Leopoldina
Nationale Akademie
der Wissenschaften

Curriculum Vitae Professor Dr Peter Walter

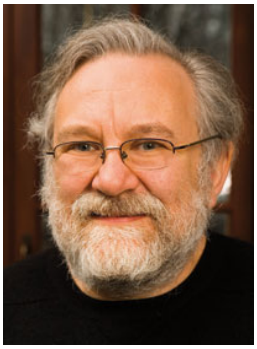

Image: Paul Fetters

Name: **Peter Walter**
Born: **5 December 1954**

Research Priorities: Cell biology, protein folding, fusion of cell membranes, unfolded protein response

Peter Walter a biochemist and molecular biologist. He works in the field of cell biology. Above all he is concerned with the mechanisms of protein folding, the transport of proteins to their target areas in the cells, the size and number regulation of organelles in the cells, and the fusion of cell membranes.

Academic and Professional Career

since 2022	Professor Emeritus, University of California, San Francisco, USA
1997 - 2022	Investigator, Howard Hughes Medical Institute, Chevy Chase, USA
1983 - 2022	Professor of Biochemistry and Biophysics, University of California, San Francisco, USA
1982 - 1983	Assistant Professor, Rockefeller University, New York, USA
1981 - 1982	Postdoc, Rockefeller University, New York, USA
1977 - 1981	Promotion, Rockefeller University, New York, USA
1976 - 1977	Master of Science in Organic Chemistry, Vanderbilt University, Nashville, USA
1973 - 1976	Studies of Chemistry, Freie Universität Berlin, Berlin, Germany

Functions in Scientific Societies and Committees

2016	President, American Society for Cell Biology (ASCB), USA
	Member, Scientific Advisory Board, ZMBH (Zentrum für Molekulare Biologie), Heidelberg University, Heidelberg, Germany

Project Coordination, Membership in Collaborative Research Projects

since 2021	Spokesperson, Research Training Groups (GRK) 2610 “Innovative Retinal interfaces for optimized Artificial Vision – InnoRetVision”, German Research Council (DFG), Germany
2015 - 2020	Applicant, Project “Development of an implantable epiretinal vision prosthesis with integrated image acquisition (OPTOEPIRET)”, DFG, Germany
2011 - 2018	Applicant, Project “Evaluation of implantable BIMEA stimulators with optimized stimulations protocols in animal models of receptor degenerations”, DFG, Germany

Honors and Awarded Memberships

2018	Breakthrough Prize in Life Sciences, Breakthrough Prize Foundation, Washington D.C., USA
2015	Vilcek Prize in Biomedical Science, Vilcek Foundation, New York City, USA
2014	Shaw Prize, Shaw Prize Foundation, Hongkong, China
2014	Albert Lasker Award for Basical Medical Research, Lasker Foundation, New York City, USA
2012	Paul Ehrlich & Ludwig-Darmstaedter Prize, Paul Ehrlich Foundation, Frankfurt am Main, Germany
2012	Jung-Preis für Medizin, Jung-Stiftung für Wissenschaft und Forschung, Hamburg, Germany
2011	Otto Warburg Medal, German Society for Biochemistry and Molecular Biology, Frankfurt am Main, Germany
2009	Canada Gairdner International Award, Gairdner Foundation, Toronto, Canada
2009	Stein and Moore Award, Protein Society, Boston, USA
2009	E.B. Wilson-Medal-, American Society of Cell Biology (ASCB), USA
since 2006	Member, German National Academy of Sciences Leopoldina, Germany
2005	Wiley Prize, Wiley Foundation, Hoboken, USA
2004	Member, National Academy of Sciences, USA
2004	Member, European Molecular Biology Organisation (EMBO)
2002	Member, American Academy of Arts and Sciences, USA
1989	Research Fellowship, Alfred P. Sloan Foundation, New York City, USA
1988	Young Scientist Award, Passano Foundation, Baltimore, USA
1988	Eli Lilly Award in Biological Chemistry, American Chemical Society, USA

1983 Searle Scholar Award, The Chicago Community Trust, Chicago, USA

Research Priorities

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Fundamental contributions were made by Peter Walter to elucidating the Unfolded Protein Response (UPR). This is a signalling pathway that prevents mistakes in the folding of proteins within the endoplasmic reticulum. It protects the cell when it is exposed to stress. Peter Walter co-discovered the enzyme Ire1, a serine-threonine kinase and endoribonuclease of central importance. As part of the UPR, he is researching among other things how Ire1 recognises misfolded proteins.

He also discovered the so-called Signal Recognition Particle. This ribonuclear protein complex is part of the transport of proteins into the endoplasmic reticulum (in eukaryotes) and into the plasma membrane (in prokaryotes).