

Jonas Béal

PhD Student in Bioinformatics and
Biostatistics and MBA Fellow

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Current situation

- 2017–2020 **PhD**, *Institut Curie - U900*, Paris.
Mathematical models of cancer and quantification of their clinical impact in the prediction of survival and response to treatment. Supervised by Emmanuel Barillot and Aurélien Latouche
- *Scientific content*: Dynamical modelling of cancer mechanisms based on data analysis and literature curation. Transformation of mathematical models into precision medicine tools using biomedical data. Biostatistical impact analysis by simulating clinical trials.
 - *Skills*: Scientific and technology watch. Data analysis, machine learning and programming (R and Python). Scientific communication (articles and conferences) and popularization.
- 2018–2021 **MBA Fellow**, *Collège des Ingénieurs*, Paris.
Dual PhD/MBA programme focused on management, finance, entrepreneurship and leadership

Education

- 2015–2017 **Master of Science**, *EPFL*, Lausanne.
Master 'Life Science and Technology', option 'Molecular Medicine and Systems Biology' in École Polytechnique Fédérale de Lausanne. Courses of *Cancer Biology*, *Systems Biology*, *Genomics*. 5.77/6 and 2nd/33
- 2012–2016 **Engineer degree**, *École Polytechnique*, Palaiseau.
General scientific foundation, humanities and major in Biology. GPA 3.88/4.
- 2010–2012 **'Classes préparatoires'**, *Lycée du Parc*, Lyon.

Previous experience

- 02/2017–08/2017 **Master thesis**, *Institut Curie - U900*, Paris.
Specification of cancer models with integration of patient omics data. Supervised by Dr. Calzone.
- 'Fondation Marguerite's Prix Annaheim - Matille', for project of 'high quality devoted to bringing together life sciences and information technology'
- 09/2016–01/2017 **Laboratory internship**, *EPFL - Genomics of Infectious Diseases Lab.*, Lausanne.
Project about Study of kinetic parameters that determine the impact of rate-limiting enzymes in the kinetic models of genome-scale metabolic networks. Supervised by Prof. Hatzimanikatis and Dr. Miskovic
- 09/2016–12/2016 **Laboratory internship**, *EPFL - Computational Systems Biotechnology Lab.*, Lausanne.
Genome-Wide Association Study (GWAS) on antibody response to several bacterial pathogens and influence of HLA genomic region. Supervised by Prof. Fellay and Dr. Hammer
- 07/2106–09/2016 **Start-up internship**, *NovaDiscovery*, Lyon.
Project within bio-modelling team. Conception of tools to model biochemical equations in Haskell language. Supervised by Frédéric Cogny
- 03/2015–07/2015 **Laboratory internship**, *Brain and Spine Institute*, Paris.
Research project in Alexis Brice's team about characterisation of a mouse model spinal cord to study fronto-temporal dementia and amyotrophic lateral sclerosis. Supervised by Morwena Latouche
- 10/2012–04/2013 **Teacher for special needs**, *EPIDE*, Belfort.
Professional immersion in a centre for social integration, which takes care of underprivileged young people

Languages

French	Native speaker	English	Fluent; daily professional use
Italian	Intermediate	Chinese	Notions

Computer skills

<i>R</i> , <i>Python</i> , <i>Matlab</i>	Frequent use	<i>Bash</i> , <i>Haskell</i>	Basic knowledge
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Interests

Reading	Avid reader with wide-ranging interests: French literature, essays, graphic novels
Sports	Regular badminton player