



**SPRINGER NATURE**



**Grand  
Challenges  
Programme**

**tAcT**  
THE ACADEMY TRUST



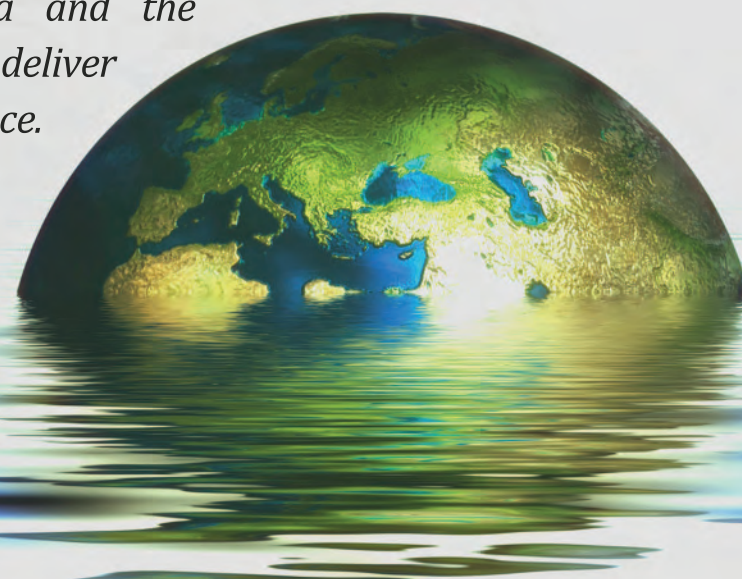
## 2019 ACADEMY – SPRINGER NATURE CHAIR LECTURE SUSTAINABLE, HEALTHY CITIES AND FOOD SYSTEMS

Globally, urban populations are growing rapidly, and in many cases their demands for resources are beyond current limits of sustainability. Cities are the drivers of economic growth and responsible for over 70% of energy-related greenhouse gas emissions. In most world regions, ambient air pollution exposure is higher in urban than rural locations, and 98% of cities in low- middle income countries, with more than 100,000 inhabitants, do not meet WHO air-quality standards. Cities are therefore critical for achieving national and international sustainability objectives, such as reductions in air pollution and greenhouse gas emissions. Cities are also vulnerable to environmental change to varying extents, depending on location and climate. Urban policies provide opportunities for capitalising on the potential to improve health and sustainability including through scaling up access to clean energy, improved housing and urban design, access to efficient public transport systems and the promotion of active travel.

Climate change and loss of pollinators can reduce crop yields and carbon dioxide fertilization can reduce the nutrient quality of some crops at a time when there are increasing demands for food from a growing population. The food system is also a major driver of greenhouse gas emissions and air pollutants, freshwater depletion, nitrogen and phosphorus loading, land use change and biodiversity loss. Initiatives such as Food Smart Cities can help promote policies to reduce food waste, encourage the consumption of healthy and sustainable diets, including from locally produced food and protect the environment.

*The world faces complex global problems that must be addressed to ensure humanity a healthy and sustainable future. To address these grand challenges, scientists, social scientists, engineers and other researchers must collaborate across disciplines to advance solutions that policymakers, business leaders and civil society representatives can implement. In 2017, the Grand Challenges programme was launched to highlight some of the best work published on these topics across the different Springer Nature brands to help develop solutions to these global problems. The Academy–Springer Nature Chair is part of Springer Nature's Grand Challenges Programme. The Chair Professorship brings an eminent international scientist working in the area of sustainability to lecture at research-intensive institutions in India and the neighbouring countries, as well as to deliver public lectures to address a wider audience.*

**Sir Andy Haines is the second  
Academy – Springer Nature Chair  
Professor.**



### SIR ANDY HAINES

Professor of Environmental Change and Public Health with a joint appointment in the Dept of Public Health, Environments and Society and in the Dept of Population Health at the London School of Hygiene & Tropical Medicine [2001 to 2010] Currently, sitting on a number of other national and international committees and co-chairing the development group for the Health Knowledge Action Network of Future Earth.



Friday, 22 March 2019



11:30 AM



Pope Paul Auditorium;  
St John's Research Institute,  
Bengaluru

**Chair:** Prof. Tony Raj  
Dean, St John's Research Institute.

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High tea will be served after the lecture

# ALL ARE WELCOME