

Siddhant Pusdekar

Science Writer

PhD Candidate, Ecology Evolution and Behavior, University of Minnesota

Email – pusde001@umn.edu / siddhantpusdekar@gmail.com

Writing Samples - <https://siddhantpusdekar.com/>

Education

University of Minnesota 2018 – present

PhD, Ecology, Evolution and Behavior

King's College London

MSc, Neuroscience 2014 - 2015

St. Xavier's College, Mumbai

BSc, Life Sciences 2011 - 2014

Research Experience

PhD Candidate University of Minnesota

Minneapolis, USA 2018 - present

- Planned and executed field based behavioral experiments in the robber fly *Laphria saffrana*, damselfly *Callopteryx maculata*, and dragonfly, *Phanogomphus spicatus*
- Analyzed high-speed videos using MATLAB, FIJI, Deep Lab Cut
- Planned and executed qualitative research project on science communication

Post-Baccalaureate Research

Fellow, Max Planck Florida

Institute for Neuroscience

Jupiter, USA 2016-2018

- Performed cranial surgeries on ferrets
- Imaged neural activity using a two-photon microscope
- Analyzed neural activity patterns using FIJI and MATLAB

Science Journalism

The Xylom

- Saying DEI in an Indian accent Oct 2021

Massive Science

- Artificial light makes it harder for nocturnal pollinators to find flowers Nov 2021

The Wire

- The globetrotting dragonfly that follows the monsoon Dec 2021
- In India's unequal research system, frugal labs are a bittersweet gem Jun 2022
- How a farmers' pest is making scientists rethink the speed of evolution Nov 2022

Mongabay

- Counting India's wolves one howl at a time Mar 2022

Salon - Scientists Manipulated Bat's social relationships and watched them go from strangers to friends

Aug 2022

Sahan Journal - Language barriers in health care contribute to more COVID deaths, Minnesota researcher finds

Aug 2023

Scientific American - A good night's sleep may help control blood sugar

Dec 2023

The Hindu – Plants warn each other of danger, now we can watch them

Nov 2023

The Conversation - Robber flies track their beetle prey using tiny microbursts of movement

May 2024

Research Experience (contd)

Research Intern, Indian Institute for Science Education and Research, Pune

Pune, India

2015-2016

- Performed feeding behavior experiments in larval zebrafish

MSc Thesis, King's College London

London, UK

2014 - 2015

- Injected larval zebrafish with plasmids
- Captured plasmid expression using confocal microscopy and mapped neural connections

Grants and Fellowships

- Max Planck Florida Institute for Neuroscience Postbac Fellowship 2022
- Itasca Biological Station and Laboratories, Director's Fellowship 2022

Academic Publications

- Predictive saccades and decision making in the beetle-predating saffron robber fly
Current Biology 2023
- Cuttlefish use stereopsis to strike at prey
Science Advances 2020
- Binocular Encoding in the Damselfly Pre-motor Target Tracking System. Current Biology 2020
- An Open Letter to University of Minnesota Ecology, Evolution, and Behavior Faculty about Diversity and Inclusion (Version 1.0). Zenodo 2020

Presentations

- Animal Behavior Society “Predictive Saccades in the Saffron Robber Fly, *Laphria Saffrana*” 2022
- Society for Neuroscience “Temporal Characteristics of Contrast Adaptation in the Ferret Visual Cortex” 2017

Science Communication

- Biological Purpose Project Feb 2023 - present
 - Host/Producer of the Purpose Podcast 2020-2021
- Science Communication Liaison 2020-2021
- Blog writer, Bioline the UMN College of Biological Sciences Blog Fall 2021
- “Perspectives from the field” for Upstream, the Itasca Biological Station Newsletter Jun 2022
- Mind Gala Mentorship – Mentored science students in popular science writing compiled in the book- Tales of Neuroscience Aug 2022
- Communicated ecology and behavior of dragonflies for the Minnesota Dragonfly Society

Teaching Experience

Teaching Assistant, University of Minnesota, College of Biological Sciences 2018 - present

- Providing Instruction in Introductory Biology Research
- Supervising student led experiments
- Mentoring Research Proposal Writing

Outreach

- Council of Graduate Students Representative, University of Minnesota 2018
- Inclusivity, Diversity, Equity and Action Committee, Ecology, Evolution and Behavior Department 2020- present
- MAP Program – Mentoring Indian PhD applicants 2022 - present