Lamin Juwara

Education

2018–Present **PhD. Quantitative Life Sciences**, *McGill University*, Canada.
Title *Privacy-preserving analysis of biomedical 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-SA, 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–present **Statistician**, iMD Research Inc.
- Statistical modelling of biomedical data

09/2017–01/2019 **Research Assistant**, Jewish General Hospital.
- Statistical Computing | data analysis | data privacy

Summer 2017 **Visiting Research Scholar**, South African Centre for Epidemiological Modelling and Analysis.
- Developed web based applications for HIV incidence estimation (UNAIDS project)

2007–2008 **Medical Laboratory Technician**, Medical Research Council, The Gambia.
- Genomic DNA isolation, PCR protocols (e.g. multiplex PCR.) and sequencing

Miscellaneous

01/2020–Present **Math 324**, McGill University.
Graduate student assistant

2013–2015 **Mathematics Tutor**, KNUST - GHANA.
International Students Association (ISA) Mathematics Tutor. KNUST

Awards and Scholarships

2018–2021 Mitacs Accelerate Fellowship ($60,000)
2016–2018 MasterCard Foundation Scholarship, McGill University ($100,000)
2016 The Martin Rees Scholarship, AIMS South Africa (Certificate for academic excellence)
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)

Department of Quantitative Life Sciences – Mcgill University
+(1) 514 318 4637 • *lamin.juwara@mail.mcgill.ca*

Computer skills

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

Selected articles

1. Saha-Chaudhuri P, Juwara L (2020). Survival Analysis under the Cox Proportional Hazards model with Pooled Covariates. Statistics in Medicine. [link]
2. 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]
3. Juwara L, ..., Saha-Chaudhuri P, Velly A (2020). Predicting neuropathic pain after breast cancer surgery using machine learning. International Journal of Medical Informatics. [link]
4. Cressatti M, Juwara L, Galindez JL, ... Schipper HM (2019). Salivary miR-153 and miR-223 levels as diagnostic biomarkers of idiopathic Parkinson disease. Movement disorders. [link]
5. Grebe E, McIntosh A.; Juwara L, ..., Welte A (2019). Incidence estimation tools (inctools). UNAIDS tools. [link]
6. Juwara L, Boateng J (2019). Assessing the effects of exposure to sulfuric acid aerosol on respiratory function in adults. Preprint arXiv: 1906.04296 [link]
7. Eaton J, Grebe E, Welte A, Juwara L, Ongarello S (2018). Prevalence and Incidence Calculator: Calculates HIV incidence from prevalence survey data that include biomarkers of recent infection. UNAIDS tools [link]

Peer reviewed abstracts

1. Galindez J, Juwara L, ..., Velly AM. Evaluation of salivary Heme Oxygenese-1 as a potential biomarker of Parkinson's disease and neurodegenerative conditions. AD/PD 2021.
2. Cressatti M, Song W, Juwara L, ..., Schipper HM. Beyond the brain: Peripheral microRNA expression and Parkinson's disease. AD/PD 2021.
3. Juwara L. Privacy-Preserving Outcome Prediction. ENAR 2020.
4. Saha-Chaudhuri P and Juwara L. Survival Analysis under the Cox Proportional Hazards Model with Pooled Covariates. ENAR 2020.
5. Juwara L and Saha-Chaudhuri P. Predictive modeling under data privacy restrictions. SSC Conference, 2020. *Travel Award*
6. 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. Statistical Society of Canada Annual Meeting, 2018.
7. 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*
8. 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*

Oral & Poster Presentations

03/2020	Poster Presentation on Privacy-Preserving Outcome Prediction at ENAR 2020 Spring Meeting [link]
09/2019	Poster Presentation at QLS annual research meeting in Montreal
06/2018	Poster Presentation at the Statictical Society of Canada annual meeting in Montreal
03/2018	Poster Presentation at the annual EBOSS Research Day [link] (Best Poster Award)
01/2018	Poster Presentation at the ISPE mid-year meeting in Toronto (Travel Award)
10/2017	Oral Presentation at the Biostatistics seminar series, McGill. [link]

Dr. Paramita Saha Chaudhuri
Assistant Professor
Department of Mathematics and Statistics, University of Vermont
email: SahaChaudhuri(DOT)work(AT)gmail(DOT)com
Telephone: +(1) 514.398-7518

Dr. Erica E. M. Moodie
William Dawson Scholar and Professor of Biostatistics
Department of Epidemiology, Biostatistics, & Occupational Health McGill University
email: erica.moodie@mcgill.ca
Telephone: +(1) 514.398-5520

Dr. Wilfred Ndifon
AIMS Network Research Director & Professor of Theoretical Biology.
AIMS NEI, Rwanda
email: wndifon@aims.ac.za

Dr. Gerard Morris
West Midlands Regional Genetics Laboratory, Birmingham, UK.
Higher Specialist Clinical Geneticist.
email: dr.gerard.morris@cantab.net
Telephone: 0121 472 1377