



Centre for Immunity,
Infection and Evolution



Beyond killing: new ways to manage infection

Monday, 2nd December 2013
University of Edinburgh
Kings Buildings
Ashworth Laboratories, Lecture Theatre 3
West Mains Road, Edinburgh

Hosted by the
Centre for Immunity, Infection, and Evolution
Organisers:

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The antibiotic pipeline is running dry and the problem of infectious disease is as threatening now as it has ever been. The 21st century has seen some innovative and effective approaches to manage disease without the aid of traditional antibiotics. These include disabling virulence of the pathogenic organism, inducing tolerance to the pathogen in the host, altering the protective commensal microbiota and even psychological treatment to capitalise on the placebo effect. Important questions accompany this new endeavour. For example, what molecular mechanisms will enable these approaches and what are their long term evolutionary consequences? Please join us to collate and discuss the latest ideas in this field.

Programme:

- 09:00** Registration/Coffee
- 09:30** Welcome
- 09:35** Nicholas Humphrey, London School of Economics/Cambridge University - *The placebo effect: an evolutionary perspective*
- 10:10** Judi Allen, CIIE - *Worm killing and Wound repair: Flip sides of the same coin*
- 10:45** Miguel Soares, Instituto Gulbenkian de Ciencia - *Tissue damage control disentangles resistance and tolerance to infectious diseases in animals*
- 11:20** Coffee
- 11:50** David Schneider, Stanford - *Warping the shape of an immune response*
- 12:25** Andrea Wilson, Roslin Institute - *Vive la résistance? Exploiting host genetic defences to conquer infections*
- 13:00** Lunch
- 14:10** Rolf Kuehmerli, University of Zurich - *Extracellular quenching of public goods as an evolutionary robust antibacterial treatment*
- 14:45** Mike Brockhurst, University of York - *Evolution and ecology of Pseudomonas aeruginosa in chronic infections of the cystic fibrosis lung*
- 15:20** Coffee
- 15:50** Kayla King, Oxford University - *What's your gut feeling? Pathogens drive evolution of probiotic gut bacteria in C. elegans*
- 16:25** Trevor Lawley, Wellcome Trust Sanger Institute - *Clostridium difficile disease and transmission*
- 17:00** Drinks Reception

Please register at <http://ciie.bio.ed.ac.uk>