

ADVERTISEMENT

PhD Studentship Title:	Values and uncertainty in early warning of climate tipping points
UCL Department / Division:	STePP
Reports to:	Dr Erica Thompson
Stipend:	£21,870 per annum + home fees
Start date:	The successful candidate is expected to start in September 2025
Application deadline:	10 th March 2025 at 11:59am UK time

VACANCY INFORMATION

A fully-funded 3.5-year PhD position on **values and uncertainty in early warning of climate tipping points** is available from September 2025, to work under the supervision of Dr Erica Thompson at UCL's Department of Science, Technology, Engineering and Public Policy (STePP).

Please note that the funder covers *stipend and home fees only* – international students will need to secure additional funding, or cover the difference between home and international fees themselves. The project will assist with applications for additional funding for exceptionally strong international students.

STUDENTSHIP DESCRIPTION:

Are you interested in long-term evidence-based environmental decision-making and excited by the idea of designing good science to inform effective policymaking? The aim of this project is to examine **the role of values and uncertainty in early warning of climate tipping points**, as part of a large programme of new projects working together to use climate models and new observations to create early warning systems for climate tipping points.

The student will take a cross-cutting view of the programme, interviewing model developers as well as programme managers and political stakeholders to understand how diverse values and levels of uncertainty are accounted for in the development of early warning systems, from the overall goal of the programme and its political context, to the detailed choices in the mathematical representation of processes. The aim is to feed back recommendations into the methodological choices of the whole programme, so there is the potential to have very high impact and shape the outcomes and the operation of pilot early warning systems. This is a fantastic opportunity for a student with a background in climate science or climate modelling and a broad interest in the philosophy and politics of climate action.

As well as playing a key cross-cutting role in a large programme, the student will have opportunities to develop interdisciplinary research skills in an area of huge interest and will be expected to present their work at project meetings and by publication. In the course of your work, you will network widely with other projects and as such will be able to develop a strong profile in this emerging research area. You will work with Dr Erica Thompson, whose work combines mathematical and social perspectives on the use of models to support decision making in a variety of contexts, and will have further learning opportunities both in the politics of science advice (at STePP) and in physical and mathematical sciences (across UCL),

according to your background and balance of interests. As you progress, you will be able to shape and extend the project to reflect your own strengths and interests. After completing your PhD, you will have world-leading expertise in the interdisciplinary science of early warning systems and climate tipping points, and would be well-positioned for a career in research, science policy, or the private sector. These questions are only set to become more urgent.

This studentship is part of an Advanced Research + Invention Agency-funded project. The studentship covers home (UK) tuition fees and a stipend of £21,870 per annum for eligible candidates for three years and six months (Sept 2025-March 2029).

STePP is a diverse, inclusive and supportive department with a mission to “*mobilise science, technology, engineering and policy expertise to help change the world for the better*”. Policy activities run as threads through all of our work. We collaborate closely with external decision makers to ensure that we are asking the relevant questions and addressing real needs through our education and research programmes. Our growing policy team continues to reshape our engagement with external practitioners and champion the value of academic research in tackling global problems.

If you have any queries about the studentship or would like to discuss the relevance of your qualifications/experience, please contact Dr Erica Thompson, erica.thompson@ucl.ac.uk

PERSON SPECIFICATION

You should have or expect to achieve a Master’s degree in a relevant discipline, or an overseas qualification of an equivalent standard. An excellent first degree and relevant professional experience would also be suitable.

As this studentship will involve a range of qualitative and quantitative methods, students from a wide range of backgrounds can be considered but please note that you will need to have sufficient mathematical understanding to be able to engage in discussions about model structure, uncertainty, and statistical analysis methods. Familiarity with mathematical modelling (in any discipline) would be advantageous.

Previous experience of qualitative interviewing is not required, as training will be provided; however, excellent oral and written communication skills are essential. Demonstrated abilities to engage with diverse perspectives, and to work effectively with both technical and non-technical partners, would be advantageous.

An interest in long-term evidence-based environmental decision making is essential. A demonstrated ability to reflect critically on the purpose and processes of science for policy advice (in any discipline) would be advantageous.

We particularly welcome applications from members of minority and under-represented groups. Whatever your background and circumstances, we are committed to supporting you to thrive and to make the most of this opportunity as a springboard for your career aspirations. For support with your application, please contact either Dr Erica Thompson (supervisor: erica.thompson@ucl.ac.uk) or Jasmina Cubra (teaching and learning administrator: steapp.postgraduateresearch@ucl.ac.uk).

HOW TO APPLY

Please see [Doctoral Study at STePP](#) for details of the application process. You must apply via [the UCL online application](#). Please select the UCL Department of Science, Technology, Engineering and Public Policy (STePP) as your home department in the application and name Dr Erica Thompson as the proposed supervisor.