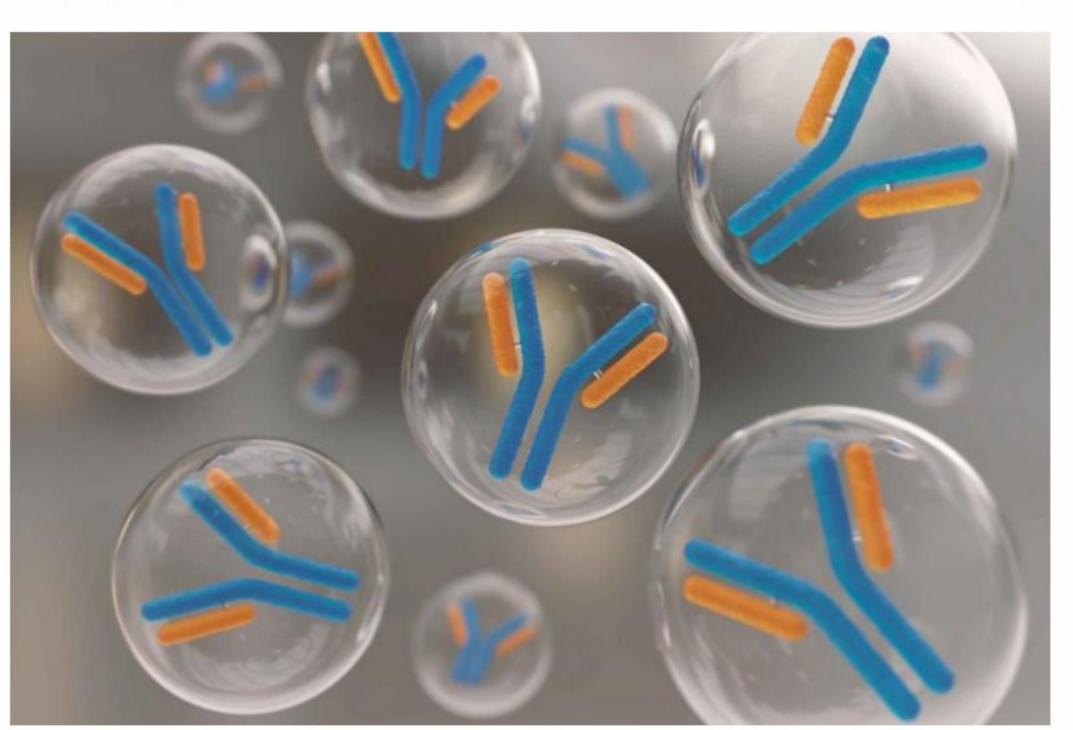
Our science ▼ Science in society ▼ Partnerships ▼ Facilities and resources ▼ Services ▼ Careers and Studentships ▼ News and events ▼ About us ▼

Home » News » Bill & Melinda Gates Foundation funds development of Pirbright's Livestock Antibody Hub supporting animal and human health

Bill & Melinda Gates Foundation funds development of Pirbright's Livestock Antibody Hub supporting animal and human health

Posted: 15 November, 2019



Researchers from The Pirbright Institute have been awarded US \$5.5 million by the Bill & Melinda Gates Foundation to establish a Livestock Antibody Hub aimed at improving animal and human health globally. The ambitious programme of work will see extensive collaboration between multiple UK research organisations in order to utilise research outcomes in livestock disease and immunology to support human health as part of the 'One Health' agenda.

Six leading scientists from Pirbright will be involved in the project, including Professor John Hammond, Professor Venugopal Nair, Dr Simon Graham, Dr Elma Tchilian, Professor Munir Iqbal and Dr Erica Bickerton. Their combined expert knowledge will drive the study of cattle, pig and poultry antibody responses at high resolution to expand our understanding of protective immunity in species that can also be used as models for a range of human infectious diseases.

The aim is to use Pirbright's expertise in livestock viral diseases, cutting-edge technology and unique highcontainment facilities to bring antibody discovery, manipulation and testing up to the benchmark already seen in the immunological field for rodents and humans. "New tools have given us the opportunity to utilise these detailed antibody responses to make the next generation of vaccines and therapies" said research lead Professor Hammond.

This highly collaborative work will address the needs of the livestock research community whilst bridging the requirements of the vaccine industry. A number of work programmes will focus on studying B cells and antibodies at multiple scales including gene expression, single cell function and the entire antibody response.

Findings from this research will be used to drive vaccine selection and design and test antibody therapies, "which will improve animal health and ultimately human health, as well as ensuring the security of our food supply", finished Professor Hammond. Pirbright will ultimately act as a 'Hub' able to provide specific methods, access to animal models and the associated expertise to drive antibody research within the 'One Health' agenda.

"This is the single biggest investment in the immunology of livestock in the UK from an international funder, and the British Society for Immunology will do all we can to support this collaborative initiative and help maximise its impact for the benefit of human and animal health", commented Dr Doug Brown, Chief Executive of the British Society for Immunology ☑.

Recent Articles

⟨≡⟩

Pirbright estimates the impact of pox viruses on Nigerian farms

Pirbright and UCL scientists map African swine fever genome

Pirbright determines bluetongue strain and origin in 2016 Cyprus outbreak

Monthly Archive 2020 (8) 2019 (57)

2018 (57)

2017 (48) 2016 (29)

2015 (19) 2014 (22)

2013 (16) 2012 (20) 2011 (16)

Associated Scientists

2010 (11)

Prof John Hammond Group Leader

Prof Venugopal Nair OBE

Group Leader Dr Elma Tchilian

Dr Erica Bickerton **Group Leader**

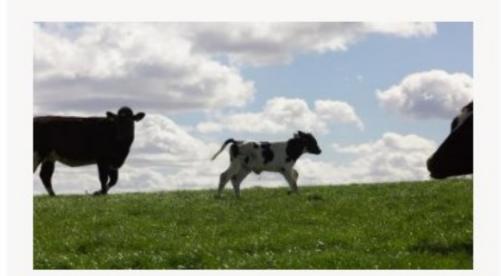
Group Leader

Prof Munir Iqbal

Group Leader

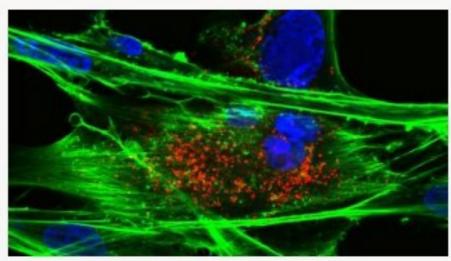
Prof Simon Graham Group Leader

Associated Group



Immunogenetics Group Leader

Prof John Hammond



Viral Oncogenesis

Group Leader Prof Venugopal Nair OBE



Mucosal Immunology

Group Leader Dr Elma Tchilian



Avian Influenza

Group Leader Prof Munir Iqbal



Porcine Reproductive and Respiratory Syndrome (PRRS) Immunology

Group Leader Prof Simon Graham



Coronaviruses

Group Leader Dr Erica Bickerton

Related Articles

Pirbright launches The Immunological Toolbox website



The Pirbright Institute, Ash Road, Pirbright, Woking, GU24 0NF Directions

Email: enquiries@pirbright.ac.uk Tel: +44 (0)1483 232441

Privacy & Cookies | Terms & Conditions | Social Media | eduroam | Sitemap







