



Bio:

Roeland Merks (NL, 1972) is professor of Mathematical Biology at Leiden University (LU), He holds a shared position between the Mathematical Institute and the Institute of Biology, and leads an interdisciplinary team at the intersection of experimental biology, mathematics, and physics, currently consisting of 5 PhD students. His research is focused on the mathematical modelling of the behavior of single cells and cell collectives, e.g., during the formation of blood vessels, plant development and the gut microbiota. Merks developed novel mathematical and computational approaches to model the biomechanical and chemical interactions between cells and the extracellular matrix that guide the development of multicellular systems, which he applied to studies of angiogenesis, tumor evolution, and other developmental systems. Alongside this work on animal cell and developmental biology, Merks group work on plant development and microbial ecosystems. His current research is funded by NWO Vici/XL grants, private funding, and the NWO Gravity Consortium GreenTE on plant mechanobiology. Roeland Merks obtained an MSc in Theoretical and Development Biology from Utrecht University in 1997, and a PhD in Computational Science from the University of Amsterdam in 2003. He held postdoctoral positions at Indiana University Bloomington and VIB Department of Plant Systems Biology in Ghent, and moved to CWI in Amsterdam in 2008 as senior researcher. He became full professor at Leiden University in 2014 and moved full-time from Amsterdam to Leiden University in 2018.

https://www.universiteitleiden.nl/en/staffmembers/roeland-merks#tab-1