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Pressemitteilung

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# CNMPB junior research group leader Katrin Willig received Lennart Nilsson Award

**Katrin Willig received the prestigious award for groundbreaking contribution to the application of super-resolution microscopy of living cells.**

Katrin Willig, junior research group leader at the Cluster of Excellence and the DFG Research Center Nanoscale Microscopy and Molecular Physiology of the Brain (CNMPB), is awardee of the Lennart Nilsson Prize 2015. Central focus of her junior research group, affiliated at the Max Planck Institute for Experimental Medicine, is the application of state of the art optical microscopy for studying cell structures at the nanoscale. The major aim is to visualize dynamic processes in living nerve cells for a better understanding of the basic principles of human brain function. The prize, endowed with 100.000 SEK (ca. 11.000 €), has been awarded on October 15th 2015 at the Karolinska Institutet in Stockholm.

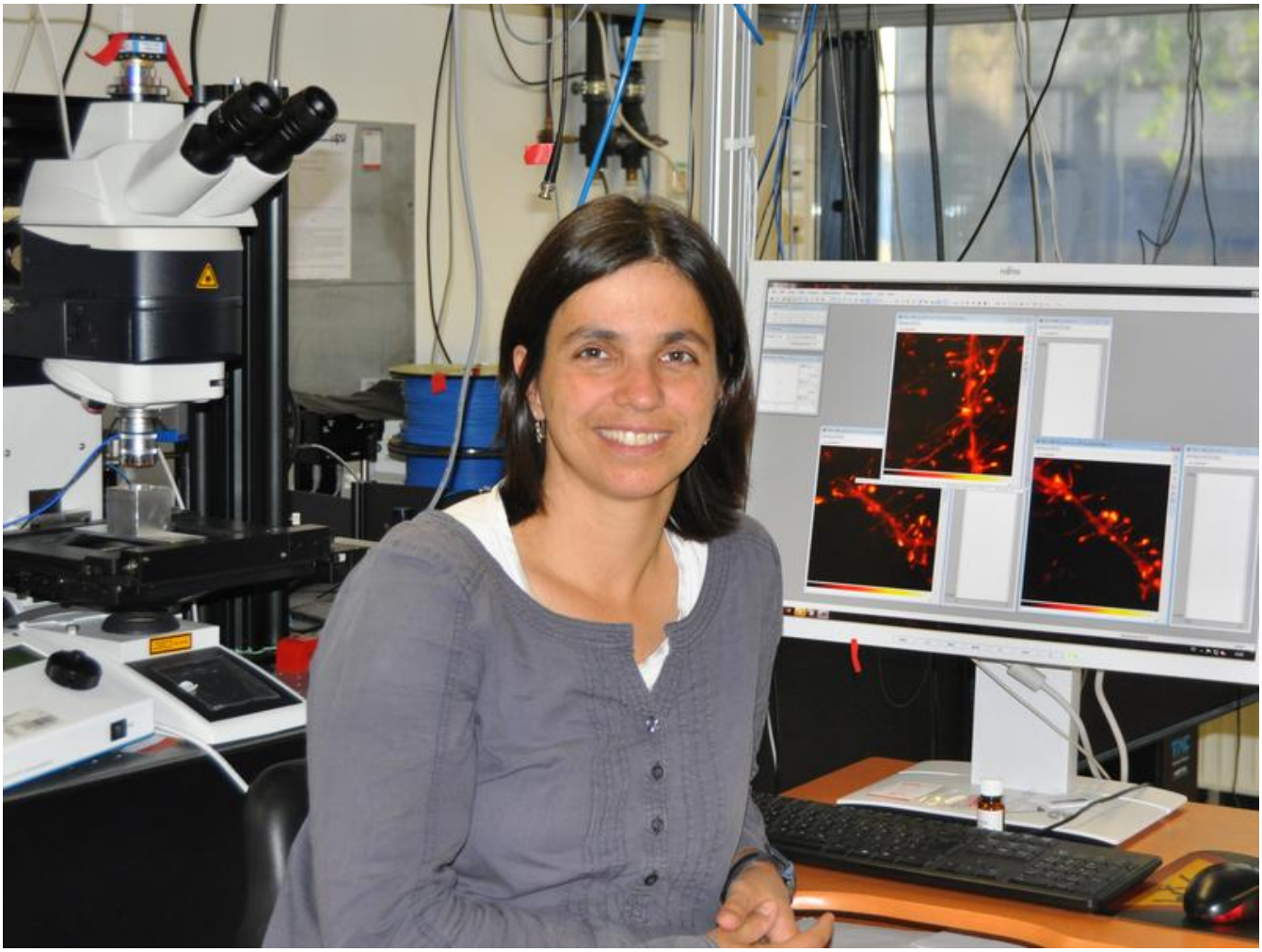
The groundbreaking development of super-resolution microscopy enables imaging of molecular processes and signal cascades. Stimulated Emission Depletion (STED) microscopy, developed in the nineties by Stefan W. Hell, generates outstanding images from living cells at the nanometer scale. The awardee, a former member of Stefan W. Hells department, has significantly contributed to establishing the application of STED microscopy in combination with fluorescent proteins for imaging of living tissues. This technology enabled her, for the first time, to visualize cellular structures of nerve cells in unexpected detail and to observe synaptic processes in the living mouse brain in real time. STED microscopy belongs to the family of super-resolution nanoscopy techniques. In 2014, Eric Betzig, Stefan W. Hell und William E. Moerner have been awarded with the Nobel Prize for the development of super-resolution fluorescence microscopy techniques.

The scientist: Dr. Katrin I. Willig, born 1975, studied Physics at the University of Würzburg. In 2006, she received her PhD under supervision of the later Nobel Laureate Stefan W. Hell at the University of Heidelberg. Within her postdoc time at the Department of NanoBiophotonics, at the Max Planck Institute for Biophysical Chemistry, also under supervision of Stefan W. Hell, she developed sub-diffraction STED microscopy for live cell and in vivo imaging. In 2014 she became leader of the junior research group “Optical Nanoscopy in Neuroscience“ at the Cluster of Excellence and DFG Research Center for Nanoscale Microscopy and Molecular Physiology of the Brain (CNMPB) with affiliation at the Max Planck Institute of Experimental Medicine in Göttingen.

The award: The Lennart Nilsson Prize, administered by the Lennart Nilsson Foundation, is annually awarded to individuals who made outstanding contributions to scientific photography. The prize was inaugurated in 1998 in honour of the Swedish medical photographer Lennart Nilsson, who achieved worldwide recognition for his images. The prize, award sum 100.000 SEK, is traditionally awarded at Karolinska Institutet's inauguration ceremony.

URL zur Pressemitteilung: http://www.em.mpg.de/index.php?id=361 - junior research group of Katrin Willig

URL zur Pressemitteilung: http://www.cnmpb.de - Cluster of Excellence & DFG Research Center Nanoscale Microscopy and Molecular Physiology of the Brain (CNMPB)



Lennart Nilsson Awardee: Katrin Willig, junior research group leader at the Cluster of Excellence Nanoscale Microscopy and Molecular Physiology of the Brain (CNMPB)
Wegner / CNMPB