### Dr Udom Sae-Ueng

Thailand's National Centre for Genetic Engineering and Biotechnology (BIOTEC)

#### European labs visited:

Institute of Biology, Humboldt-University Berlin (Germany) & Molecular Biophysics, Zernike Institute, University of Groningen (Netherlands)



**Dr Udom** has long been intrigued by the physics behind biological systems and mechanisms. He is specialized in nano-mechanics of viruses and mechanistic virology. He also focuses on bio-mechanics of cells, fungi, and nano-fibers by relating the dynamically physical traits to the biological functions of various bio-systems, moving toward the novel nano-bio-applications. He is always looking to expand his expertise and to create research collaborations at international level. He enjoys cooking, playing guitar, and watching American football in his spare time. In the Falling Walls Lab, he presented his innovation on the bacterial viruses for a global agricultural challenge of bacterial wilt disease.

# You recently took part in the Falling Walls Lab Finale and the Falling Walls Conference in Berlin. Please tell us about your experience. What were the highlights for you? This might inspire others to follow in your footsteps!

It was once in a lifetime experience! It was the first time for me to pitch my innovation on the international stage. I thought I had practiced a lot so that I would not get nervous. However, once I stepped on the stage, I felt very anxious. Personally, I felt every single pitch was a highlight. Everyone was well-prepared, and I learned a lot from the very diverse presentations. It gave me a bigger picture of how each one of us tries to make this world a better place through science, technology, and innovation. I encourage everyone to participate in the Falling Walls Lab event. It will certainly widen your horizon in moving forward and it will provide you with an opportunity to show your idea to the world.

#### How did participation help you to expand your professional networks?

I had an opportunity to meet and exchange ideas with people from various fields, organizations, and private sectors. It helped me to expand my professional network for the future.

As a EURAXESS Prize winner you also visited research labs in Europe. Can you tell us where you went and who you met?

I visited two labs. The first one was Prof Andreas Herrmann at the Institute of Biology at Humboldt-University Berlin. The second one was Prof Wouter Roos at Molecular Biophysics, Zernike Institute at the University of Groningen. I have followed both professors and their intriguing research in the fields of Biophysics and Mechanistic Virology since my days as a PhD student.

### What are your key takeaways from the visits and what are your future plans?



I am keen to establish a research collaboration with the European researchers I visited. We are now discussing funding opportunities in Europe and Thailand for our possible collaboration. I am also planning to apply for an MSCA-IF [MSCA Individual Fellowship] in the near future.

# What advice would you give to colleagues who might be interested in participating in the Falling Walls Lab in your country next year?

There is nothing to lose here. In Thailand, I made several new friends, leading to potential collaborations in Thailand. The FWL gave me the opportunity to re-think my work. There will be many opportunities for you to meet new people and introduce your research and your ideas to them so take the chance to win a ticket to Berlin.