

Rowland Kao

Physics

- Mathematical models
- Methodological development
- Livestock networks and network analyses
- Bayesian Likelihood parameter inference
- Integration of molecular epidemiology
- Use of combined mathematical and genetic data ('phylodynamics')

AGENDA

Thursday, May 9th

12.00	Transport from Kelvin Hotel (Glasgow)		
12.05	Transport from Belhaven Hotel (Glasgow)		
12.45	Arrival and Lunch		
13.45	Introductions including one slide per person/group		
14.30	Session 1 Different stokes for different folks: tailoring risk-based surveillance for bovine Tuberculosis in cattle Speaker: Paul Bessel Discussion about the various aspects of risk-based surveillance and how it can be tailored		
15.45	Report back from first breakout		
16.15	Coffee break		
16.45	Session 2 Wildlife: are badgers really different? Speakers: Clare Benton/ Aurelie Courcoul What makes badgers a (potentially) very good reservoir for bTB		
18.15	Report back from second breakout		
18.45	End of first day		
19.00	Drinks		
20.00	Dinner		
22.30	Transport to Glasgow (Belhaven & Kelvin Hotels)		

AGENDA

Friday, May 10th

08.00	Transport from Kelvin Hotel		
08.05	Transport from Belhaven Hotel		
08.45	Arrival of off-site participants		
09.15	Session 3 What can whole genome sequencing do for you? Speaker: Michael Deason Illustration of what we know about the resolution this technique offers and how it can improve our research		
10.30	Report back from third breakout		
11.00	Coffee break		
11.20	Session 4 (Final Session) The people speak: results from a survey of workshop participants Speakers: Liliana Salvador/Rowland Kao Results of the survey sent to participants. Discussion about the most relevant questions		
12.35	Report back from final breakout and summation		
13.15	Lunch and departure (including transportation back to West End, Glasgow)		
14.30	Transport to Belhaven Hotel		

Adrian Muwonge	2	
Alberto Allepuz	1	
Andrew Conlan	5	
Andy Mitchell	4	
Ariadna Garcia Saenz	3	
Aurelie Courcoul	5	
Clare Benton	2	
Colin Birch	3	
Darrell Abernethy	1 rapporteur	
Dez Delahay	1	
Edith Authie	1	
Fraser Menzies	4 rapporteur	
Jan Muskens	3	
Jane Gibbens	4	
Javier Bezos	2	
Julian Drewe	3	
LI Siben	5	
Marian Price Carter	1	
Nick Coulson	2	
Paul Bessell	1	
Philip P Robinson	4	
Ricardo de la Rua-Domenech	3 rapporteur	
Robin Skuce	4	
Ron Crump	5	
Ruth Rushton	4	
Susanna Sternberg Lewerin	2 rapporteur	
Tony Goodchild	3	
Tony Wilsmore	2	
William Wint	5 rapporteur	
	\$1.00 / 10 \$1.00 \$	

SOME GENERAL AIMS

- Bringing together people from different backgrounds, with disparate paradigms and ideas
- Bring forward 'grey literature' and expert opinions not found in peer reviewed publications
- Leading to arguments based on reason NOT authority

Hypothesis generation

Risk-based surveillance

What?

- Quantitative assessment of risk of herd breakdown
- Exploitation of statistical properties to target surveillance

Why?

- 1. To save money (same job, but cheaper)
- 2. To minimise onward risk (better job)
- 3. To identify problem herds (changing situations)
- 4. Other?

Things to think about

- What are the critical challenges to designing risk-based surveillance
- What are the critical challenges to implementing risk-based surveillance
- What are the critical risks associated with it, if implemented (give examples, if possible)?
- Give examples of risk factors and where they might be appropriate (contrast countries, situations, etc.)?

M. bovis in wildlife

- Why badgers?
- Perspectives on wildlife from other countries
 - Is the problem in GB special?
 - Does maintenance of bTB under test and slaughter require a reservoir host?
 - What other hypotheses may fit the available data?

Things to think about

- What are the main ways of identifying potential reservoirs?
- Why sometimes a reservoir and sometimes not?
- What is the signature of a reservoir host? i.e. when do you know when you've got one?
- What makes some potential reservoirs different than others?

Whole Genome Sequencing of M. bovis

 What are the scientific questions that WGS can be used to address in different ways?

What can it do to change our understanding of the epidemiology

What can it do to change our disease control paradigms?

Results of the survey

- Get an impression of what is important to people at the workshop
- Focus last discussion around an aspect of this