

Postdoctoral Fellow



May 2022

The Carvalho Laboratory (<https://www.pnri.org/research/labs/carvalho-lab/>) at the Pacific Northwest Research Institute (PNRI) in Seattle, WA seeks a motivated postdoctoral scholar who is passionate about genetics and the molecular basis of rare human genetic diseases. The successful candidate will be investigating the molecular mechanisms underlying the formation of structural variation in humans, particularly focused on ultra-rare and *de novo* structural variants that cause rare genetic diseases.

Research in the Carvalho Lab aims to investigate the mechanism of the formation of *de novo* variants in the human genome, and how they contribute to disease using a wide range of bioinformatic tools and NGS methodologies (please see publications here:

<https://scholar.google.com/citations?hl=en&user=JvZz2rUAAAAJ>). The candidate will develop skills in computational and molecular methods/tools used for genomic analysis, such as short and long-read next-generation data and optical genome mapping, and use those tools to propose mechanistic hypotheses to be tested *in vitro*. The candidate will be strongly encouraged to write manuscripts and grants, and to participate in oral presentations. There may be opportunities to mentor undergraduate and graduate students.

The highly collaborative, interdisciplinary nature of our laboratory provides a strong training environment in the areas of human genetics and genomics, as well as the opportunity to collaborate with world experts in the field of rare diseases and structural variation. The Carvalho Lab and the broader PNRI community also actively strive to increase diversity in STEM, translate our discoveries in ways that benefit society and train the next generation of scientists.

Qualifications:

- Ph.D. or MD/PhD candidates (or foreign equivalent) are encouraged to apply
- Background in genetics and basic molecular technologies
- Background in development, implementation and use of computational methods and tools for using short and long-read, next-generation sequencing to study the human genome is desirable
- Enthusiasm for learning and applying new technologies to exciting research questions
- Communication skills and the ability to work independently and as part of a team
- Track record of publication in peer-reviewed journals
- Must be fully vaccinated against COVID-19 prior to the start of employment

About PNRI:

PNRI is an independent, nonprofit, biomedical research institute with a distinguished history of contributing scientific advances to improve health in a variety of disease areas. PNRI is committed to creating a diverse environment and all qualified candidates are encouraged to apply. Applicants will not be discriminated against because of race, color, creed, sex, sexual

orientation, gender identity or expression, age, religion, national origin, citizenship status, disability, ancestry, marital status, veteran status, medical condition or any protected category prohibited by local, state or federal laws.

PNRI requires vaccination for COVID 19 as a condition of employment

How to Apply: For immediate consideration, please submit a cover letter, resume (or curriculum vitae). Please also include contact information for three professional references to hr@pnri.org.