

Ryan J. Post, Ph.D.

NRSA Postdoctoral Fellow, University of Pennsylvania

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EDUCATION

Cornell University, Ithaca, NY
Ph.D. in Neurobiology, August 2020
Dissertation: Initiation and adaptive termination of goal-directed behavior in mice
Providence College, Providence, RI
B.S. in Biology, B.A. in Psychology, May 2014
Magna cum laude, Liberal Arts Honors Certificate, Neuroscience Certificate

ACADEMIC POSITIONS

Assistant Professor, Providence College, Providence, RI (*starting* August 2023)
Department of Psychology, Neuroscience Program
Postdoctoral Researcher / National Research Service Award Postdoctoral Fellow, University of Pennsylvania, Philadelphia, PA (August 2020—present)
Department of Biology
Mentor: Dr. [J. Nicholas Betley](#)
Visiting Assistant Professor, Bryn Mawr College, Bryn Mawr, PA (January 2022—December 2022)
Department of Psychology, Bi-college Neuroscience Program
Graduate Research and Teaching Assistant, Cornell University, Ithaca, NY (August 2014—August 2020)
Department of Neurobiology and Behavior
Dissertation committee: Dr. [Melissa R. Warden](#), Dr. [Ronald M. Harris-Warrick](#), Dr. [Jesse H. Goldberg](#),
Dr. [Conor Liston](#)
Undergraduate Research Assistant / Lab Manager, Providence College, Providence, RI (April 2011—May 2014)
Department of Psychology
Mentor: Dr. [Christopher M. Bloom](#)

RESEARCH FUNDING

F32 DK131892 (PI) March 2022—February 2025
National Institute of Diabetes and Digestive and Kidney Diseases *Total amount*: \$200,946
The role of ventromedial hypothalamic steroidogenic factor-1 neurons in exercise-related metabolism

PUBLICATIONS

Published

†**Post, R.J.**, †Bulkin, D.A., Ebitz, R.B., †Lee, V., Han, K., and Warden, M.R. (2022). Tonic activity in lateral habenula neurons acts as a neutral valence brake on reward-seeking behavior. *Current Biology*. 32(20): 4325-4336.e5. [DOI](#)
Post, R.J. and Warden, M.R. (2018). Melancholy, anhedonia, apathy: the search for separable behaviors and neural circuits in depression. *Current Opinion in Neurobiology*. 49: 192-200. [DOI](#)
Guru, A., **Post, R.J.**, Ho, Y.Y., and Warden, M.R. (2015). Making sense of optogenetics. *International Journal of Psychopharmacology*. 18(11): pyv079. [DOI](#)
Post, R.J., Dahlborg, K.M., O'Loughlin, L.E., and Bloom, C.M. (2014). Effects of juvenile exposure to predator odor on adolescent and adult anxiety and pain nociception. *Physiology and Behavior*. 131: 57-61. [DOI](#)

Bloom, C.M., **Post, R.J.**, Mazick, J., Blumenthal, B., Doyle, C., Peters, B., Dyche, J., and Davenport, D.G. (2013). A discriminated conditioned punishment model of phobia. *Neuropsychiatric Disease and Treatment*. 9: 1239-1248. [DOI](#)

Bloom, C.M., **Post, R.J.**, Anch, A.M., and Davenport, D.G. (2013). Behavioral assessment of visual deficits in the *taiep* mutant. *Degenerative Neurological and Neuromuscular Disease*. 3: 15-21. [DOI](#)

Preprint publicly available

Guru, A., Seo, C., **Post, R.J.**, Kullakanda, D.S., Schaffer, J.A., and Warden, M.R. Ramping activity in midbrain dopamine neurons signifies the use of a cognitive map. *bioRxiv*. 2020.5.21, 108886. [Preprint](#)

Post, R.J., Sleezer, B.J., †Lee, V., †Pellegrino, K., †Ringelberg, N.W., †Moncrieffe, B.A., Bulkin, D.A., Seo, C., and Warden, M.R. A prefrontal cortex-midbrain projection initiates action toward goals. [Preprint](#)

In preparation

Post, R.J., Goldstein, N., Kruger, K.A., Villari, R., Jaycox, C., †Kern, H.C., †Skelly, B., †Timoney, M., and Betley, J.N. Additive activity in hypothalamic hunger imparts motivation to obtain food as costs increase.

Post, R.J., Carty, J.R.E., Goldstein, N., Villari, R., †Kellarakos, T., †Kern, H.C., †Skelly, B., Kindel, M., and Betley, J.N. Ventromedial hypothalamic steroidogenic factor-1 neurons are potentiated by exercise training and underlie improvements in exercise performance.

†Equal contributions; ‡Undergraduate mentee

TEACHING EXPERIENCE

As instructor of record

Advanced Topics in Neuroscience: Neuroscience of Mood Disorders, PSYC B316, Bryn Mawr College Fall 2022

Behavioral Neuroscience, PSYC B218, Bryn Mawr College Spring 2022

Biomedical Research Academy Journal Club: Decoding Dopamine, PSSA 006-920, University of Pennsylvania Summer 2021

First-year Writing Seminar: The Mind—Biological to Artificial, BIONB 1220, Cornell University Fall 2018

As teaching assistant, laboratory instructor, or discussion section instructor

Introduction to Biology B, BIOL 102, University of Pennsylvania Fall 2021

Teaching Assistant/Active Learning Facilitator · Instructors: Dr. [Dustin R. Brisson](#) & Dr. [Katie Barott](#)

Introduction to Biology B, BIOL 102, University of Pennsylvania Spring 2021

Teaching Assistant/Laboratory Instructor · Instructor: Dr. [Linda J. Robinson](#)

Introduction to Biology A, BIOL 101, University of Pennsylvania Fall 2020

Laboratory Grader · Instructor: Dr. [Linda J. Robinson](#)

Introduction to Neuroscience, BIONB 2220, Cornell University Summer 2020

Teaching Assistant/Discussion Section Instructor · Instructor: Dr. [Shelby B. Dietz](#)

Introduction to Neuroscience, BIONB 2220, Cornell University Spring 2020

Head Teaching Assistant · Instructor: Dr. [Shelby B. Dietz](#)

Drugs and the Brain, BIONB 3920, Cornell University Fall 2017

“Writing in the Majors” Teaching Assistant/Discussion Section Instructor · Instructor: Dr. [Ronald M. Harris-Warrick](#)

Introduction to Neuroscience, BIONB 2220, Cornell University Spring 2016

“Writing in the Majors” Teaching Assistant/Discussion Section Instructor · Instructor: Dr. [Ronald M. Harris-Warrick](#)

Foundations of Biology, BIOG 1140, Cornell University Fall 2015

Teaching Assistant/Discussion Section Instructor · Instructors: Dr. [E. Robert Turgeon](#) & Dr. [Michael J. Scanlon](#)

As guest lecturer

Introduction to Biology B, BIOL 102, University of Pennsylvania Fall 2022

Instructors: Dr. [Dustin R. Brisson](#) & Dr. [Katie Barott](#)

Introduction to Biology B, BIOL 102, University of Pennsylvania Spring 2021

Instructor: Dr. [Lori Spindler](#)

Neural Circuits of Motivated Behavior, BIONB 4370, Cornell University Spring 2017

Instructor: Dr. [Melissa R. Warden](#)

UNDERGRADUATE MENTORSHIP

Lukas R. Richie, 2022 – present, Neuroscience. **Independent Study Thesis:** Ventromedial hypothalamic steroidogenic factor-1 neurons underlie improvements in exercise performance

Bridget Skelly, 2022 – present, Neuroscience, *Penn PURM fellow*

Megan Timoney, 2022 – present, Biology. **Independent Study Thesis:** Hypothalamic AgRP projections are additive when costs are imposed on food availability

Hallie C. Kern, 2022, Neuroscience, *Bryn Mawr College visiting summer student*

Trinity M. Kellarakos, 2021 – 2022, Biology

Christian Fernandes, 2021 – 2022, Neuroscience, **Independent Study Thesis:** The activation of sufficient AgRP neurons outcompetes fear responses. *Currently:* Consultant, Simon-Kucher & Partners

Megan Zhong, 2021, Biology

Talese A. Evans, 2020 – 2022, Psychology, *PennFERBS fellow*

Brittney A. Moncrieffe, 2019 – 2020, Biology & Society. *Currently:* M.D. student, SUNY Downstate College of Medicine

Vladlena Lee, 2016 – 2018, Neurobiology & Behavior, **Honors Thesis:** Lateral habenula and dopaminergic ventral tegmental area neurons encode the motivational state of mice. *Currently:* M.D. student, SUNY Downstate College of Medicine

Kyle Pellegrino, 2016 – 2018, Neurobiology & Behavior, **Honors Thesis:** Monosynaptic tracing of ventral tegmental area-projecting infralimbic cortex neurons using G-deleted rabies virus. *Currently:* M.D.-Ph.D. student, University of North Carolina

Nicholas W. Ringelberg, 2015 – 2016, Neurobiology & Behavior. *Currently:* M.D.-Ph.D. student, University of North Carolina

SELECTED ACADEMIC PRESENTATIONS

Invited Seminars

University of Pennsylvania Biology Seminar Series · January 26, 2023 · *Title:* Neural circuits for behavioral choice under competing motivations.

Bi-College Neuroscience Club · Bryn Mawr College · November 10, 2022 · *Title:* Hypothalamic circuits for behavioral choice under competing motivations.

St. Mary's College of Maryland Psychology · November 9, 2022 · *Title:* Hypothalamic circuits for behavioral choice under competing motivations.

Providence College Psychology & Neuroscience · November 7, 2022 · *Title:* Hypothalamic circuits for behavioral choice under competing motivations.

Exercise Program Project Grant Symposium · Hypothalamic Research Center, University of Texas Southwestern Medical Center (*Virtual*) · June 16, 2022 · *Title:* VMH steroidogenic factor-1 neural activity during exercise.

Exercise Program Project Grant Symposium · Hypothalamic Research Center, University of Texas Southwestern Medical Center (*Virtual*) · May 14, 2021 · *Title*: Ventromedial hypothalamic neural activity during exercise.
Neuroscience Alumni Series · Biology Dept., Providence College · March 31, 2016 · *Title*: Neuromodulatory circuits of depressive behavior.

Conference Presentations

Neuroscience 2022 · Society for Neuroscience, San Diego · November 12-16, 2022 · *Title*: Ventromedial hypothalamic steroidogenic factor-1 neurons are potentiated by exercise training and underlie improvements in exercise performance.

Neuroscience 2019 · Society for Neuroscience, Chicago · October 19-23, 2019 · *Title*: The prefrontal cortex-ventral tegmental area projection promotes movement initiation in motivated behaviors.

Neuroscience 2018 · Society for Neuroscience, San Diego · November 3-7, 2018 · *Title*: The prefrontal cortex-ventral tegmental area projection modulates helplessness and locomotor activity, but not reward-seeking behavior.

2018 Stress Neurobiology Workshop · Banff Centre, Banff, AB · June 8-11, 2018 · *Title*: The prefrontal cortical projection to the ventral tegmental area impacts helplessness- and locomotion-related behaviors, but not hedonic behaviors, in chronically stressed mice. **Outstanding Poster Award**

6th Annual Rhode Island Summer Undergraduate Research Fellows Conference · Rhode Island IDeA Network of Biomedical Research Excellence, University of Rhode Island · August 2, 2013 · *Title*: Early stress and later psychopathology: effect of juvenile exposure to predator odor on adolescent and adult anxiety and pain nociception.

5th Annual Rhode Island Summer Undergraduate Research Fellows Conference · Rhode Island IDeA Network of Biomedical Research Excellence, University of Rhode Island · July 27, 2012 · *Title*: A novel model of human phobia: the discriminated conditioned punishment model. · *Title*: Non-suicidal self-injury: the interactive stressor model.

University and Department Forums

2019 Neurobiology & Behavior Symposium · Neurobiology & Behavior Dept., Cornell University · December 13, 2019 · *Title*: The prefrontal cortex-ventral tegmental area projection promotes motivated behavior.

2016 Neurobiology & Behavior Symposium · Neurobiology & Behavior Dept., Cornell University · December 9, 2016 · *Title*: The effect of chronic stress on anhedonia and motivated behavior.

FELLOWSHIPS

Ruth L. Kirschstein National Research Service Award (F32)	March 2022—February 2025
Cornell Center for Teaching Innovation Fellowship	August 2019—May 2020
Cornell Neurotech Mong Junior Fellowship	August 2017—August 2018
Cornell Presidential Life Sciences Fellowship	August 2014—August 2015
Rhode Island Summer Undergraduate Research Fellowship	Summer 2012 & Summer 2013
Providence College St. Catherine of Siena Honors Scholarship	August 2010—May 2014

AWARDS AND HONORS

Outstanding Graduate Teaching Assistant, Cornell College of Agriculture and Life Sciences	May 2020
John S. Knight Award for Writing Exercises and Handouts, Cornell Knight Writing Institute	April 2019
2018 Stress Neurobiology Workshop Outstanding Poster Award	June 2018
NSF Graduate Research Fellowship Honorable Mention	April 2015
Rev. Charles V. Reichart Award for scholarship in biology, Providence College	May 2014
Magna cum laude, Providence College	May 2014
Psi Chi Psychology Honors Society	October 2012

Alpha Epsilon Delta Pre-health Honors Society, elected to executive board

April 2012

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Society for Neuroscience

2018—present

Sigma Xi Scientific Research Honor Society

2012—present

FORMAL PEDAGOGICAL INSTRUCTION

Structured, Active, In-class Learning (SAIL) TA Training Program, Penn Center for Teaching and Learning

Fall 2021

Instructor, Incorporating High-Impact Teaching Practices in Your Class, Cornell Center for Teaching Innovation

February 2020

Instructor, Course Design Institute, Cornell Center for Teaching Innovation

November 2019

Instructor, Teaching Inter-Disciplinarity, Cornell Center for Teaching Innovation

November 2019

Future Professors Institute, Cornell University

June 2019

Teaching and Learning in the Diverse Classroom

Spring 2019

Teaching in Higher Education, ALS 6015, Cornell University

Spring 2019

First-year Writing Seminar Peer Collaboration Fellowship

Fall 2018

Assessing Learning & Teaching Certificate, Cornell Center for Teaching Innovation

Fall 2016

Creating an Engaging Classroom Certificate, Cornell Center for Teaching Innovation

Fall 2016

University-wide Teaching Conference, Cornell Center for Teaching Innovation

Fall 2016

Writing in the Majors Seminar, WRIT 7101, Cornell University

Fall 2015

SELECTED OUTREACH

[Women in STEM ENVISION High School Science Competition](#), **Judge**, January 2021—Present, annually

Penn Freshman Exposure to Research in Biological Science ([PennFERBS](#)), a research mentorship program for students traditionally underrepresented in the sciences, **Mentor**, November 2020—May 2021

Workshop Leader: Deciphering Data (Feb. 2021) & Talking about Science (Apr. 2021)

Cornell Graduate Student School Outreach Program ([GRASSHOPR](#))

Co-president, June 2017—May 2020 · **Organizing committee member**, August 2016—May 2020 · **Teaching Fellow**, September 2015—May 2019

[Let's Talk Science](#), an interview series for 5th graders, **Guest**, March 2020

ACADEMIC SERVICE

Guest referee, *Neuron*, *Nature Communications*, *Cell Metabolism*, *MethodsX*

UNIVERSITY & DEPARTMENT SERVICE

UPenn Summer Science Academy Instructor

July 2021—August 2021

Neurobiology & Behavior Graduate Student Organization Vice President and Recruitment Organizer

August 2016—August 2019

Diversity Recruitment Weekend Student Host

April 2017

Cornell Undergraduate Research Board Spring Forum Judge

April 2016

Graduate & Professional Student Assembly Field Representative

August 2015—May 2016