

Aakanksha Singh

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Education	PhD candidate in the group of Computational Immunology <i>April 2022 - March 2025 (Expected)</i> Goethe University, Germany	
	Erasmus Mundus Masters in Evolutionary Biology(MEME) <i>September 2019 - September 2021</i> University of Groningen, The Netherlands and University of Montpellier, France	
	Bachelor of Science (Hons.) Zoology <i>August 2016 - July 2019</i> University of Delhi, India	
		GPA: 8.2/10
		GPA: 8.9/10
Personal Statement	As a computational biologist, I am deeply passionate about analysing multi-omic data. I find great satisfaction in utilizing graphs to visually communicate complex data. My personal objective is to create open-source, user-friendly packages for comprehensive multi-omic data analyses. Moreover, I strongly believe in the value of interdisciplinary research that promotes openness, reproducibility, and collaboration.	
Technical Skills	Bioinformatic specialities: Genomics, Transcriptomics Languages/Tools: R, BASH, JAVA, HTML, Mathematica, MySQL, Latex.	
Experience	Internship	UNIL
	Lausanne, Switzerland	March 2020 - August 2021
	Thesis Project: Balancing selection at the 'social supergene' in the Alpine silver ants	
	<ul style="list-style-type: none">Finding signatures of balancing selection at the supergene in <i>Formica selysi</i> by analyzing diversity, divergence and deviation from neutral evolution in populations with different geographical origins.	
	Internship	CNRS
	Montpellier, France	September 2020 - February 2021
	Thesis Project: Estimating the micro-indel mutation rate in <i>Plasmodium falciparum</i> using genomes from mutation accumulation experiments	
	<ul style="list-style-type: none">Developed a pipeline for variant discovery in non 3D7 strains of <i>Plasmodium falciparum</i> and then calculated the micro-indel mutation rate in 5 distinct strains of <i>Plasmodium falciparum</i> that have different geographical origins.	
	Internship	INRAE
	Montpellier, France	April 2020 - June 2020
	Project: Characterizing the Genetic Architecture of host plant adaptation in the invasive fruit fly <i>Drosophila suzukii</i> based on an Evolve and Re-sequence experiment.	
	<ul style="list-style-type: none">Analyzed the pool-seq data of 11 populations of <i>D. suzukii</i>, for generations 0, 12 and 29 to provide insights into the evolutionary potential of fruit oviposition preference and larval performance of this species.	
	Internship	Dept.Of Biotechnology,Govt.Of India
	New Delhi, India	January 2019 - April 2019

Project: Study of the Physio-Chemical Parameters and Invertebrates of River Yamuna by analysing the water and soil samples under the microscope.

Summer Internship
New Delhi, India

Dept.Of Biotechnology,Govt.Of India
June 2018 - July 2018

Project: Comparative genome anylysis of 161 strains of *Mycobacterium tuberculosis* to study the total drug resistance and 8 strains of *Tessaracoccus* species to explore the possibility of it being a potential PAO.

Awards and Scholarships

- Received the Erasmus Mundus Scholarship (EMJMD) worth EUR 49000 for the duration of the Masters program (2019-2021).
- Awarded the Principal's medal for 'Outstanding Female Student (2016 - 2019)'.
- Received the Swiss European Mobility Programme (SEMP) scholarship worth CHF 2200 for conducting research at the University of Lausanne (2021).
- Received a scholarship worth INR 30000 under the 'Kanya Vidya Dhan' scheme to award meritorious girl students from the Government of Uttar Pradesh, India (2015).
- Received EFIS EJI travel grant worth worth EUR 170 to attend ENII Summer School (2023).
- Received a scholarship worth INR 3000 to buy academic books from the University of Delhi for being among the top scorer (2017).
- Letter of appreciation from the then Education Minister of India Ms. Smriti Irani (2015).

Conferences and Summer Schools

16th ENII EFIS EJI Summer School on Advanced Immunology

Location: Alghero, Italy
Date: 12 May 2023 - 19 May 2023

GTIPI(Genomics and Transcriptomics, Integrated with Proteomics and Medical Informatics) Summer School

Location: Mainz, Germany
Date: 29 May 2022 - 3 June 2022

4th Rhein-Main Cancer Retreat

Location: Glashütten, Germany
Date: 16 March 2023 - 17 March 2023

10th UCT Science Day

Location: Frankfurt am Main, Germany
Date: 29 June 2022

INSCR International Conference

Location: Bhubaneswar, India
Date: 26 September 2018 - 27 September 2018

Extra Curricular Activities

- **Campus Ambassador** of iSafe-The Safer India Challenge 17-18 conducted by IRSC in collaboration with MoRTH to make Indian roads safe.
- **Socio-scientific debate(2017)** secured 1st position.
- **Volunteer at Umeed(2016)**, an NGO to teach underprivileged children.