Alumni Feature: Rune Nguyen Rasmussen, PhD student from Keisuke Yonehara's laboratory

In brief, tell me about your specific field of research and explain why you are interested in this particular area?

The overall research field of my PhD research has been the visual system (i.e., the neural circuits that give rise to the experience of sight). Specifically, in my PhD studies, I have investigated if and how motion-encoding cells residing within the retina contribute to motion processing carried out by the visual cortex of mice. I am generally fascinated by many topics and questions within the realm of neuroscience, and thus my scientific interests span many facets of brain functioning. The research question that I addressed in my PhD studies appealed to me for several reasons. For one, our causal and mechanistic understanding of how the sensory periphery subserves higher-order sensory processing carried out by the cerebral cortex is very limited. In the lab of Keisuke Yonehara, we are ideally equipped to tackle this question in the context of the visual system, and thus I was driven by genuine curiosity to explore this. Furthermore, in order to provide answers to the question at hand, I had to learn and master a suite of experimental techniques which I also find deeply motivating and fun!

What was most memorable to you about your experiences in your PhD program, and what was most memorable to you about your experiences at DANDRITE and Aarhus University?

Several things come to mind concerning this question. My PhD pursuit has taken me on a truly wonderful journey. In addition to the countless hours in front of a two-photon microscope, I have been privileged to visit a number of inspiring scientific environments around the world (e.g., Cold Spring Harbor Laboratories, EPFL, FMI, and MPFI), which all have been rewarding and motivating experiences. I can genuinely say that I have relished these three years of PhD research, I have learned an exceptional amount — knowledge both theoretical and practical — and I have made new friends and collaborators from around the world. What probably has been most memorable for me about my experiences at DANDRITE, and at Aarhus University in general, is the tremendous helpfulness and kindness that I have met everywhere. I have always felt that no matter who I have approached for help or guidance, they always tried their very best to help me. Thus, the environment of the DANDRITE community have been such a joy to be part of — scientifically but not least collegially.

Please describe your engagement in social and work-related activities at DANDRITE, and what you have gained from it?

During my PhD study, I think it is fair to say that I have been very focused on the science and my work. Yet still I have strived to be involved in work-related activities at DANDRITE as much as I have been able to. For example, I was involved in creating video presentations for the <u>Yonehara Group</u> and <u>DANDRITE</u>, I interacted with potential future students at DANDRITE Encounters, and I have served as PhD spokesperson. All of these experiences have been very rewarding and not least fun to engage in.

What advice would you give to someone who is considering pursuing a PhD within science?

My advice to someone who is considering pursuing a PhD, in any academic field, would be to first nail down the "why" — why do you want to pursue this PhD, and what do you want to gain from it? Unquestionably, during these three years of intense studies and work, there will be times where you experience frustrations and things are not going as smoothly as you might had hoped for. In such situations, I truly feel it helps having something to anchor to, which reminds you why you embarked on this PhD in the first place and helps you to see the bigger picture.

Can you tell us about your plans after having defended your PhD?

After having defended my PhD, I am going to the lab of Professor Ole Kiehn at the University of Copenhagen where I will be a postdoctoral fellow within the field of motor neuroscience.

By Rune Nguyen Rasmussen