Dr. Kate Jones
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**Talk title:** Our Planet, Our Health - Ecosystem approaches to forecasting zoonotic diseases

**Abstract**

Today we live longer and more prosperous lives than ever before, as a species we have made huge advances to create conditions for better health for billions of people, however this progress is taking a heavy toll on the planet's natural systems. I will explore the links and interdependencies between our health and the health of our planet with particular reference to understanding how rapid global environmental change impacts the emergence and spread of high impact infectious diseases like Ebola or Covid. I will discuss how recent advances in the resolution and coverage of remote-sensing satellite data and cutting-edge machine-learning algorithms open up the possibilities of developing global early warning systems to prevent and manage future epidemics.

**Bio**

Kate Jones is Professor of Ecology and Biodiversity at University College London and Director of the Nature-Smart Centre in the Institute of Future Living. Kate has held appointments at the University of Cambridge, Columbia University, Imperial College London, and is an honorary fellow at the Zoological Society of London. Her research investigates the interface of ecological and human health, using statistical and mathematical modelling to understand the impact of global land use and climate change on ecological and human systems, with a particular focus on emerging infectious diseases. Kate’s research also develops applied artificial intelligence tools for monitoring ecological health, particularly for monitoring ecosystems acoustically and runs several wildlife citizen science programmes. Kate has written over 100 articles and book chapters in prestigious journals such as Nature and Science and is a scientific advisor for several international biodiversity...
charities and chaired The Bat Conservation Trust for 9 years. In 2008, Kate won the Leverhulme Prize for outstanding contributions to Zoology.

Professor Kate Jones’ research investigates the interface of ecological and human health, using statistical and mathematical modelling to understand the impact of global land use and climate change on ecological and human systems, with a particular focus on emerging infectious diseases from animals (like Ebola, SARS, Covid-19). Kate’s research also develops applied artificial intelligence tools for monitoring ecological health, particularly for monitoring ecosystems acoustically. Kate has led the development of novel global citizen science programmes with The Bat Conservation Trust involving thousands of volunteers all over the world to monitor bat populations, collaborating extensively with national conservation NGOs and governments.