



Inaugural meeting programme

METHODS, MECHANISMS, MISSING DATA

3-4 September 2026

Christ Church, University of Oxford

THURSDAY, 3 SEPTEMBER

Lecture Room 1, Christ Church

Time	Session	Speaker/Chair	Discussant
09:00-09:30	Welcome and workshop aims Introductions; rationale for bringing spatial epidemiology and conflict research into closer conversation.	André Python Janey Messina	
09:30-10:10	Conflict is not a covariate Towards a more process-based spatial epidemiology of conflict, displacement, service disruption, environmental change and missing data. Preliminary work mapping possible hidden or underreported arbovirus transmission in the DRC will be used to examine how conflict, surveillance capacity, and access shape what becomes visible in disease data, as well as where current spatial methods need refinement.	Janey Messina	Michael Emch
10:10-10:30	Refreshments served in the Junior Common Room		
10:30-11:10	The complex dynamics of disease Understanding disease through interacting social, environmental and spatial processes rather than isolated risk factors.	Michael Emch	Janey Messina
11:10-11:45	Spatial models in the AI era How might the deep mathematical expertise of frontier LLMs benefit applied spatial modelling practice?	Ewan Cameron	André Python
11:45-12:20	Spatial modelling with inlabru Practical modelling of realistically complex spatial processes using INLA and inlabru.	Janine Illian	André Python
12:30-13:30	Lunch in the Great Hall - all participants invited		



13:50-14:25	Modelling exposure through human movement Moving beyond residence-based measures by modelling where people encounter environmental and epidemiological risks.	Tim Lucas	André Python
14:25-15:15	Data integration, surveillance and genomic epidemiology Combining epidemiological, environmental, mobility, demographic and genomic information while accounting for observation and sampling processes.	Nuno Faria	Janey Messina
15:15-15:35	Refreshments served in the Junior Common Room		
15:35-16:10	Conflict and disease across space and time Measurement, scale, temporal lags, displacement, spillovers and spatial dependence in relationships between conflict and disease.	André Python	Janey Messina
16:10-17:00	Roundtable: What are we missing? Identifying unresolved problems, methodological opportunities and assumptions that deserve to be challenged.	André Python Janey Messina	All participants
19:00-20:45	Workshop dinner: three courses in the Great Hall - all participants invited		



FRIDAY, 4 SEPTEMBER

Lecture Room 1, Christ Church

Friday is an optional hybrid and collaborative morning for participants who can stay or join online.

Time	Session	Speaker/Chair	Discussant
09:30-10:20	Methods lab: conflict measures → epidemiological outcomes We will work in groups to define the conflict process, disease/epidemiological outcome, causal structure, scale, timing, mobility, and observation process for two or more separate worked examples.	Janey Messina André Python	All participants
10:20-10:40	Methods lab synthesis Compare each group's assumptions, data needs, reporting requirements, and disagreements or unresolved problems that should structure the methods paper.	Janey Messina André Python	All participants
10:40-11:00	Refreshments served in the Junior Common Room		
11:00-11:25	PATHWAYS: ERC Synergy grant proposal concept A brief overview of seed-funded exploratory work towards a possible interdisciplinary ERC Synergy proposal: the emerging research idea, data landscape, comparable initiatives and candidate pathways connecting human-system disruption with infectious disease transmission and detection. Short presentation followed by questions.	Charles Petrik (online) Janey Messina	All participants
11:25-12:30	Paper and collaboration workshop Agree on scope, provisional structure, leads and immediate tasks for a methods paper; discuss next steps for CONTOUR.	André Python Janey Messina	All participants
12:30-13:30	Lunch in the Great Hall - all participants invited		

- End of workshop -