Course Rationale

Everyone has heard of climate change: extreme storms, sea-level rise, floods in some places and droughts in others, and of course global warming! We've also all heard about the recent 'migrant crisis': millions of displaced people escaping war, famine and social and economic turmoil. But how are these two key concepts linked? What do they have to do with each other? And what are the implications for this nexus on societies across the globe, and on global politics? How can we better understand the nexus, to manage future impacts of climate change on people's migration and wellbeing?

Within this tutorial series we'll explore these questions through the lens of environmental epidemiology: the study of how the environment affects and interacts with the health of the human population it supports. We'll investigate in more detail the specifics of climate change and the various ways in which it is jeopardising environmental and human livelihoods around the globe. We'll explore the determinants of human migration and debunk some myths around contemporary migration patterns and what drives people to move. We'll also explore the ways in which climate change is affecting our livelihoods and is affecting people's migration decisions. We'll employ a range of scientific tools that every scientist needs, including review of scientific literature, statistical modelling and a range of online tools for geospatial analysis. The final assignment will consist of students writing their own scientific paper, as well as a visual summary report that can be presented to policy-makers to help communicate the findings of our work to policy-makers. This is an essential part of science as it can assist policy-makers to design approaches that not only tackle climate change directly, but which manages the ongoing challenges presented to global migration and public health.

Environmental epidemiology is amazing! As an 'applied science', it allows us to use scientific acumen in arguably some of the most important real-world applications: the security of our livelihoods, and the environment we depend upon for them. This means that as scientists we wield extraordinary power to help inform decisions that can have huge impacts on how we live and how we look after our precious and unique planet. I hope that after this course, students will take away a flavour of what, and how exciting science is and how essential it is to policy and decision making, which impacts upon our everyday lives.