

Postdoctoral position in Bioinformatics/Computational Genomics at University of California San Diego (USA)

A postdoctoral research position is available in Dr. Vikas Bansal's lab at the University of California San Diego. The lab is based in the Division of Genome Information Sciences (Department of Pediatrics) and focuses on developing computational methods for the detection and analysis of genetic variation using high-throughput DNA sequencing technologies and applying these methods to understand human disease. The lab has developed computational methods for haplotype phasing ([HapCUT2](#)), small variant calling ([Nature Communications 2019](#)) and read mapping in segmental duplications ([Nucleic Acids Research 2020](#)) using long-read sequencing technologies. Long-read sequencing has the potential to overcome some of the key limitations of short-read sequencing, particular in long repetitive regions of the human genome. The postdoc is expected to work on developing and benchmarking computational methods and tools for long-read sequencing technologies and applying them to human genome analysis. The position is supported by a federal grant for a maximum duration of four years.

Requirements:

Ph.D. in Computer Science, Statistics, Bioinformatics, Applied Mathematics or related field

Proficiency in programming (preferably in C/C++/Python), developing and benchmarking algorithms

Experience working in a Unix/Linux computing environment with large datasets

Proficiency in scientific writing and communication

Candidates with strong analytical skills and background in algorithms/statistics or experience in analyzing DNA sequence datasets will be given preference

Location:

University of California, San Diego is a top-ranked university located in sunny San Diego and offers extensive opportunities for training and collaboration. The candidate will have access to High-Performance Computing resources at the San Diego Supercomputer Center.

Contact information:

To apply, please send an email to Dr. Vikas Bansal at vibansal@ucsd.edu with your CV, contact information for 2-3 references and a brief statement of research experience and interests. More information about the publications and research projects of the lab is available from <https://bansal-lab.github.io>