DANDRITE Alumni Feature

Dongik Park

Postdoc and Assistant Professor Nykjær Lab 2018-2024

Now: Assistant Professor, Ghent University Global <u>Campus Korea</u>



How would you describe your academic career path up until now?

After completing my bachelor's and master's degrees in South Korea, I pursued doctoral studies at the Max Planck Institute of Psychiatry in Germany to experience advanced research environments. There, I studied biomarkers and pathways predicting antidepressant response but found observational omics studies lacked mechanistic insight. Discovering Prof. Anders Nykjaer's work on the sortilin receptor family and psychiatric disorders, I moved to Denmark to join his lab. Over six rewarding years, I trained and collaborated extensively in an open, supportive environment. In 2024, I accepted a tenured assistant professorship at Ghent University Global Campus Korea. From the start, I've been fascinated by the brain's complexity—especially how molecular dynamics can influence behavior. The academic freedom to explore my interests has been my greatest motivation, and I deeply value the support of my mentors and colleagues along the way.

What were the highlights of your time at DANDRITE and why?

My PhD research identified potential biomarkers for predicting and assessing antidepressant treatment response, which is currently based mainly on patient questionnaires and clinical interviews. To develop more objective, scientific markers, I conducted multi-omics analyses using both mouse models and patient samples, translating preclinical findings into clinical relevance.

As objective biomarkers for diagnosis and treatment monitoring are still lacking, my work proposed an omics-based stratification approach, laying the groundwork for precision and personalized medicine. Given the complexity and comorbidity of brain disorders, this strategy may lead to more effective and accurate interventions.

How did collaborations and mentorship at DANDRITE shape your career?

At DANDRITE, I both received and provided valuable technical support through collaborations with fellow scientists. While not all efforts succeeded, these experiences broadened my scientific perspective. I also came to appreciate the professionalism and expertise of the DANDRITE network, and I feel fortunate to have worked alongside its talented alumni.

The group leaders and senior scientists at DANDRITE have been strong role models, inspiring my pursuit of multidisciplinary science through their diverse expertise. This influence helped shape one of my current projects at Ghent University, where I integrate parasite and microbiome biology into neuroscience research.

What skills or experiences from DANDRITE have been most valuable in your current role?

At DANDRITE, I have been extensively trained in several essential skills related to education and open communication. Now I see great value in delivering comprehensive and informative lectures to students according to one of my major roles in my current workplace. According to my experience and training back in Denmark, I am working hard to establish an excellent and friendly working environment for employees in the group in which we can all thrive together.

Where do you see yourself professionally in 5 years?

In five years, I see myself to be developed as a professional lecturer delivering exciting biological content and motivating out-of-box thinking to our Ghent University students. I can imagine international scientists in my group will be working on our own firm scientific niche in the integrated field of omics, systems biology and neuroscience under my supervision. In five years, my current network with DANDRITE as well as domestic Korean community will be even further strengthened, opening new doors towards great and exciting scientific findings.

What advice would you give to others pursuing or wanting to pursue an academic career in Denmark?

Despite a bit of frustration during my stay in Denmark, now I realized that academic career and training in Denmark fostered me as a academic professional with multiple great skills. Those experiences and skills were key success points for acquiring my current position, and they are still far advanced and essential elements which are now becoming international standards. In this world with uncertainty, DANDRITE and Danish institutions are providing greater room for research and well-balanced life. I believe your experience and training at DANDRITE will be a great asset in your future academic career no matter where you go.

