

Peter Hinterdorfer

Date of birth: January 13, 1963
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Academic education

1981-1989 Technical Physics, Branch Biophysics, Johannes Kepler University Linz, Austria
1989 Diploma in Technical Physics, Branch Biophysics
Thesis: 'Fluorescence Correlation Spectroscopy'
1992 Dr. tech. in Biophysics (*Auszeichnung*) Thesis: 'Aggregation of the L-Type Ca²⁺-channel in model membranes investigated using fluorescence correlation spectroscopy'

Academic career

1988-1992 Research Assistant at the Johannes Kepler University of Linz, Institute for Biophysics
1992-1993 Postdoctoral Fellow at the University of Virginia, Department of Molecular Physiology and Biological Physics
1993-2001 University Assistant at the Johannes Kepler University of Linz, Institute for Biophysics
2001 Assistant Professor at the Johannes Kepler University of Linz, Institute for Biophysics
2001-2009 Associate Professor at the Johannes Kepler University of Linz, Institute for Biophysics
Since 2010 Professor of Experimental Applied Biophysics at the Johannes Kepler University of Linz, Institute for Biophysics

Scientific visits

1992-1993 Postdoctoral Fellow at the University of Virginia, Department of Molecular Physiology and Biological Physics

Scientific interests

Single molecule biophysics, atomic force microscopy, molecular recognition, protein folding, bio-nano-technology, proteins, viruses, membranes, cells, receptor-ligand and protein-protein interactions, energy landscapes, mechanical force and protein function

Scientific awards

Postdoctoral Schrödinger Fellowship of the Austrian Science Fund (1992-1993);
Research & Development 100 Award (2004); Nomination Nanoaward Austria (2008)

Activities

Organizer of the *Annual Linz Winter Workshop*, "Single Molecule Techniques in Biophysics and Drug Discovery", held since 1999.

Editorial boards

Council Member of Biophysical Journal; Editor of Biophysical Journal; Editor of the 'Proceedings of the Linz Winter Workshop'; Editor of the 'Springer Handbook of Single-Molecule Biophysics' (2009)

Selected publications

1. Zhu R., Howorka S., Pröll J., Kienberger F., Preiner J., Hesse J., Ebner A., Pastushenko V. Ph. Gruber H.J., and P. Hinterdorfer. 2010. Nanomechanical Recognition Measurements of Individual DNA Molecules Reveal Epigenetic Methylation Patterns. *Nature Nanotech.* In press.
2. Rankl C. , F. Kienberger, L. Wildling, J. Wruss, H.J. Gruber, D. Blass and P. Hinterdorfer. 2008 Multiple Receptors Involved in Human Rhinovirus Attachment to Live Cells. *Proc. Natl. Acad. Sci. USA*, 105(46):17778-83
3. Tang J., A. Ebner, H. Badelt-Lichtblau, C. Völlenkle, C. Rankl, B. Kraxberger, M. Leitner, L. Wildling, H. J. Gruber, U. B. Sleytr, N. Ilk and P. Hinterdorfer. 2008. Recognition Imaging and Highly Ordered Molecular Templating of Bacterial S-Layer Nanoarrays Containing Affinity-Tags *Nanoletters*, 8(12):4312-4319.
4. Preiner, J., H. Janovjak, C. Rankl, H. Knaus, D. A. Cisneros, A. Kedrov, F. Kienberger, D. J. Muller, and P. Hinterdorfer. 2007. Free Energy of Membrane Protein Unfolding Derived from Single-Molecule Force Measurements. *Biophys J.* 93:930-937.
5. Chtcheglova, L. A., J. Waschke, L. Wildling, D. Drenckhahn, and P. Hinterdorfer. 2007. Nano-Scale Dynamic Recognition Imaging on Vascular Endothelial Cells. *Biophys J.* 93:L11-13.