

# Yale University: School of Medicine: Genetics

## Location

New Haven, CT

## Open Date

Oct 13, 2022

## Deadline

Oct 13, 2023 at 11:59 PM Eastern Time

## Description

The Scharfe Laboratory in the Department of Genetics at Yale School of Medicine seeks an Associate Research Scientist with expertise in biomedical research and the development of molecular technology and approaches for genetic disease screening and diagnostics.

## About the Lab

The Scharfe laboratory develops a number of tools and genomic approaches for molecular screening and diagnostics and the study of disease pathogenesis. We couple experimental and computational techniques to full integrate all steps of multiplexed molecular assays. Examples of our ongoing work include technology development for screenable disorders in newborns, rapid genotyping of genomic variants to improve patient care, microhaplotype sequencing for population genetics and forensics, and multiplex capture and sequencing for viral nucleic acid testing. The lab employs various technologies including next-generation sequencing, microarrays and quantitative PCR for analysis of single cell genomes, complex genetic rearrangements, and genomic haplotypes. Our laboratory has a major interest in the analysis of challenging clinical samples such as genetic materials from dried blood spots, cell free circulating DNA and small forensic samples. The lab is located in a highly translational setting next to the DNA Diagnostic laboratory and we collaborate the Yale Center for Genome Analysis (YCGA) and with colleagues and researcher at Yale and other institutions.

## Primary Responsibilities

- Collaborate with faculty on research projects and contribute to grant proposals
- Perform a variety of high complexity clinical molecular testing, including next-generation sequencing for inborn metabolic disorders and population genetics studies
- Perform quality control and data analysis and troubleshoot experimental protocols
- Maintain proficiency on a wide variety of molecular methods and technologies
- Support technology and molecular assay development efforts in the laboratory
- Assist with training of personnel and students

## About the Department

The Department of Genetics believes that diversity drives outstanding science. We strive to create an inclusive community of faculty, staff, and students that promotes and values diversity in age, gender identity, race, sexual orientation, physical or mental ability, and ethnicity to represent better the communities we serve. Please refer to the official Yale School of Medicine statement on diversity and inclusion, accessible here: <https://medicine.yale.edu/dice/>.

## Qualifications

The applicant should hold a PhD, MD or similar advanced degree in molecular biology, biomedical sciences, engineering, analytical chemistry or related fields. Basic molecular technology skills required such as PCR, gel-electrophoresis, and next-generation sequencing. Strong preference given to candidates with advanced bioinformatics skills such as R and python and statistical software packages. Adapt as needed to an expanding laboratory with increased testing complexity. Ability to work as a member of a diverse team is essential.

## Application Instructions

Applicants interested in the position must apply via the following link: <http://apply.interfolio.com/115587>.

Applications should contain (1) a cover letter describing your motivation for the position and detailing your relevant experience, (2) your curriculum vitae, (3) a brief statement explaining your research interests and (4) two confidential letters of recommendation.