## KATHARINE M. CAMMACK

kmcammac@sewanee.edu 973-986-8426

#### **EDUCATION & TRAINING**

Postdoctoral Fellow, Friedman Brain Institute, Icahn School of Medicine at Mount Sinai, 2012-2015 Dorothea Dix Postdoctoral Fellow, Biology of Addictive Diseases, The Rockefeller University, 2009-2012 Ph.D., Integrative Neuroscience, Rutgers University & University of Medicine & Dentistry of New Jersey, 2009 B.S., Psychology, Santa Clara University, 2004

#### **APPOINTMENTS**

Assistant Professor of Psychology, The University of the South, 2016-present

Visiting Assistant Professor of Psychology, The University of the South, 2015-2016

Faculty, Citizen Science Program, Bard College, 2011, 2012, 2013, 2015

Visiting Assistant Professor (part-time), Psychology Program, Bard College, 2012

Adjunct Assistant Professor, Department of Psychology, Hunter College (CUNY), 2011

Doctoral Candidate, Laboratory of Behavioral Neuroendocrinology, Rutgers University, 2004-2009

Research Assistant, Laboratory of Learning & Memory, Santa Clara University, 2002-2004

Research Assistant, Laboratory of Educational Psychology, Stanford University, 2003

#### **SELECT COURSES TAUGHT**

The University of the South

NEUR101 Introduction to Neuroscience PSYC251 Research Methods & Data Analysis & Lab

NEUR254 Behavioral Neuroscience PSYC349 Drugs & Behavior

NEUR359 Advanced Behavioral Neuroscience with Lab. PSYC350 Drugs & Behavior with Lab

NEUR444 Independent Study PSYC419 Addiction

PSYC444 Independent Study PSYC421 Sex, Brain & Behavior

Other institutions

Citizen Science, Bard College Sex & Behavior, Hunter College, CUNY Sex, Brain & Behavior, Bard College Critical Thinking (TA), Rutgers University

Introduction to Psychology (TA), Rutgers University

## **GRANTS & FUNDING**

Cammack KM, Smith C, McGhee K, Schraeder M (2021) "Science Fridays": Building science identity & self-efficacy through co-curricular sessions. DEI Pedagogy Grant, The University of the South. \$3,500

**Cammack KM** (2021) Consultation with stakeholders in a problem-based learning course. Center for Teaching Mini-grant, The University of the South, \$450

Cammack KM (2021) Brain circuits supporting drug preference in rodents. University Research Grant, The University of the South, \$5000

Cammack KM (2021) Brain circuits supporting drug preference in rodents. Faculty Research Stipend, The University of the South, \$8000

Cammack KM (2020) Persistence and inclusion in STEM: Putting yourself in the shoes of neuroscientists. DEI Pedagogy Grant, The University of the South. \$1,500

Cammack KM (2020) Women in Science WIST Fund COVID Relief. \$500

Cammack KM (2018-2020) Kennedy Endowed Faculty Fellowship. The University of the South, \$13,000

**Cammack KM** (2018) Using service learning to enrich a laboratory course on substance use in Grundy County. Center for Teaching Innovative Teaching Grant, The University of the South, \$510

**Cammack KM** (2017) Opioid use in Southern Appalachia: How drug education framing can be informed by local perceptions, attitudes and worldviews. Mellon Collaborative for Southern Appalachian Studies, \$7,940

**Cammack KM** (2017) Opioid use in Southern Appalachia: Addendum. Mellon Collaborative for Southern Appalachian Studies, \$2,400

Cammack KM, Moore BC (2016) An inquiry-driven, cross-disciplinary laboratory experience for Sewanee students. Center for Teaching Innovative Teaching Grant, The University of the South, \$2969.08

Cammack KM (2016) Teaching apparati for neuroscience program. Center for Teaching Mini-Grant, The University of the South, \$500

**Seip KM** (2011-2014) Heroin withdrawal: modulation of aversive states by kappa opioid receptors. F32-DA030831 Ruth L. Kirschstein NRSA for Individual Postdoctoral Fellows, NIDA. \$150,234

Student Undergraduate Research Fellowships (Sewanee)

\* undergraduate student

Duenas-Pincay D\*, Cammack KM (2021) Blocking the rewarding effects of cocaine in mice, \$3000

Kearley S\*, Cammack KM (2021) Study of sex differences in oxycodone-induced protein expression in rewardand learning-related brain circuits, \$3000

Fain E\*, Cammack KM (2021) Substance use amongst adolescents in rural Appalachia (remote), \$1000

Pusok A\*, Cammack KM (2020) The impact of opioids on the brain and behavior of mice (remote), \$2000

Fain E\*, Cammack KM (2020) Substance use amongst adolescents in rural Appalachia (remote), \$1000

Bansal S\*, Cammack KM (2020) Study of sex differences in oxycodone-induced protein expression in rewardand learning-related brain circuits (remote), \$2000

Krueger A\*, Cammack KM (2018) Alcohol & substance use in a Southern Appalachian community, \$3000

Sands LP\*, Cammack KM (2017) The impact of sex and estrus stage motivational and physiological responses to opiates across the addiction-like cycle in the rodent, \$2800

Watters A\*, Cammack KM (2017) Behavioral and neurobiological effects of prescription opioids across the reproductive cycle of female rats, \$2800

## FELLOWSHIPS, AWARDS & HONORS

Kennedy Endowed Faculty Fellowship, The University of the South, 2018-2020

Nominee, Dean of the College's Teaching Award, The University of the South, 2016, 2018, 2020, 2021

Nominee, Dean of the College's Advising Award, The University of the South, 2021

Community Partner of the Year Award, Grundy County Safe Communities Coalition, 2019

APA Division 6 D.B. Marquis Behavioral Neuroscience Award, 2017

Postdoctoral Fellow Travel Award, Icahn School of Medicine at Mount Sinai, 2014

Invited Presenter, Early Career Investigator Session, National Institute on Drug Abuse Miniconvention, Society for Neuroscience Annual Conference, 2011

Co-Chair, Oral Communications Session, College on Problems of Drug Dependence Annual Conference, 2010

Early Career Investigator Travel Award, College on Problems of Drug Dependence, 2010

Award for Graduate Excellence, Graduate Student Government Association, Rutgers University, 2008

Graduate Merit Award, Executive Women of New Jersey, 2008

Chapters Graduate Student Travel Award, Society for Neuroscience, 2008

NIDA Women & Gender Junior Investigator Travel Award, College on Problems of Drug Dependence, 2007

Competitive Applicant Award, Integrative Neuroscience Program, Rutgers University, 2004
Wilhelm Wundt Award for Excellence in Research, Academics & Service in Psychology (top graduating senior from department), Santa Clara University, 2004

Phi Beta Kappa, Santa Clara University, 2004

Dean's Scholarship, Santa Clara University, 2000-2004

#### **PUBLICATIONS & PRESENTATIONS**

# Peer-reviewed articles & chapters

\* undergraduate student

- 1. **Cammack KM**, Reppert T, Cook-Snyder D (*in press*) The Simpsons neuron: A case study exploring neuronal coding and hypothesis testing for introductory and advanced neuroscience courses. *Journal of Undergraduate Neuroscience Education*
- 2. **Cammack KM**, Melton C (2021) Integrating service learning into a neuropsychopharmacology course. *Journal of Undergraduate Neuroscience Education* 19(2): A192-A200
- 3. Watters AB\*, Sands LP\*, **Cammack KM** (2020) Pre-gestational oxycodone exposure does not impact future maternal care or drug preference in the postpartum mouse. *Experimental & Clinical Psychopharmacology* http://dx.doi.org/10.1037/pha0000427
  - Reviewer comment: "Considering the overall quality of the writing and given the labor intensive and detailed nature of the experiment, this speaks highly of the undergraduate training environment."
- 4. Avigan P, Cammack KM, Shapiro ML (2020) Flexible spatial learning requires both the dorsal and ventral hippocampus and their functional interactions with the prefrontal cortex. *Hippocampus*, 30(7): 733-744 https://doi.org/10.1002/hipo.23198
- 5. **Cammack KM** (2018) Mystery neurotransmitters! An active learning activity on synaptic function for undergraduate students. *Journal of Undergraduate Neuroscience Education 17*(1):A26-A33
- 6. **Cammack KM**, Young JJ, Young ME, Shapiro ML (2017) Partial lesion of the nigrostriatal dopamine pathway in rats impairs egocentric learning but not spatial learning or behavioral flexibility. *Behavioral Neuroscience* 131(2): 135-142
  - Winner of the 2017 APA Division 6 D.B. Marquis Behavioral Neuroscience Award for best paper published in the journal that year
- 7. **Cammack KM** (2017) A critical thinking activity on drug tolerance for undergraduate neuroscience courses. *Journal of Undergraduate Neuroscience Education 15*(2):A157-A161
- 8. Deutch-Feldman M, Picetti R, **Seip-Cammack KM**, Zhou Y, Kreek MJ (2015) Effects of handling and vehicle injections on adrenocorticotropic and corticosterone concentrations in Sprague-Dawley compared with Lewis rats. *Journal of the American Association for Laboratory Animal Science* 54(1): 1-5
- 9. **Seip-Cammack KM**, Shapiro ML (2014) Behavioral flexibility and response selection are impaired after limited exposure to oxycodone. *Learning & Memory* 21(12): 686-695
- 10. Shapiro ML, Riceberg JS, **Seip-Cammack K**, Guise K (2014) Functional interactions of prefrontal cortex and the hippocampus in learning and memory. In: Space, time and memory in the hippocampal formation. D. Derdikman and J. Knierim, eds. Springer-Verlag
- 11. **Seip-Cammack KM**, Reed B, Zhang Y, Ho A, Kreek MJ (2013) Tolerance and sensitization to chronic escalating-dose heroin following extended withdrawal: possible role of mu-opioid receptors. *Psychopharmacology* 225(1): 127-140
- 12. **Seip KM**, Reed B, Ho A, Kreek MJ (2012) Measuring the incentive value of escalating doses of heroin in heroin-dependent Fischer rats during acute spontaneous withdrawal. *Psychopharmacology* 219(1): 59-72

- 13. **Seip KM**, Morrell JI (2009) Transient inactivation of the ventral tegmental area selectively disrupts the expression of conditioned place preference for pup- but not cocaine-paired contexts. *Behavioral Neuroscience* 123(6): 1325-1338
- 14. **Seip KM**, Morrell JI (2008) Exposure to pups influences the strength of maternal motivation in virgin female rats. *Physiology & Behavior* 95(4): 599-608
- 15. **Seip KM**, Pereira M, Wansaw MP, Dziopa EI, Reiss JI, Morrell JI (2008) Incentive salience of cocaine across the postpartum period of the female rat. *Psychopharmacology* 199: 119-30
- 16. Pereira M, **Seip KM**, Morrell JI (2008) Maternal motivation and its neural substrate across the postpartum period. In: The neurobiology of the parental mind. Amsterdam: Elsevier
- 17. **Seip KM**, Morrell JI (2007) Increasing the incentive salience of cocaine challenges preference for pup-over cocaine-associated stimuli during early postpartum: place preference and locomotor analyses in the lactating female rat. *Psychopharmacology* 194: 309-19
- 18. Bell MC, **Seip KM**, Fitzsimmons KS (2007) Signal effects on resistance to change in a multiple schedule. *Behavioural Processes* 74: 33-48

# Peer-reviewed articles in undergraduate journals

- 1. Wiseman HC\*, Bruce RD\*, Cammack KM (2021) The Opioid Crisis: A Review of Genetic Predispositions, Current Policy and Future Directions. *IMPULSE: The Premier Undergraduate Neuroscience Journal* 2021: 1-12
- 2. Maclean E\*, Cammack KM (2021) The importance of attending to community-based needs in response to the opioid crisis. *Journal of Sewanee Science*
- 3. Worsham R\*, Cammack KM (2021) Perceptions of e-cigarettes. Journal of Sewanee Science
- 4. Minor A\*, Cammack KM (2021) The opioid crisis. Journal of Sewanee Science
- 5. Williams K\*, Palmer A\*, Cammack KM (2018) Ethanol preference is impacted by estrus stage but not housing or stress in female C57BL/6J mice. *IMPULSE: The Premier Undergraduate Neuroscience Journal* 2018: 1-14
- 6. Watters A\*, Cammack KM (2018) Pregestational oxycodone exposure impacts maternal motivation but not maternal caregiving or drug seeking in the postpartum mouse. *Journal of Sewanee Science*
- 7. Fitzgerald ND\*, Cammack KM (2017) Chronic traumatic encephalopathy: Animal models, clinical diagnosis, sex differences, and revised return-to-play protocol. *IMPULSE: The Premier Undergraduate Neuroscience Journal* 2017: 1-16

### *In progress*

- 8. Erickson K\*, Cammack KM (under review) Alleviating stress: Benefits of prosocial behavior and oxytocin. Journal of Sewanee Science
- 9. Kearley S\*, Cammack KM (in preparation) Using immunohistochemistry to understand addiction. *Journal of Sewanee Science*
- 10. Dueñas-Pincay LD\*, **Cammack KM** (in preparation) Conditioned place preference for a possible cocaine antagonist. *IMPULSE: The Premier Undergraduate Neuroscience Journal*

#### **Invited lectures & talks**

^ presenting speaker \* undergraduate student

1. **Cammack KM**<sup>^</sup> (2021) The Simpsons Neuron: A neuroscience journal article presented as a case study. First Annual Neuroscience Teaching Conference (virtual)

- 2. Cammack KM<sup>^</sup>, Cecala K<sup>^</sup>, Moore BC<sup>^</sup> (2018) Engaging thematic learning to build an integrative science literacy course for undergraduates. Discussion Session, AAC&U Transforming STEM Higher Education Conference, Atlanta GA
- 3. Cammack KM<sup>^</sup>, Moore BC<sup>^</sup> (2018) Mind over matter: Integrating undergraduate curricula in neuroscience and anatomical histology. Innovation/Ideation Session, AAC&U Transforming STEM Higher Education Conference, Atlanta GA
- 4. **Cammack KM**<sup>^</sup> (2016) Sex, drugs and everyday choices: Factors influencing motivated behavior. The University of the South, TN
- 5. **Seip-Cammack KM**<sup>^</sup> (2015) The effect of prescription opiate drugs on learning, memory and cognition. Bard College, NY
- Guise K, Seip-Cammack KM, Shapiro ML<sup>^</sup> (2014) Cognition guided by coordinated oscillations in distributed neural networks: prefrontal-hippocampal interactions in spatial reversal learning. Neurobiology of Learning & Memory Winter Conference, Park City UT
- Seip-Cammack KM<sup>^</sup> (2012) Sex, drugs and everyday choices: understanding motivation-related neurobiology. Bard College, NY
- 8. Reed B, **Seip KM**^, Zhang Y, Ho A, Kreek MJ (2011) Chronic escalating-dose heroin in the rat: Behavioral characterization of exposure versus re-exposure after extended withdrawal. Nanosymposium: "Opioid Reward: Neural Mechanisms." Society for Neuroscience, Washington D.C.
- 9. **Seip KM**<sup>^</sup>, Zhang Y, Reed B, Ho A, Kreek MJ (2010) Rewarding properties of heroin differ by dose and across individuals of an inbred rat strain. College on Problems of Drug Dependence, Scottsdale AZ
- 10. Morrell JI<sup>^</sup>, **Seip KM**, Pereira M (2009) What stimulus choice reveals about maternal motivation in the rat. Annual Conference, Society for Behavioral Neuroendocrinology, East Lansing MI
- 11. **Seip KM**<sup>^</sup> (2009) Behavioral and neurobiological correlates of maternal motivation in the postpartum female rat. Johns Hopkins University, Baltimore MD
- 12. Seip KM<sup>^</sup> (2008) Careers in the sciences interviewing techniques. Baruch College, NYC
- 13. **Seip KM**<sup>^</sup> (2008) Offspring as a natural drug: maternal behavior and motivation in the female rat. Fairfield University, Fairfield CT

## The University of the South

- 1. Cammack KM<sup>^</sup> (2021) Drugs and the brain. VERGE: Flourishing by Design co-curricular experience
- 2. Thompson L^, Irarte-Diaz P^, Misra K^, **Cammack KM**^ (2021) Preparing for and applying to graduate programs. Panel, *Summer Undergraduate Research Fellows Program*
- 3. **Cammack KM**<sup>^</sup>, Reed K<sup>^</sup> (2021) Planning Ahead: Translating your Summer Experience for Application Materials for Grad School & Jobs. Workshop, *Summer Undergraduate Research Fellows Program*
- 4. Cammack KM<sup>^</sup> (2021) Drugs & the brain. Invited lecture, Peer Health Educators & Brain Awareness Week
- 5. **Cammack KM**<sup>^</sup>, Pongdee R<sup>^</sup>, O'Connor R<sup>^</sup> (2021) Variations on Scholarship of Teaching & Learning. Panel, *Center for Teaching*
- 6. **Cammack KM**<sup>^</sup>, Kikis E<sup>^</sup>, Matthews J<sup>^</sup>, Song T<sup>^</sup>, Watson K<sup>^</sup> (2020) Mentoring summer undergraduate research. Panel, *Office of Undergraduate Research & Scholarship*
- 7. Cammack KM<sup>^</sup> (2020) Neuroscience at Sewanee. Parents' Council Meeting
- 8. Cammack KM<sup>^</sup> (2020) Making connections outside the classroom. Teach & Tell, Center for Teaching
- 9. **Cammack KM**<sup>^</sup> (2019) Case studies: Using storytelling to foster creative and critical thinking. *Faculty Flash Presentation Showcase*
- 10. **Cammack KM**<sup>^</sup> (2019) Case studies: Using storytelling to foster creative and critical thinking. *The Craft: Sewanee Center for Teaching Newsletter*

- 11. Cammack KM<sup>^</sup>, Moore BC<sup>^</sup> (2018) Collaborating across the sciences: Ways to develop an inquiry-based, cross-disciplinary lab experience. *Teach & Tell, Center for Teaching*
- 12. Noffsinger-Frazier N<sup>^</sup>, West N<sup>^</sup>, Cammack KM<sup>^</sup> (2019) "Alcohol and You," Healthy Hut Event
- 13. Noffsinger-Frazier N^, West N^, **Cammack KM**^ (2018) "Should College Students Take Smart Drugs?" *Brain Awareness Week*
- 14. Cammack KM<sup>^</sup> (2018) Taking the edge off: Drinking, stress and the brain. *University Wellness Center Colloquium Series*
- 15. Cammack KM<sup>^</sup> (2016) Drugs & brain health. Brain Awareness Week
- 16. Cammack KM<sup>^</sup> (2016) Neuroscience/Psychology. "Behind the Sciences: The Sciences at Sewanee" event
- 17. Cammack KM<sup>^</sup> (2015) "Science Monday: Schmoozin and Boozin," Smith Residence Hall

# Conference presentations & posters

\* undergraduate student

- 1. Dueñas-Pincay LD\*, Püsök A\*, **Cammack KM** (in preparation) Conditioned place preference for a possible cocaine antagonist. Oral presentation, FUN Neuroscience Undergraduate Research Virtual Symposium
- 2. Püsök A\*, Cammack KM (2020) Sex differences in oxycodone place preference in mice. Oral presentation, FUN Neuroscience Undergraduate Research Virtual Symposium
- 3. Watters A\*, Cammack KM (2019) The impact of adolescent oxycodone exposure on future maternal behaviors in the postpartum mouse. Society for Neuroscience, Chicago IL
- 4. Cammack KM (2019) Integrating service learning into a neuropsychopharmacology course. Teaching Neuroscience in College, Society for Neuroscience, Chicago IL
- 5. Probasco K\*, Minor A\*, **Cammack KM** (2019) Optimizing conditioned place preference for oxycodone. Middle Tennessee Psychological Association, Murfreesboro TN
- 6. Watters A\*, Cammack KM (2017) Pre-gestational oxycodone exposure impacts maternal motivation but not maternal caregiving or drug seeking in the postpartum mouse. Southeastern Medical Scientist Symposium, Atlanta GA
- 7. **Seip-Cammack KM**, Moore BC (2017) An inquiry-driven, cross-disciplinary laboratory experience on neurogenesis for undergraduates. Teaching Neuroscience in College, Society for Neuroscience, Washington DC
- 8. Williams M\*, Krueger A\*, Crumbliss M\*, Caldwell S\*, Coffey JK, Cammack K (2017) Extracurricular activities are associated with subjective happiness in an undergraduate sample. Annual Meeting of the Southeastern Psychological Association, Atlanta GA
- 9. Watters A\*, Stackhouse S,\* Hunley A\*, Scott E\*, Cammack K, Coffey JK (2017) Effects of Instagram on body image in a college setting. Annual Meeting of the Southeastern Psychological Association, Atlanta GA
- 10. Avigan P, **Seip-Cammack KM**, Shapiro M (2016) Prefrontal-CA1 interaction supports flexible spatial learning within a CA1-dependent task framework. Champalimaud Neuroscience Symposium, Lisbon, Portugal
- 11. **Seip-Cammack KM** (2016) A critical thinking activity on synaptic function for undergraduate neuroscience courses. Annual Meeting of Sigma Xi: The Scientific Research Honor Society, Atlanta GA
- 12. Avigan P, **Seip-Cammack KM**, Shapiro M (2015) Flexible spatial learning in rats requires intact hippocampal-prefrontal circuits. Society for Neuroscience, Chicago IL
- 13. **Seip-Cammack KM,** Guise KG, Shapiro M (2014) Transient inactivation of hippocampal-prefrontal circuitry impairs flexible spatial learning in rats. Society for Neuroscience, Washington DC
- 14. **Seip-Cammack KM**, Shapiro M (2013) Repeated oxycodone exposure impairs reversal behavior when contingencies change rapidly. Society for Neuroscience, San Diego CA

- 15. Young JJ, Seip-Cammack KM, Shapiro M (2013) Dopamine depletion in the dorsolateral striatum impairs the acquisition of an egocentric task but not spatial reversal or strategy switch. Society for Neuroscience, San Diego CA
- 16. **Seip-Cammack KM,** Buonora M, Deutsch-Feldman M, Brownstein A, Picetti R, Kreek MJ (2013) Handling and vehicle injections impact corticosterone but not adrenocorticotropic hormone levels in Sprague-Dawley but not Lewis rats. College on Problems of Drug Dependence, San Diego CA
- 17. **Seip-Cammack KM** (2012) Using case studies to explore the biological roots of sexual development. Society for Neuroscience, New Orleans LA
- 18. **Seip-Cammack KM**, Reed B, Zhang Y, Ho A, Kreek MJ (2011) Chronic escalating-dose heroin alters the expression of mu-opioid receptors in the rat brain: impact of exposure versus re-exposure after extended withdrawal. NIDA Frontiers in Addiction Research Miniconvention, Washington DC
- 19. **Seip KM**, Zhang Y, Reed B, Ho A, Kreek MJ (2011) Extended withdrawal from heroin is associated with altered mu-opioid receptor expression and G-protein activation. Society for Neuroscience, Washington DC
- 20. **Seip KM**, Morrell JI (2009) Transient inactivation of the ventral tegmental area disrupts the expression of place preference for a natural but not a drug stimulus. Society for Neuroscience, Chicago IL
- 21. **Seip KM**, Morrell JI (2008) Exposure to pups affects the manifestation of maternal motivation and maternal behavior in virgin female rats. Society for Neuroscience, Washington DC
- 22. Morrell JI, **Seip KM**, Pereira M (2008) Identifying components of the neural circuit mediating maternal motivation and expression of maternal behavior with reversible inactivation by lidocaine microinjection. Society for Neuroscience, Washington DC
- 23. **Seip KM**, Morrell JI (2008) Expression of conditioned preference for pup- or cocaine-associated chambers is impaired following transient inactivation of the ventral tegmental area. Pavlovian Society, Weehawken NJ
- 24. **Seip KM**, Oswald L, Abele K (2008) Reflecting on the Science Communication Consortium How and why should neuroscientists care about communication? Society for Neuroscience, Washington DC
- 25. **Seip KM**, Morrell JI (2007) Maternal motivation is strikingly similar in both early postpartum females and maternally-induced virgin females after maternal behavior is expressed for eight days. Society for Neuroscience, San Diego CA
- 26. **Seip KM**, Dziopa EI, Wansaw MP, Morrell JI (2007) Localization and cellular characterization of neural substrates contributing to pup-associated preference in the lactating female rat. Parental Brain Conference, Boston MA
- 27. **Seip KM**, Pereira M, Dziopa EI, Morrell JI (2007) Locomotor correlates of cocaine-associated chamber preference in the postpartum dam: cocaine-induced locomotion and sensitization during conditioning and locomotor rate during preference testing. College on Problems of Drug Dependence, Quebec City
- 28. Pereira M, **Seip KM**, Dziopa EI, Morrell JI (2007) Incentive salience of cocaine is remarkably similar across the postpartum period. College on Problems of Drug Dependence, Quebec City
- 29. **Seip KM**, Dziopa EI, Morrell JI (2006) Challenges to preference for pups in early postpartum and cocaine in late postpartum using stringent methodological manipulations to the place preference paradigm. Society for Neuroscience, Atlanta GA
- 30. **Seip KM,** Dziopa EI, & Morrell JI (2006) Dramatic pup avoidance in late postpartum contrasts with preference for pups over cocaine in early postpartum: Studies using 2- and 3-chambered place preference paradigms. Society for Behavioral Neuroendocrinology, Pittsburgh PA
- 31. Morrell JI, Mattson BJ, Wansaw MP, Smith KS, **Seip KM** (2006) Postpartum neuroendocrine and endocrine changes may participate in postpartum phases of maternal motivation as measured by neuronal activation during pup-associated place preference. International Congress of Neuroendocrinology, Pittsburgh PA

- 32. **Seip KM**, Reiss JI, Dziopa EI, Wansaw MP, Morrell JI (2005) Further place preference studies on the rewarding effects of cocaine in the postpartum female rat. Society for Neuroscience, Washington D.C.
- 33. Morrell JI, Mattson BJ, Wansaw MP, Smith KS, **Seip KM** (2005) Medial preoptic area is a neural hot spot involved in the motivation to perform maternal behavior. Society for Neuroscience, Washington D.C.
- 34. Fitzsimmons KS, **Seip KM**, Bell MC (2005) Preference and resistance to change in chain and tandem schedule components. Abstract, 31<sup>st</sup> Annual Convention of the Association for Behavior Analysis, Chicago
- 35. **Seip KM**, Bell MC (2004) The effect of a signal on resistance to change. 30<sup>th</sup> Annual Convention of the Association for Behavior Analysis, Boston MA
- 36. **Seip KM**, Bell MC (2004) The relationship between preference and persistence in pigeons. 32<sup>nd</sup> Annual Western Psychology Conference for Undergraduate Research, Santa Clara CA

Undergraduate \* undergraduate student

- 1. Dueñas-Pincay LD\*, Püsök A\*, **Cammack KM** (*in preparation*) Conditioned place preference for a possible cocaine antagonist. Scholarship Sewanee Undergraduate Research Conference, The University of the South
- 2. Püsök A\*, Duenas-Pincay LD, Cammack KM (in preparation) Estrus status and place preference in female mice. Scholarship Sewanee Undergraduate Research Conference, The University of the South, Sewanee TN
- 3. Kearley S\*, Cammack KM (*in preparation*) Using immunohistochemistry to understand addiction. Scholarship Sewanee Undergraduate Research Conference, The University of the South, Sewanee TN
- 4. Seegars JC\*, Cammack KM (2021) Music therapy and the brain. Scholarship Sewanee Undergraduate Research Conference, The University of the South, Sewanee TN
- 5. Pusok A\*, Minor A, Cammack KM (2020) Exploring sex differences in oxycodone place preference in the mouse. Scholarship Sewanee Undergraduate Research Conference, The University of the South, Sewanee TN
- 6. Collins V\*, Cammack KM (2020) Ethanol preference, affective withdrawal and relapse-like behavior in female mice. Scholarship Sewanee Undergraduate Research Conference, The University of the South
- 7. Probasco K\*, Minor A\*, **Cammack KM** (2019) Optimizing conditioned place preference for oxycodone. Scholarship Sewanee Undergraduate Research Conference, The University of the South, Sewanee TN
- 8. Krueger A\*, Collins V\*, Cammack KM (2018) Alcohol & substance use amongst adolescents in a Southern Appalachian community. Scholarship Sewanee Undergraduate Research Conference, The University of the South, Sewanee TN
- Fitzgerald ND\*, Cammack KM (2018) Chronic Traumatic Encephalopathy: Animal models, clinical diagnosis, sex differences, and revised return-to-play protocol. Scholarship Sewanee Undergraduate Research Conference, The University of the South, Sewanee TN
- 10. Watters A\*, Cammack KM (2018) Pre-gestational oxycodone exposure impacts maternal motivation but not maternal caregiving or drug seeking in the postpartum mouse. Scholarship Sewanee Undergraduate Research Conference, The University of the South, Sewanee TN
- 11. Fitzgerald ND\*, Cammack KM (2018) The long-term effects of concussions: Diagnosis, CTE, and sex differences. Sewanee Neurds Colloquium, Brain Awareness Week, Sewanee TN
- 12. Watters A\*, Cammack KM (2018) Pre-gestational oxycodone exposure impacts maternal motivation but not maternal caregiving or drug seeking in the postpartum mouse. Sewanee Neurds Colloquium, Brain Awareness Week, Sewanee TN
- 13. Gray K\*, Green S\*, Palmer A\*, Sands P\*, Watters A\*, Bueso M\*, Blevins A\*, Williams K\*, Matthews M\*, Shattuck A\*, Walker S\*, Van Why N\*, Blake D\*, **Cammack KM** (2017) The impact of cycling gonadal hormones on ethanol preference and affective responses in female mice. Scholarship Sewanee Undergraduate Research Conference, The University of the South, Sewanee TN

- 14. Blake D\*, Van Why N\*, Walker S\*, Shattuck A\*, Matthews M\*, Williams K\*, Blevins A\*, Bueso M\*, Watters A\*, Sands P\*, Palmer A\*, Green S\*, Gray K\*, **Cammack KM** (2017) The effects of environmental enrichment and stress on ethanol preference in female mice. Scholarship Sewanee Undergraduate Research Conference, The University of the South, Sewanee TN
- 15. Bueso M\*, Blevins A\*, Williams K\*, Watters A\*, Sierra O\*, Palmer A\*, Pittman H\*, Gray K\*, Woody S\*, Walker S\*, Earp H\*, Shattuck A\*, Allison T\*, Sands P\*, Penland S\*, Green S\*, Williams M\*, Matthews M\*, Womack B\*, Blake D\*, Malpica A\*, Van Why N\*, Moore BM, Cammack KM (2017) Neuroplasticity induced by voluntary exercise: Quantifying cell proliferation in the brain and small intestine of adult female mice. Scholarship Sewanee Undergraduate Research Conference, Sewanee TN
- 16. Gabriel D\*, Cammack KM (2017) Reducing stigma surrounding mental health disorders in Nigerian adolescents: A pilot study on the efficacy of new mental health literacy curricula. Scholarship Sewanee Undergraduate Research Conference, The University of the South, Sewanee TN
- 17. Reece H\*, Cammack KM (2017) Clinical and neurobiological effects of brain injury: Diagnostic issues and potential therapeutics. Sewanee Neurds Colloquium, Brain Awareness Week, Sewanee TN
- 18. Absi G\*, Rumbika K\*, Guise K, Seip-Cammack KM, Shapiro M (2014) Exploring the role of prefrontal-hippocampal circuitry in spatial reversal learning using muscimol and DREADD technology. Undergraduate Research Opportunity Program Conference, Boston University, Boston MA
- 19. Gagliardi C\*, Nagy J\*, Guise K, **Seip-Cammack KM**, Shapiro M (2013) Transient inactivation of hippocampal-prefrontal circuitry may impair spatial learning. Undergraduate Research Opportunity Program Conference, Boston University, Boston MA

### **SERVICE**

## National/international:

ad hoc Reviewer, Psychopharmacology; Neuroscience; Behavioral Neuroscience; Neuroscience Letters; Brain Sciences; British Journal of Pharmacology; Frontiers in Child & Neurodevelopmental Psychiatry; Hippocampus; Behavioural Brain Research; Journal of Undergraduate Neuroscience Education

Faculty Advisor, IMPULSE Undergraduate Neuroscience Research Journal, 2016-present

Judge, NEURON Competition, International Youth Neuroscience Association (IYNA), 2021

Session Moderator, Motivation & Emotion, Neuroscience Undergraduate Research Virtual Symposium (NURVS), Faculty in Undergraduate Research, 2020

Reviewer, Posters on the Hill, Council on Undergraduate Research, 2019, 2020

Neuroscientist/Teacher Partners, Society for Neuroscience, 2006-2015

Co-Chair, Oral Communications Session III - Preclinical Opioid Research, College on Problems of Drug Dependence Annual Conference (Scottsdale AZ), 2010

Panelist, Professional Skills Workshop, Society for Neuroscience Annual Conference (Chicago IL), 2009

## State/local:

Coalition Member, Grundy Safe Communities Coalition, 2020-present

Speaker, Grundy County Health Council Meeting, 2021

Speaker, Grundy County Principals' Meeting & Teacher In-service Day (3 sessions), 2019

Invited Speaker, Franklin County Jail Re-Entry Program (3 sessions), 2017

Volunteer, Brain Awareness Week, Icahn School of Medicine at Mount Sinai, 2013-2015

Speaker, Pre-Freshmen Summer Program, Research Initiative for Scientific Enhancement, Brooklyn College, 2014 Chair, Professional Development Committee, New York Women in STEM, 2013

Judge, New York City Science & Engineering Fair, CUNY/NYC Board of Education, 2010-2011 Co-Chair and Moderator, Science Communication Consortium, New York NY, 2007-2009

## **University:**

The University of the South

Co-Chair, Neuroscience Program, Fall 2021-present

Member (5-year term), Center for Teaching Advisory Board, 2020-present

Member, Library/Information Technology Service Committee (LITSC), 2019-present

Faculty Liaison, Sewanee-at-Yale Program, 2019-present

Member, Institutional Animal Care & Use Committee (IACUC), 2016-present

Faculty Advisor, Psi Chi Psychological Honors Society, 2016-present

Peer Review Faculty Advisor, IMPULSE Undergraduate Neuroscience Research Journal, 2016-present

Member, Neuroscience Steering Committee, 2015-present

Member, Advisory Committee on Alcohol & Narcotics (ACAN), 2020-2021

Member, Undergraduate Research Advisory Council, 2018-2020

Member, Smith Experiential Learning Fund Review Board, 2020, 2021

Member (1-year term), Center for Teaching Advisory Board, 2019-2020

Faculty Advisor, Psychology Club, Spring 2020

Search Committee, Visiting Assistant Professor of Psychology (Cognitive Neuroscience), Spring 2020

Member, Health Professions Advisory Committee, 2019

Search Committee, Visiting Assistant Professor of Psychology, Spring 2018, Spring 2019, Spring 2020

Search Committee, Assistant Professor of Biology (Neurobiology), Fall 2016 & Fall 2017

Judge, Scholarship Sewanee Undergraduate Research Conference, 2017, 2018

Institutional Delegate, Sigma Xi Scientific Research Honor Society, 2016-2017

### Icahn School of Medicine at Mount Sinai

Vice President, Women in Science, 2012-2015

Executive Board, Women in Science & Medicine, 2012-2015

Member, Postdoc Executive Committee, 2013-2015

Planning Committee, SINAInnovations Trainee Entrepreneurship Forum & Reception, 2013-2014

Chair, Professional Development Subcommittee, Women in Science, 2013

## Rutgers University

President, Graduate Student Government Association, 2007-2008

Program Representative, Integrative Neuroscience Graduate Program, 2007-2008

Campus Liaison to the New York Academy of Science, 2006-2008

Secretary, Graduate Student Government Association, 2006-2007

Mentor, SEED High School Summer Scholarship Program, American Chemical Society, 2005

## PEDAGOGICAL TRAINING

#### Fellowships:

NeuroCaseNet Fellow, The Neuroscience Case Studies Network (RCN-UBE), 2018-2020

Civic Engagement Faculty Fellow, The University of the South, 2017-2018

#### Select courses & workshops:

A Fearless Framework for Infusing Inclusion Throughout Your Course, Sewanee, 2021

Neuroscience Case Studies Workshop, Emory University, 2019, 2021

Summer Teaching Workshop, Associated Colleges of the South, 2019

Practical Strategies for Enhancing Inclusivity in Undergraduate Courses (Barbara Lom, Ph.D.), Sewanee, 2018

Community Engagement & Service-Learning Pedagogy (Marshall Welch, Ph.D.), Sewanee, 2017

Scientists Teaching Science, New York Academy of Sciences, 2014

Introduction to Teaching Science Online, New York Academy of Sciences, 2014

Effective College Teaching, Rutgers University, 2008

#### STUDENTS & TRAINEES

## The University of the South

Behavioral Neuroscience Laboratory

- Fall 2021: Daniela Dueñas-Pincay, Emma Fain, Gabby Acker, Anna Püsök, Carter Cooper, Reevie Atkinson, Yana Van Den Abbeele, Tyler Reese, Kelly Walker, Maggie O'Hare
- Summer 2021: Daniela Dueñas-Pincay, Sam Kearley, Emma Fain, Anna Püsök, Reevie Atkinson, Yana Van Den Abbeele, Kairi Gardner
- Spring 2021: Anna Pusok, Carter Cooper, Emma Fain, Jordan Besh, Alice Charbonteau, Reevie Atkinson, Gabby Acker, Raleigh Bruce, Colin Seegars, Kallysta Erickson
- Summer 2020 (remote): Anna Pusok, Sambhav Bansal, Emma Fain, Carter Cooper
- 2019-2020: Andrew Minor, Anna Pusok, Victoria Collins, Sambhav Bansal, Alice Charbonteau, Sophia Harnew-Spradley, Mac Gortney
- 2018-2019: Amanda Watters, Kate Probasco, Andrew Minor
- 2017-2018: Amanda Watters, Victoria Collins, Marq Schieber
- 2016-2017: Paul Sands, Amanda Watters

## NEUR444 Independent Study

- 1. Gabby Acker (F21) Racial bias & healthcare inequities contributing to the opioid crisis
- 2. Kallysta Erickson (S21) Prosocial behavior and the brain
- 3. Carter Cooper (F20, S21) The role of exercise in opioid recovery & relapse
- 4. Colin Seegars (F20, S21) Music therapy & neuroscience
- 5. Anna Pusok (S20) Exploring sex differences in oxycodone place preference in the mouse
- 6. Hayden Wiseman (S20) Cognitive neuroscience: Bilingualism
- 7. Hayden Wiseman (F19) Factors contributing to individual differences in opioid dependence
- 8. Andrew Minor (S19/F19) Behavioral and neurobiological effects of prescription opioids across the reproductive cycle of female rats.

## PSYC444 Independent Study

- 1. Emma Fain (F20, S21) Perceptions and attitudes about substance use in Grundy County schools.
- 2. Rebecca Worsham (F19) Perceptions about vaping and e-cigarette use in Grundy County schools.
- 3. Emma Maclean (S19/F19) The intergenerational impacts of the opioid crisis in Grundy County.
- 4. Kate Probasco (F17/S18/S19) The interaction between sex steroid hormones and mesolimbic dopamine in opioid reinforcement.
- 5. Meredith Heitland, Rachel Vincent, Ashlyn Blevins, Dalton Fitzgerald (S18) *Sex differences and the influence of gonadal hormones in opioid use, dependence and addiction.*
- 6. Amanda Watters (F17/S18) Behavioral and neurobiological effects of prescription opioids across the reproductive cycle of female rats.

- 7. Ashley Krueger (F17/S18) Alcohol & substance use amongst adolescents in Southern Appalachia
- 8. Daniel Gabriel (S17/F17) Feasibility and efficacy of a semester-long mental health literacy program in two Nigerian high schools: A pilot study
- 9. Elizabeth Eidson (S17/F17) *Investigating the opioid epidemic: How patient perceptions, diagnoses and access to treatment shape prescription opioid use in rural Appalachia*
- 10. Paul Sands (F16/S17) Behavioral econometrics of addiction: Dopamine dynamics in nucleus accumbens
- 11. Hayden Reece (F16/S17) Clinical and neurobiological effects of traumatic brain injury
- 12. Dalton Fitzgerald (F16) Chronic traumatic encephalopathy: clinical markers and neuropathology

## Teaching assistants

- 1. Victoria Collins PSYC251 (S18, F19) and PSYC350 (S20)
- 2. Anne-Stuart Bell PSYC359 (S17) and PSYC251 (F16)
- 3. Ariyan Cox PSYC251 (F16)
- 4. Allison Smith PSYC251 (F15)

## Icahn School of Medicine at Mount Sinai

## Undergraduate

- 1. Gianna Absi, Boston University, 2014
- 2. Kendra Rumbika, Boston University, 2014
- 3. Elisa Caffrey, Bard College, 2013
- 4. Celia Gagliardi, Boston University, 2013
- 5. Jamie Nagy, Boston University, 2013

#### Graduate

- 1. Philip Avigan, 2014-2015
- 2. Vincent Luo, 2014
- 3. Prashanth Rajarajan, 2013

## PROFESSIONAL AFFILIATIONS AND MEMBERSHIPS

Society for Neuroscience

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Faculty for Undergraduate Neuroscience

APA – Division 02 – Teaching of Psychology

APA – Division 28 – Psychopharm & Substance Abuse

APA – Division 06 – Behavioral Neuroscience & Comparative Psychology

Psi Chi Psychological Honors Society

Phi Beta Kappa

Council on Undergraduate Research