

**THOMAS JOHN GOULD, Ph.D.**

**8/21/24**

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**OFFICE:**

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

**Penn State's Child Maltreatment Solutions Network** July 2024 - Current  
Affiliate  
Pennsylvania State University

**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

<p><b>Consortium on Substance Use and Addiction</b>  Member  Pennsylvania State University</p>	<p>January 2019 - Current</p>
<p><b>Faculty Affiliate of the Social and Behavioral Neuroscience Dual-Title Degree Program</b>  Pennsylvania State University</p>	<p>May 2019 - Current</p>
<p><b>Prevention and Methodology Training Program</b>  Member  Pennsylvania State University</p>	<p>September 2018 - Current</p>
<p><b>Penn State Center for Molecular Investigation of Neurological Disorders</b>  Member  The Huck Institute  Pennsylvania State University</p>	<p>July 2018 - Current</p>
<p><b>Penn State Molecular Cellular and Integrative Biosciences</b>  Member  The Huck Institute  Pennsylvania State University</p>	<p>January 2018 - Current</p>
<p><b>Penn State Institute of the Neurosciences</b>  Member  The Huck Institute  Pennsylvania State University</p>	<p>December 2016 - Current</p>
<p><b>Penn State Cancer Institute</b>  Member  The Pennsylvania State University</p>	<p>December 2016 - Current</p>
<p><b>Tobacco Use Research Center</b>  Member  University of Pennsylvania</p>	<p>March 2003 - 2016</p>

## Center for Substance Abuse Research

January 2003 – June 2016

Member

Temple University

### EDITORIAL BOARDS

- ◆ Associate Editor *Frontiers in Behavioral Neuroscience* 2021-
- ◆ Section 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 DRO-N (O1) S  
NIDA Animal Genomics and Functional Validation/  
Characterization of Genes/Variants Implicated in SUD 2024 (July)
- ◆ Past President, Society for Psychopharmacology and Substance  
Use (Division 28) of the American Psychological Association 2024  
Executive Committee Member
- ◆ Chair of grant review panel ZDA1 IXR-N J1 R  
NIDA Animal Genomics and Functional  
Validation/Characterization of Genes/Variants in SUD 2023 (November)
- ◆ Panel Member: Society for Neuroscience Career  
Development Networking Event 2023  
Washington, D.C.
- ◆ Chair of grant review panel ZDA1 IXR-N (O1)S  
RFA Panel: Genetics/Epigenetics & SUD 2023 (June)
- ◆ President, Society for Psychopharmacology and Substance  
Use (Division 28) of the American Psychological Association 2023
- ◆ Chair of grant review panel ZDA1 IXR-Q (J3)S  
RFA Panel: NIDA Animal Genomics Program (U01) 2022 (October)
- ◆ 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 Use (Division 28) of the American Psychological Association Executive Committee Member 2022
  - ◆ Abstract Reviewer on Program Committee for 2023 annual meeting of the Society for Research on Nicotine and Tobacco 2022
  - ◆ American Psychological Association Divisions 12, 28, 45, 50 URM Mentorship Program 2022-
  - ◆ Co-Chair of grant review panel ZDA1 IXR-Q (07) RFA Panel: NIDA Animal Genomics Program (U01) 2021
  - ◆ Society for Research on Nicotine and Tobacco Nominations Committee 2021
  - ◆ Abstract Reviewer on Program Committee for 2022 annual meeting of the Society for Research on Nicotine and Tobacco 2021
  - ◆ Session Chair: Neurobiological Underpinnings of Nicotine Dependence. 2021 annual meeting of the Society for Research on Nicotine and Tobacco 2021
  - ◆ Abstract Reviewer on Program Committee for 2021 annual meeting of the Society for Research on Nicotine and Tobacco 2020
  - ◆ Chair of grant review panel ZRG1 RPHB-R(57)R RFA Panel: Career Development and Pathways to Independence Award In Tobacco Regulatory Research, National Institute of Health 2020
  - ◆ 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 “The Mouse Gene Development Initiative”, National Institute of Health 5/09
- ◆ 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, 3/24
- ◆ 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 10/00, 1/05, 7/09, 5/10  
National Institute of Health/NIDA
- ◆ Ad-Hoc grant review panel member 2004  
National Science Foundation
- ◆ Consulting Editor for Monographs of the Society for 2005  
Research in Child Development
- ◆ 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; EMBRO Reports; 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 Reports; 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 4<sup>th</sup> 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

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 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– 02/8/2024

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

## **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., Sebastian, A., Siegel, S.R., Praul, C., Zeid, D.\*, Albert, I., Beierle, J., Bryant, C.D., and **Gould, T.J.** Alcohol and Fear Conditioning Produce Strain-Specific Changes in the Dorsal Hippocampal Transcriptome of Adolescent C57BL/6J and DBA/2J Mice. *Alcohol: Clinical and Experimental Research*, in press.

Zeid, D.\*, Seemiller, L.R.\*, Wagstaff, D. A., and **Gould, T.J.** (2023) Behavioral and Genetic Architecture of Fear Conditioning and Related Phenotypes. *Neurobiology of Learning and Memory*, 205: doi: 10.1016/j.nlm.2023.107837.

- Seemiller, L.R.\* , Garcia-Trevizo, P.\* , Novoa, C.\* , Goldberg, L.R., Murray, S.°, and **Gould, T.J.** (2023) Adolescent Intermittent Alcohol Exposure Produces Strain-Specific Cross-Sensitization to Nicotine and Other Behavioral Adaptations in Adulthood in C57BL/6J and DBA/2J Mice. *Pharmacology, Biochemistry and Behavior*, 232: doi: 10.1016/j.pbb.2023.173655.
- Gould, T.J.** (2023) Epigenetic and Long-Term Effects of Nicotine on Biology, Behavior, and Health. *Pharmacological Research*, 192: 106741.
- Seemiller, L.R.\* , Goldberg, L.R., Garcia-Trevizo, P.\* , and **Gould, T.J.** (2023) Interstrain Differences in Adolescent Fear Conditioning After Acute Alcohol Exposure. *Brain Research Bulletin*, 194:35-44.
- Zeid, D.\* and **Gould, T.J.** (2023) Chronic Nicotine Exposure Alters Sperm Small RNA Content in C57BL/6J Mouse Model. *Developmental Psychobiology*, 65(2):e22367. doi: 10.1002/dev.22367.
- Palmisano, A.N.\* , **Gould, T.J.**, and Astur, R.S. (2023) The Effect of Acute Nicotine Administration on Human Delay Cued and Context Fear Conditioning. *Experimental and Clinical Psychopharmacology*, 31:464-474.
- 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.\* , Logue, S.F., 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.
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## 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

**Genetic, Developmental, and Receptor Level  
Influences on Nicotine Withdrawal-Associated  
Deficits in Learning**

June 2014

Annual Meeting of the International Behavioral Neuroscience Society  
Las Vegas, NV

**Nicotine and the Hippocampus: Insights into  
Learning and Addiction**

December 2012

Department of Psychology  
Texas A&M University

**Nicotine and the Hippocampus: Insights into  
Learning and Addiction**

September 2012

Department of Psychology  
University of Delaware

**The Neural Substrates of Nicotine's effects on Learning**

February 2012

Department of Pharmacology and Toxicology  
Virginia Commonwealth University  
Richmond, VA

**Nicotine Modulation of the Neural Substrates of**

January 2012

**Hippocampus-Dependent Learning**

Department of Neurobiology and Anatomy  
Drexel School of Medicine  
Philadelphia, PA

**Hippocampus-Dependent Learning: A Smoking Gun in Understanding Nicotine Addiction**

September 2011

Annual Meeting of the Pavlovian Society  
Milwaukee, WI

**The Behavioral and Neural Effects of Nicotine on Hippocampus-Dependent Learning**

December 2009

National Institute of Environmental Health Science  
Research Triangle Park, NC

**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**

September 2008

**One Purkinje at a Time: Symposium in Honor of Joseph Steinmetz**

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**

October 2003

**of Contextual Fear Conditioning by Nicotine**

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**

**Adolescent Nicotine Exposure Differentially Impacts the  
Development of Prefrontal Circuitry in Common  
Laboratory Mice Genetic Backgrounds**

June 2024

Novoa, C.\* and Gould, T.J.

Poster

Annual Meeting of the International Behavioral Neuroscience  
Society

Panama City, Panama

**Adolescent Nicotine Exposure Induces Enduring Adaptations  
of Functional Brain Networks and Reduces Adult  
Nicotine Sensitivity**

March 2024

Novoa, C.\* and Gould, T.J.

Oral Presentation

Annual Meeting of the Society for Research on Nicotine and Tobacco  
Edinburgh, Scotland

**Studying the Mental Health Impacts of Adolescent  
Psychosocial Exposures Using Genetically-Diverse Mice**

February 2024

Novoa, C.\* and **Gould, T.J.**

Poster

Annual Meeting of the Eastern Psychological Association  
Philadelphia, PA

**Nicotine Addiction and Smoking: What a Historical and  
Psychopharmacology Perspective Tells Us About Addiction**

August 2023

Presidential Address

**Gould, T.J.**

Talk

Annual Meeting of the American Psychological Association  
Washington, DC

**Assessment of the Reliability of the Response to Nicotine  
Tartrate Salts Across Age in Mice**

August 2023

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

Poster

Annual Meeting of the American Psychological Association  
Washington, DC

**Genetic Dissection of Nicotine and Learning Traits Using  
BXD Recombinant Inbred Mice**

August 2023

Novoa, C.,\* Goldberg, L., Seemiller, L.R.\* and **Gould, T.J.**

Poster

Annual Meeting of the American Psychological Association  
Washington, DC

**Psychobiological Sequelae of Adolescent Social Instability  
Stress in Male Mice**

June 2023

Novoa, C.,\* Afiouni, E.G., • Garcia-Trevizo, P.,\* and **Gould, T.J.**

Annual Meeting of the International Behavioral Neuroscience Society  
Niagara Falls, Canada

**Long-term Effects of Adolescent Nicotine Exposure on Sensitivity  
and Cotinine in the Diversity Outbred Mouse Population** May 2023

Garcia-Trevizo, P.,\* and **Gould, T.J.**

Poster

NIDA Genetic Consortium Meeting

Bethesda, MD

**Modeling Human Heterogeneity Utilizing Diversity Outbred  
Population to Assess the Effects of Adolescent Nicotine Exposure  
to Adult Sensitivity to Nicotine** March 2023

Garcia-Trevizo, P.,\* and **Gould, T.J.**

Talk

Annual Meeting of the Society for Research on Nicotine and Tobacco

San Antonio, Texas

**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**

February 2018

**Alters Gene Expression in the Cholinergic Signaling Pathway**

**Gould, T.J.**, Kutlu, M.G., Cole, R.,\* Tumolo, J.M.,<sup>•</sup> 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.,<sup>•</sup> 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.<sup>•</sup>, Garrett, B.<sup>•</sup>, 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 Fear Learning and Cholinergic Function** June 2017  
 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** January 2017  
**Gould, T.J.**  
 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.,<sup>•</sup> 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.<sup>•</sup>, 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.<sup>•</sup>, Garrett, B.<sup>•</sup>, 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**  
**Gould, T.J.**

March 2016

Symposium

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

**Adolescent Nicotine Exposure Alters Adult  
Contextual Fear Conditioning**  
**Gould, T.J.**

September 2015

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  $\beta$  is Critically Involved in the Effects of Nicotine on Hippocampus-Dependent Memory**

June 2013

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**

November 2012

**Gould, T.J.**

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  $\beta$  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: A Role for the Beta2 Nicotinic Acetylcholine Receptor Subunit** June 2007  
 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 Conditioning in C57BL/6 Mice: An Effect Associated with  $\alpha 4\beta 2$  Nicotinic Acetylcholine Receptors Function** March 2007  
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 Protein Kinase Involvement in Latent Inhibition of Cued Fear Conditioning** May 2005  
Poster  
Philadelphia Area Chapter of the Society for Neuroscience  
Philadelphia, PA.
- Nicotine Withdrawal Associated Deficits in Hippocampus-Dependent Learning** May 2005  
Poster  
Philadelphia Area Chapter of the Society for Neuroscience  
Philadelphia, PA.
- Involvement of ERK 1 & 2 in the Enhancement of Contextual Fear Conditioning by Nicotine** May 2005  
Poster  
Philadelphia Area Chapter of the Society for Neuroscience  
Philadelphia, PA.
- Cholinergic Involvement in Fear Conditioning** September 2004  
Talk  
Annual Meeting of The Pavlovian Society  
Baltimore, MD
- Withdrawal from Chronic Nicotine Impairs Contextual but not Cued Fear Conditioning** September 2004  
Talk  
Annual Meeting of The Pavlovian Society  
Baltimore, MD

<b>Entorhinal Cortex Involvement in Latent Inhibition of Cued Fear Conditioning</b> Talk Annual Meeting of The Pavlovian Society Baltimore, MD	September 2004
<b>Signal Transduction Mechanisms Underlying Latent Inhibition of Cued Fear Conditioning</b> Poster Philadelphia Area Chapter of The Society for Neuroscience Philadelphia, PA.	May 2004
<b>Nicotinic Receptor Subtypes Mediating Enhancement of Contextual Fear Conditioning</b> Poster Philadelphia Area Chapter of The Society for Neuroscience Philadelphia, PA.	May 2004
<b>Nicotinic Receptor Subtype Involvement in Fear Conditioning</b> Talk Eastern Psychological Association Washington, DC	April 2004
<b>Behavioral Effects of delta Ligands in an Elevated Plus Maze and Forced Swim Assay</b> Perrine, SA, Page, ME, Gould, TJ, Cowan, A, Unterwald, EM Mid-Atlantic Pharmacology Society Annual Meeting	October 2003
<b>Nicotine Enhances Hippocampus-Dependent Versions of Fear Conditioning</b> Talk Annual Meeting of The Pavlovian Society Bloomington, IN	September 2003

- 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  
Conditioning but Not Contextual Fear Conditioning  
in C57BL/6 Mice** September 2003  
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  $\beta$ -Adrenergic Receptor  
Activation in Cerebellar Purkinje Cells from F344 Rats** June 1996  
**Invited Presentation**

Talk  
4<sup>th</sup> Annual Summer Training Course in Experimental Aging Research,  
Ann Arbor, MI

**Localization of Age-Related  $\beta$ -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- $\alpha$ -phenylnitron 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

**Methods in Experimental Psychology** Autumn 1990

Department of Psychology

Indiana University, Bloomington, IN

**Methods in Experimental Psychology** Spring 1991

Department of Psychology

Indiana University, Bloomington, IN

**Statistical Techniques** Fall 1992

Department of Psychology

Indiana University, Bloomington, IN

**Statistical Techniques** Spring 1993

Department of Psychology

Indiana University, Bloomington, IN

**Gerontological Pharmacology** Fall 1994

Department of Pharmacology

University of Colorado, Health Sciences Center

**Biopsychology** Fall 1997

Department of Psychology

University of Colorado, Boulder CO

**Behavioral Neuroscience 103/260** Fall 2000, Fall 2001,  
Department of Psychology Spring 2002, Fall 2002,  
Temple University Spring 2005, Fall 2005,

	Spring 2008, Fall 2008, Fall 2009
<b>Fundamentals in Neuroscience 1051</b> CLA Neuroscience Major Temple University	Team taught Spring 2008, Fall 2009
<b>Current Topics: Neurobiology of Learning 327</b> Department of Psychology Temple University	Spring 2001
<b>Current Topics: Neurobiology of Addiction 327</b> Department of Psychology Temple University	Fall 2001
<b>Cognitive Neuroscience 104</b> Department of Psychology Temple University	Spring 2002
<b>Neurobiology of Learning and Memory 366</b> Department of Psychology Temple University	Fall 2003, Spring 2004, Spring 2005, Fall 2006
<b>Graduate Topics in Experimental Psychology 706</b> <b>The Neural Basis of Learning</b> Department of Psychology Temple University	Spring 2004
<b>Graduate Topics in Experimental Psychology 706</b> <b>Psychopharmacology</b> Department of Psychology Temple University	Fall 2004
<b>Psychopharmacology 361</b> Department of Psychology Temple University	Fall 2004

<p><b>Graduate Core Course on the Neurobiology of Learning &amp; Memory 706</b>  Department of Psychology  Temple University</p>	Fall 2005
<p><b>Graduate Core Course: Behavioral Neuroscience 809</b>  Department of Psychology  Temple University</p>	Spring 2006, 2010, 2011, 2012
<p><b>Graduate Topics in Cognitive Psychology Addiction</b>  Department of Psychology  Temple University</p>	Fall 2007
<p><b>Readings in Neuroscience 9381</b>  CLA Program in Neuroscience  Temple University  Temple University</p>	Spring 2011, 2012 Fall 2011, Spring 2012, Fall 2012, Spring 2013, Fall 2013, Spring 2014 Fall 2014, Spring 2015
<p><b>Undergraduate Capstone in Neuroscience</b>  Program in Neuroscience  Temple University</p>	Fall 2013, Fall 2014
<p><b>Biobehavioral Health 497: Topical Seminar in Addiction</b>  Department of Biobehavioral Health  Penn State</p>	Spring 2018, Fall 2019
<p><b>Biobehavioral Health 203: Neurological Bases of Human Behavior</b></p>	Spring 2019, Fall 2021
<p><b>Biobehavioral Health 451: Pharmacological Influences on Health</b>  Department of Biobehavioral Health  Penn State</p>	Fall 2020

## **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.

Laurel Seemiller, Ph.D.

Prescilla Garcia-Trevizo, MS

Leila Mousavi, MS

#### **Current Graduate Students**

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: Associate 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 2010  
Moron-Concepcion, Department of Anesthesiology,  
Columbia University  
Current Position: Sales Specialist at Harvard Bioscience
- ◆ Jessica Andre Postdoctoral Position with Dr. Christopher Pittenger 2011  
Department of Psychiatry, Yale University  
Current Position: Visiting Professor at Quinnipiac University
- ◆ Derek Wilkinson Postdoctoral Position with Dr. Jonathan Katz 2011  
Chief Psychobiology Section, National Institute of Health/NIDA  
Current Position: Health Program Specialist at  
National Institute of Neurological Disorders and Stroke (NINDS)
- ◆ Prescott Leach Postdoctoral Position with Dr. Jacqueline Crawley 2014  
University of California, Davis, Mind Institute  
Current Position: In Vivo Pharmacology Senior Scientist at Delix  
Therapeutics
- ◆ Rachel Poole Postdoctoral Position with Dr. Bachmanov 2014  
Monell Chemical Senses Center, Philadelphia, PA  
Current Position: Monell Science Administrator
- ◆ Erica Holliday Postdoctoral Position with Dr. Cunningham 2015  
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

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

## **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 1<sup>st</sup> 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 30<sup>th</sup> 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 64<sup>th</sup> 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

- ◆ Precilla 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
- ◆ Precilla Garcia-Trevizo: 2021 National Institute on Drug Abuse (NIDA) R13-Funded Travel Award to the 2021 Annual Convention of the American Psychological Association
- ◆ Precilla 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
- ◆ Precilla Garcia-Trevizo: 2022 Alfred P. Sloan Foundation Travel Awardee 2022 Institute on Teaching and Mentoring, hosted by the Southern Regional Education, Atlanta, GA
- ◆ Anna Tischer: 2024 Trainee Professional Development Award from the Society for Neuroscience

## UNIVERSITY SERVICE

- ◆ College of Health & Human Development AD-14 Committee 2023
- ◆ Penn State Genomics Core Facility Faculty Steering Committee 2022-
- ◆ College of Health & Human Development EHS Coordinator Search Committee 2022
- ◆ President of Penn State Department Leadership Council 2021-2022
- ◆ Mentor on National Institutes of Health (NIH) National Heart, Lung, and Blood Institute Diversity Training Grant “Improving Access through Research and Training (IMPACT)” 2021  
Mentee: Jason Dennis
- ◆ College of Health & Human Development Diversity Achievement Awards Committee 2021
- ◆ College of Health & Human Development Assistant Director of Grants and Contracts External Search Committee 2021

- ◆ College of Health & Human Development Back to Research Committee 2020-2021
- ◆ College of Health & Human Development Faculty and Staff Awards Committee 2019
- ◆ College of Health & Human Development AD-14 Committee Chair Penn State 2018
- ◆ Carol Clark Ford Staff Achievement Award Selection Committee 2018, 2022
- ◆ Panelist: Discussion on Transitioning into Tenure Track Faculty Position: Office of Postdoctoral Affairs 2017
- ◆ Penn State KL2 Review, Penn State Clinical & Translational Science Institute 2017
- ◆ Enhancing Health Working Group (Group 3) Penn State 2017-2018
- ◆ Associate Vice President for Affirmative Action Search Committee Penn State 2017
- ◆ College of Health & Human Development AD-14 Committee Co-Chair, Penn State 2017
- ◆ 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  
Cholingeric contributions to the acquisition and maintenance of memories for Pavlovian fear conditioning in young and aged C57BL/6 mice: Olivia Feiro
- ◆ Preliminary Exam Committee: Jennifer Davis 2005
- ◆ Doctoral Dissertation Committee 2005  
Thematic Typicality in Modifier-Noun Combinations Controlling for Presentation-Order Effects: Chris Ramey
- ◆ Doctoral Dissertation Committee 2005  
Thomas A. Edison: Wizard of Menlo Park or ordinary thinker? A case study in the psychology of creativity: Joseph F. Buonanno
- ◆ Doctoral Dissertation Committee 2005  
An Examination of Emotional Experience and Expression Associated with Social Anxiety: Jane Ann Luterek
- ◆ Doctoral Dissertation Committee (Advisory Chair) 2005  
Signal Transduction Mechanisms Within the Entorhinal Cortex that Support Latent Inhibition of Cued Fear Conditioning in Mice: Michael C. Lewis
- ◆ Doctoral Dissertation Committee 2005  
Testing a New Typology of Juvenile Offenders: An Attempt to Further Differentiate Early and Late Onset Offenders: Margo Gardner
- ◆ Doctoral Dissertation Committee 2005  
A Social Developmental Model of the Impact of Incarceration on Juvenile Offenders' Social Network Support, Exposure to Antisocial Peers, Aggressive Offending and Psychological Adjustment: Michelle Little
- ◆ Doctoral Dissertation Committee 2005  
The Development of Cognitive Flexibility: Anthony Dick

- ◆ Doctoral Dissertation Committee 2006  
The Rates, Effects, and Mechanisms of Stability in Nonmaternal Child Care Arrangements During the Preschool and Transition to School Age Period: Henry Tran
- ◆ Preliminary Exam Committee: Danielle Gulick 2007
- ◆ Doctoral Dissertation Committee (Advisory Chair) 2007  
Neural Substrates of the Effects of Acute, Chronic, and Withdrawal from Chronic Nicotine on Contextual Fear Conditioning: Jennifer Davis
- ◆ Preliminary Exam Committee: Jonathan Raybuck 2007
- ◆ Preliminary Exam Committee: Jessica Andre 2007
- ◆ Preliminary Exam Committee: George Portugal 2008
- ◆ Preliminary Exam Committee: Justin Kenney 2008
- ◆ Doctoral Dissertation Committee (Advisory Chair) 2008  
An Examination of the Neural Substrates Underlying the Dissociable and Interactive Effects of Acute Ethanol and Nicotine on Learning, Anxiety, and Locomotion in Fear Conditioning and the Plus Maze Discriminative Avoidance Task: Danielle Gulick
- ◆ Doctoral Dissertation Committee 2009  
The effects of acceptance, reappraisal and suppression strategies on psychophysiological reactivity to emotionally provocative stimuli in the laboratory: Frank Castro
- ◆ Doctoral Dissertation Committee 2009  
A Prospective Investigation of the Relation Between Emotion Awareness and Disordered Eating: Moderating and Mediating Factors: Jessica Keyser
- ◆ Doctoral Dissertation Committee (Advisory Chair) 2009  
Specific Effects of Nicotine and Nicotinic Antagonists on Trace and Contextual Fear Conditioning in C57BL/6 Mice: A Role for Nicotinic Acetylcholinergic Signaling in the Dorsal Hippocampus, Ventral Hippocampus, and Medial Prefrontal Cortex in Trace Fear Conditioning: Jonathan Raybuck
- ◆ Doctoral Dissertation Committee 2009

- Empirically-Based Interventions for Error Monitoring  
Deficits in Dementia: Brianne Magouirk Bettcher
- ◆ Doctoral Dissertation Committee (co-Advisory Chair) 2010  
The Effects of Concurrent Timed-Interval Finger Tapping  
on Trace Eyeblick Conditioning in College Students:  
Michael Tobia
  - ◆ Preliminary Exam Committee: John Kennard 2010
  - ◆ Doctoral Dissertation Committee 2010  
Motivation for Weight Loss Maintenance: Approach and  
Avoidance: C. Rylann Testa
  - ◆ Doctoral Dissertation Committee (Advisory Chair) 2010  
Nicotine and Learning Interact to Alter Transcription  
Factor Activity at the C-Jun N-Terminal Kinase 1 Gene  
Promoter in the Hippocampus: Justin Kenney
  - ◆ Doctoral Dissertation Committee (Advisory Chair) 2010  
Strain-Dependent and Age-Dependent Effects of Acute,  
Chronic, and Withdrawal from Chronic Nicotine on Fear  
Conditioning: George Portugal
  - ◆ Doctoral Dissertation Committee (Advisory Chair) 2011  
Uncovering the Role of the Hippocampus in the Transitive  
Inference Task Utilizing Pharmacological and Genetic  
Manipulations: Implications for Patients with  
Schizophrenia: Jessica Andre
  - ◆ Preliminary Exam Committee: Prescott Leach 2011
  - ◆ Doctoral Dissertation Committee 2011  
Integration of Featural and Geometric Information in  
Reorientation: Evidence for an Adaptive Combination  
Model: Alexandra Twyman
  - ◆ Preliminary Exam Committee: Drew D'Amore 2011
  - ◆ Preliminary Exam Committee: Ellen Jorstad-Stein 2011
  - ◆ Doctoral Dissertation Committee 2012  
Age Sensitivity of the Barnes Maze and the Morris  
Water Maze: Associations with Cerebellar Cortical  
Purkinje Cells: John A. Kennard
  - ◆ Doctoral Dissertation Committee 2012  
Effects of early Chemotherapeutic Treatment on

Learning, Novelty, and Drug Reward in Adolescent  
Mice: Emily Bisen-Hersh

- ◆ Doctoral Dissertation Committee (Advisory Chair) 2012  
Examination of Tolerance to the Cognitive Enhancing  
Effects of Nicotine on Contextual Conditioning: Derek Wilkinson
- ◆ Masters Thesis Committee 2012  
BDNF and Striatal Glutamatergic Transmission:  
Implications for Cognitive Flexibility: Drew D'Amore
- ◆ Doctoral Dissertation Committee 2013  
The Effects of Freewriting on the Quality and Characteristics of  
Short Essays: Shaleigh Kwok
- ◆ Doctoral Dissertation Committee 2013  
Social Anxiety and Problem Alcohol Use Among College  
Students: A Longitudinal Study: Ellen Jorstad-Stein
- ◆ Doctoral Dissertation Committee (Advisory Chair) 2013  
Nicotine Modulation of Thyroid Hormone Signaling  
and Its Contribution to Cognition: Prescott Leach
- ◆ Preliminary Exam Committee: Brittney Yegla 2014
- ◆ Preliminary Exam Committee: Erica Holliday 2014
- ◆ Preliminary Exam Committee: David Connor 2014
- ◆ Doctoral Dissertation Committee 2014  
An Examination of the Effects of Chronic Caffeine and  
Withdrawal from Chronic Caffeine on Fear Conditioning in  
Pre-Adolescent, Adolescent, and Adult C57BL/6J Mice:  
Rachel Poole
- ◆ Doctoral Dissertation Committee 2014  
Executive Control Function and Emotion Regulation Processes  
in the Developmental Pathway from Childhood Maltreatment to  
Alcohol Use Problems: Ashley Hampton
- ◆ Preliminary Exam Committee: Robert Cole 2015
- ◆ Doctoral Dissertation Committee (Advisory Chair) 2015  
Storm, Stress, and Nicotine: Exploring the Interactive Effects  
of Adolescent Stress and Adolescent Nicotine on the  
Development of Long-Term Learning Deficits: Erica Holliday
- ◆ Doctoral Dissertation Committee (Advisory Chair) 2016  
Acute Nicotine-Dependent Alterations in Associative  
Learning Interfere with Backwards Trace Conditioned Safety:  
David Connor
- ◆ Doctoral Dissertation Committee 2016  
The Forebrain Cholinergic System and Age-Related  
Decline in and Compensation of Attentional Capacities:  
Brittney Yegla



- ◆ Doctoral Dissertation Committee 2017  
Nicotine Withdrawal and Deficits in Cognitive Flexibility:  
Possible Ties to Aberrations in Frontostriatal BDNF Signaling  
Robbert Cole (Temple Univ)
- ◆ Candidacy Committee (Chair) 2017  
Dana Zeid  
Biobehavioral Health  
Penn State
- ◆ Comprehensive Examination Committee 2017  
Andrea Stroup  
Biobehavioral Health  
Penn State
- ◆ Comprehensive Examination Committee 2017  
Jessica Braymiller  
Biobehavioral Health  
Penn State
- ◆ Candidacy Committee 2017  
Gina Mathew  
Biobehavioral Health  
Penn State
- ◆ Doctoral Dissertation Committee 2018  
Corticotropin Releasing Factor in the Medial Septum and  
Its Effects on Cognition  
Kimberly Wiersielis (Temple Univ)
- ◆ Doctoral Dissertation Committee 2018  
An Introduction to the Novel Electronic Waterpipe  
Andrea Stroup  
Biobehavioral Health  
Penn State
- ◆ Comprehensive Examination Committee Chair 2019  
Dana Zeid  
Biobehavioral Health  
Penn State
- ◆ Doctoral Dissertation Committee 2019  
A Behavioral and Physiological Investigation of  
the Effects of Nicotine on Human Reward  
Responding and Fear Conditioning  
Alexandra N. Palmisano, M.S.  
Department of Psychology  
University of Connecticut
- ◆ Doctoral Dissertation Committee 2019  
Epidemiology of Nicotine Use Among Adolescents and  
Young Adults in the United States: Findings from the

- PATH Study  
 Jessica Braymiller  
 Biobehavioral Health  
 Penn State
- ◆ Comprehensive Examination Committee Chair 2019  
 Laurel Seemiller  
 Molecular, Cellular, and Integrative Biosciences  
 Penn State
  - ◆ Qualifying Examination Committee 2020  
 Negin Mohammadmirzaei  
 Department of Psychology  
 University of Delaware
  - ◆ Qualifying Examination Committee 2020  
 Lauren Bellfy  
 Molecular, Cellular and Integrative Biosciences  
 Penn State
  - ◆ Qualifying Examination Committee Chair 2020  
 Prescilla Garcia-Trevizo  
 Department of Biobehavioral Health  
 Penn State
  - ◆ Doctoral Dissertation Committee Chair 2021  
 Behavioral and Genetic Architecture of Fear Conditioning  
 and Related Phenotypes  
 Dana Zeid  
 Biobehavioral Health  
 Penn State
  - ◆ Qualifying Examination Committee Chair 2021  
 Benjamin Simonson  
 Molecular, Cellular and Integrative Biosciences  
 Penn State
  - ◆ Comprehensive Examination Committee 2022  
 Corrine Smolen  
 Bioinformatics and Genomics  
 Penn State
  - ◆ Doctoral Dissertation Committee Chair 2022  
 Interstrain variability in hippocampal learning and gene  
 expression after acute adolescent alcohol exposure  
 Laurel Seemiller  
 Molecular Cellular and Integrative Biosciences  
 Penn State
  - ◆ Qualifying Examination Committee 2022  
 Jack Keady  
 Department of Pharmaceutical Sciences  
 University of Kentucky

- ◆ Qualifying Examination Committee Chair 2022  
Carlos Novoa  
Biobehavioral Health  
Penn State
- ◆ Comprehensive Examination Committee 2022  
Chad Brunswick  
Neuroscience  
Penn State
- ◆ Thesis Committee 2023  
Sabrina Amita Sony  
Biochemistry and Molecular Biology  
Penn State
- ◆ Comprehensive Examination Committee 2023  
Sabrina Amita Sony  
Biochemistry and Molecular Biology  
Penn State
- ◆ Master Committee 2023  
Leila Mousavi  
Biobehavioral Health  
Penn State
- ◆ Comprehensive Examination Committee Chair 2023  
Carlos Novoa  
Biobehavioral Health  
Penn State
- ◆ Doctoral Dissertation Committee 2023  
Implementation and Evaluation of the Firefighter  
Integrated Health Optimization Training Program  
Shannon C. White  
Biobehavioral Health  
Penn State
- ◆ Doctoral Dissertation Committee 2024  
Effects of Traumatic Stress Exposure on the Components  
of the Reward System: Alterations at Cellular, Structural,  
and Functional Levels  
Negin Mohammadmirzaei  
Department of Psychology  
University of Delaware

## MEDIA SERVICE

- ◆ Guest Speaker: “**Science Friday with Ira Flatow**” – One too Many? 2010  
Coffee Isn’t the Cure, National Public Radio  
<https://www.npr.org/templates/transcript/transcript.php?storyId=122148564>

- ◆ Guest Speaker: **“In Your Right Mind”** - Cravings  
Talk Radio 790 KABC, Los Angeles, CA  
<https://www.inyourrightmind.com/podcast/cravings/>

2018