The Data-Driven
Entrepreneurship
Programme

Connecting ideas to the world!





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Say hello to two of the people behind DDE's activities and find out what to do now if you want to get involved!



#### THE UNIVERSITY OF EDINBURGH

## Introduction

Edinburgh is a very special place. It's the Data Capital of Europe. And it has a vibrant entrepreneurial ecosystem, with the University of Edinburgh at its heart providing a constant pipeline of innovation. It is a great time to be an entrepreneur in Edinburgh – there is advice at all levels, support and funding to help founders flourish and create successful businesses.

The Data-Driven Entrepreneurship (DDE) programme was developed in 2021 with three goals: to support students, staff and businesses across the Data-Driven Innovation (DDI) Hubs and the University; to respond to the pandemic; and to meet a growing interest in and clear need for entrepreneurship and data-driven solutions to meet demand across all sectors.

It's been incredibly exciting for me to lead the DDE programme and see first-hand not only the ideas that students, staff and alumni are working on, but also the impact these solutions can have on the world's biggest social and environmental challenges. It is also rewarding to support fantastic global companies that have been attracted to Edinburgh through the programme to engage with our talent, investment opportunities, networks and expertise – adding real value to our growing network of entrepreneurs. Hosting our flagship programmes at the Bayes Centre, with its thriving data and digital community, has offered many opportunities for our founders.

In this brochure, we've gathered together stories from some of the companies we've supported along their entrepreneurial journey. Whether your aim is to be a career academic, work in industry or 'change the world', I hope the stories here will give you an idea of the opportunities and support on offer, and inspire you to explore start-up ideas – and to take part yourself!

We hope to see you on the programme soon...

#### Delivered by:







It's been incredibly exciting for me to lead the DDE programme and see first-hand not only the ideas that students, staff, alumni and external businesses are working on, but also the impact these solutions can have on the world."

#### **Charlotte Waugh**

Enterprise and Innovation Programme Lead for DDE, Edinburgh Innovations



Hosted by:



THE UNIVERSITY OF EDINBURGH

# What is the DDE programme?

The Data-Driven Entrepreneurship programme is a series of activities that create a clearer, joined-up entrepreneurial pathway for founders – or would-be founders – within the University of Edinburgh.

What's being built at the University of Edinburgh is a world-class entrepreneurship programme and community."

#### **Garrett Sprague**

Co-founder and CEO, Smplicare



With the chance to join the programme at different stages, entrepreneurs can find the support and advice they need, when they need it, within the University of Edinburgh and beyond.

The programme supports the University of Edinburgh and Edinburgh Innovations (EI) to commercialise research for the greater good, advance data-driven entrepreneurship and create data-driven solutions to real-world problems. The programme also provides the chance for founders to meet like-minded peers, experts and investors who can support their journey.

Whether you're a student, an academic, a start-up or a scale-up outside of the

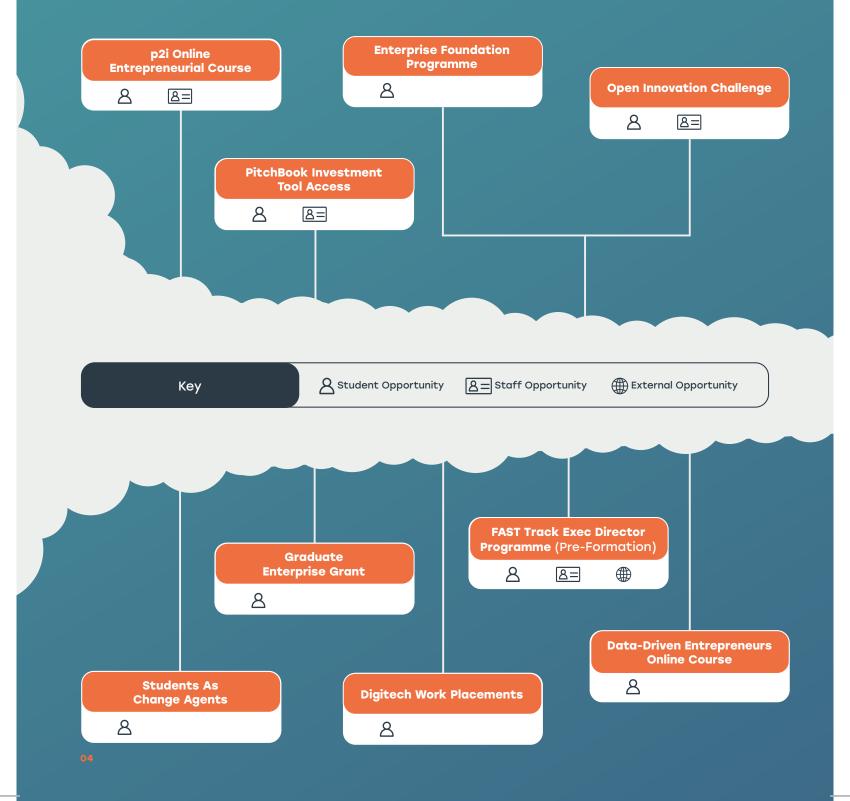
University, there's an opportunity for you to get involved, develop your ideas, access training, build skills, secure funding and take your next step. It is a fun and exciting area of activity to be involved with! And, through working with our student and staff advisory teams at EI and the DDI Hubs, whatever your topic of interest, we can help get your idea off the ground.

From the AI Accelerator, for global scale-ups looking to scale their ideas, to the Venture Builder Incubator, for PhD students wanting to turn their research into the spark for a data-driven enterprise – there are opportunities for all. So take a look and see what you can do to connect your ideas to the world!



THE UNIVERSITY OF EDINBURGH

# The DDE programme



The Earthshot Prize

DDE's activities are designed to drive entrepreneurship among staff and students at the University by supporting them to develop their business ideas, build their skills and secure funding.

We are also looking for opportunities to collaborate with start-ups, corporates, investors, mentors and funders.

Discover which opportunity is the right one to help you connect your ideas to the world!

DDE Innovation
Seed Fund

**Venture Builder Incubator** 

8 8= #

Engage Invest Exploit's Investment Readiness Programme

<u>a</u> <u>a</u>

EIE Showcase

FAST 2 Venture Studio

8

8=



FAST Track Exec Director
Programme (Post-Formation)

8





The University of Edinburgh's Al Accelerator

8







#### THE START-UP

## Therapevo



#### SECTOR

Medical Technology/Cancer Research



#### SOLUTION

Provide an alternative testing method for pre-clinical trials for brain cancer drugs, speeding up the development process for treatments



#### **DDE INITIATIVE**

Venture Builder Incubator



What led you to setting up Therapevo? Estefania: I'm now at the end of my PhD in cancer research at the University of Edinburgh. My field is in neuro-oncology, which means I work on brain tumours. My aim has been to find new targets to understand how to, if possible, develop new treatments for a specific type of brain tumour, called glioblastoma multiforme.

#### Paul (Brennan, Co-founder):

Esterania and I identified this problem independently and from different perspectives. I'm a consultant neurosurgeon, but also a clinician. My cancer biology PhD was all about modelling in brain tumours and drug discovery. And you don't have to do that for too long before you realise that there's a block, where you cannot translate ideas into the clinical field.

Estefania: It's very difficult to carry out pre-clinical research, because you can only do so on rodent brains — and rodent and human brains are extremely different. To translate our ideas and our results into preclinical research, we needed a way to fill this gap.

## What real-world challenge do you want to address?

Estefania: We want to give patients and their families hope that there's a chance for survival and increased wellbeing after a brain cancer diagnosis by speeding up the process for developing new drugs. Glioblastoma is the most common brain tumour, but the last treatment was developed over 15 years ago.

Paul: We're trying to close the gap between clinical failure and preclinical success. We're trying to Being introduced to a network of Venture Builder cohorts, past and present, was invaluable. They all had different backgrounds, and even when they had similar backgrounds, they all added something: an experience, an idea or an opinion."

#### **Estefania Esposito**

Co-founder, Therapevo

work out how we get all those clever ideas from the laboratory into the clinic. And the answer, as we see it, is modelling in humans rather than in animals.

What success have you seen so far? Estefania: We are gathering data that allows us to determine that the prototype is almost ready. We already have results that guarantee it's working and has great potential.

Paul: We've had a lot of positive feedback, which can be hard to come by in our field. We can't know if we're going to cure cancer quicker than anyone else, but I think we can inform those decisions much better. We believe that with that data, we can then get closer to finding a cure.

What role has the Venture Builder Incubator played in supporting your entrepreneurial journey so far?

Estefania: When I joined the Incubator, I was right at the start of my journey. It has been great to network with the cohort who were all at different stages and from different backgrounds – everyone had

something to add, whether that be an experience, an idea or an opinion. It's been great!

Those connections, combined with the sessions, gave us all the tools we needed to start and to go ahead on our own. That said, the Venture Builder team has continued to support us, even after our time on the programme finished.

#### What is next for Therapevo?

Estefania: We hope to finish optimising the prototype, which includes the model, all the science behind it and gathering all the data that supports our idea. Then it will be time to start looking for investment and grants to expand our team of researchers.

Paul: It's just about getting momentum going, which we're beginning to do. If by the end of the year we can be testing some compounds for an organisation, that would be fantastic. It's ambitious but I think we could, that's what we're working towards.

## the start-up bennu.ai



**SECTOR** 

AI/Climate Change



SOLUTION

A robotics company with environmentalism at its core



**DDE INITIATIVE** 

Venture Builder Incubator



**WEBSITE** bennu.ai



What led you to setting up bennu.ai?
Jonathan: I have an engineering
background and I'm currently doing
a PhD in AI at the University of
Edinburgh. While I have always had
an entrepreneurial spirit, I had no
intention of starting a business right
now. I told myself: I'm not going to
start a start-up, I'm going to focus on
my PhD. But when I was contacted by
the managerial school at the University
about a start-up idea involving
intelligent bins, I agreed to consult —
and everything grew from there.

### What real-world challenge do you want to address?

Jonathan: Our first product is a smart bin that sorts waste automatically, reducing contamination and ensuring that as much waste is recycled as possible. Designed for places with a lot of footfall – travel hubs, shopping centres, museums and so on – our technology increases recycling rates for the organisations who own those spaces, reducing their carbon footprint and saving them money. Sustainability should not come at

Thanks to Edinburgh University and the Venture Builder Incubator, I've started to build a network. The mentorship and the grants have helped us get where we are."

#### **Jonathan Feldstein**

Founder, bennu.ai

a cost, otherwise we'll never get to net zero.

We will provide our customers with data on how to improve their waste management system. And once we grow large enough and have data from different cities and locations around Europe, I believe we can provide politicians and decision-makers with data on how to improve recycling at a national scale.

What does success look like for you? Jonathan: There are three main strands to success for me. As a leader, it's in nurturing a creative team that is always growing and developing. For our vision, it's making an impact that reduces carbon footprints. For the business, it's about how many customers we can reach and the impact we can have.

We don't see ourselves as a waste management company, but as an AI robotics company, and so our success will include developing a variety of other solutions alongside our smart bin.

## What role has the Venture Builder Incubator played in supporting your entrepreneurial journey so far?

Jonathan: The financial support, the ability to connect to like-minded entrepreneurs and also the mentoring opportunities that come from the Incubator have all been very helpful.

#### What is next for bennu.ai?

Jonathan: Soon we will be developing the next iteration of our product, manufacturing a couple of smart bins and trialling these in working airports in the next year. Once these trials are complete, we will aim for a first round of investment.

There is such a push for data-driven developments at Edinburgh. Whether it's at a political level or a university level, there are grants, competitions and incentives to support that."

#### Jonathan Feldstein

Founder, bennu.ai



#### THE START-UP

## Quas



SECTOR

Biotechnology



SOLUTION

Plant-based, non-alcoholic beverages containing vitamins and organic acids produced by live probiotic bacteria that benefit your health



**DDE INITIATIVE** 

Venture Builder Incubator



WEBSITE

quasdrinks.co.uk



What led you to setting up Quas?
Jessie: I am originally from New York,
but I've lived in Edinburgh the past
couple of years, and have previous
experience working in the health,
food and wellness industry. As well as
my master's at Edinburgh, I studied
for a degree in integrative health and
nutrition – that's how Anton and I met,

and we've been on this journey since.

Anton: I'm originally from Estonia and came to Scotland in 2012 to do a biotech and business degree. I then went on to an MSc in Bioinformatics and a PhD in Synthetic Biology. I also have past start-up experience, having previously founded an e-commerce platform called One Cherry.

## What real-world challenge do you want to address?

Anton: Over the last 100 years, people in the industrialised world have switched their diet significantly from a plant-based one to consuming high-calorie, low nutritional food. In addition, there has also been an increased use of antibiotics and increased sanitation. These factors have disturbed our gut microbiome,

Our experience with DDE and the Incubator was incredibly important. Having that data-driven lens has helped us switch our perspective and target market to have an even bigger impact."

#### **Jessie Fitts**

Co-founder, Quas

meaning our immune system can no longer be trained properly. This has resulted in a significant increase of non-communicative diseases in the industrialised world, driven by chronic inflammation controlled by the bacteria in our gut.

#### What success have you seen so far?

Anton: We're contributing to restoring healthy gut bacteria with a cocktail of live probiotic and macrobiotic strains delivered as a delicious, non-alcoholic beverage. We aim to improve the lives of those who suffer from the unforeseen consequences of our industrialised world.

What role has the Venture Builder

Incubator played in supporting your

entrepreneurial journey so far?
Jessie: The people from the University
helped bring us together. Anton and
I are at a completely different end of
the spectrum, specialty-wise, but here
we are together starting a business.

Anton: The programme and its data focus helped us realise the health impact we could deliver to the world, and we have changed from being a company that focuses on healthy probiotic products as an alternative to alcohol, to a health-first company with probiotic products.

#### What is next for Quas?

Anton: We want to dig deeper into our product and are looking for funding for our next stage of research. Next is a small-scale data intervention study and trial to see how Quas affects the gut microbiome of volunteers with a variety of symptoms or allergies.



## THE START-UP Vision-RF



SECTOR

Medical Technology/Cancer



Monitoring vital signs wirelessly, remotely and in real time

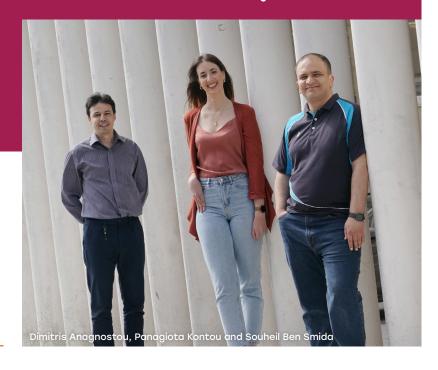


**DDE INITIATIVE** 

Venture Builder Incubator



WEBSITE visionrf.com



#### What led you to setting up Vision-RF?

Panagiota: I wanted to make a positive impact on society by addressing a real-world problem with my PhD. My PhD advisor, Dimitris, was a Marie Curie fellow studying remote sensing of vital signs using radio-frequency technologies. I started working as a team on this with him and Souheil, who had complementary expertise on microwave systems, and it worked! We explored two methods successfully - one of them even giving results with unprecedented quality. This was when we decided to form Vision-RF.

#### What real-world challenge do you want to address?

Panagiota: We want to transform the way healthcare is delivered by monitoring vital signs remotely, continuously and unobtrusively, meaning without any wires, wearable sensors or smart watches. This will maximise the mobility of patients while their health is being monitored.

Monitoring vital signs 24/7 produces a significant amount of health data. We are currently working with healthcare professionals to determine how this data can be best used to

Being accepted into the DDE programme will always be part of our start-up success story."

#### **Dimitris Anagnostou**

Co-founder, Vision-RF

tackle healthcare problems, reduce hospitalisations, ease the burden on the NHS and improve people's quality of life.

Souheil: We all have personal experiences with people with dementia and Alzheimer's. We want to benefit patients by monitoring their wellbeing and allowing them to live independently for longer, benefit health carers or caregivers by giving them peace of mind, and benefit the NHS by alleviating the burden in care homes and hospitals.

What does success look like for you? Dimitris: Being accepted into the DDE programme will always be part of our start-up success story. Collaborating

with end-users, care homes and medical professionals has also given

You always make an impact when you do research, but sometimes that impact comes 10, 20 years down the line. Here, we have the unique opportunity to make a difference now."

#### **Panagiota Kontou**

Co-founder, Vision-RF

us valuable insight for improving the device. In terms of personal success, we want to do something that people will find useful - knowing that we helped save someone's life would be the ultimate success.

#### What role has the Venture Builder Incubator played in supporting your entrepreneurial journey so far?

Souheil: The idea of applying to the Venture Builder Incubator came from our University Enterprise team at Heriot-Watt. They pointed us to the Incubator as the place where we'd learn what building a business is about. Before we were just engineers, now we are entrepreneurs.

#### What is next for Vision-RF?

Panagiota: The next step is to undergo test trials with end-users, increase our technology readiness level and hopefully spin out in the next six months – a goal significantly accelerated by the Incubator.

Dimitris: I think our next steps will also include further collaboration with cardiologists, care homes and end-users. This will shape the direction of the company and is an exciting part of the journey!

## indigo.ai



SECTOR
Al/Public Sector



SOLUTION

A no-code conversational AI platform to design and build chatbots, scale AI applications and analyse conversational experiences



**DDE INITIATIVE**Al Accelerator



**WEBSITE** indigo.ai/en



I would've spent months, probably years, gaining the sort of understanding and connections that came to me via the Al Accelerator. The education aspect was perfect, and the experience was amazing."

#### Gianluca Maruzzella

Co-founder, indigo.ai

What led you to setting up indigo.ai? Gianluca: I met my four co-founders while studying at the Polytechnic University of Milan. The inspiration for indigo.ai arrived in the last moments of my university journey, when I discovered I'd forgotten to fill in the necessary bureaucratic documents to complete my degree. I was stuck in a long line with time running out and, later, over a beer, we decided we could prevent similar problems.

I realised that while we are using artificial intelligence to go to the moon, companies haven't updated their communication methods in 20 years. We decided to put together a pitch deck and send a prototype to the most important accelerator incubator in Italy, H-FARM. We were selected as one of ten start-ups and the story began.

## What real-world challenge do you want to address?

Gianluca: indigo.ai is a B2B software service platform that uses deep learning and a virtual assistant to improve the ways businesses communicate with users. It uses state-of-the-art deep learning models, but it's a no-code platform so it's easy to set up. We are making it possible for big companies to build better relationships.

The businesses that work with us, anyone from marketing to the customer care department, can use our technology to build their own conversational Al assistant in the easiest way possible – saving them money while increasing user satisfaction.

What success have you seen so far? Gianluca: We're already working and generating revenue with UK clients like Santander and Bayer, but we're at a point where the technology is ready and we're poised to grow – and our real goal is to compete on a global level.

## What role has the AI Accelerator played in supporting your entrepreneurial journey so far?

Gianluca: The Al Accelerator was a perfect match. For a foreign company like us, it could be difficult to join an ecosystem like Edinburgh's because you don't know anyone, but the programme was the ideal way for us to really accelerate our understanding of a different culture and meet the right people at the right time.

#### What is next for indigo.ai?

Gianluca: We are fundraising to expand our team of 20 people. We know what we want to do and we know how to do it, we just need the right fuel in order to fast-track the journey. We are looking for a lead investor and are talking to a lot of potentials right now thanks to the Accelerator.

The AI Accelerator gave us a soft landing into the Edinburgh ecosystem – one that opened all kinds of doors for us."

#### Gianluca Maruzzella

Co-founder, indigo.ai

## THE START-UP Gigged.AI



**SECTOR**Al/Future of Work



SOLUTION

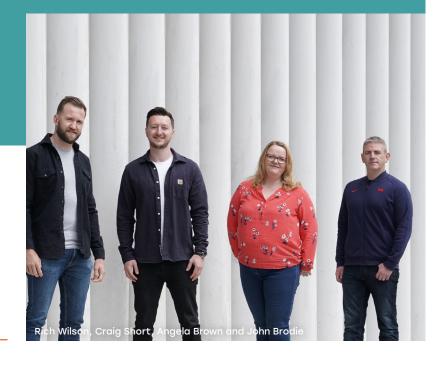
An AI-powered digital sourcing platform that brings talent and clients together



**DDE INITIATIVE**Al Accelerator



**WEBSITE** gigged.ai



What led you to setting up Gigged.AI? Rich: I joined the recruitment industry in my early 20s and was fast-tracked into leadership at 23. After 12 years as an executive director at Gartner, I burned out. Despite deciding on a change, I kept a hand in and joined the Data Lab as a Skills Advisory Board member. There, I met John Brodie, who'd just exited Aquila Insight. I had an idea for improving the recruitment process with technology and knew John would be the ideal mentor. I pitched him my idea and he said 'yes'.

### What real-world challenge do you want to address?

Rich: Our platform is B2B, but I would say we're focusing on solving three different challenges for three different groups: small and mediumsized companies, larger enterprises and universities, and also freelancers. For the small to medium companies, we're trying to help get ahead of the permanent tech crisis. For larger enterprises, our technology helps them look internally before they look externally. Freelancers get access to well-defined, quality opportunities while reducing admin and overhead time.

What success have you seen so far?
Rich: In the last six months, we've moved from being a 'passion project' to being something tangible. We have hired ten people. We have got over 3,000 users and over 200 clients. We won Scottish EDGE and Tech Nation Rising Star. We were a finalist in the KPMG, Tech Innovation of the Year.

As we grow our own business, from a Scottish perspective, we're hiring from often overlooked talent pools and we support them through At the Accelerator Showcase event, a student came up to tell me he received an internship after our algorithms matched him. He said he was shy and never normally made it through the application process, but thanks to us, he was starting on Monday."

#### **Rich Wilson**

Co-founder, Gigged.AI

a mentorship scheme. We're hiring student apprentices, we're bringing women returners in and offering fully flexible, remote working to accommodate those who can't work a 'nine to five' job. So we're really making the most of the amazing and diverse workforce available here in Scotland.

What role has the AI Accelerator played in supporting your entrepreneurial journey so far?

Rich: There are a few things in the Accelerator that have really hit home for us, a big one being the companies and mentors we had access to, such as NileHQ for design challenges. We came to the Accelerator already set up, with employees and early investment in hand, and Nile supported us in terms of storytelling and refining our product and customer journey. It absolutely accelerated what we do, no doubt about it.

What is next for Gigged.AI? Rich: We're excelling, we're growing, we're six months ahead of our goal

and everybody that we've hired

has contributed to that. Now we're aiming to raise a significant amount of funding, over £4m ideally. That will allow us to increase our headcount from 11 to 45, giving opportunities to different demographics and different workforces. We also plan to open an office in Houston and break into the US.



## Reath



**SECTOR** 

Climate Change/Circular Economy



SOLUTION

Enabling businesses to reuse single-use items



**DDE INITIATIVE** 

Al Accelerator



**WEBSITE** reath.id



#### What led you to setting up Reath?

Emily: Claire Rampen and I met at university when we were running a Student Arts Festival, and we found that we loved working together. Later, from working in and around start-ups, Claire and I caught the data bug, while getting frustrated that our brains weren't being used to work on projects that we felt passionate about and that all our environmental efforts were only individual. So in 2019, to tackle both frustrations, we cofounded Reath.

## What real-world challenge do you want to address?

Emily: We want to address the global climate crisis by changing the way that businesses use plastic. Plastic is not the bad guy, we just use it in the wrong way. We want Reath to create a system where resources aren't being wasted, where they're kept in the loop longer and we get more value out of them.

What success have you seen so far? Emily: Instead of looking at success and failure, we like to talk in terms of experimenting. With experiments, if things don't go well, instead of feeling like it's a big failure, we see it as a learning opportunity.

What role has the AI Accelerator played in supporting your entrepreneurial journey so far?

Emily: The Accelerator has pushed us to think about the wider picture. It's been so helpful to get involved with a community of businesses that are both local and data-driven, as there is a shared level of understanding here that we haven't experienced before.

In Edinburgh, there is an incredible sense of community, and I love it. It feels like people really want to be on the cutting edge for the greater good!"

#### **Emily Rogers**

Co-founder, Reath

I've met great mentors on the programme too, which has opened up new opportunities and allowed me to learn from people who have already built a data-driven business.

#### What is next for Reath?

Emily: We are soon going live with our first big retail client, and then we want to replicate it across other clients. Later this year we also hope to raise more funding.





## Carcinotech



SECTOR

Medical Technology



SOLUTION

Manufacturing 3D-printed tumours to provide a platform for rapid and accurate drug discovery



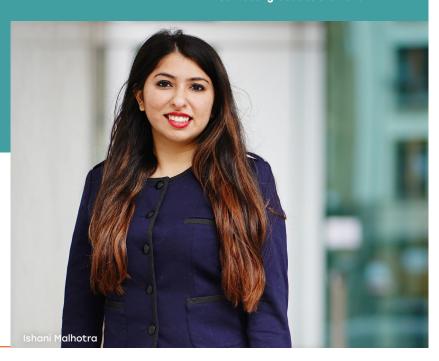
**DDE INITIATIVE** 

Al Accelerator + Seed Fund



WEBSITE

carcinotech.co.uk



## What led you to setting up Carcinotech?

İshani: Carcinotech came out of an idea that I had during my master's in regenerative medicine. Having also worked in cancer diagnostics and stem cell therapy for a while, I'd seen that it takes about 10 to 15 years for a drug to get from lab to market, which is a very long time for someone waiting for innovative cancer treatments. I wanted to make a difference.

### What real-world challenge do you want to address?

Ishani: We create 3D-printed tumours using patient biopsies to provide a platform for rapid, ethical, sustainable and accurate drug testing. We isolate the cells that are responsible for maintaining those tumours, while also replicating the immune system environments for a more accurate model.

We're aiming to support pharmaceutical companies with drug discovery and testing and, in the long term, want to have an impact on patients directly by offering treatment tailored to them. That's something we can't do

We're here to disrupt an existing but inefficient market with better, faster modelling."

#### Ishani Malhotra

Founder and CEO, Carcinotech

overnight, but we're already working on it with pharma companies and Contract Research Organisations, providing them with accurate, rapid models – helping drugs reach the market faster.

What success have you seen so far? Ishani: So far, we've got some great feedback from the companies and surgeons we've been working with and can see there's a strong need for our models both in the UK and beyond. We're working with companies in the US and Europe, too.

Through our introduction to the Usher Institute we were able to work collaboratively with surgeons – something that helps validate our

technology in real-world settings and also allows us to evolve our business plan, so we're catering to hospitals as well as pharma and Contract Research Organisations. We are currently speaking with surgeons in a whole range of different cancer areas and are looking to expand our portfolio.

## What role has the AI Accelerator played in supporting your entrepreneurial journey so far?

Ishani: The Accelerator came at the right time for us because we were looking to scale up, and now that we are closing our investment round and getting new funds, we're ready to grow. The pitching sessions allowed us to tailor our pitches for investors, but also for other audiences. And all the sessions on topics such as sales and marketing commercialisation gave us the knowledge that we needed to get there.

What is next for Carcinotech?
Ishani: Next is a round of hiring. We've already got a few great scientists on board and we're looking to expand the scientific, commercial, marketing and the sales teams.



## Bioliberty



SECTOR

Medical Technology



SOLUTION

Life-changing technology that strengthens grip for sufferers of hand weakness



**DDE INITIATIVE** 

Al Accelerator + Seed Fund + Digitech Work Placement



**WEBSITE** bioliberty.co.uk



What led you to setting up Bioliberty?

Rowan: Before Bioliberty, I worked for a couple of big medical device companies. Ross, my flatmate and co-founder, came to me with an idea. His aunt has MS and through her experiences, he realised there was very little technology to help her in dealing with hand weakness and assistive hand rehabilitative technology. He'd seen a gap in the market and knew I had the expertise to help fill it. That was two years ago, and it's gone like a flash. Now, we're full time.

### What real-world challenge do you want to address?

Rowan: Bioliberty is in the medical robotics industry and our first product is an exoskeleton robotic glove that helps people carry out rehabilitative exercises by providing resistance training, while also measuring key metrics related to hand mobility. Our first target conditions are trauma and stroke, and we'll be looking at MS, arthritis, carpal tunnel syndrome and other conditions further down the pipeline.

The number one thing that motivates me is impacting people's lives, their independence and their ability to do things that we take for granted."

#### **Rowan Armstrong**

Co-founder, Bioliberty

What success have you seen so far?

Rowan: In my eyes, bringing new people on to the team has been a huge measure of our success so far. Finding the right fit and building on our cultural purpose, knowledge and morale is huge. It will help us reach our ultimate goal of giving the hundreds of thousands of people who are undergoing a difficult experience the ability to get their grip back again – and then scaling their technology to other parts of the body.

What role has the AI Accelerator played in supporting your entrepreneurial journey so far?
Rowan: We were lucky to get a place on

the AI Accelerator, I think we were the earliest stage company on the cohort. Being among such giants of data innovation in the networking sessions meant we learnt a huge amount. It was also great to attend sessions on purpose, branding, marketing and operations. The Programme Manager even organised some healthtech specific roundtables for us.

What is next for Bioliberty?

Rowan: We're very excited to be doing a clinical study for 'Life Club' over the summer where we'll be bringing our product into a clinical environment. Next, we'll be looking at ramping up manufacturing and actually launching 'Life Club' in the UK and the US. Then it'll be looking at how our technology can scale up to other parts of the body.

The seed funding we received from DDE has been amazing. It was the first funding we got that wasn't a grant, and having that direct investment and vested interest in the company from the University was huge for us."

#### **Rowan Armstrong**

Co-founder, Bioliberty



## THE START-UP Rhizocore



**SECTOR**Biotechnology



SOLUTION

Tackling climate change through scalable methods of accelerating plant growth

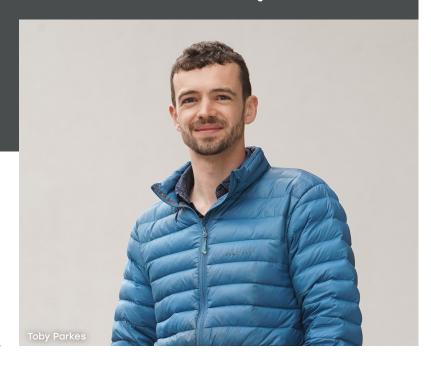


**DDE INITIATIVE** 

FAST Programme + Seed Fund



WEBSITE rhizocore.com



#### What led you to setting up Rhizocore?

Toby: I came into contact with Deep Science Ventures, one of the University of Edinburgh's partners for the FAST Programme, as I was finishing my PhD in plant pathology. The programme paid me to spend a year looking at controlled environment agriculture and other areas within agritech to see where there was room for new ventures.

One of the concept companies I created was Rhizocore. We decided it was the most likely to seed and would also have the largest upside for the planet, biodiversity and carbon sequestration. We have been running with it ever since.

## What real-world challenge do you want to address?

Toby: The end goal is making forestry generate more quickly, so that woodlands can be established faster and be more resilient to environmental stresses and changes.



The FAST Programme gives people like me the space to build a company to start making a real impact on climate change, biodiversity and carbon issues, now."

#### **Toby Parkes**

Founder and CEO, Rhizocore

I knew that ectomycorrhizal fungi are natural fertilisers for trees.
I started asking forestry and wooden regeneration organisations whether we were using these organisms. The answer was, largely, 'no'. We spotted a gap in the market and decided that we'd come up with a system – our pellets, which are developed based on the needs of trees specific to their geographical locations – that would counteract the fact these fungi weren't being used in an organised way.

#### How are you defining success?

Toby: Success for us is in establishing ways to support woodlands, making sure that we are regenerating ecosystems at scale and sequestering as much carbon as we possibly can. That's where we find success and impact in what we do.

What role has the University of Edinburgh, the FAST Programme, advisory support with the Scottish Enterprise SMART: SCOTLAND grant application and the DDE programme played in supporting your entrepreneurial journey so far?

**Toby:** PhDs teach you how to solve problems. People generate start-up companies when somebody solves a problem that is commercially viable.

FAST gives PhD students, postdocs and young career researchers the space to properly analyse possibilities and consider the kind of companies they might generate with the support of a salary.

Crucially, DDE and University of Edinburgh have helped us alongside the FAST Programme. We received investment from DDE's Seed Fund and strategic business support when completing our recent, successful SMART: SCOTLAND grant application.

#### What is next for Rhizocore?

Toby: Next is scaling up the funding side of the business, so we can move from lab scale operations to larger ones. We won't get anywhere in terms of improving biodiversity and combating climate change unless we are producing and planting millions of pellets a year – so that's what we're working towards.

#### **DDE PROGRAMME**

## Who to contact



Katy Guthrie

Al Accelerator Programme Manager, Edinburgh Innovations

Katy Guthrie is the AI Accelerator Programme Manager. An alumni of the University herself, Katy worked for many years in data practitioner and data leadership roles within financial services. She got involved with supporting early-stage businesses when working as Head of Data with ScotlandIS. Here, she helped to build and expand Scotland's community of data-driven businesses, highlighting opportunities, fostering collaboration and demonstrating the breadth of Scotland's capability. She also sat on the steering committee for the development of Scotland's AI Strategy.

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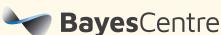
**Laura Bernal** 

Venture Builder Incubator Programme Manager, Edinburgh Innovations

Laura Bernal is the Venture Builder Incubator Programme Manager. Laura became involved in the start-up and innovation ecosystem when she hosted a radio show on global innovation. After this, she did a master's in innovation, creativity and entrepreneurship and launched her own start-up based on data management to facilitate organisational collaborations for Open Innovation projects. She has also provided consultancy for incubators, and designed training for entrepreneurs within the curriculum of different universities across the UK.

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The Bayes Centre is the University of Edinburgh's innovation hub for Data Science and Artificial Intelligence.

The Bayes Centre is working with Data-Driven Innovation and Edinburgh Innovations to deliver DDE's flagship programmes on behalf of all DDI hubs.







## What's next?

Are you inspired to find out more about how the DDE programme can help you connect your ideas to the world? **Scan the QR code below!** 



Or visit: edinburghdde.com



Other useful links:

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