CURRICULUM VITAE

Name: Anne Schaefer

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Citizenship: German, permanent residency in the United States since 2008

Place of Birth: Frankfurt am Main, Germany

Date of Birth: September 8, 1976

Education:

2001-2004	Visiting PhD student/USA-Scholarship, German National Academic Foundation The Rockefeller University, New York, NY Research Advisors: Dr. Michel Nussenzweig (The Rockefeller University, NY) and Dr. Ralf Ignatius (Charité, Berlin)
1999-2004	Free University, Charité University, Berlin, Germany
1996-1999	Johannes Gutenberg University, Mainz, Germany
1990-1996	Leibniz Gymnasium, Offenbach, Germany
1988-1990	Bachschule, Offenbach, Germany
1984-1988	Humboldt Schule Offenbach, Germany

Postdoctoral Training:

2004 –2007	Postdoctoral Fellow, Lab. of Molecular and Cellular Neuroscience, The Rockefeller University, New York, NY Research Advisor: Dr. Paul Greengard

Academic Appointments:

2019- present	Professor Departments of Neuroscience and Psychiatry Friedman Brain Institute Mount Sinai School of Medicine, New York, NY
2018- 2019	Associate Professor with Tenure Co-director, Center for Glial Biology Departments of Neuroscience and Psychiatry

	Friedman Brain Institute
	Mount Sinai School of Medicine, New York, NY
2016-2018	Associate Professor
	Departments of Neuroscience and Psychiatry
	Friedman Brain Institute
	Mount Sinai School of Medicine, New York, NY
2011-2016	Assistant Professor
	Departments of Neuroscience and Psychiatry
	Friedman Brain Institute
	Mount Sinai School of Medicine, New York, NY
2009– 2011	Senior Research Associate, Lab. of Molecular and Cellular Neuroscience,
	The Rockefeller University, New York, NY
	Research Advisor: Dr. Paul Greengard
2007– 2009	Research Associate, Lab. of Molecular and Cellular Neuroscience,
	The Rockefeller University, New York, NY
	Research Advisor: Dr. Paul Greengard

Academic Honors and Rewards:

2019	Vice Chair of Neuroscience, Mount Sinai, USA
2018	Inventor of the Year 2018 Award, Mount Sinai, USA
2018	Inaugural NINDS Landis Award for Outstanding Mentorship, NIH, USA
2017	Co-director, Center for Glial Biology, Mount Sinai School of Medicine, USA
2015	Harold and Golden Lamport Research Award, Mount Sinai School of Medicine, USA
2014	Kavli Frontiers in Science Fellow, The National Academy of Science, USA
2014	CURE Challenge Award, USA
2014	Technology Development Fund Award, Mount Sinai Innovation, USA
2012	NIH Director's New Innovator Award, USA
2012	Seaver Autism Center Research Award, USA
2012	named "Chrissy Rossi Investigator"
2011-2013	NARSAD 2010 Young Investigator Award, USA
2006-2008	German Research Foundation DFG, Research Fellowship, Germany
2005	Hans-Hench Award 2005, German Society for Immunology, Germany
2004	*Summa cum laude*, Charité University Berlin, Germany
2001-2003	USA-Scholarship of The German National Academic Foundation, (Studienstiftung)
1999-2001	The German National Academic Foundation (Studienstiftung) Scholarship, Germany

Journal and Grant Reviewer:

2018	Reviewer, NIH Special Emphasis Panel review group ZMH1 ERB-M (06)
2018	Reviewer, NIH Special Emphasis Panel review group ZRG1 MDCN-E (50)
2017	Reviewer, NIH RFA panel review group ZRG1 MDCN-P(57)
2017	Reviewer, CURE Epilepsy Award
2017	Reviewer, Welcome Trust
2016	Reviewer, CURE Epilepsy Award
2016	Reviewer, ad hoc, NIH, Somatosensory and Chemosensory Systems Study Section
2016	Reviewer, CURE Innovator Award
2014	Reviewer, ad hoc, NIH Special Emphasis Panel Review Group ZDA1 JXR-G (13) R
2014	Reviewer, CURE Taking Flight Awards
2014	Reviewer, Foundation pour la Recherche Medicale (FRM) Awards

2013 Reviewer, ad hoc, NIH Special Emphasis Panel Review Group ZDK1 GRB-9 (J2) 1
2013 Reviewer, MRC Award
2013 Reviewer, ad hoc, NIH Special Emphasis Panel Review Group ZRG1 IFCN-Z (02) M

2013-present Ad hoc reviewer for Science, Nature Medicine, Nature Neuroscience, Science Translational Medicine, PNAS, Neuron, Journal of Neuroscience, Molecular Cell, Journal of Molecular and Cellular Biology, Journal of Clinical Investigation, Cell Reports, JEM, Journal of Neuroscience Research, Biological Psychiatry, eNeuron, Molecular Cell.

Others:

2019- present Executive Committee Member of the Neurodegenerative Disease Working Group, New York Genome Center, New York
2017-present External Advisory Board member, "Simons Initiative for the Developing Brain" (SIDB), University of Edinburgh, Scotland
2013-2015 Associate Scientific Editor for *Science Translational Medicine*, USA
2012-present Associate Faculty Member F1000

Professional Societies:

2009-present The New York Academy of Sciences
2007-present Society for Neuroscience
2004-present German Society for Immunology

Patents:

- N. Heintz, P. Greengard, M. Heiman, **A. Schaefer**, J. Doyle, J. Dougherty
Title: Methods And Compositions For Translational Profiling And Molecular Phenotyping
Publication No. US 2011/0071049 A1 published 2011

- A. Schaefer, P. Greengard
Title: Compositions and methods for modulating neuronal excitability and motor behavior.
U.S. provisional patent application No.: 61/898,952 and No.: 61/896,463, filed by Mount Sinai on October 28, 2013. Full PCT application executed November 2014, International application number PCT/US2014/062664, published as WO 2015/066034, patent application entered national phase in 2016.

Research Support:

Current

R01MH118329 (Schaefer, PI) 01/01/2019-10/31/2023
NIH NIMH
Microglia mediated suppression of dopamine induced neuronal responses and behavior
The goal of this study if to focus on the identification of a novel microglia-neuron "circuit" in the basal ganglia that plays a critical role in modulating dopamine-controlled behaviors

DA047233 (Nestler, Schaefer PI) 01/01/2019-12/31/2023
NIH NIDA
Transcriptional Mechanisms of Drug Addiction/ Project 3
This goal of this grant is to address the contribution of microglia to addiction in mice.
Role: PI of Project 3

U01AG058635 (Goate) 04/01/2018-03/31/2023
NIH NIA
Genomic approach to identification of microglial networks involved in Alzheimer's disease risk
The goal of this study is to use integrative genomic approaches to identify AD risk loci in microglial networks and to model the effects of a disease risk mutation in human induced pluripotent stem cells and a mouse model.
Role: Co-PI

RF1 AG054011 (Goate) 08/01/2016-07/31/2021
NIH NIA
Understanding the mechanism of SPI1 dependent Alzheimer disease risk.
This award addresses the mechanism of the Alzheimer disease risk gene SPI1 in control of microglia activation *in vivo*.
Role: Co-PI

R01 NS091574 (Schaefer, PI) 09/01/2015-08/31/2020 NCE
NIH NINDS
Control of neuron activity and animal behavior by non-coding RNAs.
This award addresses the mechanism and potential therapeutic effects of miR-128 control of epilepsy in mice.

R21 MH115353 (Schafer, Schaefer, PI) 09/18/2017-08/31/2019
NIH NIMH UMass
Exploring Novel Activity-Dependent Mechanisms Regulating Microglia-Synapse Interactions.
This award aims to elucidate novel molecules/mechanisms mediating neuronal activity dependent synapse remodeling by microglia.

Regenxbio (Schaefer, PI) 05/03/2018-05/02/2020
Collaborative Agreement
miR-128 based treatment of epilepsy
This award supports the generation and novel AAV miR-128 overexpression strategies for the treatment of epilepsy.

Pfizer Inc. (Schaefer, PI) 10/15/2017-10/14/2019
Pfizer Inc. Pharmaceuticals Group
miR-128 Based Treatment of Fatal Epilepsy in Dravet-like Syndrome.
This award supports the generation and testing of novel miR-128 overexpression strategies for the treatment of Dravet Syndrome.

GlaxoSmithKline (Schaefer, PI) 03/02/2017-03/01/2021
GlaxoSmithKline
Using brain permeable I-BET to suppress microglia activation and microglia mediated neurodegeneration.
The goal of this proposal is to elucidate the therapeutic potential of I-BET for the suppression of microglia activation and the treatment of neurodegenerative diseases.

M.D. Anderson (Goate) 08/07/2017-08/06/2022
M.D. Anderson

Understanding the mechanism of MS4A-dependent AD risk.
The goal of this research is to investigate the role of *MS4A* in microglia and its contribution to the development of AD.
Role: Co-PI

Past
1 DP2 MH100012-01 (Schaefer, PI) 09/30/2012-09/29/2017
2012 NIH Director's New Innovator Award
"Cognate microglia-neuron interaction and its role in inflammation"
This award addresses the molecular basis for cognate neuron-microglia interaction and its role in controlling neuronal function in health and disease.

Lilly Research Award Program (Schaefer, PI) 06/01/2018-05/31/2019
Collaborative agreement
Microglia based mechanisms of neuroexcitability.
The goal of this research is to identify microglia produced ligands that reduce cortical neuron excitability in an in vitro assay.

CURE Challenge Award (Schaefer, PI) 09/01/2014-08/31/2017
CURE
"Non-coding RNA mediated control of inhibitory and excitatory neuron excitability."
This award addresses the role of miR-128 in modulating excitatory and inhibitory neuron excitability and associated behavior in mouse models of Dravet syndrome *in vivo.*

F-Prime Capital (Goate, Schaefer, PIs) 02/25/2016-02/24/2018
"Investigation of the impact of SPI1/PU.1 genetic variation on Alzheimer's disease risk and microglial function"

5P30DA035756-02 (Heintz), P30 Pilot Grant (Schaefer, PI) 03/01/2014-02/28/2015
NIDA, Molecular Definition of Brain Circuits Controlling Addiction
"Analysis of cocaine induced transcriptional memory at a single cell level"

Seaver Autism Center Research Award (Schaefer, PI) 01/01/2012-12/31/2014
Seaver Foundation
"Epigenetic basis of Autism"
The major goal of this project is to elucidate the regulatory mechanism of the autism-like phenotype caused by haploinsufficiency of the histone methyltransferase GLP/EHMT1 in mice and humans.

Technology Development Award 2014 (Schaefer, PI) 01/01/2014-12/31/2014
Mount Sinai Innovation
"Novel miRNA-based treatment of severe Epilepsy."

2010 Young Investigator Award, Grant# 18194 (Schaefer, PI) 07/15/2011-07/14/2013
NARSAD, The Brain and Behavioral Research Fund
"Epigenetic regulation of depression"
This award addresses the role of the suppressive histone mark H3K9me2 in striatal neuron function and evaluates its impact on the regulation of mood and motor activity in the adult mouse brain.

W81XWH-09-1-0095 (Schaefer, PI) 12/22/2008-12/21/2011

U. S. Army Medical Research and Materiel Command (USAMRMC)
"Role of miRNAs inParkinson's Disease"
This grant addressed the role of specific miRNAs in the function and survival of mesostriatal neurons and evaluates their impact on the pathophysiology of Parkinson's disease.

1RO3DA025962 (Schaefer, PI) 01/09/2008-08/31/2010
NIDA
"The role of miRNAs in Cocaine Addiction"
The purpose of this grant was to identify specific miRNAs that play a role in the development of cocaine addiction in mice.

Teaching Experience:

National/international:

2015-present	Co-director, Cold Spring Harbor Laboratory Course, Advanced Techniques in Molecular Neuroscience, CSH, NY
2018	NSAS Advanced Course " Non-coding RNA: Brain plasticity and diseases", Italy.
2016	Lecturer, Student course "Developing Brains", Karolinska Institute, Stockholm, Sweden
2014	Lecturer, Cold Spring Harbor Laboratory Course, Advanced Techniques in Molecular Neuroscience, CSH, NY

Mount Sinai:

2016-present	Co-director, Neuroscience Core IV, Mount Sinai School of Medicine
2015-present	Lecturer, Graduate school Core II, Mount Sinai School of Medicine
2014-present	Lecturer, Graduate school Core I, Mount Sinai School of Medicine
2011-2016	Director, Selected Topics in Neuroscience, Mount Sinai School of Medicine
2012-2014	Lecturer, Psychiatry Residency Program at Mount Sinai School of Medicine
2014	Lecturer, MD/PhD course "Problem Solving in Biomedical Science", Mount Sinai School of Medicine

Mentoring experiences:

Junior faculty mentor Mount Sinai School of Medicine:
Lotje de Witt, Assistant Professor, Department of Psychiatry
Silvia de Rubeis, Assistant Professor, Department of Psychiatry

PREP student mentor Mount Sinai School of Medicine:
Miriam Akeju
Brianna Ramirez

SURP student mentor Mount Sinai School of Medicine:
Mohamad A. Nasrallah
Lien Nguyen
Michelle Zhang

Mentor on the T32 postdoctoral NIDA training grant, Mount Sinai School of Medicine
Mentor on the T32 student training grant NIMH, Mount Sinai School of Medicine
Mentor on the T32 student training grant NIA, Mount Sinai School of Medicine

PhD Dissertation Committees:

2019- present Emma Lehmann, PhD candidate Mount Sinai School of Medicine
2019- present Katherine Meckel, PhD candidate Mount Sinai School of Medicine
2019- present Venu Pothula, PhD candidate Mount Sinai School of Medicine
2019- present Christie Nguyen, PhD candidate Mount Sinai School of Medicine
2018- present Gloriia Novikova, PhD candidate Mount Sinai School of Medicine
2018-present Amni Al-Kachak, PhD candidate Mount Sinai School of Medicine
2018-present Sasha Fulton, PhD candidate Mount Sinai School of Medicine
2018-present Diana Akpoyibo, PhD candidate Mount Sinai School of Medicine
2018-present Alexandra Keenan, PhD candidate Mount Sinai School of Medicine
2018-present Eric Tsai, PhD candidate Mount Sinai School of Medicine
2017-present Allison Kann, PhD candidate Mount Sinai School of Medicine
2017-present Carmit Bar, PhD candidate Mount Sinai School of Medicine
2017-present Casey Lardner, PhD candidate Mount Sinai School of Medicine
2017-present Elizabeth LaMarca, PhD candidate Mount Sinai School of Medicine
2016-present Ashley Lepack, PhD candidate Mount Sinai School of Medicine
2016-present Sandhya Chandrasekaran, MD, PhD candidate Mount Sinai School of Medicine
2016-present Amy Frick, PhD candidate Mount Sinai School of Medicine
2014-present Eva Xia, PhD candidate Mount Sinai School of Medicine

2015-2019 Hope Kronau, MD, PhD candidate Mount Sinai School of Medicine
2016-2019 Fiona Desland, MD, PhD candidate Mount Sinai School of Medicine
2015-2019 Kamilah Castro, PhD candidate Mount Sinai School of Medicine
2016-2018 Erin Flaherty, PhD candidate Mount Sinai School of Medicine
2015-2018 Elisa Nabel, PhD candidate Mount Sinai School of Medicine
2015-2018 Meghan Flanigan, PhD candidate Mount Sinai School of Medicine
2014-2018 Purva Bali, PhD candidate Mount Sinai School of Medicine
2014-2018 Sarah Motley, PhD candidate Mount Sinai School of Medicine
2014-2018 Zachary Lorsch, MD, PhD candidate Mount Sinai School of Medicine
2014-2017 Stacy Ku, PhD candidate Mount Sinai School of Medicine
2012-2017 Jialiang Liang, PhD candidate Mount Sinai School of Medicine
2014-2017 Maddie Pfau, PhD candidate Mount Sinai School of Medicine
2014-2016 Jacqui Rabkin, MD, PhD candidate Mount Sinai School of Medicine
2014-2016 Hannah Cates, PhD candidate Mount Sinai School of Medicine
2014-2016 Michael Miller, MD, PhD candidate Mount Sinai School of Medicine
2013-2015 Cesar Morales, PhD Mount Sinai School of Medicine
2012-2015 Marylens Hernandez, PhD Mount Sinai School of Medicine
2011-2014 Diane Damez, PhD Mount Sinai School of Medicine
2014 Sam Golden, PhD Mount Sinai School of Medicine
2013 Lauren Friedman, PhD Mount Sinai School of Medicine

Advising and Supervisory Responsibilities:
Current

Postdocs

2017-present Sarah Veugelen, PhD
Postdoctoral Fellow, Mount Sinai School of Medicine
"B.A.E.F postdoctoral fellowship"

2013-present Pinar Ayata, PhD
Postdoctoral Fellow, Mount Sinai School of Medicine
"NARSAD Young Investigator Award"
"Robin Chemers Neustein Postdoctoral Fellowship Award"

Students

2019-present Philip Hwang
PhD student, Mount Sinai School of Medicine

2018-present Sahil Agrawal
MD, PhD student, Mount Sinai School of Medicine

2017-present Andrew Chan
PhD student, Mount Sinai School of Medicine

2017-present Hayley Strasburger
PhD student, Mount Sinai School of Medicine

2014-present Josefa Sullivan
PhD student, Mount Sinai School of Medicine
"Ruth L. Kirschstein National Research Service Award (NRSA) fellowship"
NIMH T32 training grant
Seaver Autism foundation fellowship

2014-present Ana Badimon
PhD student, Mount Sinai School of Medicine
NIA T32 training grant

Research Assistants

2015- present Mary Kaye Duff
Research Assistant, Mount Sinai School of Medicine

Past:
Postdocs:

2016-2017 Naama Volk, PhD
Postdoctoral Fellow, Mount Sinai School of Medicine

2013-2016 Fan Zhang, PhD
Shared Bioinformatic Postdoctoral Fellow, Mount Sinai School of Medicine
present: Head of the lab, China

2010-2016 Melanie von Schimmelmann, PhD
Postdoctoral Fellow, Mount Sinai School of Medicine
"NARSAD Young Investigator Award"
present: Principle Scientists at Ovid Therapeutics NY

Students:

2009-2011	Morten Veno, Visiting PhD student Present: Assistant professor at Aarhus University, Denmark
2007-2013	Chan Lek Tan, PhD student Next: Postdoctoral fellow, UCLA, USA Present: Principle Scientists at Genentech, USA
2013-2014	Miriam Akeju, PREP student at Mount Sinai School of Medicine Present: PhD program at John Hopkins University
2015- 2017	Brianna Ramirez, PREP student at Mount Sinai School of Medicine Present: MD, PhD program at UT Southwestern

Research Assistants, SURP students, and Summer Students:

2016	Mohamad A. Nasrallah, SURP student Mount Sinai School of Medicine Present: MD, PhD program at University of Massachusetts
2014- 2015	Naomi Goodman, Research Assistant
2014	Michelle Zhang, SURP student Mount Sinai School of Medicine Present: UC Berkley
2014	Amelia Goldberg, summer student at Mount Sinai School of Medicine Present: Harvard College
2011-2014	Philip Feinberg Present: MD, PhD program at University of Massachusetts
2011-2014	Silas Mann Present: NYU as clinical research associate
2012-2014	Annie Handler Present: PhD Student, The Rockefeller University
2013	Lien Nguyen, SURP student Mount Sinai School of Medicine Present: PhD student, Yale University
2010-2012	Amanda Rubin Present: PhD Neuroscience Stanford University, Law School Stanford University
2009-2011	Alice Min MD. PhD. from RWJMS, Princeton University Present: Research Fellow Mount Sinai
2006-2009	Adam Intrator Present: PhD Student, John Hopkins University

Meetings Organized:

- Co-organizer, Manhattan Glia Spring Meeting, Inaugural meeting for the Center of Glial Biology at Mount Sinai and CUNY, Co-organized with Patrizia Casaccia, Icahn School of Medicine at Mount Sinai, New York, May 13-14, 2019.
- Co-organizer, Keystone symposium "Epigenetics and human diseases (X5)", Co-organized with Cheryl Arrowsmith and Mark Dawson, Fairmont Banff Springs, Banff, Alberta Canada, March 17-21, 2019.
- Co-organizer of the 2017 Banbury Conference on Post-traumatic Neuroinflammation: Roles in Pathogenesis of Long-Term Consequences and Repair, Co-organized with Richard Ransohoff, CSH, NY, December 6-8, 2017.

Invited Presentation and Seminars:

2019

- Seminar speaker, Duke Neurobiology Seminar Series
- Invited speaker, " From the laboratory to the clinic", Trinity College, Oxford, UK, September 3-6
- Invited speaker, Keystone symposium, Neural Environment in Disease: Glial Responses and Neuroinflammation (Z1), Keystone, Colorado, June 16-21
- Invited speaker, Chicago Science 2019: Epigenetics and Gene Editing, Northwestern University Feinberg School of Medicine, Chicago, June 12-14
- Invited speaker, 6th Venusberg Meeting on Neuroinflammation, German Center for Neurodegenerative Diseases (DZNE) within the Helmholtz Association, Bonn, Germany, May 9-11
- Invited speaker, St. Jude Children's Research Hospital, Memphis, Tennessee, April 3rd
- Co-organizer, chair and speaker, Keystone symposium "Epigenetics and human diseases (X5)", Fairmont Banff Springs, Banff, Alberta Canada, March 17-21.

2018

- Invited speaker, Tetra-Institutional Alzheimer's Disease Research Seminar Series, The Rockefeller University, New York, NY, December 4_{th}.
- Invited speaker, Microglia workshop: MS &AD, Cambridge, MA, October 21st -23rd.
- Invited speaker and Chair, Abcam meeting "Epigenetics in the Nervous System: Development and Disease", Biomedicum Karolinska Institute, Stockholm, Sweden, October 1st -3rd .
- Invited speaker, Neuro-Immunology Symposium, NYAS, New York, September 25th .
- Invited speaker, FASEB Conference "Transcription, Chromatin, and Epigenetics", Florence, Italy, September 16th -21st .
- Invited speaker, CSH Meeting "Epigenetics & Chromatin", CSH, September 11th -16th.
- Invited speaker, Annual research retreat, Simons Initiative for the developing brain, University of Edinburgh, UK. September 4th -5th.
- Invited speaker, NSAS Advanced Course " Non-coding RNA: Brain plasticity and diseases", Venice, Italy, May 27th.
- Invited speaker, American Society for Neurochemistry, Riverside, CA, March 15th-19th.
- Invited speaker and Chair, Fusion Conference, Neuroepigenetics, Cancun Mexico, Feb. 24-27th.

2017

- Invited speaker, Wellcome Trust Genome Center, Cambridge, UK, November 14-17
- Invited speaker, ASRC Neuroscience on Myelin and Glia Cells, CUNY, New York, NY, October 20th
- Seminar speaker, University of Massachusetts Medical School, MA, October 13th
- Seminar speaker, Genentech, San Francisco, CA, October 2nd
- Invited speaker, Symposium on non-coding RNAs in nervous system development, plasticity and diseases, Marburg, Germany, June 21-24
- Seminar speaker, NeuroScience Colloquium Berlin, NeuroCure Center of Excellence, Charite Berlin, Germany, June 15th 2017
- Seminar speaker at Washington University, Department of Neuroscience, St. Louis, April 5
- Invited speaker, Gordon Research Conference, Glial Biology: Functional Interactions Among Glia & Neurons, Ventura CA, March 5-10
- Invited speaker and Chair, Keystone symposium, Epigenetics and Human Disease, Seattle, Washington, Jan 29- Feb 3.

- Invited speaker, Neuroepigenetics Symposium, University of Pennsylvania, January 9-10

2016

- Invited speaker, Symposium on Molecular Mechanisms of Fundamental Biological Problems, MPI for Biochemistry, Martinsried, Germany, Nov 28.
- Symposium speaker, Neuroepigenetics Symposium, Society for Neuroscience Annual Meeting, San Diego, CA, November 5.
- Invited speaker, International Symposium on "Epigenetic Control and Cellular Plasticity," Beckman Center of the National Academies of Sciences and Engineering, Center for Epigenetics and Metabolism, INSERM, Fondation Ipsen, UC Irvine, CA, October 6-7.
- Invited speaker and Chair, Epigenetics and Chromatin meeting, CSH, NY, September 13-17.
- Invited speaker, " From the laboratory to the clinic, getting closer to a cure ", Trinity College, Oxford, UK, September 6-9.
- Invited speaker, The Nobel Forum "Developing Brains", Stockholm, Sweden, August 31.
- Invited speaker, Mayo Clinic, Epigenomics Seminar, Rochester, MN, June 23.
- Invited speaker, Department of Physiology Seminar, Northwestern University, Chicago, May 6.
- Invited speaker, New York Genome Center, 2nd Epigenomics Symposium, New York, May 9.
- Invited seminar speaker, University of Colorado Denver, April 18.
- Invited speaker, Gordon Research Conference Basal Ganglia, Ventura California, February 28-March 4.

2015

- Invited speaker, Paul Greengard 90th birthday symposium, The Rockefeller University, New York, December 11.
- Invited speaker and Session Chair. Abcam Chromatin meeting, Cayman Island, November 16-19.
- Invited speaker at the Behavioral Epigenetics Conference, Janelia Research Campus - HHMI, Ashburn, VA, Sep. 20-23, 2015.
- Evening lecture at the Cold Spring Harbor Laboratory Course, Advanced Techniques in Molecular Neuroscience, CSH, NY, July 6, 2015.
- Invited speaker at Cell Press LabLinks meeting on RNA in the nervous system, Columbia University, New York, July 14 2015
- Short talk at FASEB meeting on Transcription, Chromatin, Epigenetics, West Palm Beach, Florida, June 28-July 3 2015.
- Invited speaker at the Developmental Biology Institute of Marseille (IBDM), UMR 7288 CNRS Aix-Marseille University, Marseille, France, May 12.
- Short talk at Keystone symposium on Neuroepigenetics, Santa Fe, NM, February 23-26, 2015

2014

- Short talk at the Abcam Neuroepigenetics meeting, Arlington, VA, Nov 14, 2014
- Invited speaker at Labex's colloquium "From synapses to psychiatry disorders", College de France, Paris, France, Nov. 7th, 2014
- Invited speaker for the inaugural lecture of the UC Irvine Epilepsy Research Center seminar series, UC Irvine, CA, September 23, 2014
- Invited speaker at Gordon Research Conference on "Mechanisms of Epilepsy and Neuronal Synchronization", Mount Snow, Vermont August 17-22, 2014
- Evening lecture at Cold Spring Harbor Laboratory Couse "Advanced Techniques in Molecular Neuroscience", CSH, NY, July 13, 2014
- Short talk at Keystone meeting, Chromatin Mechanisms and Cell Physiology, Oberstdorf, Germany March 23-28, 2014

2013
- Invited speaker, Abcam meeting, Chromatin: Structure and Function, Grand Cayman Island, November 11-14, 2013
- Short talk, FASEB summer conference on Epigenetic, Chromatin, and Transcription, Nassau, Bahamas, USA June 17-21, 2013
- Short talk at Keystone Symposia, Epigenetics and Cancer, Santa Fe, New Mexico, March 20-24, 2013
- Seminar speaker at Stowers Institute, Kansas City, MO, March 12, 2013

2012
- Invited speaker at the 51st ACNP Annual Meeting, Hollywood, Florida, December 2-6, 2012
- Short talk at Keystone Symposia, Eukaryotic Transcription (Z2), Snowbird, Utah, USA, Mar 31 - Apr 05, 2012
- Short talk, Gordon Conference, Chromatin Structure & Function, Il Ciocco Resort, Italy, May 6-11.

2011
- Short talk, FASEB summer conference on Epigenetic, Chromatin, and Transcription, Snowmass Colorado, USA July 31- August 5th, 2011
- Invited speaker at the Epigenetics, Brain, Behavior meeting from the Ipsen Fondation, Paris, April 18th 2011.
- Invited speaker at the 44th Winter Conference on Brain Research, Keystone, CO, USA, January 2011.

2010
- Slide presentation at the Society for Neuroscience Meeting, San Diego, CA, USA, Nov. 2010.
- Invited speaker at the Epigenetic Regulation in Cell Fate & Disease meeting, Epigenome Network of Excellence, Institute of Molecular Pathology in Vienna, March 17th-19th 2010

2009
- Invited speaker at the New York Academy of Science meeting "miRNAs and Other Non-coding RNAs in Nervous System Development and Function", New York, November 2nd 2009
- Invited speaker at the Suna Kirac Conference on Neurodegeneration, Istanbul July 21th, 2009

2008
- Slide presentation at the Society for Neuroscience Meeting, Washington DC, USA, Nov. 2008.

Peer-Reviewed Publications:

1.) Kana V, Desland FA, Casanova-Acebes M, Ayata P, Badimon A, Nabel E, Yamamuro K, Sneeboer M, Tan IL, Flanigan ME, Rose SA, Chang C, Leader A, Le Bourhis H, Sweet ES, Tung N, Wroblewska A, Lavin Y, See P, Baccarini A, Ginhoux F, Chitu V, Stanley ER, Russo SJ, Yue Z, Brown BD, Joyner AL, De Witte LD, Morishita H, **Schaefer A,** Merad M.
CSF-1 controls cerebellar microglia and is required for motor function and social interaction.
J Exp Med. 2019 Jul 26. PMID: 31350310

2.) Gunner G, Cheadle L, Johnson K, Ayata P, Badimon A, Mondo E, Nagy A, Liu L, Bemiller S, Kim K, Lira SA, Lamb BT, Tapper AR, Ransohoff RM, Greenberg ME, **Schaefer A**, Schafer DP.
Sensory lesioning induces microglia-mediated elimination of thalamocortical synapses via neuronal ADAM10 and fractalkine signaling.

Nature Neuroscience, 2019 Jul;22(7):1075-1088. PMID: 31209379

3.) Sullivan JM, De Rubeis S and **Schaefer A.**
Convergence of Spectrums: Neuronal gene network states in Autism spectrum disorder
Curr Opin Neurobiol. 2019 Jun 17;59:102-111. PMID: 31220745

4.) Ayata P, Badimon A, Strasburger HJ, Duff MK, Montgomery SE, Loh YE, Ebert A, Pimenova AA, Ramirez BR, Chan AT, Sullivan JM, Purushothaman I, Scarpa JR, Goate AM, Busslinger M, Shen L, Losic B, **Schaefer A.**
Epigenetic regulation of brain region-specific microglia clearance activity.
Nature Neuroscience. 2018 Jul 23. doi: 10.1038/s41593-018-0192-3. PMID: 30038282

5.) Jiang Y, Loh YE, Rajarajan P, Hirayama T, Liao W, Kassim BS, Javidfar B, Hartley BJ, Kleofas L, Park RB, Labonte B, Ho SM, Chandrasekaran S, Do C, Ramirez BR, Peter CJ, C W JT, Safaie BM, Morishita H, Roussos P, Nestler EJ, **Schaefer A**, Tycko B, Brennand KJ, Yagi T, Shen L, Akbarian S.
The methyltransferase SETDB1 regulates a large neuron-specific topological chromatin domain.
Nature Genetics. 2017 Aug;49(8):1239-1250. doi: 10.1038/ng.3906. Epub 2017 Jul 3. PMID:28671686.

6.) Cholewa-Waclaw J, Bird A, von Schimmelmann M, **Schaefer A,** Yu H, Song H, Madabhushi R, Tsai L.
The Role of Epigenetic Mechanisms in the Regulation of Gene Expression in the Nervous System.
Journal of Neuroscience. Review, 2016 Nov 9;36(45):11427-11434. PMID: 27911745

7.) von Schimmelmann M, Feinberg PA, Sullivan JM, Ku SM, Badimon A, Duff MK, Wang Z, Lachmann A, Dewell S, Ma'ayan A, Han MH, Tarakhovsky A, **Schaefer A.**
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