SMIDDY Agenda – 5 November 2026

Preliminary agenda draft

Time	Session
08:30 – 09:00	**Registration**
09:00 – 09:10	**Opening Remarks**
09:10 – 09:55	**Keynote Lecture: Justin Lessler** (UNC Chapel Hill)
10:00 – 10:30	**Session: Surveillance and Outbreak Analytics**
10:00	**Flavio Finger** (MSF Epicentre): The 2026 Ebola Bundibugyo Outbreak: Linking Field Epidemiology and Outbreak Analytics
10:15	**Anthony Hauser** (Unisanté): Simulation-based assessment of surveillance strategies for respiratory pathogens in Switzerland
10:30 – 11:00	**Coffee Break and Posters**
11:00 – 12:00	**Session: Evaluating Vaccination and Control Interventions**
11:00	**Loïc Marrec** (UNIL): Evaluating the impact of PrEP implementation on bacterial STI rates: Insights from mathematical modeling and ecological trends
11:15	**Javier Perez Saez** (UNIGE): Model-based evaluation of the impact of mass oral cholera vaccination in an endemic area of the Democratic Republic of the Congo
11:30	**Laura Di Domenico** (Hasselt Univ): Impact of changes in measles vaccination schedule under potential waning immunity: policy implications from a modelling study in Flanders, Belgium
11:45	**Laura Andrea Barrero Guevara** (New York Univ): Climate Variability and Intervention Relaxation Drive Malaria Resurgence in an Ethiopian Highland
12:05 – 12:25	**Speed Talks**
12:05	**Dennis Partl** (UZH): Modelling the Impact of Zoliflodacin Introduction Strategies on Neisseria gonorrhoeae in South Africa: The NgoMASA Model
12:10	**Janne Estill** (UNIGE): Estimation of the burden of disease due to Hepatitis E genotypes 1 and 2 in Africa, the Middle East, South and Southeast Asia: a mathematical modelling study
12:15	**Jenny Dunstan** (ETH Zürich): Estimating fitness effects of mutations that evolve in a Long-Term Evolution Experiment of HIV-1
12:20	**Marcel Parciak** (Hasselt Univ): EpiJax: A GPU-Accelerated Framework for Modelling of Infectious Disease Dynamics
12:25 – 13:40	**Lunch and Posters**

Time	Session
13:40 – 15:00	**Panel Discussion: Effective (and ineffective!) applications of modeling for decision making** Trish Newport – Médecins Sans Frontières Alessandro Cassini – Geneva Cantonal Health Department Olivier Le Polain – World Health Organization Christian Althaus – Swiss Federal Office of Public Health
15:05 – 15:25	**Speed Talks**
15:05	**Lilian Goepp** (UniBE): Projecting the future risk of mosquito-borne diseases in Switzerland
15:10	**Katharina Kusejko** (UZH): Down-sampling schemes and their effect on inference of HIV cross-border transmission clusters
15:15	**Hannah Van Wyk** (UNIGE): Household transmission of mpox clade Ib in Uvira, Democratic Republic of the Congo: a comparison of PCR-, serology-, and symptom-based estimates
15:20	**Charlyne Bürki** (ETH Zürich): A Phylogenetically-Informed Softmax Model to Estimate Variant Fitness: Applications to SARS-CoV-2 and RSV-A/B
15:25 – 15:55	**Coffee Break and Posters**
15:55 – 16:40	**Keynote Lecture: Rachel Lowe** (Barcelona Supercomputing Center)
16:45 – 17:00	**Speed Talks**
16:45	**Adrian Denz** (Swiss TPH): Inferring a novel insecticide resistance metric and exposure variability in mosquito bioassays across Africa
16:50	**Grace Macklin** (MSF Epicentre): A multi-country retrospective analysis of the impact of reactive OCV campaigns
16:55	**Annice Bowen** (MPI for Infection Biology): Mathematical Modeling of Plasmodium falciparum Ookinete Maturation in Mosquitoes
17:00 – 17:30	**Session: Pathogen Spread and Diversity**
17:00	**Noémie Lefrancq** (ETH Zürich): Quantifying pathogen spread across scales from pairwise genetic distance distributions
17:15	**Aswin Krishna** (ETH Zürich): Quantifying the factors that shape serotype coexistence in Streptococcus pneumoniae
17:30 – 17:45	**Closing Remarks**
17:45 – 19:00	**Apéro, Networking and Posters**

Posters:

Anna Bot (Univ Hospital Zurich): Introducing the compfit R package – comfortably fitting compartmental models

Inez Derkx (Swiss TPH): Contact heterogeneity in network reconstruction: evaluating synthetic graph generators for rabies transmission modeling

Louis du Plessis (ETH Zürich): The WISE database and dashboard is a comprehensive resource of wastewater-based surveillance data of respiratory viruses circulating in Switzerland

Baptiste Elie (UZH): neutralizR: Bayesian inference of virus neutralization titers from raw assay data

Francesco Gizzarelli (UNIGE): A Hybrid Multi-Scale Framework for haemorrhagic fevers dynamics: Coupling Agent-Based and Disease-Informed networks

Cana Kussmaul (MPI for Infection Biology): U-shaped effects of humidity and the impact of misspecified weather-transmission relationships in epidemic models

Patrick Musole Bugeme (UNIGE): Vibrio cholerae-specific antibody kinetics following natural infection in a cholera-endemic city in Eastern DRC: within- and cross-population heterogeneity

Erol Orel (UNIGE): Automated evidence extraction from literature to predictive models: an application to respiratory health crises

Taru Singhal (Swiss TPH): Mathematical modelling of malaria in low-transmission settings to support elimination strategies

Yuqian Wang (UZH): Time of HIV Infection: Integrating Molecular Epidemiology and Statistical Approaches to Improve Estimates