

THOMAS JOHN GOULD, Ph.D.

3/10/24

OFFICE:

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

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EDUCATION

University of Wisconsin, Madison, Wisconsin 1984 - 1988

Major: Psychology

Department of Psychology and Program in Neural Science 1988 - 1993

Indiana University, Bloomington, Indiana

DEGREES

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

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

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

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

POST DOCTORAL TRAINING/RESEARCH ASSOCIATE POSITIONS

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

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

SCIENTIFIC INTERESTS

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

POSITIONS

Jean Phillips Shibley Professor

July 2016 –Current

Department Head

Department of Biobehavioral Health
The Pennsylvania State University

Professor,

July 2010 – June 2016

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

Director of the Neuroscience Program in the College of Liberal Arts

July 2010 – June 2016

Temple University

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

July 2007- June 2011

Temple University

Associate Professor,

July 2006 – June 2010

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

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

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

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

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

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

AFFILIATIONS

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

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

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

Faculty Affiliate of the Social and Behavioral May 2019 - Current

Neuroscience Dual-Title Degree Program

Pennsylvania State University

Prevention and Methodology Training Program

September 2018 - Current

Member

Pennsylvania State University

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

July 2018 - Current

Member

The Huck Institute

Pennsylvania State University

Penn State Molecular Cellular and Integrative Biosciences

January 2018 - Current

Member

The Huck Institute

Pennsylvania State University

Penn State Institute of the Neurosciences

December 2016 - Current

Member

The Huck Institute

Pennsylvania State University

Penn State Cancer Institute

December 2016 - Current

Member

The Pennsylvania State University

Tobacco Use Research Center

March 2003 - 2016

Member

University of Pennsylvania

Center for Substance Abuse Research

January 2003 – June 2016

Member

Temple University

EDITORIAL BOARDS

- ◆ Associate Editor Frontiers in Behavioral Neuroscience 2021-
- ◆ 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

- ◆ Past President, Society for Psychopharmacology and Substance Use (Division 28) of the American Psychological Association Executive Committee Member 2024
- ◆
- ◆ 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 Washington, D.C. 2023
- ◆ 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 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 2022-

URM Mentorship Program

- ◆ Co-Chair of grant review panel ZDA1 IXR-Q (07) 2021
RFA Panel: NIDA Animal Genomics Program (U01)
- ◆ Society for Research on Nicotine and Tobacco Nominations 2021
Committee
- ◆ Abstract Reviewer on Program Committee for 2022 annual 2021
meeting of the Society for Research on Nicotine and Tobacco
- ◆ Session Chair: Neurobiological Underpinnings of Nicotine 2021
Dependence. 2021 annual meeting of the Society for Research
on Nicotine and Tobacco
- ◆ Abstract Reviewer on Program Committee for 2021 annual 2020
meeting of the Society for Research on Nicotine and Tobacco
- ◆ Chair of grant review panel ZRG1 RPHB-R(57)R 2020
RFA Panel: Career Development and Pathways to
Independence Award In Tobacco Regulatory Research,
National Institute of Health
- ◆ Ad-Hoc grant review panel for the Special Emphasis 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 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 National Institute of Health/NIDA 10/00, 1/05, 7/09, 5/10
- ◆ Ad-Hoc grant review panel member National Science Foundation 2004
- ◆ Consulting Editor for Monographs of the Society for Research in Child Development 2005
- ◆ Ad-Hoc manuscript review (for >45 journals):

Acta Neuropathologica; Alcoholism: Clinical and Experimental Research; Behavioral Neuroscience; Behavioural Brain Research; Behavioural Genetics; Behavioural Processes; Biological Psychiatry; Biology of Reproduction; Brain and Behavior; Brain Research; Brain Research Bulletin; British Journal of Pharmacology; Cerebral Cortex; Current Neuropharmacology; 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 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

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)

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.
- Payne, P., Fiering, S., Zava, D.T., **Gould, T.J.**, Brown, B., Hage, P., Gaudet, C., and Crane-Godrea,

- M.A. (2018) Digital delivery of meditative movement training improved health of cigarette-smoke-exposed subjects. *Frontiers in Public Health*, 6:282 (EPub 16 pages).
- Kutlu, M.G., Conner, D.* , Tumolo, J.M.* , Cann, C.* , Garrett, B.* , and **Gould, T.J.** (2018) Nicotine modulates contextual fear extinction through changes in ventral hippocampal GABAergic function. *Neuropharmacology*, 141:192-200.
- Gitik, M., Holliday, E.D.,* Leung, M., Yuan, Q., Logue, S.F., Tikkanen, R., Goldman, D., and **Gould, T.J.** (2018) Choline Ameliorates Adult Learning Deficits and Reverses Epigenetic Modification of Chromatin Remodeling Factors Related to Adolescent Nicotine Exposure. *Neurobiology of Learning and Memory*, 155:239-248.
- Mooney-Leber, S.M. and **Gould, T.J.** (2018) The Long-Term Cognitive Consequences of Adolescent Exposure to Recreational Drugs of Abuse. *Learning & Memory*, 25(9):481-491.
- Zeid, D.* and **Gould, T.J.** (2018) Chronic Nicotine Exposure in Pre-Adolescence Enhances Later Spontaneous Recovery of Fear Memory. *Behavioral Neuroscience*, 132(4):240-246.
- Kutlu, M.G., Marin, M.F., Tumolo, J.M.* , Kaur, N., VanElzakker, M., Shin, L.M., and **Gould, T.J.** (2018) Nicotine Exposure Leads to Deficits in Differential Fear Conditioning in Mice and Humans: a Potential Role of the Anterior Cingulate Cortex. *Neuroscience Letters*, 673:142-149.
- Kutlu, M.G., Cole, R.D.* , Conner, D.* , Natwora, B., and **Gould, T.J.** (2018) Tyrosine Receptor Kinase B Receptor Activation Reverses the Impairing Effects of acute Nicotine on Contextual Fear Extinction. *Journal of Psychopharmacology*, 32(3):367-372.
- Kutlu, M.G., Tumolo, J.M.* , Cann, C.* , and **Gould, T.J.** (2018) Differential Effects of $\alpha 4\beta 2$ Nicotinic Receptor Antagonists and Partial-Agonists on Contextual Fear Extinction in Male C57BL/6 Mice. *Psychopharmacology*, 235(4):1211-1219.
- Tumolo, J.M.* , Kutlu, M.G., and **Gould, T.J.** (2018) Chronic Nicotine Differentially Alters Spontaneous Recovery of Contextual Fear in Male and Female Mice. *Behavioural Brain Research*, 341:176-180.
- Fowler, C.D., Gipson, C.D., Kleykamp, B.A., Rupprecht, L.E., Harrell, P.T., Rees, V.W., **Gould, T.J.** Oliver, J., Bagdas, D., Damaj, M.I., Schmidt, H.D., Duncan, A., De Biasi, M. (2018) Basic Science and Public Policy: Informed Regulation for Nicotine and Tobacco Products. *Nicotine & Tobacco Research*, 20: 789-799. **2018 Best Paper Award from Society for Research on Nicotine and Tobacco**
- Zeid, D.* , Kutlu, M.G., and **Gould, T.J.** (2018) Differential Effects of Nicotine Exposure on the Hippocampus Across Lifespan. *Current Neuropharmacology*, 16(4):388-402.
- Zhou, L., Fisher, M.L., Cole, R.D.* , **Gould, T.J.**, Parikh, V., Ortinski, P.I., and Turner, J.R. (2018) Neuregulin 3 Signaling Mediates Nicotine-Dependent Synaptic Plasticity in the Orbitofrontal

- Cortex and Cognition. *Neuropsychopharmacology*, 43(6):1343-1354.
- Kutlu, M.G., Zeid, D.*, Tumolo, J.M.°, and **Gould, T.J.** (2018) Pre-Adolescent Mice are Less Sensitive to the Effects of Acute Nicotine on Extinction and Spontaneous Recovery. *Brain Research Bulletin*, 145:143-150.
- Oliver, C.*, Kutlu, M.G., Zeid, D.*, and **Gould, T.J.** (2018) Sex Differences in the Effects of Nicotine on Contextual Fear Extinction. *Pharmacology Biochemistry and Behavior*, 165:25-28.
- Kutlu, M.G., Garrett, B.C.°, Gadiwalla, S., Tumolo, J.M.°, and **Gould, T.J.** (2017) Acute Nicotine Disrupts Consolidation of Contextual Fear Extinction and Alters Long-Term Memory-Associated Hippocampal Kinase Activity. *Neurobiology of Learning and Memory*, 145:143-150.
- Connor, D.A.* and **Gould, T.J.** (2017) Chronic Fluoxetine Ameliorates Adolescent Chronic Nicotine Exposure-Induced Long-Term Adult Deficits in Trace Conditioning. *Neuropharmacology*, 125:272-283.
- Connor, D.A.* , Kutlu, M.G. and **Gould, T.J.** (2017) Nicotine Disrupts Safety Learning by Enhancing Fear Associated With a Safety Cue Via the Dorsal Hippocampus. *Journal of Psychopharmacology*, 31:934-944.
- Holliday, E.* and **Gould, T.J.** (2017) Chronic Nicotine Treatment During Adolescence Attenuates the Effects of Acute Nicotine in Adult Contextual Fear Learning. *Nicotine & Tobacco Research*, 19:87-93.
- England, L.J., Aagaard, K., Bloch, M., Conway, K., Cosgrove, K., Grana, R., **Gould, T.J.**, Hatsukami, D., Jensen, F., and Kandel, D., Lanphear, B., Leslie, L., Pauly, J.R., Neiderhiser, J., Mark Rubinstein, M., Slotkin, T.A., Spindel, E., Stroud, L., and Wakschlag, L. (2017) Developmental toxicity of nicotine: A Transdisciplinary Synthesis and Implications for Emerging Tobacco Products. *Neuroscience and Biobehavioral Reviews*, 72:176-189.
- Holliday, E.D.*, Nucero, P., Kutlu, M.G., Oliver, C.*, Connelly, K.L., **Gould, T.J.**, and Unterwald, E.M. (2016) Long-Term Effects of Chronic Nicotine on Emotional and Cognitive Behaviors and Hippocampus Cell Morphology in Mice: Comparisons of Adult and Adolescent Nicotine Exposure. *European Journal of Neuroscience*, 44:2818-2828.
- Kutlu, M.G. and **Gould, T.J.** (2016) Effects of Drugs of Abuse on Hippocampal Plasticity and Hippocampus-Dependent Learning and Memory: Contributions to Development and Maintenance of Addiction. *Learning & Memory*, 3:515-33.
- Connor, D.A.* , and **Gould, T.J.** (2016) The Role of Working Memory and Declarative Memory in Trace Conditioning. *Neurobiology of Learning and Memory*, 134 Pt B:193-209. (cover article)
- Kutlu, M.G., Oliver, C.*, Huang, P., Liu-Chen, L.Y., and **Gould, T.J.** (2016) Impairment of Contextual Fear Extinction by Chronic Nicotine and Withdrawal from Chronic Nicotine is

- Associated with Hippocampal nAChR Upregulation. *Neuropharmacology*, 109:341-8.
- Leach, P.T.*, Kenney, J.W.*, and **Gould, T.J.** (2016) c-Jun-N-Terminal Kinase 1 (JNK1) is Necessary for Nicotine Enhancement of Contextual Fear Conditioning. *Neuroscience Letters*, 627:61-4.
- Kutlu, M.G., Tumolo, J.M.* , Holliday, E.* , Garrett, B.C.* , and **Gould, T.J.** (2016) Acute Nicotine Enhances Spontaneous Recovery of Contextual Fear and Changes c-fos Early Gene Expression in Infralimbic Cortex, Hippocampus, and Amygdala. *Learning & Memory*, 23:405-14.
- Kutlu, M.G., Braak, D.C.* , Tumolo, J.M.* , and **Gould, T.J.** (2016) Adolescent Mice Are Less Sensitive to the Effects of Acute Nicotine on Context Pre-Exposure Than Adults. *Brain Research*, 1642:445-51.
- Holliday, E.* and **Gould, T.J.** (2016) Nicotine, Adolescence, and Stress: A Review of How Stress Can Modulate the Negative Consequences of Adolescent Nicotine Abuse. *Neuroscience and Biobehavioral Reviews*, 65:173-84.
- Parikh, V., Kutlu, M.G., and **Gould, T.J.** (2016) nAChR Dysfunction as a Common Substrate For Schizophrenia and Comorbid Nicotine Addiction: Current Trends and Perspectives. *Schizophrenia Research*, 171:1-15.
- Parikh, V., Cole, R.D.* , Patel, P.J.* , Poole, R.L.* , and **Gould, T.J.** (2016) Cognitive Control Deficits During Mecamylamine-Precipitated Withdrawal in Mice: Possible Links to Frontostriatal BDNF Imbalance. *Neurobiology of Learning and Memory*, 128:110-6.
- Kutlu, M.G. and **Gould, T.J.** (2016) Nicotinic Modulation of Hippocampal Cell Signaling and Associated Effects on Learning and Memory. *Physiology & Behavior*, 155:162-71.
- Kutlu, M.G., Holliday, E.* , and **Gould, T.J.** (2016) High-affinity $\alpha 4\beta 2$ Nicotinic Receptors Mediate the Impairing Effects of Acute Nicotine on Contextual Fear Extinction. *Neurobiology of Learning and Memory*, 128:17-22.
- Poole, R.L.* , Braak, D.* , and **Gould, T.J.** (2016) Concentration- and Age-Dependent Effects of Chronic Caffeine on Contextual Fear Conditioning in C57BL/6J Mice. *Behavioural Brain Research*, 298(Pt A):69-77.
- Leach, P.T.* , and **Gould, T.J.** (2015) Thyroid Hormone Signaling: Contribution to Neural Function, Cognition, and Relationship to Nicotine. *Neuroscience & Biobehavioral Reviews*, 57:252-63.
- Kutlu, M.G. and **Gould, T.J.** (2015) Nicotine Modulation of Fear Memories and Anxiety: Implications for Learning and Anxiety Disorders. *Biochemical Pharmacology*, 97(4):498-511.
- Hall, F.S., Der-Avakian, A., **Gould, T.J.** Markou, A., Shoaib, M., and Young, J.W. (2015) Negative Affective States and Cognitive Impairments in Nicotine Dependence. *Neuroscience & Biobehavioral Reviews*, 58:168-85.

- Leach, P.T.*, Kenney, J.W.*, Connor, D.*, and **Gould, T.J.** (2015) Thyroid Receptor β Involvement in the Effects of Acute Nicotine on Hippocampus-Dependent Memory. *Neuropharmacology*, 93:155-163.
- Leach, P.T.*, Kenney, J.W.*, and **Gould, T.J.** (2015) Stronger Learning Recruits Additional Cell-Signaling Cascades: c-Jun-N-Terminal Kinase 1 (JNK1) is Necessary for Expression of Stronger Contextual Fear Conditioning. *Neurobiology of Learning and Memory*, 118:162-166.
- Kutlu, M.G., Ortega, L.A., and **Gould, T.J.** (2015) Strain-Dependent Performance in Nicotine-Induced Conditioned Place Preference. *Behavioral Neuroscience*, 129:37-41.
- Leach, P.T.*, Holliday, E.*, Kutlu, M.G., and **Gould, T.J.** (2015) Withdrawal from Chronic Nicotine Reduces Thyroid Hormone Levels and Levothyroxine Treatment Ameliorates Nicotine Withdrawal-Induced Deficits in Hippocampus-Dependent Learning in C57BL/6J Mice. *Nicotine & Tobacco Research*, 17:690-696.
- Yildirim, E., Connor, D.A.*, and **Gould, T.J.** (2015) ABT-089, but Not ABT-107, Ameliorates Nicotine Withdrawal-Induced Cognitive Deficits in C57BL/6J Mice. *Behavioural Pharmacology*, 26:241-248.
- Cole, R.D.*, Poole, R.L.*, Dawn, D.M.*[•], **Gould, T.J.**, Parikh, V. (2015) Contributions of $\beta 2$ Subunit-Containing nAChRs to Chronic Nicotine-Induced Alterations in Cognitive Flexibility in Mice. *Psychopharmacology*, 232:1207-1217.
- Kutlu, M.G., Oliver, C.*, and **Gould, T.J.** (2014) The Effects of Acute Nicotine on Contextual Safety Discrimination. *Journal of Psychopharmacology*, 28:1064-70.
- Fortress, A.M., Kim, J, Rachel L. Poole, R.L.*, **Gould, T.J.**, & Frick, K.M. (2014) 17β -Estradiol Regulates Histone Alterations Associated with Memory Consolidation and Increases Bdnf Promoter Acetylation in Middle-Aged Female Mice. *Learning & Memory*, 21:457-67.
- Poole, R.L.*, Connor, D.*, and **Gould, T.J.** (2014) Donepezil Reverses Nicotine Withdrawal-Induced Deficits in Contextual Fear Conditioning in C57BL/6J Mice. *Behavioral Neuroscience*, 128:588-93.
- Simmons, S.J.* and **Gould, T.J.** (2014) Involvement of Neuronal $\beta 2$ Subunit-Containing Nicotinic Acetylcholine Receptors (nAChRs) in Nicotine Reward and Withdrawal: Implications for Pharmacotherapies. *Journal of Clinical Pharmacy & Therapeutics*, 39:457-67.
- Gould, T.J.**, Wilkinson, D.S.*, Yildirim, E., Blendy, J.A., and Adoff, M. (2014) Dissociation of Tolerance and Nicotine Withdrawal-Associated Deficits in Contextual Fear. *Brain Research*, 1559:1-10.
- Shi, X., Miller, J.S., Harper, L.J., Poole, R.L.*, **Gould, T.J.**, and Unterwald, E.M. (2014) Reactivation of cocaine reward memory engages the Akt/GSK3/mTOR signaling pathway and

- can be disrupted by GSK3 inhibition. *Psychopharmacology*, 231:3109-18.
- Kutlu, M.G. and **Gould, T.J.** (2014) Acute Nicotine Delays Extinction of Contextual Fear in Mice. *Behavioural Brain Research*, 263:133-7.
- Gould, T.J.**, Wilkinson, D.S.*, Yildirim, E., Poole, R.L.*, Leach, P.T.*, and Simmons, S.J.* (2014) Nicotine Shifts the Temporal Activation of Hippocampal Protein Kinase A and Extracellular Signal-Regulated Kinase 1/2 to Enhance Long-Term, but not Short-term, Hippocampus-Dependent Memory. *Neurobiology of Learning and Memory*, 109:151-9.
- Miller, J.S., Barr, J.L., Harper, L.J., Poole, R.L.*, **Gould, T.J.** and Unterwald, E.M. (2014) The GSK3 Signaling Pathway Is Activated by Cocaine and Is Critical for Cocaine Conditioned Reward in Mice. *PLoS ONE*, 9(2):e88026.
- Logue, S.F. and **Gould, T.J.** (2014) The Neural and Genetic Basis of Executive Function: Attention, Cognitive Flexibility, and Response Inhibition. *Pharmacology, Biochemistry and Behavior*, 123:45-54.
- Gould, T.J.** and Leach, P.T.* (2014) Cellular, Molecular, and Genetic Substrates Underlying the Impact of Nicotine on Learning. *Neurobiology of Learning and Memory*, 107:108-32.
- Logue, S.F., Chein, J., **Gould, T.J.**, Holliday, E.* and Steinberg, L. (2014) Adolescent Mice, Unlike Adults, Consume More Alcohol in the Presence of Peers Than Alone. *Developmental Science*, 17:79-85.
- Wilkinson, D.S.* and **Gould, T.J.** (2013) Withdrawal From Chronic Nicotine and Subsequent Sensitivity to Nicotine Challenge on Contextual Learning. *Behavioural Brain Research*, 250:58-61.
- Turner, J.L., Wilkinson, D.S.*, Poole, R.L.*, **Gould, T.J.**, Carlson, G.C., and Blendy, J.A. (2013) Divergent Functional Effects of Sazetidine-A and Varenicline during Nicotine Withdrawal. *Neuropsychopharmacology*, 38(10):2035-47.
- Lotfipour, S., Byun, J., Leach, P.*, Fowler, C., Murphy, N., Kenny, P., **Gould, T.J.** and Boulter J. (2013) Targeted Deletion of the Mouse $\alpha 2$ Nicotinic Acetylcholine Receptor Subunit Gene (*Chrna2*) Potentiates Nicotine-Modulated Behaviors. *Journal of Neuroscience*, 33(18):7728-41.
- Leach, P.T.*, Cordero, K.A.°, and **Gould, T.J.** (2013) The Effects of Acute, Chronic, and Withdrawal from Chronic Nicotine on Performance of a Cued Appetitive Response. *Behavioral Neuroscience*, 127:303-10.
- Ortega, L.A., Tracy, B.A.°, **Gould, T.J.**, Parikh, V. (2013) Effects of Chronic Low- and High-Dose Nicotine on Cognitive Flexibility in C57BL/6J Mice. *Behavioural Brain Research*, 238:134-45.
- Wilkinson, D.S.*, Turner, J.L., Blendy, J.A., and **Gould, T.J.** (2013) Genetic Background Influences the Effects of Withdrawal from Chronic Nicotine on Learning and High-Affinity Nicotinic

- Acetylcholine Receptor Binding in the Dorsal and Ventral Hippocampus. *Psychopharmacology*, 225(1):201-8.
- Twyman, A.*, Newcombe, N.S., and **Gould, T.J.** (2013) Malleability in the Development of Spatial Reorientation. *Developmental Psychobiology*, 55(3):243-55. Winner of the 2012-2013 award for best student paper published in Developmental Psychobiology.
- Kenney, J.W.*, Raybuck, J.D.*, and **Gould, T.J.** (2012) Nicotinic Receptors in the Dorsal and Ventral Hippocampus Differentially Modulate Contextual Fear Conditioning. *Hippocampus*, 22(8):1681-90.
- Leach, P.T.*, Poplawski, S.G.*, Kenney, J.W.*, Liebermann, D.A., Hoffman, B., Abel, T. and **Gould, T.J.** (2012) *Gadd45b* knockout mice exhibit selective deficits in hippocampus-dependent long-term memory. *Learning & Memory*, 19(8):319-24.
- Kenney, J.W.*, Poole, R.L.*, Adoff, M.D., Logue, S.F., and **Gould, T.J.** (2012) Learning and Nicotine Interact to Increase CREB Phosphorylation at the *jnk1* Promoter in the Hippocampus. *PLoS ONE*, 7(6):e39939.
- Portugal, G.S.*, Wilkinson, D.S.*, Turner, J.R., Blendy, J.A., and **Gould, T.J.** (2012) Developmental Effects of Acute, Chronic, and Withdrawal from Chronic Nicotine on Fear Conditioning. *Neurobiology of Learning and Memory*, 97(4):482-94.
- Gould, T.J.**, Portugal, G.*, André, J.M.*, Tadman, M.P., Marks, M.J., Kenney, J.W.*, Yildirim, E., and Adoff, M. (2012) The Duration of Nicotine Withdrawal-Associated Deficits in Contextual Fear Conditioning Parallels Changes in Hippocampal High Affinity Nicotinic Acetylcholine Receptor Upregulation. *Neuropharmacology*, 62(5-6):2118-25
- André, J.M.*, Cordero, K.A. •, and **Gould, T.J.** (2012) Comparison of the Performance of DBA/2 and C57BL/6 Mice in Transitive Inference and Foreground and Background Contextual Fear Conditioning. *Behavioral Neuroscience*, 126(2):249-57.
- Portugal, G.S.*, Wilkinson, D.S.*, Kenney, J.W.*, Sullivan, C. •, and **Gould, T.J.** (2012) Strain-dependent Effects of Acute, Chronic, and Withdrawal from Chronic Nicotine on Fear Conditioning. *Behavioural Genetics*, 42:133-50.
- Kenney, J.W.*, Adoff, M.D., Wilkinson, D.S.*, and **Gould, T.J.** (2011) The Effects of Acute, Chronic and Withdrawal from Chronic Nicotine on Novel and Spatial Object Recognition in Male C57BL/6J Mice. *Psychopharmacology*, 217:353-65.
- Wilkinson, D.S.*, and **Gould, T.J.** (2011) The effects of galantamine on nicotine withdrawal-induced deficits in contextual fear conditioning in C57BL/6 mice. *Behavioural Brain Research* 223:53-57.
- Andre, J.*, Leach, P.T.* and **Gould, T.J.** (2011) Nicotine Ameliorates NMDA Receptor

- Antagonist-Induced Deficits in Contextual Fear Conditioning through High Affinity Nicotinic Acetylcholine Receptors in the Hippocampus. *Neuropharmacology*, 60:617-25.
- Gulick, D.* and **Gould, T.J.** (2011) Nicotine acts in the anterior cingulate but not dorsal or ventral hippocampus to reverse ethanol-induced learning impairments in the plus-maze discriminative avoidance task. *Addiction Biology*, 16:176-88.
- Gould, T.J.** (2010) Addiction and Cognition. *Addiction Science and Clinical Practice*, 5: 4-15.
- Raybuck, J.D.* and **Gould, T.J.** (2010) The Role of Nicotinic Acetylcholine Receptors in the Medial Prefrontal Cortex and Hippocampus in Trace Fear Conditioning. *Neurobiology of Learning and Memory*, 94:353-63.
- Kenney, J.W.*, Wilkinson, D.S.*, and **Gould, T.J.** (2010) The Enhancement of Contextual Fear Conditioning by ABT-418. *Behavioural Pharmacology*, 21:246-9.
- Zhuo, J.M., Portugal G.S.*, Kruger, W.D., Wang, H., **Gould, T.J.**, and Praticò, D. (2010) Diet-induced Hyperhomocysteinemia Increases Amyloid- β Formation and Deposition in a Mouse Model of Alzheimer's Disease. *Current Alzheimer Research*, 7:140-9.
- Elias, G.A.*., Gulick, D.*, Wilkinson, D.S.*, and **Gould, T.J.** (2010) Nicotine and extinction of fear conditioning. *Neuroscience*, 165:1063-73.
- Kenney, J.W.*, Florian, C., Portugal, G.S.*, Abel, T., and **Gould, T.J.** (2010) Involvement of Hippocampal Jun-N terminal Kinase Pathway in the Enhancement of Learning and Memory by Nicotine *Neuropsychopharmacology*, 35:483-92.
- Gulick, D.* and **Gould, T.J.** (2009) Effects of ethanol and caffeine on behavior in C57BL/6 mice in the plus-maze discriminative avoidance task. *Behavioral Neuroscience*, 123:1271-8.
- Gulick, D.* and **Gould, T.J.** (2009) Interactive Effects of Ethanol and Nicotine on Learning, Anxiety, and Locomotion in C57BL/6 Mice in the Plus-Maze Discriminative Avoidance Task. *Neuropharmacology*, 57(3):302-10.
- Gulick, D.* and **Gould, T.J.** (2009) The hippocampus and cingulate cortex differentially mediate the effects of nicotine on learning versus on ethanol-induced learning deficits via different effects at nicotinic receptors. *Neuropsychopharmacology*, 34:2167-79.
- Davis, J.A.* and **Gould, T.J.** (2009) Hippocampal nAChRs mediate nicotine withdrawal-related learning deficits. *European Journal of Neuropsychopharmacology*, 19:551-61.
- Twyman, A.*., Newcombe, N.S., and **Gould, T.J.** (2009) Of mice (*Mus musculus*) and toddlers (*Homo sapien*): evidence for species general spatial reorientation. *Journal of Comparative Psychology*, 123:342-5.
- Raybuck, J.D.* and **Gould, T.J.** (2009) Nicotine withdrawal-induced deficits in trace fear conditioning in C57BL/6 mice: a role for high-affinity β 2 subunit-containing nicotinic

- acetylcholine receptors. *European Journal of Neuroscience*, 29: 377-387.
- Portugal, G.* and **Gould, T.J.** (2009) Nicotine withdrawal disrupts new contextual learning. *Pharmacology, Biochemistry, and Behavior* 92:117-123.
- Kenney, J.* and **Gould, T.J.** (2008) Modulation of Hippocampus Dependent Learning and Synaptic Plasticity by Nicotine. *Molecular Neurobiology*, 38:101-21.
- Portugal, G.* and **Gould, T.J.** (2008) Genetic Variability in Nicotinic Acetylcholine Receptors and Nicotine Addiction: Converging Evidence from Human and Animal Research, *Behavioral Brain Research*, 193: 1-16.
- Kenney, J.* and **Gould, T.J.** (2008) Nicotine Enhances Context Learning but not Context-Shock Associative Learning, *Behavioral Neuroscience*, 122: 1158-65.
- Gulick, D.* and **Gould, T.J.** (2008) The Effects of Acute, Chronic and Withdrawal from Chronic Ethanol on Emotional Learning. *Cognitive Sciences*, 4: 15-50.
- Raybuck, J.D.*, Portugal, G.*, Lerman, C., and **Gould, T.J.** (2008) Varenicline Ameliorates Nicotine Withdrawal Deficits in Contextual Learning in C57BL/6 mice, *Behavioral Neuroscience*, 122: 1166-71.
- Gulick, D.* and **Gould, T.J.** (2008) Varenicline Ameliorates Ethanol-Associated Deficits in Learning in C57BL/6 mice, *Neurobiology of Learning and Memory*, 90:230-6.
- Andre, J.*, Gulick, D.*, Portugal, G.* and **Gould, T.J.** (2008) Nicotine withdrawal disrupts foreground and background contextual fear conditioning but not PPI in C57BL/6 mice, *Behavioral Brain Research*, 190:174-81.
- Gulick, D.* and **Gould, T.J.** (2008) Interactive Effects of Ethanol and Nicotine on Learning Depend on Both Dose and Duration of Treatment, *Psychopharmacology*, 196:483-95.
- Davis, J.A.* and **Gould, T.J.** (2008) Associative Learning, the Hippocampus, and Nicotine Addiction, *Current Drug Abuse Reviews*, 1: 9-19.
- Portugal, G.*, Kenney, J.*, and **Gould, T.J.** (2008) $\beta 2$ Containing Acetylcholine Receptors Mediate Nicotine Withdrawal Deficits in Acquisition of Contextual Fear Conditioning. *Neurobiology of Learning and Memory*, 89(2):106-13.
- Davis, J.A.*, Kenney, J.*, and **Gould, T.J.** (2007) Hippocampal $\alpha 4\beta 2^*$ nAChR Involvement in the Enhancing Effect of Acute Nicotine on Contextual Fear Conditioning, *Journal of Neuroscience*, 27: 10870-10877.
- Portugal, G.* and **Gould, T.J.** (2007) Bupropion Dose-Dependently Reverses Nicotine Withdrawal Deficits in Contextual Fear Conditioning, *Pharmacology, Biochemistry, and Behavior*, 88: 179-87.
- Raybuck, J.D.* and **Gould, T.J.** (2007) Extra-cellular Regulated Kinase 1/2 Involvement in the

- Enhancement of Contextual Fear Conditioning by Nicotine. *Behavioral Neuroscience*, 121: 1119-24.
- Lewis, M.C.* and **Gould, T.J.** (2007) Signal Transduction Mechanisms Within the Entorhinal Cortex that Support Latent Inhibition of Cued Fear Conditioning, *Neurobiology of Learning and Memory*, 88: 359-368.
- Gulick, D.* and **Gould, T.J.** (2007) Acute Ethanol has Biphasic Effects on Short- and Long-Term Memory in Both Foreground and Background Contextual Fear Conditioning in C57BL/6 Mice, *Alcoholism: Clinical and Experimental Research*, 31:1528-37.
- Lewis, M.C.* and **Gould, T.J.** (2007) Reversible inactivation of the entorhinal cortex disrupts the establishment and expression of latent inhibition of cued fear conditioning in C57BL/6 mice. *Hippocampus*, 17: 462-470.
- Phillips, J.M., Siegel, S., Shields, A., Patterson, F., **Gould, T.J.**, Strasser, A., Pinto, A., Audrain-McGovern, J., Rukstalis, M., Perkins, K.D., Blendy, J.A., and Lerman C. (2007) Translating basic science to improve pharmacotherapy for nicotine dependence. *Nicotine & Tobacco Research*, 9 (Suppl.4): S583-S598.
- Davis, J.A.* , and **Gould, T.J.** (2007) Atomoxetine reverses nicotine withdrawal-associated deficits in contextual fear conditioning, *Neuropsychopharmacology*, 32: 2011-9.
- Davis, J.A.* , and **Gould, T.J.** (2007) β 2 subunit-containing nicotinic receptors mediate the enhancing effect of nicotine on trace cued fear conditioning in C57BL/6 mice, *Psychopharmacology*, 190:343-52.
- Gould, T.J.** (2006). Nicotine and Hippocampus-Dependent Learning: Implications for Addiction. *Molecular Neurobiology*, 34:93-107.
- Davis, J. A.* , Porter, J.* , and **Gould, T.J.** (2006) Nicotine Enhances Both Foreground and Background Contextual Fear Conditioning, *Neuroscience Letters*, 394:202-5.
- Davis, J.A.* and **Gould, T.J.** (2006) The Effects of DHBE and MLA on Nicotine-Induced Enhancement of Contextual Fear Conditioning in C57BL/6 Mice. *Psychopharmacology*, 184:345-52.
- Davis, J.A.* , James, J.R., Siegel, S.J., and **Gould, T.J.** (2005) Withdrawal from Chronic Nicotine Impairs Contextual Fear Conditioning in C57BL/6 Mice. *Journal of Neuroscience*, 25:8708-13.
- Gould, T.J.** and Lewis* M.C. (2005) Co-Antagonism of Glutamate and Nicotinic Acetylcholinergic Receptors Disrupt Fear Conditioning and Latent Inhibition of Cued Fear Conditioning. *Learning & Memory*, 12:389-98.
- Gould, T.J.** and Feiro, O.* (2005) Galantamine Reverse Age-Related Deficits in the Retention of Memories for Cued Fear Conditioning. *Behavioural Brain Research*, 165:160-71.

- Davis, J.A.* and **Gould, T.J.** (2005) Rolipram Attenuates MK-801-Induced Deficits in Latent Inhibition. *Behavioral Neuroscience*, 119:595-602.
- Gould, T.J.**, Rukstalis, M., and Lewis, M.C. * (2005) Atomoxetine and Nicotine Enhance Prepulse Inhibition of Acoustic Startle in C57BL/6 Mice. *Neuroscience Letters*, 377:85-90.
- Feiro, O.* and **Gould, T.J.** (2005) The Interactive Effects of Nicotinic and Muscarinic Cholinergic Receptor Inhibition on Fear Conditioning in Young and Aged C57BL/6 Mice. *Pharmacology, Biochemistry, and Behavior*, 80:251-62.
- Lewis, M.C.*, Davis, J.A.*, and **Gould, T.J.** (2004) Inhibition of the Mitogen-Activated Protein Kinase/Extracellular Signal Related Kinase (ERK) Disrupts Latent Inhibition of Cued Fear Conditioning. *Behavioral Neuroscience*, 118:1444-9.
- Cartford, M.C., **Gould, T.J.**, and Bickford, P.C. (2004) A Central Role for Norepinephrine in the Modulation of Cerebellar Learning Tasks. *Behavioral and Cognitive Neuroscience Reviews*, 3:131-8.
- Lewis, M.C.* and **Gould, T.J.** (2004) Latent Inhibition of Cued Fear Conditioning: An NMDA Receptor Dependent Process that can be Established in the Presence of Anisomycin. *European Journal of Neuroscience*, 20: 818-826.
- Gould, T.J.**, Feiro, O.*, and Moore, D.° (2004) Nicotine Enhances Trace Cued Fear Conditioning but Not Delay Cued Fear Conditioning in C57BL/6 Mice. *Behavioural Brain Research*, 155: 167-173.
- Gould, T.J.**, Bizily, S.P., Tokarczyk, J., Kelly, M.P., Siegel, S.J., Kanos, S.J., and Abel, T. (2004) Sensorimotor Gating Deficits in Transgenic Mice Expressing a Constitutively Active Form of Gs α . *Neuropsychopharmacology*, 29: 494-501.
- Gould T.J.** (2003) Ethanol Disrupts Fear Conditioning in C57BL/6 Mice. *Journal of Psychopharmacology* 17:77-81.
- Gould T.J.** and Higgins, J.S.° (2003) Nicotine Enhances Contextual Fear Conditioning in C57BL/6J Mice at 1 and 7 Days Post-Training. *Neurobiology of Learning & Memory*, 80:147-157.
- Gould T.J.** and Lommock, J.A.° (2003) Nicotine Enhances Contextual Fear Conditioning and Ameliorates Ethanol-Induced Deficits in Contextual Fear Conditioning. *Behavioral Neuroscience*, 117: 1276-1282
- Gould T.J.** (2003) Nicotine produces a within subject enhancement of contextual fear conditioning in C57BL/6 mice independent of sex. *Integrative Physiological & Behavioral Science*, 38:124-132.
- Lewis, M.C.* and **Gould, T.J.** (2003) Nicotine and Ethanol Enhancement of Acoustic Startle Reflex

- Are Mediated in Part by Dopamine in C57BL/6J Mice. *Pharmacology, Biochemistry & Behavior*, 76:179-186.
- Woodruff-Pak, D.S. and **Gould, T.J.** (2002) Neuronal Nicotinic Acetylcholine Receptors: Involvement in Alzheimer's Disease and Schizophrenia. *Behavioral and Cognitive Neuroscience Reviews*, 1:5-20.
- Gould T.J.**, McCarthy, M.M., and Keith, R.A. (2002) MK801 Disrupts Acquisition of Contextual Fear Conditioning But Enhances Memory Consolidation of Cued Fear Conditioning. *Behavioural Pharmacology*, 13:287-294.
- Gould T.J.**, Rowe, W.B., Heman, K.L., Mesches, M.H., Young, D.A., Rose, G.M. and Bickford, P.C. (2002) Effects of Hippocampal Lesions on Patterned Motor Learning in the Rat. *Brain Research Bulletin*, 58:581-586.
- Vogel, R.W., Ewers, M. Ross, C. **Gould, T.J.**, and Woodruff-Pak, D.S. (2002) Age-related Impairment in the 250 Millisecond Delay Eyeblink Classical Conditioning Procedure in C57BL/6 Mice. *Learning & Memory*, 9:321-336.
- Gould T.J.**, Collins, A.C., and Wehner, J.M. (2001) Nicotine Enhances Latent Inhibition and Ameliorates Ethanol-Induced Deficits in Latent Inhibition. *Nicotine & Tobacco Research*, 3:17-24.
- Gould T.J.**, Keith, R.A., and Baht, R.V. (2001) Differential sensitivity to lithium's reversal of amphetamine-induced open-field activity in two inbred strains of mice. *Behavioural Brain Research*, 118:95-105.
- Tarantino, L.M., **Gould, T.J.**, Druhan, J.P. and Bucan, M. (2000) Behavior and mutagenesis screens: The importance of baseline analysis of inbred strains. *Mammalian Genome*, 11:555-564.
- Bickford, P.C., **Gould, T.**, Briederick, L., Chadman., K., Pollock, A., Young, D., Shukitt-Hale, B., and Joseph, J. (2000) Antioxidant-rich diets improve cerebellar physiology and motor learning in aged rats. *Brain Research*, 866:211-217.
- Gould T.J.** and Wehner, J.M. (1999) Nicotine enhancement of contextual fear conditioning. *Behavioral Brain Research*, 102: 31-39.
- Gould, T.J.** (1999) A review of age-related changes in cerebellar β -adrenergic function and associated motor learning. *AGE*, 22:19-25.
- Gould T.J.** and Wehner, J.M. (1999) Genetic influences on latent inhibition. *Behavioral Neuroscience*, 113:1291-1296.
- Gould T.J.** (1998) β -adrenergic involvement in acquisition versus extinction of a classically

conditioned eye blink response in rabbits. *Brain Research*, 780:174-177.

- Gould T.J.**, Chadman, K., and Bickford, P.C. (1998) Antioxidant protection of cerebellar β -adrenergic receptor function in Aged F344 rats. *Neuroscience Letters*, 250:165-168.
- Gould, T.J.**, Adams, C.E., and Bickford, P.C. (1997) β -Adrenergic modulation of GABAergic inhibition and tyrosine hydroxylase-labeled cells in the deep cerebellar nuclei of F344 rats. *Neuropharmacology*, 36:75-81.
- Gould T.J.** and Bickford, P.C. (1997) Aged-related deficits in cerebellar β -adrenergic signal transduction cascade in F344 rats. *Journal of Pharmacology and Experimental Therapeutics*, 281:965-971.
- Gould, T.J.** and Steinmetz, J.E. (1996) Changes in rabbit cerebellar cortical and interpositus nucleus activity during acquisition, extinction and backward classical eyelid conditioning. *Neurobio of Learning & Memory*, 65:17-34.
- Heron, C., **Gould, T.J.**, and Bickford, P.C. (1996) Acquisition of a novel locomotor task is impaired by a beta adrenergic antagonist in F344 rats. *Behavioural Brain Research*, 78:235-241.
- Gould, T.J.**, Strömberg, I., and Bickford, P.C. (1996) Decline in striatal dopamine D₁ and D₂ receptor activation in aged F344 rats. *Neurobiology of Aging*, 17:877-883.
- Gould, T.J.** and Bickford, P.C. (1996) The effects of aging on cerebellar β -adrenergic receptor activation and motor learning in female F344 rats. *Neuroscience Letters* 216:53-56.
- Gould, T.J.**, Bowenkamp, K.E., Larson, G., Zahniser, N.R., and Bickford, P.C. (1995) Effects of dietary restriction on motor learning and cerebellar noradrenergic dysfunction in aged F344 rats. *Brain Research*, 684:150-158.
- Gould, T.J.** and Steinmetz, J.E. (1994) Multiple unit activity from rabbit cerebellar cortex and interpositus nucleus during classical discrimination/reversal eyelid conditioning. *Brain Research*, 652:98-106.
- Gould, T.J.** and Bickford, P.C. (1994) The effects of chronic treatment with N-tert-butyl- α -phenylnitron on cerebellar noradrenergic receptor function in aged F344 rats. *Brain Research*, 660:333-336.
- Gould, T.J.**, Sears, L.L., and Steinmetz, J.E. (1993) Possible CS and US pathways for rabbit classical eyelid conditioning: electrophysiological evidence for projections from the pontine nuclei and inferior olive to cerebellar cortex and nuclei. *Behavioral and Neural Biology*, 60:172-185. Featured Cover Article.
- Gould, T.J.** and Steinmetz, J.E. (1991) Haloperidol impairs classical nictitating membrane conditioning in rabbits when stimulation of the pontine nucleus is used as a conditioned stimulus.

Life Sciences, 49:233-240.

Other Manuscripts

Gould, T.J., Sears, L.L., and Steinmetz, J.E. (1992) Techniques used for neural recording from awake, behaving or anesthetized animals: part 2. *Kopf Carrier*, 30:1-5.

Gould, T.J., Sears, L.L., and Steinmetz, J.E. (1991) Techniques used for neural recording from awake, behaving or anesthetized animals: part 1. *Kopf Carrier*, 29:1-5.

MONOGRAPH, HANDBOOK, BOOK CHAPTERS, and LETTERS

Cohen, J.E., Krishnan-Sarin, S., Eissenberg, T., **Gould, T.J.**, Berman, M.L., Bhatnagar, A., Barnett, T.E., Soule, E., Popova, L., Tan, A.S.L., Blank, M.D., Ling, P.M., O'Connor, R. (2022) Balancing Risks and Benefits of E-Cigarettes in the Real World, *American Journal of Public Health*, 112(2):e1-e2. doi: 10.2105/AJPH.2021.306607.

Gould, T.J. and Goldberg, L.R. (2021) *Genes and Behavior: Animal Models*, Encyclopedia of Behavioural Neuroscience 2e. Ed. Sergio Della Sala, Elsevier Press, Ireland.

Kutlu, M.G., Holiday, E., and **Gould, T.J.** (2015) *Genetic, Developmental, and Receptor-Level Influences on Nicotine Withdrawal–Associated Deficits in Learning*. Affective States and Cognitive Impairments in Nicotine Dependence. Chapter 4. Eds. F. Scott Hall, Jared W. Young, and Andre Der-Avakian, Elsevier Press, Ireland.

Kutlu, M.G. and **Gould, T.J.** (2015) *Nicotinic Receptors, Memory, and Hippocampus*. The Neurobiology and Genetics of Nicotine and Tobacco Current Topics in Behavioral Neurosciences. Chapter 23, pp.137-165. Eds. David Balfour and Marcus Munafò, Springer, New York, New York.

Gould, T.J. (2014) *The Effects of Nicotine on Learning and Memory*. Nicotinic Receptors. Chapter 11, pp. 217-238. Ed. Robin A. J. Lester, Humana Press, New York, New York.

Gould, T.J. and Logue S.F. (2013) *Latent Inhibition*. The Handbook of Behavioral Genetics of the Mouse. Vol. 1. Genetics of Behavioral Phenotypes. Chapter 25, pp. 254-266. Eds. Wim E. Crusio, Frans Sluyter, and Robert T. Gerlai, Cambridge University Press, Cambridge, England.

Logue, S.F. and **Gould, T.J.** (2013) *Executive Function: Response Inhibition, Attention, and Cognitive Flexibility*. Chapter 26, pp. 267-276. The Handbook of Behavioral Genetics of the Mouse. Vol. 1. Genetics of Behavioral Phenotypes. Eds. Wim E. Crusio, Frans Sluyter, and Robert T. Gerlai, Cambridge University Press, Cambridge, England.

Bevins, R.A. and **Gould, T.J.** (2012) *Drug Conditioning*. Encyclopedia of the Sciences of Learning.

pp.1043-1046. Ed. Seel, Norbert M., Springer, New York, NY.

Gould, T.J. and Bevins, R.A. (2012) *Context Conditioning*. Encyclopedia of the Sciences of Learning. pp. 794-797. Ed. Seel, Norbert M., Springer, New York, NY.

Gould, T.J. (2010) *Genes and Behavior: Animal Models*. Encyclopedia of Behavioral Neuroscience. Eds. George Koob, Richard F. Thompson, and Michel Le Moal, Elsevier Press, Ireland.

Gould, T.J. (2010) *A Comparison of Mechanisms Underlying the CS-US Association and the CS-Nothing Association*. Latent Inhibition: Cognition, Neuroscience, and Applications to Schizophrenia. Eds. Bob Lubow and Ina Weiner, Cambridge Press, England.

Lerman, C., Perkins, K. and **Gould, T.J.** (2009) *Nicotine Dependence Endophenotypes in Chronic Smokers*. Phenotypes and Endophenotypes: Foundations for Genetic Studies of Nicotine Use and Dependence. Eds. Gary E. Swan, Ph.D., Timothy B. Baker, Laurie Chassin, David V. Conti, Caryn Lerman, Kenneth A. Perkins. Tobacco Control Monograph No. 20. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute. NIH Publication No. 09-6366, August 2009.

Rogers, S.K, **Gould, T.J.**, and Baker T.B. (2009) *Mouse Models and the Genetics of Nicotine Addiction*. Phenotypes and Endophenotypes: Foundations for Genetic Studies of Nicotine Use and Dependence. Eds. Gary E. Swan, Ph.D., Timothy B. Baker, Laurie Chassin, David V. Conti, Caryn Lerman, Kenneth A. Perkins. Tobacco Control Monograph No. 20. Bethesda, MD: U.S. Department of Health and Human Services, National Institutes of Health, National Cancer Institute. NIH Publication No. 09-6366, August 2009.

BOOKS

Gould, T.J. (contributing author) (1995) *Research Ethics*. editor, R.L. Penslar, Indiana Press
Bloomington, IN.

ABSTRACTS FROM PRESENTATIONS AT SCIENTIFIC MEETINGS

(* denotes graduate student, • denotes undergraduate student)

Murray S.J., • Henry, E., • Logue, S.F., and **Gould, T.J.** (2023) Genetic Differences in the Influence of Acute Ethanol on Trace Fear Conditioning in Mice. *Soc Neurosci Abstr* PSTR303.06

Novoa, C.* Unsal, S., Zhang, N., and **Gould, T.J.** (2023) Genetic Background and Sex Modulate Adult Nicotine Sensitivity and Brain Functional Connectivity After Adolescent Exposure in

Mice. *Soc Neurosci Abstr* PSTR561.05

Gould, T.J. Novoa, C.,* Garcia-Trevizo, P.,* (2023) Adolescent Vulnerability for Long-Term Psychiatric Disorders: The Role of Acetylcholine, Genetics, Sex, and Stress. *Soc Neurosci Abstr* PSTR043.04

Mooney-Leeber, S., Zeid, D.,* Garcia-Trevizo, P.,* Seemiller, L.,* Peltz, G., **Gould, T.J.** (2021) Fear learning and acetylcholinesterase activity in the hippocampus differs by genetic background. *Soc Neurosci Abstr* P832.07

Seemiller, L.R.,* Goldberg, L.R., and **Gould, T.J.** (2021) Inbred Mouse Strains Differ in Adolescent Ethanol-Induced Learning Deficits. *Soc Neurosci Abstr* P853.09

Goldberg, L.R., Sebastian, A., Albert, I, and **Gould, T.J.** (2021) C57BL/6 Substrain Differences in Conditioned Fear and Hippocampal Transcriptome. *Soc Neurosci Abstr* P847.04

Mooney-Leber, S.M., Seemiller, L.R.,* Goldberg, L.R., Smith, P., Tian, Y., Patterson, A., Peltz, G and **Gould, T.J.** (2019) Genetic Differences in Nicotine Withdrawal-Induced Learning Deficits and Nicotine Metabolism Across Inbred Mouse Strains. *Soc Neurosci Abstr* 688.06

Goldberg, L.R., Kutlu, M.G., Zeid, D.,* Gadiwalla, S.,and **Gould, T.J.** (2018) Utilizing the BxD Genetic Reference Panel to Identify the Causal Genetic Variants of Nicotine Withdrawal Deficits in Hippocampal Learning. *Soc Neurosci Abstr* 685.03

Tumolo, J.,• Kutlu, M.G., and **Gould, T.J.** (2017) Sex-Dependent Effects of Chronic Nicotine in Spontaneous Recovery of Contextual Fear. *Soc Neurosci Abstr* 165.15

Gadiwalla, S., **Gould, T.J.**, Kutlu, M.G., Tumolo, J.,• Garrett, B. (2017) Acute nicotine disrupts consolidation of contextual fear extinction and alters long-term memory-associated hippocampal kinases *Soc Neurosci Abstr* 420.15

Kutlu, M.G., Cole, R.,* Tumolo, J.M.,• Parikh, V., and **Gould, T.J.** (2017) Paternal Nicotine Exposure Transgenerationally Alters Gene Expression in the Cholinergic Signaling Pathway. *Soc Neurosci Abstr* 465.19

Zeid, D.,* Kutlu, M.G., Tumolo, J.M.,• and **Gould, T.J.** (2017) Adolescent Mice Are Less Sensitive to the Effects of Nicotine on Extinction and Spontaneous Recovery. *Soc Neurosci Abstr* 794.09

Cole, R.,* Zimmerman, M.,• Kutlu, M.G., Matchanova, A.,• **Gould, T.J.**, and Parikh, V. (2016) Frontalstriatal BDNF Overflow and Cognitive Control Deficits Following Spontaneous Nicotine Withdrawal. *Soc Neurosci Abstr* 80.08

Holliday, E.,* Oliver, C., * Cole, R.,* Bangasser, D., and **Gould, T.J.** (2016) Storm, Stress, and Nicotine: Interaction of Stress and Nicotine During Adolescence on Adult Learning and Stress Response Systems. *Soc Neurosci Abstr* 299.05

- Tumolo, J.,* Garrett, B.,* Kutlu, M.G., Holliday, E.,* and **Gould, T.J.** (2016) Acute Nicotine Enhances Spontaneous Recovery of Contextual Fear and Changes c-fos Early Gene Expression in Infralimbic Cortex, Hippocampus, and Amygdala. *Soc Neurosci Abstr* 456.19
- Kutlu, M.G., Cole, R.,* Tumolo, J.M.,* Parikh, V., and **Gould, T.J.** (2016) Transgenerational Effects of Paternal Nicotine Exposure on Fear Response and Cholinergic Function. *Soc Neurosci Abstr* 548.27
- Connor, D.A.,* **Gould, T.J.** (2015) Chronic Fluoxetine Ameliorates Long-Term Trace Conditioning Deficits in Mice Exposed to Chronic Nicotine During Adolescence. *Soc Neurosci Abstr* 52.18
- Kutlu, M.G., Holliday, E.,* and **Gould, T.J.** (2015) High-Affinity $\alpha 4\beta 2$ Nicotinic Receptors Are Required for the Impairing Effects of Acute Nicotine on Contextual Fear Extinction. *Soc Neurosci Abstr* 175.18
- Holliday, E.,* Logue, S.F., and **Gould, T.J.** (2014) The Interaction of Nicotine and Stress During Adolescence on Long-Term Impairments on a Hippocampus-Dependent Task. *Soc Neurosci Abstr* 33.07
- Kutlu, M.G., **Gould, T.J.** (2014) Acute Nicotine Delays Extinction of Contextual Fear in Mice. *Soc Neurosci Abstr* 231.06
- Connor, D.A.,* **Gould, T.J.** (2014) Chronic Nicotine Administration in Adolescent C57BL/6J Mice Results in Deficits in Trace Fear Conditioning in Adulthood *Soc Neurosci Abstr* 619.15
- Cole, R.,* Poole, R.L.,* Guzman, D.,* Braak, D.C.,* **Gould, T.J.**, and Parikh, V. (2013) Contribution of $\alpha 4\beta 2$ * nAChRs to Chronic Nicotine-Induced Alterations in Cognitive flexibility *Soc Neurosci Abstr* 91.06
- Patel, P.J.,* Naughton, S.X.,* Poole, R.L.,* **Gould, T.J.**, and Parikh, V. (2013) Impact of Withdrawal from Chronic Nicotine on Strategy Set-Shifting in C57BL/6J Mice *Soc Neurosci Abstr* 91.08
- Ortega Murillo, L.A., Yildirim, E., Adoff, M.D., Poole, R.L.,* and **Gould, T.J.** (2013) Strain-Dependent Performance in Nicotine-Induced Conditioned Place Preference and Striatal pCREB Expression *Soc Neurosci Abstr* 290.07
- Fortress, A.M., Kim, J., Poole, R.L.,* **Gould, T.J.**, and Frick, K.M. (2013) Estradiol-Induced Epigenetic Changes and Memory Consolidation in Middle-Aged Mice *Soc Neurosci Abstr* 376.08
- Leach, P.T.,* Kenney, J.W.,* and **Gould, T.J.** (2013) Strengthening Contextual Memories with Nicotine or Increased Trial Number Recruits JNK1 Activity *Soc Neurosci Abstr* 815.01
- Poole, R.L.,* Braak, D.C.,* and **Gould, T.J.** (2013) The Effects of Chronic Caffeine on Learning and Memory in Adolescent Mice *Soc Neurosci Abstr* 865.20

- Ortega Murillo, L.A., Tracy, B.A., Guzman, D., • **Gould, T.J.**, and Parikh, V. (2012) Nicotine-Induced Alterations in Cognitive Flexibility and Striatal BDNF Expression. *Soc Neurosci Abstr* 103.03
- Leach, P.T.*, Kenney, J.W.*, and **Gould, T.J.** (2012) Thyroid Receptor beta is Critically Involved in the Cognitive Enhancing Effects of Nicotine, While Thyroid Receptor alpha 1 is Not. *Soc Neurosci Abstr* 921.23
- Gould, T.J.**, Wilkinson, D.S.*, and Adoff, M.D. (2012) Relationship Between Tolerance to the Cognitive Enhancing Effect of Nicotine and Nicotine Withdrawal-Related Impairments in Contextual Conditioning. *Soc Neurosci Abstr* 921.25
- Leach, P.T.*, Kenney, J.W.*, Poplawski, S.G.*, Liebermann, D.A., Abel, T. and **Gould, T.J.** (2011) *Gadd45b* knockout mice exhibit selective deficits in long-term contextual fear conditioning. *Soc Neurosci Abstr* 834.25.
- Poole, R.L.*, and **Gould, T.J.** (2011) Withdrawal from nicotine is associated with hippocampus subregion-specific decrease in neurogranin. *Soc Neurosci Abstr* 935.23.
- Kenney, J.W.*, Poole, R.L.*, Adoff, M.D., and **Gould, T.J.** (2011) Learning and nicotine interact to increase pCREB binding to the *jnk1* promoter in the hippocampus. *Soc Neurosci Abstr* 936.08.
- Wilkinson, D.S. * and **Gould, T.J.** (2011) Genetic differences in nicotine withdrawal-deficits in contextual conditioning. *Soc Neurosci Abstr* 936.09.
- Adoff, M.D., **Gould, T.J.**, André, J.M.*, Portugal, G.S.*, Tadman, M., Marks, M.J., Kenney, J.W.* (2011) Nicotine withdrawal-related deficits in contextual learning correlate with changes in high-affinity nicotinic acetylcholine receptor upregulation and *nachr* gene transcription in the hippocampus. *Soc Neurosci Abstr* 936.10.
- Kenney, J.W.*, Raybuck, J. D. *, and **Gould, T.J.** (2010) Differences in the effects of dorsal and ventral hippocampal nicotine infusion on learning. *Soc Neurosci Abstr* 406.16.
- Cordero, K.A. •, André, J.M.*, and **Gould, T.J.** (2010) The DBA/2J strain of mouse demonstrates deficits in foreground and background fear conditioning but not transitive inference compared to the C57BL/6J strain. *Soc Neurosci Abstr* 406.17.
- Wilkinson, D.S. *, André, J.M. *, and **Gould, T.J.** (2010) The effects of nicotine on long-term and short-term memory. *Soc Neurosci Abstr* 406.18.
- André, J.M.*, Cordero, K.A. •, and **Gould, T.J.** (2010) Inactivation of the dorsal hippocampus leads to deficits in the transitive inference task in C57BL/6 mice. *Soc Neurosci Abstr* 406.19.
- Leach, P.T.*, Cordero, K.A. •, and **Gould, T.J.** (2010) Acute nicotine enhances performance in an appetitive signaled nosepoke task without affecting task acquisition. *Soc Neurosci Abstr* 703.11.

- André, J.M.*, Leach, P.T.*, and **Gould, T.J.** (2009) Nicotine reverses NMDAR antagonist induced deficits in contextual fear conditioning through high affinity nAChRs. *Soc Neurosci Abstr* 879.4.
- Kenney, J.W.*, Adoff, M.D. •, Wilkinson, D.S.*, **Gould, T.J.** (2009) The effects of acute, chronic and withdrawal from chronic nicotine on novel and spatial object recognition. *Soc Neurosci Abstr* 879.3.
- Raybuck, J. D. * and **Gould, T.J.** (2009) Substrates of trace fear conditioning: A role for nicotinic signaling in the medial prefrontal cortex. *Soc Neurosci Abstr* 384.8.
- Zhuo, J., Portugal, G.S.*, Kruger, W.D., **Gould, T.J.**, and Pratico, D. (2009) Association of glycogen synthase kinase 3 with the homocysteine-dependent increase of Alzheimer's disease amyloid- β formation and deposition in vivo. *Soc Neurosci Abstr* 427.1.
- Portugal, G.S.* and **Gould, T.J.** (2009) The effects of acute nicotine and withdrawal from chronic nicotine on contextual fear conditioning in inbred mouse strains. *Soc Neurosci Abstr* 879.5.
- Wilkinson, D.S.*, Portugal, G.S.*, and **Gould, T.J.** (2009) Developmental differences in the effects of acute nicotine and withdrawal from chronic nicotine on contextual fear conditioning in C57BL/6J mice. *Soc Neurosci Abstr* 879.6.
- Raybuck, J. D. * and **Gould, T.J.** (2008) Effects of direct hippocampal nicotine infusion on trace fear conditioning. *Soc Neurosci Abstr* 291.12.
- Gulick, D* and **Gould, T.J.** (2008) Interactive effects of ethanol and nicotine on memory, anxiety, and locomotion in C57BL/6 mice in the plus-maze discriminative avoidance task. *Soc Neurosci Abstr* 291.14.
- Kenney, J.W.* and **Gould, T.J.** (2008) Towards an understanding of how nicotinic acetylcholine receptors modulate hippocampus dependent learning and memory. *Soc Neurosci Abstr* 291.15.
- Andre, J.M.* and **Gould, T.J.** (2008) The effect of different time points of withdrawal from chronic nicotine on contextual fear in C57BL/6 mice. *Soc Neurosci Abstr* 291.16.
- Portugal, G. S. * and **Gould, T.J.** (2008) The effects of nicotine withdrawal on contextual learning depend upon whether acquisition occurs before or after withdrawal. *Soc Neurosci Abstr* 291.27.
- Gould, T.J.** and Ellias, G.A. • and (2008) The effects of nicotine administration on the extinction and renewal of a conditioned fear response in mice. *Soc Neurosci Abstr* 291.3.
- Gulick, D* and **Gould, T.J.** (2008) Cingulate Cortex and Hippocampus Are Differentially Involved in the Effects of Nicotine Ethanol-Induced Learning Deficits in C57BL/6 Mice. Annual Meeting of the Research Society on Alcoholism, *Alcoholism, Clinical & Experimental Research*, supplement to Vol 32, no 6 p. 96A.
- Gulick, D* and **Gould, T.J.** (2007) Acute, chronic, and withdrawal from chronic nicotine interacts with acute ethanol to modulate fear conditioning. *Soc Neurosci Abstr* 610.10.

- Gould, T.J.** and Gulick, D.* (2007) Direct Infusion of Nicotine into the Cingulate Cortex, but not Hippocampus, Reverses Ethanol-Induced Impairments in Fear Conditioning. *Soc Neurosci Abstr* 610.6.
- Portugal, G. S. * and **Gould, T.J.** (2007) Bupropion dose-dependently reverses nicotine withdrawal deficits in contextual fear conditioning. *Soc Neurosci Abstr* 610.5.
- Kenney, J.W.* and **Gould, T.J.** (2007) Nicotine enhances context but not context-shock associative learning. *Soc Neurosci Abstr* 307.27.
- Florian, C., Kenney, J.W.*, Portugal, G.S.*, Abel, T., and **Gould, T.J.** (2007) Nicotine-induced enhancement of contextual fear conditioning in mice by modulation of the JNK pathway. *Soc Neurosci Abstr* 610.3.
- Davis, J. A.* and **Gould, T.J.** (2007) Nicotine withdrawal- associated deficits in contextual fear conditioning are mediated by hippocampal $\alpha 4\beta 2$ nAChRs. *Soc Neurosci Abstr* 610.9.
- Raybuck, J. D. * and **Gould, T.J.** (2007) Acute, Chronic, and Withdrawal Effects of Nicotine on Trace Fear Conditioning, A Role for the $\alpha 4\beta 2$ Nicotinic Acetylcholine Receptor. *Soc Neurosci Abstr in* 610.8.
- André, J.M.*, Gulick, D.*, Portugal, G.S.*, and **Gould, T.J.** (2007) Withdrawal from chronic nicotine interrupts both foreground and background contextual fear conditioning but not pre-pulse inhibition in C57BL/6 mice. *Soc Neurosci Abstr* 610.4.
- Gulick, D* and **Gould, T.J.** (2007) Interaction of ethanol and nicotine on fear conditioning in C57BL/6 mice. Annual Meeting of the Research Society on Alcoholism, *Alcoholism, Clinical & Experimental Research*, supplement to Vol 31, no 6 p. 150A.
- Davis, J. A.* and **Gould, T.J.** (2006) Hippocampal involvement in the effects of acute, chronic, and withdrawal from chronic nicotine administration on contextual fear conditioning. *Soc Neurosci Abstr* 481.21.
- Andre, J.M.* and **Gould, T.J.** (2006) Nicotine reverses MK-801 induced deficits in contextual fear conditioning. *Soc Neurosci Abstr* 481.23.
- Portugal, G.S.*, Kenney, J.W.*, and **Gould, T.J.** (2006) Nicotine withdrawal deficits in contextual fear conditioning require the $\alpha 4\beta 2$ nicotinic acetylcholine receptor subunit. *Soc Neurosci Abstr* 481.22.
- Kenney, J.W.*, Davis, J.A.*, and **Gould, T.J.** (2006) $\alpha 4\beta 2$ neuronal nicotinic acetylcholine receptors in the dorsal hippocampus mediate the enhancement of contextual conditioning in C57BL/6 mice by nicotine. *Soc Neurosci Abstr* 481.20.
- Porter, J.°, Davis, J.A.*, and **Gould, T.J.** (2005) Nicotine enhances contextual fear conditioning in C57BL/6 mice regardless of whether the context is a foreground or background stimulus. *Soc*

Neurosci Abstr 885.5.

- Raybuck, J.D.* , Davis, J.A.* , and **Gould, T.J.** (2005) Nicotine increases ERK activation in the hippocampus, a necessary component of the enhancement of contextual fear conditioning by nicotine in C57BL/6J mice. *Soc Neurosci Abstr* 885.6.
- Lewis, M.C.* and **Gould, T.J.** (2005) Signal transduction mechanisms within the entorhinal cortex that support latent inhibition of cued fear conditioning. *Soc Neurosci Abstr* 651.15.
- Gulick, D. * , Lewis, M.C.* and **Gould, T.J.** (2005) Nicotine and atomoxetine enhancement and nicotine withdrawal disruption of prepulse inhibition of acoustic startle response in C57BL/6 mice. *Soc Neurosci Abstr* 651.15.
- Davis, J. A.* and **Gould, T.J.** (2005) Atomoxetine reverses nicotine withdrawal-induced impairments in contextual fear conditioning. *Soc Neurosci Abstr* 651.11.
- Gould T.J.** and Davis, J.A.* (2005) Deficits in prepulse inhibition of the acoustic startle reflex in $\alpha 7$ null mutant mice are rescued by acute nicotine treatment. *Soc Neurosci Abstr* 651.18
- Gould T.J.** and Davis, J.A.* (2004) $\alpha 4\beta 2$ and $\alpha 7$ Nicotinic Receptors and Fear Conditioning. *Soc Neurosci Abstr* 206.3.
- Davis, J. A.* and **Gould, T.J.** (2004) Acute, chronic, and withdrawal from chronic nicotine differentially affect fear conditioning in C57BL/6 mice. *Soc Neurosci Abstr* 206.2.
- Lewis, M.C.* and **Gould, T.J.** (2004) Entorhinal cortex and mitogen activated protein kinase (MAPK)/extracellular signal related kinase (ERK) involvement in latent inhibition of cued fear conditioning. *Soc Neurosci Abstr* 206.1.
- Lewis, M.C.* and **Gould, T.J.** (2003) Nicotine and ethanol enhancement of acoustic startle reflex is mediated in part by dopamine in C57BL/6J mice. *Soc Neurosci Abstr* 89.2.
- Gould T.J.** and Lewis*, M.C. (2003) Latent inhibition of cued fear conditioning is inhibited by co-antagonism of nicotinic & AMPA receptors but is not inhibited by antagonism of either receptor subtype alone. *Soc Neurosci Abstr* 721.1.
- Rossebo, O.E.* and **Gould, T.J.** (2003) Nicotine enhancement of cued trace fear conditioning but not cued delay fear conditioning in C57BL/6J mice. *Soc Neurosci Abstr* 89.1.
- Davis, J. A.* and **Gould, T.J.** (2003) Rolipram attenuates the effects of MK-801 on latent inhibition of cued fear conditioning in C57BL/6J mice. *Soc Neurosci Abstr* 721.6
- Gould T.J.** and Higgins, J.S.* (2002) Nicotine produces long-lasting enhancement of contextual fear conditioning in C57BL/6 mice. *Soc Neurosci Abstr* 185.2.
- Lewis, M.C.* , Bartocci, C.* , and **Gould, T.J.** (2002) NMDA and protein synthesis involvement in latent inhibition: A non associative learning processes. *Soc Neurosci Abstr* 684.4.
- Higgins, J.S.* and **Gould, T.J.** (2001) Long lasting enhancement of contextual fear

- conditioning in C57BL/6 mice. *Integrative Physiological & Behavioral Science* 36:317.
- Gould T.J.** (2001) Hydrogen peroxide decreases nicotine-stimulate $^{86}\text{Rb}^+$ efflux from C57BL/6 mouse thalamic and cortical synaptosomes. *Soc Neurosci Abstr* 861.3.
- Woodruff-Pak, D., Vogel, R. W. and **Gould, T.J.** (2001) Age differences in 250 ms delay eyeblink classical conditioning in C57BL/6J mice. *Soc Neurosci Abstr* 86.12.
- Gould T.J.** and Abel, T. (2000) Transgenic mice that overexpress a constitutively active form of Gs α have disrupted prepulse inhibition. *Soc Neurosci Abstr* 25: 10790.
- Bickford, P.C., **Gould, T.J.** and G. Rose (2000) Hippocampal lesions in F344 rats disrupt retention but not acquisition of a motor learning task. *Soc Neurosci Abstr* 25: 2851.
- Gould T.J.**, Collins, A.C. and Wehner, J.M. (1999) Nicotine prevents ethanol associated deficits in contextual fear conditioning and latent inhibition in C57BL/6 mice. *Soc Neurosci Abstr* 25:2153.
- Gould T.J.**, Collins, A.C. and Wehner, J.M. (1998) Nicotine facilitates contextual fear conditioning and latent inhibition in C57BL/6 mice. *Soc Neurosci Abstr* 24:183.
- Bickford, P.C., Shukitt-Hale, B., **Gould, T.J.**, Breidrick, L., Denisova, N., Bielinski, D., and Joseph, J.A. (1998) Reversal of age-related declines in CNS neurotransmission with diets supplemented with fruit or vegetable extracts. *Soc Neurosci Abstr* 24:2157.
- Gould T.J.** and Bickford, P.C. (1997) Noradrenergic involvement in acquisition and extinction of rabbit classically conditioned eye blink response. *Soc Neurosci Abstr* 23:1313.
- Holmes, D., **Gould, T.J.**, Beehler, C., Repine, J. and Bickford, P.C (1997) Protection from hyperoxia and age-related deficits in cerebellar β -adrenergic function in a breed of hyperoxia resistant rats. *Soc Neurosci Abstr* 23:350.
- Gould T.J.**, Adams, C.E. and Bickford, P.C. (1996) Localization of β -adrenergic receptor responses and tyrosine hydroxylase positive fibers in the deep cerebellar nuclei of F344 rats. *Soc Neurosci Abstr* 22:602.
- 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.
- Eckles, K.E., Dudek, E.M., **Gould, T.J.**, Bickford, P.C., and Browning, M.D. (1995) Aged animals have a deficit in phorbol ester stimulation of synapsin phosphorylation. *Soc Neurosci Abstr* 21:473.
- Gould T.J.** and Bickford, P.C. (1994) Aged diet restricted F344 rats show better cerebellar noradrenergic receptor function than age-matched ad lib fed rats. *Soc Neurosci Abstr* 20:390.

- 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

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| Impact of Age and Genetics on the Effects of Nicotine on Learning and Hippocampal Function
Department of Psychology
University of Connecticut | May 2019 |
| Nicotine Addiction Across the Ages: A Biobehavioral Perspective
Pattishall Research Lecture
The Penn State University | March 2019 |
| Gene Variants for Nicotine Withdrawal Deficits in Learning
Lisa Goldberg (postdoctoral fellow, presenter) and Thomas Gould
NIDA Genetics Animal Models Consortium Meeting
Bethesda, MD | January 2019 |
| The Role of Epigenetics in the Effects of Nicotine on Learning
The Annual Delaware Neuroscience Research and Poster Symposium
Newark, DE | November 2018 |
| 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
Hippocampus-Dependent Learning**

January 2012

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
One Purkinje at a Time: Symposium in Honor of Joseph Steinmetz** September 2008
Annual Meeting of the Pavlovian Society
Weehawken, NJ

**Nicotine, Synaptic Plasticity, and Addiction: The Effects of
Nicotine on Hippocampus-Dependent Learning** May 2008
Neuroscience Workgroup Cutting Edge Seminar:
Nicotine and Neuroplasticity
National Institute on Drug Abuse
Bethesda, MD

Nicotine and Learning: From Behavior to Neural and April 2008

Genetic Substrates

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

March 2005

Nicotine Addiction and Contextual Learning

Department of Neural and Behavioral Science
Medical College
Penn State University

Nicotine Addiction and Learning

Tobacco Use Research Center
University of Pennsylvania

January 2004

Nicotine Addiction and Hippocampus-Dependent Learning

Department of Psychology
University of Delaware

December 2004

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

Department of Psychiatry
University of Pennsylvania

June 2004

Nicotine Addiction: Learning, Neural & Genetic Substrates

Frontiers in Addiction
Summer Conference
Vanderbilt University
Nashville, TN

May 2004

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

Department of Pharmacology
Temple University College of Medicine

October 2003

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

Department of Pharmacology & Physiology
Drexel University College of Medicine

September 2003

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

May 2001

Invited Presentation

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** March 2023

Population to Assess the Effects of Adolescent Nicotine Exposure to Adult Sensitivity to Nicotine

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
Gould, T.J.

June 2022

Talk

Annual Meeting of the International Behavioral Neuroscience Society
Glasgow, Scotland

Genetic Background Determines Adolescent Hippocampal Learning and Gene Expression After Acute Alcohol Exposure

June 2022

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

Poster

Annual Meeting of the International Behavioral Neuroscience Society
Glasgow, Scotland

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

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

Talk

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

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

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

Poster

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

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

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

Poster

NIDA Genetic Consortium Meeting
Virtual

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

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

Talk

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

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

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

Poster

Annual Meeting of the Pavlovian Society

Ann Arbor, Michigan

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

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

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

Poster

Annual Meeting of the Pavlovian Society

Virtual

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

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

Poster

Annual Meeting of the Pavlovian Society

Virtual

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

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

Poster and Data Blitz Presentation

Annual Meeting of the American Psychological Association

Virtual

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

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

Poster

NIDA Genetic Consortium Meeting

Virtual

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

August 2020

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

Poster

Annual Meeting of the Pavlovian Society

Virtual

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

August 2020

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

Poster

Annual Meeting of the International Behavioral Neuroscience Society

Virtual

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

June 2020

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

Poster

Annual Meeting of the Research Society on Alcoholism

Virtual

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

March 2020

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

Poster

Annual Meeting of the Society for Research on Nicotine and Tobacco

New Orleans, LA

**Genetic Influences on Learning, Acetylcholinesterase, and
Withdrawal from Chronic Nicotine Across Inbred Mouse Strains**

March 2020

Mooney-Leber, S.M., Zeid, D.,* Peltz, G and **Gould, T.J.**

Poster

Annual Meeting of the Society for Research on Nicotine and Tobacco
New Orleans, LA

**Systems Genetic Analysis of Nicotine Withdrawal Deficits
in Learning Using the BxD Genetic Reference Panel** January 2020

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

Poster

NIDA Genetic Consortium Meeting

Bethesda, MD

**Nicotine Metabolism Genetics in C57BL/6J and NOD/ShiLtJ
Mouse Strains** January 2020

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

Poster

NIDA Genetic Consortium Meeting

Bethesda, MD

**Computational Genetic Analysis of 8300 Biomedical
Phenotypes and of Responses to Drugs of Abuse** January 2020

Arslan, A., Guan, Y., Chen, X., Donaldson, R., Zhu, W.,
Ford, M., Wu, M., Dill, D.L., Mooney-Leber, S.M.,
Seemiller, L.R.,* Goldberg, L.R., Smith, P., Tian, Y.,
Patterson, A., **Gould, T.J.**, Jentsch, D., and Petz, G.

Poster

NIDA Genetic Consortium Meeting

Bethesda, MD

**Ethanol Differentially Induces Fear Learning Deficits
in Adolescent and Adult Male and Female C57BL/6J and
DBA/2J Inbred Mice** October 2019

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

Poster

Annual Meeting of the Pavlovian Society

Vancouver, BC, Canada

**Adolescent Stress and Nicotine Interact to Disrupt
Adult Hippocampal-Dependent Learning and Stress Response** October 2019

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

Poster

Annual Meeting of the Pavlovian Society

Vancouver, BC, Canada

**Systems Genetic Analysis of Nicotine Withdrawal Deficits
in Learning** May 2019

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

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

Talk

Genes, Brain and Behavior Conference

International Behavioural and Neural Genetics Society

University of Edinburgh

Edinburgh, Scotland, UK

**Identification of a Locus on Chromosome Four Mediating
Nicotine Withdrawal Deficits in Hippocampal Learning.** February 2019

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

Talk

Annual Meeting of the Society for Research on Nicotine and Tobacco

San Francisco, CA

**Translational Studies on the Impacts of Developmental Nicotine
Exposure on Adolescent and Adult Learning, Memory, and
Addiction: A Role of Epigenetics** January 2019

Gould, T.J.

Talk

Winter Conference on Brain Research

Snowmass, CO

**Identification of a Locus on Chromosome Four Mediating
Nicotine Withdrawal Deficits in Hippocampal Learning** January 2019

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

Gould, T.J.

Poster

NIDA Genetic Consortium Meeting

Bethesda, MD

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

January 2019

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

Poster

NIDA Genetic Consortium Meeting

Bethesda, MD

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

October 2018

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

Poster

Annual Meeting of the Pavlovian Society

Iowa City, IA

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

May 2018

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

Gould, T.J.

Poster

International Behavioural and Neural Genetics Society Annual Meeting

Rochester, MN

**Paternal Nicotine Exposure Transgenerationally
Alters Gene Expression in the Cholinergic Signaling Pathway**
Gould, T.J., Kutlu, M.G., Cole, R.,* Tumolo, J.M.,[•] and Parikh, V.

February 2018

Symposium

Annual Meeting of the Society for Research on Nicotine and Tobacco

Baltimore, MD

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

February 2018

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

Poster

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

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

February 2018

Gadiwalla, S., Kutlu, M.G., Tumolo, J.M.[•], Garrett, B.[•], and **Gould, T.J.**

Poster

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

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

January 2018

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

Poster

NIDA Genetic Consortium Meeting
Bethesda, MD

Paternal Nicotine Exposure Alters Generational Fear Conditioning and Hippocampal Cholinergic Function

October 2017

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

Poster

Annual Meeting of the Pavlovian Society
Philadelphia, PA

Paternal Nicotine Exposure Transgenerationally Alters 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
Gould, T.J.**

January 2017

Talk

Park City Winter Conference
Park City, UT

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

November 2016

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

Poster

NIDA Genetic Consortium Meeting
Bethesda, MD

**Choline Supplementation in an Adolescent Nicotine
Exposure Model - a Whole Genome Epigenetic Perspective**

November 2016

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

Poster

NIDA Genetic Consortium Meeting

Bethesda, MD

**Chronic Nicotine Alters Spontaneous Recovery of
Contextual Fear Differentially in Male and Female Mice**

September 2016

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

Poster

Annual Meeting of the Pavlovian Society

Jersey City, NJ

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

September 2016

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

Poster

Annual Meeting of the Pavlovian Society

Jersey City, NJ

**Dysregulations in the Cholinergic System After
Adolescent Nicotine is Reversed by Dietary Choline**

June 2016

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

Poster

College on Problems of Drug Dependence

Phoenix, AZ

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

May 2016

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

Poster

Annual Meeting - Society of Biological Psychiatry

Atlanta, GA

Developmental Toxicity of Nicotine During

March 2016

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

September 2015

Gould, T.J.

Poster

Annual Meeting of the Pavlovian Society

Portland, OR

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

March 2015

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

Talk

Annual Meeting of the Eastern Psychological Association

Philadelphia, PA

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

March 2015

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

Talk

Annual Meeting of the Eastern Psychological Association

Philadelphia, PA

The effects of acute nicotine on contextual safety learning

February 2015

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

Poster

Annual Meeting of the Society for Research on Nicotine and Tobacco

Philadelphia, PA

Acute, chronic, and withdrawal from nicotine impair extinction of contextual fear and a trkB agonist, 7,8DHF, ameliorates nicotine-

February 2015

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

Poster

Annual Meeting of the Society for Research on Nicotine and Tobacco

Philadelphia, PA

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

December 2014

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

Poster

Annual Meeting of the American College of Neuropsychopharmacology

Phoenix, AZ

**The Effects of Chronic and Withdrawal from Chronic
Nicotine on Extinction Learning**

September 2014

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

Poster

Annual Meeting of the Pavlovian Society

Seattle, WA

**Neural Substrates of Age-dependent Hippocampal Sensitivity
to the Effects of Nicotine on Hippocampus-Dependent Learning**

February 2014

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

Talk

Annual Meeting of Society for Research on Nicotine and Tobacco

Seattle, WA

**Novel Cellular Mechanisms of Nicotine's Effects on Learning and
Memory**

September 2013

Gould, T.J.

Talk and Symposium Chair

Annual Meeting of the Pavlovian Society

Austin, TX

**Acute Administration of Nicotine Interferes with
the Expression of Safety Cue Memory**

September 2013

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

Poster

Annual Meeting of the Pavlovian Society

Austin, TX

**Adolescent Vulnerability to the Effects of Nicotine on
Hippocampus-Dependent Learning**

August 2013

Gould, T.J.

Talk and Symposium Chair

Annual Meeting of the American Psychological Association

Honolulu, HI

**Thyroid Receptor β is Critically Involved in the Effects of
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

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**

September 2012

Thyroid Receptor $\alpha 1$ is Not

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

December 2008

Deficits in Learning

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 May 2007

**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-Administration 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 May 2007

Role for JNK in Nicotine Addiction

Poster

Philadelphia Area Chapter of the Society for Neuroscience

Philadelphia, PA.

Withdrawal from Chronic Nicotine Produces Deficits in Trace Fear March 2007

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

Nicotinic Acetylcholine Receptors Function

Talk

Eastern Psychological Association
Philadelphia, PA

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

March 2007

Talk

Eastern Psychological Association
Philadelphia, PA

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

March 2007

Talk

Eastern Psychological Association
Philadelphia, PA

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

February 2007

Talk

Annual Meeting of the Society for Research on Nicotine and Tobacco
Austin, TX

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

September 2006

Poster

Annual Meeting of The Pavlovian Society
Philadelphia, PA

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

September 2006

Poster

Annual Meeting of The Pavlovian Society
Philadelphia, PA

- The Effects of Bupropion on Contextual and Cued Fear Conditioning in C57BL/6 Mice** September 2006
Poster
Annual Meeting of The Pavlovian Society
Philadelphia, PA
- Nicotine Enhances Contextual Fear Conditioning via Dorsal Hippocampal $\alpha 4\beta 2$ Nicotinic Acetylcholine Receptor-Mediated Processes in C57BL/6J Mice** September 2006
Poster
Annual Meeting of The Pavlovian Society
Philadelphia, PA
- Inhibition of ERK 1/2 Prevents the Enhancement of Contextual Fear Conditioning by Nicotine in C57BL/6 Mice** September 2006
Poster
Annual Meeting of The Pavlovian Society
Philadelphia, PA
- Dose Response Effects of Ethanol on Background and Foreground Contextual Fear Conditioning** September 2006
Poster
Annual Meeting of The Pavlovian Society
Philadelphia, PA
- Atomoxetine Ameliorates Deficits in Sensory Gating and Contextual Learning in C57BL/6 Mice** April 2006
Talk
TTURC Grantees Conference. Sponsored by NIH
Boston, MA
- $\beta 2$ Nicotinic Acetylcholine Receptor Subunits Mediate Nicotine Withdrawal Deficits in Contextual Fear Conditioning** April 2006
Poster
Philadelphia Area Chapter of the Society for Neuroscience
Philadelphia, PA.

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

Poster

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

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

Poster

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

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

Poster

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

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

Talk

Annual Meeting of The Pavlovian Society
Anaheim, CA

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

Talk

Annual Meeting of The Pavlovian Society
Anaheim, CA

**Entorhinal Cortex, NMDA, and Mitogen-Activated
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 May 2005
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 May 2005
Contextual Fear Conditioning by Nicotine

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 September 2004
Contextual but not Cued Fear Conditioning

Talk
Annual Meeting of The Pavlovian Society
Baltimore, MD

Entorhinal Cortex Involvement in Latent September 2004
Inhibition of Cued Fear Conditioning

Talk
Annual Meeting of The Pavlovian Society
Baltimore, MD

Signal Transduction Mechanisms Underlying Latent May 2004
Inhibition of Cued Fear Conditioning

Poster
Philadelphia Area Chapter of The Society for Neuroscience

Philadelphia, PA.

**Nicotinic Receptor Subtypes Mediating
Enhancement of Contextual Fear Conditioning**

May 2004

Poster

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

**Nicotinic Receptor Subtype
Involvement in Fear Conditioning**

April 2004

Talk

Eastern Psychological Association
Washington, DC

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

October 2003

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

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

September 2003

Talk

Annual Meeting of The Pavlovian Society
Bloomington, IN

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

September 2003

Poster

Annual Meeting of The Pavlovian Society
Bloomington, IN

**Age-Related Impairments in Auditory Cued Fear
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 β -Adrenergic Receptor Activation in Cerebellar Purkinje Cells from F344 Rats** June 1996
Invited Presentation
Talk
4th Annual Summer Training Course in Experimental Aging Research,
Ann Arbor, MI
- Localization of Age-Related β -adrenergic Signal Transduction Deficits in Cerebellar Purkinje Cells from F344 Rats** October 1995

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

**Effects of Chronic Treatment with
N-tert-butyl- α -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 Department of Psychology Indiana University, Bloomington, IN	Spring 1991
Statistical Techniques Department of Psychology Indiana University, Bloomington, IN	Fall 1992
Statistical Techniques Department of Psychology Indiana University, Bloomington, IN	Spring 1993
Gerontological Pharmacology Department of Pharmacology University of Colorado, Health Sciences Center	Fall 1994
Biopsychology Department of Psychology University of Colorado, Boulder CO	Fall 1997
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	Fall 2001

Department of Psychology
Temple University

Cognitive Neuroscience 104

Spring 2002

Department of Psychology
Temple University

Neurobiology of Learning and Memory 366

Fall 2003, Spring 2004,
Spring 2005, Fall 2006

Department of Psychology
Temple University

Graduate Topics in Experimental Psychology 706

Spring 2004

The Neural Basis of Learning

Department of Psychology
Temple University

Graduate Topics in Experimental Psychology 706

Fall 2004

Psychopharmacology

Department of Psychology
Temple University

Psychopharmacology 361

Fall 2004

Department of Psychology
Temple University

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

Fall 2005

Department of Psychology
Temple University

**Graduate Core Course:
Behavioral Neuroscience 809**

Spring 2006, 2010, 2011,
2012

Department of Psychology
Temple University

Graduate Topics in Cognitive Psychology

Fall 2007

Addiction

Department of Psychology
Temple University

Readings in Neuroscience 9381

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

Department of Biobehavioral Health
Penn State

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 Moron-Concepcion, Department of Anesthesiology, Columbia University 2010
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 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

POSTDOCTORAL FELLOW PLACEMENT

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

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

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

LABORATORY UNDERGRADUATE/GRADUATE STUDENT AWARDS and FELLOWSHIPS

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

- ◆ Justin Kenney: Temple University Shipley Prize Award Winner 2010
- ◆ Kristy Cordero: Philadelphia Chapter of the Society for Neuroscience 2010 Undergraduate Research Award
- ◆ Prescott Leach: Selected to attend the Seventh Annual NIH National Graduate Student Research Conference 2012
- ◆ Prescott Leach: Temple University Dissertation Completion Grant 2013
- ◆ David Braak: Creative Arts, Research And Scholarship, Temple University 2013
- ◆ David Braak: Center for Scholars Program Scholar, Temple University 2014
- ◆ David Braak: Summer Undergraduate Research Fellowships (SURF) 2014 at UT Southwestern Medical Center
- ◆ Steven Simmons: selected to participate in the 64th Lindau Nobel Laureate Meeting, Lindau, Germany 2014
- ◆ David Braak: Benjamin Cottone, M.D. Scholarship, Temple University 2014
- ◆ Erica Holliday: 2014 Weinstein Summer Graduate Research Fellowship, Temple University
- ◆ David Braak: Andrea Pearlman Price Pre-Medical Award, Temple University 2014
- ◆ Courtney Cann: 2017 Undergraduate Research Grant, College of Health and Human Development Penn State
- ◆ Dana Zeid: International Behavioural and Neural Genetics Society Outstanding Graduate Student Travel Award, 2018
- ◆ Dana Zeid: NIDA Scholarship to Short Course on the Genetics of Addiction at the Jackson Laboratory, 2018
- ◆ Dana Zeid: BBH Graduate Student Research Award, 2018
- ◆ Dana Zeid: National Research Service Award, NIH/NIDA, Grant Number: 1F31DA049395-01A1, Project Title: Effects of paternal nicotine exposure on sncRNA expression in sire sperm and offspring hippocampus 2020-2022
- ◆ 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
- ◆ 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

- ◆ 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)”
Mentee: Jason Dennis 2021
- ◆ 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 2017

Penn State

- ◆ College of Health & Human Development AD-14 Committee 2017
Co-Chair, Penn State
- ◆ Director of the Neuroscience Program in the College of Liberal Arts 2010-2016
- ◆ Psychology Chair's Advisory Committee 2010-2016
- ◆ University Head Veterinarian Search Committee 2012
- ◆ Psychology Personnel Committee 2011-2016
- ◆ College of Liberal Arts Merit Committee 2012-2014
- ◆ Keynote Speaker at Temple University McNair Scholars Graduation Celebration 2011
- ◆ Temple University Substance Abuse Research Steering Committee 2011-2016
- ◆ Temple University Formula Funds Committee 2011-2012
- ◆ Temple University Biology Faculty Search Committee 2010-2012
- ◆ Director of the Brain and Cognitive Sciences Area of Psychology, Temple University 2007-2011
- ◆ Space Committee (psychology) 2009-2010
- ◆ Temple University McNair Scholars Mentor 2008- 2011
- ◆ Temple University Internal Research Advisory Committee 2007-2008
- ◆ Temple University Graduate Board 2007-2010
- ◆ Temple University Graduate Board Program Review Committee 2007-2010
- ◆ Temple University Graduate Board Fellowship Committee 2010
- ◆ Fellowship Committee (psychology) 2007-2011
- ◆ Neuroscience Steering Committee (psychology) 2007-2011
- ◆ Director of Undergraduate Studies, Psychology 2006-2007
- ◆ College of Liberal Arts Dean Search Committee 2005-2007
- ◆ Executive Committee Member and Training Faculty for NIH Training Grant 2003-2007
- ◆ Neuroscience Program Executive Committee 2003-2011
- ◆ Graduate Committee (psychology) 2003-2016
- ◆ Colloquium Committee (psychology) 2000-2002
- ◆ Animal Welfare Committee (psychology) 2001-2007
- ◆ Awards Committee (Chair 2002-2003, psychology) 2001-2009
- ◆ Council of Graduate Departments of Psychology (COGDOP)/APA Graduate Fellowship and Internal Awards Committee (Current Chair, psychology) 2004-2007
- ◆ Presentation at the Temple University 2004

Russell Conwell Summer Bridge Program

- ◆ 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 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
The effects of long-term practice and training on mental rotation: Melissa Terlecki
- ◆ Master Thesis Committee 2004
Cholinergic 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 Eyeblink 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

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 2018
Talk Radio 790 KABC, Los Angeles, CA
<https://www.inyourrightmind.com/podcast/cravings/>