#### 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

Open questions

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 in England and Wales?
  - Sometimes high density elsewhere
  - At least one case in Scotland
  - Deer farmed/wild
  - Pigs
  - Etc. etc.
- 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

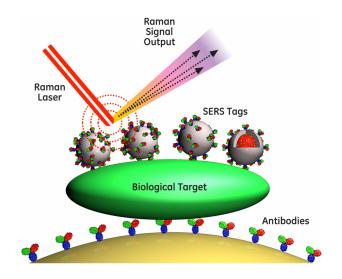
- Why is a species sometimes a reservoir and sometimes not?
- What are the main ways of identifying potential reservoirs?
- What is the signature of a reservoir host problem? i.e. when do you know when you've got one?
  - (Is bTB in GB really a badger problem?)

## Results of the survey

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

# Results of the survey - discuss

- Would a 'pen-side' early diagnostic test solve our problems?
  - What are the technical challenges to achieving this?
  - What are the practical challenges of implementing it?
  - What are the implications if we have one?



## Results of the survey - discuss

- Understanding farmer behaviour
  - What do we want to know?
  - How would we go about getting these data?
  - What are the challenges to obtaining these data?
  - What are the pitfalls associated with interpreting them?

(why is it the attitude of the farmers we are targeting?) i.e. not government, general public etc.

## Whole Genome Sequencing of M. bovis

- Entirely new technological approach
- Increasingly inexpensive
- Obvious uses retain challenges of interpretation
- Are there any 'un-obvious' uses?
- It isn't the solution

## Things to think about

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

- What can it do to change our understanding of the epidemiology
- What can it do to change our disease control paradigms?