

Assoc.-Prof. Dr. Georg Pabst

Biophysics Division, Institute of Molecular Biosciences, University of Graz, Humboldtstr. 50/III, A-8010 Graz;
phone: + 43 316 380 4989, email: georg.pabst@uni-graz.at, www: <http://homepage.uni-graz.at/de/georg.pabst/>

ORCID: [0000-0003-1967-1536](https://orcid.org/0000-0003-1967-1536)

Curriculum Vitae

30 June 2016

1. UNIVERSITY EDUCATION

Habilitation	2007	Technical University of Graz, Austria (Applied Physics)
PhD	2000	Graz University of Technology, Austria (Solid State Physics / Biophysics)
MSc	1997	Graz University of Technology, Austria (Applied Physics)

2. SCIENTIFIC CAREER

October 2014 - present	Associate Professor, University of Graz, Institute of Molecular Biosciences, Biophysics Division, Graz
October 2012 – September 2014	Assistant Professor, University of Graz, Institute of Molecular Biosciences, Biophysics Division, Graz
October 2007 - present	External Lecturer, Graz University of Technology, Austria
February 2007 – September 2012	Senior Scientist and Vice Group Leader - Institute of Biophysics and Nanosystems Research, Austrian Academy of Sciences, Graz.
February 2002 – January 2007	Junior Scientist - Institute of Biophysics and X-ray Structure Research / Institute of Biophysics and Nanosystems Research), Austrian Academy of Sciences, Graz.
February 2001 – January 2002	Erwin Schrödinger Fellow - National Research Council of Canada, Canadian Neutron Beam Center, Chalk River Laboratories, Ontario, Canada. Group of John Katsaras
June 2000 – December 2000	Post-Doc. - Institute of Biophysics and X-ray Structure Research, Austrian Academy of Sciences, Graz
May 1997 – May 2000	"Beamline Scientist" (50% employment) during PhD studies at the Austrian Small-Angle X-ray Scattering Beamline (Synchrotron Elettra), Trieste, Italy.

3. OTHER APPOINTMENTS

January 2016 - present	Editorial board member of Biophysics Journal, Membranes Section
October 2013 – February 2016	Series Editor for Taylor & Francis (CRC Press) in Biophysics
Sept. 2010 – Sept. 2013	President of Austrian Biophysical Society
February 2001 – January 2002	Erwin Schrödinger Fellow - National Research Council of Canada, Canadian Neutron Beam Center, Chalk River Laboratories, Ontario, Canada. Group of John Katsaras

4. RESEARCH EXPERIENCE

Research is focused on biological membranes as meeting place of lipids, proteins and membrane active drugs on the one hand, and on the other hand as complex multifunctional interfaces for diverse (patho)physiological processes. Of particular interest are, on the one hand the functional role of lipid distribution in diverse membranes and, on the other hand the coupling of collective lipid properties to protein function. The overall aim is to delineate the physics of simplified but functional models to biomembrane function to aid the develop membrane active drugs. The approach involves a broad selection of biophysical techniques, such as small angle x-ray (neutron) scattering, calorimetry, or fluorescence microscopy to name but a few. For example, we are studying the physical properties of lipid-only models for membrane rafts, the elastic response of membranes to antimicrobial peptides, or the modulatory role of lipids and lipophilic drugs in cellular signaling.

5. HIGHEST ACADEMIC PRIZES/RECOGNITION RECEIVED:

Academic Awards/ Fellowships

- | | |
|------|----------------------------------------------------------------------------------------------------------------------|
| 2002 | Otto-Kratky Prize for young scientists, International Union of Crystallography, Commission on Small Angle Scattering |
| 2001 | Visiting Fellowship, Natural Sciences and Engineering Research Council of Canada |
| 2000 | Erwin Schrödinger Fellowship, (Austrian Science Fund (FWF)) |

Peer Review Activities

- | | |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Journals | Biochim. Biophys. Acta, Biophysical Journal, Langmuir, JACS, Physical Review Letters, Physical Review E, Soft Matter, etc |
| Funding Agencies | ANR (French National Research Agency), ARRS (Slovenian Research Agency), DFG (German Funding Agency), DOE (Department of Energy), ERC (European Research Council) |

Editorships

- Guest editor of special issue “Scattering techniques in biology—Marking the contributions to the field from Peter Laggner on the occasion of his 68th birthday”, *Europ. Biophys. Journal*, 41, 2012.
- Co-editor of book “Liposomes, Lipid Bilayers and Model Membranes: From Basic Research to Application”, CRC Press (Boca Raton, FL), 2014.

6. MEMBERSHIPS IN ACADEMIC ORGANIZATIONS

- Austrian Biophysical Society
- Biophysical Society (U.S.)
- Austrian Physical Society (*since 2012: board member*)
- Chair of the Austrian national adhering body to IUPAB (International Union of Pure and Applied Biophysics)

7. ORGANIZATION OF CONFERENCES/MEETINGS

- 7th Christmas Biophysics Workshop, Riegersburg, Austria, 2012
- 4th ÖGMBT Annual Meeting jointly organized with Biophysics Austria, Graz, Austria 2012

- Local Organizing Committee: 8th Liquid Matter Conference, Vienna, Austria, 2011
- 4th Christmas Biophysics Workshop, Leibnitz, Austria, 2009

8. GRANTS

- Coupling of transverse and lateral structure in asymmetric lipid bilayers (FWF-P27083, 01. 10. 2014 – 30. 09. 2017)
- Tuning the interaction in lipid multibilayers by ions: When does a multivalent ion become a polyion? (WTZ Austrian – Croatian Scientific-Technological Co-operation, 01. 01. 2014 – 31. 12. 2015)
- Modulation of Inter- and Intramembrane Coupling in Lipid Bilayers via the Aqueous Phase (FWF- I1304, Austrian – Slovenian Bilateral Project, 01. 01. 2014 – 31. 12. 2016).
- Refinement of Lipid-Models for Membrane Rafts (WTZ Austrian – Indian Scientific-Technological Co-operation, 01. 06. 2013 – 31. 05. 2015)
- Structure and elasticity of liquid ordered/liquid disordered domains (FWF-P24459, 01. 04. 2012 – 31. 03. 2015)
- Coupling of Plasma Membrane Structure to Sphingomyelinase Activity (OEAW Oelzelt-Stiftung. 01. 08. 2011 – 31. 09. 2012)
- Coupling of local and global membrane properties (FWF-P17112, 01. 06. 2004 – 31. 05. 2007).
- Peptide-Membrane Interactions in Aligned Systems (FWF Schrödinger-J2002, 01. 02. 2001 – 31.01. 2002)

9. SCIENTIFIC OUTPUT

Publications (refereed)	64
Review Articles / Book Chapters	14
H-Index	27
Number of Citations	>1900