# KARIN ELIZABETH GILL, PH.D.



Associate Professor of Behavioral Neuroscience Centre College 218 Young Hall 600 West Walnut Street Danville, KY 40422 859-238-6513

karin.gill@centre.edu

# **EDUCATION**

Ph.D. Experimental Psychology (2015)

Behavioral Neuroscience and Psychopharmacology

University of Kentucky

Lexington, KY

Advisor: Chana K. Akins, Ph.D.

Dissertation Committee: Drs. Chana Akins, Susan

Barron, Kimberly Nixon (outside examiner), Mark

Prendergast, & David Westneat

*Graduate Certificate (2013)* 

College Teaching & Learning

University of Kentucky

Lexington, KY

M.S. Experimental Psychology (2011)

Behavioral Neuroscience and Psychopharmacology

University of Kentucky

Lexington, KY

Advisor: Chana K. Akins, Ph.D.

Thesis Committee: Drs. Chana Akins, Mike Bardo, &

Susan Barron

B.S. Psychology (2005)

Minors: Biology, Sociology

University of North Carolina at Charlotte

Charlotte, NC

# PROFESSIONAL EXPERIENCE

2022-Present

**Associate Professor** 

Behavioral Neuroscience Program

Centre College

2015-2016

Visiting Assistant Professor

Behavioral Neuroscience Program

Centre College

08/2014 - 12/2014

Adjunct Instructor

Eastern Kentucky University

Department of Psychology

2016-2022

Tenure-Track Assistant Professor

Behavioral Neuroscience Program

Centre College

2009-2015

Teaching Assistant/Research Assistant

University of Kentucky

Laboratory of Dr. Chana K. Akins

Teaching Assistant for Drs. Andrea Friedrich, Ray

Archer, Chana Akins, Hui Chu, and Lynda Sharrett

# **TEACHING EXPERIENCE**

**Centre College** 

PSY 110: Introduction to Psychology

F15, S16, F16, F18

PSY 110L: Introduction to Psychology Laboratory F15, S16, F16, F18, S22 BNS 210: Experimental Design: Behavioral Neuroscience S17, S18, S19, F19, S20, F20, S21, F21, S22, S23 PSY 295: Physiological Psychology F15, S16, S17, F17, S18, S19 PSY 305: The Psychology of Learning F20 PSY 305L: The Psychology of Learning Laboratory F16, F17, F18, F19, F20 PSY 350/351: Advanced Research Topics F17, F19, S21, S23 BNS 360: Drugs, Brain, and Behavior F21, S23 BNS 380: Behavioral Neuroendocrinology F16, F18, S20, S21, S22

# **Eastern Kentucky University**

PSY 200: Introductory Psychology F14 (two sections)

# **University of Kentucky**

PSY 100L: Introduction to Psychology Laboratory
PSY 215L: Experimental Psychology Laboratory
PSY 311: Learning & Cognition
PSY 312: Brain and Behavior

F13 (four sections), F14 (two sections)
F10 (two sections), S14 (two sections)
S15
Sum13

PSY 456L: Behavioral Neuroscience Laboratory F12 (two sections)

# **PUBLICATIONS** (\*denotes undergraduate student)

- Gill, K.E., \*McGarrigle, W.J., \*Neel, A.I., \*Tonto, D.O., & \*Greenleaf, K.L. (2022) D2 receptor antagonism enhances cocaine-induced behavioral sensitization in female, but not male Japanese quail. Manuscript accepted with minor revisions to Behavioural Pharmacology.
- Akins, C.K., Bolin, B.L., & Gill, K.E. (2017). Cocaine pre-exposure enhances sexual conditioning and increases resistance to extinction in male Japanese quail. *Learning & Behavior*, 45 (3), 313-322.
- Gill, K.E., Reynolds, A.R., Prendergast, M.A., & Akins, C.K. (2016). Female Japanese quail with high levels of estradiol demonstrate cocaine-induced conditioned place preference. *Experimental & Clinical Psychopharmacology*, 24 (3), 185-192.
- Gill, K.E., Madison, F.N., & Akins, C.K. (2015). Cocaine-induced sensitization correlates with testosterone in male Japanese quail but not with estradiol in female Japanese quail. *Hormones & Behavior*, 67, 21-27. doi:10.1016/j.yhbeh.2014.11.006
- Gill, K.E., Rice, B.A., & Akins, C.K. (2015). Cocaine induces state-dependent learning of sexual conditioning in male Japanese quail. *Physiology & Behavior*, 138, 150-153. doi:10.1016/j.physbeh.2014.10.020
- Bolin, B.L., \*Cornett, H.L., \*Barnes, A.F., **Gill, K.E.**, & Akins, C.K. (2012). Nicotine induces a conditioned place preference in male Japanese quail (*Coturnix japonica*). *Physiology & Behavior*, 107 (3), 364-367. doi:10.1016/j.physbeh.2012.08.005

# **INVITED TALKS**

**Gill, K.E.** (April, 2021) *It's Not Rocket Science: Breaking Down Complex Material through Memorable Activities.* Talk presented in the Teaching in the Behavioral Sciences with Activities and Laboratory Experiments Symposium at the Midwestern Psychological Association annual convention, Chicago, IL, virtual presentation.

# STUDENT RESEARCH MENTORSHIP/TRAINING

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Centre College	
2021-Present	Molly Samonds, 2024 undeclared
2021-Present	Emma Ridener, 2023 BNS Major
2021-Present	Lauren Chatfield, 2023 BNS Major
2021-2022	Alexandria Coffin, 2022 BNS Major
2021-2022	Elsie Mead, 2022 BNS Major
2020-2021	Kylie Cochran, 2021 BNS Major
2020-2021	Katy Haering, 2021 BNS Major
2019-2021	Breanna Roberts, 2021 BNS Major
2019-2020	Zena Maddux, 2020 BNS Major
2019-2020	Emily Stone, 2020 BNS Major
2019	Neha Rao, 2019 BNS major
2018-2021	Anna "Izzy" Neel, 2021 BNS Major
2018-2020	Kat Greenleaf, 2020 BNS major
2018-2019	Derrick Osei Wiafe Tonto, 2019 BNS major
2018-2019	Claire Samuels, 2019 PSY major
2017-2019	Lillie Dickman, 2019 BNS major
2017-2019	Dayera Vance, 2019 BNS major
2017-2018	Shain Mays, 2018 BNS major
2017-2018	Elijah Rue, 2019 BNS major
2016-2018	Yanisa Robbins, 2018 BNS major
2016-2018	Hudson Smith, 2018 PSY major
2016-2018	William McGarrigle, 2018 BNS major
2016-2018	Caleb Scrogham, 2018 BNS major
2015-2016	Kayla Morris, 2016 BNS major, co-mentored with Dr. Brian Cusato

# **University of Kentucky**

2014-2015	Lucas Nyerges, 2017 PSY major
2013-2015	Emily Edmiston, 2015 PSY & Neuroscience major
2012-2014	Joshua Shouse, 2014 PSY & Neuroscience major
2012-2013	Charlie Deese, 2014 PSY major
2012-2013	Aaron Barr, 2014 PSY major
2010-2011	Patrick Young, 2011 PSY major
2009-2010	David Arndt, 2010 PSY major

# **COLLABORATIVE WORK WITH CENTRE STUDENTS**

# Grants

Summer 2021 FDC Faculty Research, Lauren Chatfield (2023, BNS major) and Elsie Mead (2022, BNS

major)

Project titled, The effect of estradiol and testosterone on cocaine-induced behavioral

sensitization in male Japanese quail.

Summer 2018 FDC Faculty Research, Kat Greenleaf (2020, BNS major) and Anna "Izzy" Neel (2021

undeclared)

Kentucky West Virginia Alliance for Minority Participation LSAMP, Derrick Osei Wiafe

Tonto (2019, BNS major)

Project titled, Hormonal control of alcohol-induced aggression in male Japanese quail.

Summer 2017 FDC Faculty Research, Yanisa Robbins (2018 BNS major) and Hudson Smith (2018 PSY

Lauren Chatfield, Title IX intern at the Centre College Title IX Office

major)

Kentucky West Virginia Alliance for Minority Participation LSAMP, Dayera Vance (2019)

BNS major)

Project titled, Cocaine-induced locomotor activity and conditioned place preference in male

and female Japanese quail.

# **Internships**Spring 2022

Spring 2022	Lauren Chatheid, Thie IX intern at the Centre Conege Thie IX Office
CentreTerm 2022	Will Leonberger, "Jail to Job" intern at the Shepard's House
CentreTerm 2022	Pranay Mupparaju, TMS Therapy Intern at the Nashville Center for Hope and Healing
Fall 2021	Lily Andersen, Speech & Language Pathology Intern at Wilderness Trace
Spring 2021	Jill Nofziger, Virtual Learning & Memory Intern at the University of Dublin
Spring 2021	Lily Murphy, Substance Abuse Intern at New Vista
CentreTerm 2021	Kylie Cochran, Orthopedics Practice Intern at Orthopaedics Associates of Kentuckiana
CentreTerm 2021	Emily Doyle, Allergy Clinic Intern at Ellis & Badenhausen
CentreTerm 2021	Brooks Owen, TMS Therapy Intern at the Nashville Center for Hope and Healing
Summer 2020	Lauren Robinson, Internal & Nutritional Medicine Intern at Remedy Wellness
CentreTerm 2020	Kylie Cochran, Hospital Administration Intern at Ephraim McDowell Medical Center
CentreTerm 2020	Jordan Sigal, Athletic Training Intern at Centre College
CentreTerm 2020	Caroline Stallings, Speech-Language Pathology Intern at Kentucky School for the Deaf
Fall 2019	Anna "Izzy" Neel, Drug/Alcohol Research Intern at University of Kentucky
Spring 2019	Lillie Dickman, Physical Therapy Intern at Danville Orthopedics and Sports Medicine
CentreTerm 2019	Hannah Bandura, CASA Intern at CASA of the Bluegrass
CentreTerm 2019	Lauren Robinson, Foundation Intern at Trilogy Health Services
CentreTerm 2018	Sierra Panting, Medical Intern at Ephraim McDowell
Summer 2018	Natalie Miskofsky-Forester, Law Firm Intern at Miller, Griffin, and Marks

# **Regional Presentations**

Chatfield, L., Mead, E., & Gill, K.E. (April 2022). *Effects of estradiol on cocaine-induced locomotor activity in male Japanese quail*. Poster presented at the Midwestern Psychological Association annual convention, Chicago, IL.

Neel, A.I., Roberts, B., Cochran, K., Haering, K., & **Gill, K.E.** (April 2021). *The role of the 5-HT2A receptor in cocaine-induced locomotor sensitization in Japanese Quail*. Poster presented at the Midwestern Psychological Association annual convention, Chicago, IL, virtual event.

Neel, A.I., Roberts, B., Maddux, Z., Stone, E., & Gill, K.E. (April 2021). *Hormonal control of alcohol-induced aggression in male Japanese Quail*. Poster presented at the Midwestern Psychological Association annual convention, Chicago, IL, virtual event.

Neel, A.I., Greenleaf, K., Tonto, D., & Gill, K.E. (November 2020) D2 Receptor Antagonism Affects Cocaine-Induced Behavior Sensitization in Japanese Quail. Oral presentation at the Kentucky Academy of Science (KAS) annual meeting, virtual event. (1st place student competition winner – Physiology/Biochemistry Division)

Neel, A.I., Greenleaf, K., & Gill, K.E. (April 2020) D2 Receptor Antagonism Affects Cocaine-Induced Behavioral Sensitization in Japanese Quail. Poster accepted for the Midwestern Psychological Association annual convention, Chicago, IL. \*\*Cancelled due to COVID-19\*\*

Maddux, Z., Stone, E., Roberts, B. & **Gill, K.E.** (April 2020) *Hormonal Control of Alcohol-Induced Aggression in Male Japanese Quail.* Poster accepted for the Psi Chi section at the Midwestern Psychological Association annual convention, Chicago, IL. \*\*Cancelled due to COVID-19\*\*

Neel, A.I., Greenleaf, K., Tonto, D., & Gill, K.E. (April 2019) *D2 Receptor Antagonism on Cocaine-Induced Locomotion in Japanese Quail*. Poster presented at the Midwestern Psychological Association annual convention, Chicago, IL.

Robbins, Y., Smith, H., Vance, D., & Gill, K.E. (April 2018) *The Effects of Gonadal Sex Hormones on Cocaine Reward in Female Japanese quail.* Poster presented at the Midwestern Psychological Association annual convention, Chicago, IL.

Dickman, L., McGarrigle, W., Scrogham, C., & Gill, K.E. (April 2018) *Cocaine-Induced Locomotor Activity and Sensitization in Japanese quail*. Poster presented at the Midwestern Psychological Association annual convention, Chicago, IL.

#### **RICE Presentations**

Coffin, A. & Ridener, E. (April 2022). *Examining the Role of Estrogen (E2) and Cocaine in Conditioned Place Preference in Japanese Quail.* Poster presented at the annual RICE (Research-Internships-Creative Endeavors) Symposium, Centre College, Danville, KY.

Cochran, K. & Haering, K. (April 2021) Examining the Role of Risperidone in Dopaminergic and Serotonergic Mechanisms Underlying Cocaine-Induced Sensitization in Japanese quail. Poster presented at the annual RICE (Research-Internships-Creative Endeavors) Symposium, Centre College, Danville, KY.

Neel, A.I. & Roberts, B. (April 2021) *Hormonal Control of Alcohol-Induced Aggression in Male Japanese quail.*Poster presented at the annual RICE (Research-Internships-Creative Endeavors) Symposium, Centre College, Danville, KY.

Dickman, L., Samuels, C., & Rao N. (April 2019) *The Role of Epinephrine in Enhancing Rewarding Behavior of Cocaine in Japanese quail.* Oral presentation at the annual RICE (Research-Internships-Creative Endeavors) Symposium, Centre College, Danville, KY.

Vance, D., Neel, A.I., Tonto, D.O. (April 2019) *The Effects of Gonadal Sex Hormones on Cocaine Reward in Female Japanese quail.* Poster presented at the annual RICE (Research-Internships-Creative Endeavors) Symposium, Centre College, Danville, KY.

Robbins, Y. & Smith, H. (April 2017). *The Effects of Estradiol and Progesterone on the Rewarding Properties of Cocaine in Female Japanese quail*. Poster presented at the annual RICE (Research-Internships-Creative Endeavors) Symposium, Centre College, Danville, KY.

Scrogham, C. & McGarrigle, W. (April 2017) *Cocaine-induced locomotor activity, sensitization, and dopaminergic activity in Japanese quail.* Oral presentation at the annual RICE (Research-Internships-Creative Endeavors) Symposium, Centre College, Danville, KY.

Morris, K. (April 2016). *Effect of Sex in Nicotine Reinforcement in Japanese quail (Coturnix japonica)*. Poster presented at the annual RICE (Research-Internships-Creative Endeavors) Symposium, Centre College, Danville, KY.

# ADDITIONAL PRESENTATIONS (\*denotes undergraduate student)

Eaton, S.E., **Gill, K.E.**, & Akins, C.K. (June 2017) *Estradiol Mediates Cocaine-Induced Locomotion in Japanese quail*. Poster presented at the annual Society for Behavioral Neuroendocrinology convention, Long Beach, CA.

Gill, K.E., \*Edmiston E.A., & Akins, C.K. (March 2015). Cocaine-induced Locomotor Activity and Conditioned Place Preference in Female Japanese Quail. Poster presented at the annual Bluegrass Society for Neuroscience Spring Neuroscience Day, Lexington, KY.

\*Edmiston, E., **Gill, K.E.**, & Akins, C.K. (April 2014). Sex Differences in Cocaine-Induced Sensitization in Japanese Quail. Poster presented at the National Conference on Undergraduate Research convention, Lexington, KY.

Gill, K.E. & Akins, C.K. (June 2013). Effects of Photocastration in Cocaine Sensitization between Male and Female Japanese Quail (Coturnix japonica). Poster presented at the annual Society for Behavioral Neuroendocrinology convention, Atlanta, GA.

**Gill, K.E.** & Akins, C.K. (May 2013). Sex Differences in Behavioral Sensitization to Cocaine in Japanese quail. Poster presented at the Midwestern Psychological Association annual convention, Chicago, IL.

Gill, K.E. & Akins, C.K. (April 2013). Sex Differences in the Locomotor-Enhancing Effects of Cocaine in Japanese quail. Poster presented at the annual Bluegrass Society for Neuroscience Spring Neuroscience Day, Lexington, KY.

**Gill, K.E.**, Bolin, B.L., & Akins, C.K. (August 2012). *Sex Differences in Behavioral Sensitization to Cocaine in Japanese quail*. Poster presented at the American Psychological Association annual convention, Orlando, FL.

**Gill, K.E.**, Bolin, B.L., & Akins, C.K. (November 2011). *Sex Differences in Behavioral Sensitization to Cocaine in Japanese quail*. Poster presented at the Society for Neuroscience annual meeting, Washington, D.C.

Gill, K.E., Bolin, B.L., & Akins, C.K. (March 2011). Sex Differences in Behavioral Sensitization to Cocaine in Japanese quail. Poster presented at the annual Bluegrass Society for Neuroscience Spring Neuroscience Day, Lexington, KY.

# COMMITTEE SERVICE FOR CENTRE COLLEGE

# **Elected Committee Member**

College Council Division III Representative 2016-2019 Faculty Development Division III Representative 2019-2020

# **Appointed Committee Chair**

Undergraduate Research, Co-Chair with Dr. Karoline Manny
Undergraduate Research, Co-Chair with Dr. Eva Cadavid
2019-2021
BNS 2-yr Visiting Search, hired Dr. Genevieve Bell
2019-2020
Undergraduate Research, Co-Chair with Dr. Amy Frederick
2018-2019

# **Appointed Committee Member**

Institutional Animal Care and Use 2020 (Spring), 2018 (Spring)

Division III Safety 2020-2021, 2017-2019

Undergraduate Research 2017-2018
PSY Visiting Search, hired Dr. Drew Morris 2018 (Spring)
Enrollment Management 2016-2017

# OTHER PROFESSIONAL SERVICE

# **Centre College**

UGR Convocation Organizer: Alumni Panel on the impact of UGR

Convocation Organizer: Drug Talk and Narcan Training with Amy Anness

March 2022

Division III Summer Symposium Co-Organizer Summer 2021, 2019

Convocation/Faculty Workshop Co-Organizer: UGR with Dr. Jenny Shanahan April 2021

CCPD Emerging Professionals Series, Research Internships Panelist Sept. 2021, 2020, 2019, 2018

Organizer for UGR Faculty Luncheon Conversation Nov. 2019
Interviewer for Lincoln Scholars Finalists April 2019

BNS/PSY Program Flyers Sept. 2018, Sept. 2017

SPARK Diversity Fishbowl Panelist

RICE Oral Session 2D Moderator

Convocation Organizer: Opiate Epidemic with Dr. Hiram Polk

Oct. 2017

Open House Faculty/Staff Reception, BNS/PSY representative May 2018, March 2017

Meet the BNS/PSY Faculty Night Nov. 2018, Mar. 2018, Mar. 2017,

Mar. 2016

# **University of Kentucky**

2021

Graduate Student Handbook Development Committee Fall 2014
Teaching Introductory Psychology Development Group Fall 2014
Brownbag Coordinator 2010-2011

# AWARDS, HONORS, & PROFESSIONAL RECOGNITION

2021	Centre Conege i De i deutty Research Giant (Liste Wiedd, Lauren Chatneld)
2021	Honor Walk Talent Recipient (Kylie Cochran, Anna "Izzy" Neel, Lauren Robinson)
2020	Kentucky Academy of Science Meeting - November 2020

Centre College FDC Faculty Research Grant (Flsie Mead, Lauren Chatfield)

Izzy Neel - Student Competition 1st place winner in the Physiology/Biochemistry Division

2019 Centre College FDC Faculty Research Grant

2019 Honor Walk Talent Recipient (Dayera Vance)

2018 Kresge Grant for new lab equipment (\$11,132)

Honor Walk Talent Recipient (Shain Mays, Yanisa Robbins, Hudson Smith)

2018 Centre College FDC Faculty Research Grant (Kat Greenleaf, Anna "Izzy" Neel)

2018 Kentucky West Virginia Alliance for Minority Participation LSAMP Grant Program (Derrick Tonto)

2017 Centre College FDC Faculty Research Grant (Yanisa Robbins, Hudson Smith)

2017 Kentucky West Virginia Alliance for Minority Participation LSAMP Grant Program (Dayera Vance)

2013 Research Challenge Trust Fellowship (RCTF)

2013 Research Challenge Trust Fellowship Travel Award (RCTF)

2011 Research Challenge Trust Fellowship Travel Award (RCTF)

Best Research Project, Gender Differences and Acceptable Behavior in Romantic Relationships

among College Students.

#### **HONOR SOCIETIES**

2016 (inducted) Nu Rho Psi

# **SCIENTIFIC SOCIETIES**

2021-Present	KY Branch of the American Association of Laboratory Animal Science
2019-Present	Faculty for Undergraduate Neuroscience (FUN)
2017-Present	Organization for the Study of Sex Differences (OSSD)
2016-Present	Kentucky Academy of Science (KAS)
2013-Present	Society for Behavioral Neuroendocrinology (SBN)
2013-Present	Midwestern Psychological Association (MPA)
2014–2015	American Psychological Association – Div 28 (APA)
2009–2015	Bluegrass Chapter Society for Neuroscience (BGSFN)

# ADDITIONAL COMMUNITY SERVICE

2016-2020	Fundraiser Committee Member – Versailles Montessori School
2018-2020	Woodford County Girl Scout Troop 5805 Parent Volunteer
2004	Winston-Salem/Forsyth County Humane Society Volunteer