



Student intern (all genders) - Innate Immunity

About BioMed X

BioMed X is an independent research institute located on the campus of the University of Heidelberg in Germany. Together with our partners, we identify big biomedical research challenges and provide creative solutions by combining global crowdsourcing with the local incubation of the world's brightest early-career research talents. Each highly diverse research team at BioMed X has access to state-of-the-art research infrastructure and is continuously guided by experienced mentors from academia and industry. At BioMed X, we combine the best of two worlds - academia and industry - and enable breakthrough innovation by making biomedical research more efficient, agile, and fun.

About Translocation of Complex Macromolecules Across the Intestinal Epithelial Barrier (TMI)

The main objective of the research group TMI, headed by Dr. Kyungbo Kim, is to discover novel transport mechanisms in the human intestinal tract which could be utilized for oral-systemic delivery of diverse therapeutic modalities (e.g., peptides, oligonucleotides, and antibodies). Studies will involve isolating intestinal cells, generating intestinal organoids from human subjects, and creating an organotypic assay system of the intestine. The project's cores are to develop a ligand specific for a target cell and establish quantitative assessment methods to monitor macromolecular drug delivery across the intestinal epithelial barrier. Our final goal is to create a novel delivery platform that can be utilized to develop a new generation of oral immunotherapies to benefit patients.

The Position

We have developed ligands for specific human immune cell populations in the human intestine. The student intern will be involved in ligand-receptor interaction studies using bioluminescence and colorimetric assays. The assistant will also study how to target a cell of interest and engineer proteins. Hands-on experience with protein expression and purification is preferred. The ideal candidate(s) will be an MSc student in cell biology, biochemistry, or a related field with excellent work organization skills and communication skills in English.

Required skills

- Hands-on experience in bacterial protein expression or *in vitro* translation (preferred)
- Hands-on experience with ELISA, SPR, or IP (preferred)
- Good documentation skills with close attention to detail
- Excellent communication skills in English

Please submit your application to Dr. Kyungbo Kim (kim@bio.mx). Applicants will be interviewed upon incoming documents; hence, please contact us as soon as you decide to apply.