Postdoc Position in Cell Communication and Signaling

A three-year postdoctoral position is immediately available in the laboratory of Prof. Jung-Youn Lee (https://leelab.dbi.udel.edu) at Delaware Biotechnology Institute (https://www.dbi.udel.edu), University of Delaware, U. S. A.

We offer a competitive salary with full-benefits.

About the Lab

The Lee lab is considered a frontier lab in the biology of plasmodesmata, membrane-lined cell-to-cell communication channels that are vital for the development and physiology and survival of plants. The research in Lee lab focuses on understanding various aspects of plasmodesmal structure and function including the role of plasmodesmata in whole plant responses. We take a multidisciplinary approach using molecular, cellular, genetics, and computational tools. Our findings has been published in high impact journals including the Nature Plants, Cell Host Microbes, eLife, and Plant Cell.

About the Project

Lee lab is recently awarded by the National Science Foundation to investigate the molecular mechanisms by which novel membrane proteins associate with plasmodesmal channels. Specifically, we aim to gain mechanistic insights into how plasmodesmata-associated integral membrane proteins are targeted and anchored at plasmodesmata, and how they may self-assemble to form functional protein complexes. We are taking an integrative computational approach utilizing newly developed machine learning tools and techniques in combination with the state-of-the-art bioimaging techniques; hence the successful postdoc is expected to work closely with computational and bioimaging experts as well as to participate in mentoring graduate and undergraduate students.

About the qualification

The successful candidate holds a PhD in cell and molecular biology, biochemistry, genetics, or plant biology discipline and is expected to lead the investigation on molecular dissection of plasmodesmata-associated proteins and evaluation of their plasmodesmal association and impact on molecular transport between cells. Expertise in molecular cloning, membrane protein targeting and modeling, protein-protein interactions are required. Experiences in fluorescent imaging and analysis and plant expression systems using tobacco and Arabidopsis are not required but a plus. Those who are highly motivated to conduct cutting-edge research and work well in a team-oriented environment are encouraged to apply.

About application

Interested candidates are asked to apply online. Please send in email to lee@dbi.udel.edu a single document including a cover letter, a CV, and statements of research interests,
experiences, and career goals and names of three referees with their detailed contact information.