

CURRICULUM VITAE

Edwin G. (Ted) Abel, III

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Research Interests

Dr. Abel is recognized as a pioneer in defining the molecular mechanisms of long-term memory storage and identifying how these processes go awry in neurodevelopmental and psychiatric disorders.

Current Positions

2021-present Founding Co-Director, University of Iowa Hawkeye Intellectual and Developmental Disabilities Research Center (P50 HD 103556)

2019-present Chair and Departmental Executive Officer, Department of Neuroscience and Pharmacology, Carver College of Medicine, University of Iowa

2019-present Professor, Department of Neuroscience and Pharmacology, Carver College of Medicine, University of Iowa

2017-present Founding Director, Iowa Neuroscience Institute, University of Iowa

2017-present Roy J. Carver Chair in Neuroscience, University of Iowa

2017-present Professor, Department of Molecular Physiology and Biophysics, Carver College of Medicine, University of Iowa (Secondary Appointment, 2019-present)

2017-present Professor, Department of Psychiatry, Carver College of Medicine, University of Iowa (Secondary Appointment)

- 2017-present Professor, Department of Biochemistry and Molecular Biology, Carver College of Medicine, University of Iowa (Secondary Appointment)
- 2017-present Professor, Department of Psychological and Brain Sciences, University of Iowa (Secondary Appointment)

Previous Positions

- 2010-2016 Brush Family Professor of Biology, University of Pennsylvania
- 2010-2016 Professor, Department of Neuroscience, Perelman School of Medicine, University of Pennsylvania (Secondary Appointment)
- 2012-2016 Founding Director, Neurobehavior Testing Core, University of Pennsylvania
- 2006-2016 Director, Biological Basis of Behavior Program, University of Pennsylvania
- 2008-2016 Professor, Department of Biology, University of Pennsylvania
- 2006-2016 Program Director, NIMH Training Program in Behavioral and Cognitive Neuroscience, University of Pennsylvania
- 2011 Gastwissenschaftler, Molekulare Organisation des Gehirns, Institut für Neurowissenschaften und Medizin (IMN-2), Forschungszentrum Jülich, Germany
- 2009-2010 Edmund J. and Louise W. Kahn Term Professor of Biology, University of Pennsylvania
- 2004-2008 Associate Professor with Tenure, Department of Biology, University of Pennsylvania
- 1998-2004 Assistant Professor, Department of Biology, University of Pennsylvania

Education

- 1993-1997 Postdoctoral Fellow, Center for Neurobiology and Behavior, College of Physicians and Surgeons, Columbia University, Dr. Eric R. Kandel, advisor, “Molecular mechanisms of long-term memory storage”

1987-1993	Ph.D., Biochemistry and Molecular Biology, Harvard University, Dr. Tom Maniatis, advisor, “Characterization of factors that bind to <i>Drosophila Adh</i> regulatory elements”
1986-1987	M. Phil., Biochemistry, University of Cambridge, Dr. R. Tim Hunt, advisor, “The cloning of cyclin from starfish oocytes”
1985-1986	Part II (First Class Honors), Biochemistry, University of Cambridge
1981-1985	B.A. (Honors), Chemistry, Swarthmore College, Honors Thesis, Dr. Peter T. Thompson, advisor, “Solute-solute interactions in dilute aqueous solutions of nonelectrolytes”

Honors, Awards and Fellowships

2024	Keynote Speaker, 27 th Annual Meeting of the Korean Society for Brain and Neural Sciences
2024	Harry A. Waisman Memorial Lecture, University of Wisconsin, Madison
2023	Iowa Board of Regents Award for Faculty Excellence
2022	Wall of Scholarship, University of Iowa, Carver College of Medicine
2021	Presidential Lecturer, University of Iowa
2021	Scholar of the Year, University of Iowa
2020	Elected Fellow, American Psychological Association
2019	Elected Member, National Academy of Medicine
2019	Impact Scholar, University of Iowa, Carver College of Medicine
2018	Elected Fellow, Association for Psychological Science
2018	Springfield High School Achievers Hall of Fame
2017	Roy J. Carver Chair in Neuroscience, University of Iowa
2017	Plenary Speaker, Indian Society for Sleep Research, 25 th Annual Meeting, Goa, India
2015	Elected Fellow, American Association for the Advancement of Science
2015	Donald O. Hebb Lecturer, Dalhousie University, Halifax, Nova Scotia, Canada

- 2015 Keynote Lecture, Asian Chromatin Meeting, Bangalore, India
- 2013 Presidential Symposium Lecturer, Association for Psychological Science
- 2012 Elected Fellow, American College of Neuropsychopharmacology
- 2010-2016 Brush Family Professor of Biology, University of Pennsylvania
- 2009-2010 Edmund J. and Louise W. Kahn Term Professor of Biology, University of Pennsylvania
- 2006 Dean's Award for Mentorship of Undergraduate Research, School of Arts and Sciences, University of Pennsylvania
- 2006 Elected Member, American College of Neuropsychopharmacology
- 2005 Biological Basis of Behavior Society Professor of the Year, University of Pennsylvania
- 2001 Biological Basis of Behavior Society Professor of the Year, University of Pennsylvania
- 2001 Elected Associate Member, American College of Neuropsychopharmacology
- 2000-2006 David and Lucile Packard Foundation Fellowship for Science and Engineering
- 2000 Daniel X. Freedman Award, National Alliance for Research on Schizophrenia and Depression
- 1999-2001 Young Investigator Award, Mental Retardation and Developmental Disabilities Research Center, Children's Hospital of Philadelphia
- 1998-2002 John Merck Scholars Award in the Biology of Developmental Disabilities in Children
- 1998 McKnight Scholars Award, McKnight Endowment Fund for Neuroscience (Declined to accept Merck Scholars Award)
- 1998 Klingenstein Fellowship Award in the Neurosciences, The Esther A. and Joseph Klingenstein Fund (Declined to accept Merck Scholars Award)
- 1996-1998 Young Investigator Award, National Alliance for Research on Schizophrenia and Depression
- 1993-1996 Damon Runyon-Walter Winchell Cancer Research Fund Postdoctoral Fellowship

1990, 1991, 1992	Certificate for Distinction in Teaching, Harvard University
1987-1990	National Science Foundation Graduate Fellowship
1986	Bachelor Scholar, Christ's College, University of Cambridge
1986	Darwin Prize, Christ's College, University of Cambridge
1985-1987	Marshall Scholarship
1985	Ivy Award, Swarthmore College
1985	Phi Beta Kappa, Swarthmore College
1985	Sigma Xi, Swarthmore College

Teaching Experience

2019-present	Professor, Department of Neuroscience and Pharmacology, University of Iowa
2017-present	Professor, Department of Molecular Physiology and Biophysics, University of Iowa
2008-2016	Professor, Department of Biology, University of Pennsylvania
2004-2008	Associate Professor, Department of Biology, University of Pennsylvania
1998-2004	Assistant Professor, Department of Biology, University of Pennsylvania
1996-1997	Laboratory Instructor, Neuroanatomy, College of Physicians and Surgeons, Columbia University
1994-1997	Supervisor, Summer Undergraduate Research Students, Columbia University
1991-1992	Head Teaching Fellow, Introductory Molecular Biology, Harvard University
1990	Teaching Fellow, Mechanisms of Gene Control (Graduate Seminar), Harvard University
1990-1993	Teaching Consultant to Teaching Fellows in the Sciences, Harvard University
1990-1993	Supervisor, Undergraduate Research Theses, Harvard University
1989	Teaching Fellow, Physical Biochemistry, Harvard University

1988-1993	Freshman Proctor and Advisor for Freshmen, Harvard University
1986-1987	Tutor, Part 1B, Biochemistry, Christ's College and Jesus College, University of Cambridge

Courses Taught (University of Iowa)

2020-present	Lecturer in Biology 5653, Fundamental Neurobiology
2021-present	Lecturer in Psychology 3275, The Science of Sleep

Courses Taught (University of Pennsylvania)

2001-2016	Biology 442/NGG 575, Neurobiology of Learning and Memory
2001-2016	Biology/Biological Basis of Behavior 251, Molecular and Cellular Neurobiology Laboratory (with Marc Schmidt)
1998- 2001	Biology/Biological Basis of Behavior 251, Molecular and Cellular Neurobiology (with Marc Schmidt and Lee Peachey)
1999-2016	Biology 488/ NGG 578, Advanced Topics in Behavioral Genetics (with Maja Bucan)
2008	Biology 425, Biochemistry and Molecular Genetics Superlab (with John Wagner)
2006	INSC 595/Psychology 603, Behavioral Neuroscience (with Harvey Grill)
1999	Biology 521/Psychology 600/NGG 575, Advanced Topics in Learning and Memory (with Robert Rescorla)
1998-2016	Lecturer in a variety of courses including Systems Neuroscience (INSC 573), Behavioral Neuroscience (INSC 595), Cellular and Molecular Neuroscience (INSC 571), Neurochemistry and Neuropharmacology (PHRM 510), Neuropsychopharmacology (PHRM 550), Neuroscience Journal Club/Seminar Course (INSC 999), Introductory Biology (BIOL 101, 102, 121, 122), Epigenetics of Human Health and Disease (BIOL 593), Brain and Behavior (Perelman School of Medicine)

Current Grant Support

RO1 MH 087463 (Abel, T.) 07/16/10 to 4/30/26
NIH/NIMH \$409,648 (current year total direct costs)

Epigenetic Mechanisms of Memory Storage

This grant examines epigenetic changes during memory storage, focusing on histone acylation and cutting-edge transcriptomic approaches. The competitive renewal application for this grant was scored

in the 5th percentile.

P50 HD 103556 (Strathearn L.- Contact and Abel, T.) 06/1/21 to 05/31/26
NIH/NICHD \$1,230,243 (current year total costs)

University of Iowa Hawkeye Intellectual and Developmental Disabilities Research Center (HAWK-IDDRC)

The mission of the Hawk-IDDRC is to provide an organizational structure that fully integrates basic and clinical research across the lifespan—from conception to adulthood—that is tailored to an underserved rural population and focused on the prevention, diagnosis, treatment and amelioration of IDD.

1R01 AG 062398 (Abel, T - Contact and Lyons, L.) 08/01/19 to 04/30/25
NIH/NIA \$497,257 (current year total direct costs)

Mechanistic Studies on the Impact of Sleep Deprivation on Gene Regulation

The objectives of this proposal are to identify the molecular signaling pathways through which sleep deprivation affects hippocampal protein synthesis, determine the mRNA molecules available for translation after sleep deprivation and identify cellular signatures of sleep deprivation within the hippocampus.

1R01 NS 114780 (Frank, M.) 07/01/20 to 06/30/25
NIH/NINDS \$195,430 (current year total costs, Iowa)

Astroglial Mechanisms in Sleep Homeostasis

The major goal of the project is to define the role that astrocytes play in sleep homeostasis. The Abel lab at the University of Iowa is using next generation sequencing technology (single-cell RNA sequencing) to isolate signaling pathways that are involved in astrocyte-mediated sleep homeostasis.

1R01 DA 056113 (Blackwell, K.) 04/15/23 to 01/31/28
NIH/NIDA \$198,000 (current year direct costs, Abel lab)

Estradiol Signaling Pathways Mediating Sex Differences in Striatal Synaptic Plasticity

The major goals of this application are to use cutting-edge molecular techniques to explore molecular mechanisms underlying sex differences in synaptic plasticity in the striatum.

Eagles Autism Foundation (Abel, T.) 01/24/24 to 01/24/26
\$200,000 (current year direct costs)

Characterizing the Functional Impact of Mutations in Nr4a2-related Neurodevelopmental Syndrome

The major goals of this application are to characterize single nucleotide variants in the Nr4a2 gene and define their impact of protein function using biochemical, molecular and genetic approaches.

Completed Grant Support

2018-2024 Principal Investigator, R01 MH117964, NIH/NIMH, “Molecular, Cellular and Circuit Effects of Sleep Deprivation on Hippocampal Function,” Kamran Diba (Michigan), multi-PI, \$434,299 (last year total direct costs)

- 2018-2022 Principal Investigator, SFARI 573508, Simons Foundation, “Translating drug discovery in zebrafish and mouse models of ASD risk genes,” Ellen Hoffman (Yale), lead PI, \$130,687 (last year total costs, Iowa)
- 2018-2020 Principal Investigator, SFARI 572595, Simons Foundation, “Neural mechanisms underlying sleep disturbances in autism spectrum disorder,” Shinjae Chung (Penn), lead PI, \$40,934 (last year total costs, Iowa)
The major goal of this project was to investigate changes in the activity and molecular signature of preoptic sleep neurons that underlie sleep disturbances of ASD mouse model.
- 2007-2019 Project Leader, P50 AG 017628, NIH/NIA, “The mechanisms of alterations in sleep with age,” Allan Pack (Penn), PI, \$209,911, last year direct costs (Project 1). Dr. Abel was the leader of Project 1 that examined the role of CREB in age-related changes in sleep/wake states, using genetically modified mice to define where CREB acts to regulate sleep and to identify target genes regulated by CREB.
- 2015-2019 Principal Investigator, NSF 1515458, National Science Foundation. “US-French Collaboration: Spatial and Temporal Aspects of Molecular Signaling in Synaptic Plasticity,” \$75,000, last year total costs. This collaborative grant with Avrama Blackwell (George Mason University) and Jean-Antoine Girault (Institut du Fer à Moulin, Paris) uses electrophysiological, imaging and computational approaches to define the mechanisms by which compartmentalized signaling mediates synaptic plasticity in the hippocampus. The Girault lab is funded by the Agence Nationale de la Recherche (France).
- 2015-2019 Principal Investigator, SFARI 345034, Simons Foundation (SFARI). “Uncovering the impact of 16p11.2del on neurons mediating motivated behavior,” \$249,914, last year total costs. This collaborative grant with Alea Mills (Cold Spring Harbor Laboratory) and Nicola Grissom (University of Minnesota) examines the impact of 16p11.2 del on reward learning.
- 2013-2018 Principal Investigator, RO1 MH 099544, NIH/NIMH, “Non-neuronal regulators of sleep,” \$327,972 last year total direct costs. This grant focused the role of astrocytes in regulated sleep/wake states and in mediating the impact of sleep deprivation on memory storage and synaptic plasticity. This was a multi-PI grant with Marcos Frank (Washington State University) as contact PI.
- 2017-2018 Principal Investigator, SFARI 497698, Simons Foundation, “Assessment of Arbaclofen treatment on habituation, cognition and repetitive motor behaviors in a mouse model of 16p 11.2 microdeletion,” \$22,849 last year direct costs. This collaborative grant with William O’Brien (University of Pennsylvania) examines the impact of Arbaclofen on 16p11.2 microdeletion behavioral phenotypes.
- 2014-2017 Principal Investigator, R21 MH102679, NIH/NIMH, “Cell-Type Specific

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Epigenomics in the Brain,” \$150,000 last year total direct costs. This grant focused on the development of novel approaches to isolate chromatin from specific populations of neurons. This was a collaborative grant with Ben Garcia at the University of Pennsylvania.

- 2014-2017 Principal Investigator, R21 MH102703, NIH/NIMH, “The Impact of Sleep Deprivation on Translation,” \$150,000 last year total direct costs. This grant explored the role of protein synthesis to reverse the negative impact of sleep deprivation on cognition. This is a collaborative grant with Leon Reijmers at Tufts University.
- 2012-2017 Animal Core Director, P50 MH 096891, NIH/NIMH, Raquel Gur, PI, “Developmental Trajectories of Negative Symptoms in Schizophrenia.” This project sought to uncover the molecular mechanisms that underlie the developmental trajectory of schizophrenia. It sought to unify clinical and basic science findings with the goal of finding predictive markers of schizophrenia and understanding the basis for cognitive deficits that are debilitating aspects of this disorder. \$183,453 last year direct costs to Dr. Abel.
- 2006- 2016 Program Director, NIH/NIMH T32 MH017168, “Predoctoral Training Program in Behavioral/Cognitive Neuroscience.” The program, funded continuously since 1984, is designed to prepare exceptional students for a productive research career in the neuroscience of behavior, from CNS-controlled mechanisms of homeostasis to perception and cognition. Dr. Abel renewed this grant competitively twice. \$212,998 last year direct costs.
- 2010-2016 Project Leader, DARPA 58077-LS-DRP, Seema Bhatnagar, PI, “Identifying the Neural Substrates of Emotional Arousal: Towards a Path to Stress Resistance.” This grant examined the impact of chronic stressors on activity of orexin and norepinephrine systems in the brain and identified targets that produced resistance to the effects of stress.
- 2012-2016 Co-Principal Investigator, DOD CDMRP AR110189, Thomas A. Jongens, PI, “Examination of the mGluR-mTOR Pathway for the Identification of Potential Therapeutic Targets to Treat Fragile X.” This grant genetically and pharmacologically examined the misregulation in the mGluR-mTOR pathway identified in the *Drosophila* and mouse fragile X models to identify new potential targets for treatment of this syndrome.
- 2004-2015 Co-Principal Investigator, NIH/NIDA RO1 DA017949, Thomas J. Gould (Temple University), PI, “Nicotine Addiction: Learning, Neural and Genetic Processes,” \$34,732, last year total costs to Dr. Abel. This was a collaborative grant between Dr. Gould and Dr. Abel to examine the effects of nicotine on learning from the level of receptor activation to changes in cell signaling and gene expression.
- 2015 SFARI Undergraduate Summer Research Program, \$12,331.

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- 2014 SFARI Undergraduate Summer Research Program, \$12,331.
- 2012-2015 Principal Investigator, SFARI 248429, Simons Foundation, “Comprehensive Phenotyping of Mouse Autism Models,” \$475,208 total costs.
- 2009-2015 Principal Investigator, RO1 MH086415, NIH/NIMH, “Tools to Conditionally Regulate Intracellular Signaling Pathways in Vivo,” \$335,580 last year total direct costs. This was a collaborative grant with Martin Schwärzel, Freie Universität Berlin.
- 2008-2014 Principal Investigator, RO1 AA 018060, NIH/NIAAA, “CRCNS: Spatial & Temporal Aspects of cAMP/PKA Signaling Underlying Information Processing,” \$112,693 last year total direct costs. This was a collaborative grant with Avrama Blackwell, George Mason University and Manuela Zaccolo, Oxford University.
- 2009-2013 CHOP/Penn Center for Excellence for Autism Research, SAP#4100047863 (PI: Schultz, R.), Investigator, \$898,989 last year total direct costs.
- 2011-2012 Principal Investigator, S10-RR027374, “Fluidigm BioMark High-Throughput Genetic Analysis System,” \$268,479 last year direct costs.
- 2001-2012 Conte Center, The Neurobiology of Stimulus Encoding in Schizophrenia (Project IV, cAMP/PKA signaling and endophenotypes of schizophrenia). NIH/NIMH P50 MH64045, Raquel Gur, PI. Dr. Abel was the PL for Project IV. \$157,259 last year direct costs.
- 2000-2011 Principal Investigator, NIH/NIMH RO1 MH 060244, “The Molecular Basis of Long-Term Memory Storage,” \$212,500 last year direct costs. Dr. Abel was PI of this grant which focused on the molecular mechanisms of long term hippocampus-dependent memories.
- 2009-2010 University Research Foundation Award, University of Pennsylvania. “Novel Pharmacogenetic and Optogenetic Tools for Neurobiology.” The objective of this one-year grant is to develop new pharmacogenetic and optogenetic tools to study the role of cAMP signaling in hippocampal synaptic plasticity and memory. \$45,000 total costs.
- 2005-2009 Human Frontiers Science Program Research Grant. “PKA anchoring and cAMP signaling: Genetic, proteomic, computational and cell biological approaches.” Dr. Abel was the Principal Investigator of this collaborative program grant between Seth Grant (United Kingdom), Manuela Zaccolo (United Kingdom) and Avrama Blackwell (USA). \$450,000 last year total costs.
- 2003-2008 SCOR in Neurobiology of Sleep and Sleep Apnea (Project IV, The Molecular Mechanisms of Sleep/Wake Regulation). NIH/NHLBI P50 HL 060287, Allan Pack, PI. Dr. Abel was the PL for Project IV. This Project

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represented a competing renewal of Dr. Abel's RO1 grant NIH RO1 AG 018199. \$219,304 last year direct costs.

- 2003-2008 Investigator, NIH/NICHD U01 HD 044575, Richard Schultz, PI, "Impact of Egg Quality on Gene Expression and Behavior." \$228,957 last year direct costs.
- 2006-2007 University of Pennsylvania Distinguished International Scholars Program Grant to host Peter V. Nguyen, University of Alberta, Edmonton, Canada.
- 2006-2009 University of Pennsylvania Provost Interdisciplinary Seminar Fund Grant to support a seminar series in the Biological Basis of Behavior.
- 2000-2006 David and Lucile Packard Foundation Fellowship for Science and Engineering, "In Vivo Imaging and Molecular Studies of Gene Expression Following Learning," \$112,500 first year direct costs, \$562,500 total direct costs.
- 2003-2004 Co-Principal Investigator, NIH R43 AG 022779, "Sleep Research with Digital Video Technologies," Yiqing Liang, Clever Systems Inc., Principal Investigator, \$11,170, total costs
- 2002-2003 Transdisciplinary Tobacco Use Research Center (P50 CA 84718), University of Pennsylvania, "Microarray Analysis of Learning-Related Changes in Hippocampal Gene Expression after Nicotine Treatment," \$25,000 direct costs.
- 2002-2003 University Research Foundation, University of Pennsylvania, "The Roles of RGS Proteins in Learning and Memory," \$15,000 direct costs.
- 2000-2006 Co-Principal Investigator with Bruce T. Lamb, P50 AG 008012, "Project 1: Behavioral Analysis of Transgenic Models of Alzheimer's Disease," UHC/CWRU Alzheimer's Disease Research Center, Karl Herrup, Principal Investigator, \$58,351 first year direct costs, \$291,755 total direct costs to the University of Pennsylvania.
- 1999-2004 Principal Investigator, NIH RO1 AG 018199, "Sleep and Memory: A Genetic and Molecular Analysis," \$150,000 first year direct costs, \$600,000 total direct costs; administrative supplement, \$73,000, direct costs.
- 1999-2004 Co-Principal Investigator, NIH RO1 HD 037032, "Molecular Mechanisms and Developmental Consequences of ICSI," Richard Schultz, Principal Investigator, \$158,345 first year direct costs, \$842,582 total direct costs.
- 1999-2001 Young Investigator Award, Mental Retardation and Developmental Disabilities Research Center, NIH P30 HD 026979, Children's Hospital of Philadelphia, \$37,000 total direct costs.

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1998-2002	John Merck Scholars Award in the Biology of Developmental Disabilities in Children, John Merck Fund, \$60,000 first year direct costs, \$240,000 total direct costs.
1998-2001	Whitehall Foundation Research Grant, "Protein Kinase A, Long Term Memory and LTP: A Genetic Analysis," \$75,000 first year direct costs, \$225,000 total direct costs.
1998-1999	American Cancer Society Institutional Research Grant, University of Pennsylvania Cancer Center, "Transgenic Approaches to Determine the Oncogenic Potential of Galphas in the Pituitary Gland," \$10,000 direct costs.
1998-1999	University Research Foundation, University of Pennsylvania, "The Use of Temporally Regulated Transgenes to Study the Role of Protein Kinase A in Long-Term Memory Storage," \$20,000 direct costs.
1998	University of Pennsylvania Cancer Center Pilot Project Grant, "Transgenic Approaches to Determine the Oncogenic Potential of Galphas in the Pituitary Gland," \$20,000 direct costs.

Collaborators

Sourav Banerjee, National Brain Research Centre, Manesar, India: microRNA regulation of synaptic plasticity

Kim (Avrama) Blackwell, University of Iowa: Computational modeling of localized signaling pathways

Kamran Diba, University of Michigan: Impact of sleep deprivation on hippocampal function

Marcos Frank, Washington State University, The role of non-neuronal cells in the function of sleep

Karl Peter Giese, King's College, London, England: Epigenetic mechanisms of memory storage

Robbert Havekes, University of Groningen, Netherlands: Impact of sleep deprivation on memory

Matthew Howard, University of Iowa: Activity dependent gene expression in the human brain

Yong-Seok Lee, Seoul National University, South Korea: Molecular mechanisms of memory

Lisa Lyons, Florida State University: Impact of sleep deprivation on gene expression

Jacob Michaelson, University of Iowa: Computational analysis of high throughput sequencing data

Thomas Nickl-Jockschat, University of Magdeburg: Structural imaging of mouse models of autism and schizophrenia; spatial transcriptomics

Chris Petkov, University of Iowa: Activity dependent gene expression in the human brain

Stephen Safe, Texas A&M University: The role of nuclear receptors in memory consolidation

Jennifer Tudor, Saint Joseph's University: Impact of sleep deprivation on protein synthesis

Advisory Boards

2023-present	External Advisory Board, Stiles Nicholson Brain Institute, Florida Atlantic University
2023	External Advisory Board, Center for Opioid and Cocaine Addiction (P50-DA046373), Medical University of South Carolina
2022-present	National Advisory Mental Health Council, National Institute of Mental Health
2022-present	NIH BRAIN Multi-Council Working Group
2022-present	Scientific Advisory Board, EmbarkNeuro
2022-present	Scientific Advisor, Aditum Bio
2022-present	Scientific Advisor, Radius Health
2022-present	Internal Advisory Board, Molecular and Cellular Research to Advance Child Health (K12-HD02748), University of Iowa
2022-present	Claremont McKenna College Integrated Sciences Advisory Council
2021-2022	Center for Foundational Neuroscience Research and Education External Advisory Committee, West Virginia University
2020-present	Internal Advisory Board, Wellstone Muscular Dystrophy Specialized Research Center (P50-NS053672), University of Iowa
2019-2023	Advisory Committee to the Deputy Director for Intramural Research, National Institutes of Health
2019-2021	Scientific Advisory Board, Conte Center, McLean Hospital and Harvard University
2019-present	External Advisory Board, Intellectual and Developmental Disabilities Research Center, Children's Hospital of Philadelphia/Penn
2019-2023	Swarthmore College Alumni Council
2017-2021	Scientific Advisory Board, McLean Hospital

2017-2024	SPARK Community Advisory Council, Simons Foundation Autism Research Initiative
2015-present	Brain and Behavior Research Foundation, Scientific Council
2014-2018	Chair, NIMH Board of Scientific Counselors (member since 2013)
2014-2016	McMorris Autism Training Program, Executive Committee, Center for Autism Research, CHOP/Penn
2012-2016	Training Grant in Neurodevelopmental Disabilities, CHOP/Penn, Michael Robinson, PI, Steering Committee
2012-2024	New Jersey Governor's Council for Medical Research and Treatment of Autism, Scientific Advisory Committee
2010-2015	Executive Committee, International Research Training Group (DFG: IRTG 1328), RWTH Aachen University, Germany and Penn (F. Schneider and R. Gur, PIs)
2008-2014	Autism Speaks Foundation, Scientific Advisory Board
2008-2012	"Mu Opioid Receptors in Addiction" NIDA Program Project Grant (Wade Berrettini, PI), University of Pennsylvania, Board of Scientific Councilors
2008-2012	"Molecular and Cellular Basis of Cognitive Aging in Prefrontal Cortical Networks" NIA Program Project Grant (Amy Arnsten, PI), Yale University, External Advisory Board
2008-2012	Penn Autism Network Advisory Committee
2007-2008	Autism Speaks, Scientific Advisory Committee
2006-2008	Cure Autism Now and Autism Speaks Foundation, Clinical Trials Network Steering Committee
2005-2007	Cure Autism Now Foundation, Board of Directors
2004-2007	Cure Autism Now Foundation, Scientific Review Council

Review Committees

2024	External Review Committee, University of British Columbia, Djavad Mowafaghian Centre for Brain Health
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2019-2021	Co-chair, External Review Committee, Scientific Director, National Institute of Mental Health
2019	Chair, External Review Committee, Medical Neuroscience Graduate Program, Indiana University School of Medicine
2019	Eagles Autism Challenge Review Committee
2019	Simons Foundation Autism Research Initiative, Bridge to Independence Grant Review Panel
2016	External Review Committee, Department of Health Sciences and Technology, Eidgenössische Technische Hochschule Zürich
2016	External Review Committee, Neuroscience Graduate Program, University of Texas Southwestern Medical Center
2013-2020	Brain Research Foundation: Scientific Review Committee
2013, 2014, 2016	Simons Foundation Autism Research Initiative, Review Panel
2013	NIH Director's Early Independence Awards Review, ZRG1 BBBP-E
2013	Deutsche Forschungsgemeinschaft, Review Panel for TR-SfB 654, Plasticity and Sleep
2013	Autism Speaks: Weatherstone Fellowship Review Panel
2006-2010	NIH: Neurobiology of Learning and Memory Study Section, standing member
2006	NIH Special Emphasis Panel, ZRG1 IFCN-L (Learning and Memory)
2005, 2006	NIH: Neurobiology of Learning and Memory Study Section, ad hoc member
2005	NIH: IFCN-E Special Emphasis Panel member
2005, 2006	New Jersey Governor's Council on Autism, Scientific Review Panel
1999	NIH Special Emphasis Panel, IFCN-1
1998-2003	NSF Behavioral and Computational Neuroscience Advisory Panel
1998, 1999, 2002	NIH: Integrative, Functional and Cognitive Neuroscience 7 (IFCN-7), ad hoc member

Editorial Appointments

2015-present	Editorial Board Member, <i>Neurobiology of Sleep and Circadian Rhythms</i>
2015-present	Editorial Board Member, <i>Cellular Signaling</i>
2006-present	Editorial Board Member, <i>Neurobiology of Learning and Memory</i>
2012-2022	Editor in Chief, <i>Neurobiology of Learning and Memory</i>
2008-2018	Review Editor, <i>Frontiers in Neuroscience</i>
2006-2014	Associate Editor, <i>Behavioral Neuroscience</i>
2001-2005; 2014-present	Consulting Editor, <i>Behavioral Neuroscience</i>
2003-2022	Contributor, Faculty of 1000, http://www.facultyof1000.com
2002-present	Reviewing Editor, <i>Hippocampus</i>
1997-2004	Editorial Board, Mouse Mutant Database

Journal and Grant Reviews

Review about 30 papers a year for *Behavioral Brain Research*; *Behavioral Neuroscience*; *Biological Psychiatry*; *Cell*; *Cell Reports*, *Current Biology*; *eLife*; *Frontiers in Neuroscience*; *Genes, Brain and Behavior*; *Hippocampus*; *Human Molecular Genetics*; *Journal of Biological Chemistry*; *Journal of Clinical Investigation*; *Journal of Neurophysiology*; *Journal of Neuroscience*; *Journal of Neuroscience Research*; *Learning & Memory*; *Molecular Psychiatry*; *Nature*; *Nature Communications* *Nature Neuroscience*; *Neurobiology of Learning and Memory*; *Neuron*; *Neuropsychopharmacology*; *Neuroscience Letters*; *Philosophical Transactions B, PNAS*; *Psychopharmacology*; *Science*; and grants for the Science Foundation Ireland, The Wellcome Trust, National Science Foundation, Human Frontier Science Program, US-Israel Binational Science Foundation, Medical Research Council, Telethon (Italy), Autism Speaks, Deutsche Forschungsgemeinschaft (DFG), Simons Foundation Autism Research Initiative (SFARI), INSERM, CNRS, Agence Nationale de la Recherche (France), Wellcome Trust/ DBT India Alliance, Swiss National Science Foundation.

Community Outreach

2024	Congressional Neuroscience Caucus, BRAIN Initiative briefing, Moderator
2023	Miracles in Motion, Swisher Iowa
2023	University of Iowa, Highly Prestigious Awards Ceremony, Speaker
2023	Phi Beta Kappa Induction Ceremony, Speaker
2020	STEAD Talk, University of Iowa
2020	Chat from the Old Cap, University of Iowa

- 2018 Talk at Iowa City Rotary, Sleep and Memory
- 2015, 2016 Talk at Kinney Center for Autism Education and Support, Saint Joseph's University, Reward Learning and Autism
- 2004-2016 Kids Judge Neuroscience Fair, Faculty Organizer
- 2011-2016 Neuroscience Advisory Board, The Franklin Institute and Penn,
 Neuroscience in Your World: A Partnership for Neuroscience Education
 Across the K-12 Spectrum
- 2012 Talk at White Horse Village, Mechanisms of Memory Storage
- 2010 Talk at The Quadrangle, Sleep and Memory
- 2008 Talk at Young Women's Leadership School at Rhodes, Philadelphia
- 2005-2009 CBS 3-TV Autism Phone Bank

Special Courses and Summer Programs

- 2015 Speaker, Summer Undergraduate Internship Program, University of Pennsylvania
- 2014 Speaker, Summer School, talk entitled "Memory and consciousness:
 Plasticity, brain rhythms and sleep," Tübingen, Germany
- 2007-2009, 2012 Instructor, Summer Course in Computational Neuroscience, University of Pennsylvania
- 2001, 2009 Instructor, Undergraduate Summer Workshop in Cognitive Science and Cognitive Neuroscience, University of Pennsylvania
- 1995 Linkage Analysis Course, College of Physicians and Surgeons, Columbia University
- 1994 Short Course in Medical and Experimental Mammalian Genetics, Jackson Laboratory, Bar Harbor, Maine
- 1993 Molecular Embryology of the Mouse, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York
- 1985 Resident research student, laboratory of Dr. S. Brenner, Dupont Experimental Station, Wilmington, Delaware

Professional Society Memberships

2019-present	Member, National Academy of Medicine
2013-present	Association for Psychological Science (Fellow, 2018-present)
2007-present	American Psychological Association (Fellow, 2020-present)
2001-present	American College of Neuropsychopharmacology (Associate Member, 2001-2005; Member, 2006-2011; Fellow, 2012-present)
2000-present	Pavlovian Society
1999-present	Sleep Research Society
1995-present	Society for Neuroscience
1988-present	American Association for the Advancement of Science (Fellow, 2015-present)
1985-present	Sigma Xi
1985-present	Phi Beta Kappa

Professional Society Service

2024-present	Vice Chair, Section 3 (Neurobiology, Physiological and Pharmacological Sciences), National Academy of Medicine
2022-2023	Program Committee, Annual BRAIN Initiative meeting
2022-present	Society for Neuroscience, Program Committee
2018	American College of Neuropsychopharmacology, Nominating Committee
2017-2020	Molecular and Cellular Cognition Society, President
2016-2018	Chair Elect, Chair and Past Chair, Section on Neuroscience, American Association for the Advancement of Science
2016-present	Steering Committee, Gordon Research Conference on Sleep
2015-2016	Molecular and Cellular Cognition Society, Treasurer
2015-2018	American College of Neuropsychopharmacology, Membership Committee
2014-2016	Chair, Sleep Research Society Scientific Offerings Committee

2014-2015	Sleep Research Society Research Committee
2014	Sleep Research Society Strategic Planning Retreat
2012-present	Molecular and Cellular Cognition Society, Council
2011-2013	American College of Neuropsychopharmacology, Program Committee
2008-2012	American College of Neuropsychopharmacology, Public Information Committee
2009	President, Phi Beta Kappa Delta Chapter, University of Pennsylvania, (Selection Committee 2006-2009)

Musical Experience

2023-present	Trinity Episcopal Church Choir, Iowa City, Iowa
2020-present	Saxophone Student of Ryan Smith
2017-2020	Clarinet Student of Jorge Montilla
2017-2020	University of Iowa Hospitals and Clinics, Faculty and Staff Orchestra
2016	Diocesan Consecration Choir, Episcopal Diocese of Pennsylvania
2014-2016	Penn Wind Ensemble
2012-2016	Clarinet Student of Allison Herz
1998-2016	Trinity Episcopal Church Choir, Swarthmore, Pennsylvania
2011	Aachener Bachverein, Aachen, Germany
1993-1997	New York Choral Society
1993-1997	First Presbyterian Church Choir, New York City
1987-1993	Harvard University Choir and Appleton Chapel Choir
1985-1987	Christ's College Chapel Choir, Christ's College, Cambridge, United Kingdom

Recordings

- 1992 *Alleluia! Sacred Choral Music in New England.* Harvard University Choir
- 1993 *O Great Joy: Baroque Music for Christmas.* Harvard University Choir
- 1995 “*The Testament of Freedom*” and “*Frostiana*. ” Randall Thompson.
Manhattan Chamber Orchestra and New York Choral Society
- 1997 *Ain’t Got Time to Die: Songs of the American Spirit.* Choir and Soloists of
the First Presbyterian Church in the City of New York

Publications (* indicates peer-reviewed publication)

As an undergraduate

- 1.* Suri, S. K., Spitzer, J. J., Wood, R. H., **Abel, E. G.** and Thompson, P. T. (1985). Interactions in aqueous nonelectrolyte systems: Gibbs Energy of interaction of the ether group with the hydroxyl group and the amine group. *Journal of Solution Chemistry* **14**: 781-794.
- 2.* Florant, G., Green, R., **Abel, T.**, Hartzell, S., Tamarkin, L. and Brainard, G. (1989). Melatonin profile in marmots: The influence of catecholamine, hibernation, and light. *Journal of Pineal Research* **7**: 105-113.

As a graduate student

3. **Abel, T.** and Maniatis, T. (1989). The action of leucine zippers. *Nature* **341**: 24-25.
- 4.* **Abel, T.**, Bhatt, R. and Maniatis, T. (1992). A *Drosophila* CREB/ATF transcriptional activator binds to both fat body- and liver-specific regulatory elements. *Genes & Development* **6**: 466-480.
- 5.* **Abel, T.**, Michelson, A. M. and Maniatis, T. (1993). A *Drosophila* GATA family member that binds to *Adh* regulatory sequences is expressed in the developing fat body. *Development* **119**: 623-633.
- 6.* Winick, J., **Abel, T.**, Leonard, M. W., Michelson, A. M., Chardon-Loriaux, I., Holmgren, R. A., Maniatis, T. and Engel, J. D. (1993). A GATA family transcription factor is expressed along the embryonic dorsoventral axis in *Drosophila melanogaster*. *Development* **119**: 1055-1065.
7. **Abel, T.** and Maniatis, T. (1994). Mechanisms of eukaryotic gene regulation. In Stamatoyannopoulos, G., Nienhuis, A. W., Majerus, P. W. and Varmus, H. (eds.), *The Molecular Basis of Blood Diseases*. W. B. Saunders, Philadelphia, pp. 33-70.

As a postdoctoral fellow

- 8.* Nguyen, P. V., **Abel, T.** and Kandel, E. R. (1994). Requirement for a critical period of transcription for induction of a late phase of LTP. *Science* **265**: 1104-1107.
- 9.* Mayford, M., **Abel, T.** and Kandel, E. R. (1995). Transgenic approaches to cognition. *Current Opinion in Neurobiology* **5**: 141-148.
10. **Abel, T.**, Alberini, C., Ghirardi, M., Huang, Y.-Y., Nguyen, P. and Kandel, E. R. (1995). Steps toward a molecular definition of memory consolidation. In Schachter, D. (ed.), *Memory Distortion*. Harvard University Press, Cambridge, Mass., pp. 298-325.
11. Nguyen, P. V., Alberini, C. M., Huang, Y.-Y., Ghirardi, M., **Abel, T.** and Kandel, E. R. (1995). Genes, synapses and long-term memory. In Ottoson, D. (ed.), *Challenges and Perspectives in Neuroscience*. Elsevier, Oxford, U.K., pp. 213-237.
12. Kandel, E. R. and **Abel, T.** (1995). Neuropeptides, adenylyl cyclase and memory storage. *Science* **268**: 825-826.
- 13.* Patterson, S. L., **Abel, T.**, Deuel, T. A. S., Martin, K. C., Rose, J. C. and Kandel, E. R. (1996). Recombinant BDNF rescues deficits in basal synaptic transmission and hippocampal LTP in BDNF knockout mice. *Neuron* **16**: 1137-1145.
14. Huang, Y.-Y., Nguyen, P. V., **Abel, T.** and Kandel, E. R. (1996). Long-lasting forms of synaptic potentiation in the mammalian hippocampus. *Learning & Memory* **3**: 74-85.
- 15.* **Abel, T.**, Nguyen, P. V., Barad, M., Deuel, T. A. S., Kandel, E. R., and Bourtchouladze, R. (1997). Genetic demonstration of a role for PKA in the late phase of LTP and in hippocampus-based long-term memory. *Cell* **88**: 615-626.
16. Silva, A. J., Simpson, E. M., Takahashi, J. S., Lipp, H. P., Nakanishi, N., Wehner, J. M., Giese, K. P., Tully, T., **Abel, T.**, Chapman, P. F., Fox, K., Grant, S., Itohara, S., Lathe, R., Mayford, M., McNamara, J. O., Morris, R. J., Picciotto, M., Roder, J., Shin, H. S., Slesinger, P. A., Storm, D. R., Stryker, M. P., Wang, Y. and Wolfer, D. P. (1997). Mutant mice and neuroscience: recommendations concerning genetic background. *Neuron* **19**: 755-759.

As a principal investigator at the University of Pennsylvania

- 17.* **Abel, T.**, Martin, K. C., Bartsch, D. and Kandel, E. R. (1998). Memory suppressor genes: Inhibitory constraints on the storage of long-term memory. *Science* **279**: 338-341.
18. **Abel, T.** and Kandel, E. R. (1998). Positive and negative regulatory mechanisms that mediate long-term memory storage. *Brain Research Reviews* **26**: 360-378.
- 19.* Bourtchouladze, R., **Abel, T.**, Berman, N., Gordon, R., Lapidus, K. and Kandel, E. R. (1998). Different training procedures for contextual memory in mice can recruit either one or two critical periods for memory consolidation that require protein synthesis and PKA. *Learning & Memory* **5**: 365-374. PMCID: PMC311273.

20. Cardin, J. and **Abel, T.** (1999). Memory suppressor genes: Enhancing the relationship between synaptic plasticity and memory storage. *Journal of Neuroscience Research* **58**: 10-23.
21. Bailey, C. H., **Abel, T.** and Kandel, E. R. (1999). Meccanismi molecolari dei processi di apprendimento e di memorizzazione. In *Frontiere della Vita, Enciclopedia Italiana*.
22. Lattal, K. M. and **Abel, T.** (2000). Cellular and molecular mechanisms of learning and memory. In Reith, M.E.A. (ed.), *Cerebral Signal Transduction: From First to Fourth Messengers*. Humana Press, Totowa, New Jersey, pp. 27-71.
- 23.* Nguyen, P. V., **Abel, T.**, Kandel, E. R. and Bourtchouladze, R. (2000). Strain-dependent differences in LTP and hippocampus-dependent memory in inbred mice. *Learning & Memory* **7**: 170-179. PMCID: PMC311331.
- 24.* Rotenberg, A., **Abel, T.**, Hawkins, R. D., Kandel, E. R. and Muller, R. U. (2000). Parallel instabilities of LTP, place cells and learning caused by decreased protein kinase A activity. *Journal of Neuroscience* **20**: 8096-8102.
- 25.* Woo, N. H., Duffy, S. N., **Abel, T.** and Nguyen, P. V. (2000). Genetic and pharmacological demonstration of differential recruitment of cAMP-dependent protein kinases by synaptic activity. *Journal of Neurophysiology* **84**: 2739-2745.
- 26.* Duffy, S. N., Craddock, K. J., **Abel, T.** and Nguyen, P. V. (2001). Environmental enrichment modifies the PKA-dependence of hippocampal LTP and improves hippocampus-dependent memory. *Learning & Memory* **8**: 26-34. PMCID: PMC311356.
27. **Abel, T.** (2001). Advances in Synaptic Plasticity (Book Review). *Quarterly Review of Biology* **76**: 114-115.
- 28.* Graves, L., Pack, A. and **Abel, T.** (2001). Sleep and memory: A molecular perspective. *Trends in Neurosciences* **24**: 237-243.
- 29.* **Abel, T.** and Lattal, K. M. (2001). Molecular mechanisms of memory acquisition, consolidation and retrieval. *Current Opinion in Neurobiology* **11**: 180-187.
- 30.* Wand, G., Levine, M., Zweifel, L., Schwindinger, W. and **Abel, T.** (2001). The cAMP-protein kinase A signal transduction pathway modulates ethanol consumption and sedative effects of ethanol. *Journal of Neuroscience* **21**: 5297-5303.
- 31.* Lattal, K. M. and **Abel, T.** (2001). Different requirements for protein synthesis in acquisition and extinction of spatial preferences and context-evoked fear. *Journal of Neuroscience* **21**: 5773-5780.
- 32.* Nie, T. and **Abel, T.** (2001). Fear conditioning in inbred mouse strains: An analysis of the time course of memory. *Behavioral Neuroscience* **115**: 951-956.
- 33.* Lattal, K. M. and **Abel, T.** (2001). An immediate shock freezing deficit with discrete cues: A possible role for US processing mechanisms. *Journal of Experimental Psychology: Animal Behavior Processes* **27**: 394-406.

- 34.* Bucan, M. and **Abel, T.** (2002). The mouse: Genetics meets behavior. *Nature Reviews Genetics* **3**:114-123.
- 35.* Graves, L., Dalvi, A., Lucki, I., Blendy, J. A. and **Abel, T.** (2002). Behavioral analysis of the CREB alpha Delta mutation on a B6/129 F1 hybrid background. *Hippocampus* **12**: 18-26.
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- 43.* Graves, L., Hellman, K., Veasey, S., Blendy, J. A., Pack, A. and **Abel, T.** (2003). Genetic evidence for a role of CREB in sustained cortical arousal. *Journal of Neurophysiology* **90**: 1152-1159.
- 44.* Kaplan, M. and **Abel, T.** (2003). Genetic approaches to the study of synaptic plasticity and memory storage. *CNS Spectrums* **8**: 597-620.
- 45.* Chennathukuzhi, V., Stein, J. M., **Abel, T.**, Donlon, S., Yang, S., Miller, J. P., Allman, D. M., Simmons, R. A. and Hecht, N. B. (2003). Mice deficient for Testis-Brain RNA-Binding Protein exhibit a coordinate loss of TRAX, reduced fertility, altered gene expression in the brain and behavioral changes. *Molecular and Cellular Biology* **23**: 6419-6434. PMCID: PMC193699.
- 46.* Lattal, K. M., Mullen, M. T. and **Abel, T.** (2003). Extinction, renewal and spontaneous recovery of a spatial preference in the water maze. *Behavioral Neuroscience* **117**: 1017-1028.

- 47.* Connolly, P. M., Maxwell, C., Kanes, S. J., **Abel, T.**, Liang, Y., Tokarczyk, J., Bilker, W. B., Turetsky, B. I., Gur, R. E., and Siegel, S. J. (2003). Inhibition of auditory evoked potentials and pre-pulse inhibition of startle in DBA/2J and DBA/2Hsd inbred mouse substrains. *Brain Research* **992**: 85-95.
- 48.* Ecker, D., Stein, P., Xu, Z., Williams, C. J., Kopf, G. S., Bilker, W. B., **Abel, T.** and Schultz, R. M. (2004). Long-term effects of culture of preimplantation mouse embryos on behavior. *Proceedings of the National Academy of Sciences* **101**: 1595-1600. PMCID: PMC341785.
- 49.* Gould, T. J. #, Bizily, S. P. #, Tokarczyk, J., Kelly, M. P., Siegel, S. J., Kanes, S. J. and **Abel, T.** (2004). Sensorimotor gating deficits in transgenic mice expressing a constitutively active form of G_{alpha}. *Neuropsychopharmacology* **29**: 494-501. #Co-first authors PMCID: PMC3348581.
- 50.* Maxwell, C. R., Liang, Y., Weightman, B. D., Kanes, S. J., **Abel, T.**, Gur, R. E., Turetsky, B. I., Bilker, W. B., Lenox, R. H. and Siegel, S. J. (2004). Effects of chronic olanzapine and haloperidol differ on the mouse N1 auditory evoked potential. *Neuropsychopharmacology* **29**: 739-746.
- 51.* Lattal, K. M. and **Abel, T.** (2004). Behavioral impairments caused by injections of the protein synthesis inhibitor anisomycin after contextual retrieval reverse with time. *Proceedings of the National Academy of Sciences* **101**: 4667-4672. PMCID: PMC384804.
- 52.* Lattal, K. M., Honavar, S. and **Abel, T.** (2004). Effects of post-session injections of anisomycin on the extinction of a spatial preference and on acquisition of a spatial reversal preference. *Behavioral Brain Research* **153**: 327-339.
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- 56.* Wood, M. A., Kaplan, M. P., Park, A., Blanchard, E. J., Oliveira, A. M. M., Lombardi, T. L. and **Abel, T.** (2005). Transgenic mice expressing a truncated form of CREB-binding protein (CBP) exhibit deficits in hippocampal synaptic plasticity and memory storage. *Learning & Memory* **12**: 111-119. PMCID: PMC1074328.
- 57.* Wood, M. A., Kaplan, M. P., Brensinger, C. M., Guo, W. and **Abel, T.** (2005). Ubiquitin C-terminal esterase 3 (*Uchl3*) is involved in working memory. *Hippocampus* **15**: 610-621.
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- overexpression on hippocampus-dependent learning and hippocampal synaptic plasticity in MARCKS transgenic mice. *Hippocampus* **15**: 675-683.
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- 60.* Keeley, M. B., Busch, J., Singh, R. and **Abel, T.** (2005). Novel tTA hybrid transcription factors report kinase activity and are inhibited by doxycycline. *Biotechniques* **39**: 529-536.
- 61.* Sommovilla, J., Bilker, W. B., **Abel, T.** and Schultz, R. M. (2005). Embryo culture does not affect longevity of offspring in mice. *Reproduction* **130**: 599-601.
- 62.* Lee, E. B., Leng, L. Z., Zhang, B., Kwong, L., Doms, R. W., Trojanowski, J. Q., **Abel, T.** and Lee, V. M.-Y. (2006). Targeting A beta oligomers by passive immunization with a conformation selective monoclonal antibody improves learning and memory in APP transgenic mice. *Journal of Biological Chemistry* **281**: 4292-4299.
- 63.* Stein, J. M., Bergman, W., Fang, Y., Davison, L., Brensinger, C., Robinson, M. B., Hecht, N. B. and **Abel, T.** (2006). Behavioral and neurochemical alterations in mice lacking the RNA-binding protein translin. *Journal of Neuroscience* **26**: 2184-2196.
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- 250.* Giri, B., Kaya, U., Maboudi, K., **Abel, T.** and Diba, K. (2024). Sleep loss diminishes hippocampal reactivation and replay. *Nature* **630**: 935. doi: 10.1038/s41586-024-07538-2 PMCID: PMC9949250.
- 251.* Mukherjee, U. and **Abel, T.** (2024). Molecular intersection of activity-dependent gene expression and behavior: The transcriptomic signature of long-term memory. In: Saha, R. N. and Dudek, S. M. (eds), *Transcriptional regulation by neuronal activity: To the nucleus and back*, 2nd Edition. pp. 433-468. Switzerland: Springer Nature. ISBN: 978-3-031-68549-1.
- 252.* Tadinada, S.M., Walsh, E.N., Mukherjee, U. and **Abel, T.** (2024) Differential effects of PDE4A5 on cAMP-dependent forms of long-term potentiation. *J. Physiol.*, in press. doi: 10.1113/JP286801 PMCID: In Process.

Submitted

1. Pagano, R., Salamian, A., Skonieczna, E., Wojtas, B., Gielniewski, B., Harda Z., Cały, A., Havekes, R., **Abel, T.** and Radwanska, K. (2023). Molecular fingerprints in the hippocampus of alcohol seeking during withdrawal. *Res Sq.* 2023 Sep 28:rs.3.rs-3337670. doi: 10.21203/rs.3.rs-3337670/v1. PMCID: PMC10571638

2. Gundersen, B. B., O'Brien, W. T., Schaffler, M. D., Schultz, M. N., Tsukahara, T., Martin Lorenzo, S., Nalesto, V. Luo Clayton, A. H., **Abel, T.**, Crawley, J.N., Datta, S. R. and Y Herault. (2023). Towards preclinical validation of Arbaclofen (R-baclofen) treatment for 16p11.2 deletion syndrome. *bioRxiv*. doi: <https://doi.org/10.1101/2023.05.01.538987>. PMCID: PMC10515778.
3. Chatterjee, S., Vanrobaeys, Y., Gleason, A. I., Park, B. J., Heiney, S. A., Rhone, A. E., Nourski, K. V., Langmack, L., Budhaditya, B., Mukherjee, U., Kovach, C. K., Kocsis, Z., Kikuchi, Y., Ayala, Y. A., Petkov, C.I., Hefti, M. M., Bahl, E., Michaelson, J. J., Kawasaki, H., Oya, H., Howard, M. A. 3rd, Nickl-Jockschat, T., Lin, L. C. and **Abel, T.** (2024). The gene expression signature of electrical stimulation in the human brain. *bioRxiv*. doi: 10.1101/2023.09.21.558812. PMCID: PMC10542502
4. Kim, J., Vanrobaeys, Y., Davatolhagh F.M., Kelvington, B., Chatterjee, S., Ferri, S.L. Angelakos, C., Mills, A.A., Fuccilo, M.V., Nickl-Jockschat, T., and **Abel, T.** (2024) A chromosome region linked to neurodevelopmental disorders acts in distinct neuronal circuits in males and females to control locomotor behavior. *bioRxiv*. <https://doi.org/10.1101/2024.05.17.594746>. PMCID: PMC11216371
5. Nickl-Jockschat, T., Baek, S., Peterson, Z. J., Charton, J., Pavic, M., Nastruz, M., Rooke, E., Sharkey, R. J., Eickhoff, S. B., Hawrylycz, M. and **Abel, T.** (2024). The transcriptomic architecture of the human cerebral cortex. *bioRxiv*. doi: 10.1101/2024.06.20.599687. PMCID: In Process.

Books

1. Meerlo, P., Benca, R. and **Abel, T.** (Eds.) (2015). *Sleep, Neuronal Plasticity and Brain Function*. Springer.
2. **Abel, T.** and Nickl-Jockschat, T. (Eds.) (2016). *The Neurobiology of Schizophrenia*. Elsevier.
3. Sajikumar, S. and **Abel, T.** (Eds.) (2024). *Synaptic Tagging and Capture: From Synapses to Behavior* (Second Edition). Springer.
4. Lee, Y.-S. and **Abel, T.** (Eds.) (2025). *Learning and Memory: A Comprehensive Reference, Volume 1: Neurobiology of Learning and Memory* (Third Edition), Elsevier, in preparation.

Citation Statistics (Google Scholar, November 2024)

Total citations: 30,691

h-index: 88

i10-index: 212

<https://scholar.google.com/citations?user=2XITxRcAAAAJ&hl=en>

<https://www.ncbi.nlm.nih.gov/myncbi/browse/collection/40828237>

ORCiD: 0000-0003-2423-4592

Selected Press Coverage of Research

ABCNEWS.com, 14 August 2003: “Sleep Affects Some Memories But Not All”:
<http://abcnews.go.com/Technology/story?id=97553&page=1>

ScienceNOW, 21 October 2009: “Why Sleepyheads Forget”:
<http://sciencenow.sciencemag.org/cgi/content/full/2009/1021/1>

Digital Journal, 19 May 2011: “Study links memory impairment with sleep deprivation”:
<http://digitaljournal.com/article/306909>

Penn 60 Second Lecture, 22 September 2012: It’s Not a Dream, It’s a Memory: The Role of Sleep in Memory Storage: www.youtube.com/watch?v=XiY3mRh5dU4

NPR’s Science Friday, 5 October 2012: “What your genes can tell you about your memory”:
<http://sciencefriday.com/guests/ted-abel.html#page/full-width-list/1>

Daily Mail, 16 October 2012: “Yet ANOTHER reason why sleep is so vital - missing even two hours a night can erase memories for ever”: <http://www.dailymail.co.uk/health/article-2218625/Missing-just-hours-sleep-erase-memories-ever.html>

Penn-led Team Prevents Memory Problems Caused by Sleep Deprivation, 18 November 2014:
<http://www.upenn.edu/pennnews/news/penn-led-team-prevents-memory-problems-caused-sleep-deprivation>

Learning difficulties mark male mice with autism mutation, SFARI, 19 November 2014:
<http://sfari.org/news-and-opinion/conference-news/2014/society-for-neuroscience-2014/learning-difficulties-mark-male-mice-with-autism-mutation>

60-Second Lecture: When Nurture Meets Nature: The New Field of Behavioral Epigenetics, 16 May 2015: <https://vimeo.com/129593486>

The effect of sleep on memory, Radio New Zealand 28 August 2015:
<http://www.radionz.co.nz/national/programmes/ninetonoon/audio/201768381/the-effect-of-sleep-on-memory>

Penn Team Restores Memory Formation Following Sleep Deprivation in Mice, 26 April 2016:
<https://news.upenn.edu/news/penn-team-restores-memory-formation-following-sleep-deprivation-mice>

In mTORC and Theta Rhythms, New Clues to How Sleep Locks Down Memories, ALZFORUM, 20 May 2016-05-29: <http://www.alzforum.org/news/research-news/mtorc-and-theta-rhythms-new-clues-how-sleep-locks-down-memories#comment-20761>

Mutation tied to autism deprives male mice of their sleep, Spectrum 23 November 2016:
<https://spectrumnews.org/news/mutation-tied-autism-deprives-male-mice-sleep/>

Metabolic enzyme drives memory formation, 20 June 2017:

<https://medcom.uiowa.edu/theloop/news/metabolic-enzyme-drives-memory-formation>

Signaling pathway may be key to why autism is more common in boys, 17 October 2017:

<https://medcom.uiowa.edu/theloop/news/signaling-pathway-may-be-key-to-why-autism-is-more-common-in-boys>; <http://www.dailymail.co.uk/health/article-4988208/May-explain-boys-likely-autism.html>; <https://spectrumnews.org/news/learning-difficulties-mark-male-mice-with-autism-mutation/>

Sci on the Fly: <https://www.aaaspolicyfellowships.org/blog/podcast-aaas-2018-live-science-memory-and-exceptional-abilities>

How Iowa is advancing our understanding of autism: <https://btn.com/2020/04/02/iowa-autism-research/>

Chat from the Old Cap, a conversation with Dean Jean Robillard:

https://www.youtube.com/watch?v=opHzqRu4_tE

New UI center for Intellectual and Developmental Disabilities:

<https://www.kcrg.com/2021/07/27/new-ui-autism-research-center-launches-response-growing-diagnosis-concerns/>

University of Iowa Presidential Lecture, “It’s Not a Dream, It’s a Memory”:

<https://youtu.be/ouYWO0HgaO4>

River to River, Iowa Public Radio:

<https://www.iowapublicradio.org/podcast/river-to-river/2021-11-17/how-sleep-helps-us-process-and-consolidate-memories>

Rounding@Iowa

<https://uiowace.libsyn.com/49-neuroscience-informing-healthcare-education-support-services-and-public-policy-for-those-with-autism>

Dementia Journal Club (5 January 2023)

<https://www.youtube.com/watch?v=H00goot8SzW>

Brain Ponderings Podcast (6 January 2023)

https://www.youtube.com/watch?v=SY_oLNdsAs4

Sleep deprivation disrupts memory: here’s why (12 June 2024)

<https://www.nature.com/articles/d41586-024-01732-y>

Invited Talks

2024

Association of University Centers on Disability, Plenary Panel

Korean Society for Brain and Neural Sciences Annual Meeting, Keynote Speaker, Gyeongju, South Korea

Groningen Evolutional Life Sciences Institute, University of Groningen, Netherlands

Harry A. Waisman Memorial Lecture, University of Wisconsin, Madison
Magdeburg University, Germany
Newcastle University, England
Seoul National University, Department of Physiology
University of Illinois at Chicago, Psychiatry Department Annual Retreat, Keynote Speaker

2023

80th Birthday Symposium for Tom Maniatis, Columbia University
American Psychological Association, Leadership Webinar Series
Cincy Neuroscience Retreat, Keynote Speaker
Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde, Berlin,
Germany
Marcus Autism Center, Children's Healthcare of Atlanta, Emory University
Penn State University, Huck Institute of the Life Sciences
Stark Neurosciences Institute, Indiana University School of Medicine
University of California, Davis, Joint Seminars in Molecular Biology

2022

6th International Anatomical Sciences and Cell Biology Conference, Singapore
EMBO Workshop, Molecular and Physiological Basis of Behavioral/Cognitive Defects in
Neurodevelopmental Disorders, Bangalore, India, Co-Organizer, Plenary Speaker
Molecular and Cellular Cognition Society Asia, Tokyo, Japan
National Institute of Mental Health and Neurosciences, Bengaluru, India
National Institute on Aging Workshop: Can Autism Spectrum Disorders Tell Us Anything
About Alzheimer's Disease?
Neuro2022, Okinawa, Japan
Northwestern University, Center for Autism and Neurodevelopment
Purdue University, Department of Medicinal Chemistry and Molecular Pharmacology
SFARI Annual Investigators Meeting, New York
The Next Generation of BRAIN Initiative Leaders: Making the Transition
University of California, Irvine, Department of Neurobiology and Behavior

2021

Cardiff University, School of Biological Sciences
Case Western Reserve University, Department of Neurosciences
Society for Neuroscience, Annual Meeting
Washington State University, Department of Translational Medicine & Physiology

2020

University of Massachusetts Medical Center, Joel Richter Lab Presentation
Vanderbilt University, Vanderbilt Brain Institute

2019

Asian Molecular and Cellular Cognition Society, Seoul, South Korea
Federation of Asian and Oceanian Physiological Societies Congress, Kobe, Japan
International Brain Research Organization, Session Chair, Daegu, South Korea
SFARI Annual Investigators Meeting, New York

2018

American Association for the Advancement of Science Annual Meeting, Session Chair,
Austin, Texas
Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde, Berlin,
Germany
European Molecular and Cellular Cognition Society Annual Meeting, Berlin, Germany
EMBO/Wellcome-Trust DBT India Alliance Symposium “From synapses to memory: RNA
based regulatory mechanisms,” National Brain Research Center, Manesar, India, Co-
Organizer
Gordon Research Conference on Sleep, Galveston, TX, Steering Committee
Molecular and Cellular Cognition Society Europe, Berlin, Germany
Nencki Institute for Experimental Biology, Warsaw, Poland
Pennsylvania State University, Department of Biobehavioral Health
Rutgers University, Brain Health Institute
Stowers Institute, Kansas City
University of California San Diego, Temporal Dynamics of Learning Center
University of Texas Southwestern Medical Center, Department of Neuroscience

2017

Associated Professional Sleep Societies, Boston, MA, Lunchtime Debate
Associated Professional Sleep Societies, Boston, MA, Session Chair
Brain Research Foundation, Neuroscience Day, Chicago, IL
Florida Atlantic University, Brain Institute
Indian Society for Sleep Research, Goa, India
Molecular and Cellular Cognition Society Asia, Singapore
Northwestern University, Neurobiology of Information Storage Training Program
Simons Foundation Autism Research Initiative, Spring Investigators Meeting
Tokyo University of Agriculture, Japan
University of California, Irvine, Conte Center
University of Iowa, Department of Biology
University of Iowa, Department of Neurology, Grand Rounds
University of Massachusetts Medical School, Department of Neurobiology
World Congress of Psychiatry, Berlin, Germany

2016

American Society for Neurochemistry, Annual Meeting, Denver, CO, Plenary Session
Speaker
Associated Professional Sleep Societies, Denver, CO, Session Chair
Florida State University, Rushton Symposium Speaker
Gordon Research Conference on Sleep, Galveston, TX, Session Chair
Indian Academy of Neuroscience Annual Meeting, Plenary Lecture, Manesar, India
Indian Institute of Technology, Kharagpur, India
International Meeting on Anchored cAMP Signaling Pathways, Zermatt, Switzerland
Jawaharlal Nehru University, Delhi, India
McLean Hospital, Harvard University
National Center for Brain Research, Manesar, India
MIND Institute, University of California, Davis, Distinguished Lecture Series
Oregon Health & Science University, Department of Behavioral Neuroscience
Simons Center for the Social Brain, MIT

University of Texas Southwestern Medical Center, Department of Psychiatry

2015

- Asian Chromatin Meeting, Bangalore, India; Keynote Lecture
Bryn Mawr College, Department of Biology Seminar Series
Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde, Berlin,
Germany, Session Chair
Donald O. Hebb Memorial Lecture, Dalhousie University, Halifax, Nova Scotia, Canada
Gordon Research Conference on Amygdala in Health & Disease, Stonehill College, Easton,
MA, Speaker
International Society for Neurochemistry Meeting, Cairns, Australia
Janelia Conference on Behavioral Epigenetics, Ashburn, VA
King's College London, Department of Basic and Clinical Neuroscience
National University of Singapore, Department of Physiology
Providence Sleep Research Interest Group (PSRIG) seminar series, Brown University,
Providence, RI
Shriners Hospitals Pediatric Research Center, Temple University, Philadelphia, PA
Society for Neuroscience Annual Meeting, Publishing Panel, Chicago, IL
University of Iowa, Department of Psychology
University of Otago, Dunedin, New Zealand
University of Wisconsin, Milwaukee, Neuroscience Series
Winter Conference on Neural Plasticity, Barbados
Winterschool, RWTH, Aachen, Germany; Keynote Lecture

2014

- Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde, Berlin,
Germany, Session Chair
European MCCS meeting, Milan, Italy
FENS Workshop, Milan, Italy
Institut du Fer à Moulin, Paris, France
Gordon Research Conference on Sleep, Galveston, TX, Session Chair
Simons Foundation, 16p11.2 meeting, New York, NY
Uniformed Services University of the Health Sciences, Bethesda, MD, Neuroscience Seminar
Series
University of Toronto, Canada, Neuroscience Seminar Series
West Virginia University, Morgantown, West Virginia, Neuroscience Seminar Series

2013

- American College of Neuropsychopharmacology Annual Meeting, Hollywood, Florida, Session
Chair
Association for Psychological Science (APS), Presidential Symposium, Washington, DC
Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde, Berlin,
Germany, Session Chair
Drexel University School of Medicine, Department of Pharmacology
Forschungszentrum Jülich, Germany
Zentrum für Molekulare Neurobiologie, Hamburg, Germany
International Society for Neurochemistry Meeting, Cancun, Mexico
International Meeting on Anchored cAMP Signaling Pathways (Denver)
RWTH Seminar and Workshop, Aachen, Germany

Society for Neuroscience Annual Meeting, San Diego, Nanosymposium Chair
Universität klinikum Aachen, Klinik für Psychiatrie, Psychotherapie und Psychosomatik,
Aachen, Germany
Johns Hopkins University, Department of Psychiatry
University of Southern California, Zilkha Neurogenetic Institute

2012

American College of Neuropsychopharmacology Annual Meeting, Hollywood, Florida
Associated Professional Sleep Societies, Boston
Colorado State University, Molecular, Cellular and Integrative Neurosciences Program
Defense Science Research Council, What is Information in the Brain Workshop
Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde, Berlin,
Germany, Session Chair
Epigenetics: Opportunities for Sleep Research, University of Pennsylvania, Co-Organizer
Molecular and Cellular Cognition Society, New Orleans
Max Planck Institute for Neurobiology, Martinsried, Germany
University of Pennsylvania, Department of Psychiatry, Grand Rounds
New York University, Neuroscience Institute
University of Arizona, Neuroscience Program

2011

American College of Neuropsychopharmacology Annual Meeting, Waikaloa, Hawaii, Session
Chair
Deutsche Gesellschaft für Psychiatrie, Psychotherapie und Nervenheilkunde, Berlin,
Germany (Three talks, Co-Chair of two Symposia)
Foundation IPSEN, Epigenetics, Brain and Behavior Meeting, Paris, France
Gladstone Institute of Neurological Disease and UCSF Neuroscience Program
IBRO World Congress of Neuroscience, Symposium Speaker, Florence, Italy
Institut du Fer à Moulin, Paris, France
Interdisziplinäres Zentrum für Neurowissenschaften, Heidelberg University, Heidelberg,
Germany
Molecular and Cellular Cognition Society, Session Chair
University of Alabama, Birmingham, Bevill Conference on Cognition and Cognitive
Disorders
Universität klinikum Aachen, Klinik für Psychiatrie, Psychotherapie und Psychosomatik,
Aachen, Germany
Université de Strasbourg, CNRS, IFR 37 des Neurosciences, Strasbourg, France
Winter Conference on Neural Plasticity, Moreea, French Polynesia
Young Researchers Transatlantic Academy, Philadelphia
Zoologisches Institute, Technische Universität Braunschweig, Germany

2010

European Sleep Meeting, Lisbon, Portugal
Forschungszentrum Jülich, Germany
Universiteit Maastricht, Netherlands
New York Academy of Sciences Symposium “Phosphodiesterase Targets for Cognitive
Dysfunction and Schizophrenia”
New York Academy of Sciences Behavioral Epigenetics Meeting
RWTH Seminar and Workshop, Aachen, Germany

Swarthmore College, Department of Biology
University of Delaware, Department of Psychology

2009

American College of Neuropsychopharmacology Annual Meeting, Hollywood, Florida
Center for Molecular Medicine and Therapeutics, University of British Columbia, Vancouver
Canada
Center for the Neurobiology of Learning and Memory, University of California, Irvine
Early Life Programming and Neurodevelopmental Disorders, Philadelphia, Pennsylvania
International Congress on Sleep Medicine, Sao Paulo, Brazil
Krasnow Institute for Advanced Study, George Mason University, Fairfax, Virginia
Leibniz Institute for Neurobiology, Magdeburg, Germany
Mosbach Colloquium, German Society for Biochemistry and Molecular Biology
Neuroscience Seminar Series, Tufts University, Boston, Massachusetts
Stanley Center Seminar Series, Broad Institute, Cambridge, Massachusetts

2008

American College of Neuropsychopharmacology Annual Meeting, Phoenix, Arizona, Chair and
Speaker, Two Panels
Center for Behaviour and Neurosciences, University of Groningen, Netherlands
Department of Neuroendocrinology, University of Lübeck, Germany
FENS Panel Organizer, Geneva, Switzerland
HFSP Annual Meeting, Berlin, Germany
Indiana University, Department of Psychological and Brain Sciences
Institute of Psychiatry, King's College, London
Keystone Symposium on Genetics and Biochemistry of Sleep, Tahoe City, California
Memorial University, Grass Lectureship, St. John's Newfoundland, Canada
Temple University, Neuroscience Program

2007

Associated Professional Sleep Societies, Trainee Day, Annual Meeting, Minneapolis
Canadian College of Neuropsychopharmacology, Banff, Canada
Johns Hopkins University, Department of Psychological and Brain Sciences
Mount Sinai School of Medicine, Seaver and New York Autism Seminar Series
Penn Autism Network Conference, University of Pennsylvania, Conference Co-organizer
University of Texas Southwestern Medical Basic Neuroscience Seminar Series

2006

American College of Neuropsychopharmacology Annual Meeting, Hollywood, Florida, Panel
Chair and Speaker
Case Western Reserve University School of Medicine, Department of Neuroscience
Cleveland Clinic Foundation, Department of Neuroscience
Cure Autism Now Philadelphia Chapter
DFG International Research Training Group, Winter School, Aachen, Germany
Leibniz Institute for Neurobiology, Magdeburg, Germany
Mount Sinai School of Medicine, Translational Neuroscience Seminar Series
NIA Workshop on the Molecular and Cellular Basis of Cognitive Aging
Penn Autism Network Conference, University of Pennsylvania, Conference Co-organizer
Sanger Centre, Hinxton, England

Research Perspectives in Autism, University of Pennsylvania, Conference Co-organizer
Rutgers University, Department of Genetics
University College, London, Department of Anatomy, England
University of Maryland, Department of Physiology
University of Pennsylvania School of Medicine, Department of Anesthesiology, Grand Rounds
University of Pennsylvania School of Medicine, Department of Pharmacology
University of Tennessee Health Science Center, Neuroscience Institute
University of Vienna School of Medicine, Austria

2005

American College of Neuropsychopharmacology Annual Meeting, Hawaii, Hot Topics Session
Free University of Berlin, Germany, Department of Neurobiology
International Meeting on Anchored cAMP Signaling Pathways, Berlin, Germany
Merck/Penn Sleep Research Retreat
David and Lucile Packard Foundation, Annual Meeting, Monterey, California
Pavlovian Society, Annual Meeting, Anaheim, California
Temple University School of Medicine, Department of Pharmacology
University of Alberta School of Medicine, Department of Physiology
University of Toronto, Program in Neuroscience

2004

Duke University, Department of Psychology and Brain Science
Molecular and Cellular Cognition Society Annual Meeting
Monell Chemical Senses Center, Philadelphia, PA
Ponce School of Medicine, Department of Physiology, Ponce, Puerto Rico
Ninth International Sleep & Breathing Meeting, Newport, Rhode Island
University of Tennessee Health Science Center, Neuroscience Institute

2003

American College of Neuropsychopharmacology Annual Meeting, Puerto Rico
Associated Professional Sleep Societies, Annual Meeting, Chicago, Discussion Organizer
Drexel University College of Medicine, Department of Pharmacology and Physiology
Experimental Biology 2003, San Diego, CA
University of Pennsylvania, "How to phenotype my mouse at Penn"
University of Pennsylvania, SIB/Vision Training Grant Annual Retreat
University of Pennsylvania, Summer Undergraduate Internship Program

2002

Associated Professional Sleep Societies, Annual Meeting, Seattle
Associated Professional Sleep Societies, Trainee Day, Annual Meeting, Seattle
Case Western University School of Medicine, Postdoctoral Research Day
University of Pennsylvania, Institute of Neurological Sciences

2001

Associated Professional Sleep Societies, Annual Meeting, Chicago
Associated Professional Sleep Societies, Annual Meeting, Chicago, Discussion Organizer
David and Lucile Packard Foundation, Annual Meeting, Monterey, California
Pavlovian Society, Annual Meeting, Symposium Organizer, New Brunswick, New Jersey

University of Alberta School of Medicine, Edmonton, Alberta
University of Pennsylvania, Institute of Neurological Sciences Annual Retreat
Wyeth-Ayerst Pharmaceuticals, Monmouth Junction, NJ

2000

Carnegie Institute of Washington
Children's Hospital of Philadelphia, Mental Retardation and Developmental Disabilities Research Center
Eastern Virginia Medical School, Department of Neuroscience
National Institutes of Health, National Institute of Child Health and Human Development
Tufts University School of Medicine, Department of Neuroscience
University of Pennsylvania, Center for Cognitive Neuroscience
University of Pennsylvania, Center for Neurodegenerative Disease Research
University of Pennsylvania, Department of Biology Annual Retreat

1999

University of Delaware, Department of Psychology
University of Pennsylvania, Behavioral Neuroscience Annual Retreat

1998

American College of Neuropsychopharmacology Annual Meeting, Puerto Rico
University of Pennsylvania, Center for Neurobiology and Behavior
University of Pennsylvania, Center for Reproductive Studies
University of Pennsylvania, Department of Psychology
University of Pennsylvania, Institute for Neurological Sciences

1997

Case Western Reserve University School of Medicine, Department of Neuroscience
Georgetown University, Department of Biology
Harvard University Medical School, Department of Genetics
National Institutes of Health, National Cancer Institute
Northwestern University, Department of Neurobiology and Physiology
University of Rochester, Department of Brain and Cognitive Sciences
University of California, Irvine, Department of Psychobiology
University of Pennsylvania, Department of Biology

1996

Cold Spring Harbor Laboratory Banbury Meeting on Learning & Memory
Columbia University, Graduate Program in Neuroscience
New York State Psychiatric Institute

1995

American College of Neuropsychopharmacology Annual Meeting, Puerto Rico

1994

American EEG Society Annual Meeting, Chicago

Lab Personnel

Ted Abel Family Tree: <https://neurotree.org/neurotree/tree.php?pid=6367>

Postdoctoral Fellows and Research Scientists (Ph.D. level)

University of Pennsylvania

K. Matthew Lattal, 1998-2004, individual NRSA award, currently a Professor, Department of Behavioral Neuroscience, Oregon Health and Sciences University
Rifat Hussain, 1999-2000, currently a research associate at Albany Medical College
Carolina Isiegas, 2000-2005; 2007, currently employed in Biotech research, Spain
Marcelo Wood, 2001-2006, Society for Neuroscience Minority Fellowship, Alavi-Dabiri Postdoctoral Fellowship Award in Intellectual and Developmental Disabilities Research (CHOP), currently Professor and Chair, Department of Neurobiology and Behavior, University of California, Irvine
Scott Bizily, 2001-2002, currently a lawyer
Michael Kaplan, 2001-2006, currently Lab Instructor, Biological Basis of Behavior Program, Penn
Michy Kelly, 2002-2006, Tourette Syndrome Association Research Grant Award, currently an Associate Professor, University of Maryland School of Medicine
Ming Ouyang, 2005-2008, currently a Research Specialist with Steven Thomas, Penn
Cedrick Florian, 2005-2010, currently a Lecturer-Researcher, University of Toulouse 3, France
Pepe Hernandez, 2006-2012, NSF Minority Postdoctoral Research Fellowship, currently a Research Scientist, Psychogenics
Robbert Havekes, 2007-2015, Rubicon Grant, Netherlands Organization for Scientific Research, currently an Associate Professor, University of Groningen, Netherlands
Marcel Estévez Montero, 2008-2012, Penn-PORT Program, individual NRSA award
Lucia Peixoto, 2010-2015, Neurodevelopmental Disorders Postdoctoral Fellowship, currently an Assistant Professor, Washington State University, Spokane, Washington
Jennifer Choi Tudor, 2010-2016, Penn-PORT Program, individual NRSA award, currently an Associate Professor, Saint Joseph's University
Danielle Cusmano, 2014-2016, currently employed by Rutgers University
Rolf Hansen, 2014-2016, currently employed by Teva Pharmaceuticals

University of Iowa

Sarah Ferri, 2013-2022, Neurodevelopmental Disorders Postdoctoral Fellowship, K01 Award NIMH, currently an Assistant Professor, University of Iowa, Department of Pediatrics
Snehajyoti Chatterjee, 2016-2022, K99 Award NIA, currently an Assistant Professor, University of Iowa, Department of Neuroscience & Pharmacology
Joseph Lynch, 2016-2017, currently employed in industry
Mahesh Shetty, 2017-present
Marie Gaine, 2017-2020, currently an Assistant Professor, College of Pharmacy, University of Iowa
Jae Kyo Kim, 2018-present
Queena Lin, 2018-2020, currently Director, Neurobank Core, Iowa Neuroscience Institute
Satya Tadinada, 2019-present
Junko Kasuya, 2020-present

Graduate Students (Ph.D.)

University of Pennsylvania

Laurel Graves Weaver, M.D., Ph.D. (Neuroscience), 1998-2002, currently a child psychiatrist,
Children's Hospital of Philadelphia
Kevin Hellman, Ph.D. (Neuroscience), 2000-2004, individual NRSA award, currently a tenure track
faculty member, University of Chicago
Ting Nie, Ph.D. (Biology), 1999-2005, currently a postdoctoral fellow, Emory University
Michael Keeley, Ph.D. (Cellular and Molecular Biology), 2000-2005, currently a marketing planning
manager, Genentech
Joel Stein, M.D., Ph.D. (Cellular and Molecular Biology), 2001-2005, currently an Assistant Professor
of Radiology, Hospital of the University of Pennsylvania
Conor McDonough, Ph.D. (Neuroscience), 2001-2006, individual NRSA award, currently a lawyer
Ana Oliveira, Ph.D. (Instituto Gulbenkian de Ciencia, Oeiras, Portugal), 2003-2008, currently a
postdoctoral fellow with Hilmar Bading, Heidelberg, Germany
Ted Huang, Ph.D. (Neuroscience), 2004-2008, currently a Strategic Consultant, ETHOS Health
Communications
Chris Vecsey, Ph.D. (Neuroscience), 2004-2008, MINS/NGG Flexner Award for Outstanding Ph.D.
Thesis, currently an Associate Professor, Skidmore College
Joshua Hawk, Ph.D. (Neuroscience), 2004-2010, Saul Winegrad Award for Outstanding Ph.D. Thesis,
currently a postdoctoral fellow with Daniel Colon-Ramos, Yale University
Nan Ma, Ph.D. (Biology), 2007-2011, currently a scientist at Cetazam
Mathieu Wimmer, Ph.D. (Neuroscience), 2007-2012, currently an Assistant Professor of Psychology,
Temple University
Hannah Schoch, Ph.D. (Cell and Molecular Biology), 2008-2014, currently a postdoctoral fellow with
Lucia Peixoto, Washington State University
Toni-Moi Prince, Ph.D. (Neuroscience), 2009-2013, currently in management consulting
Shane Poplawski, Ph.D. (Pharmacology), 2009-2014, currently a postdoctoral fellow at Abbott
Alan (Jung Whan) Park, Ph.D. (Biology), 2009-2014, currently an Assistant Professor, Department of
Physiology, Seoul National University
Vince Luczak, Ph.D. (Biology), 2010-2016, currently a postdoctoral fellow with Gulcin Pekkurnaz,
University of California, San Diego
Morgan Bridi, Ph.D. (Neuroscience), 2010-2015, individual NRSA award, currently an Assistant
Professor of Neuroscience, West Virginia University.
Christopher Angelakos, Ph.D. (Neuroscience), 2013-2017, National Defense Science and Engineering
Graduate fellowship, currently a postdoctoral fellow with Luis De Lecea, Stanford University

University of Iowa

Emily Walsh (Neuroscience), 2018-2023, currently a postdoctoral scholar, Washington University, St
Louis
Utsav Mukarjee (Neuroscience), 2019-present
Yann Vanrobaeys (Genetics), 2020-2024, currently at MIT
Benjamin Kelvington (Pharmacology), 2021-present
Yutong Wang (Pharmacology), 2021-present
Lucy Langmack (Biochemistry & Molecular Biology), 2022-present
Pravda Quinones (Pharmacology), 2022-present
Taylor Jorgensen (Neuroscience), 2023-present

Graduate Students (M.A.)

Natalie Denney, M.A. (submatriculation), 1998-1999

Jennifer Yanow, M.A. (submatriculation), 1999-2000

Alan Young, M.A. (Neuroscience), 1999-2004, individual NRSA award

Anna McNally, M.A. (Pharmacology), 2014-2015

Rotation Students

University of Pennsylvania

Yang Song, Biology, 1998

Ting Nie, Biology, 1998-1999

Jessica Cardin, Neuroscience, 1998-1999

Alan Young, Neuroscience, 1998-1999

Arati Sadalge, Neuroscience, 1999

J. Clay Gaspard, Biology, 2000

Joel Stein, Cellular and Molecular Biology (MD/PhD), 2000

Michael Keeley, Cellular and Molecular Biology, 2000

Kevin Hellman, Neuroscience, 2000

Li Li, Biology, 2000

Shaya Honarvar, Biology, 2001

Noah Roy, Neuroscience, 2001

Conor McDonough, Neuroscience, 2001

Prin Amorapanth, Neuroscience (MD/PhD), 2001

Kimberly Noble, Neuroscience (MD/PhD), 2001

David Yang, Biology, 2001

Bing He, Biology, 2002

Mate Varga, Biology, 2002

Yanshan Fang, Neuroscience, 2002

Andrew McClelland, Neuroscience (MD/PhD), 2003

Tamar Gur, Neuroscience (MD/PhD), 2003

Congzhou Liu, Biology, 2004

Nick DeLong, Neuroscience, 2004

Ted Huang, Neuroscience, 2004

Chris Vecsey, Neuroscience, 2004

Joshua Hawk, Neuroscience, 2005

Amanda Crocker, Neuroscience, 2005

Nan Ma, Biology, Biology, 2006

Mathieu Wimmer, Neuroscience, 2006

Greg Dunn, Neuroscience, 2007

Robert Lin, Pharmacology, 2007

Farzaneh Najafi, Biology, 2008

Alan (Jung Whan) Park, Biology, 2008

Hannah Schoch, Cell and Molecular Biology, 2008

Toni-Moi Prince, Neuroscience, 2009

Shane Poplawski, Pharmacology, 2009

Vince Luczak, Biology, 2009
Joseph Wasserman, Neuroscience, 2010
Morgan Bridi, Neuroscience, 2010
Kellie Woll, Pharmacology, 2012
Julia Kahn, Neuroscience, 2013
Christopher Angelakos, Neuroscience, 2013
Anna McNally, Pharmacology, 2014
Janani Saikumar, Biology, 2014
Nicole Bowman, Neuroscience, 2014

University of Iowa

Parker Abbott, Neuroscience, 2017
Emily Walsh, Neuroscience, 2018
Yann Vanrobaeys, Genetics, 2019
Hassan Ahamed, MSTP, Neuroscience, 2019
Gage Liddiard, MSTP, Neuroscience, 2019
Rebekah Peplinski, Genetics, 2020
Sara Mitchell, Neuroscience, 2021
Lucas Casten, Genetics, 2021
Benjamin Kelvington, Pharmacology, 2021
Yutong Wang, Pharmacology, 2021
Yuxi Li, Pharmacology, 2021
Muhammad Elsadany, Genetics, 2022
Lucy Langmack, Biochemistry & Molecular Biology, 2022
Annie Gleason, Genetics, 2022
Sarah Jordon, Biochemistry & Molecular Biology, 2022
Savannah Bliese, Neuroscience, 2022
Tyler Rankin, Genetics, 2022
Emily Baldwin, MSTP, Neuroscience, 2023
Victor Kilonzo, MSTP, Neuroscience, 2023

Medical Students and Residents

University of Pennsylvania

Chris Chiang (Jefferson), 1999
Edward Blanchard (Penn Med), 2004
John Northrop, M.D., Ph.D. (Penn Psychiatry Resident), 2009-2012

University of Iowa

Justin Valdez, 2018, Summer Research fellowship (SRF)
Mark Dyken, 2023, Summer Research fellowship (SRF)
Brian Park, 2019-2022, Neurosurgery fellow

Foreign Scholars

University of Pennsylvania

Claudia Barz, Forschungszentrum Jülich, Germany, 2010-2011

Burcin Acar, University of Groningen, Groningen, Netherlands, 2010

Vibeke Bruinenberg, University of Groningen, Groningen, Netherlands, 2011

Erik van Tilborg, Maastricht University, Netherlands, 2013

Anne Guenther, Forschungszentrum Jülich, Germany, 2014

Vishalini Sivarajan, Forschungszentrum Jülich, Germany, 2015

Judith Kreutzmann, University of Groningen, 2015-2016

University of Iowa

Yong Seok Lee (Visiting Professor), Seoul National University College of Medicine, Korea, 2023-2024

Kyoungdoo Hwang (Visiting Scholar), Seoul National University College of Medicine, Korea, 2023-2024

Undergraduates

University of Pennsylvania

Alexander Harris, 1998, work study

Donald Monson, 1998-1999, work study

David Ecker, 1998-2000, independent study, BIBB; Undergraduate Research Grant Recipient

Edward Blanchard, 1998-2000, independent study, BIOL

Rajeev Dhupar, 1998-1999, independent study, BIOL; Nassau Fund Award Recipient

Bree Goldman, 1998-1999, independent study, BIBB

Charles Levine, 1998-1999, independent study, BIOL

Josh Gruber, 1999, independent study, CHEM

Matthew Scharf (Yeshiva University), Summer 1999, Summer 2000

Elizabeth Heller, 1999-2002, independent study, BIOL

David Krieger (Yeshiva University), Summer 2000

Michael Mullen, 2000-2001, independent study, BIBB; received BIBB undergraduate research award

Michael Abrahamy, 2000-2001, work study

Michael Krathen, 2000-2001, work study

Alice Park, 2001-2003, independent study, BIOL

Rebecca Spivack, 2001-2002, independent study, BIOL; Nassau Fund Award Recipient

Byron Ko, 2001-2002, work study

Johanna Busch, 2001-2004, work study and independent study

Komal Soin, Summer 2002

Ari Grinspan, 2002-2004

Fatima Akrouh, 2002, work study

Mingrui Zhou, 2002, work study

Katherine Peer, 2002-2003, independent study, BIOL

Rajesh Singh (St. Louis University), Summer 2003, SUIP

Christina Liu, 2003-2004

Zachary Kern, 2003-2004, work study

Michelle Attner, 2003-2005, Nassau Fund Award Recipient
Katherine Holzem, 2003-2005
Michael Esposito, 2003-2005, work study
Arter Biggs (Grambling State University), Summer 2004, SUIP
Jessica Knight (Washington College), Summer 2005, SUIP
Nora Khatib, 2005-2006, independent study
Quinn Grimes, 2005-2008, work study, independent study
Stephen Han, 2005-2006
Chris Favilla, 2005-2007, work study
Allison Rao, 2006-2009, independent study, Eliot Stellar Award
Shannon Grimes, 2006-2010, work study
Devan Jaganath, 2006-2008, work study, independent study, Edward N. Pugh, Jr Award
Aysha El Shamayleh, 2006, work study
Brian Kroener, 2007-2010, independent study
Rosa Cui, 2007-2010, work study and independent study, Edward N. Pugh, Jr Award
Michael Sulewski, 2008-2011, Provost's Undergraduate Research Mentoring Program, Eliot Stellar Award
Justin Besen, 2008-2010, independent study
Karuna Meda, 2008-2010, independent study, Pincus-Magaziner Family Undergraduate Research Grant
Jihaan Mutasim (Rutgers, Camden), 2009-2010
Charles Kenworthy, 2009-2010, independent study
Edward Linton, 2009-2011, independent study, University Scholar
Lyl Tomlinson (Brooklyn College, CUNY), 2009, SUIP
Armin Gollogly, 2009, Summer Program in Computational Neuroscience
Jennifer Blackwell, 2009-2012, independent study, Pincus-Magaziner Family Undergraduate Research Grant
Kimberly Lackenby, 2009, UPenn/King's College London Medical Student Exchange
Susan Sheng, independent study 2010-2012
Brittany Mayweather, 2010-2014, Ware College House Research Fellowship
Kyle Krainock (Swarthmore College), 2011-2013
Sean Massa, 2012
Bridget Ellsworth, 2012-2013, independent study
Emily Davis, 2012-2014, independent study, Penn Undergraduate Research Mentoring Program, Benjamin Franklin Scholars
Angela Wanjin Zhu, 2013-2015, Penn Undergraduate Research Mentoring Program
James Mellody, 2013
Rebecca Teng (Swarthmore College), 2013-2014
Caroline Chung, 2013-2016, Rose Award for Undergraduate Research
Patrick Lawson (Johns Hopkins University), 2013
Stelios Monos, 2013-2016
Olivia Perez (Swarthmore College), 2013-2015, Conte Summer Program
Mengxi Zhang (Swarthmore College), 2013-2014, Conte Summer Program
Alyssa Nieves, 2013-2015, independent study
Giulia Porcari, 2013-2014
Chris Schlitt (Penn State University), 2013-2014
Natalie Long (Penn State University), 2014
Adewola Osunsade (University of the District of Colombia), 2014, SUIP, SFARI Summer Fellow
Noelle Arroyo (Swarthmore College), 2014-2016, Conte Summer Program

Jenni Walsh (Swarthmore College), 2014-2015
Hope Merens, 2015-2016
Matthew Bruce (Temple University), 2015-2016, MARC Scholar
Abigail Dove (Swarthmore College), 2015, CTSA Summer Program
Maria Navarro (University of Miami), 2015, The Leadership Alliance Summer Program, SFARI Summer Fellow
Vedant Thyagaraj, 2015-2016
Kate Sohn, 2015-2016, Penn Undergraduate Research Mentoring Program
Wendy Wei, 2015-2016
Shaila Berlas, 2015-2016
Jessica Schwarz, 2016, SUIP, SFARI Summer Fellow
Laura Baratta (Temple), 2016, SUIP
Anna Meaney (Vassar College), 2016
Luigim Vargas (Brown University), 2016, SUIP, SFARI Summer Fellow
Justine Albers (Swarthmore College), 2016, CTSA Summer Program
Rachel Levinson, 2016, Penn Undergraduate Research Mentoring Program
Nickole Kanyuch, 2016, Conte Summer Program

University of Iowa

Sam Dahlke (Grinnell College), 2017
Noah Ajram (Princeton University), 2017
Manish Yadav (India Institute of Technology, Kharagpur), 2017
Andrew Solsrud, 2017
Jia Ern Ong, 2017-2019
Michael Li, 2017-2018
Ji Youn Lee, 2017-2019, independent study
Amy Yan, 2018-2021, Undergraduate Research Assistant
Ariel Roghair (Macalester College), 2018, Interdisciplinary Summer Undergraduate Research Program
Ashley Plumb (St. Ambrose University), 2018, Interdisciplinary Summer Undergraduate Research Program
Saaman Ghodsi (Franklin & Marshall College), 2018
Marie Wosny (Heinrich-Heine-Universität, Düsseldorf), 2018, DAAD Summer Fellowship
Achala Thippeswamy, 2018-2021
Michela (Benney) Argue, 2019-2020
Cindy Cosme, 2019, Interdisciplinary Summer Undergraduate Research Program
Tasha Gilkison, 2021-present, Undergraduate Research Assistant
Quinn Truax (St. Olaf College), 2021, 2022, Summer Undergraduate Research Program
Ingrid Streitz (St. Olaf College), 2021, 2022, Summer Undergraduate Research Program
Deaven Denis, 2020-2022, Undergraduate Research Assistant
Taylor Jorgensen (University of Illinois), 2022, NSF NRT-UtB Grant 1735252 to Martha Gillette
Audrey Chen, 2022, Secondary Student Training Program (SSTP)
Sydney Mitvalsky, 2022, Undergraduate Research Assistant
Jacob Belardo, 2023-present, Undergraduate Research Assistant
Ritika Thapa (Arizona State University), 2023, Summer Research Opportunities Program (SROP)
Taylor P Voyna, 2024 – present, Undergraduate Research Assistant
Mamadou Diallo, 2024, the Beginning and Early Stage Translational (B.E.S.T.) Researcher Program
Samantha Anema (Dordt University), 2024, Biomedical Scholars Summer Undergraduate Research Program

Research Specialists

University of Pennsylvania

Scott Gellman, 1998-1999
Haejin Kim, 1999-2000
Elizabeth Cresiski, 2000-2001
Matthew Scharf, 2000-2001
Michael Waddington, 2000-2001
Charles Levine, 2000-2002
Thomas Lombardi, 2001-2003
David Rapoport, 2002-2004
Sara Fabian, 2004-2005
LaKesha Davison, 2004-2005, Penn PREP
James Lederman, 2006-2007
Dan Reilly, 2007-2008
Angela Carter, 2007-2009, Penn PREP
Leonardo Guercio, 2010-2011
Karuna Meda, 2010-2011
Charles Kenworthy, 2010-2012
Michael Heenan, 2012-2014
Marcus Neafsey, 2012-2013
Mary McMullen, 2013-2015
Kyle Krainock, 2013-2014
Christopher Schlitt, 2014-2015
Giulia Porcari, 2014-2105
Emily Davis, 2015
Kyle White, 2015-2016
Natalie Long, 2015-2016
Matthew Marini, 2015-2016
Eric Sorensen, 2015-2017

University of Iowa

Tania Chatterjee, 2017-2020
Joseph Lederman, 2017-2018
Kelsey Blocklinger, 2019-2020
Pravda Quinones, 2020-2022
Saaman Ghodsi, 2020-2021
Nathan Robillard, 2021-2022
Deaven Denis, 2022-2024
Regan Fair, 2023-2024
Marston Jamieson, 2024-present

Training Grant Participation

University of Pennsylvania

Training in Behavioral/Cognitive Neuroscience (MH17168), T. Abel, P.I., 1998-2016
MD/PhD Program in Sleep and Chronobiology (AG00256), A. Pack, P.I., 1998-2004
Training Program in Cell and Molecular Biology (GM07229), R. Schultz, P.I., 1998-2016
Graduate Training in Systems and Integrative Biology (GM07517), J. Gold, P.I., 1998-2016;
member, executive committee, 2005-2016
Predoctoral Training Grant Program in Genetics (GM08216), D. Epstein, P.I., 1998-2016
Training Program in Sleep and Respiratory Neurobiology (HL07713), A. Pack, P.I., 1998-2016
Training in Sleep and Sleep Disorders (HL07953), A. Pack, P.I., 2000-present; director, MD/PhD
program in sleep/circadian rhythm research, 2000-2016
Training Program in Neuropsychopharmacology (MH14654), I. Lucki, P.I., 1998-2016
Training in Age-Related Neurodegenerative Diseases (AG000255), V. Lee, P.I., 1998-2016
Schizophrenia: A Neuropsychiatric Perspective (MH019112), R. Gur, P.I., 2001-2016
UPenn Post-Baccalaureate Research and Education Program (GM71745), J. Boyer, P.I.,
2005-2016
Summer Undergraduate Internship Program in Biomedical Studies, 2003-2016
Training Grant in Neurodevelopmental Disabilities (NS007413), M. Robinson, P.I., 2005-2016
Research Training in Anesthesia/Perioperative Medicine, (GM007612), C. S. Deutschman, P.I.,
2006-2016
Institutional Research and Academic Career Development Award (GM081259), Y. Paterson, P.I.,
2007-2016
International Research Training Group (DFG: IRTG 1328), RWTH Aachen, Germany and Penn
(F. Schneider and R. Gur, PIs), 2006-2015

University of Iowa

Medical Scientist Training Program (T32-GM007337), S. Lentz and P. Geyer, Directors, 2017-
present
Mechanisms of Health and Disease at the Behavioral-Biomedical Interface (T32-GM108540), S.
Lutgendorf, Director, 2017-present
Neuroscience Training Program (T32-NS007421), D. Tranel, Director, 2017-present
Molecular and Cellular Research to Advance Child Health (K12-HD02748), A. Bassuk, Director,
2022-present.

Thesis Committees

University of Pennsylvania

Paul Nealen, Biology, 1997-2000
David Kapfhamer, Cellular and Molecular Biology, 1997-2002
Gloster Aaron, Neuroscience, 1998-2001
Xiufang Guo, Neuroscience, 1999-2004
Diana Williams, Psychology, 1999-2003

Jessica Cardin, Neuroscience, 1999-2004
Henry Su, Neuroscience, 1999-2002, Chair
Mark Beenhakker, Neuroscience, 1999-2004
Daniel Gottlieb, Psychology, 2000-2004
Stacey Schaefer, Psychology, 2000-2006
Julide Bilen, Biology, 2001-2004
Han Cho, Biology, 2001-2002
Edward Lee, Neuroscience, 2001-2003
Youngshin Lim, Biology, 2001-2003
Kangning (Connie) Liu, Biology, 2001-2005
Carrie Walters, Neuroscience, 2001-2004, Chair
Melanie Watson, Neuroscience, 2002-2007
Qi Zhang, Neuroscience, 2002-2004, Chair
Laila Dadvand, Neuroscience, 2002-2006
Lingbo Li, Biology, 2002-2006
Francesca Grossman, Cellular and Molecular Biology, 2002-2004
Pavan Auluck, Neuroscience, 2003
Deepak Sampathu, Cellular and Molecular Biology, 2003-2006
Marc Meulener, Cellular and Molecular Biology, 2003-2005
John Wolf, Neuroscience, 2003-2006, Chair
Mate Varga, Biology, 2003-2006
Matthew Giampoala, Neuroscience, 2003-2006
Jim Crowley, Pharmacology, 2003-2005
Rui Liu, Biology, 2004-2009
Cathryn Kubera, Neuroscience, 2005-2008
Matthew Scharf, Neuroscience, 2005-2008, Chair
Caroline Patten, Neuroscience 2006-2007
Andrew McClelland, Neuroscience (MD, PhD), 2006-2008
Jessica Cleck, Pharmacology, 2006-2008
John Ross, Pharmacology, 2006-2010
Keith Schutsky, Pharmacology, 2007-2011
Xiaoyu Peng, Biology, 2007-2011
Marybless Atienza, Neuroscience, 2008-2009
Sarah Ferri, Psychology, 2009-2013
Dustin Shilling, Neuroscience (MD, PhD), 2009-2013
Aleksandra Nall, Cell and Molecular Biology, 2011-2014
Rachel Monyak, Cell and Molecular Biology, 2011-2016
A Reum Jang, Biology, 2011-2014
Adam Watson, Neuroscience, 2011-2015
Heather Ballance, Neuroscience, 2011-2015
Leonardo Guercio, Neuroscience, 2011-2016
Riley Graham, Biology, 2014-2016
Hung Bui, Biology, 2014-2017
Jennifer Blackwell, Neuroscience, 2015-2016
Seth Madlon-Kay, Psychology, 2015-2016

University of Iowa

Margaret Fuller, Neuroscience (MSTP), 2017-2022

Alexandra Petrucci, Neuroscience, 2018-2022
Katerina Sosa, Neuroscience, 2020-present
Emese Chmielewski, 2020-present

Mentorship Committees

University of Pennsylvania

Steve Siegel, Department of Psychiatry, 2001-2007
Stephen Kanes, Department of Psychiatry, 2001-2006
Mirek Mackiewicz, Center for Sleep and Respiratory Neurobiology, 2002-2009
Elena Nikonova, Center for Sleep and Respiratory Neurobiology, 2002-2005
Aaron Pawlyk, Center for Sleep and Respiratory Neurobiology, 2003-2004
Marcos Frank, Department of Neuroscience, 2004-2009
Dejian Ren, Department of Biology, 2006-2009
David Raizen, Department of Neurology, 2009-2014
Jason Gerstner, Center for Sleep and Circadian Neurobiology, 2010-2014
Miranda Lim, Center for Sleep and Circadian Neurobiology, 2012-2013
Gangrui Yang, Department of Pharmacology, 2015-2016
Nicholas Betley, Department of Biology, 2015-2016
John Wolf, Department of Neurosurgery, 2016

University of Iowa

Joseph Glykys, Department of Pediatrics, 2019-2023
Merry Mani, Department of Radiology, 2020-2023
Hildegard Janouschek, Department of Psychiatry, 2019-2023
Sarah Ferri, Department of Pediatrics, 2022-present

Preliminary and Qualifying Exam Committees

University of Pennsylvania

Peter Bronk, Neuroscience, 1998
Marc Eisen, Neuroscience, 1998
Laurel Graves, Neuroscience, 1998
Brook Brouha, Cellular and Molecular Biology, 1999
Henry Su, Neuroscience, 1999
Youngshin Lim, Biology, 1999
Jessica Cardin, Neuroscience, 1999
Julide Bilen, Biology, 2000
Kevin Hellman, Neuroscience, 2000
Matthew McManus, Neuroscience, 2000
Gene Civillico, Neuroscience, 2001
Kangning (Connie) Liu, Biology, 2001
Carrie Walters, Neuroscience, 2001
Matthew Giampoala, Neuroscience, 2002
Michael Gyda, Biology, 2002
Kimberly Noble, Neuroscience, 2002

Ryan Wyatt, Neuroscience, 2002
Jim Crowley, Pharmacology, 2002
Mate Varga, Biology, 2003
Tamar Gur, Neuroscience, 2004
Matthew Scharf, Neuroscience, 2004
Rui Liu, Biology, 2004
Pat Williams, Neuroscience, 2005
Melissa Wang, Neuroscience, 2009
Sarah Ferri, Psychology, 2009
Jia He, Biology, 2012
Nicole Yohn, Neuroscience, 2012
Jennifer Blackwell, Neuroscience, 2014
Riley Graham, Biology, 2014
Hung Bui, Biology, 2014
Greg Artiushin, Neuroscience, 2014

University of Iowa

Margaret Fuller, Neuroscience (MSTP), 2017
Kelsey Heslin, Neuroscience, 2018
Alexandra Petrucci, Neuroscience, 2018
Parker Abbott, Neuroscience, 2019
Katerina Sosa, Neuroscience, 2020

External Examinations

Seema Malkani, University of Delaware, Department of Psychology, Thesis Committee, 1998-2001
Edwin Santini, Ponce School of Medicine, Department of Physiology, Ponce, Puerto Rico, Thesis Committee, 2002-2004
Susan Carswell, Widener University, Institute for Graduate Clinical Psychology, Thesis Committee, 2002
Cuie Qiu, Drexel University College of Medicine, Department of Pharmacology and Physiology, Thesis Committee, 2003-2007
Robbert Havekes, Center for Behaviour and Neurosciences, University of Groningen, Netherlands, 2007
Rebekah Evans, Neuroscience Ph.D. Program, George Mason University, 2009-2013
Roelina Hagewoud, Center for Behaviour and Neurosciences, University of Groningen, Netherlands, 2010
Han Wang, Otto von Guericke Universität, Magdeburg, Germany, 2013
Nikos Tzavaras, Mount Sinai School of Medicine, 2013
Xia Nan, Jefferson University School of Medicine, 2014
Swarthmore College, Department of Biology, Honors Examiner, 1999, 2002, 2014
Amrutha Swaminathan, Jawaharlal Nehru Centre for Advanced Scientific Research, 2015
Ozan Baytas, Brown University, 2021

Committees and Administrative Assignments (University of Pennsylvania)

Biology Department

Faculty Search Committee, Neuroscience, 1998, 1999, 2014
Chair, Faculty Search Committee, Neuroscience, 2006-2008
Ad hoc Tenure and Faculty Review Committees, Member and Chair, 2005-2016
Space Committee, 2014-2016

Advising Committee, Undergraduate Neurobiology Concentration, 2000-2016
Undergraduate Curriculum Committee, 2003-2016
Undergraduate Major Advisor, 2003-2016

Graduate Student Admissions Committee, 1998-2000
Graduate Student Academic Review Committee, 1999-2000
Advising Committee, Neurobiology and Physiology Graduate Students, 2006-2011
Advising and Assessment Committee, Biology Graduate Students, 2015-2016

Biology Advisory Board Presentation, 1998
Biology Undergraduate Night Speaker, 1998

School of Arts and Sciences

Director and Co-Director, Biological Basis of Behavior Program, 2006-2016
Biological Basis of Behavior Program Faculty Advisory Committee, 2001-2005

Member, Executive Committee, College of Liberal and Professional Studies, 2008-2011
Co-Chair, SAS Penn Integrates Knowledge Neuroscience Committee, 2010-2011
Member, Mapping the Mind Strategic Planning Committee, 2013-2014
Member, Faculty Planning Group on Mapping the Mind, 2015-2016

Search Committee, Dean of Freshmen, 2004
Psychology Department, Faculty Search Committee, Behavioral Neuroscience, 1998-1999, 2004-2005,
2005-2006, 2006-2007
Psychology Department, ad hoc Tenure Review Committee, 2014

Advisor to First-Year and Second-Year Students, 1998-2016
Welcome to the College, Speaker, 2007, 2016
Penn Previews, Faculty Panel, 2002, 2005, 2007, 2008, 2009, 2012, 2013

University

Mahoney Institute for Neurosciences
Advisory Board, 1999-2002; 2006-2009
Executive Committee, 2010 to 2016
Neuroscience Advisory Committee, 2016
Chair, Seminar Committee, 2013 to 2015
Chair, Year of Neuroepigenetics Planning Committee, 2016

McMorris Fellows Executive Committee, 2014 to 2016

Search Committee, Chair in Autism Research (CHOP and Penn), 2005-2007

Department of Neurology, School of Medicine, Faculty Search Committee, 2006, 2007, 2012

Department of Psychiatry, School of Medicine, Faculty Search Committee, 2006-2007

Department of Neuroscience, School of Medicine, Faculty Search Committee, 2008, 2009, 2013, 2014

Department of Neuroscience, School of Medicine, Chair Search Committee, 2011-2012

Ad hoc Tenure Review Committees

Department of Otorhinolaryngology; Head and Neck Surgery, 2008-2009

Department of Neuroscience, School of Medicine, 2007, 2008, 2009

Department of Pediatrics, School of Medicine, 2007

Department of Anesthesiology, School of Medicine, 2011

Center for Cognitive Neuroscience Retreat Planning Committee, 2004, 2006

Center for Cognitive Neuroscience Review Committee, 2014

Neuroscience Graduate Group

Lab Rotation Talks Committee, 1998-1999

Admission Committee, 1998-2000

Curriculum Committee, 1999-2002

Preliminary Examination Course, Instructor, 2001-2005

Seminar Committee, 2002-2003

Member, Cell and Molecular Biology Graduate Group, 1998-2016

Member, Biology Graduate Group, 1998-2016

Member, Neuroscience Graduate Group, 1999-2016

Member, Mahoney Institute for Neurosciences, 1999-2016

Member, Pharmacology Graduate Group, 1999-2016

Member, Psychology Graduate Group, 1999-2016

Member, Center for Neurobiology and Behavior, 1999-2016

Member, Center for Sleep and Circadian Neurobiology, 1999-2016

Affiliated Faculty, Institute for Research in Cognitive Science, 2005-2016

Member, Penn Genome Frontiers Institute, 2010-2013

Member, Institute for Translational Medicine and Therapeutics, 2011-2016

Center for Undergraduate Research and Fellowships, Selection Committee for Rhodes, Marshall,
Mitchell Scholarships, 2000-2016

Member, Penn Prep Program to prepare minority students for medical and graduate school, 2003-2016

Penn Reading Project, Discussion Group Leader, 1998-2008, 2011-2013

Speaker, Career Services Panel on Grant Writing, 1999

Speaker, Science Panel, Freshmen Week, 2000

Member, Faculty Working Group on Mechanisms of Abnormal Behavior, 2015-2016

Member, Faculty Discussion Group on Foundations in Cognitive Science, 2015-2016

Long-Term Animal Needs Committee, 2001-2002

Animal Resources Review Committee, 2006

Committees and Administrative Assignments (University of Iowa)

University

Iowa Neuroscience Institute, Founding Director, 2017-present

Member, Interdisciplinary Graduate Program in Neuroscience, 2017-present

Member, Molecular Medicine Graduate Program, 2017-present

Member, Interdisciplinary Graduate Program in Genetics, 2018-present

Path Forward Research and Discovery Work Group, Co-Chair, 2017-2021

Strategy Team, 2021-2022

Faculty Success Recognition SPARC Tactic Team, 2022-present

National Academies Advisory Group, Chair, 2023-present

Carver College of Medicine

Chair and Departmental Executive Officer, Department of Neuroscience and Pharmacology, 2018-present

Co-chair, Search Committee for the Chair of the Department of Psychiatry, 2018

Member, Medical Scientist Training Program (MSTP), Executive Committee, 2019-present

Member, UIHC Faculty Compensation Implementation Working Group, 2020-2021

Member, Committee for Compensation (with Huron), 2020-2021

Member, Master Campus Facility Planning Executive Steering Committee (with Jacobs), 2021-present

Member, Search Committee for the Chair of the Department of Pediatrics, 2021

Member, Search Committee for the Chair of the Department of Internal Medicine, 2023

Member, Search Committee for the Chair of Biochemistry and Molecular Biology, 2023

Member, Space Oversight Committee, 2022-present