Postdoctoral researcher in single cell epigenomics and genetics at UC San Diego

A postdoctoral position is available to conduct integrative analysis of genetic and genomic data as part of a NIH-funded multi-disciplinary team that aims to gain insight into transcriptional and cell-cell signaling mechanisms leading to type 1 and type 2 diabetes. The position will be jointly with Dr. Maike Sander and Dr. Kyle Gaulton at the University of California, San Diego. The aims of this project are to (1) analyze single cell and bulk ATAC-seq, RNA-seq and other epigenome data from primary pancreatic cells and human pluripotent stem cell (hPSC)-derived organoids; (2) integrate single cell epigenome, transcriptome and large-scale human genetic data to link causal variation in regulatory elements to downstream changes in gene expression; and (3) reconstruct cell-cell signaling networks and cell lineage relationships from single cell data. The candidate will work as part of a collaborative team of computational biologists and experimental biologists with expertise in diabetes, stem cell biology, and metabolism. An ideal candidate will have a Ph.D. in Biological Science, Computer Science, Mathematics, or a related field, and have experience with high-throughput sequence data. Additional experience working with single cell data would be ideal. Our research team is equipped with next-generation sequencing technology, state-of-the-art computational resources, hPSC culture facilities, and sophisticated experimental platforms for functional validation. To apply: Applicants should send a detailed curriculum vitae, a list of publications, and a statement of research interests to Maike Sander, MD, at masander@ucsd.edu and Kyle Gaulton, PhD, at kgaulton@ucsd.edu. More information about the labs can be found at: http://msanderlab.org and http://www.gaultonlab.org.