



## New Interdisciplinary ESRC/ SWBio +3 PhD studentship award available

### Walking and working in agricultural environments: Risks for transmission of antimicrobial resistance

The rapid emergence and spread of antimicrobial resistance (AMR) has become a critical medical and public health issue worldwide and has profound implications for farming and global food security, human health, animal welfare and veterinary medicine. This interdisciplinary project will investigate relationships between countryside walking and possible risks from environmental transmission of AMR. It will do this by documenting practices and perceptions relating to walking in agricultural environments among walkers and farmers, while estimating the number of AMR bacteria occurring in these environments.

The project will involve ethnographic and qualitative research to learn how people who walk in rural environments for recreational purposes, as well as those who work there, perceive risks and benefits associated with physical activity on farmed land, including exposure to the natural environment, animals (specifically, sheep and cattle), and disease causing bacteria such as *Escherichia coli*, which are abundant in the faeces of animals that share open green spaces with walkers and farmers. Exposure to AMR *E. coli* can potentially lead to subsequent serious opportunistic infections. The risk of potential exposure to AMR *E. coli* arising from recreational walking and working on farmland will be measured by collecting and analysing samples in green spaces with varying levels of usage by farmed animals (cattle and sheep). Views from key stakeholders on the acceptability of possible interventions to reduce potential harm from exposure to AMR bacteria while minimising adverse effects will be sought, using participatory approaches.

Candidates may have a background in either qualitative social sciences (ideally including ethnography) or biological sciences (microbiology knowledge or practical skills are not required). The successful candidate will benefit from tailored cross-faculty training in laboratory techniques, statistical skills and qualitative research methods.

#### Supervisors

Dr. Helen Lambert, Reader in Medical Anthropology and ESRC AMR Research Champion, School of Social and Community Medicine

<http://www.bristol.ac.uk/social-community-medicine/people/person/helen-s-lambert/overview.html>

<http://ow.ly/T5bfD>

Dr. Matthew Avison, Senior Lecturer in Microbiology, School of Cellular and Molecular Medicine

<[http://research-information.bristol.ac.uk/en/persons/matthew-b-avison\(16fae83c-8367-4740-b09c-21b076846d7d\).html](http://research-information.bristol.ac.uk/en/persons/matthew-b-avison(16fae83c-8367-4740-b09c-21b076846d7d).html)>

Dr. Kristen Reyher, Senior Lecturer in Farm Animal Science, School of Veterinary Sciences

<http://www.bristol.ac.uk/vetscience/research/infection-immunity/main/>

Interested applicants are strongly encouraged to contact Dr. Lambert to discuss their application: Please email [h.lambert@bristol.ac.uk](mailto:h.lambert@bristol.ac.uk)



## SOUTH WEST DOCTORAL TRAINING PARTNERSHIP

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Applications should be submitted to the School of Social and Community Medicine via the online application system: <http://www.bristol.ac.uk/social-community-medicine/courses/postgraduate/apply.html>

Deadline for applications: **12 noon 10th March 2017.**

Shortlisted candidates will need to be available for interview on 28<sup>th</sup> March 2017.

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