

## Curriculum vitae Aiswarya Prasad

Lausanne, Switzerland | [aiswarya.prasad1998@gmail.com](mailto:aiswarya.prasad1998@gmail.com) | [aiswarya.prasad@unil.ch](mailto:aiswarya.prasad@unil.ch)

I am keen on leveraging microbiome engineering and synthetic biology to tackle critical challenges in health and agriculture. My goal is to integrate cutting-edge sequencing, multi-omic approaches, and automation to understand and manipulate complex microbial communities effectively.

### Education

Ph.D. in Quantitative Biology 2020 – Present  
University of Lausanne, Switzerland  
Thesis title: Ecology and Evolution of the honeybee gut microbiome

BS and MS in Biology (4+1 yrs) 2015 – 2020  
Indian Institute of Science, Bangalore

### Fellowships and Awards

Faculty of Biology and Medicine (FBM) PhD Fellowship 2020 – 2023  
*International PhD fellowship award granted by the Faculty of Biology and Medicine (FBM), University of Lausanne*

Mathilde Agassiz scholarship 2020 – 2021  
*Scholarship of CHF 70k awarded to one chosen candidate recommended by the FBM.*

KVPY Fellowship 2015 – 2020  
*Stipend and contingency to fund BSc and MS awarded by the Indian government (All-India Rank: 335)*

Bronze Medal in iGEM Competition 2016  
*Boston, USA*  
*Co-founded the first team from the institute and won a bronze medal at the iGEM competition. Co-appSecured 3 grants for research and travel from the Wellcome Trust Indian Alliance, the Govt. of India, DBT and the State government of Karnataka.*

### Publications

Mazel, F., Prasad, A., Engel, P. (2024) Host specificity of gut microbiota associated with social bees: patterns and processes. *Microbiology and Molecular Biology Reviews* (In Press)

Prasad A., Pallujam A. D., et al (2024). Symbiont loss and gain, rather than co-diversification shapes honeybee gut microbiota diversity and function. [bioRxiv](https://doi.org/10.1101/612390), 2024.09.11.612390 (In Review)

Baud, G. L., Prasad, A., Ellegaard, K. M., & Engel, P. (2023). *Turnover of strain-level diversity modulates functional traits in the honeybee gut microbiome between nurses and foragers.* [Genome Biology](https://doi.org/10.1016/j.genbi.2023.100000), 24(1), 283.

Sarton-Lohéac, G., Nunes da Silva, C. G., Mazel, F., Baud, G., de Bakker, V., Das, S., El Chazli, Y., Ellegaard, K., Carcia-Carcera, M., Glover, N., Liberti, J., Nacif Marçal, L., Prasad, A., Sommerville, V., SAGE class 2019-2020 and 2020-2021, Bonilla-Rosso, G., & Engel, P. (2023). *Deep divergence and genomic diversification of gut symbionts of neotropical stingless bees.* [Mbio](https://doi.org/10.1016/j.mbs.2023.100000), 14(2), e03538-22.

Beal, J., Haddock-Angelli, T., Baldwin, G., Gershater, M., Dwijayanti, A., Storch, M., ... & with the iGEM Interlab Study Contributors. (2018). *Quantification of bacterial fluorescence using independent calibrants*. PloS one, 13(6), e0199432.

### Invited Talks

The Local Pangenome Oct 2023  
 Alicante, Spain  
*Variation and specialization of structure and function of gut microbial community across host species*

Academic Seminar Series Apr 2023  
 School of Science, Monash University Malaysia  
*Evolutionary and functional insight into gut microbial community diversity across honeybee species*

### Conference Participation

Gordon Research Conference and Seminar (Animal Microbe Symbiosis) Jun 2023  
 Lucca, Italy  
*Poster: Evolutionary and functional insight into gut microbial community diversity across honeybee species using metagenomics*

CSHL Meeting: Microbiome Oct 2023  
 Cold Spring Harbor Laboratories, USA  
*Poster: Whole-genome shotgun metagenomics reveals differences in gut microbiomes among honeybee species*

SymbNET PhD Summer School on Host-Microbe Symbiosis Jul 2022  
 Instituto Gulbenkian de Ciência, Lisbon  
*Poster: Understanding the evolution of the gut microbiome across honeybee species*

### Teaching

Teaching Assistant – SAGE (Sequence A GEnome) course 2021 - 2024  
*Masters-level course teaching bioinformatics through research*

### Professional service

Peer review of journal publications 2023 – Present  
*Ecological Monographs (1) and Insect Molecular Biology (1)*

Workshop Evaluation Committee Jan 2023  
*Workshop and tutorial selection for the BC2 (Basel Computational Biology Conference)*

Local volunteer Aug 2022  
*ISME-18 (International Society of Microbial Ecology) conference*

### Department service

Organizing committee Sep 2023  
*Annual (DMF) Department Science Retreat*

DMF Faculty Hiring Committee May 2023  
*Postdoc/PhD Representative*

## Outreach and Extracurricular engagement

[Contributor](#) - Methods in Microbiomics

Jan 2024

Set of guidelines and best practices for robust and reproducible pipelines

Open Science Meeting

Nov 2023

National center for competence in Research (NCCR) Microbiomes, Switzerland

Decolonizing North-South Research Collaboration

Aug 2022

Centre for Development and Environment, University of Bern

[Moderator](#) – Health and Data Privacy Committee

Jul 2020

iGEM India BioSummit (Online)

[Delegate](#) at United Nations Convention on Biological Diversity

Nov 2018

Sharm El-Sheikh, Egypt

## References

Philipp Engel

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Florent Mazel

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Ramaswamy Subramanian

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