

Name: Rösch, Paul, Prof. Dr.
Date of Birth: July 13, 1952
Address: University of Bayreuth; Dept. of Biopolymers
Universitaetsstrasse 30, 95447 Bayreuth
Phone: +49 921 55-3540;
Fax: +49 921 55-3549
Email: roesch@unibt.de



CURRENT POSITION

Chair, Dept. of Biopolymers, U Bayreuth
Director, Research Center for Bio-Macromolecules

EDUCATION

1976 Diploma: Physics, U Heidelberg
Diplom thesis: Prof. K.-H. Hausser, MPI for Medical Research, Heidelberg

SCIENTIFIC GRADES

1988 Lecturer Qualification: Biology/ Biophysics, U Heidelberg
Adviser: Prof. K. C. Holmes, MPI for Medical Research, Heidelberg
1978 PhD: Physics, U Heidelberg
PhD thesis: Prof. K.-H. Hausser, MPI for Medical Research, Heidelberg

CAREER

from 1990 Chair, Dept. of Biopolymers, U Bayreuth
from 2007 Director, Research Center for Bio-Macromolecules
2011 Co-founder, ALNuMed GmbH
2005 - 2012 Board, BioMedTec Franken e.V.
2004 - 2012 Chair, Graduate School Elitenetwork of Bavaria: *Lead Structures of Cell Function*
2004 – 2008 Vice-chair, German Research Council (DFG), Decision Panel *Foundations of Biology and Medicine*
1998 – 2007 Vice-speaker, DFG Special Research Unit 486: *Lymphoproliferation and Viral Immunodeficiency*
2004 – 2007 Member of the Senate, U Bayreuth
2000 – 2007 Board, Regional Compute Center North Bavaria
2000 - 2007 Founding member, Bayreuth Center for Molecular Biosciences
2007 Visiting Professor, Columbia U, New York
2001 – 2003 Dean, Faculty of Natural Sciences II, U Bayreuth
2000 Visiting Professor, *The Scripps Research Institute*, La Jolla
1994-1998 Chair, Program *Research on AIDS*, EU Framework 4, Development of Therapeutic Agents: *Structure, function, and dynamics of HIV-regulatory proteins*
1988 Lecturer Qualification: Biology/ Biophysics, U Heidelberg
1986 Visiting Scientist, Oxford U, Oxford
1986 Visiting Scientist, Indiana U – PURDUE U at Indianapolis, Indianapolis
1978 – 1979 Postdoctoral student, U Pennsylvania, Philadelphia

ADDITIONAL INFORMATION

1978 Foreign Research Fellowship of the Max-Planck-Society for gifted researchers
1999 Offer of Chair of the Dept. of Biochemistry, U Heidelberg (rejected)
2015 Ludwig-Schaefer-Award of the Columbia University, New York

PUBLICATIONS:

(Members of the *Dept. of Biopolymers*: **boldface**)

- [1] **Drögemüller J**, Stegmann CM, Mandal A, Steiner T, **Burmann BM**, Gottesman ME, **Wöhrl BM**, **Rösch P**, Wahl MC, **Schweimer K**. An Autoinhibited State in the Structure of *Thermotoga maritima* NusG. *Structure*. 2013. doi:pil: S0969-2126(13)00008-7. 10.1016/j.str.2012.12.015.
- [2] **Burmann BM**, **Knauer SH**, Sevostyanova A, **Schweimer K**, Mooney RA, Landick R, Artsimovitch I, **Rösch P**. An α helix to β barrel domain switch transforms the transcription factor RfaH into a translation factor. *Cell*. 2012 150:291-303. doi: 10.1016/j.cell.2012.05.042.
- [3] **Burmann BM**, **Schweimer K**, Luo X, Wahl MC, Stitt BL, Gottesman ME, **Rösch P**. A NusE:NusG complex links transcription and translation. *Science*. 2010 328:501-4. doi: 10.1126/science.1184953.
- [4] **Sticht H**, **Bayer P**, **Willbold D**, **Dames S**, Hilbich C, Beyreuther K, Frank RW, **Rösch P**. Structure of amyloid A4-(1-40)-peptide of Alzheimer's disease. *Eur J Biochem*. 1995 233:293-8.
- [5] **Willbold D**, Rosin-Arbesfeld R, **Sticht H**, Frank R, **Rösch P**. Structure of the equine infectious anemia virus Tat protein. *Science*. 1994 264:1584-7.
- [6] **Neudecker P**, **Schweimer K**, **Nerkamp J**, Scheurer S, Vieths S, **Sticht H**, **Rösch P**. Allergic cross-reactivity made visible: solution structure of the major cherry allergen Pru av 1. *J Biol Chem*. 2001 276:22756-63.
- [7] **Neudecker P**, **Nerkamp J**, **Eisenmann A**, Nourse A, **Lauber T**, **Schweimer K**, **Lehmann K**, **Schwarzinger S**, Ferreira F, **Rösch P**. Solution structure, dynamics, and hydrodynamics of the calcium-bound cross-reactive birch pollen allergen Bet v 4 reveal a canonical monomeric two EF-hand assembly with a regulatory function. *J Mol Biol*. 2004 336:1141-57.
- [8] Bayer P, Kraft M, Ejchart A, Westendorp M, Frank R, Rösch P Structural studies of HIV-1 Tat protein. *J Mol Biol*. 1995 247:529-35
- [9] **Rösch P**, **Willbold D**. Is EIAV Tat protein a homeodomain? *Science*. 1996 272:1672.
- [10] **Beißinger M**, **Sticht H**, Sutter M, **Ejchart A**, Haehnel W, **Rösch P**. Solution structure of cytochrome c6 from the thermophilic cyanobacterium *Synechococcus elongatus*. *The EMBO J*. 1998 17:27-36

Patent:

Rösch P, **Berkner H**, **Weiglmeier PR**. Verfahren zur rekombinanten Herstellung von mehrfach Disulfidverbrückten Peptiden (DPMA 102011008075.9; EP 11194048.2; Marke CysCys-Xpress: 302012014651)

RESEARCH INTERESTS

Protein Structures
NMR
Optical Spectroscopy
Food Analysis
Viral Proteins
Allergens
Transcription
Translation