#MeetOurSTEMAmbassadors

We have so many amazing volunteers and we'd like you meet them!

About me		
Name:	Luke Fountain	**Photo:** 
Location:	Sheffield	
Job/course title:	PhD researcher – plant and soil interactions	
Organisation:	The University of Sheffield	
Fun fact about me:	When I'm not in the lab I play American Football for my local team, the Sheffield Giants	

Education/career journey:

I attended Freeston Business and Enterprise College in Normanton, Wakefield, followed by NEW College Pontefract for my A levels. I have always enjoyed science subjects, and have been driven towards STEM subjects through my lifelong career goal of working in the space sector, as a research scientist and one day an astronaut. Throughout school and the first year of my A levels, I was fascinated by physics and planetary geology, but my A level Biology teacher brought my attention to the field of genetics and molecular biology. This led me to pursue a Master's Degree in Molecular Biology which I completed in 2018. Initially I was worried that my choices would reduce my chances of working in the space industry, but I learnt that plant science is very important for space travel, which renewed my interest in plant biology. I am now doing a PhD in Plant and Soil Science and my goal of working in space biology is closer than ever. My ambition of becoming an astronaut still drives me in everything that I do.

My current job:

As a PhD student, my main day-to-day job is research, meaning I am in the lab almost every day performing experiments or analysing results.

My current job (continued)

The roles that research scientists have are very diverse, and every day is different. My work is focused on trying to use plants to reduce greenhouse gases that come from agriculture, which are damaging our planet and contributing to climate change. I love the idea of my work contributing to a real-life problem that is of great importance.

My advice to any aspiring scientists is to follow your curiosity and have fun. It is good to have a goal in mind and to make decisions to get there, but always make sure that you enjoy what you're doing. That way you will wake up every day wanting to go to work - enjoying what you do goes a long way when you're working the long hours that scientists frequently do. Also, plant science is an up and coming field with the opportunity to answer many big questions both on Earth and off, so new aspiring plant scientists will always be welcome!

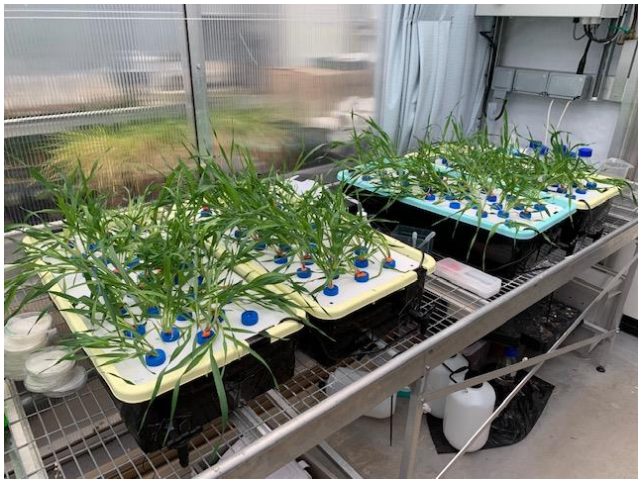
STEM Ambassador role:

Now more than ever it is crucial for more and more young people to get involved in STEM subjects. I have always had a passion for talking about my work and science in general, and being a STEM Ambassador allows me to convey that passion to the next generation. I support all activities that engage people of all ages in science, particularly young people who will become the next generation of innovators in this country and the world. I have a personal preference for getting involved in activities that promote space travel and space-related science, and have plans to develop a practical that can be carried out in schools to investigate how we may grow plants on planets such as Mars, and what impacts this will have on plant health.

The STEM ambassador program has had and continues to have a huge impact on getting young people interested in science, which results in more students enrolling at universities such as mine and allows us to continue to push world-leading research in STEM subjects and beyond.

Student challenge:

Part of my work involves looking at how different plants alter their nutrient requirements depending on environment, and I have built a hydroponics system (please see below) to allow me to do this. Can you come up with a way to grow plants without using any form of soil? Think about why this may be important!



Nice to get to know you!