

# Weikang SHI

Curriculum Vitae | Latest update: April 2026 | New Haven, CT | [weikang.w.shi@gmail.com](mailto:weikang.w.shi@gmail.com) | <https://wilburshi.github.io>

My research program seeks to understand how the primate brain computes strategic social decisions, with a central focus on prosocial behavior in freely moving marmosets. I integrate computational neuroethology, naturalistic behavioral paradigms, and large-scale neural recordings to link social strategies to their underlying neural computations. My long-term goal is to build a circuit-level model of how the cortico-striatal circuit generates complex prosocial decisions.

## Education & Positions

---

- 6/2022-pres. **Postdoctoral Fellow, Yale University, New Haven, CT, USA**  
Mentors: Drs. Steve Chang, Anirvan Nandy, Monika Jadi  
Funding: Wu Tsai Institute Postdoctoral Fellowship, NIMH T32, **NIMH K99**
- 2/2022-5/2022 **Postdoctoral Associate (in transition), Washington University in St. Louis, MO**  
Mentor: Dr. Camillo Padoa-Schioppa
- 8/2016-1/2022 **Doctor of Philosophy, Neuroscience Program, Washington University in St. Louis, MO**  
Mentor: Dr. Camillo Padoa-Schioppa  
Funding: Cognitive, Computational and Systems Neuroscience Predoctoral Fellowship  
*Dissertation Title: Causal Function and Bias Correlation of the Orbitofrontal Cortex in Economic Choices*
- 9/2012-7/2016 **Bachelor of Science, School of Life Sciences, Peking University, Beijing, China**  
Mentor: Dr. Paul Taghert, Washington University in St. Louis (semester exchange)

## Fellowships & Funding

---

- 4/2026 **NIMH, K99MH142687**, NIH Pathway to Independence Award  
*Grant Title: Cortical-Striatal Circuit Mechanisms Underlying Altruistic Decisions*
- 7/2025 **Yale University, T32MH014276**, Two-Year BSTP Postdoctoral Fellowship
- 6/2022 **Yale University, Wu Tsai Institute**, Three-Year Postdoctoral Fellowship
- 5/2017 **Washington University in St. Louis, Cognitive, Computational and Systems Neuroscience**, Predoctoral Fellowship

## Scholarships & Awards

---

- 5/2026 **Marmoset Bioscience Symposium, Young Investigator Award**  
*Talk Title: Effort Costs and Social Information Shape Cooperative Decisions in Marmosets*
- 5/2025 **Larry J. Young Memorial Research Symposium, Best Poster Award**  
*Poster Title: Social Visual Evidence Accumulation in the Prefrontal Cortex Supports the Successful Cooperation in Marmosets*
- 10/2023 **Society for Social Neuroscience, Best Poster Award**  
*Poster Title: Exploring Behavioral Dynamics in Cooperative Interactions Among Marmoset Dyads*
- 9/2022 **Society for Neuroeconomics, Best Dissertation Award**  
*Dissertation Title: Causal Function and Bias Correlation of the Orbitofrontal Cortex in Economic Choices*
- 3/2021 **Washington University in St. Louis, The James L. O'Leary Prize for Research in Neuroscience, Finalist**  
*Talk Title: Values Encoded in Orbitofrontal Cortex Are Causally Related to Economic Choices*
- 10/2018 **Washington University in St. Louis, Thach Award, Best Poster Presentation**  
*Poster Title: Values Encoded in Orbitofrontal Cortex Are Causally Related to Economic Choices*

## Peer-Reviewed Publications (\*: equal contribution)

---

1. **Weikang Shi**, Olivia C. Meisner, Monika P. Jadi, Steve W. C. Chang, Anirvan S. Nandy. Canonical decision computations underlie behavioral and neural signatures of cooperation in primates. bioRxiv, 2025.10.22.683999 (2025). **Neuron** (in press 2026).
2. Olivia C. Meisner\*, **Weikang Shi**\*, Amrita Nair, Gargi Nandy, Monika P. Jadi, Anirvan S. Nandy, Steve W. C. Chang. Diverse and flexible strategies enable successful cooperation in marmoset dyads. **Current Biology**, 35.18 (2025).
3. Olivia C. Meisner, **Weikang Shi**, Nicholas A. Fagan, Joel Greenwood, Monika P. Jadi, Anirvan S. Nandy, Steve W. C. Chang. Development of a marmoset apparatus for automated pulling to study cooperative behaviors. **eLife**, 13 (2024): RP97088.
4. **Weikang Shi**, Olivia C. Meisner, Sylvia Blackmore, Monika P. Jadi, Anirvan S. Nandy, Steve W. C. Chang. The orbitofrontal cortex: a goal-directed cognitive map framework for social and non-social behaviors. **Neurobiology of Learning and Memory**, 107793 (2023).
5. Sébastien Ballesta, **Weikang Shi**, Camillo Padoa-Schioppa. Orbitofrontal cortex contributes to the comparison of values underlying economic choices. **Nature Communications**, 13. 4405 (2022).
6. **Weikang Shi**, Sébastien Ballesta, Camillo Padoa-Schioppa. Neuronal Origins of Reduced Accuracy and Biases in Economic Choices Under Sequential Offers. **eLife**, 11 (2022): e75910.
7. **Weikang Shi**, Sébastien Ballesta, Camillo Padoa-Schioppa. Economic Choices with Simultaneous or Sequential Offers Rely on the Same Neural Circuit. **Journal of Neuroscience**, 42.1 (2022): 33-43.
8. Sébastien Ballesta\*, **Weikang Shi**\*, Katherine E. Conen, Camillo Padoa-Schioppa. Values Encoded in Orbitofrontal Cortex Are Causally Related to Economic Choices. **Nature**, 588 (2020): 450-453.
9. Jingquan He, **Weikang Shi**, Yu Guo, Zhen Chai. ERp57 modulates mitochondrial calcium uptake through the MCU. **FEBS letters**, 588.12 (2014): 2087-2094.

## Book Chapters

---

1. **Weikang Shi**, Olivia C. Meisner, Monika P. Jadi, Anirvan S. Nandy, Steve W. C. Chang. Comparative game theory: Bringing ethology back into decision neuroscience. In: David Smith, Dominic Fareri, and Patricia Lockwood, ed., **Neuroeconomics: Core Topics and Current Directions**, (2026).
2. Camillo Padoa-Schioppa and **Weikang Shi**. The role of orbitofrontal cortex in economic choice behavior. In: Jordan Grafman, ed., **Encyclopedia of the Human Brain, Second Edition**, (2023).

## Conference Organization

---

- |         |   |
|---------|---|
| 3/2024  | <b>Symposium Chair, Society for Social Neuroscience</b> Symposium on Understanding the Behavioral and Neural Dynamics of Naturalistic Social Interactions |
| 10/2022 | <b>Symposium Chair, Society for Neuroeconomics</b> Symposium on Biases Across Different Timescales, Species, and Behavioral Paradigms                     |

## Ad Hoc Reviewers

---

Behavioural Brain Research, Neuroscience, Current Opinion in Behavioral Sciences, Nature Communications, Communications Biology, Cosyne, Wellcome Trust Grant Funding, etc.

## Professional Societies

---

- |            |  |
|------------|--|
| 2026-pres. | <b>Janeway Society</b> , Yale University |
| 2022-pres. | <b>Society for Social Neuroscience</b>   |
| 2020-pres. | <b>Society for Neuroeconomics</b>        |
| 2017-pres. | <b>Society for Neuroscience</b>          |

## Presentations & Talks

---

- |         |  |
|---------|--|
| 5/2026  | <b>Princeton Neuroscience Institute Symposium, Invited Talk, Princeton University</b> Behavioral and Neural Mechanisms of Cooperation in Freely Moving Marmosets |
| 10/2025 | <b>Society for Neuroeconomics, Talk, Boston, MA</b> Neural Dynamics of Social Evidence Accumulation in Cooperative Interactions of Freely Moving Marmosets       |

- 6/2025 **Wu Tsai Institute Seminar, Talk, Yale University** Neural Dynamics of Social Evidence Accumulation in Cooperative Interactions of Freely Moving Marmosets
- 3/2024 **Society for Social Neuroscience, Talk, Tsukuba, Japan** Exploring Behavioral and Neural Dynamics in Cooperative Interactions Among Marmoset Dyads
- 6/2023 **Wu Tsai Institute Seminar, Talk, Yale University** Exploring Behavioral Dynamics in Cooperative Interactions Among Marmoset Dyads
- 10/2022 **Society for Neuroeconomics, Talk, Arlington, VA** Neuronal Origins of Reduced Accuracy and Biases in Economic Choices Under Sequential Offers
- 1/2022 **Moreno-Bote Lab journal club, Invited Talk, Virtual, UPF, Barcelona, Spain** Economic Choices with Simultaneous or Sequential Offers Rely on the Same Neural Circuit
- 6/2021 **Yale Neuroeconomics Forum, Invited Talk, Virtual, Yale University** Values Encoded in Orbitofrontal Cortex Are Causally Related to Economic Choices
- 2/2021 **CCSN Retreat, Invited Talk, Virtual, Washington University in St. Louis** Economic Choices with Simultaneous or Sequential Offers Rely on the Same Neural Circuit
- 10/2020 **NeuroMatch 3.0, Talk, Virtual** Economic Choices with Simultaneous or Sequential Offers Rely on the Same Neural Circuit Mechanism
- 10/2020 **Society for Neuroeconomics, Talk, Virtual** Values Encoded in Orbitofrontal Cortex Are Causally Related to Economic Choices
- 7/2018 **Neuroscience and Artificial Intelligence - Where Do We Meet?, Talk, Peking University** Establishing Causal Links Between Neural Activity in Orbitofrontal Cortex and Economic Choices

### Conference Abstracts (\*: equal contribution)

---

1. **Weikang Shi**, Olivia C. Meisner, Monika P. Jadi, Steve W. C. Chang and Anirvan S. Nandy. Canonical decision computations underlie behavioral and neural signatures of cooperation in primates. Gordon Research Conference, 2026.
2. **Weikang Shi**, Olivia C. Meisner, Monika P. Jadi, Steve W. C. Chang and Anirvan S. Nandy. Canonical decision computations underlie behavioral and neural signatures of cooperation in primates. COSYNE, #I-055, 2026.
3. Jing Yuan, **Weikang Shi**, Olivia C. Meisner, Anirvan S. Nandy, Steve W. C. Chang and Monika P. Jadi. From exploration to coordination: Computational models reveal learning dynamics of cooperation. COSYNE, #I-452, 2026.
4. **Weikang Shi**, Olivia C. Meisner, Monika P. Jadi, Steve W. C. Chang and Anirvan S. Nandy. Neural Dynamics of Social Evidence Accumulation in Cooperative Interactions of Freely Moving Marmosets. Society for Neuroscience, 2025.
5. **Weikang Shi**, Olivia C. Meisner, Monika P. Jadi, Steve W. C. Chang and Anirvan S. Nandy. Neural Dynamics of Social Evidence Accumulation in Cooperative Interactions of Freely Moving Marmosets. Simian Collective, 2025.
6. **Weikang Shi**, Olivia C. Meisner, Alec G. Sheffield, Steve W. C. Chang, Anirvan S. Nandy and Monika P. Jadi. Strategic and Dynamic Use of Social Gaze for Successful Cooperation in Marmoset Dyads. COSYNE, #I-054, 2025.
7. **Weikang Shi**, Olivia C. Meisner, Amrita R. Nair, Alec G. Sheffield, Nyomi V. Hudson, Nicholas A. Fagan, Feng Xing, Monika P. Jadi, Anirvan S. Nandy and Steve W. C. Chang. Strategic and Dynamic Use of Social Gaze for Successful Cooperation in Marmoset Dyads. Gordon Research Conference, 2024.
8. **Weikang Shi**, Olivia C. Meisner, Amrita R. Nair, Alec G. Sheffield, Nyomi V. Hudson, Nicholas A. Fagan, Feng Xing, Monika P. Jadi, Anirvan S. Nandy and Steve W. C. Chang. Exploring Behavioral Dynamics in Cooperative Interactions Among Marmoset Dyads. Society for Neuroscience, 2023.
9. **Weikang Shi**, Olivia C. Meisner, Amrita R. Nair, Alec G. Sheffield, Nyomi V. Hudson, Nicholas A. Fagan, Feng Xing, Monika P. Jadi, Anirvan S. Nandy and Steve W. C. Chang. Exploring Behavioral Dynamics in Cooperative Interactions Among Marmoset Dyads. Society for Social Neuroscience, 2023.
10. **Weikang Shi**, Olivia C. Meisner, Amrita R. Nair, Alec G. Sheffield, Nyomi V. Hudson, Nicholas A. Fagan, Feng Xing, Monika P. Jadi, Anirvan S. Nandy and Steve W. C. Chang. Exploring Behavioral Dynamics in Cooperative Interactions Among Marmoset Dyads. Simian Collective, 2023.

11. **Weikang Shi** and Camillo Padoa-Schioppa. Value compression and the amplification of choice biases. Society for Neuroscience, 2022.
12. **Weikang Shi**, Sebastien Ballesta, Camillo Padoa-Schioppa. Neuronal origins of choice biases under sequential offers. Society for Neuroscience, #P792.06, 2021.
13. **Weikang Shi**, Sebastien Ballesta, Camillo Padoa-Schioppa. Economic Decisions Under Simultaneous or Sequential Offers Rely on the Same Neural Circuit. Society for Neuroscience Global Connectome, #P307.04, 2021.
14. **Weikang Shi**, Sebastien Ballesta, Camillo Padoa-Schioppa. Economic Choices with Simultaneous or Sequential Offers Rely on the Same Neural Circuit Mechanism. COSYNE, #II-112, 2020.
15. **Weikang Shi**, Sebastien Ballesta, Camillo Padoa-Schioppa. Economic Choices with Simultaneous or Sequential Offers Rely on the Same Neural Circuit Mechanism. Society for Neuroscience, #514.18, 2019.
16. Sebastien Ballesta\*, **Weikang Shi**\*, Katherine E. Conen, Camillo Padoa-Schioppa. Causal Relationship Between Neural Activity in Orbitofrontal Cortex and Economic Decisions. Society for Neuroscience, #514.03, 2019.
17. **Weikang Shi**\*, Sebastien Ballesta\*, Katherine E. Conen, Camillo Padoa-Schioppa. Causal Relationship Between Neural Activity in Orbitofrontal Cortex and Economic Decisions. COSYNE, #I-22, 2019.

### Teaching and Mentoring Experiences

---

- 9/2025 **Neuroscience of Social Interaction**, Guest Lecturer, Yale University
- 7/2021 **Neuromatch Academy-Computational Neuroscience**, Lead Teaching Assistant
- 8/2017-12/2017 **Laboratory of Neurophysiology**, Teaching Assistant, Washington University in St. Louis
- 10/2014-2/2015 **Current Topics on Biochemistry**, Teaching Assistant, Peking University
- 6/2022-pres. **Chang, Nandy & Jodi Labs**, Mentor for junior lab members, Yale University  
*Mentees: Gargi Nandy, Jamie Masthay, Nyomi Hudson, Jing Yuan, Ali Guo*
- 8/2017-5/2022 **Padoa-Schioppa Lab**, Mentor for junior lab members, Washington University in St. Louis  
*Mentees: Jiaxin Tu, Heejae Choi*

### Outreaching

---

- 6/2025-pres. **BSTP Selection Committee**, Seminars at Yale Psychiatry, Yale University
- 6/2023-5/2024 **SYNAPSES Selection Committee**, Seminars at Yale Neuroscience, Yale University
- 6/2022-pres. **Faculty Opinions**, Associate Faculty Member
- 3/2022-pres. **Journal of Emerging Investigators**, Editor & Reviewer
- 1/2021 **WUSTL-ENDURE program**, SfN Representative, Washington University in St. Louis