

April 2026

**UW SCHOOL OF MEDICINE
CURRICULUM VITAE
SAM A. GOLDEN, PHD**

1. Personal Data:

Sam A. Golden

Place of birth: New York City, New York, USA

Citizenship: USA; Contact information: sagolden@uw.edu

2. Education:

2002-2006 BS, Neuroscience, Honors, Bates College, Lewiston, ME

Advisor: John Kelsey, PhD

2009-2015 PHD, Neuroscience, Icahn School of Medicine at Mount Sinai, New York, NY

Advisor: Scott Russo, PhD

3. Postgraduate Training:

2015-2018 Postdoctoral Fellow, National Institute on Drug Abuse, Baltimore, MD

Advisor: Yavin Shaham, PhD

4. Faculty Positions Held:

2019-2025 Assistant Professor, Department of Biological Structure, University of Washington, Seattle, WA

2019- Faculty, Center for Excellence in the Neurobiology of Addiction, Pain and Emotion (NAPE), University of Washington, Seattle, WA

2023- Adjunct Assistant Professor, Department of Anesthesiology and Pain Medicine, University of Washington, Seattle, WA

2023- Washington Research Foundation Howell Distinguished Faculty Fellow, University of Washington, Seattle, WA

2025- Associate Professor, Department of Biological Structure, University of Washington, Seattle, WA

5. Hospital Positions Held: N/A

6. Honors:

2002. Finalist, International Science and Engineering Fair (ISEF)

2002. Finalist, United States Army Engineering and Science Award

2003. Dana Scholar, Bates College, Lewiston, ME

2004. Research Experience for Undergraduates Fellowship, University of Pittsburgh

2006. Honors in Neuroscience, Bates College, Lewiston, ME

2006. Post-baccalaureate Intramural Research Training Award Fellowship (NIH)

2013. Hausfeld Award in Neuroscience, Icahn School of Medicine, New York, NY

2013. Outstanding Research Innovation, Icahn School of Medicine, New York, NY

2014. Postdoctoral Intramural Research Training Award Fellowship (NIH)

2014. EBPS International Conference Travel Award

2015. Postdoctoral Research Associate Fellowship (NIH)

2017. Dutch Society for Neuroscience Main Speaker Travel Award (Netherlands)

2018. K99 NIH Pathway to Independence Award

2019. R00 NIH Pathway to Independence Award

2019. NARSAD Young Investigator Award

2019. NVIDIA Accelerating Data Science GPU Award

2021. ACNP Young Investigator Travel Award

2021. Lab Safety Innovator, UW EH&S's 2021 Laboratory Safety Awards

- 2021. NIH/NIDA Cutting-Edge Basic Research Award (CEBRA)
- 2023. Washington Research Foundation - Howell Distinguished Faculty Fellow
- 2024. Washington Initiative for Neuroscience Innovation Challenge Award
- 2025. University of Washington Rising Leader program awardee

7. Board Certification: N/A

8. Current Licenses to Practice: N/A

9. Diversity, Equity and Inclusion Activities:

Committees

2019-2024 Member, Department of Biological Structure DEI Committee

Workshops

- 2020. [Organizer and leader] "Systems of Power and Privilege" – Department of Biological Structure DEI Workshop Series
- 2020. [Participant] "Who am I, and why does that matter?" – Department of Biological Structure DEI Workshop Series
- 2020. [Participant] "Gender and Sexuality" – Department of Biological Structure DEI Workshop Series
- 2020-2021. [Participant] DEI Learning Group – UW Graduate Program in Neuroscience
- 2021. [Participant] "Identity and Intersectionality" – Department of Biological Structure DEI Workshop Series
- 2021. [Participant] "Dragonfly Mental Health Part 1: Intro to Mental Health Literacy" – Department of Biological Structure DEI Workshop Series
- 2021. [Participant] "Dragonfly Mental Health Part 2: A Scientist's Primer on Depression" – Department of Biological Structure DEI Workshop Series
- 2022. [Participant] "Forefront Suicide Prevention Workshop" – Department of Biological Structure DEI Workshop Series
- 2023. [Participant] "Countering Impostor Phenomenon Workshop with Dr. Addie McClintock" – Department of Biological Structure DEI Workshop Series

URM Summer Research Programs

- 2021. UW ENDURE Summer Program – Andrea Abanto (Undergraduate)
- 2021. UW ENDURE Summer Program – Axelle Salazar (Undergraduate)
- 2021. UW Rainier Summer Program – Hermona Hadush (High School)
- 2022. UW Rainier Summer Program – Shagun Seth (High School)
- 2022. UW Rainier Summer Program – Netrang Desai (High School)
- 2023. UW U-BRIGHT Program – Aida Chan (High School)
- 2024. UW SOAR Program – Kelsey Carvajal (Undergraduate)
- 2024. UW ENDURE Summer Program – Erica Sanchez (Undergraduate)
- 2024. UW U-BRIGHT Program – Coby Dunfield (High School)
- 2026- UW U-BRIGHT Program – TBN

10. Professional Organizations:

- 2006- Member, Sigma Xi
- 2009- Member, Society for Neuroscience
- 2014- Member, European Behavioral Pharmacology Society
- 2016- Member, International Society on Aggression Research
- 2018- Member, Animal Behavior Society
- 2018- Member, F1000Prime
- 2020- Member, The Association of Biomolecular Research Facilities

2021-	Member, International Behavioral and Genetics Society
2022-	Member, Japan Society for Neuroscience
2026-	Member, Faculty for Undergraduate Neuroscience

11. Education and Training Activities:

a. Didactic Teaching

Undergraduate Level:

2019. NEUSCI401A Spring: Systems Neuroscience – Lecturer, 1 class
2020. NEUSCI401A Spring: Systems Neuroscience – Co-Lead (50%), 30 classes, 48 students
2021. NEUSCI401A Spring: Systems Neuroscience – Leader (100%), 30 classes, 56 students
2022. NEUSCI401A Spring: Systems Neuroscience – Leader (100%), 30 classes, 55 students
2023. NEUSCI401A Spring: Systems Neuroscience – Leader (100%), 30 classes, 74 students
2024. NEUSCI401A Spring: Systems Neuroscience – Leader (100%), 30 classes, 77 students
2025. NEUSCI401A Spring: Systems Neuroscience – Leader (100%), 30 classes, 77 students
2026. NEUSCI401A Spring: Systems Neuroscience – Leader (100%), 30 classes, 81 students

Graduate Level:

2020. NEURO503A Winter: Cognitive and Integrative Neurobiology – Lecturer, 1 class
2021. NEURO527A Spring: Current Topics in Neurobio. – Co-leader (33%), 3 classes
2021. NEURO511 Fall: Neural Circuits of Motivated Behavior – Lecturer, 1 class
2021. NEURO527B Winter: Current Topics in Neurobiology – Lecturer, 1 class
2022. NEURO527A Spring: Current Topics in Neurobiology – Lecturer, 3 classes
2023. NEURO527A Winter: Current Topics in Neurobiology – Lecturer, 2 class
2023. NEURO503A Spring: Cognitive and Integrative Neurobiology – Lecturer, 1 class
2023. NEURO527A Fall: Current Topics in Neurobio. – Lecturer, 1 class
2023. NEURO511 Fall: Neural Circuits of Motivated Behavior – Lecturer, 1 class
2024. NEURO527A Winter: Current Topics in Neurobio. – Lecturer, 1 class
2024. NEURO503A Spring: Cognitive and Integrative Neurobiology – Lecturer, 1 class
2024. NEURO527A Fall: Current Topics in Neurobio. – Lecturer, 1 class
2025. NEURO511 Fall: Neural Circuits of Motivated Behavior – Lecturer, 1 class

b. Thesis committee membership

Undergraduate Honors Thesis Committees:

2022. Yahir Gonzalez - Interdisciplinary Honors Program. Role: Supervisor
2022. Natalia Owen – Neuroscience Honors Program. Role: Faculty Reader
2022. Natalie Hoffman - Neuroscience Honors Program. Role: Faculty Reader
2023. Joumana Barbakh - Neuroscience Honors Program. Role: Faculty Reader
2023. Luke Jouppi - Neuroscience Honors Program. Role: Faculty Reader
2024. Yahir Gonzalez - Neuroscience Honors Program. Role: Supervisor
2024. Pranav Anumolu - Neuroscience Honors Program. Role: Faculty

Graduate Dissertation Committees

2019-2021 Dissertation Committee, Christian Pedersen, Bruchas Lab (UW GNP)
2019-2023 Dissertation Committee, Rhiana Simon, Stuber Lab (UW GNP)
2020-2022 Dissertation Committee, Andrew Luskin, Bruchas Lab (UW GNP)
2020-2023 Dissertation Committee, Zackari Murphy, Ferguson Lab (UW MCB)
2020-2025 Dissertation Committee, Madelyn Gray, Stuber Lab (UW GNP)
2021-2025 Dissertation Committee, Scott Sterrett, Gire and Fairhall Labs (UW GNP)

2021-2025	Dissertation Committee, Lydia Gordan-Fennel, Phillips Lab (UW GNP)
2022-2025	Dissertation Committee, Kathryn Powers, Bermingham-McDonogh (UW MCB)
2022-2026	Dissertation Committee, Makenzie Patarino, Schindler Lab (UW GPN)
2022-	Dissertation Committee, Elana Judd, Palmiter Lab (UW GPN)
2023.	Dissertation Committee, Briana Smith, Yazdan-Shahmorad Lab (UW BioE)
2024-	Dissertation Committee, Stephanie Zhu, Wang Lab (UW Biology)
2025-	Dissertation Committee, Nzinga Hendericks, Valdmanis Lab (UW GPN)

Outside Expert for PhD Dissertations

2021.	Aiste Baleiyste, École Polytechnique Fédérale de Lausanne, Thèse No. 7201 The role of medial amygdala inhibitory neurons in regulating social behaviour.
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c. Advising/Mentorship

Acting Assistant Professors

2024-2026	Eric Szelenyi, PhD, Acting Assistant Professor
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Post-Doctoral Fellows

2019-2021	Simon Nilsson, PhD, Post-doctoral Fellow Current employment: Senior AI Researcher, Deep Labs, Seattle WA
2019-2024	Eric Szelenyi, PhD, Post-doctoral Fellow (Washington Research Foundation Fellowship 2020, UW CoMotion Postdoctoral Entrepreneur Fellowship 2024)
2022-2025	Kevin Schneider, PhD, Post-doctoral Fellow (NIDA T32 DA 007278)
2022-	Carlee Toddles, PhD, Post-doctoral Fellow (NIDDK T32 DK 007247, Weill Neurohub Fellow 2023, Washington Research Foundation Fellowship 2024)
2024-	Todd Appleby, Post-doctoral Fellow (NEI T32, NIDDK T32 DK 007247)
2027-	Trevonn Gyles, Post-doctoral Fellow (NIDA T32, or NIMH DSPAN)

Graduate Students

2019-2020	Roel Vrooman, BS, University of Washington VISIT Program (2 nd year Master Student, University of Utrecht, Netherlands)
2019-2021	Jia Jie Choong, BS, Masters Program in Electrical Engineering, University of Washington, Seattle, WA
2019- 2024	Nastacia Goodwin, BS, Graduate Program in Neuroscience, University of Washington, Seattle, WA (NIDA T32 5T32NS099578-04, NIMH NRSA F31)
2021-2026	Jovana Navarrete, BS, Graduate Program in Neuroscience, University of Washington, Seattle, WA (NIDA T32 5T32NS099578-04, NIMH NRSA F31)
2025-	Zoya Hill-Sargizi, BS/MA Dual Degree Program in BioEngineering, University of Washington, Seattle, WA

Rotational Graduate Students

2019.	Nastacia Goodwin, UW GPN
2020.	Ruby Marx, UW GPN
2021.	Jovana Navarrete, UW GPN
2022.	Makenzie Patarino, UW GPN
2023.	Andy Pelos, UW GPN
2023.	Alex Garcia Arango, UW GPN
2023.	Amanda Pasqualini, UW PGN
2024.	Mary Loveless, UW GPN
2025.	Kelly Kim, UW GPN

Post-baccalaureate Students

2015-2017	Connor Heins, BS, enrolled in Max Plank University PhD Program
2017-2019	Michelle Jin, BS, enrolled in Columbia University MSTP Program
2019-2020	Briana Smith, BS, enrolled in UW Bioengineering PhD Program
2019-2021	Liana Bloom, BA, enrolled in Elson S Floyd College of Medicine MD Program
2021-2023	Yizhe Zhang, BS, enrolled in University of Washington GPN
2023-2024	Ainsley Barrow, BS, applying to medical schools
2024-2025	Erica Sanchez, BS, UW-SOAR Program
2025-	Kevin Bai, BS, applying to medical schools

Undergraduate Students

2019.	Tanvi Shedge, University of Washington
2019-2020.	Sophia Hwang, University of Washington
2019-2020.	Mahathi Allepally, University of Washington
2019-2021.	Cindy Xu, University of Washington
2019-2021.	Annette Mercedes, University of Washington
2019-2022.	Kayla Pitts, University of Washington
2020-2022.	Aasiya Islam, University of Washington
2020.	Arash Tabesh, University of Washington
2020-2021.	Yizhe Zhang, University of Washington
2020-2022.	Valerie Tsai, University of Washington
2021.	Emery Leggett, University of Washington
2021.	Andrea Abanto, UW ENDURE Program, University of Washington
2021.	Alexis Nguyen, University of Washington
2021-2022.	Kaylani Kukkadapu, University of Washington
2021-2022.	Natalie Hoffman, University of Washington
2021-2022.	Sarah Kadado, University of Washington
2021-2023	Drew-Elizabeth Barger, University of Washington
2021-2023	Lauren Mika Kuo, University of Washington
2022-2023	Ainsley Barrow, University of Washington
2023-2024	Sam Husarik, University of Washington
2022-2025	Pranav Anumolu, University of Washington
2022-2025	Kevin Bai, University of Washington
2022-2025	Yahir Gonzalez, University of Washington
2022-2025	Virginia Wang, University of Washington
2022-2025	Ethan Gross, University of Washington
2022-2025	Axelle Salaza, UW ENDURE Program, University of Washington
2022-2025	Bryce Bowler, University of Washington
2023-2025	William Riley Keeler, University of Washington
2023-2024	Aida Chan, University of Washington
2023-2025	Ian McRae, University of Washington
2024-2025	Kelsey Carvajal, UW ENDURE Program, University of Washington
2023-	Nick Ressler, University of Washington
2023-	Isabel Halperin, University of Washington
2024-	Zoya Hill-Sargizi, University of Washington
2025-	Brittni Atkinson, University of Washington
2025-	Shireen Aryana, University of Washington
2025-	Aurora Exner, University of Washington
2025-	Shagun Seth, University of Washington
2025-	Caroline Kobayashi, University of Washington
2025-	Pearl Thapar, University of Washington
2025-	Christine Cui, University of Washington
2025-	Sofia Colaluca, University of Washington

High School Student

2019-2020	Anika Consul, Tesla STEM High School
2021.	Hermona Hadush, UW Rainier Summer Program
2022-2023	Netrang Desai, Juanita High School
2022.	Shagun Seth, UW Rainier Summer Program
2023.	Aida Chan, UW U-BRIGHT Summer Program
2024.	Coby Dunfield, UW U-BRIGHT Summer Program
2026-	TBN, UW U-BRIGHT Summer Program

d. Curriculum and training program development

2020 -	NEUSCI401A Spring: Systems Neuroscience This is a core required course for the UW Neuroscience major. I developed and maintain the curriculum as course leader. Since 2021 I have been the sole leader for this course, which currently is taken by ~80 students every Spring. There are 30 scheduled classes, of which 22 are didactic lectures and the remainder are laboratory-based or exams. I personally teach 16 didactic lectures each quarter, lead 2 laboratory sessions, and proctor all exams (24/30 classes). The remaining 6 didactic lectures are taught by guest lecturers. I am fully responsible for all administrative aspects of the course.
2025-2026	Associate Director, UW Neuroscience major This is an administrative role supporting the Director of the major, on matters of program curriculum, student advancement, and overall program direction.
2025-	Director, VR/AR Virtual/Augmented Reality Facility for the Greater UW Neuroscience Community In 2025 I wrote and was awarded a ~\$75,000 UW Student Technology Fee (STF) Award to develop a trainee-led Virtual Reality (VR)/Augmented Reality (AR) Facility to serve the greater UW Neuroscience Community, as well as act as resource for neuroscience-related community outreach resource. This facility is located on Hancock 534, supported by an MOU between then Departments of Biology and Neurobiology & Biophysics, and run by an executive committee made up of leadership from 6 undergraduate Registered Student Organizations (RSO), the Graduate Program in Neuroscience (GPN), and the Neuroscience major. This resource supports numerous neuroscience-related teaching, outreach, and training programs.
2026-	Director, UW Neuroscience major In 2026 I became the Director of the Neuroscience major. I oversee all aspects of the major.

e. Other

UW Undergraduate Advisory Roles

2021-	Faculty Advisor, Gray Matter Journal (largest undergrad neuroscience RSO)
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UW Undergraduate Outreach

2019.	An Evening with Neuroscientists (Panel Participant), Grey Matter Journal
2021-	Dawg Daze Human Brain Dissection
2022-	An Evening with Neuroscientists (Brain demonstration), Grey Matter Journal
2022.	Undergraduate Research Symposium, Oral Panel Moderator

2024. Undergraduate Research Symposium, Oral Panel Moderator
2026. An Evening with Neuroscientists (Brain demonstration), Grey Matter Journal

12. Editorial Responsibilities:

a. Editorial boards

Deputy Editor:

- 2023- Neuropsychopharmacology - Digital Psychiatry and Neuroscience
Deputy Editor for "Studies in Animals" portfolio

Reviewing Editor:

- 2022- eNeuro

Ad hoc Reviewing Editor:

- 2024- PNAS

Associate Editor:

- 2020- Frontiers in Neural Circuits
2024- Royal Society Open Science

b. Ad hoc reviewing responsibilities

[selected journals] Nature, Cell, Science, Nature Neuroscience, The Journal of Neuroscience, Biological Psychiatry, Neuropsychopharmacology, Neuropharmacology, Psychopharmacology, Experimental Neurology, Nature Protocols, Addiction Biology, Genes Brain and Behavior, Cell Reports, Nature Communications, Brain and Behavior, PLOS, Frontiers, eNeuro, eLife

13. Special Responsibilities and Service:

a. International

Grant review

2017. French National Funding Agency for Research (ANR)
2023. German Science Foundation (DFG), Emmy Noether Programme

Conferences organized

2022. (Organizer). European Behavioral Pharmacology Society Workshop 2022:
Spanning the spectrum of social behavior: towards more translationally relevant animal models. June 2022, Rome, Italy.

b. National

Grant review

- 2020- Animal Behavior Society Research Grants
2020. NSF GRFP Neuroscience 1 Panel
2021-2024. Graduate Women in Science (GWIS) National Fellowship
2024. NIH/NIDA ZDA1 SKP-N (O1) Study Section, CEBRA
2025. NIH/NIDA ZDA1 SKP-N (J1) Study Section, CEBRA
2025. NIH ZRG1 F02A-D (20) L Study Section, BRLE
2026. NIH Neural Basis of Motivated Behavior (NBMB) Study Section

Conferences organized

- 2022. (Organizer). Gordon Research Seminar on the Neurobiology of Drug Addiction, August 2022, Lowery, ME, USA.
- 2024. (Program Committee). 8th Annual Technology and Psychiatry Summit (TIPS/ACNP), December 2024, Pheonix, AZ, USA.
- 2025. (Organiser) Short Course on the Application of Machine Learning for Automated Quantification of Behavior. October 2025, Bar Harbor, Maine, USA.

c. Regional: N/A

d. University of Washington

Grant review

- 2019- University of Washington Royalty Research Fund
- 2021-2023 Scan Design Foundation Innovative Pain Research

UW School of Medicine Committees and Service

- 2019- UW Psychiatry Residency Research Program, Interviewer
- 2019- UW School of Medicine MSTP Program, Interviewer
- 2019- UW Graduate Program in Neuroscience, Interviewer
- 2019- UW Molecular and Cellular Biology, Interviewer
- 2021. Joint DLMP-BSTR Faculty Search Committee, Member
- 2021-2023. UW Institutional Animal Care and Use Committee (IACUC), Alternate Scientist
- 2021-2024. UW Graduate Program in Neuroscience (GPN) Admissions Committee, Member
- 2022- UW Undergraduate Neuroscience major Admissions Committee, Member
- 2022. Department of Comparative Medicine (DCM) Attending Veterinarian Interview Committee, Member
- 2023-2026. UW Graduate Program in Neuroscience (GPN) Admissions Committee, Chair
- 2024-2027. UW Council on Research and Graduate Education, Member
- 2026. UW SOM OFA Promotion/Career Development Workshop, Panelist
- 2026- US SOM Faculty Senate, NBIO Representative

Department of Neurobiology and Biophysics Committees and Service (2024+)

- 2024-2025. Assistant Teaching Professor Search Committee, Chair
- 2024-2026 Strategic Plan (Merger) Committee, Member
- 2024 - Teaching and Mentoring Committee, Chair
- 2025-. Hendricks Trainee Symposium Organizing Committee, Faculty Advisor

Department of Biological Structure Committees and Service (2019-2024)

- 2019-2024 IT Committee, Member
- 2019-2024 Equipment Committee, Member
- 2019-2024 Diversity Committee, Member
- 2020-2024 Web Site Committee, Member
- 2022. Grants Manager Interview Committee, Member
- 2022-2023. Retreat Organizer, Chair
- 2023-2024 Strategic Plan (Merger) Committee, Member

14. Clinical Activities: N/A

15. Research Funding:**A. Current**

- 2022-2027 Sponsor: NIH/NIMH
2R01MH104603-06A1
Title: Deciphering gene-environment interactions in pathological reactive aggression
Total Costs: \$2,695,965
Total UW subaward: \$790,016
Role: Co-I
- 2023- Sponsor: Washington Research Foundation
Ronald S. Howell Distinguished Faculty Fellow Endowment
Total Costs: \$50,000
Role: PI (UW primary research site)
- 2023-2028 Sponsor: NIH/NIDA
1R01DA059374-01
Title: Integrative single-cell spatial transcriptomic, anatomical, and functional profiling of brain-wide ensembles engaged by opioid relapse
Total Costs: \$3,868,971
Role: PI (contact, UW primary research site)
- 2024-2026 Sponsor: NIH/NIMH
9R44MH140096-02
Title: Wireless Implantable Mechano-Acoustic Recording Device
Total Costs: \$1,952,647
Total UW subaward: \$643,506
Role: Co-I (site PI)
- 2024-2029 Sponsor: NIH/NIMH
R01MH138645-01
Title: Serotonergic Modulation of Aggressive Behavior
Total Costs: \$3,319,368
Total UW subaward: \$83,817
Role: Co-I
- 2025-2026 Sponsor: University of Washington Student Technology Fee
Title: VR/AR Facility for the Greater UW Neuroscience Community
Total Costs: \$67,000
Role: PI
- B1. Pending – Scored**
- 2025-2030 Sponsor: NIH/NIMH
Type: R01, 11% percentile
Title: Trauma, alcohol, and aging
Role: Co-I (UW primary research site)
- 2025-2030 Sponsor: NIH/NIMH

- Type: R01, 9th percentile
 Title: Sex-specific strategies to promote stress resilience through social reward seeking
 Role: PI (contact)
- 2026-2031 Sponsor: NIH/NIDA
 Type: R01, 18th percentile
 Title: The neural basis of sleep deprivation effects on fentanyl dependence and relapse
 Role: PI (contact)
- 2026-2031 Sponsor: NIH/NIMH
 Type: R25, Impact Score 20 (no percentiles given)
 Title: The Short Course on the Application of Machine Learning for Automated Quantification of Behavior
 Role: PI (contact)
- 2026-2031 Sponsor: NIH BBQS
 Type: U01, Impact Score 20 (no percentiles given)
 Title: μ Dock: A Wireless, Battery-Free Platform for Integrated Neural, Physiological, and Behavioral Recording
- B2. Pending – Waiting to be scored
 2026-2031 Sponsor: NIH/NIMH
 Type: R01
 Title: Phasic dopamine and symptom domains of mental illness
 Role: Co-I (UW primary research site)
- 2027-2032 Sponsor: NIH/NIMH
 Type: R01– new submission
 Title: Sex-specific strategies to promote stress resilience through social reward seeking
 Role: PI (contact)
- 2027-2032 Sponsor: NIH/NIDA
 Type: R01 - resubmission
 Title: The neural basis of sleep deprivation effects on fentanyl dependence and relapse
 Role: PI (contact)
- C. Past
 2015-2018 Sponsor: NIH/NIDA
 FI2GM117583-01
 Title: Role of the nucleus accumbens in regulating aggression reward
 Total Costs: \$0 (IRP funding)
 Role: PI
2018. Sponsor: NIH/NIDA
 1K99DA045662-01
 Title: Connectomics of relapse to aggression seeking
 Total Costs: \$0 (IRP funding)
 Role: PI

2019-2022	Sponsor: NIH/NIDA NIDA 4R00DA045662-02 Title: Connectomics of relapse to aggression seeking Total Costs: \$747,000 Role: PI
2019-2022	Sponsor: Brain and Behavior Foundation NARSAD YI Award #27082 Title: Connectomics of PTSD-escalated aggression Total Costs: \$75,000 Role: PI
2021-2023	Sponsor: NIH/NIDA NIDA 1UG3DA053802 Title: Clear Volume Imaging with Machine Learning: a novel tool to identify brain-wide neuronal ensembles of opioid relapse in rat models Total Costs: \$423,231 Role: MPI
2022-2023	Sponsor: UW NAPE Center P30 Pilot Grant Title: Light sheet fluorescent microscopy resource. Total costs: \$45,000 Role: PI
2022-2023.	Sponsor: UW CoMotion CoMotion Gap Fund Award Title: Platea Total Costs: \$50,000 Role: PI
2022-2023.	Sponsor: Washington Research Foundation WRF Phase 1 Commercialization Award Title: Platea Total Costs: \$87,000 Role: PI
2022-2023	Sponsor: NIH/NIMH R43 SBIR Phase I 1R43EB033239-01 Title: Wireless Implantable Mechano-Acoustic Recording Device Total Costs: \$334,336 Role: Co-I
2020-2025	Sponsor: NIH/NDSC NDSC 1R01NS115747-01A1 Title: Identifying new targets in pain, utilizing the novel analgesic AS1 Total Costs: \$2,403,004 Role: Co-I (UW primary research site)
2021-2026	Sponsor: NIH/NIMH NIDA 1R01DA054317 Title: Transcriptional, functional and circuit profiling at single cell resolution of neuronal ensembles engaged by heroin relapse.

Total Costs: \$3,645,169
Role: Co-I (UW primary research site)

2023-2026 Sponsor: Department of the Army
Proposal No. 82644-HC-INT
Title: Fear entrainment as a model of post-traumatic stress disorder
Total Costs: \$456,275
Role: MPI (UW primary research site)

D. Trainee Funding (active and past, other than T32)

Postdoctoral trainees

2020-2023 Sponsor: Washington Research Foundation
Trainee: Eric Szelenyi
WRF Postdoctoral Fellowship
Title: Brain-wide activity mapping with novel near-IR genetic tools.
Total costs: \$275,000
Role: Mentor

2021. Sponsor: UW NAPE Center
Trainee: Eric Szelenyi
P30 2-Photon Pilot Grant
Title: Structural and functional properties of basomedial amygdala neurons engaged in prolonged relapse to food reward seeking in-vivo.
Total costs: \$5,000
Role: Mentor

2021. Sponsor: UW CoMotion
Trainee: Eric Szelenyi and JJ Choong
NSF I-Corps Grant
Title: Precision brain mapping for CNS drug development.
Total costs: \$2,500
Role: Mentor

2023-2024 Sponsor: Scan Design Foundation
Trainee: Carlee Toddes
Scan Design Pilot Award
Title: Neural ensemble dynamics underlying pain modulated volitional social behavior.
Total costs: \$30,000
Role: Mentor

2023-2024 Sponsor: UW NAPE Center
Trainee: Carlee Toddes
P30 Pilot Grant
Title: Neural ensemble dynamics underlying pain modulated volitional social behavior.
Total costs: \$35,000
Role: Mentor

2023-2025 Sponsor: Weill Neurohub

Trainee: Carlee Todd
Weill Neurohub Postdoctoral Fellowship
Title: Integrative cell type and circuit ensemble observation and dynamic closed-loop modulation of volitional social behavior following pain.
behavior following pain.
Total costs: \$150,000
Role: Mentor

2024. Sponsor: UW CoMotion
Trainee: Eric Szelenyi
Postdoctoral Entrepreneurship Program (PEP) Award
Title: Cognitive Circuit Mapping Platform for Psychiatric Drug Development.
Total costs: \$84,000
Role: Mentor

2024-2027 Sponsor: Washington Research Foundation
Trainee: Carlee Todd
Weill Neurohub Postdoctoral Fellowship
Title: Integrative cell type and circuit ensemble observation and dynamic closed-loop modulation of volitional social behavior following pain.
behavior following pain.
Total costs: \$275,000
Role: Mentor

Graduate trainees

2021-2023 Sponsor: NIH/NIMH
Trainee: Nastacia Goodwin
NRSA F31 1F31MH125587-01
Title: Dissociable neural mechanism of reactive versus appetitive aggression.
Total costs: \$130,284
Role: Mentor

2023-2026 Sponsor: NIH/NIMH
Trainee: Jovana Navarette
NRSA F31 1F31MH133295-01
Title: Cell-type and whole-brain dynamics underlying operant social stress resiliency.
Total costs: \$143,082
Role: Mentor

Undergraduate trainees

2020. Sponsor: UW NAPE Center
Student: Sophia Hwang
NAPE Summer Undergraduate Research Scholarship
Title: Supervised machine learning for classification of social behavior in mice.
Total costs: \$4,000
Role: Mentor

2021. Sponsor: UW NAPE Center
Student: Valerie Tsai
NAPE Summer Undergraduate Research Scholarship
Title: Visualizing and interpreting brain-wide cellular activation dynamics.

- Total costs: \$4,000
Role: Mentor
2021. Sponsor: Mary Gates Endowment for Students
Student: Aasiya Islam
Mary Gates Research Scholarship
Title: Unsupervised machine learning for social behavior analysis.
Total costs: \$5,000
Role: Mentor
2022. Sponsor: Mary Gates Endowment for Students
Student: Aasiya Islam
Mary Gates Research Scholarship
Title: Supervised and unsupervised analysis of emergence from anesthesia.
Total costs: \$5,000
Role: Mentor
2022. Sponsor: Levinson Emerging Scholars Award
Student: Valerie Tsai
Levinson Emerging Scholars Award
Title: Analyzing brain-wide cellular activation dynamics.
Total costs: \$7,000
Role: Mentor
2022. Sponsor: UW NAPE Center
Student: Lauren Kuo
NAPE Summer Undergraduate Research Scholarship
Title: Near Infrared Light-inducible Cre Prototyping
Total costs: \$4,000
Role: Mentor
2023. Sponsor: UW NAPE Center
Student: Drew Berger
NAPE Summer Undergraduate Research Scholarship
Title: Whole brain signatures of reactive versus rewarding aggression.
Total costs: \$6,000
Role: Mentor
2023. Sponsor: Mary Gates Endowment for Students
Student: Brandon Wu
Mary Gates Leadership Scholarship
Title: Expanding the Grey Matters Outreach Initiative
Total costs: \$5,000
Role: Mentor
- 2023-2024. Sponsor: Mary Gates Endowment for Students
Student: Kevin Bai
Mary Gates Research Scholarship
Title: Analysis of Volitional Social Self Administration as an Intervention for Mice Suffering from Chronic Neuropathic Pain
Total costs: \$5,000
Role: Mentor

- 2023-2024. Sponsor: Mary Gates Endowment for Students
Student: Virginia Wang
Mary Gates Research Scholarship
Title: Improving Classifiers for Social Behavior via Automated Metadata Integration and Object Detection
Total costs: \$5,000
Role: Mentor
- 2023-2024. Sponsor: Mary Gates Endowment for Students
Student: Jay Bhateja
Mary Gates Leadership Scholarship
Title: Expanding the Grey Matters Outreach Initiative
Total costs: \$5,000
Role: Mentor
- 2023-2024. Sponsor: UW 3Rs Committee
Student: Kevin Bai
3Rs Pilot Funding Proposal
Title: Analysis of Volitional Social Self Administration as an Intervention for Mice Suffering from Chronic Neuropathic Pain
Total costs: \$10,000
Role: Mentor
- 2024-2025. Sponsor: Mary Gates Endowment for Students
Student: Emma D'cessare
Mary Gates Leadership Scholarship
Title: Expanding the Grey Matters Outreach Initiative
Total costs: \$5,000
Role: Mentor
2025. Sponsor: UW NAPE Center
Student: Zoya Hill-Zargizi
NAPE Summer Undergraduate Research Scholarship
Title: Pairing genetic expression with neurophysiological data at a single-cell resolution in mice susceptible to drug relapse
Total costs: \$6,000
Role: Mentor
2025. Sponsor: Mary Gates Endowment for Students
Student: Preston Sands
Mary Gates Research Scholarship
Title: Modeling the Impact of Fentanyl on Neural and Behavioral Dynamics
Total costs: \$5,000
Role: Mentor
2026. Sponsor: Mary Gates Endowment for Students
Student: Zoya Hill-Zargizi
Mary Gates Research Scholarship
Title: Pairing genetic expression with neurophysiological data at a single-cell resolution in mice susceptible to drug relapse
Total costs: \$5,000
Role: Mentor

2026. Sponsor: Mary Gates Endowment for Students
 Student: Nick Ressler
 Mary Gates Research Scholarship
 Title: Free roaming vitals and acceleration streaming.
 Total costs: \$5,000
 Role: Mentor

16. Bibliography:

Publications and Citation Information ([Google Scholar](#), April 2026)

Total peer reviewed papers: 66; Citations: ~11,500; h factor: 45; i10-index: 62.

A. Peer-reviewed manuscripts (all original reports unless otherwise indicated)

1. U.E. Ghitza*, S.G. Nair*, **S.A. Golden**, S.M. Gray, J.L. Uejima, J.M. Bossert, Y. Shaham. (2007). Peptide YY3-36 decreases reinstatement of high-fat food seeking during dieting in a rat relapse model. Journal of Neuroscience, 27(43): 11522-32. [PMID: [17959795](#)]
2. S.G. Nair, **S.A. Golden**, Y. Shaham (2008). Differential effects of the hypocretin 1 receptor antagonist SB 334867 on high-fat food self-administration and reinstatement of food seeking in rats. British Journal of Pharmacology, 154(2):406-16. [PMID: [18223663](#)]
3. C.L. Pickens, **S.A. Golden**, T. Adams-Deutsch, S.G. Nair, Y. Shaham Y. (2009). Long-lasting incubation of conditioned fear in rats. Biological Psychiatry, 65(10):881-6. [PMID: [19167702](#)]
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9. D.J. Christoffel, **S.A. Golden**, S.J. Russo. (2011). Structural and synaptic plasticity in stress-related disorders. Reviews in Neuroscience, 22(5): 535-49. [PMID: [21967517](#)][review]
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- accumbens on emotional behavior. Neuropsychopharmacology, 37(12): 2615-23. [PMID: [22781845](#)]
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12. E. Koya, F.C. Cruz, R. Ator, **S.A. Golden**, A.F. Hoffman, C.R. Lupica, B.T. Hope. (2012). Silent synapses in selectively activated nucleus accumbens neurons following cocaine sensitization. Nature Neuroscience, 15(11): 1556-62. [PMID: [23023294](#)]
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17. J.J. Walsh, A.K. Friedman, H. Sun, E.A. Heller, S.M. Ku, B. Juarez, V.L. Burnham, M.S. Mazei-Robison, D. Ferguson, **S.A. Golden**, J.W. Koo, D. Chaudhury, D.J. Christoffel, L. Pomeranz, J.M. Friedman, S.J. Russo, E.J. Nestler, M.H. (2014). Stress and CRF gate neural activation of BDNF in the mesolimbic reward pathway. Nature Neuroscience, 2014 Jan;17(1):27-9. [PMID: [24270188](#)]
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26. **S.A. Golden**, M. Heshmati, M. Flanigan, D.J. Christoffel, K. Guise, M.L. Pfau, H. Aleyasin, C. Menard, H. Zhang, G.E. Hodes, D. Bregman, L. Khibnik, J. Tai, N. Rebusi, B. Krawitz, D. Chaudhury, J.J. Walsh, M.H. Han, M.L. Shapiro, S.J. Russo. (2016). Basal forebrain projections to the lateral habenula modulate aggression reward. Nature. 2016 Jun 30;534(7609):688-92. [PMID: [27357796](#)]
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60. E.R. Szelenyi, J.S. Navarrete, A.D. Murry, Y.Y. Zhang, K.S. Girven, L. Kuo, M.M. Cline, M.X. Bernstein, M. Burdyniuk, B. Bowler, N.L. Goodwin, B. Juarez, L.S. Zweifel, **S.A. Golden**. (2024). An arginine-rich nuclear localization signal (ArgiNLS) strategy for streamlined image segmentation of single-cells. Proceedings of the National Academy of Science USA, July 29; 121 (32) e2320250121. doi: 10.1073/pnas.2320250121. [PMID: [39074275](#)]
61. N.L. Goodwin, **S.A. Golden**. (2024). Keeping it simple – a Simple Behavioral Analysis (SimBA) primer. Neuropsychopharmacology – Digital Psychiatry and Neuroscience (NPP-DPN), 2024;2(1):13. doi: 10.1038/s44277-024-00014-9. [PMID: [39099890](#)][review]
62. J.E. Elum, E.R. Szelenyi, B. Juarez, A.D. Murry, G. Loginov, C.A. Zamorano, P. Gao, G. Wu, S. Ng-Evans, X. Xu, **S.A. Golden**, L.S. Zweifel. (2024). Distinct dynamics and intrinsic properties in ventral tegmental area populations mediate reward association and motivation. Cell Reports, 2024 Sep 24;43(9):114668. doi: 10.1016/j.celrep.2024.114668. [PMID: [39207900](#)]
63. A.T. Luskin, L. Li, X. Fu, K. Barcomb, T. Blackburn, E.M. Li, A. Rana, R.C Simon, L. Sun, A.D. Murry, **S.A. Golden**, G.D. Stuber, C.P. Ford, L. Gu, M.R. Bruchas. (2025). A diverse network of pericoerulear neurons control arousal states. Nature, 2025 Jul;643(8071):437-447.v [PMID: [40335695](#)]
64. R. Simon, W. Fleming, P. Senthilkumar, B. Briones, K. Ishii, M. Hjort, M. Martin, K. Hashikawa, A. Sanders, **S.A. Golden**, G. Stuber. (2025). Opioid-driven disruption of the septal complex reveals a role for neurotensin-expressing neurons in withdrawal. Neuron, Neuron. 2025 Jul 23;113(14):2325-2343.e9. [PMID: [40378834](#)]
65. C. Toddes, SA Golden. (2025). Dominance in the absence of competition. Current Biology. 2025 Jul 21;35(14):R706-R708. [PMID: [40695236](#)][perspective]

B. MedEDPortal publications: N/A

C. Book Chapters

1. **S.A. Golden**, S.J.Russo. (2012). Mechanisms of psychostimulant-induced structural plasticity. Cold Spring Harbor Perspectives in Medicine, 2(10). [PMID: [22935995](#)][review]

D. Published Books, Videos, Software, Etc.

Open-source software releases:

1. SimBA – Simple Behavioral Analysis, <https://github.com/sgoldenlab/simba>
2. SMART – Semi-Manual Alignment to Reference Templates, <https://github.com/sgoldenlab/SMART>

Patents:

1. "SYNTHETIC NUCLEAR LOCALIZATION SIGNALS AND METHODS OF THEIR USE". Filed on May 17, 2023, assigned serial number 63/467,255.
2. "TECHNIQUES FOR ACHIEVING SYNTHETIC NERVOUS SYSTEM STATES" Patent Application 63/746,456 filed 1/17/2025

E. Other Publications (not yet peer reviewed)

1. Brainwide genetic capture for conscious state transitions. (2025). Hallie Lazaro, Kevin N. Schneider, Michelle Jin, Asad Beck, Daniel R. Rijsketic, Alexandria D. Murry, Jovana Navarrete, Cole C. Shin, Ainsley C. Barrow, Ian Campuzano, Minke H.C. Nota, Nick Ressler, Ella Apley, Jason Zhang, Glorianna Gutierrez, Eric R. Szelenyi, Simon RO Nilsson, Christine A. Denny, Michael R. Bruchas, Boris D. Heifets, Horacio O. de la Iglesia, **Sam A. Golden***, Mitra Heshmati*. bioRxiv 2025.03.28.646066.
2. Synthetic modulation of brain-wide anesthesia-activated neural ensembles using a transgenic mouse system. (2025). Minke H.C. Nota, Hallie Lazaro, Jaidyn O. Gaur, Ian Campuzano, Lukas K. MacMillen, **Sam A. Golden***, Mitra Heshmati*. bioRxiv 2025.12.02.691631.

F. Manuscripts Submitted

G. Other Media

1. Podcast guest – Once A Scientist: UW Asst. Prof., Sam Golden, on building a lab during a pandemic..May 5, 2020. <https://podcasts.apple.com/us/podcast/11-uw-asst-prof-sam-golden-on-building-a-lab-during-a-pandemic/id1505716027?i=1000473663182>
2. Podcast guest – Dear Body, Dear Mind: The Neuroscience of Anger and Addictin with Dr. Sam Golden. June 8, 2026. <https://open.spotify.com/episode/4nSN5N9pdB0MJiAxxQcLUq?si=6e16d2bc87684028>

17. **Talks and Presentations:**

A. Invited National and International Lectures and Panels at Conferences

1. Epigenetic regulation of synaptic remodeling in depression (Nano-symposium speaker). Society for Neuroscience 42nd Annual Meeting, October 2012, New Orleans LA USA
2. Epigenetic regulation of synaptic remodeling in depression (Symposium speaker). 46th Annual Winter Conference on Brain Research (WCBR), January 2013, Breckenridge, CO USA
3. Epigenetic mechanisms of synaptic remodeling in depression (Symposium speaker). Society of *Biological Psychiatry* - 68th Annual Meeting, May 2013, San Francisco, CA USA
4. Epigenetic regulation of synaptic remodeling in stress disorders (Mini-symposium speaker).

- Society for Neuroscience 43th Annual Meeting, November 2013, San Diego CA USA
5. Ventral striatal projections to the lateral habenula modulate aggression reward. EBPS International Conference Travel Award Presenter (Israel). May 2015, Rehovet, Israel.
 6. The role of the ventral striatum in encoding operant behavior for natural rewards: food and aggression (Symposium speaker). Monitoring Molecules in Neuroscience 2016, June 2016, Gothenburg, Sweden.
 7. Compulsive addiction-like aggressive behavior in mice (Main speaker). Dutch Society for Neuroscience 2017. June 2017, Lunteren, Netherlands.
 8. Compulsive addiction-like aggressive behavior in mice. Department of Anatomy & Neurosciences at VU University medical center (VUmc). June 2017, Amsterdam, Netherlands.
 9. Compulsive addiction-like aggressive behavior in mice. Department of Behavioral Neuroscience, Universiteit Utrecht. June 2017, Utrecht, Netherlands.
 10. Compulsive addiction-like aggressive behavior in mice. Center for Compulsive Behavior. October 2017, Bethesda, MD, USA.
 11. Learning to Aggress: Neural Underpinnings of Aggressive Behaviour (Symposium speaker). Winter Conference on Neural Plasticity 2018. January 2018, Curacao, Caribbean.
 12. Learning to Aggress: Behavioral and circuit mechanisms of aggression reward. Department of Biological Structure at The University of Washington. May 2018, Seattle, WA, USA.
 13. Learning to Aggress: Behavioral and circuit mechanisms of aggression reward. Center of Excellence on the Neurobiology of Pain, Addiction and emotion (NAPE) at The University of Washington. May 2018, Seattle, WA, USA.
 14. Appetitive Aspects of Aggression (Symposium speaker). World Meeting of the International Society for Research on Aggression 2018. July 2018, Paris, France.
 15. Connectomics of appetitive aggression. The Institut du Cerveau et de la Moelle épinière. July 2018, Paris, France.
 16. Violence and substance use disorders (Plenary speaker). Swedish Association for Addiction Medicine Annual Meeting 2018. August 2018, Gothenburg, Sweden.
 17. Learning to Aggress: Behavioral and circuit mechanisms of aggression reward. Center on Social and Affective Neuroscience at Linköping University. August 2018, Linköping, Sweden.
 18. Connectomics of appetitive aggression. Department of Biological Structure Annual Retreat 2018. September 2018, Seattle, WA, USA.
 19. Social motivation across the lifespan (Mini-symposium speaker). Society for Neuroscience 46th Annual Meeting, November 2018, San Diego, CA USA.
 20. Question and Answers from a Neuroscientist. An Evening with Neuroscience 2019. April 2019, Seattle, WA, USA.
 21. Resilience: mechanisms from pre-clinical animal models. 2nd International Spring School on Resilience Research. May 2019, Castle Etelsen (Bremen), Germany.
 22. Aggression reward and motivation in mice. NeuroFutures2019. July 2019, Portland, Oregon, USA.
 23. Neuropharmacology and Neurogenetics of Aggression as Reward. 2019 Biennial Meeting of the European Behavioral Pharmacology Society. August 2019, Braga-Porto, Portugal.
 24. A debate on the utility of the social defeat stress as a model for depression-related behaviors. The 5th International Symposium on Resilience Research. September 2019, Mainz, Germany.

25. Effects of Cocaine Use (Chair). 2019 Society for Neuroscience Meeting. October 2019, Chicago, IL, USA.
26. Aggression reward: from behaviour to whole brain (main speaker). 2019 Society for Neuroscience Meeting. October 2019, Chicago, IL, USA.
27. The Spectrum of Social Behavior and Its Underlying Mechanisms. 2020 Winter Conference on Brain Research. January 2020, Big Sky, MO, USA.
28. Approaches for imaging organic solvent and aqueous cleared brain tissue. The Association of Biomolecular Research Facilities 2020. February 2020, Palm Springs, CA, USA.
29. [Cancelled due to COVID-19] Machine learning approaches to social ethology in rodents. Cross-Talk 2020 at The University of Utrecht. March 2020, Utrecht, Netherlands.
30. [Virtual] Learning to aggress: complex social behaviour to light sheet microscopy (main speaker). Miltenyi Biotec Labroots Webinar Series, Virtual, July 2020.
31. [Rescheduled due to COVID-19] Gordon Research Seminar on Addiction (Chair). Gordon Research Conference on the Neurobiology of Drug Addiction 2020. August 2020, Lowery, ME, USA.
32. [Virtual] Learning to aggress: behavioural and circuit mechanisms of aggression reward (Grand Rounds Speaker). Vanderbilt School of Medicine Psychiatry Grand Rounds. October 2020, Nashville, TN, USA.
33. [Virtual] Examining Social Behavior in a Time of Social Distancing (Panel speaker). ACNP 59th Annual Meeting, Virtual, December 2020.
34. [Rescheduled due to COVID-19] Learning to aggress: behavioural and circuit mechanisms of aggression reward (Invited speaker). State-Dependence of Sensation and Behavior, HHMI Janelia Research Campus. May 2021, Virginia, USA.
35. [Virtual] Machine learning for social behavior analysis. Gene, Brain, and Behavior Meeting 2021 (IBANGS). Virtual, May 2021.
36. [Virtual] Machine learning for social behavior analysis. OpenScience Meeting 2021. Virtual, July 2021.
37. [Virtual] Do we understand human aggressive behaviour? In the search for brain mechanisms towards effective rehabilitation. 49th Meeting of the European Brain and Behaviour Society, September 2021, Lausanne, Switzerland.
38. Short Course: Supervised machine learning for the unsupervised behavioural neuroscientist (Chair). Winter Conference on Brain Science 2022. February 2022, Snowmass, CA, USA.
39. European Behavioral Pharmacology Society Workshop 2022 (Organizer). Spanning the spectrum of social behavior: towards more translationally relevant animal models. June 2022, Rome, Italy.
40. Gordon Research Seminar on Addiction (Organizer). Gordon Research Conference on the Neurobiology of Drug Addiction 2020. August 2022, Lowery, ME, USA.
41. Neurobiology of behavioral changes in social context. The 46th Annual Meeting of the Japan Neuroscience Society (Panel Speaker). July 2023, Sendai, Japan.
42. Sensitization of a claustrum-amygdalar-accumbens neural system precedes incubation to palatable food craving. International Brain Initiative, Daegu Conference 2023. August 2023, Daegu, South Korea.
43. Neural basis of social motivation (Speaker). Nobel Forum 2023. August 2023, Stockholm, Sweden.
44. UW Graduate Program in Neuroscience Keynote. UW GPN Seminar 2023. August 2023, Seattle, WA, USA.
45. Where worlds collide: finding common ground between physiological and psychosocial

- stress (Speaker). Stress Neurobiology Workshop 2024. June 2024, Boston, MA, USA.
46. New Perspectives on Neurotechnologies and AI Tools (Speaker). Fens - Chen Institute - Neuroleman Summer School: Monitoring and Manipulating the Affective State. August 2024, Lausanne, Switzerland.
 47. Development of preclinical open-source tools bridging behavior, body and brain in an academic environment (Keynote). The 7th Technology in Psychiatry Summit, ACNP satellite conference. November 2024, Pheonix, Arizona, USA.
 48. Machine learning for behavioural quantification and explanation. (Organizer and Speaker). Short Course on the Application of Machine Learning for Automated Quantification of Behavior. October 2025, Bar Harbor, Maine, USA.
 49. Development of preclinical open-source tools bridging behavior, body and brain (ACNP Distinguished Lecture Speaker Keynote). American College of Neuropsychopharmacology (ACNP) 46th Annual Meeting. January 2026. Nassau, Bahamas.
 50. Gordon Research Conference on Social Behavior (Panelist). Gordon Research Conference on the Neurobiology of Social Behavior 2026. March 2026, Pamona, CA, USA.

B. Invited Talks

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| 2005 | Center for Neuroscience, University of Pittsburgh, PA |
| 2006 | NIDA Intramural Research Program, MD |
| 2012 | Dept. of Neuroscience and Physiology, New York University, NY |
| 2013 | Dept. of Psychiatry, Yale University, CT |
| 2013 | Dept. of Neuroscience, The Scripps Research Institute, FL |
| 2014-2017 | NIDA Intramural Research Program, MD |
| 2017 | NIGMS PRAT Invited Speakers Series, Washington DC |
| 2017 | Center for Compulsive Behavior, NIH, Bethesda MD |
| 2018 | Dept. of Biological Structure, University of Washington, Seattle WA |
| 2018 | NAPE Center, University of Washington, Seattle WA |
| 2019 | Graduate Program in Neuroscience, Michigan State University, Lansing MI |
| 2019 | Computational Neuroscience Center, University of Washington, Seattle WA |
| 2019 | NAPE Center, University of Washington, Seattle WA |
| 2020 (virtual) | Washington University Pain Center, WUSTL, St. Louis MO |
| 2020 (virtual) | Dept. of Biochem. & Molecular Biology, University of Tennessee, Knoxville TN |
| 2020 (virtual) | Psychiatry Grand Rounds, Vanderbilt University, Nashville TN |
| 2020 (virtual) | The David Anderson Research Group, Caltech, Pasadena CA |
| 2021 (virtual) | Dept. of Neuroscience, Icahn School of Medicine, New York City, NY |
| 2021 (virtual) | BMI Circuits & Behavior Seminar, EPFL, Lausanne, Switzerland |
| 2021 (virtual) | McLean Hospital, Harvard University, Boston, MA |
| 2021 (virtual) | Dept. of Neuroscience, Northwestern University, Chicago, IL |
| 2023 (virtual) | Dept. of Neuroscience, Penn State, Hershey, PA |
| 2024 | Waggoner Center, University of Texas Austin, Austin, TX |
| 2024 | Dept. of Neuroscience, Southern Illinois University, Carbondale, IL |
| 2024 | Dept. of Neuroscience, University of Tennessee, Knoxville, TN |
| 2024 | Dept. of Neuroscience, Virginia Tech, Blacksburg, VA |
| 2025 (virtual) | National Primate Research Center (NPRC) Neuroscience Seminar |