Lamin Juwara

Education

2018–Present	**PhD. Statistical and Computational Biology Stream, QLS**, McGill University, Canada.
Title	Privacy-preserving regression methods for distributed data
Advisors	Dr Paramita Saha-Chaudhuri, Prof Yi Yang, and Dr Ana Velly
2016–2018	**MSc. Biostatistics**, McGill University, Canada.
Title	Virtual Pooling as a Privacy-preserving Analysis Tool
Supervisors	Dr Paramita Saha-Chaudhuri and Dr Alexandra M Schmidt
2015–2016	**MSc. Mathematics**, AIMS, Stellenbosch University, South Africa.
Title	Reverse-engineering T-cell proliferation dynamics
Supervisor	Dr Wilfred Ndifon
2011–2015	**BSc. Mathematics (Hons)**, Kwame Nkrumah University of Science and Tech., Ghana.
Title	Representation Theory of Finite Groups
Supervisor	Dr Richard Kena Boadi

Work Experience

01/2019–now	**Biostatistician**, iMD Research Inc.
	o Statistical modeling of epidemiological and biomedical data
09/2017–01/2019	**Research Assistant**, Jewish General Hospital.
	o Statistical Computing and data analysis
Summer 2017	**Visiting Research Scholar**, South African Centre for Epidemiological Modelling and Analysis.
	o Developed web based applications for HIV incidence estimation (UNAIDS project)

Miscellaneous

01/2020–04/2020	**Math 324**, McGill University.
	Graduate student assistant
2013–2015	**Mathematics Tutor**, KNUST, GHANA.

Awards and Scholarships

2018–2022	Mitacs Accelerate Fellowship, McGill University ($60,000)
2016–2018	MasterCard Foundation Scholarship, McGill University (>$100,000)
July, 2016	The Martin Rees Scholarship, AIMS South Africa (Certificate of academic excellence, 1 of 4 categories)
2015–2016	African Institute for Mathematical Sciences (AIMS) Postgraduate Scholarship ($10,000)
June, 2015	Best graduating student, Department of Mathematics, KNUST Ghana (Highest CWA, class size - 140)

Computer skills

Advanced	R, Python, MatLab, LaTeX, Linux, and Office suites
Intermediate	HTML, Visual Basics, SPSS, SAS

Selected articles

1. Juwara L, Saha-Chaudhuri P (2022). A Hybrid Covariate Microaggregation Approach for Privacy-Preserving Logistic Regression. Journal of Survey Statistics and Methodology. [accepted]
2. Galindez JL, Juwara L, ... Schipper HM (2021). Salivary Heme Oxygenase-1: A Potential Biomarker for Central Neurodegeneration. Journal of Central Nervous System Disease. [link]
3. Saha-Chaudhuri P, Juwara L (2021). Survival Analysis under the Cox Proportional Hazards model with Pooled Covariates. Statistics in Medicine. [link]
4. Cressatti M, Galindez JL, Juwara L, ... Schipper HM (2020). Characterization and heme oxygenase-1 content of extracellular vesicles in human biofluids. Journal of Neurochemistry. [link]
5. Juwara L, . . ., Saha-Chaudhuri P, Velly A (2020). Predicting neuropathic pain after breast cancer surgery using machine learning. International Journal of Medical Informatics. [link]
6. Cressatti M, Juwara L, Galindez JL, ... Schipper HM (2020). Salivary miR-153 and miR-223 levels as diagnostic biomarkers of idiopathic Parkinson disease. Movement disorders. [link]

Peer reviewed abstracts (selected)

1. Juwara L, Yang Y, and Saha-Chaudhuri P. Improving the efficiency of meta-analysis estimators for privacy-preserving Cox regression. QLS Research Day, 2022.
   [*Oral presentation*]
2. Juwara L, Yang Y, and Saha-Chaudhuri P. Privacy-preserving Cox proportional hazards regression with aggregate covariates. Annual Canadian Statistics Student Conference, 2021.
   [*Best poster prize, PhD category*]
3. Juwara L and Saha-Chaudhuri P. Predictive modeling under data privacy restrictions. Statistical Society of Canada annual Conference, 2020.
   [*Travel award*]
4. Juwara L and Saha-Chaudhuri P. Microaggregation as a Privacy-Preserving Analytical Tool for Analysis of Confidential Distributed Data. International Society of Pharmacoepidemiology mid-year meeting, 2018.
   [*Travel award*]
5. Juwara L, Schmidt A, and Saha-Chaudhuri P. Virtual Pooling as a Privacy-preserving Analysis Tool to Estimate Covariate Hazard Ratio (HR) of Cox Proportional Hazard Model. 14th Annual Student Research Day of the Department of Epidemiology, Biostatistics and Occupational Health, 2018.
   [*Best poster award*]

Software & other services

03/2021	Co-Reviewed an article for JMIR Medical Informatics (2021)
05/2019	Incidence estimation tools (UNAIDS tools). [link]
08/2018	Prevalence and Incidence Calculator: Calculates HIV incidence from prevalence survey data that include biomarkers of recent infection. UNAIDS [link]
2018-Now	Maintain several R-Packages (e.g. [link]) and Web-based tools [link]

References

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Dr. Wilfred Ndifon
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Higher Specialist Clinical Geneticist.
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