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Born 9 August 1960 (in Casablanca, Morocco), French national
Married (to Erin Schuman), 3 daughters

A. EDUCATION

1989 Computational Neuroscience Course, Woods Hole, MA, USA
1985 Ph.D., Neuroethology, Université Paul Sabatier, Toulouse, France
1985 Doctorate, Veterinary Medicine, Natl. School Vet. Med., Toulouse, France
1979 Classes préparatoires, admission National School of Veterinary Medicine
1978 Baccalaureat "C" (Math & Physics, mention TB)

B. ACADEMIC POSITIONS

Since 2021 Guest Professor, Radboud University, Nijmegen, Holland
Since 2014 Professor "by Cooptation", Goethe University, Frankfurt, Germany
Since 2009 **Director, Max Planck Institute for Brain Research, Frankfurt, Germany**
(Co-Founding Director, w Erin Schuman, of new MPI Brain Research)

1990 - 2011 Professor, California Institute of Technology, Pasadena, CA, USA
2002 - 2011 *Lawrence A. Hanson Professor of Biology and CNS, Caltech*
2000 - 2002 *Professor of Biology and CNS, Caltech*
1996 - 2000 *Associate Professor of Biology and CNS, Caltech*
1990 - 1995 *Assistant Professor of Biology and Computation and Neural Systems (CNS), Caltech*

1987 - 1990 Royal Society Locke Research Fellow, University of Cambridge, UK
1987 - 1990 Research Fellow, Downing College, Cambridge, UK
1985 - 1987 Postdoctoral Research Assistant, University of Cambridge, UK

C. RESEARCH EXPERIENCE

2009 - Director, MPI Brain Research
2008 Visiting Faculty (sabbatical), École Normale Supérieure, Paris, France
2005 Visiting Scholar (sabbatical), Clark Center, Stanford University, CA, USA
1990 - 2011 Professor, Caltech, Pasadena, CA, USA
1985 - 1990 Postdoctoral Research, University of Cambridge, UK
1983 Visitor, Technische Universität, München, Germany
1983 Visitor, MPI für Verhaltensphysiologie, Seewiesen, Germany
1982 - 1985 Pre-doctoral Research, Université Paul Sabatier, Toulouse, France
1982 Visitor, Laboratory for Energy-related Health Research, U.C. Davis, USA

D. RECOGNITION

2019 - 2024	ERC Advanced Grant
2017	Member, Academia Europaea
2014	Member, EMBO
2013 - 2018	ERC Advanced Grant
2002	Fellow Associate, Neurosciences Institute, La Jolla
2001	Fellow, American Association for the Advancement of Science
2000 - 2003	McKnight Neuroscience Investigator Award
1993 - 1998	National Science Foundation Presidential Faculty Fellow Award
1993	L.L. and A.W. Ferguson Award for Excellence in Teaching
1992	L.L. and A.W. Ferguson Award for Excellence in Teaching
1991 - 1994	McKnight Neuroscience Young Investigator Award
1991 - 1993	Alfred P. Sloan Research Fellow Award
1990 - 1993	Searle Fellow Award
1987	International Society for Neuroethology Prize
1987 - 1990	Royal Society Locke Research Fellow
1987 - 1990	Research Fellow, Downing College, Cambridge
1985	Fyssen Foundation Fellowship, Paris, France (declined)
1985	S. & C. del Duca Foundation Fellowship, Paris (declined)
1985	1985 City of Toulouse Prize (Natural and Life Sciences)

E. NAMED / SPECIAL LECTURES

Duke Neurobiology Ruth K. Broad Lecture, Duke University, Durham, NC (2023)
Richard M. Furlaud Distinguished Lecture, Rockefeller University, NYC, NY (2022)
IBM Distinguished Speaker, IBM Watson Research Center, NJ (2022)
Forbes Lecture, MBL, Woods Hole, MA, USA (2019)
Adrian Lecture, University of Cambridge, UK (2018)
EMBL Distinguished Lectures Series, Heidelberg, Germany (2018)
Lamport Lecture, Univ. Washington, Seattle, WA, USA (2017)
Keynote speaker, GDR Vision 2016, Toulouse, France (2016)
Keynote speaker, CRCNS Conference, Paris, France (2016)
Keynote Speaker, Intl. Conference on Systems Biology, Barcelona, Spain (2016)
Masakazu Konishi Lecture, Woods Hole, MA, USA (2016)
Norman Davidson Lecture, Caltech, Pasadena, CA, USA (2016)
Keynote Speaker, 4th European Zebrafish Meeting, Lisbon, Portugal (2016)
Director's Series Seminar, HHMI JFRC, Ashburn, VA, USA (2015)
Keynote Lecturer, FENS (European Neurosciences) Meeting, Milano, Italy (2014)
R & H Record Award Lecturer, Baylor Coll. Med., Houston, TX, USA (2014)
Ruth K. Broad and Shepard Broad Foundation International Lecturer on
Neurobiology and Disease, Duke University, Durham, NC, USA (2013)
NIPS Keynote Lecture, Granada, Spain (2011)
Max Birnstiel Lecture, Vienna, Austria (2011)
ANS Overseas Lecture, Sydney, Australia (2010)
Swammerdam Lecture, Amsterdam, Holland (2009)
Masakazu Konishi Lecture, Woods Hole, MA, USA (2009)
Robert J. Terry Lecture, Washington U. Med. School, St. Louis, MO, USA (2009)
Teuber Lecture, MIT, Cambridge, MA, USA (2008)
Special Lecture, Society for Neuroscience, San Diego, CA, USA (2007)
Ernst Florey Lecture, German Neuroscience Meeting, U. Göttingen, Germany (2007)
Monell/Penn Lecture, University of Pennsylvania, Philadelphia, PA, USA (2006)
D-Biol Lecture, ETH Zürich, Switzerland (2006)
Heller Lecture, Hebrew University, Jerusalem, Israel (2006)
Ernest C. Watson Lecture, Caltech, CA, USA (2005)
David Bodian Lecture, Johns Hopkins University, Baltimore, MD, USA (2005)
Hertie Lecture, European Neuroscience Assoc. Meeting, Lisbon, Portugal (2004)
Perkins Lecture, University of Cambridge, UK (2002)
Dupont Lecture, Arizona Research Labs, U. Arizona, Tucson, AZ, USA (1997)

F. SERVICE*MPI Brain Research and MPG Academic Affairs (since 2008):*

2020 - 2023	Managing Director MPIBR (Aug 2020 - Jul 2023)
2016 - 2017	Managing Director MPIBR (Aug 2016 - Jul 2017)
2009 - 2013	Managing Director MPIBR (Aug 2009 - Jul 2013)
2018 -	MPG Presidential Committee on Animal Research
2016 -	IMPRS (Graduate School) Director
2015 -	Special Presidential Committee on MPG History
2010 -	IMPRS Admissions Committee
2009 -	Various search and recruitment committees in the US and Europe
2009 -	Various MPG recruitment committees (directors, research group leaders)
2008 - 2014	Concept and Design of new MPI Brain Research Building (together w. Erin Schuman, as founding directors)

Recent Scientific Advisory Boards, Review Boards:

2023	Member, Review Board, Champalimaud Institute, Lisbon, Portugal
2023	Member, SAB, Pasteur Institute, Neuroscience Department, Paris FR
2021	Member, SAB, Weizmann Institute, Neuroscience, Rehovot, Israel
2021	Member, Review Board, Champalimaud Institute, Lisbon, Portugal
2019	Chair SAB, NeuroMarseille, Marseille, France
2019	Member, Review Board, Champalimaud Institute, Lisbon, Portugal
2018	Chair, NeuroPSI Paris Saclay SAB, Paris, France
2017	HHMI Investigators Review Boards (2), Chevy Chase, MD, USA
2016	Cambridge University Neuroscience Ten-year Review Board, CB, UK
2015	HHMI Janelia Ten-year Review Board, Ashburn, VA, USA
2014	HHMI Investigators Review Board, Chevy Chase MD, USA
2014	Chair, Review Board, AERES UNIC Gif-sur-Yvette, France
2014 -	Graduate Program Review Board, Champalimaud, Lisbon, Portugal
2013	HHMI Investigators Review Board, Chevy Chase MD, USA
2013 - 2018	Chair, SAB, Neuro-PSI Saclay, France
2014	Chair, Institute Neuroinformatics Review Board, ETH/UZ, Zurich, CH
2013 - 2018	Member, Hiring Committee, ETH Zürich, Switzerland
2012 - 2013	Member, Hiring Committee, Institut Pasteur, Paris, France
2009 - 2014	Member and Chair, École des Neurosciences de Paris, France
2009 - 2013	SAB member, Biozentrum Basel, Switzerland
2009 - 2013	SAB member, NeRF-VIB Leuven, Belgium

Journal Review

Cell, Current Biology, eLife, Eur J Neuroscience, Frontiers Journals, J Comp Neurol, J Neuroscience, J Neurophysiology, J Comput Neurosci, J Exp Biology, Nature, Nature Communication, Nature Neuroscience, Neuron, Neural Computation, PLoS, Science

Journal Editorial Work

J Comput Neurosci; J Physiol (Paris), Current Opinion Neurobiology
Guest Editor for Annual Rev Neuroscience, Current Opinion Neurobiology

Grant Reviews:

2021 -	EMBO Postdoctoral Fellowships Selection Committee (we review ~1,200 applications every year)
2023 -	ERC Consolidator Grants Review Committee
2000 -	Ad Hoc: NIH, NSF, Wellcome, HSFP, DFG, Foundation Schlumberger, ATIPE, ANR, ERC, German-Israeli Foundation for Scientific Research, Minerva

Meeting Organization

- 2023 *Systems Neuroscience Special Symposium* (in honor of Malcolm Burrows' 80th birthday), Cambridge (UK).
- 2022 *Neural Dynamics Special Symposium*, Max Planck Institute for Brain Research in Frankfurt.
- 2019 Co-organizer with Ila Fiete (MIT) of Brain Conference (Lundbeck Foundation, FENS) on *Neural Dynamics*, Copenhagen, June 2019
- 2014 Co-organizer (with Erin Schuman) of *Inaugural MPI Brain Research Symposium*
- 2006 Planning Committee, Computational/Systems Neuroscience, NIH, USA
- 2005 Organizing Committee, Gordon Conference on Circuits and Synapses, USA

Prize Committees:

- 2024-2026 Committee member, SfN Swartz Prize for Theoretical and Computational Neuroscience
- 2023 - Committee Co-Chair, *ALBA-Roche Prize*
- 2018 - Committee Member, *V. Braitenberg Award for Computational Neuroscience*
- 2018 - 2021 Committee Member, *SfN Young Investigator Award*
- 2011 - 2014 Committee Member, *SfN Girard Prize*

Internal MPI Brain Research PhD Thesis Committees (recent):

29 since 2010

External PhD Thesis Committees (recent):

- 2023 Meike Sievers, Radboud University, Nijmegen, Holland
- 2018 Tanja Wernle, Kavli Institute, NTNU, Trondheim, Norway

Summer Course Teaching:

- 2023 CSHL High Throughput Neuroanatomy, CSH, NY USA (Oct 2023)
- 2019 Neuroinformatics, Baltic/Nordic Course, Frankfurt, Germany
- 2018 - FENS CAJAL Computational Neuroscience Course, Lisbon, Portugal
- 2018 FENS CAJAL Behavioral Neuroscience Course, Lisbon, Portugal
- 2016 ISN-JNC Flagship School, Alpbach, Austria
- 2015 - 2017 Course co-director, European (FENS) CAJAL Computational Neuroscience Course, Champalimaud Institute, Lisbon, Portugal
- 2012 *Drosophila* Neuroscience Course, MPI Chemical Ecology, Jena, Germany
- 2011 Neuroscience Course, University of Copenhagen, Denmark
- 2005 Computational Neuroscience Course, Arcachon, France
- 1998 Cold Spring Harbor Labs NY, Neurobiology Course, NY, USA
- 1996 US-German School of Neuroethology, Munich, Germany
- 1996 Woods Hole, Scholar in Residence, Neural Systems and Behavior Course, Woods Hole, MA, USA
- 1996 Cold Spring Harbor NY, Neurobiology Course, NY, USA
- 1995 Cold Spring Harbor NY, *Drosophila* Neurobiology Course, NY, USA

Caltech Academic Affairs Committees (1990-2009):

- 2006 - 2007 Study-Abroad Committee
- 2005 - 2009 CNS Graduate Admissions Committee
- 2005 - 2006 Athletics Committee
- 2003 - 2009 Undergraduate Curriculum Committee
- 2001 - 2009 Biology Graduate Admissions Committee
- 2001 - 2002 Patents Committee
- 1998 - 2001 CNS Option Representative
- 1992 - 2009 Faculty Searches (as committee member or chair/co-chair: Systems Biology, Computational Neurosciences, Cellular Neuroscience, Primate Neuroscience,

1992 - 1994 Psychophysics)
IACUC, Special Investigative Committee, Caltech
1990 - 1998 CNS Graduate Admissions Committee

G. ALUMNI

See: <https://neurotree.org/beta/tree.php?pid=178>

Former postdocs (with current position and affiliation):

Shahaf Weiss: Postdoc, MPI for Brain Research, Stempel Lab
Xitong Liang: Assistant Professor, Neuroscience Department, Peking University, PRC
Hiroaki Norimoto: Assistant Professor, Hokkaido University Med. School, Sapporo, Japan
Christian Müller: Retired
Sara Haddad: Postdoctoral Research Fellow, University of Zürich, Switzerland
Sam Reiter: Assistant Professor, OIST, Okinawa, Japan
<https://groups.oist.jp/cne/sam-reiter>; <https://groups.oist.jp/cne>
Maria Antonietta Tosches: Assistant Professor, Columbia U., New York, NY, USA
<https://www.toscheslab.com/>; <https://www.biology.columbia.edu/people/tosches>
Mark Shein-Idelson: Assistant Professor, Neuroscience, University of Tel Aviv, Israel
<https://english.tau.ac.il/profile/sheinmark>;
<https://www.evolutionaryneuralcodinglab.sites.tau.ac.il/>
Marcel Lauterbach: Assistant Professor, University of Homburg, Germany
<https://cipmm.uni-saarland.de/index.php/de/molekulare-bildgebung/forschung>
Robert Naumann: Assistant Professor, Shenzhen Institutes of Advanced Technology,
Chinese Academy of Sciences, Shenzhen, China;
<https://www.wangnaumannlab.com/people.html>
Tracy Yamawaki: Senior Associate Scientist, Amgen, South SF, CA, USA
Stefano Masneri: Investigador, Vicomtech, San Sebastián, Spain
Janie Ondracek: Research Group Leader, TUM, Munich, Germany
<https://www.zoologie.wzw.tum.de/arbeitsgruppe-ondracek.html>
Julien Fournier: Chargé de Recherche INSERM, Paris Jussieu, France
<https://www.ibps.upmc.fr/fr/IBPS/annuaire/10460-Julien-Fournier>;
Andreas Kotovicz: Head of IT, MPI for Astronomy, Heidelberg, Germany
Michael Kuba: Research Scientist, Okinawa Research Institute, Japan
Ueli Rutishauser: Professor and Board of Governors Chair in Neurosciences, Cedars Sinai
Medical Center, Los Angeles, CA, USA; <https://www.cedars-sinai.org/research/labs/rutishauser.html>
Mala Murthy: Professor of Neuroscience, Director of PNI, Princeton University, NJ, USA
<https://murthylab.princeton.edu/>
Rachel Wilson: Professor of Neurobiology, Harvard Medical School, Boston, MA, USA
<https://wilson.hms.harvard.edu/>
Glenn Turner: Group Leader, HHMI Janelia RC, Ashburn, VA, USA
<https://www.janelia.org/lab/turner-lab>
Stephen Houston: Research Professor, Columbia University, NYC, USA
Ingmar Riedel-Kruse: Associate Professor of MCB, University of Arizona, Tucson, AZ, USA
<https://riedel-kruse.arizona.edu/>
Fabrizio Gabbiani: Professor of Neuroscience, Baylor Coll. Medicine, Houston, TX, USA;
& Professor of Electrical and Computer Engineering, Rice University, Houston, TX, USA
Rainer Friedrich: Professor, FMI, Basel, Switzerland; <https://zfin.org/ZDB-LAB-020725-1>
Holger Krapp: Professor of Systems Neuroscience, Imperial College, London, UK

Nicho Hatsopoulos: Professor, University of Chicago, IL, USA

<https://pondside.uchicago.edu/oba/faculty/Hatsopoulos/lab/>

Leslie Kay: Professor, Dept. of Psychology, University of Chicago, IL, USA

http://kaylab.uchicago.edu/kay_bio.html

Laurent Moreaux: Research Scientist, Physics Department, Caltech, Pasadena, CA, USA

Mark Stopfer: Senior Investigator, Sensory Coding and Neural Assemblies, NIH, Bethesda, MD, USA

<https://irp.nih.gov/pi/mark-stopfer>

Mikko Vähäsöyrinki: Founder and CEO, Sensapex Oy, Oulu, Finland

Former Ph.D. students (with current position and affiliation):

Tatiana Gallego-Flores: EMBO postdoctoral Fellow, U San Sebastian, Spain

Hua-Peng Liaw: Research Scientist, IMEC the Netherlands, Eindhoven, NL

Mike Hemberger: Deep Learning Scientist, nyris GmbH, Berlin, Germany

Lorenz Pammer: Consultant, Boston Consulting Group, Vienna, Austria

Sina Tootoonian: Research Scientist, The Francis Crick Institute, London, UK

Alessandro Coatti: Senior Science Policy Officer, Royal Society of Biology, London, UK

Ingmar Schneider: Senior Life Sciences Consultant, Avertim Deutschland GmbH, Bad Homburg, Germany

Andres Laan: Senior Quantitative Researcher, G-Research, London, UK

Viola Priesemann: Max Planck Group Leader, MPI Dynamics and Self-Organization, Professor of theoretical neuroscience, Goettingen, Germany

Kai Shen: Partner, McKinsey & Company, Shanghai, China

Ron Jortner: Managing Director, Masthead Biosciences, Cambridge, UK

Alex Bäcker: Entrepreneur, CEO Qless Inc., Altadena, CA, USA

Bede Broome: Managing Director, ASSURED Healthcare Partners, N.Y., USA

Stijn Cassenaer: Research Scientist, Caltech, CA, USA

Vivek Jayaraman: Senior Group Leader, HHMI Janelia RC, Ashburn, VA, USA

<https://www.janelia.org/lab/jayaraman-lab/members>

Kate MacLeod: Research Professor, University of Maryland, MD, USA

Ofer Mazor: Instructor in Neurobiology, Harvard Medical School, Boston, MA, USA

Mohammed Naraghi: CEO, Aenova Holding GmbH, Germany

Maria Papadopoulou: Scientific Research Associate, Caltech, CA, USA

Javier Perez-Orive: Director of Research, Instituto Nacional de Rehabilitación, Mexico City, Mexico

Mike Wehr: Professor of Psychology, University of Oregon, Eugene, OR, USA

<https://psychology.uoregon.edu/profile/wehr>

H. TEACHING

Caltech:

Bi-150	Introduction to Neuroscience; Senior undergrad. class; 1990 - 2005
Bi-250b	Systems Neuroscience; Graduate class; 2003 - 2009
Bi252	Seminar presentation classes
Bi 162	co-taught with Erin Schuman; Electrophysiology Lab course 2004 - 2009
Phys-1	Guest lecturer
CNS-100	Guest lecturer

MPIBR Frankfurt/IMPRS teaching:

- 2011 - IMPRS classes: Cellular, Synaptic, Systems Neuroscience, Ethics
- 2011 - Graduate Seminar Class: Systems Neuroscience, co-taught with Prof. Jochen Triesch, FIAS and Physics

Summer/Winter Courses:

- 2023 CSHL High Throughput Neuroanatomy, CSH, NY USA (Oct 2023)
- 2022 FENS CAJAL Computational Neuroscience Course, Lisbon, Portugal
- 2018 FENS CAJAL Computational Neuroscience Course, Lisbon, Portugal
- 2018 FENS CAJAL Behavioral Neuroscience Course, Lisbon, Portugal
- 2016 ISN-JNC Flagship School, Alpbach, Austria
- 2015 - 2017 Course co-director, European (FENS) CAJAL Computational Neuroscience Course, Champalimad Institute, Lisbon, Portugal
- 2012 Drosophila Neuroscience Course, MPI Chemical Ecology, Jena, Germany
- 2011 Neuroscience Course, University of Copenhagen, Denmark
- 2005 Computational Neuroscience Course, Arcachon, France
- 1998 Cold Spring Harbor Labs NY, Neurobiology Course, NY, USA
- 1996 US-German School of Neuroethology, Munich, Germany
- 1996 Woods Hole, Scholar in Residence, Neural Systems and Behavior Course, Woods Hole, MA, USA
- 1996 Cold Spring Harbor NY, Neurobiology Course, NY, USA
- 1995 Cold Spring Harbor NY, Drosophila Neurobiology Course, NY, USA

I. EXTERNAL (GRANTS) SUPPORT

At MPI Brain Research

2019-2024. ERC Advanced Investigator Grant “Claustrum, Brainstem and Sleep: Mechanisms and Function”, “SleepCirc”, Grant Agreement No. GA 834446, 01.07.2019 – 30.06.2024

2021-2024. DFG CRC 1080, (coPI) Homeostatic regulation of REM-nonREM transition in sleep, project C04, Jan 2021-Dec 2024

2020-2023. LOEWE CMMS Grant, Mehrskalen-Modellierung, Teilprojekt P7: „Datenanalyse und Modellierung für Wachstum und Musterbildung in Sepien“, (EN: Multi-scale modelling, subproject P7: “Data analysis and modelling for growth and pattern formation in cuttlefish”)

2017-2020. DFG CRC 1080, (coPI) Homeostatic regulation of REM-SWS balance in sleep, project C04, Jan 2017-Dec 2020

2013-2018. ERC Advanced Investigator Grant “Function and computation in three-layer cortex”, “Cortex Simplex” project no. 322705, 01.02.2013 – 31.01.2018

2011-2013. LOEWE Neuronale Koordination Forschungsschwerpunkt Frankfurt (NeFF), (coPI) “Dynamik und Koordination in einem dreischichtigen Kortex”, project no. A6, (EN: LOEWE Neuronal Coordination Research Focus (NeFF), (coPI) “Dynamics and coordination in a three-layered cortex”)

At Caltech (partial)

- 2006-2011 NIH RO1 DC007652 Drosophila Olfaction 1.5M USD DC
- 2002-2003 NSF EEC-9402726 Center Neuromorphic Systems Engineering (ERC) Co-PI (PI P. Perona, Caltech)

2002-2006	NSF EIA-0130746	Biological Computation in olfactory systems, PI	
1998-2007	NIH RO1 DC003688	Temporal Encoding	2.5M USD DC
1993-1998	NSF Presidential Fellow Award		
1991-1994	NIH RO1 NS029194	Properties Local Interneurons	568,000 USD DC

J. EXPERTISE

Cellular, Systems and Computational Neuroscience, Cortical Computation, Neural Coding, Olfaction, Vision, Cortex Evolution, Visual Texture Processing, Sleep

K. PUBLICATIONS

1. Laurent G (2023). Mysterious ultraslow brain activity observed in mice. **Nature** <https://www.nature.com/articles/d41586-023-03795-9>
2. Knobloch JA, Laurent G, Lauterbach MA (2023). STED microscopy reveals dendrite-specificity of spines in turtle cortex. **Prog Neurobiol** 231, 102541.
3. Fenk LA, Riquelme JL, Laurent G (2023). Inter-hemispheric competition during sleep. **Nature** 625:244-245. <https://doi.org/10.1038/s41586-023-05827-w>
4. Woo T*, Liang X*, Evans D, Fernandez O, Kretschmer F, Reiter S and Laurent G (2023). The Dynamics of Pattern Matching in Camouflaging Cuttlefish. **Nature** <https://doi.org/10.1038/s41586-023-06259-2>
5. Riquelme JL, Hemberger M, Laurent G and Gjorgjieva J (2023). Single spikes drive sequential propagation and routing of activity in a cortical network. **eLife** 79928 <https://doi.org/10.7554/eLife.79928>
6. Hain D, Gallego-Flores T, Klinkmann M, Macias A, Ciirdaeva E, Arends A, Thum C, Tushev G, Kretschmer F, Tosches M and Laurent G (2022). Molecular diversity and evolution of neuron types in the amniote brain. **Science** 377(6610), <https://doi.org/10.1126/science.abp8202>
7. Laurent G (2020). On the value of model diversity in neuroscience. **Nat Rev Neurosci** 21:395-96.
8. Norimoto H, Fenk LA, Li HH, Tosches MA, Gallego-Flores T, Hain D, Reiter S, Kobayashi R, Macias A, Arends A, Klinkmann M and Laurent G (2020). A claustrum in reptiles and its role in slow-wave sleep. **Nature** 578:413-18.
9. Reiter S and Laurent G (2020). Visual perception and cuttlefish camouflage. **Curr Opin Neurobiol** 60:47-54.
10. Hemberger M, Shein-Idelson M, Pammer L and Laurent G (2019). Reliable sequential activation of neural assemblies by single pyramidal cells in a three-layered cortex. **Neuron** 104:353-69.
11. Tosches MA and Laurent G (2019). Evolution of neuronal identity in the cerebral cortex. **Curr Opin Neurobiol** 56:199-208.
12. Harris KD, Groh JM, DiCarlo J, Fries P, Kaschube M, Laurent G, MacLean JN, McCormick DA, Pipa G, Reynolds JH, Schwartz AB, Sejnowski TJ, Singer W and

- Vinck M (2019). Functional properties of circuits, cellular populations, and areas. In: The Neocortex (Eds. Singer W, Sejnowski TJ and Rakic P) Strüngmann Forum Reports, vol. 27, Lupp JR, series editor. Cambridge, MA: MIT Press: pp. 223-65.
13. Reiter S, Huelsdunk P, Woo T, Lauterbach MA, Eberle JS, Akay LA, Longo A, Meier-Credo J, Kretschmer F, Langer JD, Kaschube M and Laurent G (2018). Elucidating the control and development of skin patterning in cuttlefish. **Nature** **562**:361-66.
 14. Tosches MA, Yamawaki TM, Naumann RK, Jacobi AA, Tuschev G and Laurent G (2018). Evolution of pallium, hippocampus and cortical cell types revealed by single-cell transcriptomics in reptiles. **Science** **360**:881-88.
 15. Fournier J, Mueller CM, Schneider I and Laurent G (2018). Spatial information in a non-retinotopic visual cortex. **Neuron** **97**:164-80.
 16. Reiter S, Liaw HP, Yamawaki TM, Naumann RK and Laurent G (2017). On the value of reptilian brains to map the evolution of the hippocampal formation. **Brain Behav Evol** **90**:41-52.
 17. Shein-Idelson M, Pammer L, Hemberger M and Laurent G (2017). Large-scale mapping of cortical synaptic projections with extracellular electrode arrays. **Nature Methods** **14**:882-90.
 18. Fournier J, Mueller CM, Shein-Idelson M, Hemberger M and Laurent G (2016). Consensus-based sorting of neuronal spike waveforms. **PLoS One** **11**:e0160494.
 19. Shein-Idelson M, Ondracek JM, Liaw H-P, Reiter S and Laurent G (2016). Slow waves, sharp waves, ripples, and REM in sleeping dragons. **Science** **352**:590-95.
 20. Laurent G (2016). Connectomics: a need for comparative studies. **e-Neuroforum** **7**:54-55, doi: 10.1007/s13295-016-0025-3.
 21. Hemberger M, Pammer L and Laurent G (2016). Comparative approaches to cortical microcircuits. **Curr Opin Neurobiol** **41**:24-30.
 22. Laurent G, Fournier J, Hemberger M, Müller CM, Naumann RK, Ondracek JM, Pammer L, Reiter S, Shein-Idelson M, Tosches MA and Yamawaki T (2016). Cortical evolution: Introduction to the reptilian cortex. In: Micro, Meso- and Macro-Dynamics of the Brain. (Eds. Buzsaki G and Christen Y) *Research and Perspectives in Neuroscience*. Springer Cham (CH): pp. 23-33.
 23. Huston SJ, Stopfer M, Cassenar S, Aldworth ZN and Laurent G (2015). Neural encoding of odors during active sampling and in turbulent plumes. **Neuron** **88**:403-18.
 24. Naumann RK, Ondracek JM, Reiter S, Shein-Idelson M, Tosches MA, Yamawaki TM and Laurent G (2015). The reptilian brain. **Curr Biol** **25**:R317-21.
 25. Fournier J, Müller CM and Laurent G (2015). Looking for the roots of cortical sensory computation in three-layered cortices. **Curr Opin Neurobiol** **31**:119-26.
 26. Laan A, Gutnick T, Kuba MJ and Laurent G (2014). Behavioral analysis of cuttlefish traveling waves and its implications for neural control. **Curr Biol** **24**:1737-42.
 27. Frégnac Y and Laurent G (2014). Neuroscience: Where is the brain in the Human Brain Project? **Nature** **513**:27-9.
 28. Shen K, Tootoonian S and Laurent G (2013). Encoding of mixtures in a simple olfactory system. **Neuron** **80**:1246-62.

29. Rutishauser U, Kotowicz A and Laurent G (2013). A method for closed-loop presentation of sensory stimuli conditional on the internal brain-state of awake animals. **J Neurosci Methods** **215**:139-55.
30. Cassenaer S and Laurent G (2012). Conditional modulation of spike-timing-dependent plasticity for olfactory learning. **Nature** **482**:47-52.
31. Narayan A, Laurent G and Sternberg PW (2011). Transfer characteristics of a thermosensory synapse in *Caenorhabditis elegans*. **Proc Natl Acad Sci USA** **108**:9667-72.
32. Papadopoulou M, Cassenaer S, Nowotny T and Laurent G (2011). Normalization for sparse encoding of odors by a wide-field interneuron. **Science** **332**:721-25.
33. Tootoonian S and Laurent G (2010). Electric times in olfaction. **Neuron** **67**:903-5.
34. Geffen MN, Broome BM, Laurent G and Meister M (2009). Neural encoding of rapidly fluctuating odors. **Neuron** **61**:570–86.
35. Du J, Riedel-Kruse IH, Nawroth JC, Roukes ML, Laurent G and Masmanidis SC (2009). High-resolution three-dimensional extracellular recording of neuronal activity with microfabricated electrode arrays. **J Neurophysiol** **101**:1671–78.
36. Moreaux L and Laurent G (2008). A simple method to reconstruct firing rates from dendritic calcium signals. **Front Neurosci** **2**:176-85.
37. Murthy M, Fiete I and Laurent G (2008). Testing odor response stereotypy in the *Drosophila* mushroom body. **Neuron** **59**:1009-23.
38. Rabinovich M, Huerta R and Laurent G (2008). Neuroscience. Transient dynamics for neural processing. **Science** **321**:48-50.
39. Turner GC, Bazhenov M and Laurent G (2008). Olfactory representations by *Drosophila* mushroom body neurons. **J Neurophysiol** **99**:734-46.
40. Laurent G, Borst A (2008). Dendritic short stories from invertebrates: linking biophysics and computation. In: Dendrites (Eds. Stuart G, Spruston N and Hausser M) 2nd Edition, Oxford University Press.
41. Moreaux L and Laurent G (2007). Estimating firing rates from calcium signals in locust projection neurons in vivo. **Front Neural Circuits** **1**:2.
42. Jayaraman V and Laurent G (2007). Evaluating a genetically encoded optical sensor of neural activity using electrophysiology in intact adult fruit flies. **Front Neural Circuits** **1**:3.
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L. INVITED TALKS (1): MEETINGS, WORKSHOPS AND SYMPOSIA

- 2023 Gordon Research Conference, Neuromodulation, Les Diablerets, CH
- 2023 4 lectures and 1 public lecture: Institut Henri Poincaré, Paris, FR
- 2022 Brain Dynamics Scientific Day, Leipzig, Germany
- 2022 Comparative Neurobiology of Higher Cognitive Functions, Erice, IT
- 2022 FENS Cajal Course on Computational Neuroscience, Lisbon, Portugal
- 2022 The Assembly and Function of Neuronal Circuits, Ascona, CH
- 2022 Sars Symposium, Bergen, Norway
- 2022 Keynote speaker, Sussex Neuroscience Day, Brighton, UK
- 2022 Neural Codes across Model Systems, Tel Aviv, Israel
- 2020 Keynote speaker, ILANIT-FISEB Conference, Eilat, Israel
- 2019 Ascona Meeting on Neural Circuits, Ascona, Switzerland
- 2019 Computational Neuroscience and Methods Meeting, Capbreton, France
- 2019 Bernstein Meeting (talk and workshop), Berlin, Germany
- 2019 EMBO Workshop **Beyond Standard**, Berlin, Germany
- 2019 Brain Conference, Neural Dynamics, Copenhagen, DK
- 2018 Neural Net GDR Conference, ENS, Paris, France
- 2018 Journée Francois Jacob, Collège de France, Paris, France
- 2018 Neuroscience Symposium, Kavli Institute, NTNU Trondheim, Norway
- 2018 Genomics & Systems Biology Conference, NYU in Abu Dhabi, UAE
- 2018 Collective Behavior Meeting, Janelia HHMI, USA
- 2018 Neural Dynamics Symposium, Stanford University, USA
- 2017 Neuroscience of Behavior Meeting, Weizmann Institute, Rehovot, Israel
- 2017 15th Meeting of the Austrian Neuroscience Association, Vienna, Austria
- 2017 Kavli Salon, Budapest, Hungary
- 2017 BSCB/BSDB Genetics Society Joint Meeting 2017, Warwick University, UK
- 2016 Keynote speaker, GDR Vision 2016, Toulouse, France
- 2016 Keynote speaker, CRCNS Conference, Paris, France
- 2016 Keynote Speaker, Intl. Conference on Systems Biology, Barcelona, Spain
- 2016 Masakazu Konishi Lecturer, Woods Hole, MA, USA
- 2016 113th International Titisee Conference, Building tools for quantifying brain and behavior, Titisee, Germany
- 2016 Norman Davidson Lecturer, Caltech, Pasadena, CA, USA
- 2016 Keynote Speaker, 4th European Zebrafish Meeting, Lisbon, Portugal
- 2016 Bernstein Center Freiburg, Brain Manifesto 2.0, Beuggen, Germany
- 2015 Director's Series Seminar, HHMI JFRC, Chevy Chase, MD, USA
- 2015 Max Planck International Neuroscience Symposium, Synapses and Circuits, Buenos Aires, Argentina
- 2015 NYU Canonical Neural Computation Conference, Florence, Italy
- 2015 Gordon Conference, Circuit Modulation, Hong-Kong, Hong-Kong
- 2015 IPSEN Meeting *Circuit Dynamics*, Paris, France
- 2015 *Sunposium*, Max Planck Florida Institute, Jupiter, FL, USA
- 2014 Keynote Lecturer, FENS (European Neurosciences) Meeting, Milano, Italy
- 2014 AREADNE Meeting on Systems Neuroscience, Santorini, Greece
- 2013 Ascona Circuits Meeting, Ascona, Switzerland
- 2013 Cognitive Neuromorphic Engineering Workshop, Capo Caccia, Italy
- 2013 Kavli Ceremony, Berlin, Germany
- 2012 FLiACT Workshop on Electrophysiology, Jena, Germany
- 2012 Sensory Coding Meeting, University of Göttingen, Germany
- 2012 Students Conference, U. of Würzburg, Grad. School of Life Sciences, Würzburg, Germany
- 2012 Sensory Coding and Natural Environment Meeting, IST Austria, Klosterneuburg, Austria
- 2012 University of Tokyo, Neural Circuits Symposium, Tokyo, Japan
- 2012 International Neuroscience Winter Conference, Sölden, Austria
- 2012 Computational Neuroscience Meeting, Leysin, Switzerland
- 2012 Biophysical Chemistry, Molecular Biology and Cybernetics of Cell Function, Klosters, Switzerland
- 2011 Neural Circuit Function and Development, Ascona, Switzerland
- 2011 CEA-LETI, Grenoble, France
- 2011 Keynote Lecture, NIPS, Granada, Spain
- 2011 Computational Neuroscience, Barcelona, Spain

- 2011 Annual Meeting Max Planck Society, Berlin, Germany
- 2010 FACETS/College de France, Paris, France
- 2010 Meeting at Hungary Academy of Science, Pecs, Hungary
- 2010 First Francis Crick Symposium, CSH Asia, Suzhou, China
- 2010 Meeting at Neuroscience Institute, La Jolla, CA, USA
- 2010 Seminar at Bernstein Center, LMU, Munich, Germany
- 2010 AREADNE Meeting, Santorini, Greece
- 2010 Francis Crick Cold Spring Harbor Symposium, Suzhou, China
- 2010 Neuroscience Institute Meeting, La Jolla, CA, USA
- 2010 ANS Meeting, Sydney, Australia
- 2009 Biozentrum Symposium, Basel, Switzerland
- 2009 Strüngmann Forum, FIAS, Frankfurt, Germany
- 2009 Bernstein Centers Meeting, Frankfurt, Germany
- 2008 Hippocampus Meeting, Svalbard, Spitsbergen, Norway
- 2008 AREADNE Meeting, Santorini, Greece
- 2008 Genes and Brain Meeting, Paris, France
- 2008 European Systems Consortium, Gif-sur-Yvette, France
- 2007 Ladislav Tauc Conference in Neurobiology, Gif-sur-Yvette, France
- 2007 Integrative Approaches to Brain Complexity, Wellcome Trust, Hinxton, UK
- 2007 Special Lecture, 2007 Soc. for Neuroscience Meeting, San Diego, CA, USA
- 2007 Circuits and Plasticity Gordon Conference, Newport, RI, USA
- 2007 Learning and Memory Meeting, UCLA, Los Angeles CA, USA
- 2007 Santa Fe/Los Alamos Center for Computational Neuroscience, Santa Fe, NM, USA
- 2007 NRP Meeting, Neuroscience Institute, La Jolla, CA, USA
- 2007 NSF-NIH Neuroscience Meeting, University of Maryland, MD, USA
- 2007 Florey Lecture, Goettingen Neurobiology Meeting, Göttingen, Germany
- 2006 Monell/ARO Meeting, Monell Inst., University of Pennsylvania, Philadelphia, PA, USA
- 2006 AREADNE Meeting, Santorini, Greece
- 2005 Neurons and Sensory Systems, Neuron Symposium, Washington, DC, USA
- 2005 The Assembly and Function of Neuronal Circuits, Ascona, Switzerland
- 2005 Synaptic Communication in Neuronal Networks (Monod Conf.), Roscoff, France
- 2005 UCLA, Computational Neuroscience Meeting, Los Angeles, CA, USA
- 2005 UCLA, Learning & Memory Meeting, Los Angeles, CA, USA
- 2005 CoSyNe Meeting, Utah, UT, USA
- 2005 Seventy-second Stated Meeting of NRP Associates, The Neurosciences Institute, La Jolla, CA, USA
- 2004 McGovern Institute, MIT, Cambridge, MA, USA
- 2004 Aspen Physics Institute, Aspen, CO, USA
- 2004 Hertie Lecturer, European Neuroscience Meeting, Lisbon, Portugal
- 2004 Dahlem Conference, Berlin, Germany
- 2004 CoSyNe Meeting, Cold Spring Harbor Labs, CSH, NY, USA
- 2003 National Academies, Keck Futures Initiative, NAS, Irvine, CA, USA
- 2003 Monte Verità Neuroscience Meeting, Ascona, Switzerland
- 2003 Computational Neuroscience Workshop, Santa Fe, NM, USA
- 2003 NRP Meeting, Neuroscience Institute, La Jolla, CA, USA
- 2002 European Neuroscience Meeting, Paris, France
- 2002 NEC Lectures in Biophysics, NEC & Princeton University, Princeton, NJ, USA
- 2002 Bioforum *Deciphering the Brain* Public Lecture, Caltech, Pasadena, CA, USA
- 2002 Learning and Memory Meeting, UCLA, Los Angeles, CA, USA
- 2002 Institut Henri Poincaré, Paris, France
- 2001 Independent Component Analysis Meeting, Del Mar, CA, USA
- 2001 Society for Neuroscience 2001 Meeting, San Diego, CA, USA
- 2001 Gordon Conference (Chemical Senses), Newport, RI, USA
- 2001 Keystone Symposium (Synapses), Taos, NM, USA
- 2001 Winter Brain Research Conferences, Antigua, West Indies
- 2000 Stimulus Statistics Meeting, Cold Spring Harbor Labs, NY, USA
- 2000 Gordon Conference (Synaptic Function), NH, USA
- 2000 McKnight Foundation Meeting, Aspen, CO, USA
- 2000 Keck Foundation Symposium, Caltech, Pasadena, CA, USA

- 2000 Biophysics Society Meeting Symposium, New Orleans, LA, USA
- 1999 Monte Verità Meeting on Neurons and Circuits, Ascona, Switzerland
- 1999 IBRO, Jerusalem, Israel (sent postdoctoral fellow Dr. Mark Stopfer)
- 1999 Sloan Centers for Theoretical Neuroscience Meeting, La Jolla CA, USA
- 1999 Salk Institute-Caltech Joint Meeting, La Jolla, CA, USA
- 1999 Learning and Memory Gordon Conference, Newport RI, USA
- 1999 French Neuroscience Society Meeting, Marseille, France
- 1999 Temporal Coding Workshop, Bremen, Germany
- 1998 European Olfaction Meeting, Siena, Italy
- 1998 Jacques Monod Conference, Roscoff, France
- 1998 Olfaction and Ecology Meeting, Oxford, UK
- 1998 Olfaction Meeting, CNRS, Paris, France
- 1998 AChems Meeting, Sarasota, FL, USA
- 1998 Role of Time in Neural Processing, Titisee, Germany
- 1997 Neurobiology Meeting, CNRS, Arcachon, France
- 1997 ESITO Meeting, Sardinia, Italy
- 1997 Learning and Memory Meeting, Angers, France
- 1997 Time in Neuroethology Meeting, Charlottesville, VA, USA
- 1997 Santa Fe Institute, Sloan Ctrs. for Theoretical Neuro. Workshop, NM, USA
- 1997 Snowbird Computational Neuroscience Workshop, UT, USA
- 1996 Development and Evolution of Brain Centers for Learning Meeting, IL, USA
- 1996 Olfaction Meeting, Max Planck Society, Frankfurt, Germany
- 1996 Gordon Conference, Chemical Senses, Newport, RI, USA
- 1995 Vincent Dethier Memorial Symposium, Amherst, MA, USA
- 1995 Neuroethology Congress, Olfaction Symposium, Cambridge, UK
- 1995 Olfaction Meeting, Lund, Sweden
- 1995 Santa Fe Institute, Sloan Ctrs. for Theoretical Neuro. Workshop, NM, USA
- 1995 Neural Coding Meeting, Prague, Czech Republic
- 1995 N.A.S.-Humboldt Foundation, *Frontiers in Science* Meeting, Dresden, Germany
- 1994 Computational Neuroscience Workshop, Woods Hole, MA, USA
- 1994 Hebb Symposium on Neurons and Biological Dynamics, Toronto, Canada
- 1993 Computations and Neural Systems '93 Meeting, Washington DC, USA
- 1993 Santa Fe Institute Workshop on Dynamical Systems, Santa Fe, NM, USA
- 1993 ONR Single Neuron Computation Meeting, Baltimore, MD, USA
- 1993 Single Neuron Computation Meeting, Tübingen, Germany
- 1992 Integrative Neuroscience Meeting, MPI Biol. Cybernetics, Tübingen, Germany
- 1992 Neurobiology Meeting, Göttingen, Germany
- 1991 ONR Neuroethology and Robotics Meeting, Woods Hole, MA, USA
- 1989 UK Association of Physiologists Meeting, Bristol, UK
- 1989 CNRS Meeting on Sensorimotor Integration, Arcachon, France
- 1989 Snowbird Meeting on Neural Networks, Snowbird, UT, USA
- 1988 Neuroethology Congress, Satellite Meeting, Tutzing, Germany

M. INVITED TALKS (2): SEMINARS and LECTURES

- 2023 NYU, CNS Department, NYC, NY, USA
- 2023 Duke University, Neuroscience
- 2023 Harvard University, MCB/Neurobiology
- 2023 Caltech Biology/Bioengineering Division
- 2023 Institut Henri Poincaré, Paris, FR
- 2022 NYU Medical School, Neuroscience Department, NYC, USA
- 2022 University of California, Berkeley, CA, USA
- 2022 Oxford University, Oxford, UK
- 2022 University College London, London, UK
- 2022 Rockefeller University, NY, NY, USA
- 2022 IBM Distinguished Speaker, IBM Watson Research Center, NJ
- 2022 MPI for Biology, Tübingen, Germany

2021 Brown University, RI, USA
2021 Biozentrum, Basel, CH
2021 University of Michigan, MI, USA
2021 Weizmann Institute, Rehovot, Israel
2019 Salk Institute, La Jolla, USA
2019 Forbes Lecture, MBL Woods Hole, MA, USA
2019 Francis Crick Institute, London, UK
2019 Max Delbrück Center, Berlin, Germany
2019 EMBL Rome and Sapienza U. Rome, Italy
2019 Princeton University, Neuroscience, Princeton NJ, USA
2019 Columbia University, Dept. Biology, NY, NY, USA
2018 Champalimaud CU, Lisbon, Portugal
2018 SISSA, Trieste, Italy
2018 Adrian Lecture, University of Cambridge, UK
2018 Systems Seminars Series, UCL London
2018 University of Freiburg, Neuroscience Series, Freiburg, Germany
2018 Friedrich Miescher Institute Basel, Switzerland
2018 Zuckermann Center, Columbia University, NYC, USA
2018 EMBL Distinguished Lectures Series, Heidelberg, Germany
2017 Lamport Lecture, University of Washington, Seattle WA, USA
2017 NIH Neuroscience Seminar Series, Bethesda, Maryland, USA
2015 Students Invited Speakers Series, LMU Munich, Germany
2015 Seminar, University of Alicante, Spain
2015 Seminar, Directors' Series, JFRC, VA, USA
2015 Seminar, UCL, London, UK
2014 École Normale Supérieure, IBENS, Paris, France
2014 Centre for Brain and Behavior, Oxford University, UK
2014 Brain Research Institute, University of Zürich, Switzerland
2014 Erasmus Medical Center, University of Rotterdam, Holland
2014 New York University, Dept. Neuroscience, New York, NY, USA
2014 Baylor College of Medicine, Houston TX, USA
2014 Hanse Lecture, Bremen, Germany
2013 Duke University, Neuroscience, Durham NC, USA
2012 MPI Chemical Ecology, Jena, Germany
2012 École Polytechnique, Paris, France
2012 RIKEN Brain Science Institute Summer School, Tokyo, Japan
2012 Max Planck Institute for Dynamics and Self-Organization, Göttingen, Germany
2012 University of Edinburgh, Dept. Neuroscience, Scotland, UK
2012 Newcastle University, Dept. Neuroscience, Newcastle, UK
2012 Weizmann Institute of Science, Rehovot, Israel
2012 Harvard University, Cambridge MA, USA
2012 Janelia Farms, HHMI, VA, USA
2011 University of Copenhagen, Denmark
2011 Champalimaud Institute for the Unknown, Lisbon, Portugal
2011 University of Heidelberg, Germany
2011 University of Tübingen, Germany
2011 Max Birnstiel Lecture, Vienna, Austria
2010 J.W. Goethe University, Biology Department, Frankfurt, Germany
2010 J.W. Goethe University, Mathematics Department, Frankfurt, Germany
2010 Friedrich Miescher Institut, Basel, Switzerland
2010 Munich University, Bernstein Computational Center, Munich, Germany
2009 Konishi Lecturer, MBL, Woods Hole, MA, USA
2009 Swammerdam Lecture, Amsterdam, Holland
2009 UCSF, San Francisco CA, USA
2008 Teuber Lecture, MIT, Biology Department, Cambridge, MA, USA
2008 CNRS, Neurobiology, Marseille, France
2008 CNRS/Université Paris V, Neuroscience, Paris, France
2008 CRG, Barcelona, Spain
2008 University of Cambridge, Zoology and Physiology Depts., Cambridge, UK
2008 Max Planck Institute of Neurobiology, Martinsried, Germany

2008 Max Planck Institute of Biophysics, Frankfurt, Germany
2008 École Normale Supérieure, Physics Department (parts i-iii), Paris, France
2007 JFRC Seminar, JFRC/HHMI, VA, USA
2007 Neuroscience Program, Harvard Medical School, Boston, MA, USA
2007 Neuroscience Department, Yale University, New Haven, CT, USA
2007 Neuroscience Lecture, UT South Western Medical Center, UTSWU, Dallas, TX, USA
2007 Center for Studies in Physics and Biology Seminar, Rockefeller U., NYC, USA
2007 Biology Department, Caltech, Pasadena, CA, USA
2006 Neuroscience Graduate Seminars Series, UC San Diego, La Jolla, CA, USA
2006 Department of Neurobiology, University of Chicago, Chicago, IL, USA
2006 Pasteur Institute, Paris, France
2006 Department of Neuroscience, NYU, New York, NY, USA
2006 Penn/Monell Joint Lecture, Monell Inst., U. of Pennsylvania, Philadelphia, PA, USA
2006 Heller Lecture, Hebrew University, Jerusalem, Israel
2006 Janelia Farms Research Center, HHMI, VA, USA
2006 D-Biol Special Lecture, ETH, Biology Department, Zürich, Switzerland
2006 CNBC Retreat Speaker, Carnegie Mellon University, Pittsburgh, PA, USA
2006 Harvard Bauer Center, Cambridge, MA, USA
2005 Clark Center and Dept. of Biology, Stanford University, Palo Alto, CA, USA
2005 Department of Neuroscience, UCLA, CA, USA
2005 HWNI Student Seminar Series, UC Berkeley, CA, USA
2005 Computational Neuroscience, Arcachon, France
2005 Ernest C. Watson Lecture, Caltech, Pasadena, CA, USA
2005 The David Bodian Seminar in Neuroscience, Johns Hopkins U., MD, USA
2005 University of Maryland, Baltimore MD, USA
2005 Neuroscience Colloquium Series, Rutgers University, NJ, USA
2004 MIT McGovern Institute Retreat, MA, USA
2004 UC Davis, CA, USA
2004 UC Riverside, CA, USA
2003 Vollum Institute, Portland, OR, USA
2003 Caltech Physics Colloquium, Pasadena, CA, USA
2002 Harvard University, Bio Labs, Cambridge, MA, USA
2002 École Supérieure de Physique et Chimie (ESPCI), Paris, France
2002 Perkins Lecturer, Cambridge University, UK
2002 UCSF, Department of Anatomy, San Francisco, CA, USA
2002 Washington University, St Louis, MO, USA
2002 UC Irvine, Neurobiology Department, Irvine, CA, USA
2001 UCSD, Department of Biology, La Jolla, CA, USA
2001 Duke University Medical School, Durham, NC, USA
2001 Brandeis University, Waltham, MA, USA
2000 USC, Neuroscience Department, Los Angeles, CA, USA
2000 Naples Zoological Station, Naples, Italy
2000 Stanford University, Neuroscience Department, Palo Alto, CA, USA
2000 City of Hope Medical Center, Duarte, CA, USA
1999 National Institutes of Health, Bethesda, MD, USA
1999 University of California at San Diego, La Jolla, CA, USA
1999 University of California at Berkeley, Berkeley CA, USA
1999 Mount Sinai Medical Center, New York, NY, USA
1999 University of Pennsylvania, Dept. of Neuroscience, Philadelphia, PA, USA
1999 Rutgers University, Newark NJ, USA
1999 Southwestern University Medical Center, Mol. Cell Biol. Dept., Dallas, TX, USA
1998 University of California, Physiol. Department, Los Angeles, CA, USA
1998 University of California, Mol. Cell Biol. Dept., Berkeley, CA, USA
1998 University of Iowa, Dept. of Biology, Iowa City, IA, USA
1998 Institute for Nonlinear Science, Physics Dept., UCSD, La Jolla, CA, USA
1998 Max Planck Institutes for Biol. Cybernetics and Devel. Biology, Tübingen, Germany
1998 Max Planck Institute for Brain Research, Frankfurt, Germany
1998 Caltech, Theory Seminar Series, Pasadena, CA, USA
1997 Harvard Medical School, Boston, MA, USA
1997 UC Davis, CA, USA

- 1997 Helmholtz Club, Irvine, CA, USA
- 1997 Dupont Lecturer, ARL, Tucson, AZ, USA
- 1997 Columbia University Medical School, New York, NY, USA
- 1997 UC Irvine, Department of Psychobiology, Irvine, CA, USA
- 1996 Yale University, Dept. Cell and Molecular Physiology, New Haven, CT, USA
- 1996 UCSF, Sloan Center for Theoretical Neuroscience, San Francisco, CA, USA
- 1995 Cornell University, Neuroscience Department, Ithaca, NY, USA
- 1995 UCSD, Institute for Computational Neuroscience, San Diego, CA, USA
- 1995 University of Washington, Pharmacology Dept., Seattle, WA, USA
- 1995 Brandeis University, Biology Dept., Waltham, MA, USA
- 1994 University of Würzburg, Genetics Department, Würzburg, Germany
- 1994 Freie Universität Berlin, Neurobiology Department, Berlin, Germany
- 1994 California Institute of Technology, CNS Program, Pasadena, CA, USA
- 1994 Helmholtz Club, Irvine, CA, USA
- 1994 UCB, Dept. Cell and Mol. Biology, Berkeley, CA, USA
- 1993 California Institute of Technology, CNS Seminar, Pasadena, CA, USA
- 1992 ARL, University of Arizona, Neurobiology Division, Tucson, AZ, USA
- 1992 University of Southern California, Neuroscience Dept., Los Angeles, CA, USA
- 1992 University of Oregon, Neuroscience Department, Eugene, OR, USA
- 1991 UCR, Entomology Department, Riverside, CA, USA
- 1990 UCSD, Biology Department, San Diego, CA, USA
- 1990 Brandeis University, Biology Department, Waltham, MA, USA
- 1990 University of Massachusetts, Neuro. and Behavior Dept., Amherst, MA, USA
- 1989 University of Konstanz, Biology Department, Germany
- 1989 Max Planck Institute for Behavioral Physiology, Seewiesen, Germany
- 1989 University of Tübingen, Department of Biocybernetics, Tübingen, Germany
- 1989 CNRS, Neuroscience Division, Marseille, France
- 1989 University of Cambridge, Zoology Department, Cambridge, UK
- 1988 University of Newcastle, Neurobiology Department, Newcastle, UK