## Aditya **Iyer**

### PhD student

### Max Planck Institute for the Neurobiology of Behaviour - caesar | Bonn

Understanding development of behaviour. Developing tools and designing experiments. Biking and Science Communication

## EDUCATION

2020-Present PhD Student - International Max Planck Research School for Brain and Behaviour, Bonn, Germany

Master of Science (Research) - Medalist - Indian Institute of Science, Bangalore, India 2020

2015-2019 Bachelor of Science (Research, Biology) - First Class with Distinction - Indian Institute of Science, Bangalore, India



## **PUBLICATIONS**

#### Amphibian behavioral diversity offers insights into evolutionary neurobiology

lyer, A. A., Briggman, K. L. Current opinion in neurobiology 71 (2021): 19-28.

https://doi.org/10.1016/j.conb.2021.07.015



### **EXPERIENCE**

#### Present Developement of Locomotion during tadpole metamorphosis

## Aug2020

DR. KEVIN BRIGGMAN, Max Planck Institute for the Neurobiology of Behaviour – caesar

- > 2 Photon Microscopy of spinal cord activity in restrained tadpoles
- > Behavioural Filming and Quantification
- Whole Mount ImmunoHistoChemistry of spinal cords

Neuroethology Microscopy ImmunoHistoChemistry Image Analysis Deep Learning

## Jun2020

#### Automating Diagnostic Reporting and Patient Data Handling

#### Apr2020

BLISC COVID19 DIAGNOSTIC CLINIC, Bangalore Life Science Cluster

- ➤ Administrative Manager of Patient Data Handling Team (8 people)
- Developed Python Selenium web tools for automating centralised reporting of diagnostic results

COVID19 | Selenium | Python | Team Management

### Jun2020

#### Developing a microfluidic method for Single Cell Metabolic Measurement

### Aug2019

DR. SHASHI THUTUPALLI, National Center for Biological Sciences

- Designed and implemented microfluidic devices for biological applications
- Developed MATLAB and Python tools for image and data analysis Microfluidics Metabolism Engineering Image Analysis Python MATLAB

### Apr2019

## Mechanosensory input mediated flight control in the soldierfly Hermetia illucens

#### Oct2018

PROF. SANJAY SANE, National Center for Biological Sciences

- ➤ Multi-camera high speed videography of freely flying flies
- > Integrated existing deep learning tools with custom Python and MATLAB for improved performance Behaviour | High Speed Filming | 3D Digitization | Deep Learning | Python | MATLAB

#### Jul2018

#### Dietary Tuning and begging behaviour of the mimic poison frog tadpole Ranitomeya imitator

## May2018

DR. LAUREN O'CONNELL, Stanford University

- > Tissue harvesting and RNA extraction
- Animal Caretaker for in-house Poison frog and tadpole tanks

Behaviour RNA extraction Cryostat Sectioning Python Animal Care



### WORKSHOPS AND COURSES.

July 2022	KITP 2022 (	ןBio Summer Scl	hool Neurop	hysics of Motion
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KAVLI INSTITUTE FOR THEORETICAL PHYSICS UNIVERSITY OF CALIFORNIA SANTA BARBARA

#### August 2021 International Summer School - Communicating Science

WID, BERLIN

#### Story Telling and Science Communication April 2021

MPINB - CAESAR, BONN

#### Dec 2019 Winter School on Quantitative Systems Biology

ICTS, BENGALURU

#### **CAMP Neuroscience** July 2019

NCBS, BENGALURU

## A \* LANGUAGES





## PROGRAMMING LANGUAGES

- Python
- > MATLAB
- Julia
- R
- **>** C++
- HTML/CSS5



## **AWARDS**

Sept. 2021	Indian Institute of Science - Medal For Bachelor of Science 2015-19
May 2018	Khorana Scholarship IUSSTF, DST Govt. of India
Oct. 2017	<b>iGEM 2017 Gold Medal</b> TEAM IISC BENGALURU
2015-2020	KVPY Scholarship DST, GOVT. OF INDIA



Nov. 2022	Indian Student Association of Bonn and Köln MASTER OF CEREMONY
2022	International Max Planck Research School for Brain and Behavior PHD STUDENT REPRESENTATIVE
Nov. 2021	International Soceity for the Advancement of Science Communication WEBSITE DESIGN
August 2020	Neuromatch 3.0 TECHNICAL SUPPORT - ZOOM
October 2019	Science Gallery Banglore - ELEMENTS MEDIATOR
June 2018	NightLife - California Academy of Sciences STALL MANAGER
2017, '18, '19	Student Conference on Conservation Science SUPPORT STAFF
2017	Notebook Drive IISc VOLUNTEER
2016, '17	Vijyoshi National Science Camp SUPPORT STAFF



# **66** References

Dr. Kevin Briggman
MPINB -caesar, Bonn
kevin.briggman@caesar.de

### Dr. Shashi Thutupalli NCBS, BANGALORE shashi@ncbs.res.in

### Prof. Sanjay Sane NCBS, BANGALORE sane@ncbs.res.in

### Dr. Lauren O'Connell Stanford University, Stanford loconnel@stanford.edu