

Education

- 2020–2023 **PhD in Mathematics on modelling and model analysis of size distribution of adipose cells**
 - Supervised by Magali Ribot (IDP) and Romain Yvinec (INRAE), in Institut Denis Poisson, Université d'Orléans.
- 2019–2020 **Master 2 Mathematics for Life Sciences**
 - Université Paris-Saclay, École Polytechnique.
- 2018–2019 **Master 1 in Mathematics and Application**
 - Sorbonne University, Paris.
- 2017–2018 **Exchange year of undergraduate studies in Biology and Mathematics**
 - National University of Singapore, Singapore.
- 2015–2017 **Two years of undergraduate studies in Biology and Mathematics**
 - Sorbonne University, Paris.
- 2015 **Scientific baccalaureate with Highest distinction**
 - Saint-Esprit High School, Landivisiau.

Experience

- 2020 **5 month internship on modelling and model analysis of size distribution of adipose cells**
 - Supervised by Magali Ribot (IDP),
Introduction to the model and tools used during my PhD.
- 2019 **2 month internship on mathematical modelling of the size distribution of adipose cell**
 - Supervised by Chloé Audebert (Sorbonne Université) at LCQB in Sorbonne Université,
Python language, Numerical schemes for PDE, Parameter estimation.
- 2017 **3 month internship titled "Differential equations in Physiology" about mathematical modelisation of ion flux in a red blood cell**
 - Done with Benoit SARELS (Associate professor, Sorbonne University) in the Laboratory of Integrative Biology of Marine Models (Laboratory UMR8227),
Python language, LaTeX, Solving Differential Equations with LSODA.
- 2016 **Co-founder and Treasurer of the association « Les Biomaths'lots »**
 - Research of sponsors and crowdfunding operation to participate in the 48th EDHEC Regatta,
Leadership, team working, fundraising.
- 2014 **One week internship in a pharmaceutical laboratory**
 - Done with Laurent Meijer, Manros Therapeutics, Roscoff,
Discovery of the role of a biologist in pharmaceutical business.

Skills

- French *Mother language.*
- Spanish *B2 level acquired in high school.*
- English *C1 level, TOEFL (IBT) with a score of 104.*
- Computer skills *Windows, Linux (ubuntu), Office, Python, C++, Scilab, LaTeX.*

Miscellaneous

- Sports *Sailing and rugby during 7 years, Team working experience and autonomy.*
- Trips *United Kingdoms, USA (5 times), Japan, South Africa, Germany, Italy, India, Mostly one month trips, discovery of various cultures, religions, ways of life.*

Posters

- 2022 **PhD poster**
Workshop Tissue Growth and Movement at Institut Henri Poincaré during the thematic trimester program Mathematical modeling of organization in living matter.
- 2022 **PhD poster**
Research school at CIRM (Marseille) during the thematic trimester program Mathematical modeling of organization in living matter.

Articles

- Preprint **A Lifschitz-Slyozov type model for adipocyte size dynamics : limit from Becker-Döring system and numerical simulations** *L.M., Magali Ribot, and Romain Yvinec.*
- WIP **A probabilistic approach to the size dynamic of adipose cells : convergence result and numerical simulations** , *L.M., and Romain Yvinec.*
- WIP **Mathematical modeling of adipose tissue size distributions : parameter identifiability study and estimation with measured adipocyte size distributions in rats** *Chloé Audebert, Anne-Sophie Giacobbi, L.M., Magali Ribot, Hédi Soula, and Romain Yvinec.*
- WIP **Numerical schemes for mixture theory models with filling constraint: application to biofilm ecosystems** *Olivier Bernard, Mickael Bestard, Thierry Goudon, L.M., Sebastian Minjeaud, Florent Noisette, and Bastien Polizzi.*