

Jury report

Pieter Langerhuizen Lambertuszoon Fonds 2018 - Botany

This year the Pieter Langerhuizen Lambertuszoon Fonds allocated funding to support activities in the discipline 'botany'. This is a broad discipline that also includes phytopathology and agriculture. In this round nine excellent proposals were submitted, some seeking financial support for fieldwork, others for fundamental research or for collecting data, in particular sequencing data, as a basis for further research. After intense deliberations the jury that was assigned to evaluate the proposals, made the decision to nominate Dr. Kaisa Kajala from University of Utrecht as the winner of the prize.

Dr. Kajala started her scientific career at the University of Cambridge in the UK where she obtained a PhD degree in Plant Sciences in 2010. She then worked as a post-doc at the University of Western Australia and at the University of California, Davis where she spent five years in a renowned research group that is addressing the question "How do cells within plant roots respond to the multitude of stresses they face in the world?". Dr. Kajala gained a broad expertise in this particular field and in 2017 she was selected to join the Plant Ecophysiology Group at Utrecht University as an assistant professor. This group studies the interactions between plants and their environment. The focus of Dr. Kajala is to understand the ins-and-outs of a particular cell layer in the root, named the exodermis. This cell layer protects the roots from drying and drowning, a stress condition encountered by many crop plants in particular due to global climate changes. Plant breeders have to harness new crop varieties with the ability to cope with drought or heavy rainfall and to do so, fundamental knowledge on these processes is essential.

Dr. Kaisa Kajala faces the challenge to establish her own niche as a plant researcher in the Netherlands. She has to attract students to join her group, she has to seek for funding for fundamental research and has to make alliances with the private sector, the plant breeding industry which has an important position in the Dutch economy. To support her in this endeavor the Pieter Langerhuis Lambertuszoon Fonds will provide finances for the purchase of equipment that is crucial for her research on the root exodermis. The so-called vibratome enables high-quality slicing of plant tissues in thin sections suitable for microscopy and hence, precise studying of the anatomy of root tissues by advanced microscopic imaging. This investment will give Dr. Kajala a head start that is important for her as a starting assistant professor.

Stress conditions cause enormous damage in agriculture and in natural ecosystems. The type of research performed by Kaisa Kajala is instrumental to further our insights into the complex interactions between plants and their environment. We encourage Kaisa to further exploit her skills and knowledge and to build a strong research team here in the Netherlands amidst of the Dutch plant scientists and the private plant breeding sector. We look forward to her contributions in the future.

Prof. dr. ir. F.P.M. (Francine) Govers, persoonlijk hoogleraar moleculaire fytopathologie Wageningen Universiteit

Prof. dr. E.F. (Erik) Smets, hoogleraar systematische botanie Universiteit Leiden, wetenschappelijk directeur Naturalis Biodiversity Center, buitengewoon hoogleraar Katholieke Universiteit Leuven

The jury meeting took place on 30 March 2018 and was chaired by Ir. B.M.Th. Dortland-Bier, former Secretary KHMW. Also attended Prof. dr. A.P. IJzerman, Secretary of Natural Sciences KHMW and Drs. S. van Manen, Secretary (minutes).