

Curriculum Vitae

Joshua Michael Gulley

UPDATED February 26, 2019

CONTACT INFORMATION

515 Psychology Building
Department of Psychology, MC 716
University of Illinois at Urbana-Champaign
603 E Daniel Street
Champaign, IL 61820

Telephone: (217) 265-6413
Fax: (217) 244-5876
Electronic Mail: jgulley@illinois.edu

ACADEMIC APPOINTMENTS

- 8/04-7/11 Assistant Professor, Department of Psychology, University of Illinois, Urbana-Champaign
- 8/04-ongoing Faculty member, Neuroscience Program, University of Illinois, Urbana-Champaign
- 8/07-ongoing Affiliate, Carl R. Woese Institute for Genomic Biology, “Gene Networks in Neural and Developmental Plasticity” theme
- 8/11-ongoing Associate Professor, Department of Psychology, University of Illinois, Urbana-Champaign
- 12/17-ongoing Chair and Director, Institutional Animal Care and Use Committee (IACUC), University of Illinois, Urbana-Champaign

EDUCATION

- 8/88-5/92 B.S., Psychology, University of Iowa
- 8/92-6/94 Research assistantship, Department of Psychology, University of New Mexico
Mentors: Frank R. George, Ph.D. and Mary C. Ritz, Ph.D.
- 8/94-6/00 Ph.D., Neural Science and Psychology, Indiana University
Thesis title: “Movement- and drug-induced changes in the activity of basal ganglia output neurons in awake, unrestrained rats.”
Mentor: George V. Rebec, Ph.D.
- 7/00-7/04 Postdoctoral fellow, Department of Pharmacology, University of Colorado
Health Sciences Center
Mentor: Nancy R. Zahniser, Ph.D.

FELLOWSHIPS, AWARDS AND HONORS

- 1992 Inducted into Psi Chi, the National Honor Society in Psychology
- 1994-1995 College of Arts and Sciences Graduate Fellowship, Indiana University
- 10/1995 College of Arts and Sciences Travel Award, Indiana University

1/01-12/02	Trainee, National Institute on Alcoholism and Alcohol Abuse postdoctoral training grant (T32 AA07464), University of Colorado Health Sciences Center
8/01	Conference Scholarship, “Cellular Biology of Addiction” workshop at Cold Spring Harbor Laboratory, Cold Spring Harbor, New York
5/04	Conference Travel Award (\$1,250), “Frontiers in Addiction Biology: Genomics and Beyond”, Vanderbilt University
6/05	The College on Problems of Drug Dependence (CPDD), Early Career Investigator Award
8/06	Travel award (from NIDA’s Neuroscience Consortium) for NIDA-sponsored Early Career Investigator Poster Session; held in conjunction with the annual meeting of the American Psychological Association, Divisions 28 and 50, New Orleans, LA
10/06	NIDA Early Career Investigator Poster Session and Travel Award, Frontiers in Addiction Research 2006 NIDA Mini-Convention, Atlanta, GA
5/07	Excellence in Undergraduate Teaching, presented by Psi Chi, the National Honor Society in Psychology, University of Illinois, Urbana-Champaign
5/09	Excellence in Teaching and Advising at the Graduate Level, presented by the Graduate Student Organization, University of Illinois, Urbana-Champaign
1/10	Winter Conference on Brain Research, Early Career Investigator Travel Award
5/10	Mabel Kirkpatrick Hohenboken Teaching Enhancement Award, Department of Psychology, University of Illinois, Urbana-Champaign

RESEARCH

A. Pending funding

NIH R01 AI148918-01 “Helicobacter pylori and extra-gastric inflammation”; total direct costs requested: \$2,190,000; Project period: 11/01/19-10/31/24; Role: co-PI [pending IRG review]

B. Current funding

NIH R21 DA045175-01A1 “Mechanisms of metabolic and cognitive dysregulation after combined alcohol and THC use”; total costs awarded: \$372,046; Project period: 09/30/18-08/31/20; Role: co-PI.

RB17146 (UIUC Campus Research Board) “Changes in dopamine/glutamate receptor interactions as a potential mechanism of heightened relapse risk in adolescent-onset methamphetamine users”; total costs awarded: \$29,976, Project period: 04/17/17-03/31/19; Role: PI.

C. Past funding

NIH 1 R01 DA029815-01A1 “Mechanisms of amphetamine-induced plasticity in adolescents compared to adults”; total direct costs awarded: \$1,000,000; Project period: 02/1/11-01/31/16 (2/1/16-1/31/18 NCE); Role: PI.

AN ZB20 (Abbott Nutrition) “Neural mechanisms of nutrient-induced cognitive enhancement”; total direct costs awarded: \$392,709; Project period: 8/16/2014 – 2/15/2017; Role: co-PI

RB15182 (Arnold O. Beckman Research Award, UIUC Campus Research Board) “Evaluation of cognitive performance in a rat model of *Helicobacter pylori* chronic infection”; total direct costs: \$29,498, Project period: 03/06/15-10/31/16; Role: Co-I.

NIH F31 DA036330-01A1 "Methamphetamine effects on cognition and 5-HT receptors in orbitofrontal cortex" (PI: E.R. Hankosky); mentored fellowship; Project period: 08/16/2014-08/15/2016; Role: mentor.

AN ZA69 (Abbott Nutrition) “The effects of a bioactive nutrient on cognitive functioning in an animal model of normal aging”; co-PI’s: J.M. Gulley and J.M. Juraska; total direct costs awarded: \$398,844; Project period: 5/16/2012 – 12/31/2014.

CRB 12196 (University of Illinois Campus Research Board) “Alcohol, sex and adolescence: effects on prefrontal cortex structure and function”; co-PI’s: J.M. Gulley and J.M. Juraska; total direct costs awarded: \$28,221; Project period: 4/1/2012 – 8/31/2013

Arnold O. Beckman Research Award, UIUC Campus Research Board, “Amphetamine-induced deficits in cognitive function and the role of adaptations in medial prefrontal cortex function.” PI: J.M. Gulley; approximately \$13,550, Project period: 03/01/10-02/28/11.

NIH 1 R21 AA017354-01 “Alcohol drinking behavior and prefrontal cortex neuron loss during adolescence.” Co-PIs: J.M. Gulley and J.M. Juraska; total direct costs: \$262,500, Project period: 09/30/07-08/31/09.

Arnold O. Beckman Research Award, UIUC Campus Research Board, “Methamphetamine-induced neuroplasticity in the medial prefrontal cortex.” PI: J.M. Gulley; approximately \$15,750; Project period: 2/1/07-3/31/08.

NIH R03 DA019876 “Amphetamine sensitization and prefrontal cortex function.” PI: J.M. Gulley; total direct costs: \$50,000; Project period: 8/16/05-8/15/07.

NIH F32 DA016485 “Amphetamine Sensitization: Role of Dopamine Transporters.” PI: J.M. Gulley (Mentor: Nancy R. Zahniser); Project period: 8/1/03-7/31/04

NIH F32 F31 DA05921 “Amphetamine-induced changes in basal ganglia output.” PI: J.M. Gulley (Mentor: George V. Rebec); Project period: 9/1/98-7/31/00

INSTRUCTIONAL ACTIVITY

A. Course Coordination and Instruction

University of Illinois, Urbana-Champaign

PSYC 210 Introduction to Behavioral Neuroscience, ~ 250 undergraduate students/semester, 2009-2012 (4 semesters)

PSYC 413	Psychopharmacology, ~135 undergraduate students/semester and ~10 graduate students/semester, 2006-2018 (11 semesters)
PSYC 492	Undergraduate Capstone Research, ~14 undergraduate students/semester, 2014-2015; 2017-2018 (4 semesters)
PSYC 510	Advances in Psychobiology, ~ 10 graduate students, 2005 (1 semester)
PSYC 593	Seminar: Behavioral Neuroscience of Drug Addiction, 10 graduate students. 2011 (1 semester)
PSYC 593	Seminar: Behavioral Neuroscience of Adolescence, 14 graduate students, 2014 (1 semester)

Indiana University, Bloomington

P211	Methods of Experimental Psychology, ~15 undergraduate students, 1996 (1 semester)
------	---

B. Course Contribution

University of Illinois, Urbana-Champaign

PSYC 210	Introduction to Behavioral Neuroscience, ~ 250 undergraduate students/semester, 10 lectures (1/4 of course), 2004-2012
PSYC 510	Advances in Psychobiology, ~ 10 graduate students, 4 lectures (1/4 of course), 2005, 2009 (2 semesters)

ADVISING ACTIVITY

A. Graduate Student Advisees (year Ph.D. obtained)

Darien Hall (2010)	Neuroscience Program
Jessica Stanis (2013)	Neuroscience Program
Emily Hankosky (2016)	Department of Psychology
Luke Sherrill (2017)	Department of Psychology
Lindsey Hammerslag (2017)	Neuroscience Program
Shuo Kang (2018)	Neuroscience Program
Sara Westbrook (expected 2019)	Department of Psychology
Asia Banks (expected 2023)	Department of Psychology

B. Graduate Student Committees –Dissertation

Department of Psychology

Completed (year of defense) – Jason C. Pych (2005); Marissa Rubinow (2008); Wendy Koss (2013); Konrad Bresin (2017); Ryan Loh (2017); Leslie Wise (2017); Sean Collins (2018)

Neuroscience Program

Completed (year of defense) – Lilia Zurkovsky (2008); Jon Zombeck (2010); Renee Sadowski (2013); Martina Mustruph (2014); Supida Monaikul (2015); Daniel Kougias (2018); Payel Kundu (2018)
Ongoing – Nhamdi Nelson

Other departments/programs

Completed (year of defense) – Paul Eubig (2013: Comparative Biosciences, College of Veterinary Medicine); Rekha Balachandran (2018; Comparative Biosciences, College of Veterinary Medicine)

C. Graduate Student Committees – Qualifying Examinations

Department of Psychology (exam year)

Melissa Yates (2006); Leslie Knapp (2010); Nioka Lowry (2011); Lily Chau (2012); Leslie Wise (2015); Ryan Loh (2015); Sean Collins (2016); Carly Drzewiecki (2016); Tiffany Yang (2017); John Pfeiffer (2018)

Neuroscience Program (exam year)

Jordan Aerts (2013); Daniel Kougiyas (2015); Mariam Bonyadi (2015); Payel Kundu (2015); Nhamdi Nelson (2017); Elli Sellinger (2018)

Other departments/programs

Rekha Balachandran (2016: Comparative Biosciences, College of Veterinary Medicine)

D. Undergraduate Student Advisees – Honors Thesis

Department of Psychology (graduation year)

Lyn Apa (2006); Alexander Chan (2006); David Klein (2007); Abby Folberg (2007); Tim Meier (2007); Lauren Sehy (2007); Kimberly Farbota (2009); Rick Ofman (2009); Doug Schuweiler (2008); Callie Michels (2008); Claire Berthold (2009); Karina Durso (2010); Emily Foreman (2010); Rakesh Marredy (2011); Alex Waldman (2012); Elizabeth Seeley (2012); Alex McClory (2012); Nikki Kofsky (2013); Lauren Ruvola (2014); Rachel Haake (2014); Bankole Aladesuyi (2014); Mariah Wu (2015); Adam Gold (2015); JoJo Gu (2017); Megan Dwyer (2017); Maxwell Haynes (2018)

Molecular and Cell Biology (graduation year)

Diana Lone (2010); Courtney Hong (2014); Amin Ghane (2015)

Neuroscience IPS (graduation year)

Minsu Kang (2013)

COLLEGE/UNIVERSITY SERVICE

A. Department of Psychology Committees

2004-2005	Faculty Search Committee, Biological Division
2004-2007	Graduate Awards Committee
2008-2009	Faculty Search Committee, Affective Neuroscience position
2008-2009	Faculty Position Evaluation Committee, Biological Division
2008-2010	Graduate Admissions Committee
2010-2012	Graduate Awards Committee
2010-2012	Graduate Education Committee
2011-2012	Promotion & Tenure Committee

2011-2012	Search Committee, senior administrative staff position
2012-2013	Promotion & Tenure Evaluation Committee
2012-2013	Faculty Search Committee, Behavioral Neuroscience position
2012-2013	Division coordinator, Behavioral Neuroscience
2012-2013	Departmental Advisory Committee
2012-2013	Lanier Lecture Committee
2012-2014	Undergraduate Academic Appeals Committee
2014-2015	Graduate Education Committee
2015-2016	Promotion & Tenure Committee
2015-2016	Division coordinator, Behavioral Neuroscience
2015-2016	Departmental Advisory Committee
2016-2017	Committee on Post-baccalaureate Education
2016-2017	Graduate Education Committee
2017-2018	Teaching Policy Committee
2018-2019	External Relations Committee

B. University Committees

Campus committees

2005-2006	Faculty Search Committee, Department of Veterinary Clinical Medicine
2009-2010	Institutional Animal Care and Use Committee (IACUC), sub-committee on food restriction guidelines
2014-2015	Division of Animal Resources (DAR) Strategic Financial Planning Committee
2011-2017	Regular member, IACUC
09/17-11/17	Vice-Chair, IACUC
12/17-11/19	Chair and Director, IACUC

Liberal Arts & Sciences committees

2016-2018	LAS Committee on Academic Standards
-----------	-------------------------------------

Other Department/Program committees

2005-2007	Admissions Committee, Neuroscience Program
2007-2008	Brain Awareness Committee, Neuroscience Program
2007-2009	Trainee selection committee, NICHD Developmental Psychobiology and Neurobiology Training Grant
2009-2010	Executive Committee, Neuroscience Program
2010-2011	Admissions Committee, Neuroscience Program
2016-2017	Seminar Committee, Neuroscience Program

C. Department of Psychology – Non-committee Service

8/06	“Drug Addiction: A Behavioral Disorder Caused by a Diseased Brain?” article, for <u>Psychology Times</u> , a publication of the Illinois Psychology Department
11/08	Overview presentation of our research program given to alumni of the Department of Psychology at Illinois

- 11/11 Overview presentation of our research program given to alumni of the Department of Psychology at Illinois
2014-2015 Backup floor coordinator, Building Emergency Action Plan

D. University – Non-committee Service

- 3/05 “Ask the Expert” column, for Illinois Alumni, the official publication of the University of Illinois Alumni Association
2006-2010 Faculty mentor for 6 under-represented minority, undergraduate Summer Research Fellows in the Ronald E. McNair Research Institute, University of Illinois, Urbana-Champaign
2007-2010 Faculty mentor for 5 under-represented minority, undergraduate students participating in the Summer Research Opportunities Program (SROP), University of Illinois, Urbana-Champaign
2007-2010; 2015 Speaker, Illinois Summer Neuroscience Institute (ISNI)
2008; 2010-2011 Speaker, Neuroscience Teacher Institute
10/09 Speaker, Osher Lifelong Learning Institute (OLLI), University of Illinois, Urbana-Champaign
10/10 Speaker, “Professor Chat” with professional chemistry fraternity Alpha Chi Sigma
2011-2012 classroom module participant; Project NEURON (Novel Education for Understanding Research On Neuroscience), an NIH Science Education Partnership Award (SEPA), D. Korol and B. Hug (co-PIs)
3/13 Speaker, LAS Faculty Showcase (LAS Open House)
4/13 Speaker, LAS Admitted Student Day
4/14 Speaker, “Professor Chat” at professional chemistry fraternity Alpha Chi Sigma meeting
2016-2017 Campus Research Board, University of Illinois, *ad hoc* funding proposal review
11/16 Speaker, Drug Rehabilitation System program, University of Illinois Global Education and Training office
12/17 Speaker, Undergraduate Psychology Association meeting

COMMUNITY SERVICE

- 11/01 Invited presentation, “Neuroscience of Drug Addiction,” Grace United Methodist Church, Denver, CO
3/02 Judge, Denver Metro Regional Science & Engineering Fair, Aurora, CO
7/02 Invited presentation, summer student research program, Alcohol Research Center, University of Colorado Health Sciences Center
7/02 Invited presentation, “The Biology of Drug Addiction,” Arvada High School, Arvada, CO
2/03 Invited presentation, “Drugs and the Brain,” Arvada High School, Arvada, CO
11/03 Neuroscientist mentor, “K-12 Science Teachers Workshop,” Society for Neuroscience Annual Meeting, New Orleans, LA
10/04 Neuroscientist mentor, “K-12 Science Teachers Workshop,” Society for Neuroscience Annual Meeting, San Diego, CA

- 5/08 External examiner for honors thesis and oral defense, Knox College, Galesburg, IL
- 9/12 Guest lecturer, Education Justice Project, Danville Correctional Center, Danville, IL

MEDIA COVERAGE OF OUR RESEARCH

- 7/09 Our research was included in the Society for Neuroscience's online media room and its "Hot Topics" book for the 2009 Annual Meeting
- 10/09 "Drug use in teens may damage memory years later", US News & World Report
- 10/09 "Teen drug use may impair memory later, study suggests", USA Today online
- 11/09 "Amphetamine use in adolescence may impair adult memory", Inside Illinois, Nov. 9, 2009 edition
- 11/09 Society for Neuroscience Press Conference, panel member for "Teen vulnerability: Drug exposure during adolescence has long-lasting consequences", San Diego, CA
- Spring 2010 "Drug abuse in adolescence may impair adult working memory," LAS News, a publication of the College of Liberal Arts & Sciences, University of Illinois, Urbana-Champaign
- 3/16 "Research Unearths the Long-Term Effects of Teen Amphetamine Abuse on the Brain", *The Science Explorer*

PROFESSIONAL ACTIVITIES AND SERVICE

A. Peer Review - Grants

- 10/05 Neurological Foundation of New Zealand, *ad hoc* reviewer
- 3/07 NIH/CSR study section, Behavioral Track Award for Rapid Transition (B/START) program (ZDA1 MXS-M 26); *ad hoc* mail reviewer
- 11/07 NIH/CSR study section, NIDA Training and Career Development Review Committee (NIDA-K); *ad hoc* member
- 2/08 NSF, Graduate Research Fellowship Program review panel
- 2/09 NSF, Graduate Research Fellowship Program review panel
- 6/12, 10/12 NIH/CSR study section, Biobehavioral Regulation, Learning and Ethology (BRLE), *ad hoc* member
- 7/13-6/19 BRLE study section, regular member
- 5/14, 3/15, 11/17 Pennsylvania Department of Health, Master Tobacco Settlement Research Grants, *ad hoc* reviewer
- 5/18 San Antonio Life Sciences Institute Innovation Challenge grants, *ad hoc* reviewer

B. Editorial Boards

- 03/18-ongoing Review Editor, *Frontiers in Systems Neuroscience*

C. Peer Review - Journals

- 2002-ongoing *Ad hoc* reviewer for: *Addiction Biology*; *Behavioural Pharmacology*; *Biological Psychiatry*; *Brain Research*; *Behavioral Brain Research*;

European Journal of Neuroscience; Frontiers in Neuroscience; Journal of Neurochemistry; Journal of Pharmacy and Pharmacology; Neurobiology of Learning and Memory; Neuropharmacology; Neuropsychopharmacology; Neuroscience; Pharmacology, Biochemistry and Behavior; Physiology & Behavior; PLOS One; Psychoneuroendocrinology; Psychopharmacology; and Synapse.

D. Peer Review - Other

2006-ongoing *Ad hoc* reviewer for textbook publishers: *John Wiley & Sons, Inc., Norton, Thomson Wadsworth, Sinauer, Worth Publishers, and Oxford University Press*

PROFESSIONAL SOCIETY MEMBERSHIPS

Association for Psychological Science (APS)
 College on Problems of Drug Dependence (CPDD)
 International Behavioral Neuroscience Society (IBNS)
 Research Society on Alcoholism (RSA)
 Society for Neuroscience (SfN)

INVITED PRESENTATIONS

A. National

Symposia

- 1/02 “Substrate-Mediated Regulation of Neurotransmitter Transporters,” Panel speaker, 35th Annual Winter Conference on Brain Research, Snowmass Village, Aspen, CO
- 1/10 “Different Tokes for Different Folks...,” Panel organizer and speaker, 43rd Annual Winter Conference on Brain Research, Breckenridge, CO
- 1/12 “Stress, Drugs and Alcohol – the adolescent brain on a poorly groomed slope,” Panel organizer and speaker, 45th Annual Winter Conference on Brain Research, Snowbird, UT
- 11/13 “Experiences with drugs during adolescence: Potential mechanism of adolescent vulnerability to addiction as revealed by animal models” Panel speaker, 46th Annual Meeting of the International Society for Developmental Psychobiology, San Diego, CA.
- 6/14 “Adolescence as a critical period for exposure-related developmental effects in humans and animal models” Panel speaker, 2014 Annual Meeting of the Neurobehavioral Teratology Society, Bellevue, WA.
- 1/17 “Navigating the Moguls of Prefrontal Cortex Development: Plasticity and Vulnerability in Adolescence” Panel speaker, 2017 Winter Conference on Brain Research, Big Sky, MT
- 11/17 “Age and sex differences in motivation and the role of cortico-accumbens circuit maturation”, Minisymposium speaker, 2017 Society for Neuroscience Annual Meeting, Washington, DC

- 6/19 “Binge drinking during adolescence: Translational studies in cognition and reward sensitivity.” Panel speaker, 2019 Research Society on Alcoholism annual meeting, Minneapolis, MN

Invited talks

- 12/03 “Individual Differences in Cocaine Response: A Psychobiological Perspective,” Geo-Centers Inc., Wright-Patterson Air Force Base, OH
- 12/03 “Individual Differences in Cocaine Response: A Psychobiological Perspective,” Department of Psychology, Southern Illinois University, Carbondale, IL
- 1/04 “Individual Differences in Cocaine Response: A Psychobiological Perspective,” Department of Psychology, University of Missouri, Columbia, MO
- 2/04 “Individual Differences in Cocaine Response: A Psychobiological Perspective,” Department of Psychology, Northeastern University, Boston, MA
- 2/04 “Individual Differences in Cocaine Response: A Psychobiological Perspective,” Department of Psychology, Florida Atlantic University, Boca Raton, FL
- 2/05 “Individual Differences in Psychostimulant-Induced Behavior: Is DAT It?” Saint Louis University, Department of Psychology
- 4/08 “Preclinical models for studying the neurobiology of addiction-prone individuals” Western Illinois University, Department of Psychology
- 10/09 “Vulnerability to the behavioral and neurobiological consequences of repeated exposure to alcohol, cocaine and amphetamine” Southern Illinois University – Carbondale, Department of Psychology
- 10/14 “Amphetamines during adolescence: #BrainChangers”, Indiana University, Bloomington, Department of Psychology
- 4/17 “Imbalances in brain maturation and their role in adolescent-typical behavior and the consequences of amphetamine abuse”, Illinois State University, Department of Psychology

B. Local

- 1/04 “Individual Differences in Cocaine Response: A Psychobiological Perspective,” Department of Psychology, University of Illinois, Urbana-Champaign
- 2/05 “Individual Differences in Psychostimulant-Induced Behavior: Is DAT It?” Neuroscience Program, University of Illinois, Urbana-Champaign
- 9/06 “Drugs and the adolescent brain,” guest lecture for SW 451: Human Behavior and the Social Environment, University of Illinois, Urbana-Champaign
- 11/06 “The Biology of Drug Use, Abuse and Addiction,” guest lecture for Alcohol and Other Drug Treatment Team seminar, University of Illinois, Urbana-Champaign

- 4/07 Member of a panel assembled to discuss career issues with graduate students, Professional Skills and Development Program through the Neuroscience Program, University of Illinois, Urbana-Champaign
- 2/08 “Addiction as a Brain Disease,” guest lecture for Alcohol and Other Drug Treatment Team seminar, University of Illinois, Urbana-Champaign
- 3/11 guest lecturer, VCM 590: Neurotoxicology seminar
- 2/12 “What can rat’s tell us about the effects of repeated amphetamine exposure during adolescence?”, Developmental division brown bag, Department of Psychology, University of Illinois, Urbana-Champaign
- 4/12 Guest lecturer, PSYC 421: Principles of Psychophysiology
- 3/13 Guest lecturer, MCB 529: Biological Rhythms in Health and Disease
- 4/14 Guest lecturer, NEUR 462: Integrative Neuroscience
- 10/14 Guest lecturer, CB 552: Ethics in Toxicology
- 09/15 Guest lecturer, PSYC 336: Alcohol and Alcoholism
- 09/16 Guest lecturer, PSYC 336: Alcohol and Alcoholism
- 09/16 Guest lecturer, CB 552: Ethics in Toxicology
- 08/17 Guest lecturer, PSYC 336: Alcohol and Alcoholism

PEER-REVIEWED PUBLICATIONS

A. Under review (or revision following initial review)

B. Published

1. Gulley RM, Vander Pleog N, Gulley JM (1993). Treatment of hyperemesis gravidarum with nasogastric feeding. *Nutrition in Clinical Practice*, 8:33-35.
2. Gulley JM, McNamara C, Barbera TJ, Ritz MC, George FR (1995). Selective serotonin reuptake inhibitors: Effects of chronic treatment on ethanol-reinforced behavior in mice. *Alcohol*, 12: 177-181.
3. Gulley JM, Billman SP, Gilliam DM, George FR (1999). Operant self-administration of ethanol in mice prenatally exposed to cocaine. *Journal of Addictive Diseases*, 18: 77-89.
4. Gulley JM, Rebec GV (1999). Modulatory effects of ascorbate, alone or with haloperidol, on a lever-release conditioned avoidance response task. *Pharmacology, Biochemistry and Behavior*, 63: 125-129.
5. Gulley JM, Kuwajima M, Mayhill E, Rebec GV (1999). Behavior-related changes in the activity of substantia nigra pars reticulata neurons in freely moving rats. *Brain Research*, 845: 68-76
6. Gulley JM, Kosobud AEK, Rebec GV (2002). Behavior-related modulation of substantia nigra pars reticulata neurons in rats performing a conditioned reinforcement task. *Neuroscience*, 111:337-349.
7. Gulley JM, Kosobud AEK, Rebec GV (2002). Amphetamine inhibits behavior-related neuronal responses in substantia nigra pars reticulata of rats working for sucrose reinforcement. *Neuroscience Letters*, 322:165-168.
8. Gulley JM, Doolen S, Zahniser NR (2002). Brief, repeated exposure to substrates down-regulates dopamine transporter function in *Xenopus* oocytes *in vitro* and rat dorsal striatum *in vivo*. *Journal of Neurochemistry*, 83:400-411.

9. Gulley JM, Hoover BR, Larson GA, Zahniser NR (2003). Individual differences in cocaine-induced locomotor activity in rats: behavioral characteristics, cocaine pharmacokinetics and the dopamine transporter. *Neuropsychopharmacology*, 28:2089-2101.
10. Gulley JM, Zahniser NR (2003). Rapid regulation of dopamine transporter function by substrates, blockers and presynaptic receptor ligands. *European Journal of Pharmacology*, 479:139-152.
11. Briegleb SK, Gulley JM, Hoover BR, Zahniser NR (2004). Individual differences in cocaine- and amphetamine-induced activation of male Sprague-Dawley rats: contribution of the dopamine transporter. *Neuropsychopharmacology* 29: 2168-2179.
12. Gulley JM, Reed JL, Kuwajima M, Rebec GV (2004). Amphetamine-induced behavioral activation is associated with variable changes in basal ganglia output neurons in awake, behaving rats. *Brain Research* 1012:108-118.
13. Hanania T, Gulley JM, Salaz DO, Larson GA, Zahniser NR (2004). Role of the dopamine transporter in the differential cocaine-induced locomotor activation of inbred long-sleep and short-sleep mice. *Neuropsychopharmacology* 29: 1814-1822.
14. Allen RM, Everett CV, Nelson AM, Gulley JM, Zahniser NR (2007). Low and high locomotor responsiveness to cocaine predicts intravenous cocaine conditioned place preference in male Sprague-Dawley rats. *Pharmacology, Biochemistry and Behavior*, 86: 37-44. (<http://dx.doi.org/10.1016/j.pbb.2006.12.005>)
15. Gulley JM (2007). Individual differences in novelty- and cocaine-induced locomotor activity as predictors of food-reinforced operant behavior in two outbred rat strains. *Pharmacology, Biochemistry and Behavior*, 86: 749-757. (<http://dx.doi.org/10.1016/j.pbb.2007.03.002>)
16. Gulley JM, Everett CV, Zahniser NR (2007). Inbred Lewis and Fischer 344 rat strains differ in not only novelty- and amphetamine-induced behaviors, but also dopamine transporter activity *in vivo*. *Brain Research*, 1151: 32-45. (<http://dx.doi.org/10.1016/j.brainres.2007.03.009>)
17. Hall DA, Stanis JJ, Avila HM, Gulley JM (2008). A comparison of amphetamine- and methamphetamine-induced locomotor activity in rats: evidence for qualitative differences in behavior. *Psychopharmacology*, 195:469-78. (<http://dx.doi.org/10.1007/s00213-007-0923-8>)
18. Stanis JJ, Marquez Avila H, White MD, Gulley JM (2008). Dissociation between long-lasting behavioral sensitization to amphetamine and impulsive choice in rats performing a delay-discounting task. *Psychopharmacology*, 199:539-548. (<http://www.springerlink.com/content/235g54041v048410/>)
19. Stanis JJ, Burns RD, Sherrill LK, Gulley JM (2008). Disparate cocaine-induced locomotion as a predictor of choice behavior in rats trained in a delay-discounting task. *Drug and Alcohol Dependence*, 98:54-62. (<http://dx.doi.org/10.1016/j.drugalcdep.2008.04.009>).
20. Klein DA, Gulley JM (2009). Reduced sensitivity to the locomotor-stimulant effects of cocaine is associated with increased sensitivity to its discriminative stimulus properties. *Behavioural Pharmacology*, 20:67-77. (<http://dx.doi.org/10.1097/FBP.0b013e3283242fdd>)
21. Hall DA, Powers JP, Gulley JM (2009). Blockade of D1 dopamine receptors in the medial prefrontal cortex attenuates amphetamine- and methamphetamine-induced locomotor activity in the rat. *Brain Research*, 1300:51-7. (<http://dx.doi.org/10.1016/j.brainres.2009.08.084>)

22. Gulley JM, Stanis JJ (2010). Adaptations in medial prefrontal cortex function associated with amphetamine-induced behavioral sensitization. *Neuroscience*, 166:615-624. (<http://dx.doi.org/10.1016/j.neuroscience.2009.12.044>)
23. Romanova EV, Lee JE, Kelleher NL, Sweedler JV, Gulley JM (2010). Mass spectrometry screening reveals peptides modulated differentially in the medial prefrontal cortex of rats with disparate initial sensitivity to cocaine. *The AAPS Journal*, 12:443-54. (<http://dx.doi.org/10.1208/s12248-010-9204-2>)
24. Hall DA, Gulley JM (2011). Disruptive effect of amphetamines on Pavlovian to instrumental transfer. *Behavioural Brain Research*, 216:440-5. (<http://dx.doi.org/10.1016/j.bbr.2010.08.040>)
25. Sherrill LK, Koss WA, Foreman ES, Gulley JM (2011). The effects of prepubertal gonadectomy and binge-like ethanol exposure during adolescence on ethanol drinking in adult male and female rats. *Behavioural Brain Research*, 216:569-75. (<http://dx.doi.org/10.1016/j.bbr.2010.08.048>)
26. Sherrill LK, Berthold C, Koss WA, Juraska JM, Gulley JM (2011). Sex differences in the effects of ethanol pre-exposure during adolescence on ethanol-induced conditioned taste aversion in adult rats. *Behavioural Brain Research*, 225:104-9. (<http://dx.doi.org/10.1016/j.bbr.2011.07.003>)
27. Koss WA, Sadowski RN, Sherrill LK, Gulley JM, Juraska JM (2012). Effects of ethanol during adolescence on the number of neurons and glia in the medial prefrontal cortex and basolateral amygdala of adult male and female rats. *Brain Research*, 1466:24-32. (<http://dx.doi.org/10.1016/j.brainres.2012.05.023>)
28. Romanova EV, Lee JE, Kelleher NL, Sweedler JV, Gulley JM (2012). Comparative peptidomics analysis of neural adaptations in rats repeatedly exposed to amphetamine. *Journal of Neurochemistry*, 123:276-87. (<http://dx.doi.org/10.1111/j.1471-4159.2012.07912.x>)
29. Sherrill LK, Stanis JJ, Gulley JM (2013). Age-dependent effects of repeated amphetamine exposure on working memory in rats. *Behavioural Brain Research*, 242:84-94. (<http://dx.doi.org/10.1016/j.bbr.2012.12.044>)
30. Hankosky ER, Gulley JM (2013). Performance on an impulse control task is altered in adult rats exposed to amphetamine during adolescence. *Developmental Psychobiology*, 55:733-744 (<http://dx.doi.org/10.1002/dev.21067>)
31. Gulley JM, Juraska JM (2013). The effects of abused drugs on adolescent development of corticolimbic circuitry and behavior. *Neuroscience*, 249:3-20. (<http://dx.doi.org/10.1016/j.neuroscience.2013.05.026>)
32. Hankosky ER, Kofsky NM, Gulley JM (2013). Age of exposure-dependent effects of amphetamine on behavioral flexibility. *Behavioral Brain Research*, 252:117-25. (<http://dx.doi.org/10.1016/j.bbr.2013.06.002>)
33. Hammerslag LR, Gulley JM (2014). Age and sex differences in reward learning in adolescent and adult rats. *Developmental Psychobiology*, 56:611-621. (<http://dx.doi.org/10.1002/dev.21127>)
34. Hammerslag LR, Waldman AJ, Gulley JM (2014). Effects of amphetamine exposure in adolescence or young adulthood on inhibitory control in adult male and female rats. *Behavioral Brain Research*, 263:22-33. (<http://dx.doi.org/10.1016/j.bbr.2014.01.015>)
35. Hammerslag LR, Gulley JM (2016). Sex differences in behavior and neural development and their role in adolescent vulnerability to substance use. *Behavioral Brain Research*, 298:15-26. (<http://dx.doi.org/10.1016/j.bbr.2015.04.008>)

36. Kougias DG, Nolan SO, Koss WA, Kim T, Hankosky ER, Gulley JM, Juraska JM (2016). Beta-hydroxy-beta-methylbutyrate (HMB) ameliorates aging effects in the dendritic tree of pyramidal neurons in the medial prefrontal cortex of both male and female rats. *Neurobiology of Aging*, 40:78-85.
(<http://dx.doi.org/10.1016/j.neurobiolaging.2016.01.004>)
37. Kang S*, Paul K*, Hankosky ER, Cox CL, Gulley JM (2016). D₁ receptor-mediated inhibition of medial prefrontal cortex neurons is disrupted in adult rats exposed to amphetamine in adolescence. *Neuroscience*, 324:40-49. (*co-first author)
(<http://dx.doi.org/10.1016/j.neuroscience.2016.02.064>)
38. Paul K*, Kang S*, Cox CL, Gulley JM (2016). Repeated exposure to amphetamine during adolescence alters inhibitory tone in the medial prefrontal cortex following drug re-exposure in adulthood. *Behavioral Brain Research*, 309:9-13. (*co-first author)
(<http://dx.doi.org/10.1016/j.bbr.2016.04.018>)
39. Kang S, Wu MM, Galvez R, Gulley JM (2016). Timing of amphetamine exposure in relation to puberty onset determines its effects on anhedonia, exploratory behavior, and dopamine D₁ receptor expression in young adulthood. *Neuroscience*, 339:72-84.
(<https://doi.org/10.1016/j.neuroscience.2016.09.044>)
40. Hankosky ER, Sherrill LK, Ruvola LA, Haake RM, Kim T, Hammerslag LR, Kougias DG, Juraska JM, Gulley JM (2017). Effects of β -hydroxy- β -methyl butyrate (HMB) on working memory and cognitive flexibility in an animal model of aging. *Nutritional Neuroscience*, 20:379-387 (<http://dx.doi.org/10.1080/1028415X.2016.1145376>)
41. Kougias DG, Hankosky ER, Gulley JM, Juraska JM (2017). Beta-hydroxy-beta-methylbutyrate (HMB) ameliorates age-related deficits in water maze performance, especially in male rats. *Physiology & Behavior* 170:93-99.
(<http://dx.doi.org/10.1016/j.physbeh.2016.12.025>)
42. Walker DM, Bell MR, Flores C, Gulley JM, Willing J, Paul MJ (2017). Adolescence and reward: Making sense of neural and behavioral changes amid the chaos. *Journal of Neuroscience*. 37:10855-10866. (<https://doi.org/10.1523/JNEUROSCI.1834-17.2017>)
43. Hankosky ER, Westbrook SR, Haake RM, Marinelli M, Gulley JM (2018). Reduced sensitivity to reinforcement in adolescent compared to adult Sprague-Dawley rats of both sexes. *Psychopharmacology*, 235:861-871. ([10.1007/s00213-017-4804-5](https://doi.org/10.1007/s00213-017-4804-5))
44. Westbrook SR, Hankosky ER, Dwyer MR, Gulley JM (2018). Age and sex differences in behavioral flexibility, sensitivity to reward value, and risky decision-making. *Behavioral Neuroscience* 132:75-87. (<https://doi.org/10.1037/bne0000235>)
45. Hankosky ER, Westbrook SR, Haake RM, Willing J, Raetzman LT, Juraska JM, and Gulley JM (2018). Age- and sex-dependent effects of methamphetamine on cognitive flexibility and 5-HT_{2C} receptor localization in the orbitofrontal cortex of Sprague-Dawley rats. *Behavioral Brain Research* 349:16-24. (<https://doi.org/10.1016/j.bbr.2018.04.047>)
46. Westbrook SR, Kang M, Sherrill LK, O'Hearn D, Krishnamania T, and Gulley JM (2018). Sex differences in adolescent ethanol drinking to behavioral intoxication. *Journal of the Experimental Analysis of Behavior* 110:54-62 (<http://dx.doi.org/10.1002/jcab.440>)
47. Sherrill LK, Gulley JM (2018). Effects of amphetamine exposure during adolescence on behavior and prefrontal cortex neuron activity in adulthood. *Brain Research* 1694:111-120 (<https://doi.org/10.1016/j.brainres.2018.05.028>)
48. Kang S, Cox CL, Gulley JM (2018). High frequency stimulation-induced plasticity in the prefrontal cortex of rats emerges during adolescent development and is associated with an

increase in dopamine receptor function. *Neuropharmacology* 141:158-166.

(<https://doi.org/10.1016/j.neuropharm.2018.08.037>)

49. Hammerslag, L. R., Belagodu, A. P., Aladesuyi Arogundade, O. A., Karountzos, A. G., Guo, Q., Galvez, R., Roberts, B. W., and Gulley, J. M. (2019) Adolescent impulsivity as a sex-dependent and subtype-dependent predictor of impulsivity, alcohol drinking and dopamine D₂ receptor expression in adult rats. *Addiction Biology*, 24:193-205.

(<https://doi.org/10.1111/adb.12586>)

CHAPTERS IN EDITED VOLUMES

1. Gulley JM, Larson GA, Zahniser NR (2007). Using high-speed chronoamperometry coupled with local dopamine application to assess dopamine transporter function, in *Electrochemical Methods in Neuroscience*, Michael AC and Borland LM (Eds.), CRC Press, Boca Raton, FL, pp. 83-102.
2. Hankosky ER, Gulley JM (2016). Adolescent exposure to amphetamines and vulnerability to addiction, in *The Neuropathology of Drug Addictions and Substance Misuse*, Preedy VR (Ed), Academic Press, pp. 292-299.

ABSTRACTS AND CONFERENCE PROCEEDINGS (2015-present)

1. Kang S, Wu M, Galvez R, Gulley JM (2015). Amphetamine exposure during adolescence alters anxiety- and depression-like behaviors and prefrontal dopamine receptor expression in young adulthood. Poster presentation at the Annual Meeting of the College on Problems of Drug Dependence.
2. Sherrill LK, Gulley JM (2015). Amphetamine exposure during adolescence alters behavior, dopamine receptors and medial prefrontal cortex function in adulthood. Poster presentation at the Annual Meeting of the College on Problems of Drug Dependence.
3. Hammerslag LR, Contreras-Rogers AJ, Shah PB, Marks AN, Gulley JM (2015). Effects of amphetamine exposure during adolescence on orbitofrontal cortex neurons that encode goal-directed and habitual behaviors. Poster presentation at the Annual Meeting of the Society for Neuroscience, Chicago, IL.
4. Hankosky ER, Haake RM, Gold AR, Kroeger EC, Gulley JM (2015). Age- and sex-dependent differences in acquisition and persistence of methamphetamine self-administration. Poster presentation at the Annual Meeting of the Society for Neuroscience, Chicago, IL.
5. Kang S, Cox CL, Gulley JM (2015). The effects of amphetamine on synaptic plasticity in the medial prefrontal cortex are more pronounced in adolescent- compared to adult-exposed rats. Poster presentation at the Annual Meeting of the Society for Neuroscience, Chicago, IL.
6. Kougiyas DG, Nolan SO, Kim T, Koss WA, Gulley JM, Juraska JM (2015). Long-term HMB supplementation ameliorates aging effects in the dendritic morphology of mPFC layer 5 pyramidal neurons in aged male and female rats. Poster presentation at the Annual Meeting of the Society for Neuroscience, Chicago, IL.
7. Westbrook SR, Hankosky ER, Haake RM, Dwyer MR, Gulley JM (2015). The effects of unit dose on age- and sex-dependent differences in methamphetamine self-administration. Poster presentation at the Annual Meeting of the Society for Neuroscience, Chicago, IL.

8. Sandoval, R.D., Westbrook, S.R., & Gulley, J.M. (2015). Differences in reward behavior in adolescent female and male rats. Abstract and poster presentation at the Annual Biomedical Research Conference for Minority Students, Seattle, WA, November 11-14, 2015.
9. Westbrook, S.R., Dwyer, M.R., & Gulley J.M. (2016). Adolescent and Adult Rats Similarly Update the Value of Rewards Following Their Devaluation. Abstract and poster presentation at the Annual Association for Psychological Science Conference, Chicago, IL, May 26-29, 2016.
10. Gulley, J.M. (2017). Age and sex differences in motivation and the role of cortico-accumbens circuit maturation. Minisymposium presentation at the Annual Meeting of the Society for Neuroscience, Washington, DC.
11. Kang S, Haynes ML, Barros TM, Gulley JM (2018). Effects of amphetamine exposure during adolescence or adulthood on cognitive flexibility and synaptic plasticity in the prefrontal cortex and nucleus accumbens. Program No. 235.17. Abstract and poster presentation at the Annual Meeting of the Society for Neuroscience, San Diego, CA.
12. Westbrook SR, Dwyer MR, Cortes LR, Gulley JM (2018). Age-of-onset and sex influence escalation of methamphetamine self-administration and drug-induced deficits in recognition memory in Sprague-Dawley rats. Program No. 235.18. Abstract and poster presentation at the Annual Meeting of the Society for Neuroscience, San Diego, CA.