

## ERIN MARGARET SCHUMAN

### PERSONAL

Birth date: May 15, 1963  
Current status: Director, Professor  
Lab address: Max Planck Institute for Brain Research  
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web: [www.brain.mpg.de/schuman](http://www.brain.mpg.de/schuman), orcid ID: [0000-0002-7053-1005](https://orcid.org/0000-0002-7053-1005)  
Family status: Married, 3 daughters

### EDUCATION

Ph.D.	Neuroscience	Princeton University	January, 1990
B.A.	Psychology	Univ. of Southern Cal.	May, 1985
	Neural Systems & Behavior	Marine Biological Lab	Summer, 1988

### AWARDS AND HONORS

2018 Society for Neuroscience, Salpeter Lifetime Achievement Award  
2017 Elected Member Academia Europaea  
2017 Elected Member German National Academy of Sciences Leopoldina  
2017 European Research Council, Advanced Investigator Grant  
2016 Forbes Lectures, Marine Biological Laboratory  
2014 Elected EMBO member  
2013 Alexander Cruickshank Lecture, Gordon Research Conference  
2013 Hodgkin-Huxley-Katz Prize  
2013 Norbert Elsner Lecture, German Neuroscience Society  
2011 European Research Council, Advanced Investigator Grant  
2008 Gerard Lecture, University of California, Irvine  
2005 Howard Hughes Medical Institute Investigator  
2002 Howard Hughes Medical Institute Associate Investigator  
1997 Howard Hughes Medical Institute Assistant Investigator  
1996 Ferguson Biology Undergraduate Teaching Prize  
1996-1998 Beckman Young Investigator Award  
1995 Ferguson Biology Graduate Teaching Prize  
1995 American Association of University Women Emerging Scholar  
1995-1999 Pew Biomedical Scholar  
1994-1998 John Merck Scholar  
1994-1996 Alfred P. Sloan Research Fellow  
1994-1996 McKnight Scholars Award (declined)  
1991 Katherine McCormick Foundation fellow  
1990 NIH postdoctoral fellowship  
1986 NIH predoctoral fellow  
1985 Phi Beta Kappa, graduation with honors  
1985 Sigma Xi Outstanding Undergraduate Research Award

## **EMPLOYMENT**

2009-	Director, Max Planck Institute for Brain Research, Frankfurt
2013-2016	Managing Director, Max Planck Institute for Brain Research
2015-present	Professor, Biology, Goethe University Frankfurt
2004-2010	Professor, Caltech, Biology
2007-2009	Option Representative, Division of Biology, Caltech
2008	INSERM-Visiting Faculty, Ecole Normale Superieure, Paris
2005	Visitor in Biology, Russ Fernald's lab, Stanford University
2004-2009	Investigator, HHMI
2002-2004	Associate Investigator, Howard Hughes Medical Institute
2000-2006	Executive Officer in Biology, Caltech
1999-2004	Associate Professor, Caltech, Biology
1997-2002	Assistant Investigator, Howard Hughes Medical Institute
1993-1999	Assistant Professor, Caltech, Biology
1990-1993	Postdoctoral Fellow, Stanford University, Mol-Cell Physiology
1990	Postdoctoral fellow, Princeton University, Neuroscience/Psychology
1985-1990	Graduate student, Princeton University, Neuroscience/Psychology

## **Advisory/Editorial Boards**

2018-	Panel Member, Lundbeck Foundation Talent Panel 2019
2018-	Councilor, Society for Neuroscience
2018	Brain Research Institute, HiFo, University of Zurich, SAB
2017	External Evaluation Board, IBENS, Paris
2017-	European Training Network ZENITH
2017-	Simons Initiative for the Developing Brain, Univ. of Edinburgh, UK
2017-	Center for Integrative Biology, College de France
2016-	Editorial Board, Neuron
2016-	Frankfurt International School, Board of Trustees
2016-	Editorial Board, Annual Review of Cell and Developmental Biology
2016	11 <sup>th</sup> RIKEN Brain Science Advisory Council (BSAC), Japan
2016	Advisory Committee, Harvard University, Molecular-Cellular Biology
2016	DFG (German Research Foundation) Review Board (Priority Program)
2015-	Neurobiology Advisory Group, EMBL Monterotondo
2015-	Scientific Advisory Board, NERF Neuroelectronics Research Flanders
2015-2017	Frankfurt International School Advisory Council
2014-	FENS Brain Conferences Committee (BCC)
2014- 2017	Gruber Neuroscience Prize Committee
2014-	Chair, Scientific Advisory Board, MRC Centre for Dev Neurobiology (UK)
2014-	Associate Editor of Neuroscience Research (Japan)
2014	10 <sup>th</sup> RIKEN Brain Science Advisory Council (BSAC), Saitama, Japan
2013-2016	Scientific Advisory Committee, Foundation for Dystonia Research
2013	Scientific Advisory Board, VIB Center for the Biology of Disease
2013-2016	Axelrod Neuroscience Prize Selection Committee
2011-2014	Panel Member, ERC Starting Grant Selection Committee
2011-	Scientific Advisory Board, Kavli Institute, Trondheim, Norway
2011-2016	Editorial Board, Learning & Memory

2010-2013	Society for Neuroscience International Affairs Committee
2010-2015	Wellcome Trust Core Interview Panel
2010-2014	Scientific Advisory Board, Neuroscience Institute, Helsinki
2009-	Associate Editor, Current Opinion in Neurobiology
2008	Advisory Committee, Harvard University, Molecular-Cellular Biology
2004-2007	NIH Study section regular member, SYN

### **Meeting Organization**

2018	Co-Organizer, Logistics of Neuronal Function, Frankfurt
2018	Co-Organizer, Dendrites 2018, Crete, Greece
2016-	The Brain Conferences Committee, Spring Brain Conference
2013-2015	Chair and Organizer, RNA Localization Conference 2015, Crete, Greece
2013-2014	Organizer Janelia High-throughput Sequencing for Neuroscience
2012	FENS Forum (2014) Program Committee
2011	Co-Chair, Gordon Conference on Dendrites
2009	Co-Organizer, Cell-adhesion symposium, Cell Biology meeting
2009	Organizer, JFRC Protein Translation at the Synapse
2007	Organizer, JFRC Protein Translation at the Synapse
2003	Co-Chair, Cold Spring Harbor Meeting on Learning and Memory
2001	Chair, Gordon Conference on Neural Plasticity
2001	Co-Organizer, Keystone Meeting on the Hippocampus and Synapses
1998	Chair, Gordon Conference on Neural Plasticity

### **Teaching**

2011-present	IMPRS Lecturer
2006-2009	Co-Instructor, Bi129, Cellular Dynamics
2004-2009	Co-Instructor, Bi162, Cellular Neurophysiology
2003-2009	Guest Lecturer, Bi150 and Bi156, Neurobiology
1998-2003	Co-Instructor, Bi260, How to give a seminar
1996-1998	Co-Director, Brain Development and Function Course, CSHL
1995	Faculty, Neural Systems and Behavior, Marine Biological Laboratory
1994-2002	Co-Instructor, Bi150, Neurobiology
1994-2005	Co-Instructor, Bi80, Current Research

### **Committees and Groups**

2018-	MPG Sexual Harassment Committee
2018-	Jury member Hermann Neuhaus Prize for Postdocs in the MPG
2016	Horizons 2020 Grant Panel Reviewer
2016-	PI, DFG CRC, Resilience
2016-	EMBO Long-term Postdoc Fellowship Committee
2016-	FENS Brain Conferences Committee
2012-	MPI for Molecular Genetics Search Committee
2012-	Working Group to support female scientists in the MPG
2011-2014	MPG Perspective's Committee
2011-	CAESAR Search Committee
2011-2015	IMPRS for Neural Circuits, Spokesperson
2010	Max Planck 20X2020 Initiative Author
2011	Biology of Sleep Search Committee

2011- PI, DFG CRC 1080, Homeostasis  
2011- PI, Cluster of Excellence, Macromolecular Complexes  
2010- PI, DFG CRC 902, RNA regulation  
2010-2011 Max Planck Florida Institute  
2010 MPG 2010+ Co-Author

### **Caltech Committee Work**

2007-2009 Admissions Task Force  
2006-2009 Chair, Genetics of Neural Circuits and Behavior  
2006-2009 Institute Convocations committee  
2006-2009 Faculty Committee on Recruiting and Retaining Women and Minority Faculty  
2005-2009 Cellular and molecular biology search committee  
2006-2009 Behavior & Genetics Search committee chair  
2003-2009 Target of Opportunity committee  
2000-2009 Division of Biology Postdoctoral Fellowship committee  
2002-2009 Cellular & Molecular Neuroscience Qualifying Exam chair  
2002-2006 Behavior & Genetics Search Committee  
2003 Faculty Board nominating Committee  
2002 Child Care Committee  
2001-2004 Faculty Board  
2003-2004 Bioengineering Search Committee

### **Invited Talks at Universities, Research Centers and Conferences**

*2019*

Duke University Medical Center, Durham, NC  
NIH, Bethesda, MD  
Biozentrum, University of Basel, Switzerland  
Science for Life Laboratory, KTH, Karolinska Institute, Stockholm, Sweden

*2018*

Milner Centenary Symposium, Rockefeller University, NY  
Francis Crick Institute, London, UK  
SfN Annual Meeting, Mini-symposium on Neural Proteomics, San Diego, CA  
Wellcome Trust India Alliance EMBO Symposium, New Delhi, India  
Sussex Neuroscience, University of Sussex, Brighton, UK  
Keynote lecture, Harris and Holt Farewell Symposium, Cambridge, UK  
SAB symposium, Kavli Center for Systems Neuroscience, Trondheim, Norway  
Leopoldina Symposium, Halle/Saale, Germany  
Fondation des Treilles, Synapses: from Complexity to Diversity, Paris, France  
Edinburgh Neuroscience Day 2018, Annual Distinguished Lecture, Univ Edinburgh  
DFG Conference "RNA Transport Meeting 2018", Düsseldorf, Germany  
Genomics & Systems Biology VIII at NYU Abu Dhabi, UAE

*2017*

Keynote Lecture, EMBL Graduation Ceremony, Heidelberg, Germany  
Cell Symposia: Big questions in Neuroscience, Arlington, VA  
Bordeaux Neurocampus Inaugural Conference, France  
Janelia Farm Conference on Cell Biology of Neurons & Circuits, Ashburn, VA  
Brain Prize Symposium, Lund, Sweden

ISN-ESN Symposium, Paris, France  
RNA Conference on Localization and Local Translation, Barga, Italy  
FENS-IBRO Cajal Course, Champalimaud Center for the Unknown, Lisbon, Portugal  
Stockholm Nordic Neuroscience Meeting, Stockholm, Sweden  
GRC on Dendrites, Il Ciocco, Barga, Italy  
King's College, Wohl Imaging Center Opening Symposium, London, UK  
MPI-Cambridge Neuroscience Meeting, Berlin, Germany  
*2016*

EMBO/EMBL Symposium: Complex Life of mRNA, Heidelberg, Germany  
Soc. for Neurochemistry, INC-JCN Flagship School, Alpbach, Austria,  
Caltech, Norman Davidson Anniversary Lecture, Pasadena, CA  
DENDRITES 2016, Keynote Lecture, Crete, Greece  
UCL, London, UK  
MIT, Picower Institute for Learning and Memory, Cambridge, MA  
Neuroscience School of Advanced Studies, Bressanone, Italy  
Forbes Lectures, Marine Biological Laboratory, Woodshole MA  
University of Göttingen Medical Center, Göttingen, Germany  
IGMM Edinburgh, Scotland

*2015*

Science for Life Symposium, Utrecht University, Netherlands  
Society for Neuroscience Symposium on Dendrite Development & Function, USA  
16<sup>th</sup> National Congress of the Spanish Society of Neuroscience, Granada, Spain  
Sunposium, MPI Florida, Jupiter USA  
IMP-IMBA-BI Meeting, Vienna, Austria  
Brandeis University, Bauer Distinguished Lecturer, Waltham, MA  
University of Massachusetts, Worcester, MA  
Adrian Lecture, University of Cambridge, UK  
Max Planck Institute for Psychiatry, Munich, Germany  
5<sup>th</sup> European Synapse Meeting, Bristol, UK,  
Zebrafish Workshop, Janelia Farm Research Campus, Ashburn, VA  
FMI for Biomedical Research, Basel, Switzerland

*2014*

EMBL-La Sapienza Seminar Series, Monterotondo, Rome, Italy  
Freiburg University, Germany  
School of Biosciences, Cardiff University, Wales  
Collège de France, Paris, France  
15<sup>th</sup> EMBL/EMBO Science and Society Conference, Chair, Heidelberg, Germany  
Janelia Conference on High-Throughput Sequencing for Neuroscience, Ashburn, VA  
Translational Control Meeting Wellcome Trust, Keynote Address, London, UK

*2013*

Baylor College of Medicine, Houston, Texas, USA  
The University of Texas at Austin, USA, Winter  
Bordeaux Neurocampus, Bordeaux, France,  
DGIST Distinguished Lecture, Daegu, Korea  
Rockefeller University, NY, NY  
Université Paris Descartes, Paris, France  
ICM, Paris, France  
Max Planck Institute for Medical Research, Heidelberg, Germany

TEDx: The Brain, Caltech, Pasadena CA  
LTP Meeting by the Royal Society, London, UK  
IFM International Colloquium 2013, Paris, France  
10<sup>th</sup> Horizons in Molecular Biology Symposium, Göttingen, Germany  
Hodgkin-Huxley-Katz Prize Lecture, IUPS, Birmingham, UK  
Gordon Research Conference on Dendrites, Les Diablerets, Switzerland  
10<sup>th</sup> Meeting of the German Society of Neuroscience, Göttingen, Germany  
107<sup>th</sup> International Titisee Conference, Titisee, Germany

*2012*

Neuroscience Seminar, Max Planck Institute Florida, Jupiter, Florida  
CNS Colloquium, NYU, New York,  
Research Institute of Molecular Pathology, Vienna, Austria  
IBMB Barcelona, Spain  
Instituto de Neurociencias, Alicante, Spain,  
Centro de Biología Molecular, Madrid, Spain  
Institute of Neuroscience, Newcastle-upon-Tyne, UK  
Centre for Integrative Physiology, Edinburgh, Scotland  
MRC LMB, Cambridge, UK,  
EMBL, Heidelberg, Germany  
Brain Research Institute, University of Zurich, Switzerland  
Champalimaud Neuroscience Symposium, Lisbon, Portugal  
Kavli Prize Symposium on Neuroscience 2012, Bergen, Norway  
RIKEN BSI Summer Program 2012, Japan,  
14<sup>th</sup> International Winter Neuroscience Conference, Soelden, Austria  
Janelia Dendrites: Substrates for Information Processing, Asburn, VA  
Molecular Neurobiology, Weizmann Institute of Science, Rehovot, Israel

*2011*

VIB, K.U. Leuven & Vesalius Research Center, Leuven, Belgium  
Single-Unit Human Recordings, New York University, NY  
Max Delbrück Center for Molecular Medicine, Berlin, Germany  
Pharmazentrum Frankfurt, University Hospital Goethe-University Frankfurt, Germany  
Society for Neuroscience Special Lecture, SfN Meeting, Washington DC  
Nobel Forum Lecture, Karolinska Institutet, Stockholm, Sweden  
Ascona Neuronal Circuits Meeting, Ascona, Switzerland,  
ISN 2011 Meeting, Athens, Greece  
IEEE • ICDL • EPIROB 2011, Keynote lecture Frankfurt, Germany  
EMBO Conf. on Intracellular RNA Localization & Localized Translation, Barga, Italy  
8<sup>th</sup> IBRO World Congress of Neuroscience, Florence, Italy  
34<sup>th</sup> German Society for Cell Biology (DGZ), Bonn, Germany  
Translational Regulation in the CNS, German SfN, Göttingen, Germany  
University of Oxford, Physiology, Anatomy and Genetics, Oxford, UK

*2010*

Stanford University, Molecular and Cellular Physiology, Palo Alto, CA  
Institute for Cell Biology and Neuroscience, Goethe-University, Frankfurt, Germany  
Harvard, Center for Brain Science, Boston, MA  
Europ. Symp. on Imaging Structure & Function in the Zebrafish Brain, Lisbon, Portugal  
XIIth Magdeburg Neurobiological Symposium, Magdeburg  
FENS Forum, Amsterdam, The Netherlands

GRC on the Cell Biology of the Neuron, Waterville Valley Resort, NH  
AREADNE , Encoding & Decoding of Neural Ensembles, Santorini, Greece  
Ribosomes Keynote, Orvieto, Italy  
1<sup>st</sup> Francis Crick Symposium on Neuroscience, Suzhou, China  
Janelia Farm Conference on Structural Plasticity in the Mammalian Brain, Ashburn, VA  
SFB Initiative Mainz-Frankfurt on Mechanisms of Molecular Adaptation, Mainz, Germany  
Max Planck Unit for Structural Molecular Biology, Hamburg, Germany  
Bernstein Center for Computational Neuroscience, Berlin, Germany  
Neuroscience Center Niederrad, Frankfurt, Germany  
SFB/TR 3, University Hospital, Bonn, Germany  
*2009*  
MRC Laboratory for Molecular Cell Biology, UCL, London, UK  
Biozentrum, Basel, Switzerland,  
Allen Institute, Seattle, WA  
Janelia Meeting on Dendritic Translation, Ashburn, VA  
Gordon Conference on Cell Adhesion,  
FASEB Meeting on RNA translation  
Gordon Conference on Dendrites, Ventura, CA  
Learning and Memory meeting, UCI, Irvine, CA  
Case Western University, Case Western, Ohio  
*2008*  
UCI, Gerard Lecture, Irvine, CA  
Hippocampus Conference, Spitsbergen Norway  
Hinxton meeting, Cambridge, UK  
Bergamo Scienza, Keynote public lecture, Bergamo, IT  
University of Michigan, Agranoff Lecture, MA  
Ecole Normale Superieure, Paris, France  
*2007*  
University of Pennsylvania Children's Hospital, Philadelphia, PA  
CSHL and EMBL Protein Translation, Keynote address, Heidelberg, Germany  
Protein Translation at the Synapse, Janelia Farm, Ashburn, VA  
Mass Spectrometry in the Health & Life Sciences, San Francisco, CA  
Gordon Research Conference on Neural Circuits  
Banbury Center Fragile X meeting, Cold Spring Harbor, NY  
Johns Hopkins University, Neuroscience, Baltimore, MA  
USC, Zilkha Neurogenetics Institute, LA, CA  
University of Minnesota, Department of Neuroscience, Minneapolis, MN  
Scripps Research Institute, San Diego, Ca  
*2006*  
Ecole Normale Superieur, Paris, France  
University of New Mexico, Grass Traveling Lecturer, Santa Fe, NM  
Rockefeller University, NY, NY  
Emory University, Atlanta, GA  
Carnegie Mellon University, Philadelphia, PA  
Cold Spring Harbor, Learning and Memory, 2006  
*2005*  
RNA and Protein Synthesis, Kfar Blum, Israel, 2005

Molecular and Cellular Physiology, Stanford, Fall 2005  
Villum Institute, Winter, 2005  
Neuroscience, UT Southwestern, Dallas, Winter, 2005  
Women in Life Sciences Speaker, UCSF, Winter, 2005  
*2004*  
Montreal Neurological Institute, McGill University, Winter, 2004  
Washington University Neuroscience, Spring, 2004  
Penn Neurobiology, Spring, 2004  
Harvard Medical School, Neurobiology, Spring, 2004  
UT Southwestern Medical Center, Dallas, Winter, 2004  
University of California, Santa Cruz, Winter, 2004  
Picower Center for Learning and Memory, Learning Meeting, 2004  
Molecular mechanisms of long-term memory, SFN symposium speaker, 2004  
The Cytoskeleton and Synaptic Function, San Diego, 2004  
Gordon Research Conference on the Cell Biology of the Neuron, 2004  
*2003*  
University of Colorado Denver, CO  
Pasteur Institute, Paris, France  
Neuron's 15<sup>th</sup> anniversary symposium: Cell Biology of the Neuron, New Orleans, LA  
Assembly of Neural Circuits, Ascona, Switzerland  
Formation and Function of Neural Circuits, Varenna, Italy  
30<sup>th</sup> Anniversary of LTP, Royal Society, London, UK  
*2002*  
Laboratoire de Physiologie Cerebrale, CNRS, Paris, France  
USC, LA, CA  
Stanford, Molecular and Cellular Physiology, Palo Alto, CA  
Learning and Behavior, UCLA, LA, CA  
Cellular Motility and Signaling, Keystone, Taos, NM  
*2001*  
Cellular and Molecular Medicine, UCSD, San Diego, CA  
MIT, Center for Learning and Memory, Boston, MA  
Harvard Medical School, Boston, MA  
Harvard, Molecular and Cellular Biology, Boston, MA  
UCSD, Molecular Medicine, San Diego, CA  
Learning and Memory Symposium, UCI, Irvine, CA  
Harvard-Armenise Foundation Symposium, Milano, Italy  
Keystone Meeting on Synaptic Function and the Hippocampus, Taos, NM  
Cold Spring Harbor Learning and Memory Meeting, CSH, NY  
*2000*  
UCSF, San Francisco, CA  
Duke University, Durham, NC  
University of Pittsburgh, PA  
UC Berkeley, Berkeley, CA  
Gordon Research Conference on Neural Development, Salve Regina, NH  
Gordon Research Conference on The Cell Biology of the Neuron, Plymouth, NH  
*1999*  
Harvey Mudd College, Pomona, CA  
Neuronal Circuits, Monte Verita, Ascona, Switzerland



FASEB Meeting, Symposium on Local Protein Synthesis, Washington, D.C.

*1998*

Institute for Neurobiology, Max Planck Institute, Martinsried, Munich, Germany

Wake Forest University, Bowman Gray School of Medicine, NC

Washington University, McDonnell Neuroscience Speaker, St. Louis, MI

University of Chicago, Chicago, IL

Salk Institute and UCSD Neuroscience, La Jolla, CA

Whitehead Institute Symposium on Neurobiology, Boston, MA

Frontiers of Science, National Academy of Sciences, Irvine, CA

Cortical Plasticity: the representation of experience, Berlin, Germany

Gordon Research Conference on The Cell Biology of the Neuron, Plymouth, NH

Keystone Symp. The Hippocampus, Park City, UT

*1997*

Northwestern University Neurobiology Dept., Chicago, I

NIH, Neuroscience Lecture Series, Winter, Bethesda, MD

NYU, Neural Sciences Dept., NY, NY

Stanford University Neuroscience Retreat, Palo Alto, CA

Society for Neuroscience, Molecular Basis of Long-term Memory, New Orleans, LA

Gordon Research Conference on Neural Plasticity, NH,

Gordon Research Conference on Neurotrophins, Newport, RI

Neurotrophins in Development and Plasticity, Osaka, Japan

Dahlem Conference on Learning and Development, Berlin, Germany

UCI, Psychobiology Dept., Irvine, CA

UCLA, Neuroscience Dept., LA, CA

UC Berkeley, Neuroscience Dept., Berkeley, CA

U. Washington, Dept. Pharmacology/Neuroscience, Seattle, WA

*1996*

Johns Hopkins University, Neuroscience Dept., Baltimore, MA

LUMC, Neuroscience Dept

U. Iowa, Biology Dept.,

4th NGF Conference, LondonUK

Spring Hippocampus Meeting, Grand Cayman, BWI

Keystone Symposium on Signal Transduction, Taos, NM

*1995*

Neurotrophic factors in development, plasticity & survival, Madison, WI

Gordon Research Conference on Neurotrophins, Plymouth, NH

UC Davis, Center for Neuroscience, Davis, CA

Duke University, Dept. of Neurobiology, Durham, NC

University of Texas, Dept. of Pharmacology, San Antonio, TX

University of Southern California, Neuroscience Dept., LA., CA

University of Minnesota, Dept. of Physiology, Minnesota, MN

*1994*

Gif sur Yvette: The latest in synaptic transmission, Paris, France

European Society for Neurochemistry, Jerusalem, Israel

Brain Development and Function Course, Cold Spring Harbor, NY

FASEB Meeting, Anaheim, CA

City of Hope, Neuroscience group, Duarte, CA

University of Oregon, Neuroscience Institute, Eugene, OR

SUNY Stonybrook, Department of Pharmacology, Stonybrook NY  
1993

Hopkins Marine Station, Monterey, CA

Banbury Meeting: Molecular Aspects of NO and NO Synthase, Cold Spring Harbor, NY

IUBMB Meeting: Biochemistry of Cellular Membranes, Bari Italy

Keystone Meeting: Molecular aspects of signal transduction. Taos, NM

American Chemical Society, NO symposium, Richmond, VA

1992

Duke University, Neurobiology Department, Durham, NC

Nitric Oxide: Brain and Immune system, Calabria, Italy

Brain Development and Function Course, Cold Spring Harbor, NY

Keystone Meeting: Synapse Formation and Function, Big Sky, Montana

Cold Spring Harbor Conference on Learning and Memory, NY

### **Community Seminars**

Royal High School, Girl's Science Lecture, Bath UK 2016

Frankfurt International School, Girls Science Lecture, 2016

TedX Brain, Pasadena, CA 2013

Ernest Watson Public Lecture, 2007

Caltech Trustee's Board Meeting, 2007

Caltech Associate's President's Circle speaker, 2006

SURF summer speaker, 2003, 2005

WEST evening speaker, Fall, 2001

Caltech Discovery Weekend, Spring, 1997

Caltech Board of Trustees, Winter, 1997

Watson Lecture, Fall, 1996

Discovery Weekend, Caltech Development, Spring, 1996

Sigma Xi, L.A. Hughes Chapter, Spring, 1996

Caltech Physics Colloquium, Winter, 1995-1996

Keynote Address, AAUW, Bridges to Tomorrow, Fullerton, CA, Winter, 1995-1996

Helmholtz Lecture, UCI, Spring, 1995

Caltech Associates, Pasadena, CA, Fall, 1995

American Assoc. of University Women Foundation, Orlando, FL, Summer, 1995

Alzheimer's Disease: Causes and Effects, Caltech, Spring, 1995

West Coast Nerve Net, Caltech, Spring, 1995

Caltech Seminar Day, Spring, 1995

Caltech CNS Seminar, Spring, 1993

Caltech, Biology Division, Spring, 1992

### **PUBLICATIONS**

Biever, A., Donlin-Asp, P.G., and Schuman, E.M. (2019). Local translation in neuronal processes. **Current Opinion in Neurobiology**, 57: 141-148.

doi: 10.1016/j.conb.2019.02.008.

Mockett, B., Guevremont, D., Elder, M., Parfitt, K., Peppercorn, K., Morrissey, J., Singh, A., Hintz, T., Kochen, L., tom Dieck, S., Schuman, E.M., Tate, W., Williams, J., and Abraham, W. (2019). Glutamate receptor trafficking and protein synthesis mediate the facilitation of LTP by secreted amyloid precursor protein- $\alpha$ . **Journal of Neuroscience**, in press.

- Kreis, P., Gallrein, C., Rojas-Puente, E., Mack, T., Kroon, C., Dinkel, V., Willmes, C., Murk, K., tom-Dieck, S., Schuman, E.M., Kirstein, J., and Eickholt, B. (2019). ATM phosphorylation of the actin-binding protein drebrin controls oxidation stress-resistance in mammalian neurons and *C. elegans*. **Nature Communications**, in press.
- Alvarez-Castelao, B., Schanzenbaecher, C.T., Langer, J.D., and Schuman, E.M. (2019). Cell-type-specific metabolic labeling, detection and identification of nascent proteomes *in vivo*. **Nature Protocols**, published online on January 4, 2019. doi: 10.1038/s41596-018-0106-6.
- Rangaraju, V., Lauterbach, M., and Schuman, E.M. (2019). Spatially stable mitochondrial compartments fuel local translation during synaptic plasticity. **Cell**, 176, 1-12. doi: 10.1016/j.cell.2018.12.013.
- Elamri, I., Heumüller, M., Herzig, L.-M., Stinal, E., Wachtveitl, J., Schuman, E.M., and Schwalbe, H. (2018). A new photocaged puromycin for an efficient labeling of newly translated proteins in living neurons. **ChemBioChem** 19 (23):2458-2464, doi: 10.1002/cbic.201800408.
- Dörrbaum, A.R., Kochen, L., Langer, J.D., and Schuman, E.M. (2018). Local and global influences on protein turnover in neurons and glia. **eLife** 2018, doi: 10.7554/eLife.34202.
- Tushev, G., Glock, C., Heumueller, M., Biever, A., Jovanovic, M., and Schuman, E.M. (2018). Alternative 3'UTRs modify the localization, regulatory potential, stability, and plasticity of mRNAs in neuronal compartments. **Neuron**, 98, 495-511. doi:10.1016/j.neuron.2018.03.030.
- Schanzenbaecher, C.T., Langer, J.D., and Schuman, E.M. (2018). Time- and polarity-dependent proteomic changes associated with homeostatic scaling at central synapses. **eLife** 2018;7:e33322. doi: <https://doi.org/10.7554/eLife.33322>
- Alvarez-Castelao, B., Schanzenbaecher, C.T., Hanus, C., Glock, C., tom Dieck, S., Dörrbaum, A.R., Bartnik, I., Nassim-Assir, B., Ciirdaeva, E., Mueller, A., Dieterich D.C., Tirrell, D.A., Langer, J.D., Schuman, E.M. (2017). Cell-type-specific metabolic labeling of nascent proteomes *in vivo*. **Nature Biotechnology**, 35: 1196-1201. doi:10.1038/nbt.4016
- Glock, C., Heumüller, M., and Schuman, E.M. (2017). mRNA transport & local translation in neurons. **Current Opinion in Neurobiology**, 45: 169-177. doi: 10.1016/j.conb.2017.05.005
- Rangaraju, V., tom Dieck, S., and Schuman, E.M. (2017). Local translation in neuronal compartments: how local is local? **EMBO Reports**, 18(5): 693-711. doi: 10.15252/embr.201744045
- Sambandan, S., Akbalik, G., Kochen, L., Rinne, J., Kahlstatt, J., Glock, C., Tushev, G., Alvarez-Castelao, B., Heckel, A., and Schuman, E.M. (2017). Activity-dependent spatially localized miRNA maturation in neuronal dendrites. **Science**, 355 (6325), 634-637.
- Vlatkovic, I., Sambandan, S., Tushev, G., Wang, M., Epstein, I., Glock, C., Fuerst, N., Cajigas, I.J., and Schuman, E.M. (2017). Poly(A) Binding Protein Nuclear 1 regulates the polyadenylation of key synaptic plasticity genes and plays a role in homeostatic plasticity. **bioRxiv** 121194.

- Akbalik, G., Langebeck-Jensen, K., Tushev, G., Sambandan, S., Rinne, J., Epstein, I., Cajigas, I.J., Vlatkovic, I., and Schuman, E.M. (2017). Visualization of newly synthesized neuronal RNA in vitro and in vivo using click-chemistry. **RNA Biology**, 14(1):20-28. doi: 10.1080/15476286.2016.1251541. Epub 2016
- Schanzenbaecher, C.T., Sambandan, S., Langer, J.D., Schuman, E.M. (2016). Nascent proteome remodeling following homeostatic scaling at hippocampal synapses. **Neuron**, 92, 358-371.
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### **Book Chapters**

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