change, which is likely to further complicate their effects on population health.

The research group is developing mathematical and computational models to explore how human behavioral and climatic changes impact infectious disease dynamics. By integrating methods from formal demography and disease ecology, we aim to address several key questions, including:

- How and why does the mortality burden and transmission of infectious diseases vary seasonally and spatially?
- How do human behaviors and heterogeneities in behavior influence disease transmission

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dynamics?
- How do population mobility and mixing patterns shape the spatial and temporal spread of outbreaks? Our studies use statistical techniques and biologically mechanistic models to investigate these questions in the context of multiple diseases across Asia, Africa, and the Americas. We leverage a wide range of data, including disease surveillance systems, hospital databases, climate models, human mobility data, and population surveys and censuses.

The Postdoctoral Scholar will have the opportunity to contribute to a cluster of studies exploring the complex interplay between human population dynamics, climate and environmental factors, human behavior, and infectious disease transmission.

Program Overview:
UC Berkeley's Demography program is widely regarded as one of the most innovative and interdisciplinary in the world. The program has a strong focus on formal demography and population theory, and is closely integrated with fields like ecology, biology, and public health. The Postdoctoral Scholar will have ample opportunities to collaborate with researchers across various departments, including the School of Public Health and the Department of Integrative Biology.

Duties:
Conduct research under the guidance of Professor Ayesha Mahmud Department of Demography
Develop and apply computational tools to analyze large-scale epidemiological data.
Conduct advanced mathematical and statistical modeling of human behavior and disease dynamics.
Assist with the design and implementation of new research studies related to infectious disease dynamics.
Work independently and as part of a diverse, interdisciplinary team. Prepare and submit articles for publication; present findings at conferences and other events.
Participate in lab meetings, other lab events, and departmental colloquia in the Department of Demography, with the option to attend colloquia in other Departments such as the School of Public Health

Department: https://www.demog.berkeley.edu/about/

Qualifications
Basic qualifications (required at time of application)
PhD (or equivalent international degree) or enrolled in a PhD (or equivalent international degree) program.

Additional qualifications

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(required at time of start)
PhD or equivalent international degree and no more than 3 years of post PhD research experience.

Preferred qualifications
Ideal applicants must be on track to complete a PhD (by the position start date) and have a demonstrated record of scientific achievement in fields such as infectious disease epidemiology, mathematical modeling, causal inference, time-series methods, disease dynamics, applied statistics, or similar quantitative areas. This could be demonstrated through journal articles, working papers/preprints, conference presentations, successful grant applications, or other evidence of impactful research.

Candidates should also have experience with programming, modeling, and/or data analysis using tools like R, Python, or Matlab. Experience with cloud computing, spatio-temporal modeling, or modeling dynamical systems is especially valuable. Applicants with backgrounds in mathematics, applied mathematics, computer science, engineering, quantitative environmental sciences, or physics are strongly encouraged to apply.

Application Requirements

Document requirements

- Curriculum Vitae - Your most recently updated C.V.
- Cover Letter
- Statement on Contributions to Diversity, Equity, Inclusion, and Belonging - Statement on your contributions to diversity, equity, inclusion, and belonging in research, teaching, and service, including information about your record of activities to date, and plans for contributing if hired at UC Berkeley. More Information and guidelines.
  (Optional)

Reference requirements

- 3-5 required (contact information only)

Apply link: https://aprecruit.berkeley.edu/JPF04716

Help contact: mahmuda@berkeley.edu

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About UC Berkeley

UC Berkeley is committed to diversity, equity, inclusion, and belonging. The excellence of the institution requires an environment in which the diverse community of faculty, students, and staff are welcome and included. Successful candidates will demonstrate knowledge and skill related to ensuring equity and inclusion in the activities of their academic position (e.g., teaching, research, and service, as applicable).

The University of California, Berkeley is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, or protected veteran status.

Please refer to the University of California's Affirmative Action Policy and the University of California's Anti-Discrimination Policy.

In searches when letters of reference are required all letters will be treated as confidential per University of California policy and California state law. Please refer potential referees, including when letters are provided via a third party (i.e., dossier service or career center), to the UC Berkeley statement of confidentiality prior to submitting their letter.

As a University employee, you will be required to comply with all applicable University policies and/or collective bargaining agreements, as may be amended from time to time. Federal, state, or local government directives may impose additional requirements.

As a condition of employment, the finalist will be required to disclose if they are subject to any final administrative or judicial decisions within the last seven years determining that they committed any misconduct, are currently being investigated for misconduct, left a position during an investigation for alleged misconduct, or have filed an appeal with a previous employer.

- "Misconduct" means any violation of the policies or laws governing conduct at the applicant's previous place of employment, including, but not limited to, violations of policies or laws prohibiting sexual harassment, sexual assault, or other forms of harassment, discrimination, dishonesty, or unethical conduct, as defined by the employer.
- UC Sexual Violence and Sexual Harassment Policy
- UC Anti-Discrimination Policy for Employees, Students and Third Parties
- APM - 035: Affirmative Action and Nondiscrimination in Employment

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Job location
Berkeley, CA

To apply, visit https://aprecruit.berkeley.edu/JPF04716

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact

N/A
University of California Berkeley

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