

# Postdoctoral positions in mechanisms of genome maintenance

## Description

Multiple NIH-funded postdoctoral positions are available in the <u>laboratory of Dr. Brandt Eichman</u> at Vanderbilt University to study molecular mechanisms of enzymes involved in DNA replication-repair. Projects are focused on (1) repair and tolerance of DNA damage during replication, (2) resolution of stalled replication forks, (3) replication initiation, and (4) base excision repair of interstrand DNA crosslinks. We integrate the tools of structural biology, including cryo-EM and X-ray crystallography, with in vitro biochemistry, biophysics, chemical and cell biology, and genetics to investigate the structure-function relationship of DNA processing enzymes and their macromolecular complexes.

### Environment

Lab members are part of a collaborative, multidisciplinary, and inclusive team of investigators and trainees interested in DNA replication and repair. Fellows are trained in multiple disciplines and take advantage of state-of-the-art shared <u>research facilities</u>, including new cryo-EM and X-ray instrumentation. Scientific growth and professional development opportunities beyond the PI's laboratory are provided by the <u>Genome Maintenance</u> program within the Vanderbilt-Ingram Cancer Center, the Molecular Biophysics training program within the <u>Center for Structural Biology</u>, the Training Program in Environmental Toxicology, and the Biochemical and Chemical Training in Cancer program. The PI and team members are committed to fostering a diverse and inclusive environment.

Vanderbilt University is located in the heart of Nashville, Tennessee, rated as one of the best cities in the US to live and work.

### Stipend

Salaries follow the NIH NRSA stipend scale. Additional information on benefits and being a postdoc at Vanderbilt University can be found at <u>https://www.vanderbilt.edu/postdoc/</u>.

### Applicants

A PhD or MD/PhD in biochemistry, molecular biology, or a related discipline, and a record of publication in peer-reviewed journals are required. Experience in cryo-EM, protein/nucleic acid biochemistry, and/or single-molecule techniques are highly desirable. Knowledge of DNA replication and the DNA damage response is preferred, but not required. Successful candidates will have critical thinking and problem solving skills; excellent organizational, interpersonal, and communication skills; the ability to work both independently and collaboratively; and be willing take research risks and motivated to learn new techniques. Scientists from marginalized groups are encouraged to apply.

### To apply

Email CV, a cover letter detailing your research interests and career goals, reprints of recent publications, and names of 3 references to <u>brandt.eichman@vanderbilt.edu</u>.



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