Postdoctoral Associate – Functional genomics of islet dysfunction in diabetes
Stitzel Lab
Farmington, CT

The Stitzel Lab at The Jackson Laboratory for Genomic Medicine in Farmington, CT is recruiting a Postdoctoral Associate to join our scientific team working to understand the precise genetic mechanisms controlling pancreatic islet identity and function and identify genes and response pathways that can be therapeutically targeted to prevent islet dysfunction and enhance islet resilience. We conduct innovative allelic and functional and single cell genomic analyses of primary human islets and employ high-throughput genomic techniques (e.g. CRISPR-based screens, MPRA) to (de)code the gene regulatory circuits controlling each islet cell type in human and mouse and uncover gene targets and molecular effects of human diabetes risk variants.

We seek a highly motivated and talented individual with computational or dual computational/experimental experience to lead current or new NIH-funded functional (epi)genomic projects including: (1) (epi)genomics of human islet cell type-specific stress responses; (2) organelle-based (e.g., mitochondrial, peroxisomal) dissection of diabetes-associated genetic variants; and (3) single-cell genomic approaches to understand and engineer cell type-specific regulatory circuits in human and mouse pancreatic islets. Past and current trainees have been extremely successful obtaining fellowships and pursuing individualized career development and trajectories. Exceptional candidates can show early independence through the JAX Scholars Program. In addition to lab-based training and interactions, trainees have extensive access to resources and support from computational colleagues in collaborating labs and JAX Computational Science Services. JAX has developed a unique program for postdocs to expand their professional skills in science communication, entrepreneurship, teaching, mentoring and laboratory management to best prepare them for future career opportunities.

QUALIFICATIONS
- M.D or Ph.D. in biology, engineering, computer science, physics, mathematics, or related fields.
- Strong publication record (minimum of one first author publication) as objective evidence of scientific leadership and research accomplishments.

- For computational applicants, knowledge of HPC, Python, and/or R is required. Experience in human genetics, genome alignment, and handling bulk and single cell genomic datasets or a strong desire to learn these techniques is highly advantageous.
- For experimentally-focused applicants, a working knowledge of scientific computing software (R/Matlab) and scripting (bash/perl/python) languages is preferred.
- Passion to solve important questions in human genetics and precision genomic medicine

To apply, please submit: (1) a cover letter describing past research accomplishments, research interests, and career goals; (2) a current CV; and (3) contact information of three references.

Years of Postdoc Experience

Years	Salary
0-1	$57,034 – 61,397
1-2	$58,537 – 63,015
2-3	$60,083 – 64,679
3-4	$61,323 – 66,014
4-5	$63,371 – 68,219
5	$65,712 – 70,739

About JAX:

The Jackson Laboratory is an independent, nonprofit biomedical research institution with a National Cancer Institute-designated Cancer Center and nearly 3,000 employees in locations across the United States (Maine, Connecticut, California), Japan and China. Its mission is to discover precise genomic solutions for disease and empower the global biomedical community in the shared quest to improve human health.

Founded in 1929, JAX applies over nine decades of expertise in genetics to increase understanding of human disease, advancing treatments and cures for cancer, neurological and immune disorders, diabetes, aging and heart disease. It models and interprets genomic complexity, integrates basic research with clinical application, educates current and future scientists, and provides critical data, tools and services to the global biomedical community. For more information, please visit www.jax.org.