Infectious disease epidemiologist with +5 years of experience in mathematical modeling of health interventions. Passionate about using analytical tools to improve population health. International experience working in Germany, Switzerland, Tanzania, and the United States.

#### **EXPERIENCE**

#### MM Global Health Consulting GmbH - Zurich, Switzerland

Senior Associate, September 2023 - present

- Supporting clients on selecting and performing appropriate methodologies for impact assessment and implementation strategies of health interventions for infectious diseases, particularly in low- and middleincome countries.
- Analytical and programmatic support to ongoing projects.

### Manuela Runge GmbH - Winterthur, Switzerland

Owner and manager, January 2022 – present

- Research contracting, project management and accounting.

#### Northwestern University - Chicago, United States (remote work)

Postdoctoral Research Collaborator, January 2022 – present

- Lead scientific projects on malaria intervention impact modeling
- Conduct analysis and prepare deliverables in joint projects with co-workers and collaborators.
- Create course material and provide mentorship in a faculty enrichment training program.

### Northwestern University - Chicago, United States

Postdoctoral Researcher, January 2020 - December 2021

- 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.

## 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**

### Board member and committee chair, Applied Malaria Modeling Network (AMMnet)

January 2021 – present

- Shaping future direction of AMMnet and leading the 'Guidance and values' committee activities.

### Correspondent and Senior Editor, Malaria Eradication Alliance (MESA)

May 2018 - April 2024

- Generated daily reports of scientific talks at 5 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.