



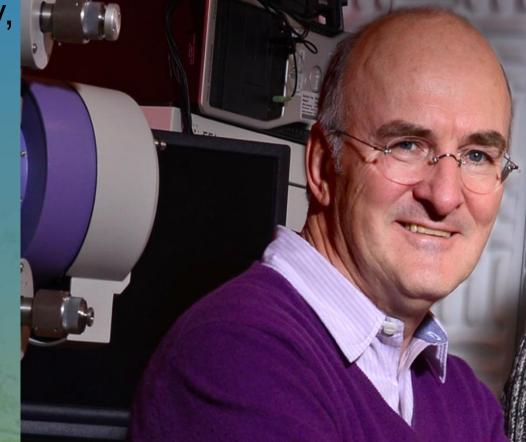
## A revolution in cryo-EM: beauty and benefits of nanobiology in life science

报告人: Peter J. Peters 报告时间:2016年6月30日(周四)上午10:00 报告地点:生物物理研究所9501会议室 主持人:徐涛研究员

## 报告人简介

Peter Peters obtained his PhD in 1991 from Utrecht University, where he co-developed the cryo-immunogold EM method. Using this technique, he discovered the 'MHC class II antigen loading compartment' and established that secretory granules in cytotoxic T cells are of lysosomal nature. At the National Institutes of Health in Bethesda, he identified ARF6 as a regulator for endocytosis.

In 1998, Peters was appointed professor at the Netherlands Cancer Institute in Amsterdam. His team discovered that Mycobacterium tuberculosis translocates via a 'type VII



secretion system'-dependent fashion from the phagosome to the cytosol. He also codeveloped with Hans Clevers the human organoid cell culture starting from single stem cells. Additionally, he initiated and coordinated the 'Netherlands Centre for Nanoscopy,' with two Krios cryo-EMs (www.necen.nl).

In 2014, Peters was appointed as distinguished professor at Maastricht University, where the Maastricht MultiModal Molecular Imaging Institute co-directs (M4I), he www.maastrichtuniversity.nl/m4i. His team is studying the near-atomic structure of the type VII secretion system using single-particle cryo-EM and cryo-electron tomography. For this, they are co-developing high precision, cryo-focused ion beam sample preparation guided by correlative cryo-fluorescence microscopy. His team also is developing the nextgeneration Vitrobot.