

PAT R. LEVITT

Children's Hospital Los Angeles
University of Southern California

CONTACT INFORMATION

Home Address: 157 N. Lucerne Blvd Birth Date: February 22, 1953
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CURRENT RESEARCH INTERESTS

Development of circuitry in the vertebrate brain; role of genes and environment in brain development; The impact of early adversity and toxic stress on brain development and mental and physical health outcomes; Developmental basis of neuropsychiatric and neurodevelopmental disorders; Autism spectrum disorders

EDUCATION AND TRAINING

1971-1975 **B.A. Biological Sciences** University of Chicago, Chicago, IL

1975-1978 **Ph.D. Neuroscience** University of California, San Diego, San Diego, CA

1979-1981 **Post Doctoral Fellow** Section of Neuroanatomy, Yale University School of Medicine, New Haven, CT

APPOINTMENTS AND POSITIONS

1981-82 **Assistant Professor**, Section of Neuroanatomy, Yale University School of Medicine, New Haven, CT

1982-86 **Assistant Professor**, Department of Anatomy, The Medical College of Pennsylvania, Philadelphia, PA

1986-89 **Associate Professor**, Department of Anatomy, The Medical College of Pennsylvania, Philadelphia, PA

1989-93 **Professor**, Department of Anatomy & Neurobiology, The Medical College of Pennsylvania, Philadelphia, PA

1991-1993 **Associate Dean**, Graduate School of Medical Science, The Medical School of Pennsylvania, Philadelphia, PA

1993-1996 **Professor**, Department of Neuroscience and Cell Biology, Robert Wood Johnson Medical School, UMDNJ, Piscataway, NJ

APPOINTMENTS AND POSITIONS (CONT.)

1996- 2002	Chairman and Professor , Department of Neurobiology, School of Medicine, University of Pittsburgh, Pittsburgh, PA
1996-2002	Co-Director , Center for Neuroscience, University of Pittsburgh, Pittsburgh, PA
1998-2002	Thomas Detre Professor of Neuroscience , Department of Neurobiology, School of Medicine, University of Pittsburgh, Pittsburgh, PA
2002-2008	Director , The Vanderbilt Kennedy Center for Research on Human Development, Vanderbilt University, Nashville, TN
2002-2009	Professor , Department of Pharmacology, Vanderbilt University School of Medicine, Nashville, TN
2006-2009	Annette Schaffer Eskind Chair , The Vanderbilt Kennedy Center for Research on Human Development, Vanderbilt University, Nashville, TN
2009-2012	Chairman , Department of Cell and Neurobiology, Keck School of Medicine, University of Southern California, Los Angeles, CA
2009-2012	Director , Zilkha Neurogenetic Institute, Keck School of Medicine, University of Southern California, Los Angeles, CA
2009-present	Professor , Division of Research on Children, Youth and Families, Dept. Pediatrics, Children's Hospital Los Angeles, Los Angeles, CA
2009-present	Provost Professor of Pediatrics, Neuroscience, Psychiatry, Psychology & Pharmacy, University of Southern California, Los Angeles, CA
2013-present	WM Keck Provost Professor of Neurogenetics , Keck School of Medicine of University of Southern California, Los Angeles, CA
2013-present	Director , Program in Developmental Neurogenetics, Institute for the Developing Mind, Children's Hospital Los Angeles, Los Angeles, CA
2014-present	Simms/Mann Chair in Developmental Neurogenetics , Institute for the Developing Mind, Children's Hospital Los Angeles, Los Angeles, CA
2010-present	Director , Neuroscience Graduate Program, University of Southern California, Los Angeles, CA
2012-present	Quintiles Senior Fellow , Leonard D. Schaeffer Center for Health Policy and Economics, University of Southern California, Los Angeles, Los Angeles, CA
2009-present	Adjunct Professor , Department of Pharmacology, Vanderbilt University Medical Center, Nashville, TN
2011-present	Senior Fellow , Center for the Developing Child, Harvard Univ., Cambridge, MA

HONORS AND AWARDS

1978	Intrascience Foundation Graduate Student Research Award
1979-1981	National Institutes of Health NINCDS Postdoctoral Fellowship
1981-1983	March of Dimes Basil O'Connor Starter Research Grant
1981-1984	NIH, NINCDS Research Grant
1982-1985	Alfred P. Sloan Research Fellow
1983-1985	National Down Syndrome Society Scholar Award
1985-1989	Klingenstein Foundation Fellowship
1988-1990	Scottish Rite Schizophrenia Research Foundation Award
1989-1999	NIH, NIMH Merit Award
1995-1997	NARSAD Windisch Established Investigator
1997, 2000	Grass Foundation Traveling Lecturer
2002	Elected Fellow , American Association for the Advancement of Science
2002-2005	McKnight Foundation Scholar
2004	Elected Member , Dana Alliance for Brain Initiatives
2004	Tennessee Chapter, American Academy of Pediatrics Friend of Children Award
2005	Grass Foundation Traveling Lecturer
2005	Autism Society of America Champion of Research Award
2007	Cozzarelli Prize for Outstanding Paper, Division IV (Biomedical Sciences), Proceedings of the National Academy of Sciences - Campbell et al, 2006 (#133)
2011	International Society for Developmental Psychobiology Wiley Press Award
2012	USC Mellon Faculty Mentoring Award for Postdoctoral Fellows
2012	Elected Member , Phi Kappa Phi Honor Society for Academic Excellence
2013	Elsevier Award, Society for Teratology & Society for Neurobehavioral Teratology
2013	Elected Member , National Academy of Medicine (renamed from Institute of Medicine in 2015)
2014	Elected Fellow , American College of Neuropsychopharmacology (ACNP)

PROFESSIONAL ORGANIZATIONS AND SCIENTIFIC SOCIETIES

American Association for the Advancement of Science
 American Society for Cell Biology
 Society for Neuroscience
 American College of Neuropsychopharmacology

EXTRAMURAL ACTIVITIES

1987-1990	Co-Director , Cold Spring Harbor Neurobiology Summer Course, <i>Molecular Probes of the Nervous System</i>
1993	NIMH Task Force, Panel on Developmental Neurobiology
July 1994	Program Committee, International Society Developmental Neuroscience, 10 th Biennial Meeting
1994-1997	Program Committee, Society for Neuroscience
May 1996	Program Committee, Society for Biological Psychiatry, 50th Annual Meeting
July 1996	Program Committee, International Society Developmental Neuroscience, 11th Biennial Meeting
1996-1997	Council, Society for Neuroscience (interim)
1997-1999	Task Force, American Jewish Healthcare Foundation
1998	Chairman , Program Committee, Society for Neuroscience
1998-2002	Council, Society for Neuroscience
1998-2006	MacArthur Foundation Network, Brain Development and Development of Behavior

1999	Co-Organizer , Human Frontiers Science Program Symposium on Neural Development, Riken, Japan,
2001	Chair , NIMH Workshop on Developmental Neuroscience, Bethesda, MD
2003-2005	Member, NIMH Panel on Primates in Psychiatric Research
2004-2005	Member, Research Committee, The ARC of the United States
2004-2007	Member, Program and Scientific Communication Committee, American College of Neuropsychopharmacology
2005-2006	Member, Program Committee, International Meeting for Autism Research
2006	Co-Chair , NIH Blueprint Conference on Developmental Neuroscience
2006; 2008	Member, Program Committee, International Society for Developmental Neuroscience
2007	Co-Director , Cold Spring Harbor Laboratory Summer Course, <i>Autism Spectrum Disorders</i>
2007-2008	Co-Chair , NIMH Council Workgroup on Neurodevelopment and Mental Health
2007-2008	Chair , High Risk/High Impact Program Committee, Autism Speaks Foundation
2008	Member, NINDS Strategic Plan Committee, Basic Module
2008	Member, NIMH Blue Ribbon Panel on Intramural Research Programs
2009	Co-Director , Cold Spring Harbor Laboratory Summer Course, <i>Autism Spectrum Disorders</i>
2008-2011	Scientific Director , Marino Autism Research Institute
2008-2012	Member, Society for Neuroscience, Committee on Committees
2008, 2010	Co-Organizer , Keystone Conference on Autism and Related Syndromic Disorders, Santa Fe, New Mexico, March, 2008; Winter Park, Utah, March, 2010
2009-2011	Consultant, Puretech Ventures
2009-2016	Board of Advisors , Urban Child Institute, Memphis, Tennessee
2003-present	Member, National Scientific Council on the Developing Child
2009-2016	Scientific Director , National Scientific Council on the Developing Child
2016-present	Co-Scientific Director , National Scientific Council on the Developing Child
2009-present	Member, Scientific Advisory Board, International Mental Health Research Organization (IMHRO)
2010	Technical Advisor, Pediatric Bioscience
2013-present	Member, Scientific Council, Brain & Behavioral Research Foundation
2011	Co-Director , Cold Spring Harbor Laboratory Summer Course, <i>Autism Spectrum Disorders</i>
2012-2014	Member, Research Advisory Board, Autism Treatment Network (ATN)
2012-2013	Member, Membership Committee, American College of Neuropsychopharmacology
2013	Co-Director , Cold Spring Harbor Laboratory Summer Course, <i>Autism Spectrum Disorders</i>
2014	Chair , Program Committee, American College of Neuropsychopharmacology
2014	Chair , Neuroscience Section, American Association for the Advancement of Science
2014-present	Member, Scientific Advisory Board, LA Biomed, Harbor-UCLA Research Institute

UNIVERSITY-RELATED ADVISORY BOARDS

1996-2006	Member, Advisory Board, University of Arizona Program on Neural Development
2006-2009	Member, Advisory Board, Waisman Center, University of Wisconsin
2002-2009	Member, Advisory Board, Univ. North Carolina Developmental Disability Research Center

2010	Chair , External Advisory Committee, George Washington University/National Children's Medical Center Autism Initiative
2010-present	Member, Advisory Committee, University of Pittsburgh Conte Center for Translational Neuroscience
2000-present	Member, Advisory Board, UCLA Center for the Study of Drugs of Abuse
2007-2012	Member, Advisory Board, Rockefeller University Conte Center for Mental Health Research
2007-present	Member, Scientific Advisory Board, Oregon National Regional Primate Center
2010-2012	Member, Scientific Advisory Board, Early Experience, Stress and Neurobehavioral Development, U. Minnesota
2009-present	Member, Scientific Advisory Board, Family and Child Research Institute, NeuroDevNet Consortium of Canada, University of British Columbia
2012-present	Member, Scientific Advisory Board, MIND Institute, UC, Davis
2013-present	Member, Scientific Advisory Board, Conte Center for Social Behavior, Emory University
2015	Member, Neuroscience Scientific Advisory Committee, Oregon Health Science University
2016	Scientific Reviewer, Center for Neuroscience, University of California, Davis
2016	External Advisory Committee, Research in Autism, Intellectual and Other Neurodevelopmental Disorders (RAIN), Michigan State University
2016-present	Member, External Advisory Council, Munroe-Meyer Institute for Genetics and Rehabilitation, University of Nebraska Medical Center

University of Southern California, Keck School of Medicine and Children's Hospital Los Angeles

2008-2012	Member, Dean's Research Committee
2008-2012	Member, Executive Faculty Committee, School of Medicine
2009-2010	Member, Provost's Neuroscience Task Force
2009-present	Member, Neuroscience Graduate Program Executive Committee
2010-present	Director, Neuroscience Graduate Program, USC
2010-present	Member, Graduate School Council
2010-2012	Member, Dean's Search Committee, Norris Cancer Center Director
2010-2013	Chair of the Provost's Committee on Transformative Neuroscience
2011-2012	Chair, Search Committee for the Broad CIRM Center for Regenerative Medicine and Stem Cells
2013	Member, Search Committee, Director for the CHLA Institute for the Developing Mind
2015	Search Committee, Vice President for Research Administration, CHLA
2015-present	Executive Committee, Institute for the Developing Mind, CHLA
2016-present	Research Leadership Committee, The Saban Research Institute
2016	Chair, Task Force on Research Communication Tools, CHLA
2016-2017	Member, Committee on Tenured and Tenure-Track Faculty Affairs Academic Senate

EDITORIAL BOARDS & EDITED BOOKS

1990-1997	Associate Editor, <i>Journal of Neuroscience</i>
1991-1998	Associate Editor, <i>Perspectives on Developmental Neurobiology</i>
1997-2001	Reviewing Editor, <i>Journal of Neuroscience</i>
2002-2006	Senior Editor , <i>Journal of Neuroscience</i>
1995-2011	Associate Editor, <i>Biological Psychiatry</i>

1996-present Associate Editor, *Cerebral Cortex*
1997-present Associate Editor, *Neuron*
2007-present Associate Editor, *Autism Research*
2008-present Associate Editor, *Journal of Neurodevelopmental Disorders*
2008-2015 Associate Editor, *Disease Models & Mechanisms*
2012-2015 Reviewing Editor, *eLife*
2011 Section Editor, *Developmental Neurobiology*. In: Amaral, Dawson and Geschwind, Autism Spectrum Disorders. Oxford University Press
2013 Section III Editor, *Diseases*. In: Rubenstein and Rakic, Comprehensive Developmental Neuroscience: Neural Circuit Development and Function in the Healthy and Diseased Brain. Elsevier, 2013
2014 Guest Editor, *Neuropsychopharmacology Reviews: Neurodevelopment and the Origin of Brain Disorders*
2015-present **Editor-in-Chief**, *Mind, Brain and Education*

STUDY SECTIONS, REVIEW & PRIVATE FOUNDATION BOARDS

1984	Ad Hoc Member, NIH - Neurological Sciences Panel C2
1985-1988	Panel Member, NSF, Developmental Neurobiology
1990-1994	Regular Member, NIH, Neurological Sciences, Panel B1
1994	Ad Hoc Reviewer, NIMH, Laboratory of Neurophysiology
1994-1998	Member, NIH - National Review Reserve (NRR)
1996-2003	March of Dimes Basil O'Connor Advisory Committee
1999-2004	Board of Scientific Counselors, NIMH
2003-2004	Chair , Board of Scientific Counselors, NIMH
2002-2003	Scientific Advisory Board, Cure Autism Now
2003-2006	Chair , Scientific Advisory Board, Cure Autism Now
2002-2005	Scientific Board, FDA National Center for Toxicological Research
2005-2010	National Advisory Council for Mental Health, NIMH Council Member
2010	The John Merck Fund, ad hoc reviewer
2012	NIH Molecular and Cellular Substrates of Complex Brain Disorders Special Emphasis Panel (ZRG1 MDCN-P57)
2012-2016	Member, Board of Advisors, Urban Child Institute (Memphis, TN)
2011-present	Member, Scientific Advisory Board, Lieber Institute for Brain Development (affiliate of Johns Hopkins University School of Medicine)
2013-present	Member, Scientific Council, Brain and Behavioral Research Foundation (formally NARSAD)
2016	Ad Hoc Reviewer, NIH Study Section ZRG-MCDN-7

GRANT AWARDS (Active as PI)

National Institutes of Health

NIMH R01 MH067842

July 2002 - June 2019

Function and Structure Adaptations in Forebrain Development

National Institutes of Health

NIMH Conte Center P50 MH096972 (Project 2)

September 2012 – June 2017

Enduring Impact of Early Life Serotonin Signaling

National Institutes of Health

NIMH Conte Center P50 MH096972 (Molecular Neuroanatomy Core)

September 2012 – June 2017

Autism Speaks

Grant # 9411

December 2014 – November 2017

Response Heterogeneity to GI Treatment, Autism Symptom and Improved Oxidative Stress

JBP Foundation

March 2015 – February 2018

Research Network on Toxic Stress and Health

PREVIOUS RESEARCH AND TRAINING GRANT AWARDS (PI only)

National Institutes of Health

NINDS R21 NS086413

May 2014 – October 2016

Mechanisms of Autonomic Brainstem Development

Simons Foundation Autism Research Initiative
July 2009 – June 2014

National Institutes of Health
NIMH Conte Center P50 MH078028 (Project 2)
September 2007 – June 2012

National Institutes of Health
NIMH R01 MH080759
September 2007 – August 2012

National Institutes of Health
NIDA R01 DA022785
September 2007 – July 2012

National Institutes of Health
NIMH P30 MH089877
September 2009 – August 2011

National Institutes of Health (Knowles, PI)
NIMH RC2 MH090047
Sept 2009 – August 2011

National Institute of Child Health & Human Development
NICHD R21 HD065289
September 2009 to August 2011

National Institutes of Health
NICHD P30 HD15052
July 2002 – November 2008
John F. Kennedy Center for Mental Retardation

National Institutes of Health
NIMH Schizophrenia Center P50 MH45156 (Project 4)
July 2003 - June 2008

National Institutes of Health
NIH Roadmap Initiative
NIMH T32 MH075883
September 2005 – August 2009 (PI change after leaving the institution)

The Simons Foundation and The Nancy Lurie Marks Foundation
February 2008 – January 2009

National Institutes of Health
NIMH R01 MH45507
September 1989 – April 2007

National Institutes of Health
NIDA R01 DA11165
September 1996 - May 2006

McKnight Endowment Fund Neuroscience of Brain Disorders
July 2002 - June 2005

National Institutes of Health
NIDA R01 DA13792
September 2000 - July 2004

March of Dimes Basic Research Grant
July 2000 - June 2002

National Institutes of Health
NIMH Merit Award MH45507
September 1989 - June 1999

Human Frontiers Foundation
July 1996 - June 1999

March of Dimes
Basic Research Grant
July 1997 - May 1999

National Alliance for Research on Schizophrenia and Depression
NARSAD
May 1995 - April 1997

National Institutes of Health
NIMH/NIDA T32 Training Grant - Roots of Mental Illness and Dementia
July 1996 (PI change after leaving institution)

March of Dimes
Basic Research Grant
July 1994 - June 1996

National Institutes of Health
NIDA, Program Project Grant
April 1991 - June 1996 (PI, Project #2)

National Institutes of Health - NINDS
Program Project Grant
April 1986 - March 1995 (co-PI, Project #3)

National Institutes of Health
Minority Summer Research Apprenticeship Grant (Med. Coll. PA)
January 1993 - 1994

National Institutes of Health - NIA
September 1991 - August 1994

March of Dimes
Basil O'Connor and Basic Research Grant
July 1983 - July 1990

National Institutes of Health-NINCDS
December 1983 - April 1990

National Science Foundation
Basic Neuroscience Research Grant
March 1986 - February 1989

National Institutes of Health
NEI (Pilot Grant)
August 1985 - August 1986

INVITED SEMINARS AND LECTURES**Symposia and Workshops**

- May 1981 1st International Tourettes Syndrome Symposium, New York
- May 1983 Vieme Symposium International du Centre de recherche en sciences neurologiques, University de Montreal, *Monoamine Innervation of Cerebral Cortex*, Montreal
- July 1983 International Society for Neurochemistry, Astrocyte Symposium, Vancouver
- January 1985 Winter Conference on Brain Research, University of Michigan
- August 1985 International Society of Developmental Biology, *Cell Interactions in Neural Development*, Session Chairman, Los Angeles
- October 1985 Neuroimmunology Social, Society for Neurosciences, Session Organizer, Dallas
- November 1985 *Neurobiology of Down Syndrome*, Session Chairman, New York
- January 1986 Winter Conference on Brain Research. Monoamine Oxidase (MAO): A *Revisionist View of its Distribution and Function in the Nervous System*, Workshop Chairman, Colorado
- April 1986 Klingenstein Foundation Meeting of Neuroscience Fellows, New York
- May 1986 2nd Meeting in Neural Development (MIND), Columbia University, New York
- April 1988 Klingenstein Foundation Meeting of Neuroscience Fellows, New York
- November 1988 *Recovery of Function after Spinal Cord Injury*, Pittsburgh, PA
- October 1989 *From Early Embryogenesis to Neural Circuits: Cellular and Molecular Strategies Applied to the Analysis of Vertebrate Brain Development*, Society for Neuroscience, Co-Organizer, Phoenix
- November 1991 Developmental Neurobiology Social, Society for Neuroscience, New Orleans
- February 1992 Hereditary Disease Foundation, *Transplantation as a Tool for Understanding the Neurobiology of Huntington's Disease*, Los Angeles
- May 1992 Northeast Developmental Biology Meeting, *Cell-cell Interactions and Signaling in Development*, Session Chairman and Speaker, Woods Hole, MA
- June 1993 NATO Meeting, *Neuronal Specificity: Maps & Molecules*, Cargese, Corsica
- July 1993 James S. McDonnell Summer Institute & Conference, *Neural & Psychological Development*, Squaw Creek, Lake Tahoe, CA
- November 1993 Society for Neuroscience 19th Annual Meeting, *Brain Microglia in Development, Injury and Aging*, Washington, DC
- July 1994 Gordon Conference, *Neuronal Development*, Newport, RI
- July 1994 International Society Developmental Biology 10th Biennial Meeting, San Diego, CA
- November 1994 Ciba Foundation, *Development of the Cerebral Cortex*, London
- September 1995 Second Corsica International Workshop, *Generation of Phenotypic Diversity in the Cortex*, Corsica
- December 1995 ACNP, *Cell Recognition Molecules in Brain Development and Psychiatric Disorders*, San Juan, PR
- January 1996 Winter Conference on Brain Research, *Neural Recognition Molecules in Development, Regeneration and Neuropsychiatric Disorders*, Vail, CO
- February 1996 21st Annual Seiriken Conference, *Development and Differentiation of the Nervous System*, Okazaki, Japan
- March 1996 Association pour la Neuro-Psycho-Pharmacologie, *Neurogenesis: From Egg to Brain*, Paris, France
- May 1996 Society for Biological Psychiatry, 50th Anniversary Meeting, *Neurodevelopment and Psychiatric Disorders*, New York

Symposia and Workshops (Cont.)

- December 1996 Association for Research in Nervous and Mental Disease, *Basics of Cortical Development*, New York
- December 1996 ACNP, *Thalamus and Schizophrenia*, San Juan, Puerto Rico
- May 1997 New York Academy of Sciences, *Neural-immune interactions: the role of cytokines in the nervous system, Opiates, Cytokines and Neuroimmune Interactions Following Injury in the Developing Brain*, New York
- July 1997 National Institutes for Mental Health, Workshop, *Developmental Etiology of Schizophrenia*, Washington, DC
- September 1997 MacArthur Foundation Network Workshop III, *Neuronal Development and Development of Behavior*, Chicago, IL
- September 1997 New York Academy of Sciences Symposium, *Prenatal Cocaine Exposure and Brain Development - Molecular and Structural Changes in Cortical Development Following Prenatal Cocaine Exposure*, Washington, DC
- November 1997 MacArthur Foundation Network Workshop V, *Neuronal Development and Development of Behavior*, Boston, MA
- June 1998 McDonnell-Pew Summer Institute, *Neuronal Development*, Lake Tahoe, CA
- March 1999 Human Frontiers Science Program Symposium on Neural Development, *Progenitor Cell Regulation of Cortical Development*, Riken, Japan
- April 1999 Novartis Foundation Meeting on Cortical Development and Evolution: *Not All Progenitors are Created Equal: Role in Cortical Development*, London
- October 1999 Kärger Workshop, *Molecular Regulation of Regional Specification in the Cortex*, Miami, FL
- October 1999 J.B. Johnson Club, *Role of Conserved Cell Adhesion Molecules in Axon Guidance*, Miami FL
- April 2000 Modularity in Development, Delmenhorst Conference, *Mechanisms of Cortical Patterning*, Delmenhorst, Germany
- October 2000 Juan March Conference on Mechanisms of Cell Proliferation, Migration and Assembly, Role of HGF/Scatter Factor in Forebrain Development, Madrid, Spain
- June 2001 24th Annual Meeting of the Canadian College Neuropsychopharmacology (CCNP), Banff, Alberta
- July 2001 Gordon Conference on Catecholamines, *Prenatal Cocaine Exposure and Adaptive Developmental Mechanisms*, Shrewsbury, NH
- July 2001 NIMH Workshop of Brain Development and Behavior, Bethesda, MD
- October 2001 National Association for Regulatory Administration, *The Myths and Facts of Brain-Based Education*, Pittsburgh, PA
- January 2002 NIMH, NINDS Workshop: *Setting Priorities for Molecular Neuroanatomy in the Postgenomic Era*, Laguna Beach, CA
- April 2002 Cure Autism Now workshop: *Neurobiology of Autism*, Santa Monica, CA
- May 2002 Mead-Johnson LCPUFA, *Development of Primate Brain*, Washington, DC
- June 2002 4th Neurogenomics Conference, Bar Harbor, ME
- July 2002 International Narcotics Research Conference, Asilomar, CA
- February 2003 Juan March Meeting: *Synaptic Dysfunction and Schizophrenia*, Madrid, Spain (Co-Organizer)
- July 2003 IBRO Meeting: *Evolution and Development of the Cortex*, Prague, Czech Republic
- July 2003 Riken Brain Institute: *Forebrain Development*, Ikebukuro, Japan
- September 2003 2nd INMED Conference: *Molecular Regulation of Interneuron Development*, La Ciotat, France

Symposia and Workshops (Cont.)

- May 2004 IMFAR Symposium on Brain Development: *Interneuron Development and the Etiology of Neurodevelopmental Disorders*, Davis, CA
- June 2004 McKnight Conference: *Testing a Novel Neurodevelopmental Hypothesis for Schizophrenia*, Aspen, CO
- August 2004 15th Biennial Meeting, International Society for Developmental Neuroscience: *Schizophrenia as a Neurodevelopmental Disorder of Synapse Formation and Plasticity*, Edinburgh, Scotland
- September 2004 4th Annual SUNY Biomedical Sciences Retreat: *Otogeny of Cortical Interneurons and Functional Consequences of Disrupted Development*, Skaneateles Falls, NY
- November 2004 8th Annual Autism Think Tank, Autism Research Consortium, Cambridge, MA
- December 2004 43rd Annual Meeting American College of Neuropsychopharmacology: *RGS4 in Schizophrenia and Modeling Neurodevelopmental Processes of Psychiatric Disorders*, San Juan, PR
- December 2004 24th Annual Merritt-Putnam Symposium: *Adding Interneurons*, New Orleans, LA
- May 2005 Ohio Valley Society for Neuroscience Grass Foundation Lecture, *Cortical Interneurons and Neurodevelopmental Disorders*, Dayton Ohio
- June 2005 Samsung Welfare Foundation: *Genes, Experiences and Human Brain Development and Emotional Development and Learning – Investing in Our Children*, Seoul, Korea
- July 2005 Cold Spring Harbor Laboratory Schizophrenia Workshop: *Developmental Origins of Disorders*, Cold Spring Harbor, NY
- September 2005 Gottingen Schizophrenia Symposium, *Neurodevelopmental Basis of Schizophrenia: Experimental and Molecular Strategies*, Gottingen, Germany
- December 2005 American College of Neuropsychopharmacology Annual Meeting, *Clues From Basic Neurodevelopment for New Treatment Targets in Autism*, Kona, Hawaii
- March 2006 Johns Hopkins University, TestSmart Developmental Neurotoxicology Meeting, *The Intersection of Developmental Neurobiology and Developmental Neurotoxicology: Opportunities in Translational Neuroscience*, Reston, VA
- March 2006 Johns Hopkins University, The Spectrum of Development Disabilities XXVIII, *Pathophysiology of Autism*, Baltimore MD
- July 2006 Cold Spring Harbor Laboratory Schizophrenia Workshop, *Development of Cortical Circuitry and Disorders of Processing*, Cold Spring Harbor, NY
- August 2006 116th Biennial Meeting of the International Society for Developmental Neuroscience, *Development and Maintenance of Neuronal Networks*, Banff, Canada
- October 2006 39th Annual Meeting of the International Society for Developmental Psychobiology, *Translational Research Approaches for Studying the Pathophysiology of Autism*, Atlanta, GA
- November 2006 Autism Research Consortium Annual “Think Tank”, *MET Gene and Autism*, Cambridge, MA
- November 2006 1st Annual Translational Neuroscience Symposium, University of Tennessee Health Science Center, *Translational Research Strategies: Applied to Autism*, Memphis, TN
- November 2006 Fetal Physiology Foundation Symposium, *Fetal Mechanisms in Neurodevelopmental Disorders, Fundamental Mechanisms of Brain Development*, Baltimore, MD
- April 2007 Institute of Medicine Workshop on Environmental Factors in Autism, *Influence of Genetic Risk on Environmental Impact in ASD*, Washington, DC

Symposia and Workshops (Cont.)

- June 2007 Cold Spring Harbor Laboratory Workshop on Autism Spectrum Disorder, *Neuroanatomical Systems Implicated in ASD; Introduction to Developmental Neurobiology; and Neurodevelopmental Process in ASD*, Cold Spring Harbor, NY
- July 2007 Autism Speaks to the World, *Translational Research Strategies and the Pathophysiology of Autism Spectrum Disorder*, Mexico City, Mexico
- December 2007 ACNP Annual Meeting, Panel on *Susceptibility and Protection Genes: Schizophrenia and Cancer*, Boca Raton Florida
- December 2007 ACNP Annual Meeting, Panel on *Development of Social Behavior*, Boca Raton, FL
- December 2007 ACNP Annual Meeting, Panel on *Cortical Development and Schizophrenia*, Boca Raton, FL
- January 2008 Winter Developmental Psychobiology Meeting, *Neurobiology of Social Behavioral Development*, Cozumel, Mexico
- February 2008 Keystone Conference on Autism and Related Syndromic Disorders, *Met Signaling and Autism*, Santa Fe, New Mexico
- April 2008 Current Trends in Autism Conference, *Ladders, Translational Research Opportunities: Personal Lessons Learned from Autism Spectrum Disorders*, Wellesley, MA
- August 2008 RIKEN Brain Science Institute 2008 Summer Program, *Where Are We With The Autism?*, Tokyo, Japan
- September 2008 Kirby Symposium, Harvard Medical School, *Signaling Pathways in Cancer and Neurodevelopmental Disorders: Two Sides of the Same Coin*, Boston, MA
- March 2009 Simons Foundation Meeting on Autism, *Neurobiological and Genetic Studies on Autism*, New Orleans, LA
- May 2009 International Meeting For Autism Research (IMFAR), *Enough May be Enough: Genetic and Neurobiological Evidence Implicating the MET Receptor in Autism Risk*, Chicago, IL
- October, 2009 American Association of Child and Adolescent Psychiatry, Founders Symposium, *The Clinical-Research Interface Leading to New Insights into Autism Spectrum Disorder*, Honolulu, HI
- December 2009 ACNP Annual Meeting, *“Evolutionary Similarities and Differences in the Forebrain Expression of the Autism Risk Gene, the MET Receptor Tyrosine kinase,”* Hollywood, Florida
- March 2010 Norlien Foundation: Alberta Family Wellness Initiative LOGOS, *Transforming Research: Opportunities to learn from the NIMH experience and implications for creating an addiction research framework*, Washington, DC
- March 2010 Banff International Conferences on Behavioural Science, *The Clinical-Basic Research Interface Leading to New Insights into Autism Spectrum Disorder*, Banff, Alberta
- April 2010 Keystone Symposia on Molecular and Cellular Biology, *“MET Receptor Tyrosine Kinase and Social-Emotional Circuit Wiring Relevant to Autism Spectrum Disorder,”* Snowbird, Utah
- October 2010 University of Washington Autism Center Translational Science Symposium, *“Facing the Challenges of the Basic-Clinical Translation for Autism Spectrum Disorders”*, Seattle, Washington

Symposia and Workshops (Cont.)

- January 2011 Mortimer D. Sackler Winter Conference in Developmental Psychobiology, “*Bocas for Thought: Emergent Biological and Behavioral Themes of Neurodevelopmental Disorders*”, Herradura, Costa Rica
- January 2011 Translational Medicine Research in Autism: Challenges and Opportunities, “*Autism and Gastrointestinal Disorders*”, Santa Monica, CA
- March 2011 Society of Toxicology Annual Meeting, Symposium on Pathogenesis of Circuit Development in the Autisms: Emergence of the Gene-Environment and the Developmental Neurobiology Interface, “*Translational Neurobiology and Genetic Studies of Autism*”, Washington DC
- June 2011 Cold Spring Harbor Laboratory Workshop on Autism Spectrum Disorder, “*Neuroanatomical systems implicated in ASD & Neuropathology & basics of development*”, Cold Spring Harbor, NY
- June 2011 Third Herzliya Symposium on Developmental Psychopathology, New Directions in Autism Research: Early Identification and Treatment. Research on Autism, Neuroscience and Intervention, “*The Clinical-Basic Interface for Discovering Autism Pathophysiology*”, Herzliya, Israel
- July 2011 Angelman Syndrome Annual Conference, “*Addressing Autism Heterogeneity through Neurobiological Strategies*”, Salt Lake City, UT
- September 2011 Center for Neuroscience, University of Pittsburgh 25th Anniversary Retreat “*The Clinical-Basic Interface for Discovering Autism Pathophysiology*”, Wheeling, WV
- September 2011 Simons Foundation Autism Research Initiative (SFARI) Symposium “*The Biological Meaning of Autism Risk Via MET Disruption*”, Washington DC.
- October 2011 The 32nd NAITO Conference, Biological Basis of Mental Functions and Disorders “*The Biological Meaning of Autism Genetic Risk*”, Yamanashi, Japan
- October 2011 Vanderbilt Conte Center Symposium on Serotonin “*Serotonin and Neurodevelopmental Disorders: Red Flag or Red Herring*”, Nashville, TN
- November 2011 Cell Press Symposium on Autism Spectrum Disorders “*Biological Meaning of Autism Genetic Risk*”, Arlington, VA
- November 2011 International Society for Developmental Psychobiology Award Keynote Address “*Looking at Autism Through a Neurobiological Lens*”, Washington, DC
- December 2011 American College of Neuropsychopharmacology Panel on Serotonin in Development “*The Placenta, Serotonin and Developmental Programming*”, Kona Hawaii
- December 2011 American College of Neuropsychopharmacology Panel on Autism and Schizophrenia Genetics “*A View of Autism Through a Neurobiological Lens*”, Kona Hawaii
- February 2012 Simons Foundation for Autism Research, Workshop on Regression “*Developmental Models of Regression in Autism*”, New York, NY.
- February 2012 American Association for the Advancement of Science Symposium - Autism: Genetic, Epigenetic, & Environmental Factors: How genes and the environment influence neural networks in autism. “*Neural Networks in Autism: Linking MET Polymorphisms and Polyaromatic Hydrocarbons*”. Vancouver, BC, Canada
- February 2012 Autism Speaks Think Tank on Animal Models. “*Structure-Function Research Opportunities in Animal Models of Autism*”, MIND Institute, Sacramento, CA.

Symposia and Workshops (Cont.)

- April 2012 Simpson-Ramsey Symposium on Neurodevelopment, University of Alabama, Birmingham, “*Viewing Autism Through a Neurobiological Lens*”, Birmingham, AL
- June 2012 New York Academy of Sciences, Meeting: Fetal Programming and Environmental Exposures. “*The Role of the Placenta in Fetal Brain Development: A Focus on Serotonin*”, New York City, NY
- August 2012 Frameworks Institute Summer Conferral and Board Meeting “*The Use of Framing in Science and the Potential for Broadening Impact*”, Santa Fe, NM
- October 2012 Society for Neuroscience Public Advocacy Forum “*The Challenges of Scientific Communication for Policy Impact*”, New Orleans, LA
- November 2012 Neuroscience School of Advanced Studies, Neurobiology of Autism Course, “*Developmental Neurobiology and Neuropathology of Autism*”, San Quirico d’Orcia, Italy
- March 2013 Brain Awareness Week Symposium on Translational Neuroscience, “*Heterogeneity of Autism*”, St. Louis University, St. Louis, MO
- June 2013 Cold Spring Harbor Laboratory Workshop, Autism Spectrum Disorders, “*Developmental Neurobiology and Neuropathology of Autism*”, Cold Spring Harbor, NY
- June, 2013 Richmond Paine Annual Lecture, Update on Pediatric Neurology Conference, Children’s National Medical Center, “*New Findings in Autism Spectrum Disorder*”, Bethesda, MD
- June 2013 Elsevier Keynote Lecture, Teratology and Neurobehavioral Teratology Societies Joint Meeting, “*Role of the Placenta in Fetal Brain Development and Functional Outcomes: Developmental Programming and Prenatal Environments*”, Tucson, AZ
- June 2013 Keynote Address, Behavioral Neuroendocrine Society Annual Meeting, “*Relation Of Associative Learning To Ontogeny And Heterogeneity Of Social Behavior*”, Atlanta, GA
- November 2013 Canadian Institute for Advanced Research (CIFAR) Development of the Social Brain, “*Development of Social Behavior: an early learning-later social behavior hypothesis*”, Vancouver, BC, Canada
- November 2013 Frontiers in Pediatric Gastroenterology, Hepatology and Nutrition: Autism Spectrum Disorder Symposium “*Molecular and Biological Studies of Gastrointestinal Disturbances in Children with Autism*”, Boston MA
- December 2013 Presidential Commission for the Study of Bioethical Issues: Ethics Issues Related to the President’s Neuroscience Initiative, “*Ethics Training in Neuroscience*”, Washington DC
- March 2014 Dutch National Autism Congress “*Genetics and Neurobiology of Autism*”, s’Hertogenbosch, The Netherlands
- April 2014 Harvard Research Consortium on Toxic Stress, “*Infant Biomarkers of Risk*” Boston MA
- April 2014 Lieber Institute Workshop on Psychiatric Genetics, Baltimore, MD
- April 2014 20th Wisconsin Symposium on Emotion: Neural Basis of Adaptive and Maladaptive Emotional Regulation, “*Relating Early Contingent Learning and Early Social Behavior Development*”, Madison, WI
- April 2014 American Academy of Neurology: Recent Advances in Translational Research in Autism “*Pleiotropy Linking Autism and Co-Occurring Medical Conditions*”, Philadelphia, PA

- April 2014 West Coast Undergraduate Biological Sciences Research Conference – Keynote Address: “*From Human Gene Discovery To Basic Mechanisms Of Neurodevelopmental Disruption*”, Azusa Pacific University, Azusa, CA
- May 2014 Picower Institute @ MIT - Early Life Stress on Mental Health: “*Convergence: Translating What We Discover into What They Do*”, Cambridge, MA
- November 2014 Molecular Psychiatry Association Annual Meeting – Developmental Origins of Psychiatric Disorders: “*Allostasis as a developmental mechanism that leads to mental illness risk*”, San Francisco, CA
- March 2015 The 47th Banff International Conference on Behavioural Science: Autism in Transition – Keynote Address: “*Coming to Terms with Autism Heterogeneity*”, Banff, Alberta, Canada
- July 2015 Beit Issie Shapiro 6th International Conference on Disabilities – Keynote Address: “*Neurodevelopmental Disorder Heterogeneity, Brain Development and Plasticity Over the Lifespan*”, Tel Aviv, Israel
- July 2015 Okinawa Institute for Science and Technology Developmental Neurobiology Institute “*A Primer of Autism Spectrum Disorder*”, Okinawa City, Japan
- October 2015 2nd China International Forum on Pediatrics “*Autism Heterogeneity*”, Beijing, China
- October 2015 Rutgers Brain Health Institute Symposium, “*View Through a Neurobiological Lens: Addressing Autism Heterogeneity*”, Jersey City, NJ
- November 2015 Current Trends in Autism, “*Coming to Terms with Autism Heterogeneity*”, Boston, MA
- January 2016 Sackler Winter Brain Institute, “*Development and Maturation of Synapses*”, Papagayo Bay, Costa Rica
- July 2016 International Serotonin Research Conference, Serotonin Outside the Brain: “*Extraembryonic Regionalization of Serotonin Regulation: Implications for Brain Development*”, Seattle, WA
- February 2017 Simms/Mann Think Tank on Whole Child Development: “*Skill Rope Development for the Whole Child: Early Start, Outstanding Outcomes*”, Los Angeles, CA
- May 2017 International Meeting For Autism Research, Keynote Presentation: “*Biological Origins of Autism Heterogeneity*”, San Francisco, CA

Public Policy and Community Outreach Symposia and Lectures

- September 1996 American Health Foundation, *Is there a Critical Period in Brain Development*, Washington, DC
- October 1996 Institute for Alternative Futures, Congressional Seminar, *Current Advances in Neuroscience*, Washington, DC
- May 1997 Nurturing Neurons, *Neurobiology of Prenatal and Postnatal Development*, Pittsburgh, PA
- November 1997 Leadership Pittsburgh XIV: *Preparing Our Kids: Models for Learning. Brain Development and Development of Learning*, Pittsburgh, PA
- October 1998 Allegheny County Intermediate Unit, Superintendents Retreat. *Brain Development and Developing of Learning*, Dawson, PA
- April 1999 American Education Research Association, *Brain Science and Education: Current Thinking in Neuroscience - What Educators Should Know*, Montreal, Canada
- February 2000 Quaker Valley School District In-Service Keynote Address, *Myths of Neuroscience-Based Education*, North Hills, PA
- March 2000 Brain Awareness Week Public Lecture, Pittsburgh Neuroscience Society, *Effects of Drug Abuse on Brain Formation and Function*, Pittsburgh, PA
- March 2000 Academy of Educational Leadership, Superintendents and Administrators of Albuquerque Public Schools, *The Myths and Facts of Brain-Based Education*, Albuquerque, NM
- March 2000 Academy of Educational Leadership, Faculty, Albuquerque Public Schools, *Are There Applications of Neuroscience-Based Research in the Classroom*, Albuquerque, NM
- October 2001 NIMH Workshop on Developmental Neuroscience, Chair, Bethesda, MD
- March 2002 Western PA Business and Legislative Leadership Meeting, *The Myths and Facts of Brain-Based Education*, Pittsburgh, PA
- March 2003 Exchange Club of Nashville, Kennedy Center Update, Nashville, TN
- April 2003 Richmond Children's Museum, Neuroscience in our Neighborhood, Richmond, VA
- April 2003 Middle Tennessee Autism Society, Kennedy Center Update, Nashville, TN
- January 2004 Middle Tennessee Autism Society, *Basics of Brain Development*, Nashville, TN
- May 2004 Exchange Club of Middle Tennessee, Kennedy Center Update, Nashville, TN
- March 2005 Rotary Club of Nashville, Nashville, TN
- June 2005 Warren County Autism/Asperger's Support Group, McMinnville, TN
- February 2006 Joint session, Education Subcommittees of the TN Legislature, *A Primer of Brain Development for Policy Makers*, Nashville, TN
- March 2006 Cure Autism Now Lecture Series, *A Primer of Brain Development for Parents and Professionals*, Los Angeles, CA
- April 2006 Building Blocks to the Future V, The Arc of Westmoreland, *A Primer of Brain Development for Parents and Professionals*, Greensburg, PA
- October 2006 Literacy 360° Public Broadcasting Leads Families to Reading, RTLL Fall Conference, *Emergent Literacy and Brain Development*, Washington, DC
- November 2006 Success by Six/Smart Start, Delaware Child Development, *A Primer of Brain Development for Parents and Professionals*, Bartlesville, OK
- November 2006 Learning & the Brain Conference, *Brain Development: Early Experience -- Long-Term Consequences*, Boston, MA
- May 2007 Tennessee Early Childhood Summit: The Power of Collaboration, *Building Blocks for Brain Development: A Primer for Professionals and Parents*, Nashville, TN

Public Policy and Community Outreach Symposia and Lectures (cont.)

- May 2007 National Summit on America's Children, US Congress; *Panel on the Science of Early Childhood Development*, Washington, DC
- May 2007 The Rural Early Childhood Forum: On Young Children in the Mississippi Delta, *Promoting the Health and Education of Young Children*, Itta Bena, MS
- September 2007 Leadership Nashville Alumni Association: Alumni Opening Dinner, *We Care – The Gap Between What we Know and What we do for our Children*, Nashville, TN
- October 2007 National Governors Association Center for Best Practices, *Putting the P in P-20 Programs*, New Orleans, LA
- February 2008 Oregon Brain Awareness Month Keynote Public Lecture, Portland, OR
- March 2008 Tennessee State Legislation, Education Committee Hearing, Nashville, TN
- May 2008 NICH Capital Hill Congressional Briefing, Washington, DC
- May 2008 Giant Steps Autism Conference, *Progress and Challenges in Dealing with Etiologies of the Autisms*, Fairfield, CT
- June 2008 National Symposium on Early Childhood Science, *What Research Tells Us About the Impacts of Early Adversity on Brain Development*, Cambridge, MA
- July 2008 Aspen Ideas Festival, *It Pays to Invest in Our Kids*, Aspen, CO
- August 2008 Inaugural Tennessee Walk Now for Autism Kick Off, *What it Takes to Make Good on the Promises*, Nashville, TN
- August 2008 Special Needs in the Early Years Conference, *Bridging the Disconnect Between Brain and Child Development: Policy Implications and Long Term Changes in Cellular Function and Behavior Following Prenatal Cocaine Exposure*, Little Rock, AR
- December 2008 US Department of Education, Office of Early Education, National Early Childhood Conference, *Neuroscience in the Policy World*, Washington DC
- February 2009 Washington State Community Forum, *The Impact of Early Adversity on Our Children*, Olympia, WA
- February 2009 Washington State, House Ways and Means Committee, Early Learning and Children's Services Committee, House Education Appropriations Committee, *The Impact of Early Adversity on Brain Development – Education Implications*
- May 2009 Smart Start National Conference, *The Impact of Early Adversity on Our Children*, Greensboro, NC
- June 2009 State of Connecticut Annual Judges Institute, *The Effects of Early Adversity on Brain Development: Implications for Policy and Law*, Middletown, CT
- June 2009 American Academy of Pediatrics – CT, *Communicating the Neuroscience of Brain and Child Development to Practitioners and Families*, New Haven, CT
- June 2009 State of Connecticut, Department of Family and Children's Services, *The Effects of Early Adversity on Brain Development: Implications for Practice in the Field*, Hartford, CT
- June 2009 State of Connecticut, Department of Education, *The Neuroscience of the Link Between Social-Emotional and Cognitive Skill Development*, Hartford, CT
- July 2009 NCSL – National Conference of State Legislators National Meeting, *Impact of Early Adverse Experiences on Long-Term Behavior and Health*, Philadelphia, PA
- October 2009 University of Alaska, Anchorage, *Communicating the core story: The impact of Early Adverse Experiences on Long-Term Behavior and Health*, Anchorage, AL

Public Policy and Community Outreach Symposia and Lectures (cont.)

- October 2009 Best Beginnings of Alaska, *Investing in Brain and Child Development: Making Sense of Neuroscience Research on the Impact of Early Adverse Experiences on Long-Term Behavior and Health*, Anchorage, AL
- February 2010 Nevada Business Summit on Early Childhood Investment, *Toxic Stress and Its Impact on Learning and Health; Implications for Our Children's Future*, Las Vegas, NV
- March 2010 Casa Colina, Centers for Rehabilitation, *Thinking Translational Neuroscience and Autism Spectrum Disorders*, Claremont, California
- May 2010 Norlien Foundation: Early Brain and Biological Development: A Science in Society Meeting, "Early Genetic and Environmental Factors Impacting the Reward and Motivation Systems" and "Adult Mental and Physical Health and Developmental Programming", Banff, Alberta
- July 2010 Children Uniting Nations' (CUN) Fifth Annual National Conference - Keeping the Promise to our Children – "Toxic Stress and Its Impact on Learning, Social-Emotional Development and Long-term Health", Washington, DC
- September 2010 Staglin Family Foundation: Staglin Music Festival Scientists 2010, "A 21st Century View of the Developmental Origins of Mental Illnesses," Napa Valley, Ca
- October 2010 2nd Annual Infant Mental Health Conference – "Toxic Stress and Its Impact on Learning and Long-term Health: Building a Model for Developing Human Capital" and "The Neuroscience of Early Interventions in Children", Philadelphia, PA.
- November 2010 Building a Connected Infrastructure for Youth Success from Cradle to Career - "Toxic Stress and Its Impact on Learning and Long-term Health: Building a Model for Developing Human Capital," UNLV, Las Vegas, NV
- December 2010 Parent Support Group - Foothill Autism Alliance Meeting-"Making Sense of Autism's Diversity," Pasadena, CA
- March 2011 Applying Early Learning Brain Science Research to Policy and Practice for Children and Families Involved in the Child Welfare System. "The Core Story of Brain and Child Development". Casey Family Foundation, Seattle, WA
- March 2012 RAND Community Conference on Early Childhood Issues. "Toxic Stress and Its Impact on Early Learning, Social-Emotional Development and Long-term Health", RAND Corporation, Santa Monica, CA.
- March 2012 Casa Colina, Centers for Rehabilitation, 11th Trends in Autism Conference. *Advances in the Neuroscience of Autism Spectrum Disorders*, Claremont, California
- March 2012 Azusa Pacific University Brain Awareness Week, . "Toxic Stress and Its Impact on Early Learning, Social-Emotional Development and Long-term Health", Azusa, California
- September 2012 Early Childhood and Well-Being Community Meeting, Casey Family Programs, "Toxic Stress and Its Impact on Early Learning, Social-Emotional Development and Long-term Health", Los Angeles, California
- October 2012 Help Group Summit on Autism, "The Nitty and the Gritty of Autism and Gastrointestinal Disorders", Los Angeles, California
- November 2012 Vista Del Mar Annual Autism Conference "The Neurobiology of Autism", Los Angeles, California

Public Policy and Community Outreach Symposia and Lectures (cont.)

- November 2012 Current Trends in Autism “*Addressing the Conundrum of Autism Heterogeneity*”, Boston, Massachusetts
- November 2012 Zero to Three 27th National Training Institute Plenary Lecture “*Ingredients for Healthy Brain Development*”, Los Angeles, CA
- January 2013 NCSL State Tribal Institute Webinar: *The Intersection between Early Childhood and Child Welfare Policy*, Casey Family Foundation and NCSL.
- February 2013 Children’s Institute, Inc. “*Ingredients for Health Brain Development – Risks and Promises*”, Los Angeles, CA
- March 2013 Casey Family Foundation Orangewood Children and Family Center “*Ingredients for Health Brain Development*”, Orange, CA
- October 2013 Bowdoin College Public Policy Keynote Address “*Toxic Stress and Its Impact on Early Learning and Health: Building a Formula for Human Capital Development*”, Bowdoin College, Brunswick, ME
- October 2013 Communities in Action Symposium for Maine “*Can We Innovate to Reduce or Prevent the Impact of Toxic Stress on Brain and Child Development?*”, Brunswick, ME
- October 2013 American Academy of Pediatrics, PEDS 21: Promoting Early Brain and Child Development (Building Brains/Forging Futures). “*Early Brain Development and the Impact of Stress*”. Orlando, FL
- October 2013 Norlien Foundation Symposium on Early Brain and Child Development “*Basics of Intergenerational Transmission of Adversity*”, Edmonton, Alberta, Canada
- November 2013 Child Institute, Inc National Symposium: In Harms Way: Preventing and Healing Childhood Trauma Keynote Address “*Innovating to Reduce or Prevent the Impact of Toxic Stress on Brain and Child Development*”, Los Angeles, CA
- January 2013 The Wisconsin Family Impact Seminars: The Science of Early Brain Development “*The Science of Early Brain Development: A Foundation for Success of Our Children and the State Economy*”, Madison, WI
- January 2013 Children’s Trust Fund and SaintA: Translating Emerging Brain Science into Positive Impact for Wisconsin’s Children and Families Keynote Address “*The Science of Early Brain Development and the Health and Welfare of Children*”, Madison, WI
- April 2014 Children’s Movement of Florida “*Investing in Early Brain and Child Development – It’s Patriotic*”, Tallahassee, FL
- July 2014 USC Annenberg National Health Journalism Fellows Conference “*The Core Story of the Science of Healthy Brain Development and Challenges of Communication*”, Los Angeles, CA
- September 2014 New Hampshire Association for Infant Mental Health Annual Meeting “*The Ingredients for Healthy Brain and Child Development*”; Workshop: “*Building Healthy Brain Architecture Game*”, Lincoln, NH
- January 2015 Parent-Infant and Child Institute: Mental Health Postgraduate Certificate Program – “*Core Concepts in Early Brain and Child Development: Environment of Relationships, Executive Function and Resilience*”, Napa, CA
- January 2015 Sundance Film Festival Norlien Foundation Panel “*Addiction Fiction*”, Park City, UT

Public Policy and Community Outreach Symposia and Lectures (cont.)

- February 2015 California Head Start Annual Conference, Ed Zigler Research Institute
“Early Brain and Child Development: The Core Story, Mechanisms and Challenges” and *“Communicating the Science of Resilience to Your Stakeholders”*, Los Angeles, CA
- March 2015 3rd International Profectum Foundation Conference: *“The Neurobiology of Social Behavior Development and the Importance of Individual Differences”*, Pasadena, CA
- March 2015 Oklahoma Infant Mental Health Training Institute Workshop: *“Early Brain and Child Development: The Core Story, Mechanisms and Challenges”*, Oklahoma City, OK
- April 2015 Los Angeles Times Book Festival Panel: *“Grasping the Ineffable: On Science and Health”*, Los Angeles, CA
- June 2015 AAAS/Dana Foundation Neuroscience and Society Public Lecture Series
“Brain Development in the Early Years”, Washington DC
- July 2015 National Health Journalism Summer Institute, Annenberg School of Communication, USC *“The Core Story of Brain and Child Development – Why Early Matters”*, Los Angeles, CA
- October 2015 Iowa Family Impact Series, *“Early Brain and Child Development: The Core Story, Mechanisms and Challenges”*, Des Moines, IA
- November 2015 Simms/Mann Think Tank on the Whole Child *“Why Early Matters – Brain and Behavioral Development”*, Beverly Hills, CA
- January 2016 Parent-Infant & Child Institute, *“The Foundations of Brain and Child Development and Function”*, Napa, CA
- January 2016 Infant Mental Health Community Training Institute, *“Brain and Child Development Influences on Mental Health”*, Toronto, Ontario, Canada
- March 2016 BJE Whole Child Conference, Bebe Feurstein Simon Early Childhood Institute, *“The Importance of Early for Brain and Child Development”*, Valley Village, CA
- March 2016 Brain Awareness Week, Urban Child Institute and University of Tennessee Medical Center, *“The Ingredients for Healthy Early Brain and Child Development”*, Memphis, TN
- May 2016 George Kaiser and Robert Wood Johnson Foundations Joint Conference on Early Childhood Programs, *“Neuroscience Makes the Case for Investment in Strong Early Childhood Programs”*, Tulsa OK
- June 2016 Strategies California Strengthening Poverty Convening, *“On Poverty and Families: What Do We Need to Know About Brain and Child Development?”*, Sacramento, CA
- June 2016 Tennessee ACES Initiative, *“Building Strong Brains”*, Nashville, TN
- July 2016 NY State Zero to Three Organization, *“Making the Case for Investing in Early Childhood”*, New York City, NY
- September 2016 San Diego Early Child Mental Health Organization – We Can’t Wait. *“Early Child and Brain Development: The Core Story, Mechanisms and Challenges”* and *“Workshop on Communicating the Science of Early Child Investment”*, San Diego, CA

- September 2016 Greater Miami Chamber of Commerce Keynote Talk “*The Essential Ingredient for Success of Our Children and the Local Economy: Early Brain Development*”, Miami, FL
- January 2017 Governor’s Early Childhood & Brain Development Conference, “*The Essential Ingredient for Success of Our Children: Early Brain Development*”, Salt Lake City, UT
- January 2017 Dept Child Services, State of Utah, “*What Early Brain and Child Development Means to Practitioners*”, Salt Lake City, UT
- January 2017 Infant-Parent Mental Health Fellowship Program “*Fundamenta Ingredients of Brain and Child Development*”, Napa, CA
- April 2017 National Center for State Courts, Juvenile Justice Reform Summit, Southern Division “*The Adolescent Brain – Early Influences and Practical Elements for Healthy Development*”, Nashville, TN
- April 2017 United Way Legal Forum “*Transitions in Brain Development – Opportunities for Influence in Infancy, Toddlerhood and Adolescence*” Chattanooga, TN
- April 2017 Blue Cross of TN “*Ensuring Lifespan Health – The Role of Early Life Experiences*”, Chattanooga, TN
- April 2017 United Way Behavioral Health Forum “*The Powerful Influence of Early Adversity on Brain and Child Development*”, Chattanooga, TN
- April 2017 Advanced Training Workshop for Service Providers “*Serve and Return, Executive Function and the Impact on Brain and Child Development*”, Chattanooga, TN
- April 2017 Chamber of Commerce and United Way Conversation on Child Development “*The Ingredients of Economic Prosperity – Early Brain and Child Development*”, Chattanooga, TN
- April 2017 United Way and TN Governor’s Office Public Summit 2.0 “*Building Health Brains for a Lifetime of Success for Our Children*” Chattanooga, TN
- June 2017 US Chamber of Commerce “*Surprise - Early Brain Development is the Essential Ingredient for Child and Economic Success*”

University Seminars and Lectures

January 1981	University of Vermont School of Medicine, Department of Anatomy and Neurobiology
November 1981	Stanford University School of Medicine, Department of Neurobiology
January 1982	Cornell University College of Medicine, Department of Cell Biology
April 1982	New York University School of Medicine, Department of Pharmacology
January 1984	Jefferson University School of Medicine, Department of Anatomy
March 1984	National Institutes of Health, Heart, Lung and Blood Institute
December 1984	University of Virginia School of Medicine, Department of Anatomy
January 1985	Temple University, Department of Biology
May 1985	University of Rochester, Department of Anatomy, SUNY, Upstate Medical Center, Departments of Physiology and Biochemistry
June 1985	Hershey Medical Center, Departments of Pharmacology and Genetics
August 1985	Stanford University School of Medicine, Department of Neurobiology, Mt. Sinai School of Medicine, Department of Psychiatry
September 1985	Boston University School of Medicine, Department of Anatomy
November 1985	Columbia University College of Physicians and Surgeons, Department of Anatomy and Cell Biology
May 1986	New York University, Department of Biology
August 1986	Cold Spring Harbor, Immunoglobulins and The Nervous System Course
November 1986	Rutgers University, Robert W. Johnson Medical School, Department of Anatomy
March 1987	E.K. Shriver Center, Department of Biochemistry, Waltham, MA
October 1987	University of Heidelberg, Department of Neurobiology
October 1987	University of Zurich, Pharmacology Institute
February 1988	University of Pittsburgh School of Medicine, Department of Anatomy and Cell Biology
March 1988	E.I. Dupont du Moirs Co., Division of Neurobiology
June 1988	University of Toronto School of Medicine, Department of Anatomy
July 1988	New Jersey School of Osteopathic Medicine, Department of Anatomy
September 1988	Case Western Reserve University School of Medicine, Neuroscience Program
December 1988	Georgetown University School of Medicine, Department of Anatomy & Cell Biology
January 1989	National Institutes of Health, Animal Research Center
April 1989	Florida State University, Psychobiology Program
May 1989	John Hopkins University School of Medicine, Department of Neuroscience
January 1990	Columbia University College of Physicians and Surgeons, Center for Reproductive Biology
February 1990	Genentech, Inc., Department of Developmental Biology
February 1990	University of California, San Francisco School of Medicine, Program in Neuroscience
February 1990	University of California, Berkeley, Department of Biochemistry
February 1990	Stanford University School of Medicine, Department of Neurobiology
March 1990	University of Washington School of Medicine, Program in Neuroscience
April 1990	University of Connecticut, Storrs, Department of Neurobiology and Physiology
March 1991	SUNY, Buffalo, Program in Neurosciences
November 1991	University of Massachusetts, Neuroscience Program
November 1991	UCLA, Department of Psychiatry and Neuroscience Program
November 1991	UC, Irvine, Department of Anatomy & Neurobiology
November 1991	Genentech, Department of Neuroscience

University Seminars and Lectures (cont.)

March 1992	Cornell Medical College, Department of Neurology & Program in Neuroscience
March 1992	University of Tennessee, Memphis, Department of Anatomy & Neurobiology
September 1992	UMDNJ, Robert Wood Johnson Medical School, Center for Neuroscience
October 1992	Albert Einstein School of Medicine, Kennedy Center for Mental Retardation
November 1992	Bowman Gray School of Medicine, Wake Forrest University, Department of Anatomy
January 1993	Albert Einstein School of Medicine, Department of Pathology
February 1993	University of California, Berkeley, Department of Cell & Molecular Biology
February 1993	Barrow Neurological Institute of Phoenix
March 1993	University of North Carolina, Department of Anatomy & Cell Biology
April 1993	University of Pittsburgh, Department of Behavioral Neuroscience
May 1993	Hahneman University, Department of Physiology
October 1993	Rockefeller University, SUNY, Stonybrook, Department of Neurobiology & Behavior
January 1994	NYU Medical Center, Department of Pharmacology
February, 1994	Mt. Sinai School of Medicine, Center for Neurobiology
March, 1994	Yale University School of Medicine, Section of Neurobiology
April 1994	University of Texas, Southwest Medical Center, Program in Cell Biology
October 1994	University of Virginia, Program in Neuroscience, Princeton University, Department of Biology
November 1994	University of Pennsylvania, Neuroscience Program
January 1995	National Institutes of Health, NIMH, Clinical Brain Disorders Branch
March 1995	Cedar Crest College, Program in Genetic Engineering, University of Chicago, Program in Neurobiology
January 1996	SUNY, Syracuse, Program in Neuroscience
March 1996	INSERM Unite 371, Program in Developmental Neurobiology, Lyon, France
November 1996	University of Pittsburgh, Program in Pathology
January 1997	Emory University, Program in Neuroscience
May 1997	Hershey Medical School, Program in Neuroscience
October 1997	Case Western Reserve University, Department of Neuroscience
November 1997	Carnegie Mellon University, Department of Biological Sciences
December 1997	University of Pittsburgh School of Medicine, Department of Neurology
January 1998	University of Pittsburgh, Department of Neuroscience
March 1998	University of Florida, Program in Neuroscience
May 1998	Chatham College, Seminars in Biology Program
July 1998	Campus Biomedicus, Department of Neuroscience, Rome, Italy
January 1999	University of California-Davis, Program in Neuroscience
March 1999	Cornell Medical College, Program in Neurobiology
March 1999	CUNY, Program in Biology
May 1999	Brown University, Department of Neuroscience
May 1999	Brown University, Department of Neurology Grand Rounds
July 1999	Max Planck Institute, Tubingen, Germany
March 2000	Oregon Regional Primate Center, Beaverton, OR
May 2000	Pasteur Institute, Neuroscience Program, Paris France
June 2000	Philadelphia Chapter, Society for Neuroscience, Grass Lecture
November 2000	Cleveland Clinic Foundation, Department of Neurosciences, Lerner Research Inst Clinic
January 2001	Weizman Institute of Science, Rehovot, Israel

University Seminars and Lectures (cont.)

January 2001	The John F. Kennedy Center for Research on Human Development, Vanderbilt University
January 2001	Center for Biotechnology and Medicine, Rutgers University
January 2001	Roche Biosciences, Palo Alto, CA
May 2001	Arkansas Chapter, Society for Neuroscience Grass Foundation Lecture, University of Arkansas for Medical Sciences
May 2001	Arkansas Chapter, Society for Neuroscience Grass Foundation Lecture, National Center for Toxicology Research
May 2001	The University of Tennessee-Memphis, Center for Neuroscience
May 2001	Wake Forest University School of Medicine, Neuroscience Program
October 2001	University of Maryland School of Medicine, Program in Neuroscience
November 2001	UCLA, Neuropsychiatric Institute
March 2002	Vanderbilt University, Department of Pharmacology
May 2002	Boston University School of Medicine, Integrated Neuroscience Program
October 2002	Wayne State University, Program in Neuroscience
January 2003	Stanford University School of Medicine, Stanford Brain Research Institute
May 2003	UCLA, Department of Molecular Pharmacology
July 2003	Marine Biological Laboratory, Woods Hole, MA
July 2003	Princeton University, Merck Summer Institute
September 2003	Medical College of Georgia, Neuroscience Program
September 2003	University of North Carolina School of Medicine, Neuroscience Center
January 2004	University of Florida College of Medicine, Interdisciplinary Program in Biomedical Science
January 2004	Rice University, James A. Baker III Institute for Public Policy
January 2004	University of Florida College of Medicine, Department of Molecular Genetics and Microbiology
February 2004	University of California, Irvine, Program in Neuroscience
February 2004	California Institute of Technology, Division of Biology
March 2004	Emory University, Yerkes National Primate Research Center
April 2004	University of Miami, Neuroscience Center
May 2004	University of Texas Southwestern Medical Center, Center for Basic Neuroscience
June 2004	Children's Hospital of Philadelphia, Mental Retardation & Developmental Disabilities Research Center
July 2004	University of Southern California Medical Center, Neurogenetics Institute
March 2005	State University of New York Downstate Medical Center, Program in Molecular and Cellular Biology
March 2005	University of Wisconsin, Waisman Center Seminar Series
April 2005	Tulane University, Department of Cell and Molecular Biology
September 2005	Washington University, Program in Neuroscience Retreat
March 2006	UCLA, Center for Autism Research and Treatment
April 2006	Medical University of South Carolina, Program in Neuroscience
May 2006	University of Lausanne, Program in Neuroscience
June 2006	Columbia University Medical Center, Department of Neurology 20 th Annual Rita G. Rudel/Lucy G. Moses Lecture
September 2006	Meharry Medical College Seminar
December 2006	Emory University Medical School, MRDD Grand Rounds
January 2007	University of Louisville School of Medicine, Grand Rounds
February 2007	Oregon Health and Science University, Oregon National Primate Research Center

University Seminars and Lectures (cont.)

April 2007	University of Kansas Developmental Disability Research Center, 40 th Anniversary Keynote Lecture
April 2007	UCLA Developmental Disability Research Center, 30 th Anniversary Keynote Lecture
May 2007	Genentech, Inc. Seminar
May 2007	UCSF Graduate Neurosciences Program
October 2007	University of Chicago, Developmental Disability Research Center Mini-Symposium on Developmental Disorders
October 2007	Northwestern University, Graduate Neuroscience Program
December 2007	Autism Genetics Resource Exchange, Autism Speaks Foundation
January 2008	UCSD Neuroscience Graduate Program Alumni Lecture
February 2008	Oregon Health Sciences Center, Developmental Pediatric Center Grand Rounds
March 2008	McMaster University, Hooker Distinguished Visiting Professor Lecture, Hamilton, Ontario, Canada
April 2008	Autism and Developmental Disorders Colloquium Series, Massachusetts General Hospital
April 2008	Cornell University, PINS Lecture
April 2008	Columbia University College of Physicians & Surgeons, Grand Rounds
May 2008	University of Rochester Neuroscience Retreat Keynote Lecture
August 2008	Hamamatsu Medical College Lecture
August 2008	Kanazawa University Lecture
August 2008	Osaka Bioscience Institute Lecture
September 2008	University of Maryland, College Park, Neuroscience and Cognitive Science Program
October 2008	St. Lawrence University, Richard Church Lectureship
January 2009	University of California, Davis, M.I.N.D. Institute
February 2009	National Institute of Neurological Disease and Stroke
April 2009	Center for Autism Research, University of Pennsylvania and CHOP
September 2009	Neuroscience Interdisciplinary Program, UCLA
February 2010	Biological Sciences Program, Azusa Pacific University
March 2010	Neuroscience Program, Brown University
May 2010	Center for Autism Research and Treatment (CART), UCLA
May 2010	Neuroscience Program, Yale University
March 2011	Neuroscience Training Program, Children's Hospital of Philadelphia
March 2011	Arizona Center for the Biology of Complex Diseases, University of Arizona
January 2012	Kennedy Krieger Institute & Johns Hopkins University
April 2012	Frontiers in Neuroscience, Stanford University
May 2012	Waisman Center, University of Wisconsin
May 2012	Wake Forest University Program in Neuroscience
May 2012	National Children's Medical Center, Intellectual and Developmental Disabilities Research Center
June 2012	Columbia University College of Physicians and Surgeons, Child and Adolescent Psychiatry Grand Rounds
October 2012	Medical University of South Carolina, Neuroscience, Neurology and Neurosurgery Grand Rounds
January 2013	UCLA Brain Mapping Center Seminar Series
January 2013	Loma Linda University Medical Center Biosciences Graduate Program
March 2013	Mt. Sinai School of Medicine Neuroscience Program

University Seminars and Lectures (cont.)

March 2013	Columbia University College of Physicians and Surgeons, Psychiatry Grand Rounds
April 2013	Harvard Center for the Developing Child Distinguished Scholars Lecture Series
June 2013	University of Pittsburgh Center for Neuroscience
November 2013	California State, Los Angeles, MORE Seminar Program
January 2014	University of Wisconsin, Madison Medical Center, Pediatric Grand Rounds
September 2014	University of California, Irvine Conte Center Seminar
February 2015	University of Pennsylvania, Center for Neuroscience and Society
February 2015	Drexel University School of Medicine, Dept. Neurobiology and Anatomy
March 2015	Albert Einstein Montefiore Medical Center, Neurology Grand Rounds
March 2015	Albert Einstein College of Medicine, Dept. Neuroscience
April 2015	University of Louisville, Society for Neuroscience Local Chapter
November 2015	Florida State University, Center for Brain Injury and Recovery
December 2015	LA County Harbor UCLA Medical Center, Dept. Psychiatry Grand Rounds
March 2016	Atlanta Children's Research Institute & Emory University
March 2016	Dept. Behavioral Neuroscience, Oregon Health Sciences University
September 2016	Interdisciplinary Brain Science Program, Florida International University
September 2016	Cedar Sinai Medical Center, Obstetrics/Gynecology Grand Rounds
February 2017	Penn State University, Neuroscience Program
April 2017	Florida International University, Distinguished Speaker Series in Biomedical Sciences

PROFESSIONAL ACTIVITIES: TEACHING & GRADUATE, POSTDOCTORAL TRAINING

University of California, San Diego

1976-1978 Basic Neuroscience (Lab)

Yale University of Medicine

1979-1982 Basic Neuroscience (Lectures/Lab)
Graduate Course, Nerves, Genes and Behavior

The Medical College of Pennsylvania

1983-1993 Medical Histology & Cell Biology (Lectures and Lab)
1985-1993 Graduate Course Director, Advanced Topics in Neurobiology
1987-1993 Graduate Course Director, Developmental Neurobiology
1991-1993 Graduate Course Co-Director, Cell & Molecular Biology
1991-1993 Basic Medical Neuroscience (Lectures and Lab)

Robert Wood Johnson Medical School and Rutgers University

1994-1996 Graduate Course Co-Director, Developmental Neurobiology
1994-1996 Basic Medical Neuroscience
Graduate Course, Advanced Cell Biology

University of Pittsburgh School of Medicine

1997-2002 Graduate Course Co-Director, Neurobiology Journal Club
Graduate Course Co-Director, Developmental Neurobiology
Graduate Course, Neuroscience IV: Diseases
Graduate Course Director, Neuroscience III: Systems Neuroscience MS II

Vanderbilt University

2003-2005 Graduate Course, Advanced Molecular Neuroscience
Graduate Course, Introduction to Fundamental Neuroscience
2003 Graduate Course, Advanced Topics in Developmental Neurobiology
2005 Graduate Course, Advanced Topics in Developmental Neurobiology
2007 Graduate Course, Advanced Topics in Developmental Neurobiology

University of Southern California

2009-2011 Medical Neuroscience
Medical Microanatomy
2009 Graduate Course, Advanced Topics in Neuroscience
2009-2011 Graduate Course, Diseases of the Nervous System
2009-present Graduate Course, Principles of Neuroscience Core Course (NSCI 524, 525)
2011-2013 Graduate Course, Division of Occupational Therapy, Behavioral Neuroscience
2013 - present Director, Graduate Course, Advanced Neuroscience Core Course – Development and Neuronal Function(NSCI 524)
2013 – present Graduate Course, Advanced Neuroscience Core Course – Systems (NSCI 525)
2016 USC Ethics in Research (INTD 500)

PhD and MD-PhD Students (* denotes trainee currently holds faculty/senior industry position)

Heather R. Horton, MD, PhD, Medical College of Pennsylvania
Carol A. Milligan, PhD, Medical College of Pennsylvania*
Jian Qian, MD, PhD, Medical College of Pennsylvania*
Stephen M. Prouty, PhD, Medical College of Pennsylvania*
Raymond T. Ferri, MD, PhD, Medical College of Pennsylvania*

Liesl Jones, PhD, Medical College of Pennsylvania*
Robert Burrows, PhD, Robert Wood Johnson Medical School, UMDNJ
Mary M. Burns, PhD, Robert Wood Johnson Medical School, UMDNJ
Kelley Nicholson, PhD, Robert Wood Johnson Medical School, UMDNJ
Kyoko Koshibu, PhD, University of Pittsburgh
Michael Sabatini, MD, PhD, University of Pittsburgh
Matthew C. Judson, PhD, Vanderbilt University
Mica Y. Bergman, MD, PhD, Vanderbilt University
Philip Gorrindo, MD, PhD, Vanderbilt University
Hanke Heun-Johnson, University of Southern California
Ryan Kast, University of Southern California
Alex Jurrow Stevenson, Dean's Research Scholar, Keck School of Medicine of USC

Postdoctoral Research Fellows (* denotes trainee currently holds faculty/senior industry position)

Lawrence Botticelli, Medical College of Pennsylvania
Mary F. Barbe, PhD, Medical College of Pennsylvania*
John R. Hoffman, Medical College of Pennsylvania*
Keith Pennypacker, PhD, Medical College of Pennsylvania*
Maryann Murtaugh, PhD, Medical College of Pennsylvania
Linda Rinaman, Medical College of Pennsylvania*
Victoria Zhukareva, PhD, Medical College of Pennsylvania and Robert Wood Johnson Medical School, UMDNJ
Aurea Pimenta, PhD, Medical College of Pennsylvania and Robert Wood Johnson Medical School, UMDNJ*
Kathie Eagleson, PhD, Medical College of Pennsylvania and Robert Wood Johnson Medical School, UMDNJ*
Bess Resinoso, PhD, Robert Wood Johnson Medical School, UMDNJ*
Karen Straube-West, PhD, Robert Wood Johnson Medical School, UMDNJ
Deborah King, PhD, University of Pittsburgh
Andrea Miller, PhD, University of Pittsburgh
Claudine Laurent, MD, PhD, University of Pittsburgh*
Karoly Mirnics, MD, University of Pittsburgh*
Kathy Robertson, PhD, University of Pittsburgh*
Frank Middleton, PhD, University of Pittsburgh*
Elizabeth Powell, PhD, University of Pittsburgh*
Daniel Campbell, PhD, University of Pittsburgh and Vanderbilt University*
Gregg Stanwood, PhD, University of Pittsburgh and Vanderbilt University*
Melinda Arnett, PhD, Vanderbilt University
Philip Ebert, PhD, Vanderbilt University*
Masaaki Torii, PhD, Vanderbilt University*
Barbara Thompson, PhD, Vanderbilt University*
Elizabeth Hammock, PhD, Vanderbilt University*
Alexandre Bonnin, PhD, Vanderbilt University*
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Kimberly Aldinger, PhD, University of Southern California
Allison Knoll, PhD, University of Southern California and Children's Hospital Los Angeles*
Jasmine T. Plummer, PhD, University of Southern California and Children's Hospital Los Angeles
Zhihui Xie, PhD, University of Southern California and Children's Hospital Los Angeles
Anna Kamitakahara, PhD, Children's Hospital Los Angeles
Rodolfo Salazon, PhD, Children's Hospital Los Angeles

Parisa Afshari, PhD, Children's Hospital Los Angeles
Lisa Schleuter, PhD, Children's Hospital Los Angeles

PEER REVIEWED PUBLICATIONS

1. Levitt, P., Moore, R.Y. and Garber, B.B. Selective cell association on catecholamine neurons in brain aggregates in vitro. *Brain Research* 111: 311-320, 1976.
2. Levitt, P. and Moore, R.Y. Noradrenaline neuron innervation of the neocortex in the rat. *Brain Research* 139: 219-231, 1978.
3. Levitt, P. and Moore, R.Y. Developmental organization of raphe serotonin neuron groups in the rat. *Anat. and Embryol.* 154: 241-251, 1978.
4. Levitt, P. and Moore, R.Y. Development of the noradrenergic innervation of the neocortex. *Brain Research* 162: 243-259, 1979.
5. Levitt, P. and Moore, R.Y. Origin and organization of brainstem catecholamine innervation in the rat. *J. Comp. Neuro.* 186: 505-528, 1979.
6. Miller, A.L., Levitt, P., Ingram, H. and Lewis, L. Properties of acid β -D galactosidase isolated from I-cell disease brain. *J. Neurochem.* 32: 1479-1485, 1979.
7. Levitt, P. and Moore, R.Y. Organization of brainstem noradrenaline hyperinnervation following neonatal 6-hydroxydopamine treatment in rat. *Anat. and Embryol.* 158: 133-150, 1980.
8. Levitt, P. and Rakic, P. Immunoperoxidase localization of glial fibrillary acidic protein in radial glial cells and astrocytes of the developing Rhesus monkey brain. *J. Comp. Neuro.* 193: 817-848, 1980.
9. Levitt, P., Cooper, M.L. and Rakic, P. Coexistence of neuronal and glial precursor cells in the ventricular zone of the fetal monkey cerebrum: An ultrastructural immunoperoxidase analysis. *J. Neurosci.* 1: 27-39, 1981.
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11. Levitt, P. and Rakic, P. The time of genesis, embryonic origin and differentiation of the brain stem monoamines neurons in the Rhesus monkey. *Develop. Brain Res.* 4:35-57, 1982.
12. Levitt, P. and Pintar, J.E., Breakefield, X.O. Immunocytochemical demonstration of monoamine oxidase B in brain astrocytes and serotonergic neurons. *Proc. Natl. Acad. Sci.* 79: 6385-6389, 1982.
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14. Levitt, P., Cooper, M.L. and Rakic, P. Early divergence and changing proportions of neuronal and glial precursor cells in the primate cerebral ventricular zone. *Dev. Biol.* 96: 472-484, 1983.

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16. Levitt, P. A monoclonal antibody to limbic system neurons. *Science* 223: 299-301, 1984.
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21. Levitt, P. Relating molecular specificity to normal and abnormal brain development. *Ann. N.Y. Acad. Sci.* 450: 239-246, 1985.
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23. Levitt, D., Bard, J., Daner, R. and Levitt, P. Selective infection of astrocytes by *Chlamydia trachomatis* in primary mixed neuron-glia cultures. *Infection and Immunity* 54: 913-916, 1986.
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26. Horton, H.L. and Levitt, P. A unique membrane protein is expressed on early developing limbic system axons and cortical targets. *J. Neurosci.* 8: 4653-4661, 1988.
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33. Barbe, M.F. and Levitt, P. The early commitment of fetal neurons to limbic cortex. *J. Neurosci.* 11: 519-533, 1991.
34. Rinaman, L., Milligan, C.E. and Levitt, P. Persistence of fluoro-gold following degeneration of labeled motoneurons is due to phagocytosis by microglia and macrophages. *Neuroscience* 44: 765-776, 1991.
35. Rinaman, L. and Levitt, P. Access to gastric tissue promotes the survival of axotomized neurons in the dorsal motor nucleus of the vagus in neonatal rats. *J. Comp. Neurol.* 313: 213-226, 1991.
36. Milligan, C.E., Cunningham, T.J. and Levitt, P. Differential immunochemical markers reveal the normal distribution of brain macrophages and microglia in the developing rat brain. *J. Comp. Neurol.* 314: 125-135, 1991.
37. Milligan, C.E., Levitt, P. and Cunningham, T.J. Brain macrophages and microglia respond differently to lesions of the developing and adult visual system. *J. Comp. Neurol.* 314: 136-146, 1991.
38. Miller, M., Bower, E., Levitt, P., Li, D. and Chantler, P.D. Myosin II distribution is consistent with a role in growth cone motility but not synaptic vesicle mobilization. *Neuron* 8: 25-44, 1992.
39. Qian, J., Bull, M.S. and Levitt, P. Target-derived astroglia regulate axonal growth in a region-specific manner. *Dev. Biol.* 149: 278-294, 1992.
40. Barbe, M.F. and Levitt, P. Attraction of specific thalamic input by cerebral grafts depends on the molecular identity of the implant. *Proc. Natl. Acad. Sci.* 89: 3706-3710, 1992.
41. Levitt, P., Barbe, M.F. and Ferri, R.T. Transplants of limbic and neocortex reveal mechanisms of generating phenotypic diversity in the cerebral cortex. *J. Neur. Transpl. Plasticity* 3: 175, 1992.

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43. Silver, J., Edwards, M.A. and Levitt, P. Immunocytochemical demonstration of early appearing astroglial structures that form boundaries and pathways along axon tracts in the fetal brain. *J. Comp. Neurol.* 328: 415-436, 1993.
44. Ferri, R.T. and Levitt, P. Cerebral cortical progenitors are fated to produce region-specific neuronal populations. *Cerebral Cortex* 3: 187-198, 1993.
45. Levitt, P., Ferri, R.T. and Barbe, M.F. Progressive acquisition of cortical phenotypes as a mechanism for specifying the developing cerebral cortex. *Perspectives Dev. Neurobiol.* 1: 65-74, 1993.
46. Rinaman, L. and Levitt, P. Establishment of vagal sensorimotor circuits during fetal development in rats. *J. Neurobiol.* 24: 641-659, 1993.
47. Prouty, S. and Levitt, P. Immunocytochemical analysis of a novel carbohydrate differential antigen (CDA-3C2) associated with olfactory and otic systems during embryogenesis in the rat. *J. Comp. Neurol.* 332: 444-470, 1993.
48. Prouty, S. and Levitt, P. Immunoelectron microscopic analysis of a novel carbohydrate differentiation antigen (CDA-3C2) in the developing rat olfactory and otic systems. *J. Comp. Neurol.* 332: 471-486, 1993.
49. Goldberger, M.E., Coleman, E., Croul, S. and Levitt, P. Partial deafferentation of cat spinal neurons results in permanent changes in cell surface molecular expression and metabolic activity. *Exp. Neurol.* 123: 74-80, 1993.
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52. Barbe, M.F. and Levitt, P. Age-dependent specification of the cortico cortical connections of cerebral grafts. *Neurosci.* 15: 1819-1834, 1995.
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54. Zhukareva, V. and Levitt, P. The limbic system-associated membrane protein (LAMP) selectively mediates interactions with specific central neuron populations. *Development* 121: 1161-1172, 1995.

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55. Milligan, C.E., Webster, L., Piros, E.T., Evans, C., Cunningham, T.J. and Levitt, P. Induction of opioid receptor-mediated macrophage chemotactic activity after neonatal brain injury. *J. Immunol.* 154: 6571-6581, 1995.
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57. Cote, P.-Y., Sadikot, A.F., Levitt, P. and Parent, A. Distribution of the limbic system-associated membrane protein immunoreactivity in primate basal ganglia. *Neuroscience* 69: 71-81: 1995.
58. Wang, X.-H., Levitt, P., Grayson, D.R. and Murphy, E.H. Intrauterine cocaine exposure of rabbits: persistent elevation of GABA-immunoreactive neurons in anterior cingulate cortex but not visual cortex. *Brain Res.* 689: 32-46, 1995.
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60. Jones, L., Fischer, I. and Levitt, P. Nonuniform alteration of dendritic development in the cerebral cortex following prenatal cocaine exposure. *Cereb. Cortex* 6: 431-445, 1996.
61. Eagleson, K.L., Ferri, R.T. and Levitt, P. Complementary distribution of collagen type IV and the epidermal growth factor receptor in the embryonic telencephalon. *Cereb. Cortex* 6: 540-549, 1996
62. Pimenta, A., Fischer, I. and Levitt, P. cDNA cloning and structural analysis of the human limbic-system-associated membrane protein (LAMP). *Gene* 170: 189-195, 1996.
63. Wang, X.-W., Levitt, P., O'Brien Jenkins, A. and Murphy, E.H. Normal development of tyrosine hydroxylase and serotonin immunoreactive fibers innervating anterior cingulate cortex and visual cortex in rabbits exposed prenatally to cocaine. *Dev. Brain Res.* 715: 221-224, 1996.
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