Louis Faure

Full name: Louis Felix Benoit Faure

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POST-GRADUATE EDUCATION

DOCTORAL
Sept 2018 - June 2023 | Medical University of Vienna
PhD Neuroscience N094

PRE-DOCTORAL
Sept 2017 - June 2018 | PSL University Paris
Institute for Technology & Innovation Diploma

PRE-GRADUATE EDUCATION

GRADUATE
Sept 2015 - June 2017 | CRI, Descartes University, Paris
Interdisciplinary Approaches in Life Sciences (AIV) Msc.

UNDERGRADUATE
Sept 2012 - May 2015 | CRI, Descartes University, Paris
Frontiers in Life Science (FdV) Bsc.

POST-GRADUATE EXPERIENCE

RUSLAN SOLDATOV LAB | Postdoctoral Research Scholar
October 2023 – now | Memorial Sloan Kettering Cancer Center, New York
Computational approaches to decode the initiation of tumor growth.

IGOR ADAMEYKO LAB | PhD student
September 2018 – June 2023 | Center for Brain Research, Vienna
Heterogeneity of neural crest and Schwann cell precursors during development

FIRST AUTHOR PUBLICATIONS

Krupenko D.*, Miroliubov A.*, Kryukov E.*, Faure L.* et al. (2023). **Polymorphic parasitic larvae cooperate to build swimming colonies luring hosts** Current Biology 10.1016/j.cub.2023.08.090

Faure, L., Soldatov, R., Kharchenko, P. v, & Adameyko, I. (2022). **scFates: a scalable python package for advanced pseudotime and bifurcation analysis from single cell data** Bioinformatics. 10.1093/BIOINFORMATICS/BTAC746

Faure, L., Techameena, P., & Hadjab, S. (2022). **Emergence of neuron types**. Current Opinion in Cell Biology, 79, 102133. 10.1016/J.CEB.2022.102133

Akkuratova N.*, Faure L.*, Kameneva P., Eleni M., Adameyko I. (2022). **Developmental heterogeneity of embryonic neuroendocrine chromaffin cells and their maturation dynamics**, Frontiers in Endocrinology, 10.3389/fendo.2022.1020000

Kastriti M.*, Faure L.*, Von Ahsen D., et al. (2022). **Schwann cell precursors represent a neural crest-like state with biased multipotency**, The EMBO Journal, 10.15252/embj.2021108780

Petitpré C.*, Faure L.*, Uhl P., et al. (2022). **Single-cell RNA-sequencing analysis of the developing mouse inner ear identifies molecular logic of auditory neuron diversification**, Nature Communications, 10.1038/s41467-022-31580-1

Bouderlique T.*, Petersen J.*, Faure L.*, et al. (2022). **Surface flow for colonial integration in reef-building corals** Current Biology, 10.1016/j.cub.2022.04.054

Faure L., Wang Y., Kastriti M., et al. (2020). **Single cell RNA sequencing identifies early diversity of sensory neurons forming via bi-potential intermediates**, Nature Communications, 10.1038/s41467-020-17929-4

LECTURES/TALKS

SCVERSE COMMUNITY MEETING - ONLINE TALK
scFates, a scalable Python suite for fast tree inference and advanced pseudotime downstream analysis June 2024 | scverse

COMPUTATIONAL ONCOLOGY RETREAT - TALK
Joint modeling of shared and disease-specific fate dynamics April 2024 | MSKCC

NEUCREST BIG DATA COURSE - ONLINE LECTURE
Introduction to trajectory inference methods in scRNAseq analysis April 2021 | EMBL-EBI

BIOINFORMATICS SEMINAR SERIES - ONLINE TALK
Transcriptional landscape of fate choices in the sensory lineages June 2020 | Karonlinska Institute

POSTERS

GRS & GRC SINGLE-CELL CANCER BIOLOGY
FateUnzip: Joint modeling of shared and disease-specific fate dynamics 2024 | Manchester, New Hampshire, USA

FENS CONFERENCE
Schwann cell precursors represent a neural crest-like state with biased multipotency 2022 | FENS Forum Paris, France

AWARDS

FENS-IBRO/PERC GRANT
Travel grant to attend the FENS Conference. 750€ 2022 | FENS Forum

MIRES
Excellence scholarship for international mobility. 5000€ 2017 | Descartes University

OTHER PUBLICATIONS

Sunadome K., Erickson A. G., Kah D. *et al.* (2023). **Directionality of developing skeletal muscles is set by mechanical forces** *Nature Communications.* 10.1038/s41467-023-38647-7

Kameneva P.*, Melnikova. V. I.*, Kastriti M., *et al.* (2022). **Serotonin limits generation of chromaffin cells during adrenal organ development**, *Nature Communications*, 10.1038/s41467-022-30438-w

Colin A.*, Micali G.*, Faure L., Cosentino Lagomarsino M., van Teeffelen S., (2021). **Two different cell-cycle processes determine the timing of cell division in Escherichia coli**, *eLife*, 10.7554/ELIFE.67495

Kameneva P.*, Artemov A. V.*, Kastriti M. E., *et al.* (2021). **Single-cell transcriptomics of human embryos identifies multiple sympathoblast lineages with potential implications for neuroblastoma origin**, *Nature Genetics*, 10.1038/s41588-021-00818-x

Zhao J., Faure L., Adameyko I., Sharpe P. T. (2020). **Stem cell contributions to cementoblast differentiation in healthy periodontal ligament and periodontitis**, *Stem Cells*, 10.1002/stem.3288

Klimovich A., Giacomello S., Björklund A. *et al.* (2020). **Prototypical pacemaker neurons interact with the resident microbiota**, *Proceedings of the National Academy of Sciences*, 10.1073/pnas.1920469117

Albergante L., Mirkes E., Bac J. *et al.* (2020). **Robust and Scalable Learning of Complex Intrinsic Dataset Geometry via ElPiGraph**, *Entropy*, 10.3390/e22030296

Woo A. C., Faure L., Dapa T., Matic I. (2018). **Heterogeneity of spontaneous DNA replication errors in single isogenic Escherichia coli cells**, *Science Advances*, 10.1126/sciadv.aat1608

SKILLS

python snakemake pyro JAX R MATLAB Linux ImageJ FISH cloning music prod