

Curriculum Vitae

Christina M. Ragan, PhD
Academic Professional
School of Biological Sciences

I. Earned Degrees

Ph.D. Integrative Biosciences: Neuroscience	The Pennsylvania State University, University Park, PA	Doctoral Advisor: Sonia A. Cavigelli	2011
B.S. Cum Laude Molecular Biology, Biochemistry, Bioinformatics Minor: Chemistry Honors College	Towson University, Towson, MD		2004

II. Employment History

Georgia Institute of Technology, Neuroscience Program, Atlanta, GA Jan 2023-present
Academic Professional
Supervisor: Timothy Cope, PhD
Duties: Neuroscience Course Development, 2/3/4000-level Neuroscience course instruction, student advising, neuroscience curriculum improvement and development, mentor student research, outreach

Georgia Institute of Technology, Neuroscience Program, Atlanta, GA Jan 2021-present
Lecturer
Supervisor: Timothy Cope, PhD
Duties: Neuroscience Course Development, 2/3/4000-level Neuroscience course instruction, student advising, neuroscience curriculum improvement and development, mentor student research, outreach

Purdue University Northwest, Westville, IN July 2017-Dec 2020
Assistant Professor of Psychology
Supervisor: David Pick, PhD
Duties: Psychology Course Development, 100-200-level Psychology course instruction, Psychology curriculum improvement and development, mentor student research, outreach

Colgate University, Hamilton, NY July 2015- July 2017
Visiting Assistant Professor of Psychology and Neuroscience
Supervisors: Spencer Kelly, PhD; Bruce Hansen, PhD
Duties: Psychology Course Development, 100-400-level Psychology and Gen Ed course instruction, Psychology curriculum improvement and development, mentor student thesis research, outreach

Johns Hopkins University, Baltimore, MD Jan 2015-July 2015
 Visiting Postdoctoral Fellow
 Supervisors: Robert Yolken, PhD; Sarven Sabunciyani, PhD
 Duties: Conduct research investigating miRNA involvement in schizophrenia and bipolar disorder, mentor summer student research

Michigan State University, East Lansing, MI June 2011-July 2015
 Postdoctoral Fellow
 Supervisor: Joseph Lonstein, PhD
 Duties: Conduct research investigating neurobiology of postpartum anxiety in rodent model, mentor student research, outreach, pedagogy training

The Pennsylvania State University, University Park, PA August 2005-June 2011
 Graduate Assistant
 Supervisor: Sonia Cavigelli
 Duties: Conduct research investigating neurobiology of sibling differences in anxiety in rodent model, mentor student research, outreach, solo and teaching assistant course instruction in 100, 200, 300, 400- level biobehavioral health courses, pedagogy training, grant writing

III. Honors and Awards

College of Sciences Eric R. Immel Memorial Award for Excellence in Teaching	2023
Jung Choi Professional Development funds	2022, 2023
FUN Carol Ann Paul Neuroscience Educator of the Year Award	2021
CIOS Honor Roll-NEUR 3001	Fall 2021, 2022
CIOS Honor Roll-NEUR 2001	Spring 2021, 2023
CIOS Honor Roll-NEUR 3003	Spring 2022
GT1000 Instructor of the Year Nominee	Fall 2021, 2022
CETL Thank-a-Teacher Award (10 received)	Spring 2021-present

Prior to Georgia Institute of Technology

Purdue University Northwest
 Purdue University Northwest Outstanding Faculty Engagement Nominee Spring 2020

Colgate University
 Colgate Torch Medal for making an impact on graduating seniors awarded by Mariah Novy, Patricia Moscicki, Katie Steklac 2018

Colgate Torch Medal awarded by Connor Dufort, Nairuti Shah, and Dana Smith 2017

IV. Education and Mentorship

A. Courses Taught

Semester Year	Course Number	Course Title	Number of Students	Co-Instructor
Fall 2023*	NEUR 2001A	Principles of Neuroscience	48	Dr. Haley Steele Dr. Matthew Nusnbaum
Fall 2023*	NEUR 2001B	Principles of Neuroscience	48	Dr. Haley Steele Dr. Matthew Nusnbaum
Summer 2023	NEUR 4001	Neuroscience Research Project Capstone	9	Dr. Travis Rotterdam Dr. Mary Holder
Spring 2023	NEUR 2001 A1-A4	Principles of Neuroscience Laboratory	96	Dr. Haley Steele
Spring 2023	NEUR 2001	Principles of Neuroscience	65	Dr. Qiliang He Dr. Haley Steele
Fall 2022	NEUR 3001	Cellular and Molecular Neuroscience	55	
Fall 2022	NEUR 2001 L1-L4	Principles of Neuroscience Laboratory	96	
Fall 2022	NEUR 2001	Principles of Neuroscience	96	Dr. Qiliang He, Dr. Timothy Cope
Fall 2022	GT1000	First-Year Seminar	20	
Summer 2022	NEUR 4001	Neuroscience Research Project Capstone	6	
Spring 2022	NEUR 4801	Neuroscience Special Topics: Professional Development	16	
Spring 2022	NEUR 4001	Neuroscience Research Project Capstone	21	
Spring 2022	NEUR 3003	Neuroscience of Behavior	55	Dr. Mary Holder
Fall 2021	NEUR 2001A	Principles of Neuroscience (in-person)	33	Dr. Alonzo Whyte, Dr. Timothy Cope
Fall 2021	NEUR 2001B	Principles of Neuroscience (remote)	40	Dr. Alonzo Whyte, Dr. Timothy Cope

Fall 2021	NEUR 3001	Cellular and Molecular Neuroscience	49	
Fall 2021	CETL 2000/8000	UTA/GTA Preparation	61	Dr. Shana Kerr
Fall 2021	BIOS 4697	Undergrad Teaching	48	Dr. Shana Kerr
Fall 2021	GT1000	First-Year Seminar	15	
Summer 2021	NEUR 4001	Neuroscience Research Project Capstone	7	
Spring 2021	NEUR 2001	Principles of Neuroscience	64	Dr. Alonzo Whyte, Dr. Timothy Cope
Spring 2021	NEUR 4001	Neuroscience Research Project Capstone	15	

*On parental leave July 17-October 16, 2023

Prior to Georgia Institute of Technology

Purdue University Northwest

First Year Experience in Psychology (PSY 103)
 Elementary Psychology (PSY120) face-to-face
 Elementary Psychology (PSY120) online
 Introduction to Statistics in Psychology (PSY 201)
 Research Methods in Psychology (PSY 203)
 Brain and Behavior (PSY220)
 Research Experience in Psychology (PSY390)

Colgate University

Science, News Media, and You (CORE 141S) revived course
 Biological Psychology (PSYC 275) newly-developed course
 Brain, Physiology, and Behavior Seminar (PSYCH/NEUR 373)
 Psychopharmacology seminar (PSYCH/NEUR 377)
 Developmental Psychobiology Seminar (NEUR 378) newly-developed course

B. Academic and Career Advising and Guidance Responsibilities

Faculty advising for undergraduate neuroscience students. Duties include: academic and career mentoring, review of academic coaching, course selection, suggestion of extracurricular opportunities, degree audits.

Academic advising during FASET orientation sessions.

Academic and Career advising to GT1000 Neuroscience students. Duties included: registration and degree map planning, career preparation and exploration, resume assistance.

Faculty Advisor for student organizations: Project Lets, Down to Dance, American Parkinson's Disease Association (APDA), American Physician Scientists Association Local Chapter (APSA LC), Neuro Club. Assisted with creation of charter for Project Lets and APDA

B. Research Advising and Guidance

Undergraduate Research Option thesis second reader for: Riya Bhanushali, Abby Cornell, Evie Davalbhakta, Vanessa Haak, Uswa Khan, Sarah Talwar, Sriikhar Verdurupaka

Mentored Undergraduate Student Projects

- Grace Williams, Undergraduate Spring 2023-present
Project title: Examining social interactions and oxytocin in biological and foster mother and offspring Sumatran Orangutans.
- Mia Bechara, Undergraduate Fall 2022-present
Project title: Analyzing dopamine in the nucleus accumbens in a rodent model of postpartum OCD.
- Harika Kosajuru, Undergraduate Fall 2022-present
PURA-awarded Project title: Examination of Long-Term Effects of Postnatal Clomipramine Exposure on Serotonergic Systems in Sprague-Dawley Rats
- Siena Watcholounis Undergraduate Summer 2022
Project title: Measuring Serotonin via HPLC in Cockroaches
- Noah Campbell Undergraduate Fall 2021-Spring 2023
Project title: Phenotyping of social/mating behavior in V1aR-KO Syrian hamsters
Co-advisor: Elliot Albers, GSU
- Rachel Bond, Undergraduate Spring 2021-present
PURA-awarded Project title: Examining cortisol levels and social interactions in foster mother and offspring Sumatran orangutans to investigate the long-term effects of introductions in conservation efforts
- Hannah Maurello, Undergraduate (Purdue University Northwest), Spring 2021-present
PNW Undergraduate Research Grant awarded Project Title: Observation of foster mother-offspring relationships in the development of orphaned Sumatran orangutans in captivity
- Emily Alpers, Undergraduate (PNW) Spring 2021-Fall 2021
PNW Undergraduate Research Grant awarded Project Title: Observation of foster mother-offspring relationships in the development of orphaned Sumatran orangutans in captivity

- Antonio Kocoski, Undergraduate (PNW) Fall 2020-present
PNW Undergraduate Research Grant awarded Project Title: Observation of foster mother-offspring relationships in the development of orphaned Sumatran orangutans in captivity

Prior to Georgia Institute of Technology

Purdue University Northwest

Dillon Quinones, Undergraduate McNair Scholar (PNW) Fall 2020
Internship Project Title: The Relationship Between TPH2 Polymorphisms, Depression, and Anxiety in Undergraduate Students

- Bryan Melvin (PNW) Fall 2020
PNW Undergraduate Research Grant awarded Project Title: Personal perceptions of emotional responses compared to standardized computer analyzed responses in university subjects with varying levels of anxiety, stress, and depression.

Colgate University

Mentored Undergraduate Neuroscience Thesis Students

Ameera Crossman, Hennie Cabuhay Undergraduate Spring 2017

Thesis Title: Sex differences in a rodent model of OCD behavior

Nairuti Shah Undergraduate Fall 2016-Spring 2017
 Honors Thesis Title: Effects of offspring contact on OCD behavior in postpartum laboratory rats

Tyler Sherper Fall 2016
 Thesis Title: Effects of repeated postnatal clomipramine exposure on serotonin-related microRNA expression in the dorsal vs. ventral hippocampus of adult rats

Dana Smith Fall 2016-Spring 2017
 Honors Thesis Title: Sex differences in behavioral and neurobiological responses to acute vs. chronic antidepressant treatment

Charles Gore, John Nuveen Spring 2016
 Thesis Title: Effects of repeated postnatal clomipramine exposure on serotonin-related microRNA expression in the hippocampus of adult rats

Allison Subaldo Fall 2015
 Thesis Title: The effects of clomipramine and early maternal care on anxiety-like behaviors in Sprague-Dawley rats

TEACHING EXPERIENCE

D. Educational Innovations and Other Contributions

NEUR 2001 (Spring 2021-present)

Developed several active-learning in-class and self-guided activities such as case studies and “Back to Baseline” in-class stress activity

Participated in *Developing Knowledge Project* to improve course engagement

NEUR 3001 (Fall 2021)

Developed several active-learning in-class and self-guided activities

Created Escape Room end-of-semester collaborative cumulative activity

Developed Case Study semester-long assignment

Created “Difficult Topics” video assignment

Implemented Perusall for collaborative discussion of journal articles

NEUR 3001 (Fall 2022)

Earned Course Hero grant where students will produce videos on challenging topics with embedded quiz questions for their peers. Students will vote on the best videos, and the winners will present at a conference.

NEUR 4001 (Spring 2021)

Developed Literature Review Template

Developed Statistical Guidance sheet

Developed Presentation Templates

NEUR 4001 (Summer 2021)

Conducted genotyping experiment with student group

NEUR 4001 (Spring, Summer 2022, Summer 2023)

Collaborated with School of Chemistry and Biochemistry for publication-worthy HPLC analyses

NEUR 3003 (Spring 2022)

Created zombie-themed active-learning assignments to apply to course concepts

Prior to Georgia Institute of Technology

Purdue University Northwest

Converted Face 2 Face activities to online-accessible formats including: Escape the Classroom (Google survey) PSY120 Elementary Psychology assignment, Sensation and Perception lab. PSY120 assignment, and Chaos in the Hospital PSY 220 *Brain and Behavior* assignment.

Consistently use polleverywhere and Kahoot! for freely-available just-in-time teaching formative assessment in classes.

In Elementary Psychology, I re-created and adapted classic experiments, like the Prisoner’s dilemma, to demonstrate learning objectives.

Organized an outreach activity in PSY 220 with interactive demonstrations presented by students for homeschooled children, Fall 2018.

Adapted a “Zombie brain” and “Cauliflower brain” activity for teaching neuroanatomy in PSY 220.

Created an “Escape the Classroom” activity with stations around the room containing problems students have to solve as an in-class review session activity in PSY 120, Fall 2018.

Presented my “Make Paper Fly” demonstration of functional fixedness in PSY 120 Elementary Psychology at the Society for Teaching of Psychology Annual Conference on Teaching in Phoenix, AZ, Fall 2018.

Obtained data from a women’s shelter in collaboration with Janet Peters at Washington State University to analyze with students in PSY 201 Statistics course, Fall 2018, 2019.

Colgate University

Secured Beyond Colgate funds for Science and the Media students to tour and interview at news outlets in NYC

Secured Beyond Colgate funds for Biological Psychology students to attend Temple Grandin lecture in Syracuse

E. Educational Administration and Leadership

Supervised 7 students in 2 Capstone projects	Summer 2021
Supervised 15 students in 4 Capstone projects	Spring 2021
Undergraduate Neuroscience Curriculum Committee	Spring 2021-present

V. Research, Scholarship, and Creative Activities

A. Publications

Ragan C.M., Benjaram K., Lue C., Raman R., Ravikanti K., & Zhang E. (2023). Increasing digital literacy and course competencies using student-created digital media. In H. Scherschel & D. S. Rudmann (Eds.) Teaching tips: A compendium of conference presentations on teaching, 2022-23. (pp. 69-72). Society for the Teaching of Psychology. <http://teachpsych.org/ebooks/teachingtips8> Edited manuscript, mentored students with presentation design and statistical analysis.

Ragan, C.M., Ahmed E.I., **Vitale, E.M.**, Linning-Duffy K, Miller-Smith S.M., Maguire J. Lonstein, J.S. (2022). Postpartum state, but not maternal caregiving or level of anxiety, increases medial prefrontal cortex GAD 65 and vGAT in female rats. *Frontiers in Global Women's Health, section Women's Mental Health. 2, 746518.*

Prior to Georgia Institute of Technology

Ragan, C. Escape the classroom. In Scherschel, H., Baker, S. (Eds.), Teaching tips: A compendium of conference presentations on teaching, 2018-19 (pp. 131–135). Retrieved from the Society for the Teaching of Psychology website: <http://teachpsych.org/ebooks/teachingtips4> (2019). Created activity and wrote manuscript.

Grieb Z.A. & **Ragan C.M.** The effects of perinatal SSRI exposure on anxious behavior and neurobiology in rodent and human offspring” European Neuropsychopharmacology. 2019. 29(11):1169-1184. IF: 4.369. Co-wrote and synthesized data for manuscript.

Jimenez A.G., Winward J., Smith D. M., **Ragan C.M.** Effects of short-term clomipramine on anxiety-like behavior, cellular metabolism, and oxidative stress in primary fibroblast cells of male and female rats. Physiological Reports. 2018. 6(9):e13615. IF: 1.333. Ran behavior, analyzed data, and co-wrote manuscript.

Winward J., **Ragan C.M.**, Jimenez A.G. Cellular metabolic rates and oxidative stress profiles in primary fibroblast cells isolated from virgin females, reproductively experienced females, and male Sprague-Dawley rats. Physiological Reports. 2018. 6(20):e13909. IF: 1.333. Ran behavior, analyzed data, and co-wrote manuscript.

Gemmel M., Bögi E., **Ragan C.**, Hazlett M., Dubovicky M., van den Hove D.L., Oberlander T.F., Charlier T.D., Pawluski J.L. Perinatal selective serotonin reuptake inhibitor medication (SSRI) effects on social behaviors, neurodevelopment and the epigenome. Neuroscience & Biobehavioral Reviews. 2018. 85:102-116. IF: 9.440. Co-wrote and synthesized data for manuscript.

Ragan C.M., Harding K.M., Lonstein J.S. Early maternal care and emotional responses are associated with later adult maternal behavior and tryptophan hydroxylase 2 expression in the dorsal raphe in female rats. Hormones and Behavior special issue on Parental Behavior. 2016. 77: 62-71. IF: 4.445. Wrote, ran behavior, ran laboratory work, mentored graduate student, and analyzed data for manuscript.

Ragan C.M. & Lonstein J.S. Postpartum anxiety is predicted by pre-mating anxiety and related to recent offspring contact and brain monoamines. Neuroscience. 2014. 3(256): 433-444. IF: 3.244. Wrote, ran behavior, ran laboratory work, mentored summer undergraduate student, and analyzed data for manuscript.

Ragan C.M., Loken E.L., Stifter, C.A., Cavigelli S.A. Within-litter variance in early rat pup-mother interactions and adult offspring responses to physical and social novelty. Developmental Psychobiology. 2012. 54(2):199-206. IF: 2.494. Wrote, ran behavior, ran laboratory work, trained students, and analyzed data for manuscript.

Cavigelli S.A., **Ragan C.M.**, Barrett C.E., and Michael K.C. Within-litter variance in rat maternal behaviour. Behavioural Processes. 2010. 84(3): 696-704. IF: 1.555. Co-wrote, ran behavior, trained students, and analyzed data for manuscript.

Cavigelli S.A., **Ragan C.M.**, Michael K.C., Kovacsics C.E., Bruscke A.P. Stable temperament and glucocorticoid production both predict male rat life span. *Physiology and Behavior*. 2009. 98 (1-2): 205-214. IF: 3.033. Co-wrote, ran behavior, ran laboratory work, trained students, and analyzed data for manuscript.

Boggiano M. M., Cavigelli S. A., Dorsey J. R., Thomas J. M., Pritchett C. E., **Ragan C.M.**, Chandler-Laney P.C. Effect of a cage divider permitting social stimuli on stress and food intake in rats. *Physiology and Behavior*. 2008. 95(1-2): 222–228. IF: 3.033. Revised manuscript, ran laboratory work, trained students, and analyzed data for manuscript.

Sabunciyan S., Yolken R., **Ragan C.M.**, Potash J., Nimgaonkar V.L., Dickerson F., Llenos I.C., and Weis S. Polymorphisms in the homeobox gene OTX2 May Be a Risk Factor for Bipolar Disorder. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*. 2007. 144B (8): 1083-1086. IF: 3.123. Revised manuscript and ran laboratory work for manuscript.

Book Chapter

Cavigelli S.A., Michael K.C., **Ragan C.M.** Behavioral, physiological, and health biases in laboratory rodents: a basis for understanding mechanistic links between human personality and health. In: *Animal Personalities: Behavior, Physiology and Evolution* (Ed. by C. Carere and D. Maestripieri), 2013. Chicago: University of Chicago Press. Co-wrote and synthesized data for book chapter.

b. Unpublished manuscripts in progress

Bond, R., Kocoski A. Maurello, H. Quinn V., **Ragan, C.M.** Observation of foster mother-offspring relationships in the development of orphaned Sumatran orangutans in captivity. To be submitted in a *Primate* journal. Edited manuscript, mentored students with experimental design and statistical analysis.

Ragan C.M. Watchulonis S., Dean, D. Analysis of nervous system biogenic amines in an undergraduate neuroscience laboratory using high performance liquid chromatography in *Blaptica dubia*. To be submitted to *Journal of Neuroscience Education*. Edited manuscript, mentored students with protocol design.

Baum M., Giolda L.M., **Ragan, C.M.** Examination of attitudes toward direct-to-consumer genetic testing in undergraduate students. *Under Revision*. Co-wrote, created questionnaires, mentored student, and analyzed data for manuscript.

Regula B, Shah, N., Tague K.M., Giolda L.M., **Ragan, C.M.** Investigation of markers of inflammation in postpartum mood and anxiety disorders in a rodent model. To be submitted Spring 2023. Co-wrote, ran behavior, guided laboratory work with students, mentored students, and analyzed data for manuscript.

Lu, C.I., Leonard, S., Page, K., Ingram, C., **Ragan, C.M.** The effects of social learning on cockroach spatial navigation. To be submitted Fall 2022. Edited manuscript, mentored students with experimental design and statistical analysis.

B. Other Publications and Creative Products

Mentored Undergraduate Student Posters

Ragan C.M., Benjaram K., Lue C., Raman R., Ravikanti K., & Zhang E. Increasing digital literacy and course competencies using student-created digital media. Annual Southeastern Teaching of Psychology Conference. February 17-18, 2023, Atlanta, GA. (Co-presenter).

Bond, R. Examining cortisol levels and social Interactions in foster mother and offspring Sumatran orangutans. Annual ACC (Atlantic Coast Conference) Meeting of the Minds Undergraduate Research Conference. April 1-3, 2022, University of Virginia, Charlottesville, Virginia and Society for Behavioral Neuroendocrinology Conference, Atlanta, GA June 26-29, 2022.

Kocoski A. Maurello, H. Bond, R. Quinn V., Ragan, C.M. Quantifying Foster Primate-to-primate programs as a meaningful means of conservation for Indonesian orangutans PNW Days of Discovery April, 5, 2022 and Faculty for Undergraduate Neuroscience Undergraduate Research Virtual Symposium. April 9, 2022. (Virtual Conference).

Kocoski A. Maurello, H. Bond, R. Quinn V., Ragan, C.M. Observation of foster mother-offspring relationships in the development of orphaned Sumatran orangutans in captivity. Presented at the PNW Days of Discovery, Midwestern Psychological Association, and Society for Neuroscience meetings (Spring and Fall 2021).

Prior to Georgia Institute of Technology

Purdue University Northwest

Engel, A., Williams, B., Norris, I., Regula, B., Ragan, C.M. "It's Written All over your Face: Analyzing Mental Health in Undergraduates using iMotions Software" November 7, 2019. National Collegiate Honors Council Conference. National Conference. New Orleans, LA and PNW Days of Discovery. Local Conference. April 2020. (Virtual conference).

Regula B.N., Shah N., Gielda, L.M., Ragan, C.M. Investigation of serotonin-related gene expression and socioemotional behaviors as a result of early-life exposure to clomipramine in Sprague-Dawley rats." Indiana Academy of Social Sciences Conference. Regional Conference. Valparaiso University, Valparaiso, IN. October 11, 2019. and at the Society for Neuroscience meeting. International Conference. Chicago, IL. October 2019.

Engel, A., Williams, B., Norris, I., Regula, B., Ragan, C. M. Personal perceptions of emotional responses compared to standardized computer analyzed responses in university subjects with varying levels of anxiety, stress, and depression. April 4, 2019. PNW Days of Discovery, Westville, IN and at the 26th Clement S. Stacy Undergraduate Research Conference. Local Conference. Hammond, IN Spring 2019.

Ragan, C. M., Regula B. Shah N. Investigation of serotonin-related gene expression and socioemotional behaviors as a result of early-life exposure to clomipramine in Sprague-Dawley mother rats. PNW Days of Discovery. Local Conference. Hammond, IN. April 4, 2019 and Midwest Psychological Association. Chicago, IL. April 11, 2019.

Provided feedback and supplies for PSY 220 Brain and Behavior Brain Awareness Day presentations to the public held on March 22, 2019. Local event.

Ragan, C.M., & Regula, B. Investigation of serotonin-related gene expression in an epigenetic model of OCD in Sprague Dawley rats. Clement S. Stacy Undergraduate Research Conference. Local Conference. Hammond, IN. April 20, 2018.

Crossman, A., Cabuhay, H., Ragan C. M. The effects of clomipramine on the development of obsessive compulsive disorder: a two-generational epigenetic model. Society for Neuroscience meeting. International Conference. Washington, D.C. November 2017.

Colgate University

Smith, E., Murphy P.J., Ragan C. M. Multi-generational effects of clomipramine on anxiety- and obsessive compulsive-like behaviors in F1 generation rats. Summer Research Poster Session. Colgate University. Local Conference. July 2017.

Smith, D.M., Ragan C.M. Effects of clomipramine on anxiety-like behavior and Dnmt3a expression in the mPFC of male and female rats. International Behavioral Neuroscience Society. International Conference. Hiroshima, Japan. June 2017.

Dufort, C.M., Ragan C.M. The short-term effects of acute clomipramine treatment and maternal care on miRNA-16 expression in the dorsal raphe of neonatal rats. International Behavioral Neuroscience Society. International Conference. Hiroshima, Japan. June 2017.

Gore C.B., Nuveen J.P., Subaldo A.J., McCain, S.E., Ragan C.M., The effects of maternal care and early postnatal clomipramine treatment on offspring anxiety and microrna-16 expression in the adult rat brain. Society for Behavioral Neuroendocrinology. (Gore and McCain presented). International Conference. Montreal, Canada. August 2016.

Moscicki P., Ragan C.M., The role of maternal care and early anti-depressant exposure on later offspring anxiety in laboratory rats. Summer Research Poster Session. Colgate University. Local Conference. July 2016.

Higham C., Ransohoff J., Ragan C.M., The effects of clomipramine treatment on anxiety and Dnmt3a expression in the medial prefrontal cortex in adult male and female rats. Summer Research Poster Session. Local Conference. Colgate University. July 2016.

Subaldo A. and Ragan C.M. Effects of clomipramine and early maternal care on anxiety-like behaviors in rats. National Conferences on Undergraduate Research (NCUR). National Conference. University of North Carolina, Asheville, NC. April 2016.

C. Presentations

Invited Talks

Ragan, C.M. Dean, D. “Multidisciplinary Approaches to Undergraduate Research Capstone.” Midwestern Psychological Association. To be presented April 2023.

Ragan, C.M. “Neuroscience of Fear.” Georgia Tech Neuroscience Club. October 25, 2022. (Presenter).

Ragan, C.M., Pfau D. “Creating Wicked Students” Society for Behavioral Neuroendocrinology Conference, Atlanta, GA June 26-29, 2022. (Co-presenter).

Ragan, C.M. The Anxious Brain. Seton Hill University. Biology Seminar. Fall 2021. (Virtual presenter)

Prior to Georgia Institute of Technology

Peer-reviewed Presentations

Ragan, C.M. Dean, D. “Multidisciplinary approaches to undergraduate research capstone.” Invited Talk. Midwestern Psychological Association. Regional Conference. Chicago, IL. April 21, 2023. (Presenter).

Ragan, C.M. Dean, D., “How to Train your Cockroach: Using invertebrates for Undergraduate Neuroscience Research Capstone” Society for Teaching of Psychology Annual Conference on Teaching in Pittsburgh, PA, October 21, 2022. (Presenter)

“How I Learned to Stop Worrying and Love Neuroscience.” Southeastern Teaching of Psychology Conference. February 20, 2022. (Virtual Presenter).

“Experiential Learning through Public Outreach in Psychology and Neuroscience Courses” Lunchtime Participant Idea Exchange. Society for Teaching of Psychology Annual Conference on Teaching.
<https://www.youtube.com/playlist?list=PLnJiT2SBBVsezlktPYEYyuwPyR1XBxERw> Fall 2021. (Virtual co-presenter with Robert Hallock).

“Chaos in the Hospital!” Psychopathology Lab. Teaching in the Behavioral Sciences with Activities and Laboratory Experiments Invited Symposium. Midwestern Psychological Association. Chicago, IL. Regional Conference. April 24, 2021. (Virtual presenter).

“Multimodal Active Learning Methods for Biological Psychology” Symposium with

KatieAnn Skogsburg, Ellen Carpenter, and Beth Ann Rice. February 19, 2021.
(Virtual Presenter)

Prior to Georgia Institute of Technology

Purdue University Northwest

“Psychology... or Supernatural?” Society for Teaching of Psychology Annual Conference on Teaching. <https://www.youtube.com/watch?v=onofYgO9j8s> Fall 2020. (Virtual co-presenter with Melissa Maffeo).

“Addressing Challenging Neuroscience Concepts” American Psychological Association. National Conference. <https://www.youtube.com/watch?v=FNHBx7O-YOc&feature=youtu.be> August 6-8, 2020 (Virtual presenter).

“Life Doesn’t Have an Answer Key” Student Research and Scholarship Day. University of South Carolina Beaufort. Local Research Day in South Carolina, presented online to various audiences.
<https://www.youtube.com/watch?v=p7n27y9BqBs>. April 27, 2020 (Virtual Keynote Speaker).

“Escape the (Class)room!” Selected Teaching Demonstration Presentation. PsychOne Teaching Conference. National Conference. Duke University, Durham, NC. June 27, 2019 (Presenter).

“Surviving and Thriving During the Neuroscience Portion of your Course.” Society for Teaching of Psychology session. Midwest Psychological Association. Regional Conference. Chicago, IL. April 12, 2019. (Co-Presenter with Robert Hallock).

“Physiological Reactions to Perception of Threat from Immigrants.” Midwest Psychological Association. Regional Conference. Chicago, IL. April 11, 2019. (Co-Presenter with Hui Chu).

“Engaging the Introverted Learner” Selected Roundtable Discussion. PsychOne Teaching Conference. National Conference. Duke University, Durham, NC. June 29, 2018 (Presenter).

“The Anxious Brain.” PNW Life Sciences Seminar Series. Purdue University Northwest, Westville, IN. Local Seminar. March 9, 2018. (Presenter).

Colgate University

“Maternal Environment & Epigenetics.” Columbia University, New York, New York. October 14, 2016

“Effects of differential maternal care on sibling differences in anxiety, mothering, and serotonin mechanisms in rats.” Symposium on Early Life Experiences and Serotonin: Effects on Social and Emotional Health. International Society for Behavioral Neuroscience Conference. Budapest, Hungary. June 8, 2016.

“Environmental and neurobiological influences of maternal behavior and anxiety”
Brown Bag seminar for Psychology Department. Wayne State University, Detroit,
MI. March 14, 2016.

D. Grants and Contracts

Title of Project: Quantifying foster primate-to-primate programs as a meaningful means of conservation for Indonesian orangutans

Agency/Company: Purdue University Northwest Undergraduate Research Grant

Total Dollar Amount: \$1000

Role: co-PI

Collaborators: Vanessa Quinn (Purdue University Northwest)

Undergraduate Researchers: Antonio Kocoski, Rachel Bond, Mia Bechara, Elijah Walker

Period of Contract: 11/1/2022 – 5/31/2023

Candidate's Share: 75%

Title of Project: Student-created challenging topics videos in an upper-level Neuroscience course

Agency/Company: Course Hero

Total Dollar Amount: \$2000

Role: PI

Collaborators: N/A

Period of Contract: 7/1/2022 – 8/1/2023

Candidate's Share: 100%

Title of Project: Brain Awareness Day-A Multisensory Tour of the Brain

Agency/Company: Dana Foundation

Total Dollar Amount: \$1500

Role: PI

Collaborators: N/A

Period of Contract: 1/14/2022 – 4/30/2022

Candidate's Share: 100%

Title of Project: Neuroscience Teaching Conference

Agency/Company: Society for the Teaching of Psychology's Small Grants—
Promoting Partnerships

Total Dollar Amount: \$2500

Role: co-PI

Collaborators: Melissa Maffeo, Wake Forest University (co-PI); Anna (Katy) Lack, Wake Forest University (co-PI), Claudia Jorgensen, Utah Valley State (co-PI)

Period of Contract: 12/16/2021 – 12/31/2022

Candidate's Share: N/A

Title of Project: Brain Awareness Day-Your Brain as your Body's Computer

Agency/Company: Dana Foundation

Total Dollar Amount: \$1500

Role: PI

Collaborators: N/A
Period of Contract: 1/14/2021 – 8/31/2021
Candidate's Share: 100%

Title of Project: Increasing computer science competency in middle school students through Brain Awareness Day activities
Agency/Company: Indiana Academy of Science Community Grant
Total Dollar Amount: \$4700
Role: PI
Collaborators: Vanessa Quinn, Purdue University Northwest (Co-PI)
Period of Contract: 11/1/2020 – 7/1/2021
Candidate's Share: 100%

Mentored Undergraduate Research Grants

Title of Project: Examination of Long-Term Effects of Postnatal Clomipramine Exposure on Serotonergic Systems in Sprague-Dawley Rats
Agency/Company: Presidential Undergraduate Research Award: Georgia Institute of Technology
Total Dollar Amount: \$1500 (awarded to Undergraduate, Harika Kosaraju)
Role: PI
Collaborators: N/A
Undergraduate Researchers: Mia Bechara
Period of Contract: 8/15/2023 – 12/31/2023
Candidate's Share: N/A

Title of Project: Examining cortisol levels and social interactions in foster mother and offspring Sumatran orangutans to investigate the long-term effects of introductions in conservation efforts
Agency/Company: Presidential Undergraduate Research Award: Georgia Institute of Technology
Total Dollar Amount: \$1500 (awarded to Undergraduate, Rachel Bond)
Role: PI
Collaborators: Vanessa Quinn (Purdue University Northwest)
Undergraduate Researchers: Rachel Bond, Antonio Kocoski, Emily Alpers, Hanna Maurello
Period of Contract: 11/9/2021 – 5/31/2022
Candidate's Share: N/A

Title of Project: Observation of foster mother-offspring relationships in the development of orphaned Sumatran orangutans in captivity
Agency/Company: Purdue University Northwest Undergraduate Research Grant
Total Dollar Amount: \$544.80
Role: co-PI
Collaborators: Vanessa Quinn (Purdue University Northwest)
Undergraduate Researchers: Antonio Kocoski, Emily Alpers, Hanna Maurello
Period of Contract: 12/6/2021 – 5/31/2022
Candidate's Share: 100%

Prior to Georgia Institute of Technology

Purdue University Northwest

Society for Teaching of Psychology Early Career Travel Award Summer 2019
to present at PsychOne conference (\$500)

Faculty for Undergraduate Neuroscience Spring 2018-Spring 2020
Equipment Loan Grant

Title: iMotions Facial Expression Analysis software for scholarly and educational pursuits.

PI: Dr. Christina M. Ragan

Student researchers: Brea Regula, Annabelle Engel, Whitney Moore, Dillon Quinones, Kristina Tague

PNW College of Humanities, Education, and Social Sciences Summer 2019
Summer Scholarship

Title: Multigenerational effects of early antidepressant exposure on socioemotional behavior and serotonin in a rodent model of Obsessive-Compulsive Disorder

PI: Dr. Christina M. Ragan Student researchers: Brea Regula

Purdue Research Foundation International Travel Grant (\$1000) Summer 2018
To travel to Toronto, Canada to present at the Parental Brain and Society for Behavioral Neuroendocrinology conferences July 13-18, 2018.

PNW Catalyst Grant (\$11,089) July 2018-Dec 2019

Title: Investigation of markers of inflammation in postpartum mood and anxiety disorders in a rodent model

PI: Dr. Christina M. Ragan Co-PI: Dr. Lindsay Gielda, Biology

PNW Exploratory Grant (\$4,000) July 2018-Dec 2019

Title: Biological and socio-cultural factors associated with perceptions of immigrants by authorization status and country of origin

PI: Dr. Hui Chu Co-PI: Dr. Christina M. Ragan

Mentored Undergraduate Research Grants

McNair Scholar Summer Research Internship Program (SRIP) Summer 2020

Title: The Relationship Between TPH2 Polymorphisms, Depression, and Anxiety in Undergraduate Students

Faculty Mentor: Dr. Christina M. Ragan

Student researcher: Dillon Quinones

Psi Chi Honor Society Summer 2019

Mamie Phillips Diversity Undergraduate Research Grant (\$1100)

Title: Perceived stress, anxiety, and depression in college students vs. genetic vulnerability expressed by the ADRB1 gene awarded to student Brea Regula

PNW Undergraduate Research Grant (\$600) Fall 2018-Spring 2021
Title: Personal perceptions of emotional responses compared to standardized computer analyzed responses in university subjects with varying levels of anxiety, stress, and depression.

Faculty mentor: Dr. Christina M. Ragan
Student researchers: Annabelle Engel, Brittany Williams

PNW Undergraduate Research Grant (\$600) Fall 2018-Spring 2021
Title: Perceived stress, anxiety, and depression in college students vs. genetic vulnerability expressed by the ADRB1 gene

Faculty mentor: Dr. Christina M. Ragan
Student researchers: Brea Regula, Annabelle Engel, Brittany Williams

PNW Undergraduate Research Grant (\$300) Spring 2018-Fall 2020
Title: Investigation of serotonin-related gene expression in an epigenetic model of OCD in rats

Faculty mentor: Dr. Christina M. Ragan
Student researcher: Brea Regula

PNW Undergraduate Research Grant (\$600) Fall 2017-Spring 2018
Title: Depression, a little Electricity, and a touch of Ketamine (ECT model)

Faculty mentor: Dr. Christina M. Ragan
Student researchers: Amanda Brown and Jessica McGuire

Colgate University

Summer 2016

Faculty-initiated Summer Research Fellowship

Title: Examination of anxiety and micro-RNA-regulated serotonin expression in the bed nucleus of the stria terminalis (BST) in female rats treated with clomipramine.

PI: Dr. Christina M. Ragan Student Researchers: Jamie Ransohoff, Chris Higham

Michigan State University

Ruth L. Kirschstein National Research Service Award (NRSA) 2013-2015
National Institute of Child Health and Human Development. (\$100,000)
Training Grant Number: 1 F32 HD075758-01A1

Title: Variance in sibling mothering received and adult mothering, anxiety and serotonin.

PI: Dr. Christina M. Ragan Role: Postdoctoral Fellow Trainee

National Institute of Child Health and Human Development. 2012-2013
Grant Number: R01HD057962

Title: Neurobiological control of maternal anxiety.

PI: Dr. Joseph S. Lonstein Role: Postdoctoral Fellow Trainee

National Institutes of Mental Health Training Grant 2011-2012

Grant Number: NIMH T32 MH70343

Title: Integrative neurobiology of social processes.

PI: Dr. Marc S. Breedlove Role: Postdoctoral Fellow Trainee

E. Other Scholarly and Creative Accomplishments

Creator and Curator of Teaching Resources for Biological Psychology and Neuroscience Facebook page moderating over 1400 members

[Podcast](#) on myth busting Neuroscience in the movie Lucy

F. Societal and Policy Impacts

NR

VI. Service

A. Professional Contributions

Neuroscience Teaching Conference (NTC) Co-creator and Co-Director
Member of the National Academic Advising Association (NACADA)
Society for Behavioral Neuroendocrinology Professional Development Committee, workshop Co-chair
Member of the Faculty for Undergraduate Neuroscience (FUN)
Omicron Delta Kappa leadership society
Society for Neuroscience
Society for Teaching of Psychology

B. Public and Community Service

STREAM Day Virtual Presenter, Kuhl Elementary Port Jervis, NY	Summer 2021
Athletes for Charity STEM + Literacy Program	Spring 2021
Psi Chi Honor Society Induction Keynote Speaker IU Northwest	Spring 2021
Athletes for Charity STEM Day: Meet a Neuroscientist!	Spring 2021
Co-Host Virtual PNW Brain Awareness Day (with Rob Hallock, featuring Temple Grandin)	Spring 2021
Neuroscience careers panel to Psychology course at PNW	Spring 2021

C. Institute Contributions

Institute level

Middle Grades Discover GT	Fall 2022-present
Faculty Senate CoS Rep	Fall 2022-present
Dana Foundation Planning Grant Committee	Fall 2022-present

Organizer GT Brain Awareness Day for ATL SciFest	Spring 2022-present
Brain Awareness Week school visits	Spring 2022-present

College level

EXPLORE GT Neuroscience Presentation	Spring 2022-present
CoS "Welcome Week" Explore LLC Neuroscience Faculty Rep	Fall 2021, 2022
It's all about Science and Math Neuroscience Faculty Rep	Fall 2022
Clough Academic Partners CoS Representative	Spring 2021-present

School level

GT Neuroscience Strategic Planning Committee member	Fall 2022-present
Undergraduate Teaching Assistant Coordinator	Fall 2022-present
Neuroscience Academic Professional Search Committee	Summer 2022-present
Science Education Research Group (SERGE)	Spring 2021-present
Neuroscience Undergraduate Curriculum Committee	Spring 2021-present
Technology Fee Proposal contributor	Spring 2021
Neuroscience Suite and Labs Needs Assessment	Spring 2021
Microteaching feedback to CETL 2000/8000 students	Spring 2021-present
Director of Neuroscience Outreach	Spring 2021-present

Prior to Georgia Institute of Technology

Purdue University Northwest University Service

Mentored 10 Faculty members in PIVOT Summer Support program for online learning	Summer 2020
Reviewed 30 applicants and co-conducted candidate interviews for TRIO McNair Coordinator search committee	Summer 2020
Serve on University Grade Appeals committee	Fall 2019-Fall 2020
Scored 10 PRF Summer grants	Spring 2019
Judged PNW Days of Discovery undergraduate posters	Spring 2019
Scored 10 Indiana Space Grant grants	Fall 2018
Scored PNW Catalyst Grants	Fall 2018
Scored PNW Undergraduate Research Grants	Fall 2017-Fall 2020
Faculty Research Board Member	Fall 2018- Fall 2020
Assisted with Sinai Forum Speaker Series	Fall 2018, 2019
Served on panel at New Faculty Orientation	Summer 2018
Center for Faculty Development Faculty Fellows selection committee	Spring 2018
Scored PNW Undergraduate Research Grants	Fall 2017-Fall 2020

Purdue University Northwest College Service

CHES Strategic Planning Committee	Summer 2020
Women's, Gender, and Sexuality Studies Committee	Summer 2020-Fall 2020
Helped select CHES Summer Scholarship faculty recipients	Spring 2020
Presented in invited Symposium on "Improvisation, Neuroscience, and Philosophy," with musicians and PNW faculty in Philosophy, Psychology, Literature at CHES art gallery	Spring 2020
Helped select Lerner Memorial Scholarship recipients	Spring 2019

CHES Undergraduate Research Conference Committee	Fall 2017- Fall 2020
Purdue University Northwest Department Service	
Psi Chi Westville campus Adviser	Spring 2020-Fall 2020
Psychology Club Adviser	Fall 2018-present
Worked Psychology table at Open House at PNW	Fall 2018
Psi Chi Roundtable Discussion Professional Development -writing a personal statement	Spring 2018
PNW Brain Awareness Day Creator and Organizer	Spring 2018-Fall 2020
Psi Chi Inductions	Spring 2018-Spring 2020
Psychology Department B.S. Curriculum Committee	Fall 2017
Presented career path to Psychology Club at Hammond Campus	Fall 2017
Visit Psychology classes to discuss professional development	Fall 2017- Spring 2021

D. Other Professional Activities

Faculty for Undergraduate Neuroscience Equipment Loan Grant reviewer 2021

Ad-hoc manuscript reviewer

Acet Ethologica, Behavioural Processes, Biological Psychiatry, International Journal of Developmental Neuroscience, Physiology and Behavior, PLOS One, Frontiers in Zoology, Hormones and Behavior, Psychoneuroendocrinology, Nutritional Neuroscience, Brain Behavior Research

VII. Professional Growth and Development

On-campus

NEUR 2001 Teaching observation in *The Developing Knowledge Project*. PI: Tessa Andrews
 CETL 2000/8000 CETL Small Group Instructional Diagnosis
 CETL Celebrating Teaching Day: Assessment Hacks Revealed: Lowering Barriers while Preserving Rigor
 CETL Course Design Studio Workshop
 CETL Fall Teaching Kickoff: Syllabus Clinic, Teaching Forward: Creating Inclusive Learning Environments with Technology
 Science Education Research Group (SERGE)
 GT 1000 New Instructor Orientation Workshop
 Summer & Special Session Updates for Advisors Workshop
 Promotion Workshop for Academic Professionals and Lecturers
 Academic Professionals and Lecturers Mentoring Network
 Women Faculty Group
 Trans 101

Off-Campus

Participant and presenter for Online Teaching at its Best book club
 Participant and presenter for Small Teaching Online book club
 Participant and presenter for The Coach's Guide for Women Professors: Who Want a Successful Career and a Well-Balanced Life book club
 Top Contributor to Society for Teaching Psychology Facebook group
 Using Learning Science to Craft the Active Learning Classroom webinar from iclicker

Pearson webinar: Overcoming the Most Difficult Concepts: A Targeted Approach to Increasing Student Success Inside and Outside the Classroom"
Teaching as Research CIRTl webinar
Society for Behavioral Neuroendocrinology Professional Development Workshop
Society for Teaching of Psychology Mentorship program mentee

Prior to Georgia Institute of Technology

Purdue University Northwest

a. PNW Pedagogy Circles

Inflation

Plagiarism

Teaching portfolio-promoting reflective practice

What Makes Great Teaching?

The Socratic Method

b. PNW Center for Faculty Development & Leadership workshops

New Faculty Academy: Classroom Management

New Faculty Academy: Using Active Learning to Create an Engaging Learning Environment

Active Learning & Motivation

Assessing Student Learning

Teaching portfolio workshop

Preventing Plagiarism and Cheating

Working Smarter, Not Harder: Tools, Tips & Tricks

PIVOT Summer Support program for online learning: participant and mentor

c. Other PNW teaching-related workshops

CHESs Rubric Workshop

Designing Writing Assignments that Work workshop led by Lizbeth Bryant

Purdue Northwest Assessment meeting