

Howard Riezman

Professor of Biochemistry
Director, NCCR Chemical Biology
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<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

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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 (HFSPO), 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, 2010-2015
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

LS², 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.