

Postdoctoral Researcher - Bioinformatics

Job ID: 00392630

Job Function

Research

Schedule

Full-time

Location

United States-California
South San Francisco

Job type

Special Programs

Company/Division

Pharmaceutical

Job Level

Experienced

Who We Are

At the Roche Group, about 80,000 people across 150 countries are pushing back the frontiers of healthcare. Working together, we've become one of the world's leading research-focused healthcare groups. A member of the Roche Group, Genentech has been at the forefront of the biotechnology industry for more than 30 years, using human genetic information to develop novel medicines for serious and life-threatening diseases. The headquarters for Roche pharmaceutical operations in the United States, Genentech has multiple therapies on the market for cancer and other serious illnesses. Please take this opportunity to learn about Genentech, where we believe that our employees are our most important asset and are dedicated to remaining a great place to work.

The Position

How do changes in genome sequence affect biological function and disease? We cannot assay billions of mutations, but evolution has already tested the impact of changing every base in our genomes. Comparative genomics now offers a key to break this 'evogenetic code' by exploring which mutations survived evolution and how they correlate with the rest of the genome and on the biology of the organism.

We are looking for a smart, skilled, and highly motivated postdoctoral fellow to lead our exploration of genome evolution by reconstructing ancient genome sequences and modeling mutation patterns and evolutionary constraints. This will have potentially profound implications on understanding human sequence variation (familial and somatic), on understanding protein functions, and on relating genomics to organismal biology.

Our postdoc training encourages exposure to multiple projects, and we also have remarkable opportunities in the integrated analysis of cancer genomes. The Department of Bioinformatics and Computational Biology at Genentech is one of the largest bioinformatics research groups with a remarkable breadth and depth of expertise, a strong team

environment, deep links to our research colleagues, and a uniquely strong opportunity to help develop breakthrough new medicines. The Manning lab (<http://manninglab.org/>) focuses on understanding of biological function and disease through evolutionary genomics analysis.

Who You Are

Candidates for this position should have:

- PhD plus a strong background in bioinformatics and genomics; in particular, a robust understanding of protein sequence analysis, gene prediction and comparative genomics. Understanding of protein structure, biochemistry and signaling a plus.
- Robust mathematical and statistical skills, and a track record of applying them to complex and noisy biological data. Experience in computational modeling or population biology a plus.
- Proficiency in programming using scripting languages (Perl/Python), R, and experience in standard bioinformatics toolkits and programs.
- Excellent communication and teamwork skills to take advantage of our highly collaborative environment, adaptability and willingness to contribute to the overall goals of the project and the group.
- A passion for innovation, and demonstrated initiative and track record in tackling new areas of research.

Genentech is an Equal Opportunity Employer.