

## Howard Riezman

Professor of Biochemistry  
Director, NCCR Chemical Biology  
University of Geneva, Switzerland

[Howard.Riezman@unige.ch](mailto:Howard.Riezman@unige.ch)

<http://cms.unige.ch/sciences/biochimie/-Howard-Riezman.html>

<http://www.nccr-chembio.ch/>

Howard Riezman was trained in the United States and Switzerland as a biochemist working with bacteria, plants and yeast driven by a keen interest in membrane biogenesis. In 1983, he started an independent laboratory at the ISREC in Lausanne undertaking pioneering studies on the endocytic pathway in yeast. He received a call as full professor at the Biozentrum of the University of Basel in 1987 where he continued his work on endocytosis and began studying GPI-anchored protein biosynthesis and traffic. He is well known for the discovery of roles of actin, receptor ubiquitination, and sphingolipids in membrane trafficking. In 2002 he moved to the Biochemistry department of the University of Geneva. He continues working on membranes, but the emphasis of his research is to understand the metabolism and function of lipids in yeast, worm and animal models using a wide variety of techniques including biochemistry, genetics, metabolic engineering, synthetic biology, mass spectrometry, modeling, and chemical biology.

Howard Riezman was elected member of EMBO in 1997 and has served as department chairman in both Basel and Geneva. He has served on the Research Council of the Swiss National Science Foundation (SNSF) for 8 years and is currently a member of the Foundation Council of the SNSF. His work has received generous funding from the SNSF since 1983, as well as from the HFSP, EU and ESF. He has been awarded the directorship of a National Center for Competence in Research (NCCR) in Chemical Biology by the Federal Department of the Interior in 2010.

### Personal Details

Date of Birth : June 28, 1953

Nationality: Swiss

Work Address: Department of Biochemistry, Sciences II, 30 quai E. Ansermet, CH-1211 Genève 4, Switzerland

Office phone: +41 22 379-6469

### Education and Training

BA in Biology, Washington University, Saint Louis MO, 1976

PhD in Botany, University of Wisconsin-Madison, 1980

Postdoctoral Fellow with Prof. G. Schatz, Biozentrum of the University of Basel, 1980-83

### Positions held

Associate then Established Researcher (Group leader), Swiss Institute for Experimental Cancer Research, Epalinges, Switzerland, 1983-87

Full Professor (Ordinarius), Biochemistry, Biozentrum of the University of Basel, 1988-2002

Biochemistry Division Chairman, 1993-95, 1999-2001

Biozentrum Vice Chairman 2001-2002

Full Professor, Department of Biochemistry, Faculty of Sciences, University of Geneva, October 2002- present

Biochemistry Department Chair, 2007-2010

Member of the University of Geneva, University Council 2007-2008

### Teaching

Teaching Assistant, University of Wisconsin-Madison

Undergraduate Biochemistry course, University of Basel, Geneva

Graduate courses, Molecular biology of the yeast, *Saccharomyces cerevisiae*, Biogenesis of Eucaryotic Organelles, Yeast Cell Biology

### Awards

Knapp fellowship for research visit to the lab of C.J. Leaver, University of Edinburgh, Scotland

Dean's fellow, University of Wisconsin-Madison

Postdoctoral Fellow of the Jane Coffin Childs Memorial Fund for Medical Research

EMBO short term fellowship to visit the University of Amsterdam

Elected member of the European Molecular Biology Organization, 1997

Invited Professor, Université Catholique de Louvain, Course given on "Cell Biology of Yeast", 1996-97

L.L. van Deenen Plenary Lecture, XIII International Congress on the Biochemistry of Lipids, September 1998

Spinoza Chair, University of Amsterdam, April 1999

### Meetings organized

Chair, Swiss-Japanese Seminar on Synthesis and Trafficking of Glycolipids and Glycolipid Anchored Proteins, March 2001, Les Diablerets

Vice-Chair, EMBO-FEBS Workshop, Molecular Dynamics in Endocytosis, Sept 2005, San Feliu de Guixols

Chair, EMBO-FEBS Workshop on Endocytic Systems; Mechanism and Function, Sept. 18-23, 2007, Villars-sur-Ollon

Chair, Charleston International Ceramide Conference 6, March 16-20, 2011, Villars-sur-Ollon

Vice-Chair, Gordon Research Conference on Glycolipid and Sphingolipid Biology, Jan 12-17, 2014, Ventura, CA

Chair, Gordon Research Conference on Glycolipid and Sphingolipid Biology, 2016

### Expert Committees and Service Positions held

Member of the Review Committee for Research Grants, Molecular Mechanisms, International Human Frontiers Science Program Organization (HFSP), 1993-95

EMBO Membership and Publications Committee, 1998-2002

Swiss National Science Foundation (SNSF) Research Council (Division III) 2001-2008

Member of the Foundation Council and its Committee, SNSF, 2010-present

External evaluator of the Peer Review System at the European Science Foundation, 2003

Review panel, Institute of Zoology, University of Zurich, 2005

European Research Council (ERC) panel in biochemistry and structural biology (LS1) for Starting Grants, 2009-present

Member of the Scientific Committee of the Louis Jeantet Foundation, 2015 -

### Editorial boards

Monitoring Editor, *Molecular Biology of the Cell*, 1997-present

Monitoring Editor, *Journal of Cell Biology*, 1998-2004

*EMBO Journal* 1998-2004

*EMBO Reports* 2000-2004

*Traffic*, 1999-2007

FEMS Yeast Research 2001- 2009

PLoS ONE 2011-present

### Research Interests

Membrane trafficking in secretory and endocytic pathways

Glycosylphosphatidylinositol anchored protein synthesis and transport

Recognition phenomena and receptor-mediated protein transport

Hormone action, intra- and intercellular signaling

Ubiquitination of membrane proteins

Sphingolipid and sterol homeostasis and function

Lipidomics

Lipid functions in health and disease

Systems biology

### Major Grants

Swiss National Science Foundation (continual funding as PI since 1983)

Human Frontiers Science Program Research Grants (3 grants, 1996, 2000, 2006 as PI)

European network grants (Eurofan, Sphingolipid biology, Sphingonet)

Euromembranes (European Science Foundation, 2009-2011)

Director, NCCR in Chemical Biology (starting 1.12.2010, renewed 1.12.2014, possible to hold for 12 years)

### Professional Societies

LS<sup>2</sup>, formerly Swiss Biochemical Society (member of USGEB central committee, 1999-2001)

American Society for Cell Biology

American Society of Biochemistry and Molecular Biology

American Association for Advancement of Science

### Publication metrics

Over 180 publications in peer reviewed journals, including original research articles in Science, Cell, Nature Cell Biology, EMBO J, J Cell Biol, J Biol Chem, Mol Biol Cell, J Lipid Res, Current Biololgy, ACS Chemical Biology, J. Am. Chem Soc as well as numerous reviews and commentaries in prestigious journals. ISC Web of Knowledge Citation Analysis (Nov 15, 2015)-over 14'800 citations total, h-index=74, h-index/years of activity=2, average citations per item = 65.57, over 500 citations per year for the last 18 years.