

Project Title:	Dr Sarah Milliken  Extreme Aquaponic Farming  This scholarship centres on the significant potential for aquaponics provide fish and vegetable produce in extreme conditions, where veresources are scarce and the soils lack nutrients. The research will investigate the use of aquaponic waters and effluents to provide nutrients in Earth-based regoliths to grow food in areas where little no food can be grown at present, and on simulated regoliths from Moon and Mars. The only way that communities will be able to live permanent settlements on the Moon and Mars is if fresh, nutrition can be produced in situ. The research will also investigate a diet for tilapia that is sourced from the hydroponic part of the aquaponic stand from the agricultural system which has been fertilized using fiscomposted vegetal waste.	water e or the e in us food
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	The chosen person will be expected to work 40 hours per week an some of this may need to be at weekends, as fish welfare and the experiments will need to be monitored. This is an amazing opported to help drive forward your and our ambitions towards sustainable production in some of the most inhospitable places on Earth, and a reach for the stars by demonstrating how aquaponics could provide and a range of fresh produce for settlers on the Moon and Mars.  The Aquaponics Group and Laboratories at the University of Green are at the forefront of aquaponic research in Europe. The EU Aqua Hub initiated by the Group created over 50 videos, numerous peer reviewed papers and an open access book (Aquaponic Food Produ Systems – Springer Nature) that have advanced knowledge about aquaponics around the world.	d unity food also to le fish
I)liration:	6 years, Part-Time Study	
Bursary available (subjection of the successful university's Home rate, cu	ject to satisfactory performance): pro-rata (PT) Year 2: In line with UKRI rate Year 3: In line with UKRI all candidate will receive a contribution to tuition fees equivalent to urrently £4,596 (FT) or pro-rata (PT), for the duration of their schol will need to pay the remainder tuition fee for the duration of their	the
This fee is subject to an ar		
Person Specification of	innual increase.	

Education and Training:					
•	1 <sup>st</sup> Class or 2 <sup>nd</sup> class, First Division (Upper Second Class) honours degree or a				
	taught master's degree with a minimum average of 60% in all areas of				
	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 a	at least IELTS 6.5 (in all elements of the test) or an			
	equivalent UK VISA and Immig	igration 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 <u>and</u>				
	obtained in a majority English speaking country, e.g. UK, USA, Australia, New Zealand, etc, as recognised by the UKBA.				
Experi	ence & Skills:				
•	Previous experience of undertaking research (e.g. undergraduate or taught				
	master's dissertation)				
•	Knowledge of statistical analysis				
•	A background in aquaculture and horticulture				
Person	nal Attributes:	1:00			
•	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				
Other	Requirements:				
•	This scholarship may require Academic Technology Approval Scheme approval				
		for the successful candidate if from outside of the EU/EEA			
The scholarship will commence in January 2023					
	Closing date for applications: 16 September 2022				
For further information contact: Sarah Milliken (S.Milliken@gre.ac.uk)					

## Making an application:

Please read this information before making an application. Information on the application process is available at: <a href="https://www.gre.ac.uk/research/study/apply/application-process">https://www.gre.ac.uk/research/study/apply/application-process</a>. 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-FLAS-04-22)— included in the personal statement section together with your personal statement as to why you are applying
- a research proposal related to the stated research topic \* Applying for a PhD | What is a Research Proposal YouTube
- a CV including 2 referees \*
- 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 $\ensuremath{^{\ast}}$

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

<sup>\*</sup>upload to the qualification section of the application form. Attachments must be a PDF format.