THOMAS JOHN GOULD, Ph.D.

8/25/23

OFFICE:

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

Telephone 814-863-7256 **E-Mail** tug70@psu.edu

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 ProgramJuly 2010 – June 2016

in the College of Liberal Arts

Temple University

Director of the Brain, Behavior, and Cognition AreaJuly 2007- June 2011

of Psychology

Temple University

Associate Professor, July 2006 – June 2010

Department of Psychology

Program in Neuroscience

College of Liberal Arts

Temple University

Associate Professor,

April 2007 - June 2010

Center for Substance Abuse

School of Medicine

Temple University

Assistant Research Scientist,

July 2001 – June 2002

Albert Einstein Healthcare Network

Philadelphia, PA

Assistant Professor,

July 2000 - June 2006

Department of Psychology

Program in Neuroscience

College of Liberal Arts

Temple University

Bioscientist, January 2000 – July 2000

AstraZeneca, Research, Wilmington, DE

Research Assistant Professor, January 1999- December '99

Director of the Behavioral Phenotyping Center

Center for Neurobiology and Behavior,

University of Pennsylvania, Philadelphia, PA

Research Associate & Instructor, June 1997 - December 1998

Institute for Behavioral Genetics,

University of Colorado, Boulder, CO

Instructor, February 1997 - May 1997

Department of Pharmacology,

University of Colorado Health Sciences Center, Denver, CO

Regular Fellow, August 1993 - January 1997

Department of Pharmacology,

University of Colorado Health Sciences Center, Denver, CO

Associate Instructor,

September 1992 - May 1993

Department of Psychology,

Indiana University, Bloomington, IN

Graduate Assistant

September 1990 - May 1992

Poynter Center,

Indiana University, Bloomington, IN

Project: Develop materials for use in teaching ethics in research.

Associate Instructor,

September 1990 - May 1991

Department of Psychology,

Indiana University, Bloomington, IN

Undergraduate Research Assistant

September 1987 - June 1988

Harlow Primate Center,

University of Wisconsin, Madison, WI

Sponsor: Christopher Coe, Ph.D.

Name of project: Psychological stress and immune system function

AFFILIATIONS

Center for Neurotechnology in Mental Health Research

September 2021 - Current

Associate Director

Pennsylvania State University

Penn State Center for Brain, Behavior, and

December 2019 - Current

January 2019 - Current

Cognition

Member

The Huck Institute

Pennsylvania State University

Consortium on Substance Use and Addiction

Member

Pennsylvania State University

Faculty Affiliate of the Social and Behavioral May 2019 - Current

Neuroscience Dual-Title Degree Program

Pennsylvania State University

Prevention and Methodology Training Program

September 2018 - Current

Member

Pennsylvania State University

Penn State Center for Molecular Investigation of

July 2018 - Current

Neurological Disorders

Member

The Huck Institute

Pennsylvania State University

Penn State Molecular Cellular and Integrative Biosciences

January 2018 - Current

Member

The Huck Institute

Pennsylvania State University

Penn State Institute of the Neurosciences

December 2016 - Current

Member

The Huck Institute

Pennsylvania State University

Penn State Cancer Institute

December 2016 - Current

Member

The Pennsylvania State University

Tobacco Use Research Center

March 2003 - 2016

Member

University of Pennsylvania

Center for Substance Abuse Research

January 2003 – June 2016

Member

Temple University

EDITORIAL BOARDS

 Associate Editor Frontiers in Behavioral Neuroscience Section Editor Neuropharmacology Behavioral Neuroscience Frontiers in Behavioral Neuroscience (review editor) Neuropharmacology Journal of Addiction Journal of the Experimental Analysis of Behavior The Open Addiction Journal 	2021- 2013- 2007- 2007-2021 2010-2013 2012-2015 2010-2013 2007-2009
PROFESSIONAL SERVICE	
 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 RFA Panel: NIDA Animal Genomics Program (U01)	2022 (May)
 President-Elect, Division on Psychopharmacology and Substance Use (Division 28) of the American Psychological Association 	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	2020

	meeting of the Society for Research on Nicotine and Tobacco	
•	Chair of grant review panel ZRG1 RPHB-R(57)R	2020
	RFA Panel: Career Development and Pathways to	
	Independence Award In Tobacco Regulatory Research,	
	National Institute of Health	
♦	Ad-Hoc grant review panel for the Special Emphasis	2019
	Scientific Review Group ZDA1 IXR-Q (07) Identification of	
	Genetic and Genomic Variants by Next-Gen Sequencing in	
	Non-human Animal Models (U01)	
♦	Chair of grant review panel ZRG1 RPHB-R	2019
	RFA Panel: Career Development and Pathways to	
	Independence Award in Tobacco Regulatory Research,	
	National Institute of Health	
•	Ad-Hoc grant review panel for the Special Emphasis	2018
	Scientific Review Group ZRG1 BBBP-Y (02) Biobehavioral	
	Applications on Substance Abuse and Decision-Making, NIH	
•	Mentor for University of Delaware NIH's Centers of Biomedical	2018-Current
	Research Excellence (COBRE) Program: Dayan Knox	
•	Ad-Hoc grant review panel for the Special Emphasis	2017
	Scientific Review Group 2018/01 ZDA1 SXT-P(06)S, NIH	
•	Chair of Society for Research on Nicotine and Tobacco	2017-2018
	Fellow Task Force	
•	Ad-Hoc grant review panel for Neural Basis of	2017
	Biobehavioral Regulation, Learning and Ethology, NIH	
•	President, Society for Research on Nicotine and Tobacco	2014-2015
•	Chair of grant review panel for Neurobiology of	7/13-6/15
	Motivated Behavior, National Institute of Health	
•	Committee Member for the National Academy of Sciences,	2013
	Institute of Medicine Workshop: Caffeine in Food and Dietary	
	Supplements: Examining Safety	
•	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	6/11-6/13
	Motivated Behavior, National Institute of Health	
•	Drexel University College of Medicine	2011
	Discovery Platform Judge	

•	Program Committee Chair:	2010 -2011	
	Society for Research on Nicotine & Tobacco		
•	Executive Committee of the Pavlovian Society	2010-2014	
•	Grant review special panel for NIDA/NIAAA RFA entitled	5/09	
	"The Mouse Gene Development Initiative",		
	National Institute of Health		
•	Grant review panel The University of Wisconsin-Milwaukee	3/09, 12/12	
	Research Growth Initiative Program		
•	Grant review panel ad-hoc member for the Behavioral	7/08, 10/08, 6/10	
	Neuroscience fellowships Study Section (Currently F02a),		
	National Institute of Health		
•	Grant review panel Nicotine Dependence Study Section	3/08, 3/09, 3/10	
	California Tobacco Related Disease Research Program		
•	Society for Research on Nicotine and Tobacco Program Committee	2007-09	
•	Grant review panel ad-hoc member for Neurobiology of	6/05 - 6/07, 2/11	
	Motivated Behavior, National Institute of Health		
•	Ad-Hoc grant review panel for Neural Basis of	2/06	
	Psychopathology, Addictions and Sleep Disorders, NIH		
•	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 Resea	arch; Behavioral	
	Neuroscience; Behavioural Brain Research; Behavioural Genetics; Be	havioural	
	Processes; Biological Psychiatry; Biology of Reproduction; Brain and Behavior; Brain		
	Research; Brain Research Bulletin; British Journal of Pharmacology; Cerebral Cortex;		
	Current Neuropharmacology; European Journal of Neuropsychopharmacology;		
	European Journal of Neuroscience; Expert Opinions on Therapeutic Targets;		
	Experimental and Clinical Psychopharmacology; Frontiers in Behavioral		
	Neuroscience; Frontiers in Neuroscience; Genes, Brain, and Behavior; Hippocampus;		
	Integrative Physiological and Behavior Science; International Journal of		

Neuropsychopharmacology; Journal of the Experimental Analysis of Behavior; Journal of Neurophysiology; Journal of Neuroscience; Journal of Neuroscience

Methods; Learning and Memory; Life Sciences; Molecular Medicine; Molecular Psychiatry; Nature Communications; Neurobiology of Aging; Neurobiology of Learning and Memory; Neuropharmacology; Neuropsychophramacology; 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
 - o Division 28: Psychopharmacology and Substance Abuse

AWARDS

- Evan G. and Helen G. Pattishall Outstanding Research Achievement Award, Penn State 2018
- Pavlovian Research Award, The Pavlovian Society 2017
- Society for Research on Nicotine and Tobacco Fellow 2017
- American Psychological Association Fellow 2015
- Association for Psychological Science Fellow 2012
- Temple University Eberman Faculty Research Award 2012
- Lindback Award for Distinguished Teaching 2010
- ◆ Temple University Million Dollar Research Club 2007
- ♦ Abstract chosen to be part of the Neuroscience 2007 Press Book for the Society in Neuroscience
- Temple University Diamond Peer Teacher Faculty Mentor, 2007

- ◆ Invited co-chair of "Attention" paper session at annual meeting of the Society for Research on Nicotine and Tobacco, Austin, TX 2007
- Distinguished Teaching Award, 2004 Temple University
- Summer Research Fellowship, 2004 Temple University
- Presidential Summer Research Fellowship, 2003 Temple University
- Pre-Tenure Study Leave for Spring 2003 Temple University
- Research Incentive Fund, 2001 Temple University
- Summer Research Fellowship, 2001 Temple University
- Invited Participant of 4th Annual Training Course in Experimental Aging Research, 1996

GRANTS FUNDED: COMPLETED

Catecholamine Receptor Function and Aging

Role: Principal Investigator

Agency: NIH/NIA

National Research Service Award

Status: Funded, 1995-1997

Direct Costs: \$50,000

Hyperoxia & Resistant Rats: Models of Cerebellar Aging

Role: Principal Investigator

Agency: NIH/NIA

Status: Funded. RO3 Grant Award, 1997-1998

Direct Costs: \$50,000

A Mouse Model of Learning and Memory in Aging and AD

Role: Co-Investigator

Agency: NIA

Submission: 10/1/00

Status: Funded 6/01-5/02 Direct Costs: \$50,000

Molecular and Genetic Analysis of Cerebellar-Based Learning

Role: Principal Investigator

Agency: PA Department of Health

Submission: 11/1/01

Status: Funded 6/02-12/03

Direct Costs: \$50,000

Aging, Vascular Disease, Cell Death, & Cognition

Role: Co-Investigator
PA Department of Health

Submission: 7/1/02

Status: Funded 11/02-10/04

Direct Costs: \$225,000

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

Role: Principal Investigator

American Federation for Aging Research

Submission: 12/1/01

Status: Funded 8/02-7/04 Direct Costs: \$50,000

A Screen of Potential Antipsychotic Agents

Role: Principal Investigator

Agency: Memory Pharmaceuticals

Status: Funded 4/04-3/06 Direct Costs: \$18,700

Behavioral, Neural, and Genetic Factors of Nicotine Addiction

Role: Principal Investigator

Agency: PA Department of Health

Submission: 3/1/03

Status: Funded 4/04-3/06 Direct Costs: \$50,000

Behavioral Mechanisms of Cue Exposure Treatment for Smoking

Relapse Prevention: A Feasibility Trial with Bupropion

Role: Co-Investigator

Agency: Temple University

Submission: 1/15/04

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

Direct Costs: \$150,000

Nicotine & Ethanol Influences on Contextual Conditioning

Role: Principal Investigator

Agency: NIAAA/NIH Submission: 2/1/05

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

Direct Costs: \$100,000 Indirect Costs: \$41,410

Collaborative Research: Differing Interpretations of Young

Children's Geometric Skills

Role: Co-Investigator

Agency: NSF

Submission: 1/15/04

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

Direct Costs: \$426,677

Nicotine Withdrawal & Sensory Gating:

Noradrenergic Intervention

Role: Co-Investigator Agency: NIH/NCI Submission: 1/24/04

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

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

The Role of CREB and Opioid System in Nicotine Reward

Role: Co-Investigator Agency: NIH/NCI Submission: 1/24/04

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

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

Nicotine Addiction: Learning, Neural, & Genetic Processes

Role: Principal Investigator

Agency: NIDA/NIH

Submission: 11/01/04

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

Direct Costs: \$1,000,000 Indirect Costs: \$372,662

NIDA Research "Center of Excellence" Grant Program (P50)

Role: Project Co-PI

Agency: NIH

Submission: 1/5/08

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

Direct Costs: \$549,115 Indirect Costs: \$274,559

Genetic, Behavioral, & Neurobiological Substrates of Nicotine Withdrawal

Role: Principal Investigator

Agency: NIH

Submission: 3/5/08

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

Direct Costs: \$1,000,000 Indirect Costs: \$478,000

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

04/01/2009-3/31/2011 Total Costs: \$122,379

Nicotine Addiction: Learning, Neural, & Genetic Processes

Role: Principal Investigator

Agency: NIDA/NIH Submission: 11/01/04

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

Direct Costs: \$1,012,894 Indirect Costs: \$385,993

Big Data Computational Methods for Analysis of Drugs of Abuse

Role: Subcontract Principal Investigator

Agency: NIDA/NIH

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

Direct Costs: \$159,544 Indirect Costs: \$93,010

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

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

Role: Principal Investigator

Agency: The Jackson Laboratory

Status: Funded 01/14/2022-07/13/2023

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)

- **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.
- Payne, P., Fiering, S., Zava, D.T., **Gould, T.J.**, Brown, B., Hage, P., Gaudet, C., and Crane-Godrea, M.A. (2018) Digital delivery of meditative movement training improved health of cigarette-smoke-exposed subjects. *Frontiers in Public Health*, 6:282 (EPub 16 pages).
- Kutlu, M.G., Conner, D.*, Tumolo, J.M.*, Cann, C.*, Garrett, B.*, and **Gould, T.J.** (2018) Nicotine modulates contextual fear extinction through changes in ventral hippocampal GABAergic function. *Neuropharmacology*, 141:192-200.
- Gitik, M., Holliday, E.D.,* Leung, M., Yuan, Q., Logue, S.F., Tikkanen, R., Goldman, D., and **Gould, T.J.** (2018) Choline Ameliorates Adult Learning Deficits and Reverses Epigenetic Modification of Chromatin Remodeling Factors Related to Adolescent Nicotine Exposure. *Neurobiology of Learning and Memory*, 155:239-248.
- Mooney-Leber, S.M. and **Gould, T.J.** (2018) The Long-Term Cognitive Consequences of Adolescent Exposure to Recreational Drugs of Abuse. *Learning & Memory*, 25(9):481-491.
- Zeid, D.* and Gould, T.J. (2018) Chronic Nicotine Exposure in Pre-Adolescence Enhances Later Spontaneous Recovery of Fear Memory. *Behavioral Neuroscience*, 132(4):240-246.
- Kutlu, M.G., Marin, M.F., Tumolo, J.M., Kaur, N., VanElzakker, M., Shin, L.M., and **Gould, T.J.** (2018) Nicotine Exposure Leads to Deficits in Differential Fear Conditioning in Mice and Humans: a Potential Role of the Anterior Cingulate Cortex. *Neuroscience Letters*, 673:142-149.
- Kutlu, M.G., Cole, R.D.*, Conner, D.*, Natwora, B., and **Gould, T.J.** (2018) Tyrosine Receptor Kinase B Receptor Activation Reverses the Impairing Effects of acute Nicotine on Contextual Fear Extinction. *Journal of Psychopharmacology*, 32(3):367-372.
- Kutlu, M.G., Tumolo, J.M.•, Cann, C.•, and **Gould, T.J.** (2018) Differential Effects of α4β2 Nicotinic Receptor Antagonists and Partial-Agonists on Contextual Fear Extinction in Male C57BL/6 Mice. *Psychopharmacology*, 235(4):1211-1219.
- Tumolo, J.M.*, Kutlu, M.G., and Gould, T.J. (2018) Chronic Nicotine Differentially Alters

- Spontaneous Recovery of Contextual Fear in Male and Female Mice. *Behavioural Brain Research*, 341:176-180.
- Fowler, C.D., Gipson, C.D., Kleykamp, B.A., Rupprecht, L.E., Harrell, P.T., Rees, V.W., Gould, T.J. Oliver, J., Bagdas, D., Damaj, M.I., Schmidt, H.D., Duncan, A., De Biasi, M. (2018) Basic Science and Public Policy: Informed Regulation for Nicotine and Tobacco Products. *Nicotine & Tobacco Research*, 20: 789-799. 2018 Best Paper Award from Society for Research on Nicotine and Tobacco
- Zeid, D.*, Kutlu, M.G., and **Gould, T.J.** (2018) Differential Effects of Nicotine Exposure on the Hippocampus Across Lifespan. *Current Neuropharmacology*, 16(4):388-402.
- Zhou, L., Fisher, M.L., Cole, R.D.*, **Gould, T.J.**, Parikh, V., Ortinski, P.I., and Turner, J.R. (2018) Neuregulin 3 Signaling Mediates Nicotine-Dependent Synaptic Plasticity in the Orbitofrontal Cortex and Cognition. *Neuropsychopharmacology*, 43(6):1343-1354.
- Kutlu, M.G., Zeid, D.*, Tumolo, J.M.*, and **Gould, T.J.** (2018) Pre-Adolescent Mice are Less Sensitive to the Effects of Acute Nicotine on Extinction and Spontaneous Recovery. *Brain Research Bulletin*, 145:143-150.
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- **Gould T.J.** and Bickford, P.C. (1995) Localization of age-related β-adrenergic signal transduction deficits in cerebellar Purkinje cells from F344 rats. *Age* 18:187.
- **Gould T.J.** and Bickford, P.C. (1995) Aged-related deficits in β-adrenergic signal transduction mechanisms of cerebellar Purkinje cells from F344 rats. *Soc Neurosci Abstr* 21:473.
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- **Gould T.J.** and J.E. Steinmetz (1993) Changes in conditioning-related neuronal activity in rabbit lobule HVI of cerebellar cortex and interpositus nucleus during discrimination and reversal conditioning. *Soc Neurosci Abstr* 19:1006.
- **Gould T.J.** and Steinmetz, J.E. (1992) Changes in conditioning-related neuronal activity in rabbit lobule HVI of cerebellar cortex during backward, forward, and unpaired conditioning. *Soc Neurosci Abstr* 18:337.
- **Gould, T.J.**, Miller, D.P., and Steinmetz, J.E. (1991) Differences in acquisition and extinction of conditioning-related neuronal activity in rabbit cerebellar cortex and interpositus nucleus. *Soc Neurosci Abstr* 17:323.
- **Gould, T.J.**, Sears, L.L., and Steinmetz, J.E. (1990) Rabbit cerebellar activity evoked by pontine nuclei or inferior olive stimulation--potential regions of CS-US convergence during eyelid conditioning. *Soc Neurosci Abstr* 16:763.
- **Gould, T.J.** and Kettner, R.E. (1989) A movement-sequence delay task for the study of motor control activity during arm reaching in 3D space. *Soc Neurosci Abstr* 15:788.
- Kettner, R.E. and **Gould, T.J.** (1989) A neural model of motor cortical responses during arm reaching in 3D space. *Soc Neurosci Abstr* 15:788.

INVITED TALKS

Impact of Age and Genetics on the Effects of Nicotine on Learning and Hippocampal Function

May 2019

Department of Psychology University of Connecticut

Nicotine Addiction Across the Ages: A Biobehavioral

March 2019

Perspective

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	

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

Lehigh University

The Role of Genetics and Development in the October 2014 **Effects of Nicotine Withdrawal on Learning** Fox Chase Cancer Center Philadelphia, PA Genetic, Developmental, and Receptor Level June 2014 Influences on Nicotine Withdrawal-Associated **Deficits in Learning** Annual Meeting of the International Behavioral Neuroscience Society Las Vegas, NV December 2012 Nicotine and the Hippocampus: Insights into **Learning and Addiction** Department of Psychology Texas A&M University Nicotine and the Hippocampus: Insights into September 2012 **Learning and Addiction** 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

Annual Meeting of the Pavlovian Society

Milwaukee, WI

The Behavioral and Neural Effects of Nicotine on

December 2009

Hippocampus-Dependent Learning

National Institute of Environmental Health Science

Research Triangle Park, NC

The Impact of Nicotine on Memory Formation in Mice:

September 2009

From Behavior to Cellular Substrates

Translational Nicotine Research Meeting

CCD Congress Center Dusseldorf/Germany

September 18-19 2009

Behavioral and Molecular Mechanisms of Cognitive Deficits in

April 2009

Nicotine Withdrawal

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:

January 2009

Implications for Nicotine Addiction

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

May 2008

Nicotine on Hippocampus-Dependent Learning

Neuroscience Workgroup Cutting Edge Seminar:

Nicotine and Neuroplasticity

National Institute on Drug Abuse Bethesda, MD

Nicotine and Learning: From Behavior to Neural and

April 2008

Genetic Substrates

University of Colorado

Boulder, CO

Nicotine Addiction and Learning: Involvement of Contextual

March 2008

Associations and the Hippocampus

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:

October 2007

Insights into Nicotine Addiction

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

January 2007

Contextual Learning

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

Department of Pharmacology & Physiology

Drexel University College of Medicine

Common Neural, Cellular, and Molecular Substrates of March 2005 **Nicotine Addiction and Contextual Learning** Department of Neural and Behavioral Science Medical College Penn State University **Nicotine Addiction and Learning** January 2004 Tobacco Use Research Center University of Pennsylvania December 2004 Nicotine Addiction and Hippocampus-Dependent Learning Department of Psychology University of Delaware cAMP/PKA Signaling Cascade, Sensory Gating, June 2004 and Schizophrenia Department of Psychiatry University of Pennsylvania Nicotine Addiction: Learning, Neural & Genetic Substrates May 2004 Frontiers in Addiction **Summer Conference** Vanderbilt University Nashville, TN October 2003 Behavioral, Cellular, and Genetic Analysis of Enhancement of Contextual Fear Conditioning by Nicotine Department of Pharmacology Temple University College of Medicine Nicotine & Hippocampus-Dependent Learning: September 2003 Behavioral, Pharmacological, and Genetic Analysis

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 Invited Presentation

October 2000

Neuroscience Program

Temple University

PRESENTATIONS

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 Transciptome 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

June 2022

Nicotine Alters Offspring Fear Memory, Sensitivity to Nicotine,

Hippocampal Genetic and Neural Function, and Basal Corticosterone

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

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

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

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 May 2022 Adolescent Ethanol Exposure: Examining the Role of the Dorsal

June 2022

May 2022

May 2022

Hippocampal Transcriptome in Adolescent and Adult C57BL/6J and DBA/2J Inbred Mice

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

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

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

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

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

Poster

Annual Meeting of the Pavlovian Society

Virtual

March 2022

October 2021

October 2021

October 2021

Chronic Nicotine Exposure During Adolescence Decreases

August 2021

March 2021

Sensitivity to Nicotine Induced Hypolocomotion in Adulthood

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

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

Poster

NIDA Genetic Consortium Meeting

Virtual

Strain Differences in Behavioral Responses

August 2020

to Fear Conditioning

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

June 2020

Are Differentially Susceptible to Contextual Fear Learning Deficits

After Acute Ethanol or MK-801 Treatment

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

March 2020

Mouse Strains

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

March 2020

Withdrawal from Chronic Nicotine Across Inbreed Mouse Strains

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

January 2020

Mouse Strains

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

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

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

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

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.

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

October 2019

October 2019

May 2019

February 2019

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** Gould, T.J.

January 2019

Talk

Winter Conference on Brain Research

Snowmass, CO

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

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

Gould, T.J.

Poster

NIDA Genetic Consortium Meeting

Bethesda, MD

January 2019

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

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

January 2019

Differential Susceptibility to Effects of Acute Versus

Chronic Nicotine on Fear Extinction and Spontaneous

Recovery in Adolescent Mice

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

Poster

Annual Meeting of the Pavlovian Society

Iowa City, IA

October 2018

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 Cholingergic Signaling Pathway

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

Symposium

Annual Meeting of the Society for Research on Nicotine and Tobacco Baltimore, MD

Nicotine Differentially Impacts Fear Extinction and

February 2018

Spontaneous Recovery in Adolescent and Adult Mice

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

Poster

Annual Meeting of the Society for Research on Nicotine and Tobacco Baltimore, MD

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

February 2018

Gadiwalla, S., Kutlu, M.G., Tumulo, J.M., Garrett, B., and Gould, T.J.

Poster

Annual Meeting of the Society for Research on Nicotine and Tobacco Baltimore, MD

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

January 2018

Zeid, D.,* Gitik, M., Holliday, E.,* Goldberg, L., Goldman, D., and Gould, T.J.

Poster

NIDA Genetic Consortium Meeting Bethesda, MD

Paternal Nicotine Exposure Alters Generational Fear Conditioning and Hippocampal Cholinergic Function

October 2017

Gould, T.J., Kutlu, M.G., and Parikh, V.

Poster

Annual Meeting of the Pavlovian Society

Philadelphia, PA

Paternal Nicotine Exposure Transgenerationally Alters

June 2017

Fear Learning and Cholinergic Function

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

Poster

College on Problems of Drug Dependence

Montreal, Canada

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

March 2017

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

Symposium

Annual Meeting of the Society for Research on Nicotine and Tobacco

Florence, Italy

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

March 2017

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

Symposium

Annual Meeting of the Society for Research on Nicotine and Tobacco

Florence, Italy

Genetic and Epigenetic Modulators of Nicotine Effects on Learning and Hippocampal Function

January 2017

Gould, T.J.

Talk

Park City Winter Conference

Park City, UT

Paternal Nicotine Exposure Trans-Generationally Alters

November 2016

Fear Response and Cholinergic Function: Potential

Epigenetic Mechanisms

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

Poster

NIDA Genetic Consortium Meeting

Bethesda, MD

Choline Supplementation in an Adolescent Nicotine

November 2016

Exposure Model - a Whole Genome Epigenetic Perspective

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

September 2016

Contextual Fear Differentially in Male and Female Mice

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

Poster

Annual Meeting of the Pavlovian Society

Jersey City, NJ

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

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

Poster

Annual Meeting of the Pavlovian Society

Jersey City, NJ

Dysregulations in the Cholinergic System After

Adolescent Nicotine is Reversed by Dietary Choline

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

June 2016

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

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.

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.

Poster

Annual Meeting of the Pavlovian Society

Portland, OR

Adolescent Nicotine Negatively Impacts Adult Cognition

and Increase Addiction Liability of Subsequent Nicotine

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

March 2015

May 2016

March 2016

September 2015

March 2015

Cued Learned Safety

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

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

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, 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:

December 2014

Possible Links to BDNF Imbalance in the Frontostriatal Circuits

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

September 2014

Nicotine on Extinction Learning

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 February 2014

to the Effects of Nicotine on Hippocampus-Dependent Learning

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 September 2013

Memory

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

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 $\boldsymbol{\beta}$ 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 Gould, T.J.

November 2012

Talk

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

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

September 2012

A Jeff M D • William D C * X

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

Poster

Annual Meeting of the Pavlovian Society

Jersey City, NJ

Thyroid Receptor β is Critically Involved in the Effects of Nicotine on Hippocampus-Dependent Memory, while Thyroid Receptor $\alpha 1$ is Not

September 2012

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

Poster

Annual Meeting of the Pavlovian Society

Jersey City, NJ

Role of Alpha2-Containing Nicotinic Acetylcholine Receptors March 2012 in Nicotine-Facilitated Contextual and Cued Fear Conditioning,

Reinforcement and Withdrawal in the Mouse

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 March 2012 Protein Synthesis-Dependent Mechanism

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 May 2010 Between the Hippocampus and Relational Memory

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

February 2010

Nicotine Dependence: From Fish to Mouse to Man

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

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

April 2009

Conditioning Depending Upon Nicotine Treatment Onset:

A Model for Post Traumatic Stress Disorder

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

February 2008

Chronic Nicotine on Contextual Learning Are Mediated by

High Affinity Nicotinic Acetylcholinergic Receptors in the Hippocampus

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

June 2007

May 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

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

Poster

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

Bupropion Dose-Dependently Reverses Nicotine Withdrawal May 2007 **Deficits in Contextual Fear Conditioning**

Poster

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

Co-Adminstration of Ethanol and Nicotine Alters Learning May 2007 in C57BL/6 Mice

Poster

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

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

May 2007

Poster

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

Withdrawal from Chronic Nicotine Produces Deficits in Trace Fear March 2007 Conditioning in C57BL/6 Mice: An Effect Associated with α4β2 Nicotinic Acetylcholine Receptors Function

Talk

Eastern Psychological Association Philadelphia, PA

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

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

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

Poster

Annual Meeting of The Pavlovian Society

Philadelphia, PA

The Effects of Bupropion on Contextual and Cued

Fear Conditioning in C57BL/6 Mice

Poster

Annual Meeting of The Pavlovian Society

Philadelphia, PA

Nicotine Enhances Contextual Fear Conditioning via

Dorsal Hippocampal α4β2 Nicotinic Acetylcholine

Receptor-Mediated Processes in C57BL/6J Mice

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

Poster

Annual Meeting of The Pavlovian Society

Philadelphia, PA

Dose Response Effects of Ethanol on Background

and Foreground Contextual Fear Conditioning

Poster

September 2006

September 2006

September 2006

September 2006

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

β2 Nicotinic Acetylcholine Receptor Subunits Meditate 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

Talk

Annual Meeting of The Pavlovian Society

Anaheim, CA

Behavioral and Cell Signaling Substrates of

Latent Inhibition of Cued Fear Conditioning

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

Poster

Philadelphia Area Chapter of the Society for Neuroscience

Philadelphia, PA.

Nicotine Withdrawal Associated

Deficits in Hippocampus-Dependent Learning

Poster

Philadelphia Area Chapter of the Society for Neuroscience

Philadelphia, PA.

Involvement of ERK 1 & 2 in the Enhancement of

Contextual Fear Conditioning by Nicotine

Poster

Philadelphia Area Chapter of the Society for Neuroscience

Philadelphia, PA.

Cholinergic Involvement in Fear Conditioning

Talk

Annual Meeting of The Pavlovian Society

Baltimore, MD

Withdrawal from Chronic Nicotine Impairs

Contextual but not Cued Fear Conditioning

September 2005

May 2005

May 2005

May 2005

September 2004

Talk

Annual Meeting of The Pavlovian Society

Baltimore, MD

Entorhinal Cortex Involvement in Latent Inhibition of Cued Fear Conditioning

September 2004

May 2004

May 2004

Talk

Annual Meeting of The Pavlovian Society

Baltimore, MD

Signal Transduction Mechanisms Underlying Latent

Inhibition of Cued Fear Conditioning

Poster

Philadelphia Area Chapter of The Society for Neuroscience

Philadelphia, PA.

Nicotinic Receptor Subtypes Mediating

Enhancement of Contextual Fear Conditioning

Poster

Philadelphia Area Chapter of The Society for Neuroscience

Philadelphia, PA.

April 2004

Nicotinic Receptor Subtype

Involvement in Fear Conditioning

Talk

Eastern Psychological Association

Washington, DC

Behavioral Effects of delta Ligands in an Elevated Plus

Maze and Forced Swim Assay

Perrine, SA, Page, ME, Gould, TJ, Cowan, A, Unterwald, EM

Mid-Atlantic Pharmacology Society Annual Meeting

Nicotine Enhances Hippocampus-Dependent

Versions of Fear Conditioning

Talk

September 2003

October 2003

Annual Meeting of The Pavlovian Society Bloomington, IN

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

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

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

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

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

Poster

Philadelphia Area Chapter of The Society for Neuroscience

September 2003

September 2003

September 2003

May 2003

May 2003

Philadelphia, PA.

Rolipram, a Type-IV Specific Phosphodiesterase Inhibitor Enhances Contextual But Not Auditory Cued in Trace Fear Conditioning in C57BL/6 Mice May 2003

Poster

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

The Neurobiology of Latent Inhibition of Cued Fear Conditioning

March 2003

Talk

Eastern Psychological Association Baltimore, MD

Latent Inhibition of Pavlovian Fear Conditioning Is Mediated Through NMDA Receptor Function But Is Independent of Protein Synthesis October 2002

Talk

Pavlovian Society Annual Meeting Los Angeles, CA

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

May 2002

Poster

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

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

May 2002

Poster

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

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

October 2001

Poster

Pavlovian Society Annual Meeting

New Brunswick, NJ

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

June 1996

Talk

4th Annual Summer Training Course in Experimental Aging Research,

Ann Arbor, MI

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

October 1995

Talk

Annual Meeting of the American Aging Association,

San Antonio, TX

Effects of Chronic Treatment with

October 1994

March 1992

N-tert-butyl-α-phenylnitrone on Cerebellar

Noradrenergic Receptor Function in Aged F344 Rats

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

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 April 2018

Processing

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

Department of Psychology

Temple University

Fall 2000, Fall 2001,

Spring 2002, Fall 2002,

Spring 2005, Fall 2005,

Spring 2008, Fall 2008,

Fall 2009

Fundamentals in Neuroscience 1051

CLA Neuroscience Major

Temple University

Team taught Spring

2008, Fall 2009

Current Topics: Neurobiology of Learning 327

Department of Psychology

Temple University

Spring 2001

Current Topics: Neurobiology of Addiction 327

Department of Psychology

Temple University

Fall 2001

Cognitive Neuroscience 104

Department of Psychology

Temple University

Spring 2002

Neurobiology of Learning and Memory 366

Department of Psychology

Temple University

Fall 2003, Spring 2004,

Spring 2005, Fall 2006

Graduate Topics in Experimental Psychology 706

The Neural Basis of Learning

Department of Psychology

Temple University

Spring 2004

Graduate Topics in Experimental Psychology 706

Psychopharmacology

Department of Psychology

Temple University

Fall 2004

Psychopharmacology 361

Department of Psychology

Temple University

Fall 2004

Graduate Core Course on the

Neurobiology of Learning & Memory 706

Department of Psychology

Temple University

Fall 2005

Graduate Core Course:

Behavioral Neuroscience 809

Department of Psychology

Temple University

Spring 2006, 2010, 2011,

2012

Graduate Topics in Cognitive Psychology

Addiction

Department of Psychology

Temple University

Fall 2007

Readings in Neuroscience 9381

CLA Program in Neuroscience

Temple University

Temple University

Spring 2011, 2012

Fall 2011, Spring 2012,

Fall 2012, Spring 2013,

Fall 2013, Spring 2014

Fall 2014, Spring 2015

Undergraduate Capstone in Neuroscience

Program in Neuroscience

Temple University

Fall 2013, Fall 2014

Biobehavioral Health 497: Topical Seminar in Addiction

Department of Biobehavioral Health

Penn State

Spring 2018, Fall 2019

Biobehavioral Health 203: Neurological Bases of Human Behavior Spring 2019, Fall 2021

Biobehavioral Health 451: Pharmacological Influences on Health

Fall 2020

Department of Biobehavioral Health

Penn State

Undergraduate Student Mentoring: Over <u>50</u> 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.

Current Graduate Students

Prescilla Garcia-Trevizo

Carlos Novoa

GRADUATE STUDENT PLACEMENT

◆ Michael Lewis: Postdoctoral Position with
 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 Science	ces,
	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 Principa	1

	Investigator at the Center for Young Adult Addiction Recovery, Kenn	iesaw
	State University, Georgia	
•	David Connor Postdoctoral Position with Dr. Dani	2016
	Neuroscience, University of Pennsylvania, Philadelphia, PA	
	Current Position: Scientific Investigator at GSK	
•	Dana Zeid Postdoctoral Position with Dr. Wimer	2021
	Department of Psychology, Temple University, Philadelphia, PA	
•	Laurel Seemiller Postdoctoral Position with Dr. Crowley	2022
	Department of Biology, Penn State University, University Park, PA	
PC	OSTDOCTORAL FELLOW PLACEMENT	
•	Leonardo A Ortega Murillo, Ph.D.	2013
	Professor	
	Autonomous University of Bucaramanga	
	Department of Psychology	
	School of Health Sciences	
	Bucaramanga, Santander, Colombia	
♦	Emre Yildirim, M.D., Ph.D.,	2013
	Medical Science Associate	
	GlaxoSmithKline	
	Istanbul, Turkey	
•	Gunes Kutlu, Ph.D.,	2017
	Research Instructor	
	Department of Pharmacology	
	Assistant Professor, School of Medicine	
	Rowan University	
•	Sean Mooney-Leber, Ph.D.,	2020
	Assistant Professor	
	Department of Psychology	
	University of Wisconsin – Stevens Point	
•	Lisa Goldberg, Ph.D.,	2021
	Application Scientist at	

LABORATORY UNDERGRADUATE/GRADUATE STUDENT AWARDS and

Taconic Biosciences

FELLOWSHIPS

- Michael Lewis: Temple University Excellence in Neuroscience Research Award 2003
- ♦ Jennifer Davis: Temple University Excellence in Neuroscience Research Award 2004
- ♦ Jennifer Davis: Temple University Excellence in Neuroscience Research Award 2005
- ◆ Jennifer Davis: Selected to attend the 1st annual NIH National Graduate Student Research Festival
- Jennifer Davis: National Research Service Award, NIH/NIDA, Grant Number: 1 F31 DA021949-01, Project Title: Neural Substrates of Nicotine Withdrawal 2006-2007
- Danielle Gulick: Research Society on Alcoholism Student Merit Meeting Award 2007
- ♦ Sarah Kahn: Undergraduate Research Award at the Proceedings of the 30th Annual Meeting of the Philadelphia Chapter of the Society for Neuroscience 2007
- ♦ Danielle Gulick: CLA Graduate Fund for Excellence Award 2007
- ♦ Jessica Andre: CLA Graduate Fund for Excellence Award 2007
- ♦ Justin Kenney: Temple University Shipley Prize Award Winner 2010
- Kristy Cordero: Philadelphia Chapter of the Society for Neuroscience 2010 Undergraduate Research Award
- Prescott Leach: Selected to attend the Seventh Annual NIH National Graduate Student Research Conference 2012
- Prescott Leach: Temple University Dissertation Completion Grant 2013
- David Braak: Creative Arts, Research And Scholarship, Temple University 2013
- David Braak: Center for Scholars Program Scholar, Temple University 2014
- David Braak: Summer Undergraduate Research Fellowships (SURF) 2014 at UT Southwestern Medical Center
- ◆ Steven Simmons: selected to participate in the 64th Lindau Nobel Laureate Meeting, Lindau, Germany 2014
- ◆ David Braak: Benjamin Cottone, M.D. Scholarship, Temple University 2014
- Erica Holliday: 2014 Weinstein Summer Graduate Research Fellowship, Temple University
- David Braak: Andrea Pearlman Price Pre-Medical Award, Temple University 2014
- Courtney Cann: 2017 Undergraduate Research Grant, College of Health and Human Development Penn State
- Dana Zeid: International Behavioural and Neural Genetics Society Outstanding Graduate Student Travel Award, 2018
- Dana Zeid: NIDA Scholarship to Short Course on the Genetics of Addiction at the Jackson Laboratory, 2018
- Dana Zeid: BBH Graduate Student Research Award, 2018

- ◆ Dana Zeid: National Research Service Award, NIH/NIDA, Grant Number: 1F31DA049395-01A1, Project Title: Effects of paternal nicotine exposure on sncRNA expression in sire sperm and offspring hippocampus 2020-2022
- Prescilla Garcia-Trevizo: Society for Neuroscience, Neuroscience Scholars Program Associate
 2020
- ♦ Dana Zeid: 2020-21 Elizabeth J. Susman Enhancement Fund Award in Biobehavioral Health
- ◆ Dana Zeid: 2020-21 The Gerald E. McClearn Graduate Student Award
- ◆ Prescilla Garcia-Trevizo: 2021 National Institute on Drug Abuse (NIDA) R13-Funded Travel Award to the 2021 Annual Convention of the American Psychological Association
- Prescilla Garcia-Trevizo: 2021-22 Prevention and Methodology Training Pre-Doctoral Fellowship, Penn State
- Samantha Murray: 2022 Student Engagement Network Award, Penn State
- Emily Henry: 2022 Honors Thesis, Penn State
- ◆ Laurel Seemiller: 2022 Outstanding Student Scholar Travel Awardee International Behavioural and Neural Genetics Society
- ◆ Laurel Seemiller: 2022 Outstanding Women in Learning Award Recipient International Behavioral Neuroscience Society Annual Meeting
- Prescilla Garcia-Trevizo: 2022 Alfred P. Sloan Foundation Travel Awardee 2022 Institute on Teaching and Mentoring, hosted by the Southern Regional Education, Atlanta, GA

UNIVERSITY SERVICE

•	Penn State Genomics Core Facility Faculty Steering Committee	2022-
•	College of Health & Human Development EHS Coordinator	2022
	Search Committee	
•	President of Penn State Department Leadership Council	2021-2022
•	Mentor on National Institutes of Health (NIH) National Heart,	2021
	Lung, and Blood Institute Diversity Training Grant "Improving	
	Access through Research and Training (IMPACT)"	
	Mentee: Jason Dennis	
•	College of Health & Human Development Diversity	2021
	Achievement Awards Committee	
•	College of Health & Human Development Assistant Director of	2021
	Grants and Contracts External Search Committee	
•	College of Health & Human Development Back to Research	2020-2021
	Committee	

•	College of Health & Human Development Faculty and Staff Awards Committee	2019
•	College of Health & Human Development AD-14	2018
	Committee Chair Penn State	
•	Carol Clark Ford Staff Achievement Award Selection Committee	2018, 2022
•	Panelist: Discussion on Transitioning into Tenure Track Faculty	2017
	Position: Office of Postdoctoral Affairs	
•	Penn State KL2 Review, Penn State Clinical & Translational	2017
	Science Institute	
•	Enhancing Health Working Group (Group 3)	2017-2018
	Penn State	
•	Associate Vice President for Affirmative Action Search Committee	2017
	Penn State	
•	College of Health & Human Development AD-14 Committee	2017
	Co-Chair, Penn State	
•	Director of the Neuroscience Program in the College of Liberal Arts	2010-2016
•	Psychology Chair's Advisory Committee	2010-2016
•	University Head Veterinarian Search Committee	2012
•	Psychology Personnel Committee	2011-2016
•	College of Liberal Arts Merit Committee	2012-2014
•	Keynote Speaker at Temple University McNair Scholars	2011
	Graduation Celebration	
•	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	2007-2011
	of Psychology, Temple University	
•	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	2003-2007
	Training Faculty for NIH Training Grant	
•	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	2004-2007
	and Internal Awards Committee (Current Chair, psychology)	
•	Presentation at the Temple University	2004
	Russell Conwell Summer Bridge Program	
•	Search Committee for Clinical Psychology Hire	2002
Gl	RADUATE 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	
	theimidazobenzodiazepine inverse agonist RO19-4603 on	
	voluntary ethanol intake in sprague-dawley rats: Gregory	
	G. Blakely	
•	Doctoral Dissertation Committee	2002
	The effects of preweanling 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
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• Guest Speaker: "In Your Right Mind" - Cravings

2018

Talk Radio 790 KABC, Los Angeles, CA

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