# Ryan J. Post, Ph.D.

Assistant Professor of Psychology & Neuroscience, Providence College

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1 Cunningham Sq. Science Complex LL37 Providence, RI 02918	rpost@providence.edu ryanpostlab.com	
FRUCATION		
EDUCATION	0044 0000	
Cornell University, Ithaca, NY	2014 – 2020	
Ph.D. in Neurobiology	:	
Dissertation: Initiation and adaptive termination of goal-directed behavior in m		
Providence College, Providence, RI	2010 – 2014	
B.S. in Biology, B.A. in Psychology		
Magna cum laude, Liberal Arts Honors Certificate, Neuroscience Certificate		
ACADEMIC POSITIONS		
Providence College, Providence, RI		
Assistant Professor of Psychology & Neuroscience	Aug. 2023 - present	
University of Pennsylvania, Philadelphia, PA		
National Research Service Award Postdoctoral Fellow	Mar. 2022 – July 2023	
Postdoctoral Researcher	Aug. 2020 – Mar. 2022	
Bryn Mawr College, Bryn Mawr, PA		
Visiting Assistant Professor, Department of Psychology & Bi-College Neuroscience Program	Jan. 2022 – Dec. 2022	
RESEARCH FUNDING		
Current		
Summer Student Training and Research Award (Subaward PI), P20 GM103430 (PI: Cho)	May 2024 – Apr. 2026	
Rhode Island IDeA Network of Biomedical Research Excellence	Direct funds: \$85,260	
Neural pathways of adaptive food intake under competing survival needs		
<u>Completed</u>		
Provost's Faculty Fellowship – Early Career Scholar (PI)	Jul. 2024 – Jun. 2025	
Providence College Academic Affairs	Direct funds: \$15,000	
Neural pathways of adaptive food intake under competing motivations		
Medical Research Grant, 16409_139170 (PI)	Apr. 2024 – Aug. 2025	
Rhode Island Foundation	Direct funds: \$23,769	
Medial prefrontal cortical circuits in motivation and depression		
National Research Service Award Postdoctoral Fellowship, F32 DK131892 (PI)	March 2022 – July 2023 <sup>1</sup>	
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.   1 Awarded through Feb. 2025; voluntarily terminated upon starting tenure-track position.		
Supporting personnel — current		
Basic Instrumentation Grant (Major User), NIH OD 038193 (PI: Miller)	May 2025 - May 2026	

2025-08-21 Post | 1

Direct funds: \$348,584

Acquisition of a Nikon CSU-W1 spinning disk confocal microscope

## **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

## In revision/under review, preprint available upon request

- \*Post, R.J., \*Kindel, M., \*Goldstein, N., \*Lieberman, A.G., Blank, N., Smith, N.K., Awh, M., Chin, P.W., Jung, A., Carty, J.R.E., Kruger, K.A., Villari, R., Cho, E., †Richie, L., †Timoney, M., †Kern, H..C., Jaycox, C., †Skelly, B., Collins, H.W., †Morley, E.N., †Kelly, C.O., †Moore, E.J., †Fernandes, C.A., †Kellarakos, T.M., McKnight, A.D., Aguilar, F.S., Alhadeff, A.L., Thaiss, C.A., Machado, T.A., Betley, J.N. Separable streams of hunger and cost information enable behavioral trade-offs.
- \*Kindel, M., \***Post, R.J.**, Lantier, L., Hwang, E., Carty, J.R.E., Villari, R., Goldstein, N., <sup>†</sup>Kern, H.C., <sup>†</sup>Richie, L., <sup>†</sup>Skelly, B., Dohnlová, L., Rai, M., Fujikawa, T., Ayala, J.E., Elmquist, J.K., Thaiss, C.A., Wasserman, D.H., Williams, K.W., Bloss, E.B., and Betley, J.N. Exercise-induced activation of ventromedial hypothalamic steroidogenic factor-1 neurons mediates improvements in endurance.

## 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. <u>Preprint</u>

# **TEACHING**

#### Providence College

Behavioral Neuroscience, PSY/NEU 262 6 sections across 3 semesters

Methods & Analysis: Behavioral Neuroscience with Lab, PSY/NEU 362 1 sections

Neuroscience Capstone NEU 474

3 sections across 3 semesters

Neuroscience Capstone, NEU 474 3 sections across 2 semesters

Introduction to Neuroscience, NEU 100 (previously NEU 170 as ST)

New course proposed and approved

1 section

Neuroscience of Motivated Behavior, NEU/PSY 470 1 section

New special topics course

Independent Study, PSY 490 3 students across 3 semesters

Research in Psychology, PSY 395/495 18 enrollments across 5 semesters

# Previous institutions

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

<sup>†</sup>Undergraduate mentee. \*Co-first author

Bryn Mawr College

Bryn Mawr College	
Behavioral Neuroscience, PSYC B218, Bryn Mawr College	Spring 2022
Biomedical Research Academy Journal Club: Decoding Dopamine, PSSA 006-920,	Summer
University of Pennsylvania	2020
First-year Writing Seminar: The Mind—Biological to Artificial, BIONB 1220, Cornell University	Fall 2018
<u>Guest lectures</u>	
Introduction to Literature, ENG 175, Providence College, Prof. Olga Limnios	Fall 2024
FELLOWSHIPS, AWARDS, & HONORS	
Provost's Faculty Fellowship – Early Career Scholar, Providence College	2024 – 2025
Ruth L. Kirschstein National Research Service Award Postdoctoral (F32) Fellowship	2022 – 2023
Outstanding Graduate Teaching Assistant, Cornell College of Agriculture and Life Sciences	2020
Cornell Center for Teaching Innovation Fellowship	2019 – 2020
John S. Knight Award, Cornell Knight Writing Institute	2019
Stress Neurobiology Workshop Outstanding Poster Award	2018
Cornell Neurotech Mong Junior Fellowship	2017 – 2018
NSF Graduate Research Fellowship Honorable Mention	2015
Cornell Presidential Life Sciences Fellowship	2014 – 2015
Magna cum laude, Providence College	2014
Rev. Charles V. Reichart Award for scholarship in biology, Providence College	2014
Rhode Island INBRE Summer Undergraduate Research Fellowship	2012 & 2013
Psi Chi Psychology Honors Society	2012

2012

2010 - 2014

# **UNDERGRADUATE MENTORSHIP**

## Providence College

Clara Arcand, 2025 – present, Neuroscience

Kelly Walsh, 2025 - present, Neuroscience

Joshua Devia, 2025 – present, Psychology

Joseph Amoruso, 2025 – present, Biology

Gabriella Domgjoni, 2025 – present, Neuroscience

Kaelin McCaffrey, 2025 - present, Neuroscience. STAR Fellow, 2025

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

Providence College St. Catherine of Siena Honors Scholarship

Alonie Ashley, 2024 – present, Neuroscience. STAR Fellow, 2025

Amelia Mignacca, 2024 – 2025, Neuroscience. *Next:* Medical assistant, Just Kids RI & preparing medical school application

Madeline McGrath, 2024 – 2025, Neuroscience. STAR Fellow, 2024. Next: M.S. student, Human Physiology, Boston University

Olivia Belt, 2024 – 2025, Biology & Psychology. STAR Fellow, 2024. Undergraduate Research Academic Year Grant, 2025. Next: M.S. student, Neurosciences, Vrije Universiteit Amsterdam

Francesca Schaub, 2024 – present, Biology. *Summer Undergraduate Research Grant, 2025*: AgRP axonal projections in the periaqueductal gray influence on visual stimulus versus hunger motivation

Noah Ashby, 2024 - present, Neuroscience. STAR Fellow, 2024

Madison Rohr, 2024 - present, Neuroscience. STAR Fellow, 2025

- Arianna Gordon, 2023 2025, Biology. Next: Accelerated B.S.N. student, New York University
- Ethan Moore, 2023 present, Biology & Psychology
- Claire Kelly, 2023 2025, Neuroscience. *Summer Undergraduate Research Grant, 2024:* Competing motivations in adolescent mice. *Undergraduate Research Academic Year Grant, 2025. Next:* Medical assistant, Westchester Medical Center
- Emma Morley, 2023 2025, Biology & Psychology. *Summer Undergraduate Research Grant, 2024:* Reprioritization of survival needs during pregnancy in mice. *Undergraduate Research Academic Year Grant, 2025. Next:* Research assistant, Northwell Health Labs
- Madeline Rahilly, 2023 2024, Psychology. *Undergraduate Research Academic Year Grant, 2023. Next:* Neuropsychology technician, Rhode Island Hospital

## University of Pennsylvania (Betley lab)

- Xinming (Grace) Zhang, 2023, Neuroscience. Next: Research assistant, University of Pennsylvania
- Lukas R. Richie, 2022 2023, Neuroscience. *Independent Study Thesis*: Ventromedial hypothalamic steroidogenic factor-1 neurons underlie improvements in exercise performance. *Next:* Medical assistant and scribe & preparing medical school application
- Bridget Skelly, 2022 2023, Neuroscience, Penn PURM fellow
- Megan Timoney, 2022 2023, Biology. *Independent Study Thesis*: Hypothalamic AgRP projections are additive when costs are imposed on food availability. *Next*: Consultant, Beghou Consulting
- Hallie C. Kern, 2022 2023, Neuroscience. Next: Ph.D. student, University of Pennsylvania
- Trinity M. Kellarakos, 2021 2022, Biology
- Christian Fernandes, 2021 2022, Neuroscience. *Independent Study Thesis*: The activation of sufficient AgRP neurons outcompetes fear responses. *Next:* Consultant, Simon-Kucher & Partners
- Talese A. Evans, 2020 2022, Psychology. *PennFERBS fellow. Next:* Financial Advisor Analyst, JP Morgan Chase & Co.

# Cornell University (Warden lab)

- Brittney A. Moncrieffe, 2019 2020, Biology & Society. Next: 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. *Next:* 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. *Next*: M.D.-Ph.D. student, University of North Carolina
- Nicholas W. Ringelberg, 2015 2016, Neurobiology & Behavior. *Next:* M.D.-Ph.D. student, University of North Carolina

#### SELECTED ACADEMIC PRESENTATIONS

#### Invited Seminars

- University of Pennsylvania Biology Seminar Series · Jan. 26, 2023 · *Title*: Neural circuits for behavioral choice under competing motivations.
- Bi-College Neuroscience Club · Bryn Mawr College · Nov. 10, 2022 · *Title*: Hypothalamic circuits for behavioral choice under competing motivations.
- St. Mary's College of Maryland Psychology · Nov. 9, 2022 · *Title*: Hypothalamic circuits for behavioral choice under competing motivations.
- Providence College Psychology & Neuroscience · Nov. 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 · Mar. 31, 2016 · *Title*: Neuromodulatory circuits of depressive behavior.

#### Conference Presentations

- Neuroscience 2025 · Society for Neuroscience · San Diego · Nov. 15-19, 2025 · *Title:* Medial prefrontal cortical ensembles direct behavior in response to competing needs. <u>Student co-presenters:</u> Francesca Schaub & Kaelin McCaffrey
- Neuroscience 2024 · Society for Neuroscience · Chicago · Oct. 5-9, 2024 · *Title:* Additive, non-intersectional action of hypothalamic hunger circuits overcomes cost for acquisition of food.
- Society for the Study of Ingestive Behavior, 31<sup>st</sup> Annual Meeting · Chicago · Jul. 9-13, 2024 · *Title:* Additive, non-intersectional action of hypothalamic hunger circuits overcomes cost for acquisition of food.
- Neuroscience 2022 · Society for Neuroscience · San Diego · Nov. 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 · Oct. 19-23, 2019 · *Title*: The prefrontal cortex-ventral tegmental area projection promotes movement initiation in motivated behaviors.
- Neuroscience 2018 · Society for Neuroscience · San Diego · Nov. 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, 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*

# Student Regional Conference Presentations

- 2025 RI Summer Undergraduate Research Symposium · RI-INBRE · University of Rhode Island · Madison Rohr · Aug. 1, 2025 · *Title*: Medial prefrontal cortical ensembles direct behavior in response to competing needs.
- 2025 RI Summer Undergraduate Research Symposium · RI-INBRE · University of Rhode Island · Kaelin McCaffrey · Aug. 1, 2025 · *Title*: The impacts of pregnancy, maternal experience, and prenatal stress on motivated behavior amidst environmental threat.
- 2025 RI Summer Undergraduate Research Symposium · RI-INBRE · University of Rhode Island · Alonie Ashley · Aug. 1, 2025 · *Title*: Hunger-sensing hypothalamic neurons drive food consumption despite environmental threat.
- 2025 Northeast Under/graduate Research Organization for Neuroscience Conference · Quinnipiac University · Olivia Belt & Madison Rohr · Apr. 26, 2025 · *Title*: Effect of prefrontal cortical fear engram activation on competing needs: hunger and fear.
- 2025 Northeast Under/graduate Research Organization for Neuroscience Conference · Quinnipiac University · Claire Kelly · Apr. 26, 2025 · *Title*: Motivated behavior in juvenility and across the lifespan.
- 2025 Northeast Under/graduate Research Organization for Neuroscience Conference · Quinnipiac University · Emma Morley · Apr. 26, 2025 · *Title*: The effect of pregnancy and maternity on behavioral needs amidst environmental threat.
- 2025 Big East Research Symposium · Madison Square Garden, New York · Olivia Belt · Mar. 15, 2025 · *Title*: Effect of prefrontal cortical fear engram activation on competing needs: hunger and fear. *Competitive invitation*
- 2024 RI Summer Undergraduate Research Symposium · RI-INBRE · University of Rhode Island · Emma Morley & Claire Kelly · July 26, 2024 · *Title*: The effect of pregnancy and maternity on behavioral motivations amidst environmental threat.
- 2024 RI Summer Undergraduate Research Symposium · RI-INBRE · University of Rhode Island · Olivia Belt · July 26, 2024 · *Title*: Understanding competing fear and hunger motivations through correlating neural activity and behavior.
- 2024 RI Summer Undergraduate Research Symposium · RI-INBRE · University of Rhode Island · Noah Ashby & Madeline McGrath · July 26, 2024 · *Title*: Quantifying the effect of environmental threat on food consumption in mice.

- 2024 Northeast Under/graduate Research Organization for Neuroscience Conference · Quinnipiac University · Ethan Moore · Apr. 21, 2024 · Title: Hunger-sensing hypothalamic neurons drive food consumption despite environmental threat.
- 2024 Big East Research Symposium · Madison Square Garden, New York · Emma Morley & Madeline Rahilly · Mar. 16, 2024 · Title: Hunger-sensing hypothalamic neurons drive food consumption despite environmental threat. Competitive invitation

# **SERVICE**

Member (scientist), Institutional Animal Care and Use Committee	2024 – present
Faculty advisor, Brainy Bunch (undergraduate neuroscience club)	2023 – present
Faculty co-advisor, Nu Rho Psi Honor Society, Alpha-RI chapter	2023 – present
Organizer of Careers in Neuroscience, Apr. 9, 2025	

Organizer of inaugural induction ceremony, Apr. 10, 2025

# Scientific community

Member, Education Committee, Faculty for Undergraduate Neuroscience	2025 – present
Organizing committee, 2026 Faculty for Undergraduate Teaching Workshop.	

North Central College

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

# **MEMBERSHIP IN PROFESSIONAL SOCIETIES**

Nu Rho Psi Honor Society, faculty co-advisor, Alpha in Rhode Island Chapter	2024 – present
Faculty for Undergraduate Neuroscience	2023 - present
Society for Neuroscience	2018 - present
Sigma Xi Scientific Research Honor Society	2012 – present