MANUELA RUNGE, PhD

[manuelarunge10@gmail.com](mailto:manuelarunge10@gmail.com) | (773) 790-0209 | [https://manuelarunge.github.io](https://manuelarunge.github.io//) | Chicago, USA

Infectious disease epidemiologist with +5 years of experience in mathematical modeling of health interventions (focus malaria). Passionate about using analytical tools to improve population health. International experience working in Germany, Switzerland, Tanzania, and the United States. Relocating to Zurich, Switzerland, and looking for a new position in epidemiology and health-related analytics.

**EXPERIENCE**

**Northwestern University – Chicago, United States**

*Postdoctoral Researcher, January 2020* - *Present*

* Led scientific projects on COVID-19 burden forecasting and malaria intervention impact modeling.
* Enhanced analysis and deliverables in joint projects with co-workers and collaborators.
* Trained students and co-workers in python and use of high-performance computing.
* Improved documentation and ‘how-to’s documents to accelerate the use of programs by the team.

**Swiss Tropical Public Health Institute – Basel, Switzerland**

*Ph.D. Student, September 2016 - December 2019*

* Developed a comprehensive framework around malaria intervention impact modeling from data assembly to model calibration to the analysis of predictions.
* Generated training material and trained co-workers on the developed framework.
* Drove a self-initiated analysis idea to completion and strengthened collaboration with Tanzanian researcher.

**Swiss Tropical Public Health Institute – Basel, Switzerland**

*Consultant, May 2016 – December 2018 and May 2019 - September 2019*

* Communicated analysis demands, progress, and key findings to National Malaria Control Program and the NETCELL project team based in Dar es Salaam, Tanzania.
* Delivered modeling analysis outputs and reports to key stakeholder meetings, often with tight deadlines.
* Contributed to the development of the supplementary national malaria strategic plan 2018-2020 in Tanzania.

**Swiss Tropical Public Health Institute – Basel, Switzerland**

*Scientific Assistant, March 2016 - August 2016*

* Developed an SOP for data collection and management practices for a school survey in Tanzania.
* Generated a detailed report of epidemiological findings shared with collaborators.

**Ministry of Health and Social Welfare Tanzania – Dar es Salaam, Tanzania**

*Student Intern, March 2015 – August 2015*

* Supervised data collection and data entry.
* Led data cleaning and data analysis, leading towards a scientific publication.
* Generated a new epidemiological malaria map, used to inform malaria risk stratification.

**University Medical Center Hamburg-Eppendorf, Hamburg, Germany**

*Medical Data Manager, March 2014 – July 2016*

* Supported statisticians in their statistical guidance of clinical researchers and doctoral students.
* Generated automated data description and analysis reports shared with clients.

**SKILLS**

**Hard skills**

* Microsoft Office: Word, Excel, PowerPoint
* Statistical programming: Python, R, Stata, SPSS
* Other: QGIS, EpiInfo, LaTeX, High-performance computing

**Soft skills**

* Strong interpersonal skills with a focus on team success
* Excellent solution-oriented and problem-solving skills
* Advanced organized work style
* Strong presentation and writing skills
* Extensive experience working in international teams

**EDUCATION**

**Ph.D. Epidemiology – magna cum laude (very good)**

*University of Basel, Basel Switzerland*

* Graduation: December 2019
* Thesis: *“Mathematical modeling of malaria control interventions to support strategic planning in Tanzania”*

**M.Sc. Epidemiology – 5.5 (very good)**

*University of Basel, Basel, Switzerland*

* Graduation: February 2016
* Thesis: *“The Use of Public Primary Schools for Malaria Surveillance in Tanzania”*

**B.Sc. Health Sciences – 1.3 (very good)**

*University of Applied Sciences Hamburg, Hamburg, Germany*

* Graduation: February 2014
* Thesis: *“The influence of the menopausal hormone therapy on the overall mortality – survival analysis of the control group of the MARIE study”*

**VOLUNTEERING**

**Correspondent, Malaria Eradication Alliance (MESA)**

*May 2018 - November 2020*

* Generated daily reports of scientific talks at 3 international conferences, held virtually and in person.

**Ph.D. student representative, University of Basel, Basel, Switzerland**

*January 2017 - March 2018*

* Directed various requests and inquiries between faculty and Ph.D. students.

**Tutoring, University of Applied Sciences Hamburg, Hamburg, Germany**

*September 2013 - February 2014*

* Supervised and guided group discussions around methods on problem-oriented learning.