

Call for a Postdoctoral Fellow for Professor Takahiko Koyama's Lab

Keio University WPI Human Biology-Microbiome-Quantum Research Center (Bio2Q)

1 About the PI

Name and Title:

Takahiko Koyama, Project Professor, Keio University Bio2Q

Specialization:

Quantum Computing, Artificial Intelligence in Life Sciences

Website:

<https://www.hgc.jp/~takak/>

Contact:

takahiko.koyama@keio.jp

2 Job Description

We are seeking a highly motivated postdoctoral researcher to join our team in advancing systems biology approaches for metabolic pathway analysis. This position offers an exciting opportunity to work at the intersection of microbiology, bioinformatics, and artificial intelligence to uncover novel insights into microbial metabolism.

Key Responsibilities

- Develop and apply systems biology approaches to analyze complex metabolic pathways
- Conduct computational modeling of microbial metabolic networks
- Integrate multi-omics data (genomics, transcriptomics, metabolomics) for pathway reconstruction
- Apply machine learning and AI methods to predict metabolic functions and interactions
- Collaborate with experimental teams to validate computational predictions

3 Number of Openings

One

4 Qualifications

- Ph.D. in Microbiology, Systems Biology, Bioinformatics, Computational Biology, or related field
- Strong background in microbiology and understanding of metabolic pathways
- Proficiency in bioinformatics tools and programming languages (Python, R, MATLAB, etc.)
- Experience with systems biology approaches and metabolic network analysis
- Knowledge of statistical methods and data analysis
- Proficient in English or Japanese communication.