

TITLE: Inquiry for Ph.D. opportunity - Kyungrin

Dear Professor Lee,

Hello, I'm Kyungrin Noh, a graduate of Professor Doheon Lee's laboratory at KAIST. I'm sending you this letter in the hope to find my path as a Ph.D. student. I have been working as a data scientist in IBM, Korea to find real data use-cases and required skills in business fields since I graduated masters from Professor Dohoen Lee's lab. And now I'm looking to continue my career path back in bioinformatics.

During my bachelor's, I've gained a knowledge of Genetics; I have conducted in vivo experiments on mouse/Drosophila and graduated with the thesis paper on targeted anti-tumor drug delivery. During the master's, my main research area was to find drug candidates from natural products: utilizing a plethora of natural chemical databases, human metabolic pathways, DNA/RNA/AA sequence analysis, and machine learning models.

Moreover, my strong biological background from the university and the latest computational methodologies that I have learned at IBM will help me quickly catch up in the NGS research areas. And my project-based work experience will be a great plus for both your lab's project management and my research performance.

Based on my experience and knowledge, your laboratory would be a great place where I can continue my research career. I remember having experiments on E. coli with retrotransposon, altering the gene expression via the introduction of new sequences. Knowing that the large fractions of mammalian genomes are composed of repetitive transposable elements, I'm more than interested to handle such large datasets, apply ML/DL methodologies, and validate the results with the wet lab capability. Also, my research interests further extend to how to properly set up and manage analytics platforms for large NGS datasets, strengthening my knowledge in distributed server management and cloud architectures.

Thanks for your time reading my rather blunt inquiry. And, really, any comment from you will be a great help for my career planning, looking for my next career steps abroad.

Sincerely,

Kyungrin