

THOMAS JOHN GOULD, Ph.D.

1/18/23

OFFICE:

Department of Biobehavioral Health
219 Biobehavioral Health Bldg
The Pennsylvania State University
University Park, PA 16802

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EDUCATION

University of Wisconsin, Madison, Wisconsin 1984 - 1988

Major: Psychology

Department of Psychology and Program in Neural Science 1988 - 1993

Indiana University, Bloomington, Indiana

DEGREES

B.S., 1988 University of Wisconsin, Madison, Wisconsin

Ph.D., 1993 Indiana University, Bloomington, Indiana

Title of Dissertation **An examination of cerebellar lobule HVI activity and interpositus nucleus activity and their possible associative functions during eye blink conditioning**

Thesis Mentor **Joseph Steinmetz, Ph.D.**

POST DOCTORAL TRAINING/RESEARCH ASSOCIATE POSITIONS

Department of Pharmacology, **University of Colorado** 1993-1997

Institute for Behavioral Genetics, **University of Colorado** 1997-1999

SCIENTIFIC INTERESTS

- ◆ Pharmacological & Neural Basis of Attention, Learning, and Memory Processes
- ◆ Age-Related Changes in Learning & Memory and Underlying Neural Changes
- ◆ Genetic Models of Learning Impairments and Psychiatric Disorders
- ◆ Neural & Behavioral Plasticity in Nicotine & Alcohol Abuse; Nicotine-Alcohol Interactions

POSITIONS

Jean Phillips Shibley Professor

July 2016 –Current

Department Head

Department of Biobehavioral Health
The Pennsylvania State University

Professor,

July 2010 – June 2016

Department of Psychology
Program in Neuroscience
College of Liberal Arts
and
Center for Substance Abuse
School of Medicine
Temple University

Director of the Neuroscience Program in the College of Liberal Arts

July 2010 – June 2016

Temple University

Director of the Brain, Behavior, and Cognition Area of Psychology

July 2007- June 2011

Temple University

Associate Professor,

July 2006 – June 2010

Department of Psychology
Program in Neuroscience
College of Liberal Arts
Temple University

<p>Associate Professor, Center for Substance Abuse School of Medicine Temple University</p>	<p>April 2007 - June 2010</p>
<p>Assistant Research Scientist, Albert Einstein Healthcare Network Philadelphia, PA</p>	<p>July 2001 – June 2002</p>
<p>Assistant Professor, Department of Psychology Program in Neuroscience College of Liberal Arts Temple University</p>	<p>July 2000 – June 2006</p>
<p>Bioscientist, AstraZeneca, Research, Wilmington, DE</p>	<p>January 2000 – July 2000</p>
<p>Research Assistant Professor, Director of the Behavioral Phenotyping Center Center for Neurobiology and Behavior, University of Pennsylvania, Philadelphia, PA</p>	<p>January 1999- December ‘99</p>
<p>Research Associate & Instructor, Institute for Behavioral Genetics, University of Colorado, Boulder, CO</p>	<p>June 1997 - December 1998</p>
<p>Instructor, Department of Pharmacology, University of Colorado Health Sciences Center, Denver, CO</p>	<p>February 1997 - May 1997</p>
<p>Regular Fellow, Department of Pharmacology, University of Colorado Health Sciences Center, Denver, CO</p>	<p>August 1993 - January 1997</p>

Associate Instructor, September 1992 - May 1993
Department of Psychology,
Indiana University, Bloomington, IN

Graduate Assistant September 1990 - May 1992
Poynter Center,
Indiana University, Bloomington, IN
Project: Develop materials for use in teaching ethics in research.

Associate Instructor, September 1990 - May 1991
Department of Psychology,
Indiana University, Bloomington, IN

Undergraduate Research Assistant September 1987 - June 1988
Harlow Primate Center,
University of Wisconsin, Madison, WI
Sponsor: Christopher Coe, Ph.D.
Name of project: Psychological stress and immune system function

AFFILIATIONS

Center for Neurotechnology in Mental Health Research September 2021 - Current
Associate Director
Pennsylvania State University

Penn State Center for Brain, Behavior, and Cognition December 2019 - Current
Member
The Huck Institute
Pennsylvania State University

Consortium on Substance Use and Addiction January 2019 - Current
Member
Pennsylvania State University

Faculty Affiliate of the Social and Behavioral May 2019 - Current

Neuroscience Dual-Title Degree Program

Pennsylvania State University

Prevention and Methodology Training Program

September 2018 - Current

Member

Pennsylvania State University

**Penn State Center for Molecular Investigation of
Neurological Disorders**

July 2018 - Current

Member

The Huck Institute

Pennsylvania State University

Penn State Molecular Cellular and Integrative Biosciences

January 2018 - Current

Member

The Huck Institute

Pennsylvania State University

Penn State Institute of the Neurosciences

December 2016 - Current

Member

The Huck Institute

Pennsylvania State University

Penn State Cancer Institute

December 2016 - Current

Member

The Pennsylvania State University

Tobacco Use Research Center

March 2003 - 2016

Member

University of Pennsylvania

Center for Substance Abuse Research

January 2003 – June 2016

Member

Temple University

EDITORIAL BOARDS

- ◆ Associate Editor *Frontiers in Behavioral Neuroscience* 2021-
- ◆ Senior Editor *Neuropharmacology* 2013-
- ◆ *Behavioral Neuroscience* 2007-
- ◆ *Frontiers in Behavioral Neuroscience* (review editor) 2007-2021
- ◆ *Neuropharmacology* 2010-2013
- ◆ *Journal of Addiction* 2012-2015
- ◆ *Journal of the Experimental Analysis of Behavior* 2010-2013
- ◆ *The Open Addiction Journal* 2007-2009

PROFESSIONAL SERVICE

- ◆ Chair of grant review panel ZDA1 IXR-Q (J3)S 2022 (October)
RFA Panel: NIDA Animal Genomics Program (U01)
- ◆ Co-Chair of grant review panel ZDA1 IXR-Q (04)S 2022 (May)
RFA Panel: NIDA Animal Genomics Program (U01)
- ◆ President-Elect, Division on Psychopharmacology and Substance 2022-2023
Use (Division 28) of the American Psychological Association
- ◆ Abstract Reviewer on Program Committee for 2023 annual 2022
meeting of the Society for Research on Nicotine and Tobacco
- ◆ American Psychological Association Divisions 12, 28, 45, 50 2022-
URM Mentorship Program
- ◆ Co-Chair of grant review panel ZDA1 IXR-Q (07) 2021
RFA Panel: NIDA Animal Genomics Program (U01)
- ◆ Society for Research on Nicotine and Tobacco Nominations 2021
Committee
- ◆ Abstract Reviewer on Program Committee for 2022 annual 2021
meeting of the Society for Research on Nicotine and Tobacco
- ◆ Session Chair: Neurobiological Underpinnings of Nicotine 2021
Dependence. 2021 annual meeting of the Society for Research
on Nicotine and Tobacco
- ◆ Abstract Reviewer on Program Committee for 2021 annual 2020
meeting of the Society for Research on Nicotine and Tobacco
- ◆ Chair of grant review panel ZRG1 RPHB-R(57)R 2020
RFA Panel: Career Development and Pathways to
Independence Award In Tobacco Regulatory Research,

National Institute of Health

- ◆ Ad-Hoc grant review panel for the Special Emphasis Scientific Review Group ZDA1 IXR-Q (07) Identification of Genetic and Genomic Variants by Next-Gen Sequencing in Non-human Animal Models (U01) 2019
- ◆ Chair of grant review panel ZRG1 RPHB-R RFA Panel: Career Development and Pathways to Independence Award in Tobacco Regulatory Research, National Institute of Health 2019
- ◆ Ad-Hoc grant review panel for the Special Emphasis Scientific Review Group ZRG1 BBBP-Y (02) Biobehavioral Applications on Substance Abuse and Decision-Making, NIH 2018
- ◆ Mentor for University of Delaware NIH's Centers of Biomedical Research Excellence (COBRE) Program: Dayan Knox 2018-Current
- ◆ Ad-Hoc grant review panel for the Special Emphasis Scientific Review Group 2018/01 ZDA1 SXT-P(06)S, NIH 2017
- ◆ Chair of Society for Research on Nicotine and Tobacco Fellow Task Force 2017-2018
- ◆ Ad-Hoc grant review panel for Neural Basis of Biobehavioral Regulation, Learning and Ethology, NIH 2017
- ◆ President, Society for Research on Nicotine and Tobacco 2014-2015
- ◆ Chair of grant review panel for Neurobiology of Motivated Behavior, National Institute of Health 7/13-6/15
- ◆ Committee Member for the National Academy of Sciences, Institute of Medicine Workshop: Caffeine in Food and Dietary Supplements: Examining Safety 2013
- ◆ President-Elect, Society for Research on Nicotine and Tobacco 2013-2014
- ◆ Society for Research on Nicotine and Tobacco Leadership Team 2011-2012
- ◆ Standing Member grant review panel for Neurobiology of Motivated Behavior, National Institute of Health 6/11-6/13
- ◆ Drexel University College of Medicine Discovery Platform Judge 2011
- ◆ Program Committee Chair: Society for Research on Nicotine & Tobacco 2010 -2011
- ◆ Executive Committee of the Pavlovian Society 2010-2014
- ◆ Grant review special panel for NIDA/NIAAA RFA entitled 5/09

“The Mouse Gene Development Initiative”,

National Institute of Health

- ◆ Grant review panel The University of Wisconsin-Milwaukee Research Growth Initiative Program 3/09, 12/12
- ◆ Grant review panel ad-hoc member for the Behavioral Neuroscience fellowships Study Section (Currently F02a), National Institute of Health 7/08, 10/08, 6/10
- ◆ Grant review panel Nicotine Dependence Study Section California Tobacco Related Disease Research Program 3/08, 3/09, 3/10
- ◆ Society for Research on Nicotine and Tobacco Program Committee 2007-09
- ◆ Grant review panel ad-hoc member for Neurobiology of Motivated Behavior, National Institute of Health 6/05 – 6/07, 2/11
- ◆ Ad-Hoc grant review panel for Neural Basis of Psychopathology, Addictions and Sleep Disorders, NIH 2/06
- ◆ Ad-Hoc grant review panel member National Institute of Health/NIDA 10/00, 1/05, 7/09, 5/10
- ◆ Ad-Hoc grant review panel member National Science Foundation 2004
- ◆ Consulting Editor for Monographs of the Society for Research in Child Development 2005
- ◆ Ad-Hoc manuscript review (for >45 journals):
Acta Neuropathologica; Alcoholism: Clinical and Experimental Research; Behavioral Neuroscience; Behavioural Brain Research; Behavioural Genetics; Behavioural Processes; Biological Psychiatry; Biology of Reproduction; Brain and Behavior; Brain Research; Brain Research Bulletin; British Journal of Pharmacology; Cerebral Cortex; Current Neuropharmacology; European Journal of Neuropsychopharmacology; European Journal of Neuroscience; Expert Opinions on Therapeutic Targets; Experimental and Clinical Psychopharmacology; Frontiers in Behavioral Neuroscience; Frontiers in Neuroscience; Genes, Brain, and Behavior; Hippocampus; Integrative Physiological and Behavior Science; International Journal of Neuropsychopharmacology; Journal of the Experimental Analysis of Behavior; Journal of Neurophysiology; Journal of Neuroscience; Journal of Neuroscience Methods; Learning and Memory; Life Sciences; Molecular Medicine; Molecular Psychiatry; Nature Communications; Neurobiology of Aging; Neurobiology of Learning and Memory; Neuropharmacology; Neuropsychopharmacology; Neuroscience; Neuroscience & Biobehavioral Reviews; Neurotoxicology and

Teratology; Pharmacology Report; Pharmacological Research; Pharmacology, Biochemistry, and Behavior; Physiology & Behavior; PLoS ONE; Progress in Neuro-Psychopharmacology & Biological Psychiatry; Psychoneuroendocrinology; Psychopharmacology; Schizophrenia Research; Tobacco Induced Diseases; Elsevier's Translational Epigenetics Series

PROFESSIONAL MEMBERSHIPS

- ◆ American Association for the Advancement of Science
- ◆ College on Problems in Drug Dependence
- ◆ Society for Neuroscience
- ◆ Pavlovian Society
- ◆ Society for Research on Nicotine and Tobacco
- ◆ International Behavioural and Neural Genetics Society
- ◆ International Behavioral Neuroscience Society
- ◆ Association of Psychological Sciences
- ◆ American Psychological Association
 - Division 6: Behavioral Neuroscience and Comparative Psychology
 - Division 28: Psychopharmacology and Substance Abuse

AWARDS

- ◆ Evan G. and Helen G. Pattishall Outstanding Research Achievement Award, Penn State 2018
- ◆ Pavlovian Research Award, The Pavlovian Society 2017
- ◆ Society for Research on Nicotine and Tobacco Fellow 2017
- ◆ American Psychological Association Fellow 2015
- ◆ Association for Psychological Science Fellow 2012
- ◆ Temple University Eberman Faculty Research Award 2012
- ◆ Lindback Award for Distinguished Teaching 2010
- ◆ Temple University Million Dollar Research Club 2007
- ◆ Abstract chosen to be part of the Neuroscience 2007 Press Book for the Society in Neuroscience
- ◆ Temple University Diamond Peer Teacher Faculty Mentor, 2007
- ◆ Invited co-chair of “Attention” paper session at annual meeting of the Society for Research on Nicotine and Tobacco, Austin, TX 2007
- ◆ Distinguished Teaching Award, 2004 Temple University
- ◆ Summer Research Fellowship, 2004 Temple University

- ◆ Presidential Summer Research Fellowship, 2003 Temple University
- ◆ Pre-Tenure Study Leave for Spring 2003 Temple University
- ◆ Research Incentive Fund, 2001 Temple University
- ◆ Summer Research Fellowship, 2001 Temple University
- ◆ Invited Participant of 4th Annual Training Course in Experimental Aging Research, 1996

GRANTS FUNDED: COMPLETED

Catecholamine Receptor Function and Aging

Role: Principal Investigator

Agency: NIH/NIA

National Research Service Award

Status: Funded, 1995-1997

Direct Costs: \$50,000

Hyperoxia & Resistant Rats: Models of Cerebellar Aging

Role: Principal Investigator

Agency: NIH/NIA

Status: Funded. RO3 Grant Award, 1997-1998

Direct Costs: \$50,000

A Mouse Model of Learning and Memory in Aging and AD

Role: Co-Investigator

Agency: NIA

Submission: 10/1/00

Status: Funded 6/01-5/02

Direct Costs: \$50,000

Molecular and Genetic Analysis of Cerebellar-Based Learning

Role: Principal Investigator

Agency: PA Department of Health

Submission: 11/1/01

Status: Funded 6/02-12/03

Direct Costs: \$50,000

Aging, Vascular Disease, Cell Death, & Cognition

Role: Co-Investigator

PA Department of Health

Submission: 7/1/02

Status: Funded 11/02-10/04

Direct Costs: \$225,000

Investigation of Age-Related Changes in Molecular Substrates of Learning in Transgenic Mice

Role: Principal Investigator

American Federation for Aging Research

Submission: 12/1/01

Status: Funded 8/02-7/04

Direct Costs: \$50,000

A Screen of Potential Antipsychotic Agents

Role: Principal Investigator

Agency: Memory Pharmaceuticals

Status: Funded 4/04-3/06

Direct Costs: \$18,700

Behavioral, Neural, and Genetic Factors of Nicotine Addiction

Role: Principal Investigator

Agency: PA Department of Health

Submission: 3/1/03

Status: Funded 4/04-3/06

Direct Costs: \$50,000

Behavioral Mechanisms of Cue Exposure Treatment for Smoking

Relapse Prevention: A Feasibility Trial with Bupropion

Role: Co-Investigator

Agency: Temple University

Submission: 1/15/04

Status: Funded 10/15/05-10/14/07

Direct Costs: \$150,000

Nicotine & Ethanol Influences on Contextual Conditioning

Role: Principal Investigator

Agency: NIAAA/NIH

Submission: 2/1/05

Status: Funded 12/10/05/-11/30/07

Direct Costs: \$100,000

Indirect Costs: \$41,410

Collaborative Research: Differing Interpretations of Young Children's Geometric Skills

Role: Co-Investigator

Agency: NSF

Submission: 1/15/04

Status: Funded 10/1/04-9/30/08

Direct Costs: \$426,677

Nicotine Withdrawal & Sensory Gating:
Noradrenergic Intervention

Role: Co-Investigator

Agency: NIH/NCI

Submission: 1/24/04

Status: Funded 10/1/04-9/30/09

Direct Costs: \$46,000 (Dr. Gould's Subcontract from UPENN)

The Role of CREB and Opioid System in Nicotine Reward

Role: Co-Investigator

Agency: NIH/NCI

Submission: 1/24/04

Status: Funded 10/1/04-9/30/09

Direct Costs: \$19,715 (Dr. Gould's Subcontract from UPENN)

Nicotine Addiction: Learning, Neural, & Genetic Processes

Role: Principal Investigator

Agency: NIDA/NIH

Submission: 11/01/04

Status: Funded 7/1/05-6/30/10

Direct Costs: \$1,000,000

Indirect Costs: \$372,662

NIDA Research “Center of Excellence” Grant Program (P50)

Role: Project Co-PI

Agency: NIH

Submission: 1/5/08

Status: Funded 8/1/09-7/31/14

Direct Costs: \$549,115

Indirect Costs: \$274,559

Genetic, Behavioral, & Neurobiological Substrates of Nicotine Withdrawal

Role: Principal Investigator

Agency: NIH

Submission: 3/5/08

Status: Funded 9/19/08-5/31/13

Direct Costs: \$1,000,000

Indirect Costs: \$478,000

Research Supplement to Promote Diversity in Health-
Related Research Program for Mr. Derek Wilkinson

04/01/2009-3/31/2011

Total Costs: \$122,379

Nicotine Addiction: Learning, Neural, & Genetic Processes

Role: Principal Investigator

Agency: NIDA/NIH

Submission: 11/01/04

Status: Funded 2/15/2011- 11/30/2016

Direct Costs: \$1,012,894

Indirect Costs: \$385,993

Big Data Computational Methods for Analysis of Drugs of Abuse

Role: Subcontract Principal Investigator

Agency: NIDA/NIH

Status: Funded 09/01/2017 – 06/30/2019

Direct Costs: \$159,544

Indirect Costs: \$93,010

GRANTS FUNDED: CURRENT

Use of the Diversity Outbred mouse population to identify genetic diversity in the long-term effects of adolescent nicotine exposure on nicotine-induced responses

Role: Principal Investigator

Agency: The Jackson Laboratory

Status: Funded 01/14/2022– 01/13/2023

Direct Costs: \$7,372 and 50 Diversity Outbred mice free of charge

Interstrain Variability in Long-Term Cognitive Effects of Adolescent Nicotine Exposure

Role: Principal Investigator

Agency: NIDA/NIH

Mechanism: R03

Status: Funded 08/01/2019 – 07/31/2022

Direct Costs: \$100,000

Indirect Costs: \$59,860

Gene Variants for Nicotine Withdrawal Deficits in Learning

Role: Principal Investigator

Agency: NIDA/NIH

Submission: 6/26/15

Mechanism: U01

Status: Funded 09/15/2016 – 07/31/2022

Direct Costs: \$1,125,000

Indirect Costs: \$643,500

GRANTS SUBMITTED

Neurobiological Mechanisms Underlying the Acute Nicotine-Induced Impairment of Contextual Fear Extinction

Role: Principal Investigator

Agency: NIDA/NIH

Mechanism: R21

Effect of Adolescent Nicotine Exposure on Adult Hippocampal Learning & Plasticity

Role: Principal Investigator

Agency: NIDA/NIH

Mechanism: R01

PUBLICATIONS

Peer-Reviewed Manuscripts (* denotes graduate student, • denotes undergraduate student)

Seemiller, L.R.*, Goldberg, L.R., Garcia-Trevizo, P.*, and **Gould, T.J.** Interstrain Differences in Adolescent Fear Conditioning After Acute Alcohol Exposure. *Brain Research Bulletin*, in press.

Zeid, D.* and **Gould, T.J.** Chronic Nicotine Exposure Alters Sperm Small RNA Content in C57BL/6J Mouse Model. *Developmental Psychobiology*, in press.

Palmisano, A.N.*, **Gould, T.J.**, and Astur, R.S. The Effect of Acute Nicotine Administration on Human Delay Cued and Context Fear Conditioning. *Experimental and Clinical Psychopharmacology*, in press.

Seemiller, L.R.*, Goldberg, L.R., Smith, P.B., Dennis, J. •, Patterson, A.D., and **Gould, T.J.** (2022) Genetic Differences in Nicotine Sensitivity and Metabolism in C57BL/6J and NOD/ShiLtJ Mouse Strains. *Neuropharmacology*, 221:109279.

Seemiller, L.R.* and **Gould, T.J.** (2022) Inbred Mouse Strain Differences in Alcohol and Nicotine Addiction-Related Phenotypes from Adolescence to Adulthood. *Pharmacology, Biochemistry and Behavior*, 218:173429.

Goldberg, L.R. and **Gould, T.J.** (2022) Genetic Influences Impacting Nicotine Use and Abuse During Adolescence: Insights from Human and Rodent Studies. *Brain Research Bulletin*, 87:24-38.

Mooney-Leber, S.M., Caruso, M.J., **Gould, T.J.**, Cavigelli, S., and Kamens, H. (2022) The Impact of Adolescent Stress on Nicotine Use and Affective Disorders in Rodent Models. *European Journal of Neuroscience*, 55:2196-2215.

Zeid, D.*, Mooney-Leber, S.M., Seemiller, L.R.*, Goldberg, L.R., and **Gould, T.J.** (2021) Terc Gene Cluster Variants Predict Liver Telomere Length in Mice. *Cells*, 10(10):2623. doi: 10.3390/cells10102623.

Mooney-Leber, S.M., Zeid, D.*, Garcia-Trevizo, P.*, Seemiller, L.R.*, Bogue, M.A., Grubb, S.C., Peltz, G., **Gould, T.J.** (2021) Genetic Differences in Dorsal Hippocampus Acetylcholinesterase Activity Predict Contextual Fear Learning Across Inbred Mouse Strains. *Frontiers in Psychiatry-Molecular Psychiatry*, 184:107501 .

- Seemiller, L.R.* , Mooney-Leber, S.M., Henry, E.* , McGarvey, A.* , Druffner, A.* , Peltz, G., and **Gould, T.J.** (2021) Genetic Background Determines Behavioral Responses During Fear Conditioning. *Neurobiology of Learning and Memory*, 184:107501.
- Worrell, S.D.* and **Gould, T.J.** (2021) Therapeutic Potential of Ketamine for Alcohol Use Disorder. *Neuroscience and Biobehavioral Reviews*, 126:573-589.
- Seemiller, L.R.* and **Gould, T.J.** (2021) Adult and Adolescent C57BL/6J and DBA/2J Mice are Differentially Susceptible to Fear Learning Deficits After Acute Ethanol or MK-801 Treatment. *Behavioural Brain Research*, 410:113351
- Kamens, H., Miller, C., Caulfield, J., Zeid, D.* , Horton, W., Silva, C., Sebastian, A., Albert, I., **Gould, T.J.**, Fishbein, D., Grigson, P.S., Cavigelli, S. (2021) Adolescent Stress Reduces Adult Morphine-Induced Behavioral Sensitization in C57BL/6J Mice. *Frontiers in Behavioral Neuroscience*, June, 3 <https://doi.org/10.3389/fnbeh.2021.678102>
- Goldberg, L.R., Kutlu, M.G., Zeid, D.* , Seemiller, L.R.* and **Gould, T.J.** (2021) Systems Genetic Analysis of Nicotine Withdrawal Deficits in Hippocampus-Dependent Learning. *Genes, Brain and Behavior*, 20:e12734
- Zeid, D.* , Goldberg, L.R., Seemiller, L.R.* , Mooney-Leber, S.M., Smith, P.B., and **Gould, T.J.** (2021) Multigenerational Nicotine Exposure Affects Offspring Nicotine Metabolism, Nicotine-Induced Hypothermia, and Basal Corticosterone in a Sex-Dependent Manner. *Neurotoxicology and Teratology*, 85:e106972
- Goldberg, L.R., Zeid, D.* , Kutlu, M.G., Cole, R.D.* , Lallai, V., Sebastian, A., Albert, I., Fowler, C.D., Parikh, V., and **Gould, T.J.** (2021) Paternal Nicotine Enhances Fear Memory, Reduces Nicotine Administration and Alters Hippocampal Genetic and Neural Function in Offspring. *Addiction Biology*, 26:e12859.
- Zeid, D.* and **Gould, T.J.** (2020) Impact of Nicotine, Alcohol, and Cocaine Exposure on Germline Integrity and Epigenome. *Neuropharmacology*, e108127.
- Seemiller, L.R.* and **Gould, T.J.** (2020) The Effects of Adolescent Alcohol Exposure on Learning and Related Neurobiology in Humans and Rodents. *Neurobiology of Learning and Memory*, e107234.
- Cole, R.D.* , Zimmerman, M., Matchanova, A., Kutlu, M., **Gould, T.J.**, and Parikh, V. (2020) Cognitive Rigidity and BDNF-Mediated Frontostriatal Glutamate Neuroadaptations during Spontaneous Nicotine Withdrawal. *Neuropsychopharmacology*, 45:866-876.
- Holliday, E.D.* , Logue, S.F., Oliver, C.* , Bangasser, D.A., and **Gould, T.J.** (2020) Stress and Nicotine During Adolescence Disrupts Adult Hippocampal-Dependent Learning and Alters Stress Reactivity. *Addiction Biology*, 25:e12769.

- Cole, R.D.* , Wolsh, C., Zimmerman, M., Harrington, E., **Gould, T.J.**, and Parikh, V. (2019) Adolescent and Adult Nicotine Exposure Differentially Impacts Oral Nicotine and Oral Saccharin Self-Administration in Mice. *Behavioural Brain Research*, 359:836-844.
- Goldberg, L.R. and **Gould, T.J.** (2019) Multigenerational and Transgenerational Effects of Paternal Exposure to Drugs of Abuse on Behavioral and Neural Function. *European Journal of Neuroscience*, 50:2453-2466.
- Payne, P., Fiering, S., Zava, D.T., **Gould, T.J.**, Brown, B., Hage, P., Gaudet, C., and Crane-Godrea, M.A. (2018) Digital delivery of meditative movement training improved health of cigarette-smoke-exposed subjects. *Frontiers in Public Health*, 6:282 (EPub 16 pages).
- Kutlu, M.G., Conner, D.* , Tumolo, J.M.* , Cann, C.* , Garrett, B.* , and **Gould, T.J.** (2018) Nicotine modulates contextual fear extinction through changes in ventral hippocampal GABAergic function. *Neuropharmacology*, 141:192-200.
- Gitik, M., Holliday, E.D.,* Leung, M., Yuan, Q., Logue, S.F., Tikkanen, R., Goldman, D., and **Gould, T.J.** (2018) Choline Ameliorates Adult Learning Deficits and Reverses Epigenetic Modification of Chromatin Remodeling Factors Related to Adolescent Nicotine Exposure. *Neurobiology of Learning and Memory*, 155:239-248.
- Mooney-Leber, S.M. and **Gould, T.J.** (2018) The Long-Term Cognitive Consequences of Adolescent Exposure to Recreational Drugs of Abuse. *Learning & Memory*, 25(9):481-491.
- Zeid, D.* and **Gould, T.J.** (2018) Chronic Nicotine Exposure in Pre-Adolescence Enhances Later Spontaneous Recovery of Fear Memory. *Behavioral Neuroscience*, 132(4):240-246.
- Kutlu, M.G., Marin, M.F., Tumolo, J.M.* , Kaur, N., VanElzakker, M., Shin, L.M., and **Gould, T.J.** (2018) Nicotine Exposure Leads to Deficits in Differential Fear Conditioning in Mice and Humans: a Potential Role of the Anterior Cingulate Cortex. *Neuroscience Letters*, 673:142-149.
- Kutlu, M.G., Cole, R.D.* , Conner, D.* , Natwora, B., and **Gould, T.J.** (2018) Tyrosine Receptor Kinase B Receptor Activation Reverses the Impairing Effects of acute Nicotine on Contextual Fear Extinction. *Journal of Psychopharmacology*, 32(3):367-372.
- Kutlu, M.G., Tumolo, J.M.* , Cann, C.* , and **Gould, T.J.** (2018) Differential Effects of $\alpha 4\beta 2$ Nicotinic Receptor Antagonists and Partial-Agonists on Contextual Fear Extinction in Male C57BL/6 Mice. *Psychopharmacology*, 235(4):1211-1219.
- Tumolo, J.M.* , Kutlu, M.G., and **Gould, T.J.** (2018) Chronic Nicotine Differentially Alters Spontaneous Recovery of Contextual Fear in Male and Female Mice. *Behavioural Brain Research*, 341:176-180.
- Fowler, C.D., Gipson, C.D., Kleykamp, B.A., Rupprecht, L.E., Harrell, P.T., Rees, V.W., **Gould, T.J.** Oliver, J., Bagdas, D., Damaj, M.I., Schmidt, H.D., Duncan, A., De Biasi, M. (2018) Basic

Science and Public Policy: Informed Regulation for Nicotine and Tobacco Products. *Nicotine & Tobacco Research*, 20: 789-799. **2018 Best Paper Award from Society for Research on Nicotine and Tobacco**

- Zeid, D.*, Kutlu, M.G., and **Gould, T.J.** (2018) Differential Effects of Nicotine Exposure on the Hippocampus Across Lifespan. *Current Neuropharmacology*, 16(4):388-402.
- Zhou, L., Fisher, M.L., Cole, R.D.*, **Gould, T.J.**, Parikh, V., Ortinski, P.I., and Turner, J.R. (2018) Neuregulin 3 Signaling Mediates Nicotine-Dependent Synaptic Plasticity in the Orbitofrontal Cortex and Cognition. *Neuropsychopharmacology*, 43(6):1343-1354.
- Kutlu, M.G., Zeid, D.*, Tumolo, J.M.* and **Gould, T.J.** (2018) Pre-Adolescent Mice are Less Sensitive to the Effects of Acute Nicotine on Extinction and Spontaneous Recovery. *Brain Research Bulletin*, 145:143-150.
- Oliver, C.*, Kutlu, M.G., Zeid, D.*, and **Gould, T.J.** (2018) Sex Differences in the Effects of Nicotine on Contextual Fear Extinction. *Pharmacology Biochemistry and Behavior*, 165:25-28.
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- Gould T.J.** and J.E. Steinmetz (1993) Changes in conditioning-related neuronal activity in rabbit lobule HVI of cerebellar cortex and interpositus nucleus during discrimination and reversal

conditioning. *Soc Neurosci Abstr* 19:1006.

Gould T.J. and Steinmetz, J.E. (1992) Changes in conditioning-related neuronal activity in rabbit lobule HVI of cerebellar cortex during backward, forward, and unpaired conditioning. *Soc Neurosci Abstr* 18:337.

Gould, T.J., Miller, D.P., and Steinmetz, J.E. (1991) Differences in acquisition and extinction of conditioning-related neuronal activity in rabbit cerebellar cortex and interpositus nucleus. *Soc Neurosci Abstr* 17:323.

Gould, T.J., Sears, L.L., and Steinmetz, J.E. (1990) Rabbit cerebellar activity evoked by pontine nuclei or inferior olive stimulation--potential regions of CS-US convergence during eyelid conditioning. *Soc Neurosci Abstr* 16:763.

Gould, T.J. and Kettner, R.E. (1989) A movement-sequence delay task for the study of motor control activity during arm reaching in 3D space. *Soc Neurosci Abstr* 15:788.

Kettner, R.E. and **Gould, T.J.** (1989) A neural model of motor cortical responses during arm reaching in 3D space. *Soc Neurosci Abstr* 15:788.

INVITED TALKS

Impact of Age and Genetics on the Effects of Nicotine on Learning and Hippocampal Function May, 2019
Department of Psychology
University of Connecticut

Nicotine Addiction Across the Ages: A Biobehavioral Perspective March, 2019
Pattishall Research Lecture
The Penn State University

Gene Variants for Nicotine Withdrawal Deficits in Learning January, 2019
Lisa Goldberg (postdoctoral fellow, presenter) and Thomas Gould
NIDA Genetics Animal Models Consortium Meeting
Bethesda, MD

The Role of Epigenetics in the Effects of Nicotine on Learning November, 2018
The Annual Delaware Neuroscience Research and Poster Symposium
Newark, DE

The Impact of Developmental Nicotine Exposure on Learning and Hippocampal Function March, 2018
Department of Psychiatry and Behavioral Sciences
Johns Hopkins University School of Medicine

- Neuropharmacologic Effects of Nicotine on Learning: Implications for Addiction** March, 2018
Behavioral Pharmacology Research Unit
Johns Hopkins University School of Medicine
- From Intragenerational to Intergenerational: The Impact of Nicotine on Learning and Hippocampal Function** October, 2017
Iowa Neuroscience Institute
University of Iowa
- Nicotine Produces Long-Term Changes in Learning Through Epigenetics** August, 2017
Annual Meeting of the American Psychological Association
Washington, D.C.
- Epigenetic Regulation of Nicotine's Long-Term Effects on Memory** May, 2017
Department of Biomedical Sciences
Marquette University
- Neurobiological, Genetic, and Epigenetic Substrates of the Effects of Nicotine on Learning and Hippocampal Function** April, 2017
Department of Psychology
Florida International University
- Nicotine Exposure During Adolescence and Neurocognitive/Behavioral Outcomes** May, 2015
Developmental Effects of Nicotine and Implications for Emerging Tobacco Products Meeting
hosted by the Center for Disease Control and the National Institute of Health
- Nicotine Effects on the Neurobiology of Learning and It's Role in Addiction** April, 2015
Department of Biological Sciences
Lehigh University
- The Role of Genetics and Development in the Effects of Nicotine Withdrawal on Learning** October, 2014
Fox Chase Cancer Center
Philadelphia, PA

<p>Genetic, Developmental, and Receptor Level Influences on Nicotine Withdrawal-Associated Deficits in Learning</p> <p>Annual Meeting of the International Behavioral Neuroscience Society Las Vegas, NV</p>	June, 2014
<p>Nicotine and the Hippocampus: Insights into Learning and Addiction</p> <p>Department of Psychology Texas A&M University</p>	December, 2012
<p>Nicotine and the Hippocampus: Insights into Learning and Addiction</p> <p>Department of Psychology University of Delaware</p>	September, 2012
<p>The Neural Substrates of Nicotine's effects on Learning</p> <p>Department of Pharmacology and Toxicology Virginia Commonwealth University Richmond, VA</p>	February, 2012
<p>Nicotine Modulation of the Neural Substrates of Hippocampus-Dependent Learning</p> <p>Department of Neurobiology and Anatomy Drexel School of Medicine Philadelphia, PA</p>	January, 2012
<p>Hippocampus-Dependent Learning: A Smoking Gun in Understanding Nicotine Addiction</p> <p>Annual Meeting of the Pavlovian Society Milwaukee, WI</p>	September, 2011
<p>The Behavioral and Neural Effects of Nicotine on Hippocampus-Dependent Learning</p> <p>National Institute of Environmental Health Science Research Triangle Park, NC</p>	December, 2009

- The Impact of Nicotine on Memory Formation in Mice:
From Behavior to Cellular Substrates** September, 2009
Translational Nicotine Research Meeting
CCD Congress Center Dusseldorf/Germany
September 18-19 2009
- Behavioral and Molecular Mechanisms of Cognitive Deficits in
Nicotine Withdrawal** April, 2009
Transdisciplinary Tobacco Use Research Centers (TTURCs):
A Decade of Transdisciplinary Tobacco Use Science
NIH Sponsored Pre-meeting Symposium
Annual Meeting of the Society for Research on Nicotine and Tobacco
Dublin, Ireland
- Nicotine, Learning, and the Hippocampus:
Implications for Nicotine Addiction** January, 2009
Neural & Behavioral Sciences
Penn State College of Medicine
Hershey, PA
- Recollection of the “Early Years”: Taming Hoosier-Land
One Purkinje at a Time: Symposium in Honor of Joseph Steinmetz** September, 2008
Annual Meeting of the Pavlovian Society
Weehawken, NJ
- Nicotine, Synaptic Plasticity, and Addiction: The Effects of
Nicotine on Hippocampus-Dependent Learning** May 2008
Neuroscience Workgroup Cutting Edge Seminar:
Nicotine and Neuroplasticity
National Institute on Drug Abuse
Bethesda, MD
- Nicotine and Learning: From Behavior to Neural and
Genetic Substrates** April 2008
University of Colorado

Boulder, CO

Nicotine Addiction and Learning: Involvement of Contextual Associations and the Hippocampus

March 2008

Conference on the Neurobehavioral Approaches to the Study of Clinical Disorders sponsored by the Merrill Advanced Studies Center and the University of Kansas
Tempe, AZ

Nicotine Modulation of Hippocampus Dependent Learning: Insights into Nicotine Addiction

October 2007

University of Wisconsin at Milwaukee
Milwaukee, WI

The Hippocampus, Learning and Nicotine Addiction

October 2007

National Institute on Drug Abuse
Baltimore, MD

Ameliorating Nicotine Withdrawal Deficits in Contextual Learning

January 2007

National Institute of Health: Translational Medication Development for Nicotine Dependence Workshop
Washington, DC

Nicotine Addiction and Hippocampus-Dependent Learning

February 2006

Department of Neuroscience
Temple University College of Medicine

Nicotine Addiction and Hippocampus-Dependent Learning

January 2006

Clinical Neuropsychology
University of Pennsylvania

Common Neural, Cellular, and Molecular Substrates of Nicotine Addiction and Contextual Learning

March 2005

Department of Neural and Behavioral Science
Medical College

Penn State University

Nicotine Addiction and Learning

January 2004

Tobacco Use Research Center

University of Pennsylvania

Nicotine Addiction and Hippocampus-Dependent Learning

December 2004

Department of Psychology

University of Delaware

**cAMP/PKA Signaling Cascade, Sensory Gating,
and Schizophrenia**

June 2004

Department of Psychiatry

University of Pennsylvania

Nicotine Addiction: Learning, Neural & Genetic Substrates

May 2004

Frontiers in Addiction

Summer Conference

Vanderbilt University

Nashville, TN

**Behavioral, Cellular, and Genetic Analysis of Enhancement
of Contextual Fear Conditioning by Nicotine**

October 2003

Department of Pharmacology

Temple University College of Medicine

**Nicotine & Hippocampus-Dependent Learning:
Behavioral, Pharmacological, and Genetic Analysis**

September 2003

Department of Pharmacology & Physiology

Drexel University College of Medicine

**Genetic Regulation of PKA and CREB Expression:
Investigation of the Neurobiology of Learning and Memory
Invited Presentation**

May 2001

Pharmacology Department

Temple University

Modeling Mental Illness in the Mouse – Bipolar Disorder, Addiction, and Schizophrenia October 2000
Invited Presentation
Neuroscience Program
Temple University

PRESENTATIONS

Genetic Differences in Nicotine Metabolism and Associated Differences in Sensitivity to Nicotine August, 2022
Seemiller, L.R.*and **Gould, T.J.**
Poster
Annual Meeting of the American Psychological Association
Minneapolis, Minnesota

C57BL/6 Substrain Differences in Conditioned Fear and Hippocampal Transcriptome Differences in Sensitivity to Nicotine August, 2022
Goldberg, L.R., Sebastian, A., Albert, I., and **Gould, T.J.**
Poster
Annual Meeting of the American Psychological Association
Minneapolis, Minnesota

Multi and Transgenerational Effects of Paternal Exposure to Nicotine Alters Offspring Fear Memory, Sensitivity to Nicotine, Hippocampal Genetic and Neural Function, and Basal Corticosterone June, 2022
Gould, T.J.
Talk
Annual Meeting of the International Behavioral Neuroscience Society
Glasgow, Scotland

Genetic Background Determines Adolescent Hippocampal Learning and Gene Expression After Acute Alcohol Exposure June, 2022
Seemiller, L.R.*, Goldberg, L.R., Sebastian, A., Zeid, D.*, Albert, I., and **Gould, T.J.**
Poster

Annual Meeting of the International Behavioral Neuroscience Society
Glasgow, Scotland

Inbred Mouse Strain Differences in Adolescent Hippocampal Learning and Gene Expression After Acute Ethanol Exposure May, 2022

Seemiller, L.R.*, Goldberg, L.R., Sebastian, A., Zeid, D.*, Albert, I., and **Gould, T.J.**

Talk

Annual Meeting of the International Behavioral and Neural Genetics Society
Memphis, Tennessee

Long-Term Effects of Adolescent Nicotine Exposure Vary by Genetic Background in Learning, Anxiety-Like Phenotypes and Nicotine Sensitivity May, 2022

Garcia-Trevizo, P.*, Novoa, C.*, and **Gould, T.J.**

Poster

Annual Meeting of the International Behavioral and Neural Genetics Society
Memphis, Tennessee

Strain-Dependent Contextual Fear Learning Outcomes After Acute Adolescent Ethanol Exposure: Examining the Role of the Dorsal Hippocampal Transcriptome in Adolescent and Adult C57BL/6J and DBA/2J Inbred Mice May, 2022

Seemiller, L.R.*, Goldberg, L.R., Sebastian, A., Zeid, D.*, Albert, I., and **Gould, T.J.**

Poster

NIDA Genetic Consortium Meeting
Virtual

Genetic Dissection of Nicotine and Learning Traits Using BXD Recombinant Inbred Mice March, 2022

Goldberg, L.R., Seemiller, L.*, and **Gould, T.J.**

Talk

Annual Meeting of the Society for Research on Nicotine and Tobacco

Baltimore, Maryland

C57BL/6 Substrain Differences in Conditioned Fear and Hippocampal Transcriptome October, 2021

Goldberg, L.R., Sebastian A., Albert T., and **Gould, T.J.**

Poster

Annual Meeting of the Pavlovian Society

Ann Arbor, Michigan

Acetylcholinesterase Activity Varies Across Genetic Background and Correlates with Fear Learning October, 2021

Mooney-Leber, S.M., Zeid, D.,* Garcia-Trevizo, P.,* Seemiller, L.R.,*

Bogue, MA, Grubb, SC, Peltz, G., and **Gould, T.J.**

Poster

Annual Meeting of the Pavlovian Society

Virtual

Behavioural and Genetic Architecture of Fear Conditioning and Related Phenotypes October, 2021

Zeid, D.,* Seemiller, L.R.,* and **Gould, T.J.**

Poster

Annual Meeting of the Pavlovian Society

Virtual

Chronic Nicotine Exposure During Adolescence Decreases Sensitivity to Nicotine Induced Hypolocomotion in Adulthood August, 2021

Garcia-Trevizo, P.,* Goldberg, L.R., and **Gould, T.J.**

Poster and Data Blitz Presentation

Annual Meeting of the American Psychological Association

Virtual

Fear Learning Deficits After Acute Ethanol or MK-801 Treatment in Adolescent and Adult C57BL/6J and DBA/2J Inbred Mice March, 2021

Seemiller, L.R.,* and **Gould, T.J.**

Poster

NIDA Genetic Consortium Meeting
Virtual

**Strain Differences in Behavioral Responses
to Fear Conditioning**

August, 2020

Seemiller, L.R.,* Mooney-Leber, S.M., Henry, E.°, Hess, A.°,
Peltz, G., and **Gould, T.J.**

Poster

Annual Meeting of the Pavlovian Society

Virtual

**Alternative Behavioral Responses to Fear Conditioning Are
Determined by Genetic Background**

August, 2020

Seemiller, L.R.,* Mooney-Leber, S.M., Henry, E.°, Hess, A.°,
Peltz, G., and **Gould, T.J.**

Poster

Annual Meeting of the International Behavioral Neuroscience Society

Virtual

**Adult and Adolescent C57BL/6J and DBA/2J Inbred Mice
Are Differentially Susceptible to Contextual Fear Learning Deficits
After Acute Ethanol or MK-801 Treatment**

June, 2020

Seemiller, L.R.,* and **Gould, T.J.**

Poster

Annual Meeting of the Research Society on Alcoholism

Virtual

**Nicotine Metabolism Genetics in C57BL/6J and NOD/ShiLtJ
Mouse Strains**

March, 2020

Seemiller, L.R.,* Goldberg, L.R., Smith, P., Tian, Y., Patterson, A., and
Gould, T.J.

Poster

Annual Meeting of the Society for Research on Nicotine and Tobacco

New Orleans, LA

- Genetic Influences on Learning, Acetylcholinesterase, and Withdrawal from Chronic Nicotine Across Inbred Mouse Strains** March, 2020
 Mooney-Leber, S.M., Zeid, D.,* Peltz, G and **Gould, T.J.**
 Poster
 Annual Meeting of the Society for Research on Nicotine and Tobacco
 New Orleans, LA
- Systems Genetic Analysis of Nicotine Withdrawal Deficits in Learning Using the BxD Genetic Reference Panel** January, 2020
 Goldberg, L.R., Kutlu, M.G, Zeid, D.,* Seemiller, L.R.,* and **Gould, T.J.**
 Poster
 NIDA Genetic Consortium Meeting
 Bethesda, MD
- Nicotine Metabolism Genetics in C57BL/6J and NOD/ShiLtJ Mouse Strains** January, 2020
 Seemiller, L.R.,* Goldberg, L.R., Smith, P., Tian, Y., Patterson, A., and **Gould, T.J.**
 Poster
 NIDA Genetic Consortium Meeting
 Bethesda, MD
- Computational Genetic Analysis of 8300 Biomedical Phenotypes and of Responses to Drugs of Abuse** January, 2020
 Arslan, A., Guan, Y., Chen, X., Donaldson, R., Zhu, W., Ford, M., Wu, M., Dill, D.L., Mooney-Leber, S.M., Seemiller, L.R.,* Goldberg, L.R., Smith, P., Tian, Y., Patterson, A., **Gould, T.J.**, Jentsch, D., and Petz, G.
 Poster
 NIDA Genetic Consortium Meeting
 Bethesda, MD
- Ethanol Differentially Induces Fear Learning Deficits in Adolescent and Adult Male and Female C57BL/6J and DBA/2J Inbred Mice** October, 2019

Seemiller, L.R.,* and **Gould, T.J.**

Poster

Annual Meeting of the Pavlovian Society

Vancouver, BC, Canada

**Adolescent Stress and Nicotine Interact to Disrupt
Adult Hippocampal-Dependent Learning and Stress Response**

October, 2019

Holliday, E.D.,* Bangasser, D.A., and **Gould, T.J.**

Poster

Annual Meeting of the Pavlovian Society

Vancouver, BC, Canada

**Systems Genetic Analysis of Nicotine Withdrawal Deficits
in Learning**

May, 2019

Goldberg, L.R., Mooney-Leber, S.M., Kutlu, M.G, Zeid, D.,*

Peltz, G and **Gould, T.J.**

Talk

Genes, Brain and Behavior Conference

International Behavioural and Neural Genetics Society

University of Edinburgh

Edinburgh, Scotland, UK

**Identification of a Locus on Chromosome Four Mediating
Nicotine Withdrawal Deficits in Hippocampal Learning.**

February, 2019

Goldberg, L.R., Kutlu, M.G, Zeid, D.,* Seemiller, L.,* and **Gould, T.J.**

Talk

Annual Meeting of the Society for Research on Nicotine and Tobacco

San Francisco, CA

**Translational Studies on the Impacts of Developmental Nicotine
Exposure on Adolescent and Adult Learning, Memory, and
Addiction: A Role of Epigenetics**

January, 2019

Gould, T.J.

Talk

Winter Conference on Brain Research

Snowmass, CO

Identification of a Locus on Chromosome Four Mediating Nicotine Withdrawal Deficits in Hippocampal Learning

January, 2019

Goldberg, L.R., Kutlu, M.G, Zeid, D.,* Seemiller, L.R.,* and **Gould, T.J.**

Poster

NIDA Genetic Consortium Meeting

Bethesda, MD

Adolescent Social Stress Differentially Impacts Nicotine and Morphine Responses in a Strain Dependent Manner

January, 2019

Kamens, H.M., Caruso, M.I,* Miller, C.N.,* Zeid, D.,* **Gould, T.J.** and Cavigelli, S.A.

Poster

NIDA Genetic Consortium Meeting

Bethesda, MD

Differential Susceptibility to Effects of Acute Versus Chronic Nicotine on Fear Extinction and Spontaneous Recovery in Adolescent Mice

October, 2018

Zeid, D.,* Kutlu, M.G., and **Gould, T.J.**

Poster

Annual Meeting of the Pavlovian Society

Iowa City, IA

Utilizing the BXD Genetic Reference Panel to Identify the Causal Genetic Variants of Nicotine Withdrawal Deficits in Hippocampal Learning

May, 2018

Goldberg, L.R., Kutlu, M.G, Zeid, D.,* Gadiwalla, S., and **Gould, T.J.**

Poster

International Behavioural and Neural Genetics Society Annual Meeting

Rochester, MN

Paternal Nicotine Exposure Transgenerationally Alters Gene Expression in the Cholinergic Signaling Pathway

February, 2018

Gould, T.J., Kutlu, M.G., Cole, R.,* Tumolo, J.M.,[•] and Parikh, V.
Symposium
Annual Meeting of the Society for Research on Nicotine and Tobacco
Baltimore, MD

Nicotine Differentially Impacts Fear Extinction and Spontaneous Recovery in Adolescent and Adult Mice February, 2018

Zeid, D.,* Kutlu, M., Tumolo, J.M.,[•] and **Gould, T.J.**
Poster
Annual Meeting of the Society for Research on Nicotine and Tobacco
Baltimore, MD

Acute Nicotine Disrupts Consolidation of Contextual Fear Extinction and Alters Long-Term Memory-Associated Hippocampal Kinases February, 2018

Gadiwalla, S., Kutlu, M.G., Tumolo, J.M.,[•] Garrett, B.,[•] and **Gould, T.J.**
Poster
Annual Meeting of the Society for Research on Nicotine and Tobacco
Baltimore, MD

Effects of Nicotine Exposure During Adolescence on Adult Cognition, Dendritic Morphology, and Epigenome January, 2018

Zeid, D.,* Gitik, M., Holliday, E.,* Goldberg, L., Goldman, D., and **Gould, T.J.**
Poster
NIDA Genetic Consortium Meeting
Bethesda, MD

Paternal Nicotine Exposure Alters Generational Fear Conditioning and Hippocampal Cholinergic Function October, 2017

Gould, T.J., Kutlu, M.G., and Parikh, V.
Poster
Annual Meeting of the Pavlovian Society
Philadelphia, PA

Paternal Nicotine Exposure Transgenerationally Alters June, 2017

Fear Learning and Cholinergic Function

Kutlu, M.G., Cole, R.,* Tumolo, J.M.,• Parikh, V., and **Gould, T.J.**

Poster

College on Problems of Drug Dependence

Montreal, Canada

**Transgenerational Effects of Paternal Nicotine Exposure
on Fear Response and Cholinergic Function**

March, 2017

Kutlu, M.G., Cole, R.,* Tumolo, J.M.,• Parikh, V., and **Gould, T.J.**

Symposium

Annual Meeting of the Society for Research on Nicotine and Tobacco

Florence, Italy

**Adolescent Nicotine Exposure Disrupts Adult Hippocampus-
Dependent Learning and Alters Methylation of Chromatin-
Related Genes in the Dorsal Hippocampus**

March, 2017

Kutlu, M.G., Gitik, M., Holliday, E.,* Yuan, Q., Leung, M., Goldman, D.,
and **Gould, T.J.**

Symposium

Annual Meeting of the Society for Research on Nicotine and Tobacco

Florence, Italy

**Genetic and Epigenetic Modulators of Nicotine Effects on
Learning and Hippocampal Function
Gould, T.J.**

January, 2017

Talk

Park City Winter Conference

Park City, UT

**Paternal Nicotine Exposure Trans-Generationally Alters
Fear Response and Cholinergic Function: Potential
Epigenetic Mechanisms**

November, 2016

Kutlu, M.G., Cole, R.,* Tumolo, J.M.,• Parikh, V., and **Gould, T.J.**

Poster

NIDA Genetic Consortium Meeting

Bethesda, MD

Choline Supplementation in an Adolescent Nicotine Exposure Model - a Whole Genome Epigenetic Perspective November, 2016

Gitik, M., Holliday, E.,* Leung, M., Yuan, Q., Goldman, D., and **Gould, T.J.**

Poster

NIDA Genetic Consortium Meeting

Bethesda, MD

Chronic Nicotine Alters Spontaneous Recovery of Contextual Fear Differentially in Male and Female Mice September, 2016

Tumulo, J.M.°, Kutlu, M.G., and **Gould, T.J.**

Poster

Annual Meeting of the Pavlovian Society

Jersey City, NJ

Nicotinic Acetylcholine Receptors Modulate Contextual Fear Extinction Through Ventral Hippocampal GABAergic Signaling September, 2016

Kutlu, M.G., Tumulo, J.M.°, Garrett, B.°, and **Gould, T.J.**

Poster

Annual Meeting of the Pavlovian Society

Jersey City, NJ

Dysregulations in the Cholinergic System After Adolescent Nicotine is Reversed by Dietary Choline June, 2016

Holliday, E.*, Oliver, C.*, and **Gould, T. J.**

Poster

College on Problems of Drug Dependence

Phoenix, AZ

Effects of Dietary Choline Supplementation in an Adolescent Nicotine Exposure Model – a Whole Genome Epigenetic Perspective May, 2016

Gitik, M., Holliday, E.,* Leung, M., Yuan, Q., Goldman, D., and **Gould, T.J.**

Poster

Annual Meeting - Society of Biological Psychiatry

Atlanta, GA

**Developmental Toxicity of Nicotine During
Adolescence: A Transdisciplinary Synthesis and
Implications for Emerging Tobacco Products**

March, 2016

Gould, T.J.

Symposium

Annual Meeting of the Society for Research on Nicotine and Tobacco
Chicago, IL

**Adolescent Nicotine Exposure Alters Adult
Contextual Fear Conditioning**

September, 2015

Gould, T.J.

Poster

Annual Meeting of the Pavlovian Society
Portland, OR

**Adolescent Nicotine Negatively Impacts Adult Cognition
and Increase Addiction Liability of Subsequent Nicotine**

March, 2015

Holliday, E.D.* and **Gould, T.J.**

Talk

Annual Meeting of the Eastern Psychological Association
Philadelphia, PA

**Acute Nicotine Disrupts Backwards Trace, but Not Unpaired
Cued Learned Safety**

March, 2015

Connor, D.A.* and **Gould, T.J.**

Talk

Annual Meeting of the Eastern Psychological Association
Philadelphia, PA

The effects of acute nicotine on contextual safety learning

February, 2015

Oliver, C.*, Kutlu, M.G., and **Gould, T.J.**

Poster

Annual Meeting of the Society for Research on Nicotine and Tobacco
Philadelphia, PA

Acute, chronic, and withdrawal from nicotine impair extinction of contextual fear and a trkB agonist, 7,8DHF, ameliorates nicotine-induced impairment of extinction in mice February, 2015

Poster

Kutlu, M.G., Oliver, C.*, Cole, R.*, Connor, D.*, and **Gould, T.J.**

Annual Meeting of the Society for Research on Nicotine and Tobacco
Philadelphia, PA

Adolescent nicotine exposure causes dysregulation in the cholinergic system February, 2015

Poster

Holliday, E.D.*, Oliver, C.*, and **Gould, T.J.**

Annual Meeting of the Society for Research on Nicotine and Tobacco
Philadelphia, PA

Acute nicotine disrupts trace conditioned safety February, 2015

Connor, D.*, and **Gould, T.J.**

Poster

Annual Meeting of the Society for Research on Nicotine and Tobacco
Philadelphia, PA

Impact of nicotine withdrawal on flexible decision making and frontostriatal BDNF February, 2015

Parikh, V., Patel, P.J.,[•] Poole, R.L.*, Cole, R.*, and **Gould, T.J.**

Poster

Annual Meeting of the Society for Research on Nicotine and Tobacco
Philadelphia, PA

Disrupted Cognitive Control during Nicotine Withdrawal: Possible Links to BDNF Imbalance in the Frontostriatal Circuits December, 2014

Parikh, V., Patel, P.J.[•], Poole, R.L.*, Cole, R.D.*, and **Gould, T.J.**

Poster

Annual Meeting of the American College of Neuropsychopharmacology
Phoenix, AZ

- The Effects of Chronic and Withdrawal from Chronic Nicotine on Extinction Learning** September, 2014
 Oliver, C.*, Kutlu, M.G., and **Gould, T.J.**
 Poster
 Annual Meeting of the Pavlovian Society
 Seattle, WA
- Neural Substrates of Age-dependent Hippocampal Sensitivity to the Effects of Nicotine on Hippocampus-Dependent Learning** February, 2014
 Holliday, E.D.* and **Gould, T.J.**
 Talk
 Annual Meeting of Society for Research on Nicotine and Tobacco
 Seattle, WA
- Novel Cellular Mechanisms of Nicotine's Effects on Learning and Memory** September, 2013
Gould, T.J.
 Talk and Symposium Chair
 Annual Meeting of the Pavlovian Society
 Austin, TX
- Acute Administration of Nicotine Interferes with the Expression of Safety Cue Memory** September, 2013
 Connor, D.A.* and **Gould, T.J.**
 Poster
 Annual Meeting of the Pavlovian Society
 Austin, TX
- Adolescent Vulnerability to the Effects of Nicotine on Hippocampus-Dependent Learning** August 2013
Gould, T.J.
 Talk and Symposium Chair
 Annual Meeting of the American Psychological Association
 Honolulu, HI
- Thyroid Receptor β is Critically Involved in the Effects of** June 2013

Nicotine on Hippocampus-Dependent Memory

Leach, P.T.*, Kenney, J.W.*, Connor, D.*, and **Gould, T.J.**

Poster

Endocrine Society's Annual Meeting

San Francisco, CA

Donepezil Reverses Deficits in Contextual Learning Induced by Nicotine Withdrawal

May 2013

Poole, R.*, Connor, D.*, and **Gould, T.J.**

Poster

Annual Meeting of the Association for Psychological Sciences

Washington, D.C.

The Cholinesterase Inhibitor Galantamine Ameliorates Withdrawal Deficits in Hippocampus-Dependent Learning
Gould, T.J.

March 2013

Talk

Annual Meeting of Society for Research on Nicotine and Tobacco

Boston, Massachusetts

Nicotine Modulation of the Neural Substrates of Hippocampus-Dependent Learning: Implications for Addiction and Cognitive Disorders
Gould, T.J.

November 2012

Talk

Annual Meeting of the German Association for Psychiatry and Psychotherapy (DGPPN)

Berlin, Germany

Examination of the Relationship Between Chronic Nicotine Induced Tolerance and Withdrawal-Related Deficits in Contextual Fear Conditioning

September, 2012

Adoff, M.D.* , Wilkinson, D.S.* , Yildirim, E.1, and **Gould, T.J.**

Poster

Annual Meeting of the Pavlovian Society

Jersey City, NJ

- Thyroid Receptor β is Critically Involved in the Effects of Nicotine on Hippocampus-Dependent Memory, while Thyroid Receptor $\alpha 1$ is Not** September, 2012
 Leach, P.T.*, Kenney, J.W.*, and **Gould, T.J.**
 Poster
 Annual Meeting of the Pavlovian Society
 Jersey City, NJ
- Role of Alpha2-Containing Nicotinic Acetylcholine Receptors in Nicotine-Facilitated Contextual and Cued Fear Conditioning, Reinforcement and Withdrawal in the Mouse** March 2012
 Lotfipour, S., Fowler, C.D., Leach, P.T.*, Murphy, N.P., Kenny, P.J., **Gould, T.J.**, and Boulter, J.
 Poster
 Annual Meeting of the Society for Research on Nicotine and Tobacco
 Houston, TX
- Nicotine Enhances Long-Term Memory Through A PKA and Protein Synthesis-Dependent Mechanism** March 2012
 Wilkinson, D.S.*, Yildirim, E., Poole, R.*, Leach, P.T.*, and **Gould, T.J.**
 Poster
 Annual Meeting of the Society for Research on Nicotine and Tobacco
 Houston, TX
- Thyroid Receptor beta is Critically Involved in the Cognitive Enhancing Effects of Nicotine** March 2012
 Leach, P.T.*, Kenney, J.W.*, and **Gould, T.J.**
 Poster
 Annual Meeting of the Society for Research on Nicotine and Tobacco
 Houston, TX
- Using the Transitive Inference Task to Determine the Association Between the Hippocampus and Relational Memory** May 2010
 Cordero, K.A.* , André, J.M.* , **Gould, T.J.**
 Poster

Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

**Cognitive Neuroscience Approaches to the Treatment of
Nicotine Dependence: From Fish to Mouse to Man** February, 2010
Symposium Chair
Annual Meeting of the Society for Research on Nicotine and Tobacco
Baltimore, MD

**Hippocampus-Dependent Learning in Mice is Susceptible to the
Effects of Nicotine Withdrawal: The Effects of Background
Genetics and Varenicline on these Deficits** February, 2010
Symposium Talk
Annual Meeting of the Society for Research on Nicotine and Tobacco
Baltimore, MD

**Characterization of the Effects of Acute Nicotine and Nicotine
Withdrawal on Contextual Fear Conditioning in Eight Inbred Mouse
Strains** February, 2010
Portugal, G.S. *, Wilkinson, D.S. *, and **Gould, T.J.**
Poster
Annual Meeting of the Society for Research on Nicotine and Tobacco
Baltimore, MD

Nicotine Facilitates the Consolidation of Remote Contextual Memory February, 2010
D'Amore, D.E. *, Kenney, J.W. *, **Gould, T.J.**
Poster
Annual Meeting of the Society for Research on Nicotine and Tobacco
Baltimore, MD

**JNK1 knockout mice show deficits in contextual fear
conditioning but not novel object recognition.** October, 2009
Leach, P.T. *, Kenney, J.W. *, **Gould, T.J.**
Poster
The Annual Meeting of the Molecular and Cellular Cognition Society
Chicago, IL.

Transcription factor recruitment in the dorsal hippocampus following contextual fear conditioning: modulation by nicotine. October, 2009

Kenney, J.W.*, **Gould, T.J.**

Poster

The Annual Meeting of the Molecular and Cellular Cognition Society
Chicago, IL.

Developmental differences in the effects of acute nicotine and withdrawal from chronic nicotine on contextual fear conditioning in C57BL/6J mice October, 2009

Wilkinson, D.S. *, Portugal, G.S. *, and **Gould, T.J.**

Poster

Frontiers in Addiction Research: 2009 NIDA Mini-Convention
Chicago, IL

Nicotine and Learning, from Changes in Behavior to Cell Signaling: Implications for Nicotine Addiction May, 2009

Poster

Annual Meeting of the College on Problems of Drug Dependence
Sparks, NV

Nicotine and Learning Interact to Produce a Novel Pattern of Hippocampal Gene Expression That Underlies Long-Lasting Changes in Learning April, 2009

Symposium Talk

Annual Meeting of the Society for Research on Nicotine and Tobacco
Dublin, Ireland

Nicotine Has Differential Effects on Extinction of Fear Conditioning Depending Upon Nicotine Treatment Onset: A Model for Post Traumatic Stress Disorder April, 2009

Poster

Annual Meeting of the Society for Research on Nicotine and Tobacco
Dublin, Ireland

- Differences in the Roles of Nicotinic Receptor Activation and Desensitization and of the Hippocampus and Cingulate Cortex in the Effects of Nicotine on Learning and Ethanol-Induced Deficits in Learning** December, 2008
 Poster
 Annual Meeting of the American College of Neuropsychopharmacology
 Scottsdale, AZ
- A Time Course Study of Nicotine Withdrawal Deficits in Contextual Fear Conditioning in C57BL/6 Mice** September, 2008
 Poster
 Annual Meeting of the Pavlovian Society
 Weehawken, NJ
- Learning, the Hippocampus, and Nicotine Addiction Symposium on Translating Nicotine Effects on Cognition: From Basic Science to Clinical Populations and Back Again** February 2008
 Symposium Talk
 Annual Meeting of the Society for Research on Nicotine and Tobacco
 Portland, OR
- Both the Effects of Acute Nicotine and Withdrawal from Chronic Nicotine on Contextual Learning Are Mediated by High Affinity Nicotinic Acetylcholinergic Receptors in the Hippocampus** February 2008
 Talk
 Annual Meeting of the Society for Research on Nicotine and Tobacco
 Portland, OR
- Involvement of Jun N-terminal Kinase in the Enhancement of Learning and Memory by Nicotine** February 2008
 Poster
 Annual Meeting of the Society for Research on Nicotine and Tobacco
 Portland, OR
- Varenicline Prevents Nicotine Withdrawal Associated Deficits in Contextual Learning in C57BL/6 Mice** February 2008

Poster

Annual Meeting of the Society for Research on Nicotine and Tobacco
Portland, OR

**The Effect of Nicotine Administration on the Extinction and
Renewal of a Classically Conditioned Fear Response**

February 2008

Poster

Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

Shock Associative Learning

February 2008

Poster

Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

**Smoking Cessation Drug Varenicline Ameliorates Nicotine
Withdrawal-Induced Deficits in Contextual Fear Conditioning**

February 2008

Poster

Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

**Nicotine Reverses Ethanol-Induced Impairments in Fear
Conditioning When Administered into the Cingulate Cortex
But Not Hippocampus**

February 2008

Poster

Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

**The JNK/MAPK Pathway and the Hippocampus Are Critically
Involved in the Enhancement of Contextual Fear Conditioning
By Nicotine**

December 2007

Poster

Annual Meeting of the American College of Neuropsychopharmacology
Boca Raton, FL

Nicotine Withdrawal-Associated Deficits in Working Memory:

June 2007

A Role for the Beta2 Nicotinic Acetylcholine Receptor Subunit

Talk

Annual Meeting of the College on Problems of Drug Dependence

Quebec City, Quebec Canada

Enhancement of Learning by a High Affinity nAChR Agonist

May 2007

Poster

Philadelphia Area Chapter of the Society for Neuroscience

Philadelphia, PA.

Withdrawal From Chronic Nicotine Produces Deficits in Trace Fear Conditioning in C57BL/6 Mice: An Effect Associated With $\alpha 4\beta 2$ nAChR Function

May 2007

Poster

Philadelphia Area Chapter of the Society for Neuroscience

Philadelphia, PA.

Bupropion Dose-Dependently Reverses Nicotine Withdrawal Deficits in Contextual Fear Conditioning

May 2007

Poster

Philadelphia Area Chapter of the Society for Neuroscience

Philadelphia, PA.

Co-Administration of Ethanol and Nicotine Alters Learning in C57BL/6 Mice

May 2007

Poster

Philadelphia Area Chapter of the Society for Neuroscience

Philadelphia, PA.

One Man's JNK is Another Man's Treasure: A Possible Role for JNK in Nicotine Addiction

May 2007

Poster

Philadelphia Area Chapter of the Society for Neuroscience

Philadelphia, PA.

Withdrawal from Chronic Nicotine Produces Deficits in Trace Fear

March 2007

Conditioning in C57BL/6 Mice: An Effect Associated with $\alpha 4\beta 2$ Nicotinic Acetylcholine Receptors Function

Talk

Eastern Psychological Association

Philadelphia, PA

Interactive Effects of Ethanol and Nicotine on Contextual Fear Conditioning in C57BL/6 Mice

March 2007

Talk

Eastern Psychological Association

Philadelphia, PA

The Role of Nicotinic Acetylcholine Receptor Subtypes within the Dorsal Hippocampus in the Enhancement of Contextual Fear Conditioning by Nicotine

March 2007

Talk

Eastern Psychological Association

Philadelphia, PA

Atomoxetine and Bupropion Ameliorate Nicotine Withdrawal-Associated Deficits in Contextual Learning: Investigation of the Neural Substrates of Nicotine Withdrawal

February 2007

Talk

Annual Meeting of the Society for Research on Nicotine and Tobacco

Austin, TX

The Effects of Acute, Chronic, and Withdrawal from Chronic Hippocampal Nicotine Infusions on Contextual Fear Conditioning

September 2006

Poster

Annual Meeting of The Pavlovian Society

Philadelphia, PA

Nicotine Withdrawal Disrupts Both Foreground and Background Contextual Fear Conditioning But Not Pre-Pulse Inhibition in C57BL/6 Mice

September 2006

Poster

Annual Meeting of The Pavlovian Society
Philadelphia, PA

**The Effects of Bupropion on Contextual and Cued
Fear Conditioning in C57BL/6 Mice**

September 2006

Poster

Annual Meeting of The Pavlovian Society
Philadelphia, PA

**Nicotine Enhances Contextual Fear Conditioning via
Dorsal Hippocampal $\alpha 4\beta 2$ Nicotinic Acetylcholine
Receptor-Mediated Processes in C57BL/6J Mice**

September 2006

Poster

Annual Meeting of The Pavlovian Society
Philadelphia, PA

**Inhibition of ERK 1/2 Prevents the Enhancement of
Contextual Fear Conditioning by Nicotine in C57BL/6 Mice**

September 2006

Poster

Annual Meeting of The Pavlovian Society
Philadelphia, PA

**Dose Response Effects of Ethanol on Background
and Foreground Contextual Fear Conditioning**

September 2006

Poster

Annual Meeting of The Pavlovian Society
Philadelphia, PA

**Atomoxetine Ameliorates Deficits in Sensory Gating and
Contextual Learning in C57BL/6 Mice**

April 2006

Talk

TTURC Grantees Conference. Sponsored by NIH
Boston, MA

**$\beta 2$ Nicotinic Acetylcholine Receptor Subunits Mediate
Nicotine Withdrawal Deficits in Contextual Fear Conditioning**

April 2006

Poster

Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

**The Role of Hippocampal Nicotinic Acetylcholine Receptors
in Meditating Contextual Fear Conditioning** April 2006

Poster

Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

**Acute Nicotine Enhancement and Nicotine Withdrawal-Associated
Deficits are Demonstrated in Both Foreground and Background
Contextual Fear Conditioning** April 2006

Poster

Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

**Inhibition of Extracellular Regulated Kinase Blocks Nicotinic
Enhancement of Contextual Fear Conditioning in C57BL6 Mice
Regardless of Drug Vehicle.** April 2006

Poster

Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

**Amelioration of Nicotine Withdrawal-Associated
in Context Fear Conditioning by a Noradrenergic Agonist** September 2005

Talk

Annual Meeting of The Pavlovian Society
Anaheim, CA

**Behavioral and Cell Signaling Substrates of
Latent Inhibition of Cued Fear Conditioning** September 2005

Talk

Annual Meeting of The Pavlovian Society
Anaheim, CA

Entorhinal Cortex, NMDA, and Mitogen-Activated May 2005

Protein Kinase Involvement in Latent Inhibition of Cued Fear Conditioning

Poster

Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

Nicotine Withdrawal Associated Deficits in Hippocampus-Dependent Learning

Poster

Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

May 2005

Involvement of ERK 1 & 2 in the Enhancement of Contextual Fear Conditioning by Nicotine

Poster

Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

May 2005

Cholinergic Involvement in Fear Conditioning

Talk

Annual Meeting of The Pavlovian Society
Baltimore, MD

September 2004

Withdrawal from Chronic Nicotine Impairs Contextual but not Cued Fear Conditioning

Talk

Annual Meeting of The Pavlovian Society
Baltimore, MD

September 2004

Entorhinal Cortex Involvement in Latent Inhibition of Cued Fear Conditioning

Talk

Annual Meeting of The Pavlovian Society
Baltimore, MD

September 2004

Signal Transduction Mechanisms Underlying Latent

May 2004

Inhibition of Cued Fear Conditioning

Poster

Philadelphia Area Chapter of The Society for Neuroscience
Philadelphia, PA.

Nicotinic Receptor Subtypes Mediating

May 2004

Enhancement of Contextual Fear Conditioning

Poster

Philadelphia Area Chapter of The Society for Neuroscience
Philadelphia, PA.

Nicotinic Receptor Subtype

April 2004

Involvement in Fear Conditioning

Talk

Eastern Psychological Association
Washington, DC

**Behavioral Effects of delta Ligands in an Elevated Plus
Maze and Forced Swim Assay**

October 2003

Perrine, SA, Page, ME, Gould, TJ, Cowan, A, Unterwald, EM
Mid-Atlantic Pharmacology Society Annual Meeting

**Nicotine Enhances Hippocampus-Dependent
Versions of Fear Conditioning**

September 2003

Talk

Annual Meeting of The Pavlovian Society
Bloomington, IN

**Inhibition of Phosphodiesterase Reverses MK-801
Induced Deficits in C57BL/6 Mice Trained in
Latent Inhibition of Cued Fear Conditioning**

September 2003

Poster

Annual Meeting of The Pavlovian Society
Bloomington, IN

Age-Related Impairments in Auditory Cued Fear

September 2003

**Conditioning but Not Contextual Fear Conditioning
in C57BL/6 Mice**

Poster

Annual Meeting of The Pavlovian Society

Bloomington, IN

**Nicotinic Acetylcholinergic Receptors & AMPA Receptors
Are Involved in Latent Inhibition of Cued Fear Conditioning
and May Be Involved in Similar Neural Processes**

September 2003

Poster

Annual Meeting of The Pavlovian Society

Bloomington, IN

**Co-Antagonism of Nicotinic and AMPA Receptors But Not
Antagonism of Either Alone Blocks Latent Inhibition of Cued
Fear Conditioning in C57BL/6 Mice**

May 2003

Poster

Philadelphia Area Chapter of The Society for Neuroscience

Philadelphia, PA.

**Amplification of the Cyclic AMP Signaling Pathway
Through Phosphodiesterase Inhibition Attenuates the
Effects of MK-801 on Latent Inhibition**

May 2003

Poster

Philadelphia Area Chapter of The Society for Neuroscience

Philadelphia, PA.

**Rolipram, a Type-IV Specific Phosphodiesterase
Inhibitor Enhances Contextual But Not Auditory
Cued in Trace Fear Conditioning in C57BL/6 Mice**

May 2003

Poster

Philadelphia Area Chapter of The Society for Neuroscience

Philadelphia, PA.

**The Neurobiology of Latent Inhibition of
Cued Fear Conditioning**

March 2003

Talk
Eastern Psychological Association
Baltimore, MD

Latent Inhibition of Pavlovian Fear Conditioning Is Mediated Through NMDA Receptor Function But Is Independent of Protein Synthesis

October 2002

Talk
Pavlovian Society Annual Meeting
Los Angeles, CA

Latent Inhibition is Dependent on NMDA Receptor Activated Molecular Cascades That Do Not Require Protein Synthesis: Evidence From MK-801 and Anisomycin

May 2002

Poster
Philadelphia Area Chapter of The Society for Neuroscience
Philadelphia, PA.

Long Lasting Enhancement of Contextual Fear Conditioning in C57BL/6 Mice

May 2002

Poster
Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

Lasting Nicotine Enhancement of Contextual Fear Conditioning in C57BL/6 Mice

October 2001

Poster
Pavlovian Society Annual Meeting
New Brunswick, NJ

Mechanisms of Age-Related Deficits in β -Adrenergic Receptor Activation in Cerebellar Purkinje Cells from F344 Rats
Invited Presentation

June 1996

Talk
4th Annual Summer Training Course in Experimental Aging Research,
Ann Arbor, MI

Localization of Age-Related β -adrenergic Signal Transduction Deficits in Cerebellar Purkinje Cells from F344 Rats October 1995

Talk

Annual Meeting of the American Aging Association,
San Antonio, TX

Effects of Chronic Treatment with N-tert-butyl- α -phenylnitronone on Cerebellar Noradrenergic Receptor Function in Aged F344 Rats October 1994

Talk

Annual Meeting of the American Aging Association,
Washington, D.C.

Differences in Acquisition and Extinction of Conditioning-Related Neuronal Activity in Cerebellar Cortex and Deep Nuclei March 1992

Talk

Annual Meeting of the Midwestern Psychological Association,
Chicago, IL

Classical Conditioning-Related Neuronal Activity in Rabbit Cerebellar Cortex and Nuclei during Forward, Backward and Extinction Training October 1992

Talk

Cold Springs Harbor, NY.

WEBINARS

Developmental Effects of Nicotine on Cognition and Reward Processing April 2018

Presenter

The Society for Research on Nicotine and Tobacco

TEACHING EXPERIENCE

<p>Methods in Experimental Psychology Department of Psychology Indiana University, Bloomington, IN</p>	Autumn 1990
<p>Methods in Experimental Psychology Department of Psychology Indiana University, Bloomington, IN</p>	Spring 1991
<p>Statistical Techniques Department of Psychology Indiana University, Bloomington, IN</p>	Fall 1992
<p>Statistical Techniques Department of Psychology Indiana University, Bloomington, IN</p>	Spring 1993
<p>Gerontological Pharmacology Department of Pharmacology University of Colorado, Health Sciences Center</p>	Fall 1994
<p>Biopsychology Department of Psychology University of Colorado, Boulder CO</p>	Fall 1997
<p>Behavioral Neuroscience 103/260 Department of Psychology Temple University</p>	Fall 2000, Fall 2001, Spring 2002, Fall 2002, Spring 2005, Fall 2005, Spring 2008, Fall 2008, Fall 2009
<p>Fundamentals in Neuroscience 1051 CLA Neuroscience Major Temple University</p>	Team taught Spring 2008, Fall 2009
<p>Current Topics: Neurobiology of Learning 327 Department of Psychology</p>	Spring 2001

Temple University

Current Topics: Neurobiology of Addiction 327

Fall 2001

Department of Psychology

Temple University

Cognitive Neuroscience 104

Spring 2002

Department of Psychology

Temple University

Neurobiology of Learning and Memory 366

Fall 2003, Spring 2004,

Department of Psychology

Spring 2005, Fall 2006

Temple University

Graduate Topics in Experimental Psychology 706

Spring 2004

The Neural Basis of Learning

Department of Psychology

Temple University

Graduate Topics in Experimental Psychology 706

Fall 2004

Psychopharmacology

Department of Psychology

Temple University

Psychopharmacology 361

Fall 2004

Department of Psychology

Temple University

**Graduate Core Course on the
Neurobiology of Learning & Memory 706**

Fall 2005

Department of Psychology

Temple University

**Graduate Core Course:
Behavioral Neuroscience 809**

Spring 2006, 2010, 2011,
2012

Department of Psychology

Temple University

Graduate Topics in Cognitive Psychology

Fall 2007

Addiction

Department of Psychology

Temple University

Readings in Neuroscience 9381

Spring 2011, 2012

CLA Program in Neuroscience

Fall 2011, Spring 2012,

Temple University

Fall 2012, Spring 2013,

Temple University

Fall 2013, Spring 2014

Fall 2014, Spring 2015

Undergraduate Capstone in Neuroscience

Fall 2013, Fall 2014

Program in Neuroscience

Temple University

Biobehavioral Health 497: Topical Seminar in Addiction

Spring 2018, Fall 2019

Department of Biobehavioral Health

Penn State

Biobehavioral Health 203: Neurological Bases of Human Behavior

Spring 2019, Fall 2021

Biobehavioral Health 451: Pharmacological Influences on Health

Fall 2020

Department of Biobehavioral Health

Penn State

Undergraduate Student Mentoring: Over 50 Honors Students and Independent Studies Students Mentored

Graduate Student Mentoring

Past Graduate Students:

Michael Lewis, Ph.D.

Olivia Feiro, MS

Jennifer Davis, Ph.D.

Danielle Gulick, Ph.D.

Jonathan Raybuck, Ph.D.
George Portugal, Ph.D.
Justin Kenney, Ph.D.
Jessica Andre, Ph.D.
Derek Wilkerson, Ph.D.
Prescott Leach, Ph.D.
Rachel Poole, Ph.D.
Erica Holliday, Ph.D.
David Connor, Ph.D.
Dana Zeid, Ph.D.

Current Graduate Students

Prescilla Garcia-Trevizo
Carlos Novoa

GRADUATE STUDENT PLACEMENT

- ◆ Michael Lewis: Postdoctoral Position with 2005
Dr. Karyn Frick, Department of Psychology, Yale
Current Position: Senior Scientist; Pharmacology at
SAGE Therapeutics
- ◆ Jennifer Davis/Meis Postdoctoral Position with 2007
Dr. Toni Shippenberg, National Institute of Health/NIDA
Current Position: Medical Writer II ICON plc
- ◆ Danielle Gulick Postdoctoral Position with 2008
Dr. Alan Green, Department of Psychiatry, Dartmouth
Current Position: Assistant Professor Department of
Molecular Medicine, University of South Florida
- ◆ Jonathan Raybuck Postdoctoral Position with 2009
Dr. Matthew Lattal, Oregon Health Sciences University
Postdoctoral Position with Dr. Stan Thayer,
Department of Pharmacology, University of Minnesota
Current Position: Project Manager Abbott
- ◆ Justin Kenney Postdoctoral Position with Dr. Chris Proud, 2010
University of South Hampton, School of Biological Sciences, England
Current Position: Assistant Professor, Department of Biological Sciences,

Wayne State University

- ◆ George Portugal Postdoctoral Position with Dr. Jose Moron-Concepcion, Department of Anesthesiology, Columbia University
Current Position: Sales Specialist at Harvard Bioscience 2010
- ◆ Jessica Andre Postdoctoral Position with Dr. Christopher Pittenger
Department of Psychiatry, Yale University
Current Position: Visiting Professor at Quinnipiac University 2011
- ◆ Derek Wilkinson Postdoctoral Position with Dr. Jonathan Katz
Chief Psychobiology Section, National Institute of Health/NIDA
Current Position: Health Program Specialist at National Institute of Neurological Disorders and Stroke (NINDS) 2011
- ◆ Prescott Leach Postdoctoral Position with Dr. Jacqueline Crawley
University of California, Davis, Mind Institute
Current Position: In Vivo Pharmacology Senior Scientist at Delix Therapeutics 2014
- ◆ Rachel Poole Postdoctoral Position with Dr. Bachmanov
Monell Chemical Senses Center, Philadelphia, PA
Current Position: Monell Science Administrator 2014
- ◆ Erica Holliday Postdoctoral Position with Dr. Cunningham
Department of Pharmacology and Toxicology, The University of Texas Medical Branch at Galveston
Current Position: Assistant Professor of Psychology and Lead Principal Investigator at the Center for Young Adult Addiction Recovery, Kennesaw State University, Georgia 2015
- ◆ David Connor Postdoctoral Position with Dr. Dani
Neuroscience, University of Pennsylvania, Philadelphia, PA
Current Position: Scientific Investigator at GSK 2016
- ◆ Dana Zeid Postdoctoral Position with Dr. Wimer
Department of Psychology, Temple University, Philadelphia, PA 2021
- ◆ Laurel Seemiller Postdoctoral Position with Dr. Crowley
Department of Biology, Penn State University, University Park, PA 2022

POSTDOCTORAL FELLOW PLACEMENT

- ◆ Leonardo A Ortega Murillo, Ph.D. 2013

Professor
Autonomous University of Bucaramanga
Department of Psychology
School of Health Sciences
Bucaramanga, Santander, Colombia

- ◆ Emre Yildirim, M.D., Ph.D., 2013
Medical Science Associate
GlaxoSmithKline
Istanbul, Turkey
- ◆ Gunes Kutlu, Ph.D., 2017
Research Instructor
Department of Pharmacology
Assistant Professor, School of Medicine
Rowan University
- ◆ Sean Mooney-Leber, Ph.D., 2020
Assistant Professor
Department of Psychology
University of Wisconsin – Stevens Point
- ◆ Lisa Goldberg, Ph.D., 2021
Application Scientist at
Taconic Biosciences

LABORATORY UNDERGRADUATE/GRADUATE STUDENT AWARDS and FELLOWSHIPS

- ◆ Michael Lewis: Temple University Excellence in Neuroscience Research Award 2003
- ◆ Jennifer Davis: Temple University Excellence in Neuroscience Research Award 2004
- ◆ Jennifer Davis: Temple University Excellence in Neuroscience Research Award 2005
- ◆ Jennifer Davis: Selected to attend the 1st annual NIH National Graduate Student Research Festival
- ◆ Jennifer Davis: National Research Service Award, NIH/NIDA, Grant Number: 1 F31 DA021949-01, Project Title: Neural Substrates of Nicotine Withdrawal 2006-2007
- ◆ Danielle Gulick: Research Society on Alcoholism Student Merit Meeting Award 2007
- ◆ Sarah Kahn: Undergraduate Research Award at the Proceedings of the 30th Annual Meeting of the Philadelphia Chapter of the Society for Neuroscience 2007
- ◆ Danielle Gulick: CLA Graduate Fund for Excellence Award 2007

- ◆ Jessica Andre: CLA Graduate Fund for Excellence Award 2007
- ◆ Justin Kenney: Temple University Shipley Prize Award Winner 2010
- ◆ Kristy Cordero: Philadelphia Chapter of the Society for Neuroscience 2010 Undergraduate Research Award
- ◆ Prescott Leach: Selected to attend the Seventh Annual NIH National Graduate Student Research Conference 2012
- ◆ Prescott Leach: Temple University Dissertation Completion Grant 2013
- ◆ David Braak: Creative Arts, Research And Scholarship, Temple University 2013
- ◆ David Braak: Center for Scholars Program Scholar, Temple University 2014
- ◆ David Braak: Summer Undergraduate Research Fellowships (SURF) 2014 at UT Southwestern Medical Center
- ◆ Steven Simmons: selected to participate in the 64th Lindau Nobel Laureate Meeting, Lindau, Germany 2014
- ◆ David Braak: Benjamin Cottone, M.D. Scholarship, Temple University 2014
- ◆ Erica Holliday: 2014 Weinstein Summer Graduate Research Fellowship, Temple University
- ◆ David Braak: Andrea Pearlman Price Pre-Medical Award, Temple University 2014
- ◆ Courtney Cann: 2017 Undergraduate Research Grant, College of Health and Human Development Penn State
- ◆ Dana Zeid: International Behavioural and Neural Genetics Society Outstanding Graduate Student Travel Award, 2018
- ◆ Dana Zeid: NIDA Scholarship to Short Course on the Genetics of Addiction at the Jackson Laboratory, 2018
- ◆ Dana Zeid: BBH Graduate Student Research Award, 2018
- ◆ Dana Zeid: National Research Service Award, NIH/NIDA, Grant Number: 1F31DA049395-01A1, Project Title: Effects of paternal nicotine exposure on sncRNA expression in sire sperm and offspring hippocampus 2020-2022
- ◆ Prescilla Garcia-Trevizo: Society for Neuroscience, Neuroscience Scholars Program Associate 2020
- ◆ Dana Zeid: 2020-21 Elizabeth J. Susman Enhancement Fund Award in Biobehavioral Health
- ◆ Dana Zeid: 2020-21 The Gerald E. McClearn Graduate Student Award
- ◆ Prescilla Garcia-Trevizo: 2021 National Institute on Drug Abuse (NIDA) R13-Funded Travel Award to the 2021 Annual Convention of the American Psychological Association
- ◆ Prescilla Garcia-Trevizo: 2021-22 Prevention and Methodology Training Pre-Doctoral Fellowship, Penn State
- ◆ Samantha Murray: 2022 Student Engagement Network Award, Penn State
- ◆ Emily Henry: 2022 Honors Thesis, Penn State

- ◆ Laurel Seemiller: 2022 Outstanding Student Scholar Travel Awardee International Behavioural and Neural Genetics Society
- ◆ Laurel Seemiller: 2022 Outstanding Women in Learning Award Recipient International Behavioral Neuroscience Society Annual Meeting
- ◆ Prescilla Garcia-Trevizo: 2022 Alfred P. Sloan Foundation Travel Awardee 2022 Institute on Teaching and Mentoring, hosted by the Southern Regional Education, Atlanta, GA

UNIVERSITY SERVICE

- ◆ Penn State Genomics Core Facility Faculty Steering Committee 2022-
- ◆ College of Health & Human Development EHS Coordinator 2022
Search Committee
- ◆ President of Penn State Department Leadership Council 2021-2022
- ◆ College of Health & Human Development Diversity 2021
Achievement Awards Committee
- ◆ College of Health & Human Development Assistant Director of 2021
Grants and Contracts External Search Committee
- ◆ College of Health & Human Development Back to Research 2020-2021
Committee
- ◆ College of Health & Human Development Faculty and Staff 2019
Awards Committee
- ◆ College of Health & Human Development AD-14 2018
Committee Chair Penn State
- ◆ Carol Clark Ford Staff Achievement Award Selection Committee 2018, 2022
- ◆ Panelist: Discussion on Transitioning into Tenure Track Faculty 2017
Position: Office of Postdoctoral Affairs
- ◆ Penn State KL2 Review, Penn State Clinical & Translational 2017
Science Institute
- ◆ Enhancing Health Working Group (Group 3) 2017-2018
Penn State
- ◆ Associate Vice President for Affirmative Action Search Committee 2017
Penn State
- ◆ College of Health & Human Development AD-14 Committee 2017
Co-Chair, Penn State
- ◆ Director of the Neuroscience Program in the College of Liberal Arts 2010-2016
- ◆ Psychology Chair's Advisory Committee 2010-2016

- ◆ University Head Veterinarian Search Committee 2012
- ◆ Psychology Personnel Committee 2011-2016
- ◆ College of Liberal Arts Merit Committee 2012-2014
- ◆ Keynote Speaker at Temple University McNair Scholars Graduation Celebration 2011
- ◆ Temple University Substance Abuse Research Steering Committee 2011-2016
- ◆ Temple University Formula Funds Committee 2011-2012
- ◆ Temple University Biology Faculty Search Committee 2010-2012
- ◆ Director of the Brain and Cognitive Sciences Area of Psychology, Temple University 2007-2011
- ◆ Space Committee (psychology) 2009-2010
- ◆ Temple University McNair Scholars Mentor 2008- 2011
- ◆ Temple University Internal Research Advisory Committee 2007-2008
- ◆ Temple University Graduate Board 2007-2010
- ◆ Temple University Graduate Board Program Review Committee 2007-2010
- ◆ Temple University Graduate Board Fellowship Committee 2010
- ◆ Fellowship Committee (psychology) 2007-2011
- ◆ Neuroscience Steering Committee (psychology) 2007-2011
- ◆ Director of Undergraduate Studies, Psychology 2006-2007
- ◆ College of Liberal Arts Dean Search Committee 2005-2007
- ◆ Executive Committee Member and Training Faculty for NIH Training Grant 2003-2007
- ◆ Neuroscience Program Executive Committee 2003-2011
- ◆ Graduate Committee (psychology) 2003-2016
- ◆ Colloquium Committee (psychology) 2000-2002
- ◆ Animal Welfare Committee (psychology) 2001-2007
- ◆ Awards Committee (Chair 2002-2003, psychology) 2001-2009
- ◆ Council of Graduate Departments of Psychology (COGDOP)/APA Graduate Fellowship and Internal Awards Committee (Current Chair, psychology) 2004-2007
- ◆ Presentation at the Temple University Russell Conwell Summer Bridge Program 2004
- ◆ Search Committee for Clinical Psychology Hire 2002

GRADUATE STUDENT COMMITTEES

- ◆ Doctoral Dissertation Committee (Advisory Chair) 2002
The interaction of morphine and MK-801: studies at the behavioral and molecular level: Brian Hoshaw
- ◆ Doctoral Dissertation Committee 2002
The effects of systemic and local administration of the imidazobenzodiazepine inverse agonist RO19-4603 on voluntary ethanol intake in sprague-dawley rats: Gregory G. Blakely
- ◆ Doctoral Dissertation Committee 2002
The effects of preweaning maternal separations on adult locomotor response to amphetamine, cocaine, and ethanol: Deanna Kornacki
- ◆ Preliminary Exam Committee: Michael Ewers 2002
- ◆ Doctoral Dissertation Committee (Examining Committee Chair) 2003
Behavioral characterization of the APP+PS1 mouse models of Alzheimer's Disease: Michael Ewers
- ◆ Preliminary Exam Committee: Michael Lewis 2003
- ◆ Doctoral Dissertation Committee 2004
The role of working memory in solving analytic versus insight problems: Jessica Fleck
- ◆ Doctoral Dissertation Committee 2004
The effects of long-term practice and training on mental rotation: Melissa Terlecki
- ◆ Master Thesis Committee 2004
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