Houssou R. G DOSSA

PhD. Statistics

✉ dossa.houssou_roland_giustti@courrier.uqam.ca
https://houssoudossa.github.io/

Education

2024	**Ph.D. in Mathematics with a concentration in "Statistics"**, *UQÀM*, Montreal, *CANADA*.
2012–2014	**Master's degree in Public Economics and Applied Statistics**, *Institute of Empirical Research in Political Economy, IERPE*, Benin.
2008–2011	**Bachelor's degree in Economics**, *University of Abomey-Calavi, UAC*, Benin.

Research Interests

Genetic Statistics	Studies of genetic variants
General Statistics	Random effects models and mixed models, Linear models, Logistic regression, Multivariate analysis, Biostatistics, Applied Statistics.

Professional Experience

2021 - 2022	**Lecturer: Introduction to Quantitative Methods in Management**, *UQÀM*, Montreal, Canada. My role here was to develop students' basic knowledge, skills, and tools in mathematics, statistics, and computer science required for their program of study. Additionally, I aimed to demystify computers and foster an interest in quantitative methods. I also introduced students to electronic spreadsheets for basic mathematical language recall: algebraic expressions, functional expressions, set expressions, and graphical language, equation solving. I covered topics like graphic resolution of systems of equations and inequalities, simple and compound interests, and finally, I introduced the analysis and interpretation of mathematical and statistical data in management.
2017 - 2021	**Teaching Assistant: Statistics I - Statistical Methods - Introduction to Quantitative Methods in Management**, *UQÀM*, Montreal, Canada. I performed various tasks as a teaching assistant, including assisting the instructor in preparing their lessons, helping students better understand the material, providing guidance on writing assignments, conducting monitoring sessions, supervising exams, and correcting exams and assignments.

Other Professional Activities

March 2019	**Organization Committee Member**, *UQÀM*, Montreal. Student Summit of Statistics in Montreal (SÉSÀM).
Since 2019	**Membership**, *UQÀM*, Canada. Member (students) of the Faculty Research Center in Statistics and Data Sciences (STATQAM).
July 2017 - December 2021	**Membership**, *UQÀM*, Canada. Graduate Cycle Program Committee Member.

Awards

2021	**Recipient**, *CRM - UQÀM*, Canada. Recipient of a graduate scholarship from the Statistics Laboratory of the Centre de Recherches Mathématiques (CRM).

Publications

2023	**Houssou Dossa,**, *Alexandre Bureau, Michel Maziade, Lajmi Lakhal-Chaieb and Karim Oualkacha*, A Novel Rare Variants Association Test for Binary Traits in Family-Based Designs via Copulas, Statistical Methods in Medical Research (2023). `https://doi.org/10.1177/09622802231197977`.

Submitted or Finalized Articles

2023   **Houssou Dossa,**, *Alexandre Bureau, Michel Maziade, Lajmi Lakhal-Chaieb and Karim Oualkacha. (2023)*, Generalized Functional Linear Mixed Models for Binary Traits in Family-Based Designs via Copulas, (To be submitted).

.

Invited Talks and Conferences

Septembre 2023   **Talk**, *Houssou Dossa/Alexandre Bureau, Michel Maziade, Lajmi Lakhal-Chaieb and Karim Oualkacha (author/collaborators)*, STATQAM Seminar, UQAM.
Copula-Based Association Tests for Binary Phenotype and set of Genetic Variants in the presence of Family Data.

February 2020   **Talk**, *Houssou Dossa/Lajmi Lakhal-Chaieb and Karim Oualkacha (author/collaborators)*, Université Laval, Montreal.
A Novel Rare Variants Association Test for Binary Traits in Family-Based Designs via Copulas.

August 2018   **Poster**, *Houssou Dossa/Lajmi Lakhal-Chaieb and Karim Oualkacha (authors/collaborators)*, BANFF (Alberta), Canada.
Rare Variant Association Test for Binary Traits in Family-Based Designs via Copulas.

Presentations at Congresses and University Conferences

June 2022   **Presentation**, *Virtual*, Houssou Dossa/Alexandre Bureau, Michel Maziade, Lajmi Lakhal-Chaieb and Karim Oualkacha (author/collaborators), 49th Annual Congress of the Statistical Society of Canada.
Generalized Functional Linear Mixed Models for Binary Traits in Family-Based Designs via Copulas.

June 2021   **Presentation**, *Virtual*, Houssou Dossa/Alexandre Bureau, Michel Maziade, Lajmi Lakhal-Chaieb and Karim Oualkacha (author/collaborators), 48th Annual Congress of the Statistical Society of Canada.
A Novel Rare Variants Association Test for Binary Traits in Family-Based Designs via Copulas.

December 2018   **Presentation**, *McGill*, Montreal, Houssou Dossa/Mohamed Ouhourane (author/collaborator).
Group Variables Selection for Cox's Regression in High-Dimensional.

Participation in Workshops, Congresses, and Conferences

July 2023   **Workshop**, *Virtual*, USA.
National Institute of Statistical Sciences Writing Workshop for Junior Researchers.

June 2022   **Conference**, *Virtual*, Canada.
49th Annual Congress of the Statistical Society of Canada.

June 2021   **Conference**, *Virtual*, Canada.
48th Annual Congress of the Statistical Society of Canada.

March 2019   **Conference**, *UQÀM*, Montreal, Canada.
Student Summit of Statistics in Montreal (SÉSÀM).

Winter 2019   **Seminar**, *UQÀM*, Montreal, Canada.
Faculty Research Center STATQAM.

Fall 2018   **Seminar**, *UQÀM*, Montreal, Canada.
Faculty Research Center STATQAM.

August 2018   **Workshop**, *BANFF*, Canada.
New Statistical Methods for Family-Based Sequencing Studies.

July 2018   **Workshop/Training**, *Quebec*, Canada.
CRM 2018 Summer School: Genetic Statistics.

July 2018   **Congress**, *Montreal*, Canada.
R in Montreal.

June 2018   **R Workshop**, *Montreal*, Canada.
46th Annual Congress of the Statistical Society of Canada.

June 2018   **Conference**, *Montreal*, Canada.
46th Annual Congress of the Statistical Society of Canada.

Winter 2018   **Seminar**, *UQÀM*, Montreal, Canada.
Faculty Research Center STATQAM.

Fall 2017   **Seminar**, *UQÀM*, Montreal, Canada.
Faculty Research Center STATQAM.

Specific Skills

Programming Languages	R, Python, Matlab.
Statistical Software	SAS, Stata, SPSS.
Data Processing	Data cleaning, preparation, visualization, data preprocessing, sampling techniques.

References

Co-director	**Karim Oualkacha**, *Professor*, UQÀM, oualkacha.karim@uqam.ca. Tel. (1-514) 987-3000, poste 522, Fax : (1-514) 987-8935
Co-director	**Lajmi Lakhal-Chaieb**, *Professor*, Université LAVAL, lakhal@mat.ulaval.ca. Tel. (1-418) 656-2131 poste 2977, Fax : (1-418) 656-5902

Experiences - Interests

Languages	French (fluent), English (speaking, reading, and writing).