

Job Description: Multiple post-doctoral researcher positions available in Memorial Sloan Kettering Cancer Center

Dr. Kushal Dey,
Assistant Professor, Computational and Systems Biology Program,
Memorial Sloan Kettering Cancer Center (MSKCC)
(<https://www.mskcc.org/research/ski/labs/kushal-dey>)

The Kushal Dey lab (<https://www.mskcc.org/research/ski/labs/kushal-dey>) in the Computational and Systems Biology program at the Sloan Kettering Institute, Memorial Sloan Kettering Cancer Center, has 3 postdoctoral researcher positions available in statistical genetics and generative AI models.

Statistical Genetics postdoc:

The Statistical Genetics postdoc will be working with Dr. Dey and Dr. Gao Wang from Columbia University (<https://www.neurology.columbia.edu/profile/gao-wang-phd>), and other collaborators from MSKCC, Columbia University, Stanford University, and Harvard T.H.Chan School of Public Health on

- (a) Developing multi-ancestry fine-mapping and polygenic risk score models.
- (b) Performing GWAS-to-function methods integrating functional data from IGVF, ENCODE consortia with GWAS data.
- (c) Statistical genetics methods linking eQTLs and other QTLs with GWAS data.

We welcome applications from candidates with an exceedingly strong quantitative background in statistics, biostatistics, computer science, or other related domains. The applicant would be required to have prior experience working with large data, resulting in a high quality first/co-first author publication. The candidate must be proficient in computing, with expertise in R and/or Python.

The candidate's primary affiliation will be through the Sloan Kettering Institute, MSKCC located on the Upper East Side of New York City. It is part of the vibrant Tri-Institutional Research campus adjacent to Rockefeller University and Weill Cornell Medical College. Sloan Kettering offers competitive postdoc salaries and convenient subsidized housing. The candidate will have weekly meetings with both Dr. Dey and will be working closely with collaborators from various consortia like ADSP, ENCODE, and IGVF.

To apply, please send a CV, a brief cover letter outlining your interest, and names/contact information for three references to both the following email addresses:

deyk@mskcc.org

Generative AI models postdoc:

The Generative AI models postdoc will be working with Dr. Dey and De. Rahul Mazumder from MIT (<http://www.mit.edu/~rahulmaz/>) on

- (a) Develop and apply state-of-the-art local and global matrix completion approaches to omics data.
- (b) Build large scale neural network and graph-embedding models on biomedical and cancer knowledge graphs.
- (c) Work on multimodal diffusion and transformer-based language models to connect different modalities of genomic and genetic data.

We welcome applications from candidates with an exceedingly strong quantitative background in computer science, statistics/biostatistics, computational biology, or other related domains. The applicant would be required to have prior experience working on machine learning, optimization, and AI models. The candidate must be proficient in computing, with expertise in Python. Prior background in biological sciences will be a plus, but not required.

The candidate's primary affiliation will be with the Sloan Kettering Institute, MSKCC located on the Upper East Side of New York City. It is part of the vibrant Tri-Institutional Research campus adjacent to Rockefeller University and Weill Cornell Medical College. Sloan Kettering offers competitive postdoc salaries and convenient subsidized housing. The candidate will have regular meetings with Drs Dey and Mazumder and will also be working closely with collaborators from various consortia like ADSP, ENCODE, and IGVF. The candidate will also be working closely with the MSKCC AI/ML team to implement large-scale machine learning models.

To apply, please send a CV, a brief cover letter outlining your interest, and names/contact information for three references to the following email addresses:

deyk@mskcc.org