Dana-Farber Cancer Institute | Boston Children's
Dana-Farber/Boston Children's Cancer and Blood Disorders Center

Gene Therapy Program

HARVARD MEDICAL SCHOOL

Postdoctoral Position in Statistical Modeling for Gene Therapy, Single Cell genomics, and Clonal Dynamics

The Pellin Lab at the DFCI-BCH Gene Therapy Program/Harvard Medical School is seeking a highly motivated and talented postdoctoral researcher to join our team. We are a dynamic and interdisciplinary lab that focuses on gene therapy data analysis, methods for single cell genomics, and modeling of clonal dynamics. This is a unique opportunity to work at the cutting edge of research in gene therapy and contribute to both the development of novel therapeutic approaches and the statistical methodologies.

From a modeling perspective, we are interested in stochastic processes over graphs, analysis of spatio-temporal processes, (non-)linear modeling using differential equations, and agent-based modeling. From a biological perspective, we work on gene therapy preclinical and clinical studies, hematopoietic stem cell biology, immune cells in the context of neurodegenerative diseases, and genome editing technology.

Responsibilities:

- Analyze large-scale gene therapy datasets, including gene expression, single cell genomics, and clonal dynamics data.
- Develop and implement computational methods for data analysis, including statistical modeling, machine learning, and data visualization.
- Collaborate with experimental biologists to integrate computational and experimental findings.

Qualifications:

- Ph.D. in Statistics, Bioinformatics, Computational Biology, or a related quantitative field.
- Strong programming skills in languages such as R, Python and experience with relevant bioinformatics tools and databases.
- Prior experience in single cell genomics data, modeling of population dynamics or development of tools for the analysis of biological experiments
- Knowledge of statistical methods and machine learning techniques for data analysis.
- Excellent communication skills, both written and verbal.
- Ability to work independently and collaboratively in a team-oriented research environment.

The Pellin Lab offers a vibrant and collaborative research environment. The successful candidate will have the chance to work on exciting research projects at the forefront of gene therapy and contribute to advancing the field.

To apply, please submit the following documents to: danilo.pellin@childrens.harvard.edu or pellinlab@gmail.com

- CV
- Copies of your most significant publications or preprints if not accessible online (1-3)

Upon request,

- Cover letter describing your research interests and relevant experience
- Names and contact information for three professional references

Review of applications will begin immediately and continue until the position is filled. The anticipated start date is September 2023, although some flexibility may be possible. The position is for 2 years with the possibility of extension for an additional year. Salary and benefits will be commensurate with experience and follow the guidelines of the NIH.

For additional infos visit the Pellin Lab website PellinLab.org .

We look forward to receiving your application and having you join our team!