

AREAS OF EXPERTISE

- Survey & evaluation design.** I design complex data collection strategies and carry out design-based analysis of survey and evaluation studies: clustering, stratification, allocation, weighting, variance estimation, testing, and modeling that hold up under scrutiny.
- Small-area estimation & data fusion.** I turn sparse, multi-source data into defensible local estimates, and build the reproducible tooling that lets others verify them. Twenty years across national statistics offices, health agencies, and multilateral programmes.
- Statistical software & data systems.** I build end-to-end systems that get the statistics right by construction: correctness enforced in code, the path from raw data to published estimate streamlined rather than stitched together by hand, and AI-assisted analysis that carries its own provenance.
- Capacity building.** I train and upskill statistical and data science teams — sampling, weighting, small-area estimation, and reproducible analysis in Python or R, in English or French — so the methods stay in the organization after I leave.

SELECTED TRACK RECORD

WHO/UNICEF immunization estimates (WUENIC)	Directed annual production, 14 vaccines across 195 countries, with a 30-year time series. UNICEF.
Population-based HIV Impact Assessment (PHIA)	Lead sampling statistician, 8 national biomarker surveys. Westat / CDC-PEPFAR.
County-level health estimates, all 102 Illinois counties	Developed the statistical analytical engine for the web platform. NORC.
NCVS state-level crime rates	State- and county-level small-area estimates; R package sae2 on CRAN, used for U.S. federal subnational statistics. Westat.
Statistical capacity building	NBS Tanzania (SADC, World Bank-funded, 2026) · Ethiopia · Senegal · Jamaica (UNSD) · INSBU Burundi
Open-source software & SaaS	Author of Samplics (280K+ downloads, JOSS); architect of the svy ecosystem. Built svyLab (svylab.com), a SaaS for end-to-end analysis of complex survey data with AI assistance.

Ph.D. Statistics, Carleton University (advisor: J.N.K. Rao) · M.Sc. Statistics, Université Laval · Guest Editor, JSSAM 2025 · ASA, AAPOR

ENGAGEMENTS — FIXED SCOPE, FIXED FEE

Sample Design Review UP TO 2 WEEKS	Independent review of a planned or in-field design: frame, stratification, sample size calculation and allocation, precision under realistic response. Written memo with prioritized, defensible recommendations.
Weighting & Variance Estimation UP TO 3 WEEKS	Base weights, nonresponse adjustment, calibration, and replicate or linearized variance estimation — delivered as documented, re-runnable code with a methodology annex fit for publication or audit.
Small-Area Estimation Pilot 4-6 WEEKS	Subnational estimates for one priority indicator: Fay–Herriot, unit-level, or spatial Bayesian, with model diagnostics, uncertainty, and disclosure review. Scoped to prove the approach before you commit to a programme.
Proposal & Bid Statistical Support 3-5 DAYS	Sampling and statistical methodology sections for competitive bids, with named-personnel credentials and power calculations. Built for firms responding to federal or multilateral solicitations on deadline.
Training & Capacity Building 2-5 DAYS	Workshops for statistics offices and research teams: sampling design, weighting, small-area estimation, reproducible survey analysis in Python or R. Delivered in English or French.
Embedded Senior Statistician 6+ WEEKS	Two to three days per week inside your team to unblock a live estimation workflow — or to hold methodological continuity while you hire.

Currently taking on engagements. Every engagement is defined in writing before it starts — deliverable, timeline, and fee — and every number I hand over can be re-run from its inputs.