

Information on Postgraduate Research Scholarship - Ref: VCS-NRI-01-25			
Faculty:	Engineering and Science	Department:	AHED, NRI
Lead Supervisor:	Stefania Cerretelli		
Other Supervisors:	Pamela Katic, Jeremy Haggar		
Project Title:	Co-designing biocultural landscape conservation in Guatemala: blending traditional knowledge with ecological connectivity		
Project Description:	The provision of ecosystem services is strictly connected to biodiversity. Therefore, to support community and environmental resilience, it is crucial to study biodiversity. The overarching aim of the PhD proposal is to generate empirical and actionable knowledge on how different forms of Nature-based Solutions (NbS) can contribute to landscape and biodiversity conservation while also strengthening the wellbeing of Indigenous Peoples and local communities in the region of Alta Verapaz (Guatemala). The project will apply a mixed-methods approach rooted in interdisciplinary environmental research to blend local knowledge with scientific information. The student will mainly work with data collected by two current projects led by the supervisory team in several NbS already identified – mainly agroforestry systems integrating native trees into agricultural systems. Data include occurrences of mammals, reptiles, birds, amphibians and pollinators, survey of trees, and data from workshops on importance of biodiversity for the wellbeing and culture of local and Indigenous communities and the role of these communities in conserving biodiversity. The doctoral project will try to answer the following question: How can Indigenous Peoples’ landscape knowledge and scientific models of habitat quality and biodiversity be integrated to design multifunctional NbS that enhance ecosystem resilience, biodiversity conservation, and cultural values? More specifically, the PhD project will consider the following objectives: 1. Map priority areas for biodiversity and associated NbS across different land uses to identify management strategies that can support conservation; 2. Model biodiversity distribution in different climatic and land use scenarios to predict impacts of climate and land use changes and potentially inform conservation strategies; 3. Characterise the socio-cultural and political landscape to define barriers or opportunities for biodiversity conservation;		

	4. Assess the effectiveness of the co-designed management strategies and conservation priority areas together with local experts, stakeholders and communities. Methodology Modelling and mapping – GIS software (e.g. ArcGIS Pro, GRASS GIS) will be used in conjunction with programming software (e.g. R CRAN) to obtain spatially explicit models on habitat quality and biodiversity. Biodiversity modelling will be used to predict impacts of climate and land use changes but also of different management strategies. These models, in conjunction with stakeholders and communities' knowledge, will help identify priority areas for conservation, and management practices that could improve biodiversity conservation and therefore ecosystems resilience. Participatory mapping and focus group discussions – Participatory mapping and nature valuation exercises are already planned for addressing the importance of NbS for local and Indigenous communities within a current project the supervisory team is leading. The student will work with that information and aggregate it to the spatial habitat and biodiversity models, to identify priority areas not only based on the biophysical information but also on local values, priorities and practices. Additional focus group discussions and co-design workshops can be held with local communities and stakeholders to identify opportunities and barriers for conservation. Policy analysis and institutional mapping – The PhD project will critically analyse Guatemalan policy on conservation, land use, land tenure and agriculture incentives, as well as the structures established for its implementation to identify legal and institutional barriers and opportunities.
Duration:	3 years, Full-Time Study or 6 years, Part-Time Study
Bursary available (subject to satisfactory performance):	
Year 1: £20,780 (FT) or pro-rata (PT); Year 2: In line with UKRI rate; Year 3: In line with UKRI rate	
In addition, the successful candidate will receive a contribution to tuition fees equivalent to the university's Home rate, currently £5,006 (FT) or pro-rata (PT), for the duration of their scholarship. International applicants will need to pay the difference between the International and UK home student tuition fee rates for the duration of their scholarship.	
Person Specification of Essential (E) or Desirable (D) requirements:	
Criteria:	E or D
Education and Training:	
1st Class or 2nd class, First Division (Upper Second Class) honours degree or a taught master's degree with a minimum average of 60% in all areas of	E

assessment (UK or UK equivalent) in a relevant area to the proposed research project	
For those whose first language is not English and/or if from a country where English is not the majority spoken language (as recognised by the UKBA), a language proficiency score of at least IELTS 6.5 (in all elements of the test) or an equivalent UK VISA and Immigration secure English Language Test is required, if your programme falls within the faculty of Engineering and Science a language proficiency score of at least IELTS 6.5 overall with a minimum of 6.0 in all elements of the test or an equivalent UK VISA and Immigration secure English Language Test is required. Unless the degree above was taught in English and obtained in a majority English speaking country, e.g. UK, USA, Australia, New Zealand, etc, as recognised by the UKBA.	E
Experience & Skills:	
Previous experience of undertaking research (e.g. undergraduate or taught master's dissertation)	E
Experience of data analysis, environmental modelling and GIS techniques	E
Experience of mixed (quantitative and qualitative) research methodologies	E
Experience of R Cran programming and ArcGIS Pro or GRASS GIS software	E
Working knowledge of Spanish and ability to conduct participatory activity in Spanish	E
Previous experience of fieldwork in Indigenous communities	D
Previous experience in integrating scientific information with local and Indigenous knowledge	D
Personal Attributes:	
Understands the fundamental differences between a taught degree and a research degree in terms of approach and personal discipline/motivation	E
Able to, under guidance, complete independent work successfully	E
Other Requirements:	
This scholarship may require Academic Technology Approval Scheme approval for the successful candidate if from outside of the EU/EEA	E
The scholarship must commence before 12th January 2026	E
Closing date for applications:	midnight UTC on 15th October 2025
For further information contact:	Dr Stefania Cerretelli at s.cerretelli@greenwich.ac.uk
Making an application: Please read this information before making an application. Information on the application process is available at: https://www.gre.ac.uk/research/study/apply/application-process . Applications need to be made online via this link. No other form of application will be considered. All applications must include the following information. Applications not containing these documents will not be considered. Scholarship Reference Number (VCS-NRI-01-25)– included in the personal statement section together with your personal statement as to why you are applying a CV including 2 referees * a motivational letter a brief research proposal (2-4 pages) on how you would address the research project	

- **academic qualification certificates/transcripts and IELTS/English Language certificate if you are an international applicant or if English is not your first language or you are from a country where English is not the majority spoken language as defined by the UK Border Agency ***

**upload to the qualification section of the application form. Attachments must be a PDF format.*

Before submitting your application, you are encouraged to liaise with the Lead Supervisor on the details above.