

Kurt Wüthrich: Curriculum Vitae

Current Positions: Cecil H. and Ida M. Green Professor of Structural Biology, Scripps Research, La Jolla, CA, USA; Professor of Biophysics, ETH Zürich, Zürich, Switzerland; Professor of Structural Biology, iHuman Institute, ShanghaiTech University, Shanghai, China

Personal Data

Born October 4, 1938, in Aarberg, Switzerland. Swiss citizen.

Married to Marianne Briner, 1963; two children, Bernhard Andrew 1968, Karin Lynn 1970.

Education and Positions Held

- 1957–62 University of Bern, Switzerland: Lizentiat in chemistry, physics and mathematics.
- 1962–64 University of Basel, Switzerland: Ph.D. in chemistry (Prof. S. Fallab); Eidgenössisches Turn- und Sportlehrerdiplom.
- 1964–65 University of Basel, Switzerland: Postdoctoral training (Prof. S. Fallab).
- 1965–67 University of California, Berkeley, CA, USA : Postdoctoral training (Prof. R.E. Connick).
- 1967–69 Bell Telephone Laboratories, Murray Hill, N.J., USA : Member Technical Staff, Biophysics Department (Dr. R.G. Shulman).
- 1969– ETH Zurich, Zurich, Switzerland: Privatdozent (70), Assistant Professor (72), Associate Professor (76), Professor of Biophysics (80); Chairman Biology Department (95–2000).
- 2001– Scripps Research, La Jolla, CA, USA: Cecil H. and Ida M. Green Professor of Structural Biology.
- 2013– Distinguished Senior Professor, iHuman Institute, ShanghaiTech University, Shanghai, China.

Major Research Interests

Development of nuclear magnetic resonance (NMR) techniques for macromolecular structure determination in solution and for studies of intermolecular interactions; applications for studies of transmembrane signal transfer, with a special focus on GPCRs. Sarcopenia in the ageing population of the 21st century.

Publications

NMR in Biological Research: Peptides and Proteins, North-Holland, Amsterdam, 1976.

NMR of Proteins and Nucleic Acids, Wiley, New York, 1986.

NMR in Structural Biology – a Collection of Papers by Kurt Wüthrich, World Scientific, Singapore, 1995.

NMR with Biological Macromolecules in Solution – a Selection of Papers Published from 1996 to 2020 by Kurt Wüthrich, World Scientific, Singapore 2021

800 original papers and reviews.

Visiting Faculty Appointments

- 1988 November: Visiting Miller Research Professor, University of California, Berkeley, CA, USA.
- 1992 February–March: Scholar in Residence, Johns Hopkins University, Baltimore, MD, USA.
- 1994 February–June: Sherman Fairchild Distinguished Scholar, Caltech, Pasadena, CA, USA.
- 1994 October–December: Guest Scientist, The Scripps Research Institute, La Jolla, CA, USA.
- 1995 February–April: Visiting Associate in Biology and Chemistry, Caltech, Pasadena, CA, USA.
- 1997–98 For two months: Institute of Physical and Chemical Research (RIKEN), Tokyo, Japan.
- 1997–00 Visiting Professor, Dept. of Chemistry, University of Edinburgh, Edinburgh, UK.
- 2004 Honorary Professor, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China.
- 2004 Honorary Professor, Dalian Institute of Light Industry, Dalian, China.
- 2006–08 Underwood International College Distinguished Professor, Yonsei University, Seoul, Korea.
- 2006 Honorary Professor of Science, Chinese University of Hong Kong, Hong Kong.
- 2009–13 WCU Distinguished Professor, Yonsei University, Seoul, Korea.
- 2011–25 Honorary Visiting Professor, Universität Duisburg–Essen, Germany.
- 2012 Honorary Distinguished Professor, Tumkur University, Tumkur, Karnataka, India.
- 2012–16 Pesquisador Visitante Especial, Universidade Federal do Rio de Janeiro, Brazil.
- 2014–24 Distinguished Chair Professor, Daegu Gyeongbuk Institute of Science and Technology. (DGIST), Daegu, Korea.
- 2015–21 Advisor to the Rector, Lomonosov Moscow State University (MSU), Moscow, Russia

Awards

1974	Friedrich-Miescher-Preis, Schweizerische Gesellschaft für Biochemie.
1983	Shield of the Faculty of Medicine, Tokyo University, Japan.
1986	Médaille P. Bruylants, Université Catholique de Louvain, Belgium.
1990	Stein and Moore Award of the Protein Society, USA.
1991	Louisa Gross Horwitz Prize, Columbia University, New York, USA.
1991	Gilbert Newton Lewis Medal, University of California, Berkeley, USA.
1992	Marcel Benoist-Preis, awarded by the Swiss Confederation.
1993	Distinguished Service Award, The Miami Bio/Technology Winter Symposia, USA.
1993	Prix Louis Jeantet de Médecine, Fondation Louis Jeantet, Geneva, Switzerland.
1996	Kaj Linderstrøm-Lang Prize, Carlsberg Foundation, Copenhagen, Denmark.
1997	Eminent Scientist of RIKEN, Tokyo, Japan.
1998	Kyoto Prize in Advanced Technology, Inamori Foundation, Kyoto, Japan.
1999	Günther Laukien Prize, Experimental NMR Conference (ENC), USA.
1999	Otto-Warburg-Medaille, Gesellschaft für Biochemie und Molekularbiologie, Germany.
2001	Médaille d'Honneur en Argent, Société d'Encouragement au Progrès, Paris, France.
2002	Nobel Prize in Chemistry.
2002	World 'Future' Award, The World Awards, Wien, Austria.
2002	Swiss 'Society' Award, The Swiss Awards, Zürich, Switzerland.
2002	Ehrenpreis 2002, City of Wallisellen, Switzerland.
2003	Honorary Citizenship, City of Lyss, Switzerland.
2008	Johannes M. Bijvoet Medal, Utrecht University, Utrecht, The Netherlands.
2008	Paul Walden Medal, Riga Technical University, Riga, Latvia.
2009	Jabir ibn Hyyan (Geber) Medal, Saudi Chemical Society, Saudi Arabia.
2010	Ralph and Helen Oesper Award, University of Cincinnati, Cincinnati, OH, USA.
2012	President's Gold Medal, Government of India.
2013	Theodor Bücher Medal, Federation of European Biochemical Societies.
2015	IUBMB Medal.
2016	Shanghai 1,000 Talents Award.
2016	Social Caring Leadership Award, Hongkong, China.
2017	Genome Valley Excellence Award, BioAsia, Hyderabad, India.
2020	Magnolia Award, Shanghai Municipal Government

Honorary Degrees

1997	Dottore ad Honorem in Chimica, Università degli Studi di Siena, Italy.
1997	Dr. phil. honoris causa, Universität Zürich, Switzerland.
2001	Docteur honoris causa, Ecole Polytechnique Fédérale de Lausanne, Switzerland.
2004	Doctor honoris causa, Universitat de València, Spain.
2004	Doctor of Science honoris causa, University of Sheffield, UK.
2004	Profesor Extraordinario con distinción de Académico Ilustre, U.N. Mar del Plata, Argentina.
2005	Doctor of Science honoris causa, King George's Medical University, Lucknow, India.
2007	Doctor of Medicine honoris causa, University of Pécs, Hungary.
2007	Doctor of Chemistry honoris causa, Universidad del Norte, Asunción, Paraguay.
2007	Doctor honoris causa, Lomonosov Moscow State University, Moscow, Russia.
2007	Laurea Specialistica in Biotechnology honoris causa, University of Verona, Italy.
2007	Docteur honoris causa, Université René Descartes, Paris, France.
2012	Laurea Magistrale in Pharmacology honoris causa, Università degli Studi di Napoli, Italy.
2015	Doctor honoris causa in Pharmacology, University of Patras, Greece.
2015	Doctor honoris causa, Universidad de Buenos Aires, Argentina.
2016	Doctor honoris causa, Universidad Nacional de Córdoba, Argentina.

Academies and Honorary Memberships in Societies

1984	European Molecular Biology Organization (EMBO).
1987	Deutsche Akademie der Naturforscher Leopoldina.
1989	Academia Europaea.
1989	Foreign Fellow, Indian National Science Academy.
1992	International Member, US National Academy of Sciences.
1992	Honorary Fellow, The National Academy of Sciences, India.
1993	Foreign Honorary Member, American Academy of Arts and Sciences.
1993	Honorary Member, Japanese Biochemical Society.
1998	Honorary Member, National Magnetic Resonance Society of India.
1998	AAAS Fellow, American Association for the Advancement of Science.
2000	Associé étranger, Académie des Sciences, Institut de France.
2001	Schweizerische Akademie der Technischen Wissenschaften (SATW).
2002	Schweizerische Akademie der Medizinischen Wissenschaften (SAMW).
2002	IUPAC Fellow.
2003	Honorary Fellow, The Royal Society of Chemistry, UK (HonFRSC).
2003	Honorary Fellow, The Royal Society of Edinburgh, UK (HonFRSE).
2003	Honorary Member, Swiss Chemical Society.
2003	Honorary Member, Wallisellen Football Club, Switzerland.
2003	Titular Member, European Academy of Arts, Sciences and Humanities.
2004	Honorary Member, International Society for Magnetic Resonance in Medicine.
2004	Honorary Member, Hungarian Academy of Sciences.
2004	Honorary Member, World Academy of Young Scientists.
2004	Honorary Member, World High Technology Society, Dalian, China.
2004	Honorary Member, European Academy of Sciences and Arts.
2004	Foreign Member, Latvian Academy of Sciences.
2004	Honorary Member, Groupement Ampère.
2004	Honorary Member, The Nuclear Magnetic Resonance Society of Japan.
2005	Honorary Member, Indian Biophysical Society.
2005	Corresponding Member, Nordrhein-Westfälische Akademie der Wissenschaften.
2005	Foreign Member, The Korean Academy of Science and Technology.
2005	Honorary Member, The Korean Magnetic Resonance Society.
2008	Honorary Fellow, Latvian Institute of Organic Synthesis, Riga, Latvia.
2008	ISMAR Fellow.
2010	Foreign Member, The Royal Society, UK (ForMem RS).
2012	Honorary Fellow, The Spanish Biophysical Society.
2013	Corresponding Member, Academia Brasileira de Ciências.
2017	JMR Fellow, Journal of Magnetic Resonance, USA.
2022	Foreign Member, Accademia Nazionale dei Lincei, Italy.
2022	Honorary Member of the Solvay Institutes, Brussels, Belgium

Named Lectures

1982	FMC Lectures, Princeton University, Princeton, NJ, USA.
1983	Baker Lectures, Cornell University, Ithaca, NY, USA.
1984	S. Rudin Lecture, Columbia University Medical School, New York, NY, USA.
1986	Chaire Bruylants, Université Catholique de Louvain, Louvain-La-Neuve, Belgium.
1989	James Shannon Lecture, Massachusetts General Hospital, Boston, MA, USA.
1989	Ada Doisy Lectures, University of Illinois, Urbana, IL, USA.
1990	Pittsburgh Conference Lectures, University of Pittsburgh, Pittsburgh, PA, USA.
1991	Distinguished Lecture in Structural Biology, Dartmouth College, Hannover, NH, USA.
1991	John T. Edsall Lecture, Harvard University, Cambridge, MA, USA.
1991	Ira Remsen Memorial Lecture, Johns Hopkins University, Baltimore, MD, USA.
1993	William H. Stein Memorial Lecture, Rockefeller University, New York, NY, USA.
1993	Calbiochem Lectures, UCSD, San Diego, CA, USA.
1993	Martinsrieder Kolloquium, MPI für Biochemie, Martinsried, Germany.
1995	P.A. Leermakers Lecture, Wesleyan University, Middletown, CT, USA.
1995	Adam Neville Lecture, University of Dundee, Dundee, UK.
1996	UCLA-DOE Distinguished Lecture, UCLA, Los Angeles, CA, USA.
1997	UMDNJ Distinguished Lecture, Rutgers University, Piscataway, NJ, USA.
1998	University Lecture, University of Texas Southwestern Medical Center, Dallas, TX, USA.
1998	Ames Lecture, Dept. of Chemistry, University of Edinburgh, Edinburgh, UK.
2000	Gitte Vold Memorial Lecture, UCSD, San Diego, CA, USA.
2001	Peter Hemmerich-Vorlesung, Universität Konstanz, Konstanz, Germany.
2002	Merck Frosst Lectures, Dept. of Chemistry, Simon Fraser University, Vancouver, BC, Canada.
2002	Harry Steenbock Lectures in Biochemistry, University of Wisconsin, Madison, WI, USA.
2003	Eraldo Antonini Memorial Lecture, Università di Roma "La Sapienza", Rome, Italy.
2004	Faculty Lecture Series, The Scripps Research Institute, La Jolla, CA, USA.
2004	Eyring Lectures, Arizona State University, Tempe, AZ, USA.
2004	Robbins Lectures, Pomona College, Claremont, CA, USA.
2004	Stammbach Lecture, Swiss Society of Neuropathology, St. Moritz, Switzerland.
2004	Derby Lectures, Department of Chemistry, University of Louisville, Louisville, KY, USA.
2004	Lauterbur Lecture, ISMRM Twelfth Scientific Meeting and Exhibition, Kyoto, Japan.
2004	Ernst-Abbe-Kolloquium, Friedrich-Schiller-Universität, Jena, Germany.
2004	Datta Lecture, 29 th FEBS Congress, Warsaw, Poland.
2005	Trombay Colloquium, Bhabha Atomic Research Centre, Mumbai, India.
2005	Sarojini Damodaran Lecture, Tata Institute of Fundamental Research, Mumbai, India.
2005	G.N. Ramachandran Memorial Lecture, Indian Biophysical Society, Pune, India.
2007	Irving L. Schwartz Lecture, Mount Sinai School of Medicine, New York, NY, USA.
2007	Aline U. and James M. Orten Memorial Lecture, Wayne State University, Detroit, MI, USA.
2007	Philip Handler Lecture, Duke University Medical Center, Durham, NC, USA.
2008	Discovery Lecture, Vanderbilt University Medical Center, Nashville, TN, USA.
2009	V. Ramalingaswami Memorial Lecture, National Institute of Immunology, New Delhi, India.
2009	IUBMB Life Lecture, 21st IUBMB International Congress, Shanghai, China.
2010	Luigi Sacconi Memorial Lecture, Università degli Studi di Firenze, Firenze, Italy.
2011	Cannizzaro Lecture, Società Chimica Italiana, Italy.
2013	Bücher Lecture, 38th FEBS Congress, St. Petersburg, Russia.
2015	Severo Ochoa Lecture, 23 rd IUBMB Congress, Foz do Iguaçu, Brazil.
2016	ShanghaiTech Lecture, SIAIS BioForum, Shanghai, China.
2017	Endel Lippmaa Memorial Lecture, Estonian Academy of Sciences.
2017	Eraldo Antonini Lecture, 59 th SIB Congress, Italy.
2019	Hans Tuppy Lecture, University of Vienna, Austria.
2019	Homer C. and Emily D. Weed Lecture, University of Arizona, AZ, USA.

Scientific Advisory Boards

Centro Stefano Franscini, Monte Verità and ETH Zürich, Switzerland, 89–98.
European Molecular Biology Laboratory, Heidelberg, Germany, 89–95.
National Laboratory of Biomacromolecules, Academia Sinica, Beijing, China, 89–04.
Deutsche Forschungsgemeinschaft, Bonn, Germany: Schwerpunktsprogramm “Protein Design”, 89–95.
Commission of the European Communities: Human Capital and Mobility Program, 92–94.
Institut für Molekulare Biotechnologie, Jena, Germany, 93–96.
Ciba Foundation, London, UK, 94–96.
Institut de Biologie Structurale Jean-Pierre Ebel, Grenoble, France, 94–97.
Institute of Biotechnology, University of Helsinki, Finland, 97–05 .
Novartis Foundation, London, UK, 97–05.
Triad Therapeutics Inc., La Jolla, CA, USA, 98–04.
Genomics Sciences Center, RIKEN, Tokyo, Japan, 00–05.
Syrrx Inc., La Jolla, CA, USA, 00–04.
Groupement d’Intérêt Scientifique “Infections à Prions”, France, 01–05.
National Institute of Chemical Physics and Biophysics (NICPB), Tallinn, Estonia, 01–05.
National High Field NMR Center (NANUC), University of Alberta, Edmonton, AB, Canada, 01–04.
Resource for Solid-State NMR of Proteins at UCSD, La Jolla, CA, USA, 01–04.
Eidogen-Sertanty, Inc., San Diego, CA, USA 02–10.
Institute of Biophysics, Chinese Academy of Sciences, Beijing, China, 05–.
Solvay Scientific Committee for Chemistry, International Solvay Institutes, Brussels, Belgium, Member 05–11; Chairman 11–22.
Honorary Advisory Board of IUBMB, 07–.
Councillor of the Foundation Antidoping Switzerland, 08–10.
Department of Biosciences and Bioengineering, IIT Indore, India, 12–14.
Innovation Center for Structural Biology (ICSB), Tsinghua University, Beijing, China, 17–19.
Korea Institute of Science and Technology (KAIST), Daejeon, Korea, 18–20.
ETH Zürich, Switzerland, Global Advisory Board (GAB), 2020–.
Annaida Technologies SA, EPFL Innovation Park, Lausanne, Switzerland, 21–.
UNESCO Center ‘Health-related Basic Science and Human Nutrition’, Mashhad, Iran, 2022–.

Editorial Assignments

Editor: Q. Rev.Biophys. 84–91, 96–01; Macromolecular Structures 90–00; J. Biomol. NMR 91–11.
Member Editorial Board: Advanced Science Letters; Biochim. Biophys. Acta, Biochimie, Biology, Biophys. Chem., Biopolymers, CHEMBIOCHEM, Chemtracts, Chemical Physics Letters, Encyclopedia of NMR, Comm. Mol. Cell. Biophysics, Curr. Methods Mol. Cell Biol., Curr. Opinion Struct. Biol., Eur. Biophys. J., Inorg. Chim. Acta, Israel J. Chem., IUBMB Life, J. Biotechnology, J. Computer-Aided Mol. Design, J. Magn. Reson., J. Membrane Biol., J. Struct. Funct. Genomics, Life Sciences, PeerJ, Proteins, Structure, The Natural Products Journal.

Consultancy Assignments

Hoechst AG, Frankfurt, Germany, 85–92.
Sandoz Pharma AG, Basel, Switzerland, 87–96.
Hoffmann-La Roche AG, Basel, Switzerland, 87–04.
Ciba-Geigy AG, Basel, Switzerland, 89–96.
Tripos Inc., St. Louis, MO, USA, 92–94.
Novartis AG, Basel, Switzerland, 97–2019.

Offices in Professional Organizations

Schweiz. Kommission für Molekularbiologie (SKMB): Member 73–76; President 77–82.

International Union of Pure and Applied Biophysics (IUPAB): Council Member 75–78 and 87–90; Secretary General 78–84; Vice-President 84–87.

International Council of Scientific Unions (ICSU): Member General Committee 80–86; Member Standing Committee on the Free Circulation of Scientists 82–90.

Kommission für die Wolfgang Pauli-Vorlesungen, ETH Zürich: Member 84–92; President 93–01.

Zürcher Chemische Gesellschaft: President 90–91.

Schweiz. Gesellschaft für Biochemie: Member Executive Committee 86–92; President Biophysics Section 85–88.

International Union of Pure and Applied Chemistry (IUPAC), Commission on Biophysical Chemistry: Member 96–99; Chairman 00–01.

Prix Marcel Benoist, Conseil de Fondation, Bern: Member 01–15.

Patronage Committees

Visionen ETH 2030, 150th Anniversary ETH Zürich, Switzerland, 03–05.

International Jury, World Awards, Vienna, Austria, 03–07.

Honorary Board, The International Wallenberg Foundation, New York, USA, 03–.

Academy Member, Swiss Awards, Zürich, Switzerland, 03–15.

2. Schweizerische Kunstturntage, Bern, Switzerland 2004, 03–04.

Symposium Systems Biology (C-BSSE), Basel, Switzerland 2004, 03–04.

Kulturprojekt “Einstein05”, Bern, Switzerland 2005, 04–05.

Buchlobby Schweiz, Switzerland, 04–.

Science et Cité, Bern, Switzerland, 04–11.

Synopsis Foundation, Zürich, Switzerland, 04–.

Honorary Board, Swiss Science Forum, 05–.

International Peace Foundation, 05–.

Founder’s Assembly of the Foundation Lindau Nobel Prize Winners Meetings, 05–.

Association of Swiss Scientific Olympiads, 05–.

Ambassador for Zürich, UEFA EURO 2008, 06–08.

175th Anniversary University of Zürich, Switzerland 2008, 07–08.

European Gymnastics Championships 2016, Bern, Switzerland, 14–16.

Anniversary “50 Jahre Schweizer Jugend forscht”, 16.

Patronage Committee, International Year of Basic Sciences for Sustainable Development 2022, 2020 – 2022.

55th International Chemistry Olympiad, Switzerland 2023, 2021–2023.

Swiss Centre for Occupational and Environmental Health, 2022–.