Maryam ALAMIL

PhD in mathematics
Specialisation: Statistics

Date of birth: 09 December 1992
Nationality: French
Lyon, France and Riyadh, Saudi Arabia
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Formations

2017-2020 **Aix Marseille University** ***Avignon France***
- PhD in mathematics
  - Specialisation: bio-statistics;
  - Title: Reconstruction of the transmission of a virus during an epidemic by statistical learning on genomic data.
  - Tasks:
    - Develop (through R) a statistical learning approach to estimate epidemiological links from deep sequencing data;
    - Perform a formal sensitivity analysis to evaluate the performance of the developed approach in reconstructing disease outbreaks.
- Lecturer qualification 2021.

2016-2017 **Claude Bernard University** ***Lyon, France***,
Master 2 Applied mathematics,
Specialisation: Statistics, Computer Science and Digital Techniques

2015-2016 **Claude Bernard University** ***Lyon, France***,
Master 1 General Mathematics and Applications

2014-2015 **Lumière University** ***Lyon, France***,
Master 1 Law, Economics and Management,
Specialisation: Finance

2013-2014 **Lebanese University - Science Faculty - Section 2** ***Fanar, Lebanon***,
Bachelor in Mathematics

Professional experiences & training

July 2024 - Present **Alfaisal University,** ***Riyadh, Saudi Arabia***,
Senior lecturer in Mathematics and statistics,

September 2022 - June 2024 **Alfaisal University,** ***Riyadh, Saudi Arabia***
Adjunct professor in Mathematics and statistics
- Teaching statistics and calculus courses
- Reviewing Master thesis in Biostatistics and participating in the thesis defense committee
- Providing guidance and support in student research projects
- Participating in organising R programming Workshop

September 2021 **ESSCA School of management,** ***Lyon, France***,
Mathematics lecturer

September 2020 – August 2021 **Avignon University,** ***Avignon, France***
Avignon Mathematics Laboratory ,
Teacher and researcher
- Teaching statistics, probability, calculus and algebra courses
- Research collaboration with INRAE

October 2017 – September 2020 **INRAE: Research Institute for Agriculture, Food and the Environment** ***Avignon, France***
BioSP Unit (Bio-statistics and Spatial Processes),
PhD student,
Guiding students during their internships

2019-2020 **Avignon University** ***Avignon, France***
University Institute of Technology,
Department: Statistics and Business Intelligence
Adjunct professor in statistics
Teaching courses in statistics, probability and simulations (R programming)

2018-2019 **Avignon University** ***Avignon, France***
University Institute of Technology,
Departments: Statistics and Business Intelligence & Biological engineering
Adjunct professor in Mathematics and statistics

2017-2018 **Avignon University** ***Avignon, France***
Science, Technology and Health Training and Research Unit
& University Institute of Technology (IUT),
Departments: Life and earth sciences & Biological engineering
Adjunct professor in mathematics and statistics

May - September 2017 **INRAE: Research Institute for Agriculture, Food and the Environment** ***Avignon, France***
BioSP Unit (Bio-statistics and Spatial Processes),
Master 2 Research Internship,
Internship topic: Modeling of viral kinetics and intra-host evolution

February - June 2016 **Claude Bernard University** ***Lyon, France***,
Master 1 Research Internship,
Internship topic: Mathematical modeling of the appearance of patterns on animal coats

May 2016 **Lumière high school** ***Lyon, France***,
Observation and teaching internship

August 2015 **Bank of Beirut** ***Chehabiyeh, Lebanon***,
Observation internship & teller

2010-2017 **Private lessons** ***Lebanon & France***,
Mathematics, Physics, Biology and Chemistry (in French & English)

Publications

Al Hajj F. & Alamil M.
Novel methods for enhancing Financial market competitiveness: Case studies from a GCC perspective.*In progress.*

Alamil M., Bruchou C., Ribaud M., Thébaud G., & Soubeyrand S.
Factors influencing the inference of transmission events in disease outbreaks. *In progress.*

Tatar S., BenSalah M., & Alamil M.
Simultaneous Identification of the parameters in the Mathematical model of brain tumor growth dynamics under treatment. *Accepted in European Journal of Pure and Applied Mathematics.*

Alamil M., Berthier K., Thébaud G., & Soubeyrand S.(2022)
Characterizing viral within-host diversity in fast and non-equilibrium demo-genetic dynamics. *Frontiers in Microbiology 13.*

Almasri H., Tavares D., Diogon. M, Pioz M., Alamil M., Sené D., Tchamitchian S., Cousin M., Brunet J., Belzuncesa L. (2021).
Physiological effects of the interaction between Nosema ceranae and sequential and overlapping exposure to glyphosate and difenoconazole in the honey bee Apis mellifera. *Ecotoxicology and Environmental Safety, 217, 112258.*

Alamil M., Hughes J., Berthier K., Desbiez C., Thébaud G., & Soubeyrand S. (2019).
Inferring epidemiological links from deep sequencing data: a statistical learning approach for human, animal and plant diseases. *Philosophical Transactions of the Royal Society B, 374(1775), 20180258.*

Oral Communications

Alamil M., Hughes J., Berthier K., Desbiez C., Thébaud G., & Soubeyrand S. (2019).
Inferring epidemiological links from deep sequencing data using a statistical learning approach.
European Meeting of Statisticians, Palermo, Italie, 22-29/07/2019.

Alamil M., Hughes J., Berthier K., Desbiez C., Thébaud G., & Soubeyrand S. (2019).
SLAFEEL: Statistical Learning Approach to Estimate Epidemiological Links of infectious diseases from deep sequencing data.
Mathematical and Computational Evolutionary Biology meetings, Porquerolles, France, 26-30/05/2019.

Alamil M., Hughes J., Berthier K., Desbiez C., Thébaud G., & Soubeyrand S. (2019).
Developing a statistical learning approach to estimate transmissions of infectious diseases from deep sequencing data.
Annual meeting of the GdR Ecostat, Avignon, France, 13-14/05/2019.

Alamil M., Hughes J., Berthier K., Desbiez C., Thébaud G., & Soubeyrand S. (2019).
Statistical methods for inferring transmissions of infectious diseases from deep sequencing data.
Meeting of young statisticians, Porquerolles, France, 01-05/04/2019.

Alamil M., Hughes J., Berthier K., Desbiez C., Thébaud G., & Soubeyrand S. (2019).
A statistical learning approach to infer transmissions of infectious diseases from deep sequencing data.
Annual meeting of ModStatSAP network, Paris, France, 12/03/2019.

Posters

Alamil M., Bruchou C., Ribaud M., Thébaud G. & Soubeyrand S.(2020).
A study of factors influencing the performance of the reconstruction of transmissions in disease outbreaks.
A workshop on "Mathematical modelling and statistical analysis of infectious disease outbreaks: heterogeneity in space, time and social structure, and virus evolution", CIRM, Marseille, France, 17-21/02/2020.

Alamil M., Berthier K., Thébaud G. & Soubeyrand S.(2019).
A statistical learning approach to infer transmissions of infectious diseases from deep sequencing data.
Annual workshop on Statistical Methods for Post Genomic Data, Barcelone, Espagne, 30/01-01/02/2019.

Alamil M., Berthier K., Thébaud G. & Soubeyrand S.(2018).
Models for demo-genetic viral dynamics that will be used for inferring transmission links.
3rd edition of Mathematical Biology Modelling days, Besançon, France, 19-22/06/2018.

Computer skills

Office automation	Word, Excel, PowerPoint, Access
Software	Maple, SAS, R, Python, Julia
Languages	C, Latex.

Languages

Arabic	Mother tongue	*Written, read, spoken*
French	Certificate Delf B2	*Written, read, spoken*
English	Good	*Written, read, spoken*

References are available upon request