

Naman Agrawal

Graduate student in Dept. Neurobiology and Behavior
Cornell University

✉ na488@cornell.edu

🐦 @namanagrawal97

🌐 namanagrawal.net

🌐 linkedin.com/in/naman-agrawal-5a8a6312b/

🐙 github.com/namanagrawal97



Research Experience

- August 2021 – continued 📌 **PhD Project** under Dr. Nilay Yapici, Dept. of Neurobiology and Behavior, Cornell University
Project Title: *Understanding the neural basis of feeding and foraging decisions in Drosophila*
- May 2019 – June 2020 📌 **Master's Thesis Project** under Dr. Bettina Schnell, Max Planck Institute for Neurobiology of Behavior (previously - CAESAR), Bonn, Germany
Project Title: *Identifying the descending neurons involved in turning behavior in Drosophila*
- May 2018 – July 2018 📌 **Summer Internship** under Prof. Dr. Bjoern Brembs, University of Regensburg, Germany
Project Title: *Studying neurobiological mechanisms of spontaneous behavior and operant feedback in Drosophila using optogenetics.*
- May 2017 – July 2017 📌 **Summer Internship** under Dr. Krushnamegh Kunte, NCBS-TIFR, Bangalore, India
Project Title: *Modelling Avian vision and Color analysis; Analysis of Butterfly population data of Bengaluru*
- May 2016 – July 2016 📌 **Summer Internship** under Dr. Tina Mukherji, Institute of Stem cell regeneration and Medicine(inStem), NCBS-TIFR, Bangalore, India
Project Title: *Perturbation of Dopamine receptors in blood cells and its effect on the progenitor stem cell differentiation in Drosophila Lymph gland*

Education

- 2021 – continued 📌 **Graduate Program in Neurobiology and Behavior, Cornell University**
Major: *Cognitive and Systems Neuroscience*
Relevant courses : Data-Driven Models in Biology; Molecular and Neural Basis of Decision Making; Introduction to Neuroscience
- 2015 – 2020 📌 **Integrated BS-MS, IISER Kolkata**
Major: *Biology* GPA : 9.15/10.0 (absolute scale)
Relevant courses : Neurobiology ;Behavior and Cognition; Biostatistics; Research Methodology; Probability and Statistics; Real Analysis 1 and 2; Evolutionary Dynamics; Biophysics 1 and 2; Linear Algebra; Advanced Biochemistry 1 and 2; Scientific Communication
- 2013 – 2015 📌 **All India Senior Secondary Certificate Examinations(CBSE) DPS Bhilai.**
Score: 95%. Subjects : Physics, Chemistry , Biology, Maths, English
- 2011 – 2013 📌 **All India Higher Secondary Examination(CBSE) DPS Bhilai.**
Score: 95%. Subjects : Maths , Science, Social Sciences, English , Hindi

Skills

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|--------------|---|
| Hardware | Strong proficiency in hardware development for quantification of animal behavior using Arduino, Raspberry Pi and IoT. Data storage and analysis using Bonsai and Python |
| Coding | Proficient : Python, Scikit-Learn, pandas, scipy, numpy, matplotlib Experienced : PyTorch, Keras, Tensorflow, R, Matlab, \LaTeX |
| Bench Skills | Fly husbandry; Making and maintaining crosses; Brain and gut dissection; Optogenetics; Fluorescence and Confocal Microscopy |

Teaching Experience

Courses

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| Spring 2024 | Course Development Teaching Assistant Introduction to Neuroscience, Cornell University |
| Spring 2023 | Teaching Assistant Introduction to Neuroscience, Cornell University |

Mentorship

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| 2023-2024 | Sophie Gustin , current position - Senior Undergraduate student at Cornell University |
| 2023-2023 | Catherine Schweiger , current position - Senior Undergraduate student at Cornell University |
| 2022-2023 | Claire Makino Duan , current position - Research Technician, Harnett Lab, MIT Joshua Dov Epstein , current position - Research Assistant, Summit Health |

Miscellaneous Experience

Conferences and Workshops

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| 2024 | Selected for and participated in Cornell CTI Early Career Graduate Teaching Cohort programme Participated in Cornell <i>CTI Course Design Institute</i> workshops |
| 2023 | Participated in Cajal Neurokit Development programme for Computational Analysis of Behavior Participated in Neurobiology of Drosophila meeting, CSHL Cornell <i>GET SET</i> workshops on teaching design |
| 2022 | Participated in Society for Neuroscience, SfN 2022 Selected for and attended Neuromatch Academy for Computational Neuroscience |
| 2021 | Organized and participated in Scicomm for Scientists 2021 , organized by IISER Kolkata under DST Karyashala : Accelerate Vigyan scheme selected for and participated in Methods in Drosophila Biology workshop , organized by CCAMP Bangalore attended neurofemIndia 2021 conference , organized by BiasWatchIndia |
| 2020 | attended NeuroNovember Conclave , organized by Project Encephalon selected for and attended Science Writing workshop organized by IISER Pune SMC (Science media center) |
| 2018 | attended Understanding behavior conference, organized by IISER Kolkata |

Miscellaneous Experience (continued)

- attended **Frontiers in Biology** conference, organized by Department of Biological Sciences, IISER Kolkata
- 2017 attended **Frontiers in Biology** conference, organized by Department of Biological Sciences, IISER Kolkata

Organizing roles

- 2022 **Vice-President - Cornell India Association**, Cornell University. A club that aims to provide support to graduate students of South Asian descent during their time at Cornell University.
- 2021- ongoing **Vice-President - Graduate Student Improv Club**, Cornell University. A group dedicated to improving mental health amongst graduate students through fun improv games.
- 2020 **co-organizer Neuro Study group**, an international group of neuro-enthusiasts who self study neuroscience books and have weekly meetings.
- Design team Head - Cogito137**, the scicomm platform of IISER Kolkata
- Media designer for National Post Doc symposium**, Organized by National Center for Biological Sciences (NCBS), in collaboration with IISER Kolkata and Cogito 137
- Media designer and organizer for Scicomm for Scientists 2021 workshop** organized by IISER Kolkata under DST Karyashala : Accelerate Vigyan scheme
- 2019 **Founding member**, IISER Kolkata Student Alumni Cell
- 2018 **Organizer and Designer, Lexis**, IISER Kolkata's literary festival
- Designer for Inquivesta 8**, the science fest of IISER Kolkata
- 2017 **Organizer of Photon**, a pan-India photography contest

Online Courses

- 2020 **Writing in the Sciences**, a course on Science communication by Kristin Sainani on Coursera
- Understanding Modern Art** course by Museum of Modern Art, NY on coursera
- Statistics and R**, by HarvardX

Research Publications

Deepthi Mahishi, **Naman Agrawal**, Wenshuai Jiang, Nilay Yapici - **From Mammals to Insects: Exploring the Genetic and Neural Basis of Eating Behavior** - *in revision* Haein Kim, Ziqing Zhong, Xinyue Cui, Hayeon Sung, **Naman Agrawal**, Tianxing Jiang, Monica Dus, Nilay Yapici - **HisCl1 regulates gustatory habituation in sweet taste neurons and mediates sugar ingestion in Drosophila.** - *in revision*

References

Dr. Nilay Yapici
Assistant Professor
Cornell University
Ithaca, New York
ny96@cornell.edu

Dr. Bettina Schnell
Group Leader
Research center caesar
Bonn, Germany
bettina.schnell@caesar.de

Dr. Bjoern Brembs
Professor of Neurogenetics
University of Regensburg
Germany
bjoern@brembs.net