

Adrien Allorant

POPULATION HEALTH RESEARCHER

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Summary

Population health researcher with 10+ years' experience across academic, funder, and multilateral settings including IHME, the Gates Foundation, UNAIDS, and WHO. Contributed to multi-country HIV research initiatives—including model development and data analysis—that informed national estimates across 40+ African countries and supported Global Fund and PEPFAR funding applications. Experience conducting landscaping reviews to assess research methods for practical applicability to national programmes (GAVI/WHO). Track record of building sustained partnerships with Ministries of Health, securing competitive research funding, and translating complex evidence into actionable guidance for programme managers. Supervised undergraduate, master's, and PhD students; 12 years' experience teaching quantitative methods across institutions in France, the US, and the UK.

Key Strategic Achievements

Secured WHO Agreement for Performance of Work (£22,000, 2025-26): Delivering week-long workshop in Maputo on using routine health information systems to evaluate interventions and track changes to the HIV epidemic.

Evaluating CIFF-funded pilot with WHO and Mozambique MoH (£10,000 British Academy/Leverhulme, 2023-present): Field evaluation of HIV self-testing distribution in remote, underserved facilities (non-PEPFAR, limited workforce) in Nampula Province; two-week in-country visit (2025).

Evaluated impact of HIV self-testing technology across 8 African countries for WHO (£25,000, 2022-2023): Led multi-country analysis of how this innovative diagnostic technology transformed national HIV responses in South Africa, Mozambique, Malawi, Uganda, Tanzania, Kenya, Zimbabwe, and Lesotho.

Led GAVI-commissioned landscaping review of spatial methods for immunisation coverage (2023-2024): Critical assessment of existing research approaches and their practical applicability for national programmes, with WHO Health Inequality Monitoring team. Co-authored with GAVI, UNICEF Geospatial lead, and WHO Immunisation; findings directly informing WHO guideline revision on use of spatial estimates.

Led UNAIDS Granular Data Analysis across 18 countries in Eastern and Southern Africa (\$50,750, 2023): Supervised 3 PhD students and delivered country-specific reports used by national programmes for Global Fund and PEPFAR funding applications.

Facilitated UNAIDS Regional Training Workshops for West and Central Africa (Jan-Feb 2023): Developed training materials and provided hands-on support to 17 Francophone Ministries of Health on HIV estimation tools (Shiny90, Naomi, EPP/Spectrum) used for official national estimates.

Active member, UNAIDS Reference Group on Estimates, Modeling, and Projections (2022-present): Contributing to methods and models used by 40+ African countries to produce official HIV estimates; presented 3 manuscripts to the Reference Group.

Track record of evaluating health technology interventions and building operational tools (2018-2021): Developed agent-based model to evaluate HIV viral load testing scale-up in Guinea for NGO Solthis (\$25,000 French Agency for Development); created R package 'ImpactSimul' used by NGO for advocacy and grant applications. Built statistical methods for Haiti's national HIV EMR (iSanté) with I-TECH and Haiti MoH—now implemented as automated performance monitoring layer in national RHIS dashboard.

Organised departmental workshop on community engagement in research (2025): Secured internal funding and convened researchers across Social Statistics and Demography to strengthen participatory research practices.

Awarded Web Science Institute funding (2025): Ethnographic research at the UK Office for National Statistics examining AI/ML integration in quality frameworks for official estimates.

Professional Experience

University of Southampton

Southampton, UK

LECTURER IN SOCIAL STATISTICS

2024-present

- Admitted to Royal Statistical Society's Committee for International Development (2025)
- Supervising PhD student on AI-driven approaches to official statistics production
- Secured Web Science Institute funding for ethnographic research on AI/ML at the ONS
- Organised departmental workshop on community and stakeholder engagement in research
- Coordinating research seminar on Methodological Innovation for Survey Methods and Official Statistics

World Health Organization, Dept of Global HIV, TB, Hepatitis and STIs

Geneva (remote)

TECHNICAL CONSULTANT, HIV TESTING TEAM

2023, 2025-present

- Led multi-country analysis of HIV self-testing scale-up across 8 African countries (2023)
- Secured £22,000 Agreement for Performance of Work (2025-26) for RHIS workshop in Maputo
- Developing evidence base to inform WHO guidance on HIV testing service delivery

World Health Organization

Geneva (remote)

TECHNICAL CONSULTANT, HEALTH INEQUALITY MONITORING

2023-2024

- Led GAVI-commissioned landscaping review of spatial analysis methods for childhood immunisation coverage
- Assessed practical applicability of existing research methods for national immunisation programmes
- Co-authored with GAVI, UNICEF Geospatial lead, and WHO Immunisation; findings informing WHO guideline revision

McGill University & Imperial College London

Montreal / London

POSTDOCTORAL RESEARCH FELLOW

2022-2023

- Led UNAIDS Granular Data Analysis for Eastern and Southern Africa: secured \$50,750 funding, supervised 3 PhD students, delivered 18 country reports informing Global Fund/PEPFAR applications
- Advanced core components of Shiny90 (UNAIDS-sponsored model used by 40+ countries for official HIV estimates) through analysis of programmatic and survey data across 41 countries
- Facilitated UNAIDS Regional Training Workshops in Abidjan (Jan-Feb 2023) for 17 Francophone Ministries of Health
- Supervised 2 medical students on HIV testing inequalities research over 9 months
- Awarded competitive Fonds Recherche Quebec Sante Post-Doctoral Fellowship (CAD 90,000)

Institute for Health Metrics and Evaluation, University of Washington

Seattle, USA

PHD RESEARCHER / GRADUATE RESEARCH ASSOCIATE

2017-2021

- Led geospatial analysis of TB surveillance in Bangladesh in partnership with USAID's Alliance for Combating TB; findings directly informed programme strengthening efforts
- Contributed to Institute's COVID-19 response team, producing estimates that informed Washington State Governor's pandemic response decisions
- Developed small area estimation methods for health facility surveys, now used by IHME to assess healthcare quality disparities (published in *Nature Communications*)
- Co-authored 4 Lancet papers on global COVID-19 mortality, infections, and preparedness

Institute for Disease Modeling, Bill & Melinda Gates Foundation

Seattle, USA

PHD SUMMER FELLOW

2020

- Developed agent-based simulation model for family planning intervention in Nigeria; presented results to Gates Foundation Nigeria team
- Supported COVID-19 analyses presented to Washington State Governor Inslee's team

I-TECH & Haiti Ministry of Health

Seattle / Port-au-Prince

PHD RESEARCH ASSOCIATE

2018-2021

- Developed statistical methods to maximise use of Haiti's largest HIV electronic medical record (iSanté)
- Methods now implemented as automated performance monitoring layer in national RHIS dashboard
- Built sustained partnership with Haiti Ministry of Health; developed French-language materials for monthly bulletin
- Work led to 2 peer-reviewed publications and subsequent collaboration on COVID-19 impact on HIV services

NGO Solthis

Paris / Guinea

TECHNICAL CONSULTANT

2018-2019

- Led impact evaluation of HIV viral load testing intervention in Guinea
- Secured \$25,000 from French Agency for Development to develop generalisable agent-based model
- Presented results at AIDS 2018 Conference; developed R package 'ImpactSimul' used by NGO for advocacy

Education

2017-2021 **PhD Global Health - Metrics**, University of Washington, Seattle
 2013-2016 **MSc Statistics & Econometrics**, ENSAE ParisTech (with distinction)
 2015-2016 **MPH Epidemiology**, Paris Saclay University (with distinction)
 2010-2013 **BSc Applied Mathematics; BA Social Sciences**, Paris I Panthéon-Sorbonne; SciencesPo Paris

Partnerships & External Engagement

INTERNATIONAL PARTNERSHIPS

2023-present **Mozambique National HIV Programme**, RHIS data analysis; 2-week in-country visit (2025) for HIV-ST pilot evaluation
 2024-present **World Bank (David Newhouse)**, Poverty measurement research comparing asset-based wealth indices and consumption measures in Mozambique
 2022-present **UNAIDS Reference Group on Estimates, Modeling, and Projections**, Methods used by 40+ African countries for official HIV estimates
 2022-present **World Health Organization HIV Testing Team**, Technical consultant; secured £22,000 APW (2025-26)
 2023 **UNAIDS Regional Office, Eastern & Southern Africa**, Led Granular Data Analysis across 18 countries (\$50,750)
 2018-2021 **Haiti Ministry of Health & I-TECH**, Multi-year partnership on HIV EMR analysis; 2 publications
 2020 **USAID Alliance for Combating TB in Bangladesh**, Geospatial analysis informing programme strengthening

PROFESSIONAL MEMBERSHIPS & COMMITTEES

2025- **Royal Statistical Society**, Committee for International Development (newly admitted)
 2022- **UNAIDS Reference Group**, Estimates, Modeling, and Projections
Royal Statistical Society, Fellow
International Association of Survey Statisticians, Member

Research Funding

2025-2026	Agreement for Performance of Work - HIV Self-Testing Analysis , World Health Organisation	£22,000
2025-2026	Small Research Grant - HIV Programme Pilot Evaluation, Mozambique , British Academy / Leverhulme Trust	£10,000
2025	Web Science Institute Internal Funding - AI/ML in Official Statistics , University of Southampton	
2023	Granular Data Analysis of HIV Burden (Principal Investigator) , UNAIDS Eastern and Southern Africa	\$50,750
2022-2023	Post-Doctoral Fellowship for Outstanding Foreign Students , Fonds Recherche Quebec Sante	CAD 90,000
2021	Applied Population Health Research Fellowship - Housing Vulnerabilities , UW Population Health Initiative & King County Public Health	\$15,000
2020	PhD Summer Fellowship , Institute for Disease Modeling, Gates Foundation	\$25,000
2017-2021	Full PhD Scholarship , Institute for Health Metrics and Evaluation	\$205,000
2018-2019	Impact Evaluation Model Development , French Agency for Development (via NGO Solthis)	\$25,000

Additional: CIHR Postdoctoral Fellowship (CAD 140,000) - declined to accept FRQS award

Selected Publications

UNDER REVIEW

Allorant A, Bergen N, Danovaro-Holliday MC, Hosseinpoor AR, Lorin J, Correa G, Panciera R. Assessing geographic inequalities in childhood immunisation coverage: a critical scoping review of spatial analysis methods. *Vaccines*

Allorant A, Smith P. Algorithm-assisted inference and the future of official statistics. *Journal of Official Statistics*

Allorant A, Edun O, Bekelynyck A, et al. Scaling up HIV self-testing in Africa: insights from national programmatic data in eight countries. *Journal of the International AIDS Society*

Youssif O, **Allorant A**. Reassessing the DHS wealth index as a proxy for socio-economic status: insights from population surveys in the Middle East and North Africa. *World Development Perspectives*

PUBLISHED

Allorant A, Kuchukhidze S, et al. Socio-demographic and geographic disparities in HIV burden and care engagement: a cross-sectional analysis of population-based surveys in 43 African countries. *Journal of the International AIDS Society*. 28(8); e70024, 2025

Allorant A, Muset P, et al. Temporal trends and major determinants of antenatal care HIV testing in sub-Saharan Africa (2005-2021). *Journal of Acquired Immune Deficiency Syndromes*. 95(1S): e97-e105, 2024

Allorant A, Fullman N, et al. A small area model to assess temporal trends and sub-national disparities in healthcare quality using facility surveys. *Nature Communications*. 14, 4555, 2023

COVID-19 Excess Mortality Collaborators. Estimating excess mortality due to the COVID-19 pandemic: a systematic analysis. *The Lancet*. 399(10334), 2022

Allorant A, Biswas S, Ahmed S, et al. Finding gaps in routine TB surveillance activities in Bangladesh. *Int J Tuberc Lung Dis*. 26(4), 2022

Allorant A, Parrish C, et al. Closing the gap in implementation of HIV clinical guidelines in a low resource setting using electronic medical records. *BMC Health Services Research*. 20(1):804, 2020

Full publication list: 18 peer-reviewed articles including 4 in The Lancet