Laurent Jacob

Curriculum vitae

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Past and current positions

Since 2023	**Directeur de recherche**, CNRS, Sorbonne Université. Laboratory of Computational and Quantitative Biology
2023	**Research scientist**, CNRS, Collège de France. Invited researcher in Samuel Alizon's group
2018	**7-month parental leave**.
2013-2023	**Chargé de recherche**, CNRS, Université Lyon 1. Laboratoire de Biométrie et Biologie Evolutive
2010-2012	**Post doc**, *UC Berkeley, Statistics Department*. Sandrine Dudoit and Terry Speed groups

Education

2023	**Habilitation à diriger les recherches**, *Sorbonne Université*.
2007-2009	**PhD thesis**, *Mines ParisTech*. Machine learning and computational biology, supervised by Jean-Philippe Vert
2006	**Master in Mathematics, Vision, Learning (MVA)**, *ENS Cachan*.
2001-2005	**Engineering Diploma**, *Université de Technologie de Compiègne*, (UTC). Computer Science major

Teaching & Training since 2013

2023-2024	**Machine learning for phylogenomics**, *Bioinformatics MSc*, Sorbonne Université, 1 class.
2021	**Learning with biological sequences**, Thematic school of the Digicosme Labex, Paris-Saclay University.
2021-2022	**Advanced machine learning theory**, *Mathematics MSc*, ENS de Lyon. Coordinator of the class
2020-2022	**Introduction to machine learning**, *Bioinformatics MSc*, Université Lyon 1.
2019	**Introduction to big data and machine learning**, *LBBE*, Université Lyon 1, 1-day introductory course to machine learning directed to biologists (5 sessions).
2018	**Statistical learning: theory and applications**, *CNRS Formation Entreprise*, Université Lyon 1, 3-day introductory course to machine learning directed to companies.
2015	**Statistical learning and applications**, *Computer science MSc*, ENS de Lyon.
Since 2013	**High dimensional statistics for genomics**, *Mathematics MSc*, Université Lyon 1. Coordinator of the class since 2019

Selected grants

2023-2028   **Deelogeny**, *Machine learning for improved phylogenomic inference*, ANR PRC.
PI: B. Boussau

2021-2025   **PIECES**, *Learning from pangenomes with infinite collections of sequence motifs*, ANR JCJC.
PI: L. Jacob

2017-2023   **Fast-Big**, *Efficient Statistical Testing for high-dimensional Models: application to Brain Imaging and Genetics*, ANR PRC.
PI: B. Thirion

Jurys, Appointments and Editorial Service

Conseil National des Universités   Membre nommé in section 26 (Mathématiques appliquées et applications des mathématiques) (2020–2023)

Grad school   Member of the committee of the E2M2 grad school (2019–2022)

Univ. Jurys   Université de Montpellier (2025), Mines ParisTech (2023), Sorbonne Université (2023), Université de Lyon (2022), Polytech Lyon (2020) and at Université de Technologie de Compiègne (2015)

PhD juries   A. Beaude (Evry, 2024), E. Loffredo (Sorbonne Université, 2024), H. Khodji (Strasbourg, 2023), T. Lémane (Rennes, 2022), O. Permakovia (Grenoble, 2021), G. Gautreau (Evry, 2020), F. Privé (Grenoble, 2019), B. Playe (Mines ParisTech, 2019), F. Guinot (Evry, 2018)

PhD steering committee   10 students since 2017, including 5 tutorships

Scientific Reviews   Bioinformatics, BMC Bioinformatics, IEEE Signal Processing Letters, ICML, ISMB, JOBIM, Journal of Machine Learning Research, Machine Learning, MLCB, MLSB, Molecular Phylogenetics and Evolution, Molecular Biology and Evolution, NeurIPS, PLOS Computational Biology, RECOMB, Scientific Reports, Systematic Biology

Selected conference and seminar organization

2025   **Intelligent Systems for Molecular Biology**.
Area chair of the *Sequence Analysis* track

2024 and 2025   **Machine Learning for Evolutionary Genomic Data**, https://legend2025.sciencesconf.org/.
Member of the organization committee

2023   **Machine Learning for Genomics**, *Working group LEGO of the BIM CNRS research group*, https://gt-lego.cnrs.fr.
Co-founder, 2 meetings organized

2022   **Machine Learning for Microbial Genomics**, *Workshop of the ECML conference*.
Member of the organization committee

2021   **Intelligent Systems for Molecular Biology**.
Area chair of the *Systems Biology and networks* track

2020   **Data Science, AI and Biology symposium**, *Organized by the scientific committees of the INSB and INS2I CNRS institutes*.
Member of the organization committee