# LISA M. MONTEGGIA, Ph.D.

### **RANK/TITLE:**

Barlow Family Director of the Vanderbilt Brain Institute

Professor, Department of Pharmacology Address: Vanderbilt University

> MRBIII, Suite 7140 465 21st Avenue South Nashville, TN 37240-7933

PH: (615) 936-5483 FX: (615) 6936-3613

EM: Lisa.Monteggia@Vanderbilt.edu

## **EDUCATION:**

University of Illinois, Urbana, IL – B.S.- Microbiology – 1989 University of Illinois, Urbana, IL – M.S. – Biology – 1991 The Chicago Medical School, North Chicago, IL – Ph.D. – Neuroscience – 1999 (Dr. Marina Wolf, PI)

## **POSTDOCTORAL TRAINING:**

1998-2000 Department of Psychiatry (Dr. Eric Nestler, PI)

Yale University, New Haven, CT

### **OTHER TRAINING:**

1991-1994 Associate Scientist, Department of Neuroscience, Abbott Laboratories, Abbott Park, IL

1994-1998 Scientist, Department of Neuroscience, Abbott Laboratories, Abbott Park, IL

### **ACADEMIC APPOINTMENTS:**

TICHDENIIC III I	
09/2000-10/2002	Research Assistant Professor, Department of Psychiatry, UT Southwestern, Dallas, TX
10/2002-09/2009	Assistant Professor, Department of Psychiatry, UT Southwestern, Dallas, TX
09/2009-09/2013	Associate Professor (tenure), Department of Psychiatry, UT Southwestern, Dallas, TX
06/2010-06/2018	Ginny and John Eulich Professorship in Autism Spectrum Disorders
09/2013-06/2018	Professor, Department of Neuroscience, UT Southwestern, Dallas, TX
07/2018-	Director, Vanderbilt Brain Institute, Vanderbilt University, Nashville, TN
07/2018-	Professor of Pharmacology, Vanderbilt University, Nashville, TN

### **AWARDS/HONORS:**

1985-1989	University of Illinois, Full Academic Tuition Scholarship
1991	Top 10% of Teaching Assistants for Excellence in Teaching, University of Illinois
1998-2000	NIH/NIDA Postdoctoral Training Grant, Yale University
2001	Young Investigator Award, NARSAD
2002	American College of Neuropsychopharmacology/Bristol-Myers Squibb Travel Award
2003	Developmental Neurobiology and Child Psychiatry, Otsuka Travel Award

2003	College on Problems on Drug Dependence, Center for Addictive Diseases Travel Award
2003 2005	Young Investigator Award, NARSAD  Daniel X. Freedman Award for outstanding basic research achievement in depression or
2003	schizophrenia, NARSAD
2006	Associate Member, American College of Neuropsychopharmacology
2008	Keynote speaker, Department of Psychiatry Discovery Day, University of Alabama, Birmingham
2009	Member, American College of Neuropsychopharmacology
2010 2010	Speaker, Brian Awareness 2010, Vanderbilt University, Nashville, TN Independent Investigator Award, NARSAD
2010	International Mental Health Research Organization (IMHRO) Rising Star Award
2011	Daniel H. Efron Award for outstanding basic/translational research, ACNP
2012	Keynote speaker, Crossroads in Biology, Cologne, Germany
2012	Student invited lecture, Faculty of Medicine Symposium, University of Calgary, Canada
2012	Plenary speaker, International Behavioural and Neural Genetics Society, Boulder, CO
2013 2013	Distinguished Lecture Series, Collaborative Program in Neuroscience, University of Toronto Student invited lecture, Center for Neuroscience, West Virginia University, Morgantown, WVU
2013	Fellow, American College of Neuropsychopharmacology
2014	Distinguished Investigator Award, NARSAD
2015	Student invited lecture, Department of Neuroscience, Baylor College of Medicine, Houston, TX
2016	Plenary session speaker, American Society for Neurochemistry, Denver, CO
2017	Graduate Student Distinguished Lecturer, Department of Pharmacology & Neuroscience, LSU
2018	Keynote speaker, 4 <sup>th</sup> International Bonn Brain Meeting, Bonn University, Bonn, Germany
SERVICE C	OMMITTERS.
2004 2015	
2004-2015	IACUC Committee Member, UT Southwestern, Dallas, TX
2007-2010	IACUC Committee Member, UT Southwestern, Dallas, TX Faculty Retention and Development Committee, Dept Psychiatry, UT Southwestern, Dallas, TX
	IACUC Committee Member, UT Southwestern, Dallas, TX Faculty Retention and Development Committee, Dept Psychiatry, UT Southwestern, Dallas, TX Advisory Board, Benefiting Research for Autism Investigators Now at UT Southwestern
2007-2010 2007-present	IACUC Committee Member, UT Southwestern, Dallas, TX Faculty Retention and Development Committee, Dept Psychiatry, UT Southwestern, Dallas, TX
2007-2010 2007-present 2008-2009 2009-2016 2014-2020	IACUC Committee Member, UT Southwestern, Dallas, TX Faculty Retention and Development Committee, Dept Psychiatry, UT Southwestern, Dallas, TX Advisory Board, Benefiting Research for Autism Investigators Now at UT Southwestern Deans ARC Advisory Committee, UT Southwestern, Dallas, TX Graduate Admissions Committee, UT Southwestern, Dallas, TX PhD and Postdoctoral Research Training Subcommittee, UT Southwestern, Dallas, TX
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2015-present	Council, Molecular and Cellular Cognition Society (MCCS)
2016-2017	Membership Committee, ACNP
2016-2019	Government and Public Affairs Committee, Society for Neuroscience
2018	Chair, Membership Committee, ACNP
2017-2018	Councilor, Society for Neuroscience (elected)
2018-2019	NIH BRAIN Initiative Working Group
2018-2022	Councilor, Society for Neuroscience (elected)
2018-2020	50 <sup>th</sup> Anniversary History Working Group, Society for Neuroscience

## **EDITORIAL BOARDS:**

2007-present	Biological Psychiatry, Editorial Board
2008-2010	Neuropsychopharmacology, Editorial Board
2010-present	Neuropsychopharmacology, Associate Editor
2013-present	Journal of Neuroscience, Editorial Board
2013-present	Journal of Biological Chemistry, Editorial Board
2014-present	Behavioral Neuroscience, Consulting Editorial Board
2017-present	Neuropharmacology, Editorial Board
2017-present	eLife, Board of Reviewing Editors
2018-present	Hippocampus, Section Editor

### **TEACHING EXPERIENCE:**

2005-2018	Experimental Approaches to Complex Diseases, Course Director, Integrative Biology
2008-2018	Neurobiology of Mental Illness, Course Director, Neuroscience
2001-2004	Department of Psychiatry Works in Progress Seminar Series, Organizer
2002-2012	Neuropsychopharmacology Course, lecturer
2002-2012	PGY3 Residents, lecturer
2002-2014	Overview of Addiction Course, lecturer
2003-2018	Case Study of Ethics, Small Group Facilitator
2004-2018	Heritable Diseases Course, lecturer

# Thesis Mentor for the following graduate students:

Erika Nelson, BS (Neuroscience Graduate Program)

Sunbola Ashimi, BS, MS (Neuroscience Graduate Program)

Anita Autry, BS (Neuroscience Graduate Program)

Melissa Mahgoub, BA (Neuroscience Graduate Program)

Maarten Los, BS, MS, PharmD (Utrecht University, co-mentor: Dr. Berend Olivier)

Erinn Gideons, BS (Neuroscience Graduate Program)

Kristen Szabla, BS, MS (Neuroscience Graduate Program)

Pei-Yi Lin, BS (Neuroscience Graduate Program)

Patricia Horvath, BS (Neuroscience Graduate Program)

I-Mei Liao, BS (Neuroscience Graduate Program)

Robert Altamirano (Neuroscience Graduate Program)

# Thesis Committee Member for the following graduate students:

Tiffany Carle (mentor: Dr. Eric Nestler) Nathan Bingham (mentor: Dr. Keith Parker) Ying Chen (mentor: Dr. Joachim Herz) Omar Nelson (mentor: Dr. Ilya Bezprozvanny)

Nicole Buzin (mentor: Dr. David Self)

Rachel Arey (mentor: Dr. Colleen McClung) Charles Taylor (mentor: Dr. Matthew Goldberg) Sherry Rovinsky (mentor: Dr. Jeffrey Zigmond) Julia Mattson (mentor: Dr. Michael Rugg)

Natalie Farra, external reviewer (mentor: James Ellis, University of Toronto)

Austin Reese (mentor: Dr. Ege Kavalali) Miles Fontenot (mentor: Dr. Gena Konopka) Hillary Cansler (mentor: Dr. Julian Meeks) Olusoji Afuwape (mentor: Dr. Ege Kavalali)

Salvator Magara, external reviewer (mentor: Dr. Maria Lindskog, Karolinska Institute)

Yale University, Laboratory of Molecular Psychiatry, New Haven, CT

Richard Walsh (mentor: Dr. Ryan Hibbs) Elyza Kelly (mentor: Dr. Peter Tsai)

### **PROFESSIONAL AFFILIATIONS:**

American College of Neuropsychopharmacology (ACNP), Member Society for Neuroscience The Serotonin Club

Faculty of 1000, Associate Member

## **INVITED PRESENTATIONS:**

08/1997

00/1/2/	Tale Chiversity, Education y of Wiolecular 1 Sychiatry, 116 w Haven, C1
09/1997	NIMH, Molecular Plasticity Section, Bethesda, MD
12/1997	Duke University, Department of Cell Biology, Durham, NC
04/2002	University of Pittsburgh, Department of Neuroscience, Pittsburgh, PA
10/2002	Rockefeller University, Laboratory of the Biology of Addictive States New York, NY
10/2002	National Alliance for Research on Schizophrenia and Depression Symposium, New York
12/2002	ACNP, Hot Topics Talk, San Juan, Puerto Rico
05/2003	American Psychiatric Association Meeting, San Francisco, CA
07/2004	UT Southwestern Medical Center, MSTP Talk, Dallas, TX
12/2003	ACNP, Hot Topics Talk, San Juan, Puerto Rico
06/2004	Fifth Annual Rett Syndrome Symposium, Baltimore MD
09/2004	UT Health Sciences Center at San Antonio, Department of Pharmacology, San Antonio, TX
10/2004	University of Michigan, Grand Rounds, Department of Psychiatry, Ann Arbor, MI
10/2004	ECNP, Panel Session, Molecular Targets in Psychiatric Diseases, Stockholm, Sweden
11/2004	UT Southwestern Medical Center, Grand Rounds, Department of Psychiatry, Dallas, TX
12/2004	UT Southwestern Medical Center, MSTP Talk, Dallas, TX
12/2004	ACNP, Organizer, Panel Session, New Animal Models&Biomarkers of Depression, Puerto Rico
09/2005	UT Southwestern Medical Center, Department of Psychiatry Retreat, Dallas, TX
06/2006	Serotonin Club Meeting, Serotonin & BDNF, Sapporo, Japan
11/2006	Yale University, BSTP Seminar, New Haven, CT

11/2006	Autism Summit at UT Southwestern, Dallas, TX
12/2006	ACNP, Organizer, Panel Session, Transcriptional Regulation Synaptic Function, Hollywood, FL
03/2007	University of Alabama, Department of Neuroscience, Birmingham, AL
04/2007	European Working Group on Rett Syndrome, Busto Arsizio, Italy
06/2007	Gordon Conference, Neurotrophins, Salve Reagents College, Newport, RI
07/2007	UT Southwestern, Neural Injury, Plasticity, and Repair Group Works-In Progress, Dallas, TX
09/2007	University of Pennsylvania, Center for Neurobiology and Behavior Seminar, Philadelphia, PA
09/2007	UT Southwestern Medical Center, Neuroscience Seminar Series, Dallas, TX
09/2007	Yale University, Child Study Center, New Haven, CT
10/2007	UT Southwestern Medical Center, Department of Molecular Genetics, Dallas, TX
04/2008	University of Alabama, Discovery Day Keynote Speaker, Dept of Psychiatry, Birmingham, AL
05/2008	Biological Psychiatry Meeting, Plenary Session Speaker, Washington DC
06/2008	UT Southwestern Medical Center, MSTP Talk, Dallas, TX
06/2008	2008 Workshop on the Neuroendocrinology of Stress, San Rafael, CA
06/2008	Emory University, Department of Psychiatry, Atlanta, GA
07/2008	Eli Lilly, Neuroscience Research, Indianapolis, IN
08/2008	Penn State, Neuroscience Seminar Series, University Park, PA
09/2008	NARSAD, Healthy Minds Across America Symposium, Dallas, TX
09/2008	UT Southwestern Medical Center, Department of Physiology, Dallas, TX
10/2008	Rett Syndrome World Conference, Paris, France
11/2008	Society for Neuroscience, Co-organizer and speaker of Autism panel, Washington, DC
12/2008	ACNP, Co-organizer, Panel Session, Transcriptional Regulation in the CNS, Scottsdale, AZ
04/2009	Brown University, Neuroscience Seminar Series, Providence, RI
05/2009	Harvard Medical School, Neurobiology Seminar Series, Boston, MA
06/2009	Gordon Conference, Neural Circuits & Plasticity, Salve Regina Univ, Newport, RI
07/2009	Epigenetics and Neurodevelopmental Disorders Conference, Philadelphia, PA
09/2009	University of Pennsylvania, Mahoney Institute for Neurological Sciences, Philadelphia, PA
10/2009	Presbyterian Hospital, Psychiatry Grand Rounds, Dallas, TX
12/2009	ACNP, Co-organizer, Panel Session, HDAC Inhibitors and their potential as therapeutic targets
12/2009	ACNP, Speaker, Neurotrophins to the rescue: BDNF-TrkB and synaptic plasticity
01/2010	Zilkha Neurogenetic Institute, USC, Los Angeles, CA
02/2010	CHDI Workshop on HDAC4 and Huntington's Disease, Los Angeles, CA
03/2010	NIMH, Seminar on Epigenetics and Rett Syndrome, Washington DC
03/2010	University of Houston, College of Pharmacy, Houston, TX
03/2010	CHU Sainte-Justine, Université de Montréal, Epigenetics of development, Montréal, Canada
03/2010	Vanderbilt University, Kennedy Center, Nashville, TN
04/2010	Keystone Symposium, Defining the Pathophysiology of Autistic Behavior, Snowbird, UT
04/2010	Society on NeuroImmune Pharmacology, Epigenomic Regulation, Mountain View, CA
04/2010	NARSAD, Healthy Minds Across America, UT Southwestern, Dallas, TX
06/2010	International Rett Syndrome Foundation Meeting, Leesburg, Virginia
08/2010	Sepracor, Marlborough, MA
09/2010	Presbyterian Hospital, Psychiatry Grand Rounds, Dallas, TX
09/2010	Department of Psychiatry, Grand Rounds, UT Southwestern, Dallas, TX
10/2010	Behavioral Epigenetics Conference, NY Academy of Sciences, Boston, MA
11/2010	UT Arlington, Department of Psychology, Arlington, TX
11/2010	Johns Hopkins, Department of Psychiatry and Behavioral Science, Baltimore, MD

- 01/2011 Current Issues in Developmental Psychobiology, Costa Rica University of Virginia, Department of Biochemistry, Charlottesville, VA 02/2011 NeuroDinner, Departments of Neuroscience/Psychiatry/Neurology, UTSW, Dallas, TX 02/2011 03/2011 Virginia Commonwealth University, Department of Pharmacology&Toxicology, Richmond, VA Mt. Sinai School of Medicine, Department of Neuroscience, New York, NY 03/2011 03/2011 Tufts University, Department of Neuroscience, Boston, MA Session Chair & Speaker, Synapses:From Molecules to Circuits & Behavior, Cold Spring Harbor 04/2011 04/2011 Fondation IPSEN, Epigenetics, brain and behavior Symposium, Paris, France Session Chair&Speaker, Univ Illinois, Dept Psychiatry, Neuroepigenomics Symposium, Chicago 05/2011 05/2011 MIT, Simons Initiative on Autism and the Brain, Autism Consortium, Boston, MA Dutch Endo-Neuro-Psychology Meeting, Lunteren, The Netherlands 05/2011 06/2011 Lundbeck Research USA, Neuroscience Division, Paramus, NJ F. Hoffman-La Roche, Epigenetics and CNS Disorders, Roche Research Leadership Team, Zurich 06/2011 Session Chair, Pathophysiology of Rett Syndrome, 12th Annual IRSF Symposium, VA 06/2011 Staglin Music Festival, International Mental Health Research Organization, Napa, CA 09/2011 Emory University, Department of Neuroscience, Atlanta, GA 09/2011 09/2011 UNT Health Science Center, Grand Rounds, Ft. Worth, TX NINDS/NICHD/IRSF/RSFT, Setting Priorities for Therapy Development in RTT, Washington, DC 09/2011 University of Illinois at Chicago, Department of Psychiatry, Chicago, IL 10/2011 11/2011 National Parkinson Foundation, Non-motor symptom domains, Washington, DC ACNP, Co-organizer, Panel Session, Novel Synaptic Targets in Depression, Kona, HI 12/2011 Harvard University, Department of Psychiatry, Brigham Women's Hospital, Boston, MA 12/2011 Community Outreach on Autism, UT Southwestern, Dallas, TX 12/2012 02/2012 Crossroads in Biology, Neurobiology in Health and Disease, Cologne, Germany UT Southwestern, Department of Physiology, Dallas, TX 03/2012 03/2012 UT Dallas, Department of Molecular & Cell Biology, Dallas, TX 03/2012 UT Health Science Center at San Antonio, Department of Pharmacology, San Antonio, TX 04/2012 Keystone Symposium, Synapses & Circuits: From Formation to Disease, Steamboat Springs, CO Society of Biological Psychiatry, Symposium session, Philadelphia, PA 05/2012 University of Calgary, Faculty of Medicine Symposium, Student Invite, Calgary, Canada 05/2012
- 05/2012 Genes, Brain & Behavior Meeting, Plenary Lecture, Boulder CO
- 05/2012 One Mind Conference, Los Angeles, CA
- 06/2012 University of Arkansas, Grand Rounds, Little Rock, AR
- 07/2012 Gordon Research Conference, Synaptic Transmission, Waterville, NH
- 10/2012 ECNP Congress, Vienna, Austria
- 10/2012 F. Hoffman-La Roche, Basel, Switzerland
- 10/2012 University of Wisconsin, Department of Neuroscience, Madison, WI
- 12/2012 ACNP, Neuropsychopharmacology Reviews Plenary Session, Hollywood, FL
- 12/2012 University of Pennsylvania, Department of Psychiatry, Philadelphia, PA
- 01/2013 The Academy of Medicine, Engineering and Science of Texas, Dallas, TX
- 02/2013 Institute of Neuroscience of Castilla, Salamanca, Spain
- 03/2013 NIEHS, Research Triangle Park, NC
- 04/2013 University of Toronto, Distinguished Lecture Series, Collaborative Neuroscience Program
- 05/2013 The Stanley Center, Broad Institute, Cambridge, MA
- 09/2013 Center for Neuroscience, West Virginia University, Morgantown, WV
- 09/2013 Department of Pharmacology, UT Southwestern Medical Center, Dallas, TX

09/2013	Texas FreshAir Initiative, Austin, TX
09/2013	Pavlovian Society Meeting, Austin TX
10/2013	University of Texas at Dallas, Neuroscience seminar series, Dallas, TX
11/2013	Molecular and Cellular Cognition Society, satellite meeting to SFN, San Diego, CA
11/2013	Epigenetics Minisymposium, SFN, San Diego, CA
01/2014	Department of Cell Biology, UT Southwestern Medical Center, Dallas, TX
02/2014	International Epilepsy Research Center, UCI (Hyatt Regency Newport Beach), CA
04/2014	Washington University, Department of Neurobiology & Anatomy, St. Louis, MO
04/2014	Shire Pharmaceuticals, Valley Forge, PA
05/2014	Rosalind Franklin University, Department of Neuroscience, North Chicago, IL
06/2014	Emotional Learning and Memory Conference, UT Dallas, Dallas, TX
06/2014	Rett Symposium, Childrens Hospital, Dallas, TX
06/2014	IRSF annual meeting, Washington DC
07/2014	Gordon Conference, Neurobiology of Brain Disorders, Girona, Spain
08/2014	RIKEN Brain Science Institute, Toyko, Japan
08/2014	Cold Spring Harbor Asia Conference, Suzhou, China
01/2015	Stanford University, Neurosciences Institute, Palo Alto, CA
02/2015	Keystone Meeting, Neuroepigenetics, Santa Fe, New Mexico
03/2015	Discovery to Recovery Meeting, Brain & Behavior Research Foundation, Los Angeles, CA
03/2015	University of Maryland, Program in Neuroscience, Baltimore, MA
04/2015	Institute for Cell Engineering, Johns Hopkins University School of Medicine
05/2015	University of Buffalo, Department of Physiology, Buffalo, NY
05/2015	Meet the Scientist, Q&A Discussion, Brain & Behavior Research Foundation
06/2015	Karolinska Institutet, Stockholm Psychiatry Lecture, Sweden
09/2015	Behavioral Epigenetics Meeting, Janelia Research Campus, VA
10/2015	25 <sup>th</sup> Annual Neuropharmacology Conference, Chicago, IL
11/2015	Baylor College of Medicine, Department of Neuroscience, Houston, TX
	UT Southwestern, Autism Center, Dallas, TX
11/2015	
11/2015	Small Molecule Drug Development Symposium, UT Southwestern, Dallas, TX UT Austin, Department of Neuroscience, Austin, TX
01/2016	, 1
03/2016	University of Iowa, Department of Neuroscience, Iowa City, IA
03/2016	American Society for Neurochemistry, Denver, CO
04/2016	2016 NGF Meeting, Monterey, CA
05/2016	Herrenhausen Symposium for Psychiatric Disorders, Hannover, Germany
08/2016	Banbury, Conference, Can we make animal models of human mental illness? CSHL, NY
09/2016	Baylor University, Department of Psychology, Waco, TX
10/2016	TX FreshAir Neuroscience Conference, Austin, TX
11/2016	26 <sup>th</sup> Annual Neuropharmacology Conference, San Diego, CA
12/2016	American College of Neuropharmacology, panel speaker, Hollywood, FL
03/2017	Rushton Seminar, Florida State University, Tallahassie, FL
03/2017	New York University, Neuroscience Colloquium, New York City, NY
03/2017	Mount Sinai School of Medicine, Department of Neuroscience, New York City, NY
03/2017	UT Southwestern Medical Center, McDermott Center, Dallas, TX
05/2017	LSU, Department of Pharmacology, Toxicology & Neuroscience, Shreveport, LA
08/2017	FASEB, Reversible acetylation in health & disease conference, Big Sky, MT
09/2017	University of Helsinki, Division of Physiology & Neuroscience, Helsinki, Finland

09/2017	ECNP Congress of Applied and Translational Neuroscience, Paris, France
10/2017	Molecular Psychiatry Meeting, San Francisco, CA
10/2017	Weill Cornell Medicine, Brain and Mind Research Institute, New York City, NY
10/2017	Molecular Psychiatry Meeting, San Francisco, CA
10/2017	Weill Cornell Medicine, Brain and Mind Research Institute, New York City, NY
11/2017	Baylor College of Medicine, Houston, TX
02/2018	Virginia Commonwealth University, Department of Physiology, Richmond, VA
02/2018	University of N. Texas Health Science Center, Neuroscience Discovery, Fort Worth, TX
02/2018	Ohio State University, Neuroscience Seminar, Columbus, OH
03/2018	4 <sup>th</sup> International Bonn Brain Meeting, Bonn University, Bonn, Germany
04/2018	NYU, Psychiatry Grand Rounds, New York City, NY
05/2018	9th Annual Neuroscience symposium, Tufts Neuroscience Institute, Boston MA

## Confirmed/invited future presentations

06/2018	International Conference on Neurotrophic Factors 2018, Salamanca, Spain
09/2018	Northwestern University, Feinberg School of Medicine, Department of Physiology
11/2018	Scripps Research Institute, Jupiter, FL
06/2019	Gordon Research Conference, Neurotrophins, Newport, RI

### **GRANT SUPPORT:**

#### **CURRENT:**

9/13-8/18 R01MH081060 (Monteggia, PI)

National Institute of Mental Health

MeCP2 Dependent Transcriptional Repression & Neurotransmission

The major goal of this project is to elucidate the role of MeCP2 in synaptic transmission.

# 4/16-3/21 R01MH70727-11 (Monteggia, PI)

National Institute of Mental Health

Antidepressants and intracellular signaling linked to BDNF

The main purpose is to investigate the role of BDNF in signal transduction pathways in mediating antidepressant efficacy.

### **PUBLICATIONS (>15,900 citations):**

- 1. Doucette-Stamm L, **Monteggia LM**, Donnelly-Roberts D, Wang MT, Lee J, Tian J, Giordano T (1993) Cloning and sequence of the human a7 nicotinic acetylcholine receptor. Drug Developmental Research 30:252-256.
- 2. Pan J B, **Monteggia LM**, Giordano T (1993) Altered levels and splicing of the amyloid precursor protein in the adult rat hippocampus after treatment with DMSO or retinoic acid. Brain Res Mol Brain Res 18:259-266.
- 3. Kansy JW, Carinato ME, **Monteggia LM**, Konisky J (1994) In vivo transcripts of the S-layer-encoding structural gene of the Archaeon *Methanococcus voltae*. Gene 148:131-135..
- 4. **Monteggia LM**, Arneric SP, Giordano T (1994) Nicotine effects on the regulation of APP splicing, neurotrophin and glucose transporter RNA levels in aged rats. Int J Dev Neurosci 12(2):133-141.
- 5. Giordano T, Pan JB, **Monteggia LM**, Holtzman TF, Krafft G, Ghanbari H, Kowall NW (1994). Similarities between β-Amyloid peptides 1-40 and 40-1: effects on aggregation, toxicity *in vitro*, and injection in young and aged rats. Exp Neurol 125 (2): 175-182.

- 6. **Monteggia LM**, Gopalakrishnan M, Touma E, Idler K, Nash N, Arneric SP, Sullivan JP, Giordano T (1995) The cloning and transient expression of the human a4 and β2 neuronal nicotinic acetylcholine receptor (nAChR) subunits. Gene 155:189-193.
- 7. Briggs CA, Hughes ML, **Monteggia LM**, Giordano T, Donnelly-Roberts D, Arneric SP (1995) Nicotinic cholinergic channel activation by the novel agonist ABT 418 in PC12 cells. Drug Dev Res 34:39-46.
- 8. Weavers A, Sullivan JP, Giordano T, Birtsch CH, **Monteggia LM**, Nowacki S, Arneric SP, Schroeder H. (1995) Cellular distribution of the mRNA for the a7 subunit of the nicotinic acetylcholine receptor subunit in human cerebral cortex: an in situ hybridization study. Drug Dev Res 36:103-110.
- 9. Gopalakrishnan M, **Monteggia LM**, Anderson DJ, Arneric SP, Sullivan JP (1996) Stable expression, pharmacological properties and regulation of the human nicotinic acetylcholine a4ß2 receptor. J Pharmacol Exp Ther 276:289-297.
- 10. Delbono O, Gopalakrishnan M, Renganathan M, **Monteggia LM**, Messi ML, Sullivan JP (1997) Activation of the recombinant human a7 nicotinic acetylcholine receptor significantly rises intracellular free calcium. J Pharmacol Exp Ther 280:428-438.
- 11. Briggs CA, McKenna DG, **Monteggia LM**, Touma E, Roch JM, Arneric SP, Gopalakrishnan M, Sullivan JP (1999) Gain of function mutation of the a7 nicotinic receptor: distinct pharmacology of the human a7 V274T Variant. Eur J Pharmacol 366:301-308.
- 12. Wevers A, **Monteggia LM**, Nowacki S, Bloch W, Schutz U, Lindstrom J, Pereira EFR, Eisenberg H, Giacobini E, Gass P, deVos RAI, Jansen Steur ENH, Maelicke A, Albuquerque EX, Schroder H (1999) Expression of nicotinic acetylcholine receptor subunits in the cerebral cortex in Alzheimer's disease-histotopographical correlation with amyloid plaques and hyperphosphorylated tau-protein. Eur J Neurosci, 11(7):2551-65.
- 13. Miller T, Davis-Taber R, Molinari E, Whiteaker K, **Monteggia LM**, Scott V, Brioni J, Sullivan JP (1999) Pharmacological and molecular characterization of ATP-sensitive potassium channels in the TE671 human medulloblastoma cell line. Eur J Pharmacol 370:179-185.
- 14. Lu W, **Monteggia LM**, Wolf ME (1999) Withdrawal from repeated amphetamine administration reduces NMDAR1 expression in the rat substantia nigra, nucleus accumbens and medial prefrontal cortex. Eur J Neurosci, 11(9):3167-3177.
- 15. Gopalakrishnan M, Molinari E, Shieh C-C, **Monteggia LM**, Roch J-M, Scott V, Whiteaker K, Sullivan JP, Brioni J (2000) Stable expression of human sulfonylurea receptor SUR1 and the inward rectifier KIR 6.2 in HEK-293 cells:pharmacology of ligand binding & function. Brit J Pharm, 129(7):1323-1332.
- 16. **Monteggia LM**, Eisch AJ, Tang MD, Kaczmareck LK, Nestler EJ (2000) Cloning and localization of the hyperpolarizaton-activated cyclic nucleotide gated channel family in rat brain. Brain Res Mol Brain Res 81(1-2):129-139.
- 17. Schroder H, Schutz U, Burghaus L, Lindstrom J, Kuryatov A, **Monteggia L**, deVos RAI, van Noort G, Wevers A, Nowacki S, Happich E, Moser N, Arneric SP, Maelicke A (2001) Expression of the a4 isoform of the nicotinic acetylcholine receptor in the fetal human cerebral cortex. Brain Res Dev Brain Res 132:33-45.
- 18. Brauer AU, Savaskan NE, Kole MHP, Plaschke M, Santoro B, **Monteggia LM**, Simburger E, Deisz RA, Ninnemann O, Nitsch R (2001) Molecular evidence and functional analyzes of dynamic expression of HCN-1, a brain-specific hyperpolarization cation activated channel in the hippocampus after entorhinal cortex lesion. FASEB, 15(14)2689-2701.
- 19. Monteggia LM, Gold SJ (2001) Neurobiology of Depression. Dallas Med Journal 87:518-521.

- 20. Lu W\*, **Monteggia LM**\*, Wolf ME (\*equal contributors) (2002) Repeated administration of amphetamine or cocaine does not alter AMPA receptor expression in the rat midbrain. Neuropsychopharm 26(1):1-13.
- 21. Nestler EJ, DiLeone RJ, **Monteggia LM** (2002) Inducible, cell-targeted mutations in mice: new tools for genetically dissecting behavior. Int J Comp Psychology, 14:111-122.
- 22. Nestler EJ, Barrot M, DiLeone RJ, Eisch AJ, Gold SJ, **Monteggia LM** (2002) Neurobiology of Depression. Neuron 34(1):13-25.
- Peakman MC, Colby C, Perrotti LI, Tekumalla P, Carle T, Ulery P, Chao J, Duman C, Steffen C, **Monteggia LM**, Allen MR, Stock JL, Duman RS, McNeish JD, Barrot M, Self DW, Nestler EJ, Schaeffer E. (2003) Inducible, brain region-specific expression of a dominant negative mutant of c-Jun in transgenic mice decreases sensitivity to cocaine. Brain Res 970(1-2):73-86.
- 24. Sutton MA, Schmidt EF, Choi K-H, Schad CA, Whisler K, Simmons D, Karanian DA, **Monteggia LM**, Neve RL, Self DW (2003) Extinction-Induced Plasticity in AMPA Receptors Reduces Cocaine-Seeking Behavior. Nature 421(6918):70-75.
- 25. Powell CM, Schoch S, **Monteggia** L, Barrot M, Matos MF, Feldmann N, Südhof TC, Nestler EJ (2004) The Presynaptic Active Zone Protein RIM1a is Critical for Normal Associative Learning. Neuron 42:143-153.
- 26. **Monteggia LM**, Barrot M, Powell C, Berton O, Galanis V, Nagy A, Greene RW, Nestler EJ (2004) Essential Role of BDNF in Adult Hippocampal Function and Depression. Proc Natl Acad Sci, 101(29):10827-10832.
- 27. Perrotti LI, Hadeishi Y, Ulery PG, Barrot M, **Monteggia LM**, Duman RS, Nestler EJ (2004) Induction of DFosB in reward-related brain structures after chronic stress. J Neurosci 24(47):10594-602.
- 28. Waugh JL, Lou AC, Eisch AJ, **Monteggia LM**, Nestler EJ, Muly EC, Gold SJ (2005) Regional, Cellular and Subcellular Localization of RGS10 in Rodent Brain. J Comp Neurol, 481(3):299-313.
- 29. Hashimoto T, Bergen SE, Nguyen QL, Xu B, **Monteggia LM**, Pierri JN, Sun Z, Sampson AR, Lewis DA (2005) Relation of Brain-Derived Neurotrophic Factor and Its Receptor TrkB to Altered Inhibitory Prefrontal Circuitry in Schizophrenia, J Neurosci 25(2):372-383.
- 30. Hill JJ, Kolluri N, Hashimoto T, Wu Q, Sampson AR, **Monteggia LM**, Lewis DA (2005) Analysis of Pyramidal Neuron Morphology in an Inducible Knockout of Brain Derived Neurotrophic Factor. Biol Psychiatry 57(8):932-934.
- 31. Yu TS, Dandekar M, **Monteggia LM**, Parada LF, Kernie SG (2005) Temporally regulated expression of Cre recombinase in neural stem cells. Genesis 41(4):147-153.
- 32. Glorioso C, Sabatini M, Unger T, Hashimoto T, **Monteggia LM**, Lewis DA, Mirnics K (2006) Specificity & timing of BDNF regulation of neocortical gene expression. Mol Psychiatry 11(7):633-648.
- 33. Duman RS, **Monteggia LM** (2006) A Neurotrophic Model for Stress-Related Mood Disorders. Biol Psychiatry 59(12):1116-1127 [Epub April 19].
- 34. Berton, O, McClung CA, Dileone RJ, Krishnan V, Renthal W, Russo SJ, Graham D, Tsankova NM, Bolanos CA, Rios M, **Monteggia LM**, Self DW, Nestler EJ (2006) Essential Role of BDNF in the Mesolimbic Dopamine Pathway in Social Defeat Stress. Science, 311:864-868.
- 35. Mahgoub MA, Sara Y, Kavalali ET, **Monteggia LM** (2006) Reciprocal interaction of activity and 5-HT in regulation of CRE-dependent gene expression. J Pharmacol Exp Ther 317(1):88-96.
- 36. Gemelli T, Berton O, Nelson E, Perroti LI, Jaenisch R, **Monteggia LM** (2006) Postnatal loss of MeCP2 in the forebrain is sufficient to mediate behavioral aspects of Rett Syndrome in mice. Biol Psychiatry, 59(5):468-476.
- 37. Nelson E, Kavalali ET, **Monteggia LM** (2006) MeCP2-dependent transcriptional repression regulates excitatory neurotransmission. Current Biology 16:710-716.

- 38. **Monteggia LM,** Luikart B, Barrot M, Nef S, Parada LF, Nestler EJ. (2007) BDNF Conditional Knockouts Show Gender Differences in Depression Related Behaviors. Biol Psychiatry, 61(2):187-197.
- 39. Hensler JG, Advani T, **Monteggia LM** (2007) Regulation of 5-HT1A receptor function in inducible BDNF knock-out mice following administration of corticosterone. Biol Psychiatry 62(5):521-529.
- 40. Lippmann M, Bress A, Nemeroff CB, Plotsky PM, **Monteggia LM** (2007) Long Term Behavioral & Molecular Alterations Associated with Maternal Separation in Rats. Eur J Neurosci 25(10)3091-3098.
- 41. Becker JB, **Monteggia LM**, Perrot-Sinal T, Romeo R, Taylor J, Yehuda R, Bale T (2007) Stress and Disease: Is Being Female a Predisposing Factor? J Neurosci 27(44):11851-11855.
- 42. **Monteggia LM** (2007) Elucidating the role of brain derived neurotrophic factor (BDNF) in brain. Am J Psychiatry 164(12):1790.
- 43. Adachi M, Barrot M, Autry A, Theobald D, **Monteggia LM** (2008) Selective loss of brain-derived neurotrophic factor in the dentate gyrus attenuates antidepressant efficacy. Biol Psychiatry 63:642-649.
- 44. **Monteggia LM** (2008) Synaptic dysfunction in Rett Syndrome, an Autism Spectrum Disorder. Neuropsychopharm 33(1):205.
- 45. Nelson ED, Kavalali ET, **Monteggia LM** (2008) Activity-dependent suppression of miniature neurotransmission through the regulation of DNA methylation. J Neurosci 28(2):395-406.
- 46. Malberg JE, Monteggia LM (2008) VGF, a new player in antidepressant action? Sci Signal 1, pe19.
- 47. Bachtell RK, Cho K-H, **Monteggia LM**, Neve RL, Self DW (2008) Role of GluR1 expression in nucleus accumbens neurons in cocaine sensitization and cocaine-seeking behavior. Eur J Neurosci 27(9):2229-2240.
- 48. Barbosa AC, Kim M-S, Ertunc M, Adachi M, Nelson ED, McAnally J, Richardson JA, Kavalali ET, **Monteggia LM**, Bassel-Duby R, Olson EN (2008) MEF2C, a transcription factor that facilitates learning and memory by negative regulation of synapse numbers and function. Proc Natl Acad Sci 105(27):9391-9396.
- 49. Krystal JH, Carter CS, Geschwind D, Manji HK, March JS, Nestler EJ, Zubieta JK, Charney DS, Goldman D, Gur RE, Lieberman JA, Roy-Byrne P, Rubinow DR, Anderson SA, Barondes S, Berman KF, Blair J, Braff DL, Brown ES, Calabrese JR, Carlezon WA Jr, Cook EH Jr, Davidson RJ, Davis M, Desimone R, Drevets WC, Duman RS, Essock SM, Faraone SV, Freedman R, Friston KJ, Gelernter J, Geller B, Gill M, Gould E, Grace AA, Grillon C, Gueorguieva R, Hariri AR, Innis RB, Jones EG, Kleinman JE, Koob GF, Krystal AD, Leibenluft E, Levinson DF, Levitt PR, Lewis DA, Liberzon I, Lipska BK, Marder SR, Markou A, Mason GF, McDougle CJ, McEwen BS, McMahon FJ, Meaney MJ, Meltzer HY, Merikangas KR, Meyer-Lindenberg A, Mirnics K, Monteggia LM, Neumeister A, O'Brien CP, Owen MJ, Pine DS, Rapoport JL, Rauch SL, Robbins TW, Rosenbaum JF, Rosenberg DR, Ross CA, Rush AJ, Sackeim HA, Sanacora G, Schatzberg AF, Shaham Y, Siever LJ, Sunderland T, Tecott LH, Thase ME, Todd RD, Weissman MM, Yehuda R, Yoshikawa T, Young EA, McCandless R (2008) It is time to take a stand for medical research and against terrorism targeting medical scientists. Biol Psychiatry 63(8):725-727.
- 50. **Monteggia LM**, Kavalali ET (2009) Rett Syndrome and the Impact of MeCP2 Associated Transcriptional Mechanisms on Neurotransmission. Biol Psychiatry 65(3):204-210 [Epub 2008 Dec 4].
- 51. Autry AE, Adachi M, Cheng P, **Monteggia LM** (2009) Gender Specific Impact of BDNF signaling on Stress-Induced Depression-Like Behavior. Biol Psychiatry, 66(1):84-90.
- 52. Adachi M, Autry AE, Covington HE 3<sup>rd</sup>, **Monteggia LM** (2009) MeCP2-mediated Transcription Repression in the basolateral amygdala may underlie heightened anxiety in a mouse model of Rett Syndrome. J Neurosci 29(13):4218-4227.

- 53. Akhtar MW, Raingo J, Nelson ED, Montgomery RL, Olson EN, Kavalali ET, **Monteggia LM** (2009) Histone deacetylases 1 and 2 form a developmental switch that controls excitatory synapse maturation and function. J Neurosci 29(25):8288-97.
- 54. Autry AE, **Monteggia LM** (2009) Epigenetics in suicide and depression. Biol Psychiatry, 66:812-813.
- 55. Adachi M, **Monteggia LM** (2009) Synergistic Interactions between Histone Deacetylase Inhibitors and Drugs of Abuse. Neuropsychopharmacology, 34(13):2619-2620.
- 56. Autry AE, **Monteggia LM** (2010) Contribution of BDNF to higher incidence of depression-related behavior in females. US Psychiatry 3(1).
- 57. Na ES, **Monteggia LM** (2011) The Role of MeCP2 in CNS Development and Function. Hormones and Behavior. Horm Behav 59(3):364-368.
- 58. Morris MJ, Karra AS, **Monteggia LM** (2010) Histone deacetylases govern cellular mechanisms underlying behavioral and synaptic plasticity in the developing and adult brain. Behav Pharmacol 21(5-6):409-419.
- 59. **Monteggia LM** (2011) Towards Neurotrophin-based therapeutics. Am J Psychiatry, 168(2):114-116.
- 60. Kavalali ET, Nelson ED, **Monteggia LM** (2011) Role of MeCP2, DNA methylation and HDACS in Regulating Synapse Function. Journal of Neurodev Disord 3(3):250-256.
- 61. Sara Y, Adachi M, **Monteggia LM**, Kavalali ET (2011) Spontaneous and evoked glutamate release activates distinct populations of AMPA receptors. Journal of Neurosci 31(14):5378-5382.
- 62. Nelson ED, **Monteggia LM** (2011) Epigenetics in the Mature Mammalian Brain: Effects on Behavior and Synaptic Transmission. Neurobio Learn Mem 96(1):53-60.
- 63. Choi K-H, Edwards S, Graham DL, Larson EB, Whisler KN, Simmons D, Friedman A, Walsh J, Rahman Z, **Monteggia LM**, Eisch AJ, Neve RL, Nestler EJ, Han M-H, Self DW (2011) Reinforcement-related regulation of AMPA glutamate receptor subunits in the ventral tegmental area enhances motivation for cocaine. J Neurosci 32(21):7927-7937.
- 64. Lester BM, Tronick E, Nestler E, Abel T, Kosofsky B, Kuzawa CW, Marsit CJ, Maze I, Meaney MJ, Monteggia LM, Reul JM, Skuse DH, Sweatt JD, Wood MA (2011) Behavioral epigenetics. Ann N Y Acad Sci 1226(1):14-33.
- 65. Nelson ED, Kavalali ET, **Monteggia LM** (2011) Selective Impact of MeCP2 and associated Histone Deacetylases on the Dynamics of Evoked Excitatory Neurotransmission. J Neurophysiol 106(1):193-201.
- 66. Autry A. E., Adachi M., Nosyreva E, Na ES, Los MF, Cheng P, Kavalali, ET, **Monteggia LM** (2011) NMDA Receptor Blockade at Rest Triggers Rapid Behavioural Antidepressant Responses. Nature 275(7354):91-95.
- 67. Autry AE, **Monteggia LM** (2012) BDNF and Neuropsychiatric Disorders. Pharmacological Reviews 64(2):238-258.
- 68. Benekareddy M, Nair AR, Dias B, Suri D, Autry A, **Monteggia LM**, Vaidya VA (2012) Induction of the plasticity-associated immediate early gene Arc by stress and hallucinogens: Role of brain derived neurotrophic factor. Int Journal Neuropsychopharmacology Mar12:1-11.
- 69. Na ES, Nelson ED, Adachi M, Autry AE, Mahgoub MA, Jaenisch R, Kavalali ET, **Monteggia LM** (2012) A mouse model for MeCP2 duplication syndrome: MeCP2 overexpression impairs learning and memory and synaptic transmission. J Neuroscience 32(9):3109-3117.
- 70. Akhtar MW, Kim M-S, Adachi M, Morris MJ, Qi X, Richardson JA, Bassel-Duby R, Olson EN, Kavalali ET, **Monteggia LM** (2012) In vivo analysis of MEF2 transcription factors in synapse regulation and neuronal survival. PLoS ONE 7(4):e34863.
- 71. Burke TF, Advani T, Adachi M, **Monteggia LM**, Hensler JG (2013) Sensitivity of hippocampal 5-HT1a to mild stress in BDNF-deficient mice. Int J Neuropsychopharm 16(3):631-645.

- 72. Kim M-S, Akhtar MW, Adachi M, Mahgoub M, Bassel-Duby R, Kavalali ET, Olson EN, **Monteggia LM**. (2012) An essential role for histone deacetylase 4 in synaptic plasticity and memory formation. J Neurosci 32(32):10879-10886.
- 73. Kavalali ET, **Monteggia LM** (2012) Synaptic mechanisms underlying rapid antidepressant action of ketamine. Am J Psychiatry 169(11):1150-1156.
- 74. **Monteggia LM,** Gideons E, Kavalali ET (2013) The Role of eEF2 Kinase in Rapid Antidepressant Action of Ketamine. Biol Psychiatry 73(12):1199-1203.
- 75. **Monteggia LM**, Kavalali ET (2012) How does light drive depressive-like behavior? Nature 491(7425):537-538.
- 76. Na ES, Nelson ED, Kavalali ET, **Monteggia LM** (2013) The impact of MeCP2 loss or gain of function on synaptic plasticity. Neuropsychopharm 38(1):212-219.
- 77. Morris MJ, **Monteggia LM** (2013) Unique functional roles for class I and class II histone deacetylases in central nervous system development and function. Int J Dev Neurosci 31(6):370-381.
- 77. Nosyreva E, Szabla K, Autry AE, Ryazanov AG, **Monteggia LM**, Kavalali ET (2013) Acute suppression of spontaneous neurotransmission drives synaptic potentiation. J Neurosci, 33(16):6990-7002.
- 78. Morris MJ, Na ES, Mahgoub M, Pranav H, **Monteggia LM** (2013) Loss of histone deacetylase 2 improves working memory and accelerates extinction learning. J Neurosci. 33(15):6401-6411.
- 79. Hobson BD, O'Neill CE, Levis SC, **Monteggia LM**, Neve RL, Self DW, Bachtell RK (2013) Adenosine A1 and dopamine D1 receptor regulation of AMPA receptor phosphorylation and cocaine-seeking behavior. Neuropsychopharm 38(10):1974-1983.
- 80. Mahgoub M, Monteggia LM (2013) Epigenetics and Psychiatry. Neurotherapeutics 10(4):734-741.
- 81. Costa-Mattioli M, **Monteggia LM** (2013) mTOR complexes in neurodevelopmental and neuropsychiatric disorders Nature Neuroscience 16(11):1537-1543.
- 82. **Monteggia LM**, Kavalali ET (2013) Scopolamine and ketamine: evidence of convergence? Biological Psychiatry 74(10):712-713.
- 83. Bal M, Leitz J, Durakoglugil M, Herz J, **Monteggia LM**, Kavalali ET (2013) Reelin mobilizes a VAMP7-dependent synaptic vesicle pool and selectively augments spontaneous neurotransmission. Neuron 80(4):934-946.
- 84. Adachi M, **Monteggia LM** (2014) Decoding transcriptional repressor complexes in the adult central nervous system. Neuropharmacology, 80C:45-52.
- 85. Gideons ES, Kavalali ET, **Monteggia LM** (2014) Mechanisms underlying differential effectiveness of memantine and ketamine in rapid antidepressant responses Proc Natl Acad Sci, 111(23):8649-8655.
- 86. Na ES, Morris MJ, Nelson ED, **Monteggia LM** (2014) GABAA receptor antagonism rescues behavioral and synaptic impairments associated with MeCP2 Overexpression. Neuropsychopharmacology 39(8):1946-1954.
- 87. Morris MJ, Na ES, Adachi M, **Monteggia LM** (2014) Selective role for DNMT3a in learning and memory. Neurobiol Learn Mem S1074-7427(14)00119-1.
- 88. Mahgoub M, **Monteggia LM** (2014) A role for histone deacetylases in the cellular and behavioral mechanisms underlying learning and memory. Learn Mem 21(10):564-568.
- 89. Morris MJ, **Monteggia LM** (2014) Role of DNA methylation and the DNA methyltransferases in learning and memory. Dialogues Clin Neurosci 16(3):359-371.
- 90. Nosyreva E, Autry AE, Kavalali ET, **Monteggia LM** (2014) Age dependence of the rapid antidepressant and synaptic effects of acute NMDA receptor blockade. Frontiers in Molecular Neuroscience, 7:94.
- 91. **Monteggia LM, Malenka RC, Deisseroth K** (2014) Depression: The best way forward. Nature 515:200-201.

- 92. Kavalali ET, **Monteggia LM** (2015) How does ketamine elicit a rapid antidepressant response. Current Opinion in Pharmacology 20:35-39.
- 93. **Monteggia LM**, Zarate C Jr (2015) Antidepressant actions of ketamine: from molecular mechanisms to clinical practice. Current Opinion in Neurobiology 30:139-143.
- 94. Bjorkholm C, Monteggia LM (2015) BDNF A Key Transducer of Antidepressant Effects. Neuropharm 102:72-79.
- 95. Monteggia LM (2016) Toward Better Animal Models for Molecular Psychiatry. Biol Psychiatry 79(1):2-3.
- 96. Autry AE, Adachi M, **Monteggia LM** (2015) Dynamic methylation driven by neuronal activity in hippocampal neurons impacts complex behavior. Frontiers Biol 10(5), 439-447.
- 97. Adachi M, Lin P-Y, Pranav H, **Monteggia LM** (2016) Postnatal loss of *Mef2c* results in dissociation of effects on synapse number and learning and memory deficits. Biol Psychiatry 80(2):140-148.
- 98. Morris JM, Na ES, Autry AE, **Monteggia LM** (2016) Impact of DNMT1 and DNMT3a forebrain knockout on depressive- and anxiety like behavior in mice. Neurobiol Learn and Mem 135:139-145.
- 99. Mahgoub M, Adachi M, Suzuki K, Liu X, Kavalali ET, Charour M, **Monteggia LM** (2016) MeCP2 and Histone Deacetylases 1 and 2 in Dorsal Striatum Collectively Suppress Repetitive Behaviors. Nature Neurosci 19(11):1506-1512.
- 100. Adachi M, Autry AE, Mahgoub M, Suzuki K, **Monteggia LM** (2017) TrkB Signaling in Dorsal Raphe Nucleus is Essential for Antidepressant Efficacy. Neuropsychopharm 42(4):886-894.
- 101. Crawford DC, Ramirez DM, Trauterman B, **Monteggia LM**, Kavalali ET (2017) Selective molecular impairment of spontaneous neurotransmission modulates synaptic efficacy. Nature Comm [Epub Feb 10].
- 102. Horvath P, Kavalali ET, **Monteggia LM** (2017) CRISPR/Cas9 system mediated impairment of synaptobrevin/VAMP function in postmitotic hippocampal neurons. J Neurosci Methods 278:57-64.
- 103. Ramirez DMO, Crawford D, Chanaday N, Trauterman B, **Monteggia LM**, Kavalali ET (2017) Loss of Doc2-dependent spontaneous neurotransmission augments glutamateric synaptic strength. J Neurosci 37(26):6224-6230.
- 104. Suzuki K, Nosyreva E, Hunt KW, Kavalali ET, **Monteggia LM** (2017) The ketamine metabolite hydroxynorketamine impacts downstream signaling via NMDA receptor inhibition. Nature 546(7659):E1-E3.
- 105. Na ES, Rajadhyaksha AM, De Jesus-Cortes H, Kabir ZD, Wang J, Ramesh V, Oner Y, **Monteggia LM**, Pieper AA (2017) D-cycloserine improves synaptic transmission in an animal model of Rett syndrome. PLoS One 12(8):e0183026.
- 106. Gideons ES, Lin PY, Mahgoub M, Kavalali ET, **Monteggia LM** (2017) Chronic lithium treatment elicits its antimanic effects via BDNF-TrkB dependent synaptic downscaling. eLife 6. Pii: e25480.
- 107. Horvath PM, **Monteggia LM** (2017) Engineering MeCP2 to spy on its targets. Nature Medicine 41(2):72-74.
- 108. Guzman D, Carreira M, Friedman A, Adachi M, Neve R, Monteggia LM, Han M-H, Cowan CW, Self DW (2018) Inactivation of NMDA Receptors in the Ventral Tegmental Area During Cocaine Self-Administration Prevents GluA1 Up-Regulation but with Paradoxical Increases in Cocaine-Seeking Behavior. J Neurosci 38(3):575-585.
- 109. **Monteggia LM**, Heimer H, Nestler EJ (2018) Can we make animal models of human mental illness? Biol Psychiatry, *in press*.
- 110. Monteggia LM, Lin PY, Adachi M, Kavalali ET (2018) Behavioral analysis of SNAP-25 and Synaptobrevin-2 haploinsufficiency in mice. Neuroscience, *in press*.
- 111. Lin PY, Kavalali ET, **Monteggia LM** (2018) Genetic dissection of pre- and postsynaptic BDNF-TrkB signaling in synaptic efficacy of CA3-CA1 synapses. Cell Reports, *in press*.

#### **BOOK CHAPTERS:**

- Monteggia LM, Nestler EJ (2003) Functional Correlation of Gene Expression During Opiate Dependence. In: Molecular Biology of Drug Addiction, 1<sup>st</sup> Ed., ed. by R. Maldonado, Humana Press, Chapter 2.3.
- 2. **Monteggia LM**, Carlezon W, DiLeone RJ Functional Genomics and Models of Mental Illness. (2004) In: Neurobiology of Mental Illness, 2<sup>nd</sup> ED., ed. by DS Charney and EJ Nestler, Oxford Press.
- 3. Nelson ED, **Monteggia LM** (2008) Gene expression regulation, activity dependent. The New Encyclopedia of Neuroscience, ed. By L. Squire, Elsevier.
- 4. **Monteggia LM**, Carlezon W, DiLeone RJ (2008) Functional Genomics and Models of Mental Illness. In: Neurobiology of Mental Illness, 3rd ED., ed. by DS Charney and EJ Nestler, Oxford Press.
- 5. Kavalali ET, **Monteggia LM** (2011) Analysis of MeCP2 Function in the CNS. In: Epigenetics, brain and behavior, ed., Springer
- 6. **Monteggia LM**, Kavalali ET (2012 Analysis of MeCP2 Function in the CNS. In: Epigenetics, Brain and Behavior, ed. by P Sassone-Corsi, Springer
- 7. **Monteggia LM**, Carlezon W, DiLeone RJ (2013) Functional Genomics and Models of Mental Illness. In: Neurobiology of Mental Illness, 4th ED., ed. by EJ Nestler, DS Charney, J Buxbaum, P Sklar, Oxford Press.
- 8. Szabla KM, **Monteggia LM** (2015) Rett Syndrome. In: Rosenberg's Molecular and Genetic Basis of Neurological and Psychiatric Disease, 5h ED., ed. By Juan M Pascual and Roger N. Rosenberg, Elsevier.
- 9. **Monteggia LM**, Xu W (2016) Methods for In Vivo Gene Manipulation. In: Neurobiology of Mental Illness, 5th ED., ed. by EJ Nestler, DS Charney, J Buxbaum, P Sklar, Oxford Press.

### **BOOKS:**

The Autisms: Molecules to Model Systems. (2012) ed. by CM Powell and LM Monteggia, Oxford Press.