

### The Haydn Green Institute for Innovation and Entrepreneurship

**Impact Report 2021** 





Welcome: Professor Shearer West  Foreword: Professor Simon Mosey	5
Research	13
Practice	
The Ingenuity Lab	18
Entrepreneurs in Residence	21
The Ingenuity Programme	22
Witty Entrepreneurial Scholarships	24
Young Entrepreneurs Scheme	26
Meet the team	28





Professor Shearer West CBE
President and Vice-Chancellor
University of Nottingham

The Haydn Green Institute is among the world's leading centres for enterprise education and the focus for entrepreneurial skills development at the university. Innovation is at the heart of the work of the Institute – through its awardwinning research and teaching, support for business start-ups, and through its public-facing entrepreneurial programmes.

Universities will have a large part to play in recovery following Covid-19, especially within their local communities. The Institute supports schemes encouraging entrepreneurship not only at the university, but also in the communities we serve. Now in its sixth year, the Ingenuity Programme has built a partnership network aimed at creating impact and opportunities for disadvantaged groups across the UK. The Young Entrepreneurs Scheme (YES) is now in its 25th year. Over that time more than 6,000 researchers have taken part in the programme, exploring ways in which breakthroughs from science and engineering can address societal and environmental challenges.

The Ingenuity Lab has used innovative techniques to continue to support students and alumni to start up their own businesses, with invaluable contributions from Entrepreneurs in Residence – business leaders who volunteer their time and expertise to help ventures develop and grow.

Researchers from the Institute have conducted award winning research considering the challenges facing individuals who do not typically self-identify as entrepreneurs. The transition to online working has allowed innovative research to be shared more widely and encourage community groups to create social ventures to overcome inequality and social injustice.

Our staff, students and graduates are known for their willingness to experiment and innovate, and this is showcased in this report, demonstrating the outstanding work carried out at the Haydn Green Institute over the past year.



Professor Simon Mosey
Director
Haydn Green Institute

This year we have seen an age-old debate being revisited across the world – do we "build back better" or "build back differently"? Build back better suggests incremental innovation, carefully improving on what we have done previously. While build back differently implies radical innovation, sweeping away old traditions with completely new ways of working. Both arguments have merit, but our research shows that it is possible to do both, and here at the Haydn Green Institute (HGI) we have been proving it.

The last twelve months has seen the team at HGI build on the resourcefulness with which we responded to the Covid-19 pandemic in 2020 and continue to find new ways to explore innovation and entrepreneurship teaching, research and practice.

In this report, you can find out how we have introduced new methods of teaching to support our students this year. We found that asking 'is it better to teach face to face or online?' was the wrong question. A better question was 'how can we teach online that we could never do face to face?' This has allowed us to bring lived experiences of entrepreneurship from all over the world into the virtual classroom and I am delighted that this was recognised with a Lord Dearing Award for Innovative Teaching.

Research at HGI has explored inclusion in entrepreneurship and innovation, focussing on disability and gender equality. Here we have found that online working has enabled us to engage with disadvantaged groups and involve them in framing our research in a way that previously would have seemed impossible. The impact of this award-winning work is life changing and can be seen in the Research section of this report.

The Ingenuity Lab has continued to support and build its network of business start-ups with an engaging programme of events throughout the year, including Pitch to Win, Ingenuity though Music and She's the Business. Scale, the Lab's accelerator programme, offered support for those businesses ready to move to the next level. I would like to thank our Entrepreneurs in Residence who have continued to volunteer their time and expertise to help our businesses develop and grow.

HGI is home to the Young Entrepreneurs Scheme (YES) and the Ingenuity Programme, each offering participants opportunities to develop new ideas to address societal challenges.

Both were delivered online this year, bringing opportunities for exploring new ways of delivering the programmes, bringing in new partners and reaching new and more diverse audiences.

The Haydn Green Foundation has supported the Institute for the past eight years – it is thanks this this invaluable contribution that we are able to continue our work in to develop the skills of the next generation of innovators and entrepreneurs.

I would like to conclude by expressing my thanks to all of the HGI team for their hard work, enthusiasm and innovation over the last year, and also to say a special "thank you" to Paul Kirkham, who retired from the university, in July after ten years of supporting students and business startups. Paul's unique combination of scholarship, creativity and humour will be sadly missed.

As I look forward to next year, I am confident that we will continue to bring our unique talents at HGI to help society build better and build differently! Our graduate start-ups are

2nd in the UK



for their turnover of nearly

£160 million for 2019/20\*



for the amount of investment they have received, nearly

£70 million for 2019/20\*



2,800

business school students

286

students from the wider university



took an
enterprise module
in the academic year
2020-21



for the number of social enterprises established\*





We've now held the Small Business Charter accreditation for three years\*

\*Awarded December 2019

\*HESA (Higher Education Statistics Agency) Source: www.hesa.ac.uk



Within the Hadyn Green Institute (HGI) we have continued to adjust and change as we learn how to do things better as well as how to do things differently, in order to support our students adapting to new and different ways of learning and engaging.

As with all things relating to this pandemic, there are lessons that we have learnt that will now remain as an integral part of our teaching activity which we would never have considered before. In some cases, it has changed our teaching practice for the better – with new and innovative techniques being introduced. We were delighted that Dr Chris Carter's efforts were recognised with a Lord Dearing Award for Innovative Teaching this year, as you will read on the following page.

On the other hand, there are elements of our teaching that cannot return quickly enough. For me, the chats after lectures with my students is one thing that I have missed immensely and has been difficult to replicate.

We have had so many successful examples of good practice that there is not the space to report them all here, but over the next few pages are some of the highlights of the great work that has taken place within our Institute this year.

I would like to take this opportunity to thank all my HGI colleagues for their hard work, dedication, and unwavering enthusiasm that has meant we have delivered an innovative and entrepreneurial educational experience to be proud of!



nottingham.ac.uk/go/hgi-study

Education

The Haydn Green Institute for Innovation and Entrepreneurship

Impact Report 2021

Education





### Inspirational teaching methods

### **Dr Chris Carter receives Dearing Award**

Dr Chris Carter, Assistant Professor in Entrepreneurship and Innovation, was recognised for his Innovative Teaching at the Annual Lord Dearing Awards this year. The Lord Dearing Award Scheme recognises the outstanding achievements of University of Nottingham staff in enhancing the student learning experience, with nominations coming from students at the university.

Throughout the last academic year, Chris has sought out interesting and innovative ways of connecting with the students on his Entrepreneurial Creativity module via remote learning. His solution was to create engaging video content to go alongside his lectures, aiming to encourage students to connect with him as Module Convenor and feel as though they were part of a more interactive learning experience.

"Last Summer, we all faced the daunting task of converting

our lectures into – what was for most of us – an entirely new format: the pre-recorded lecture. As an entrepreneurship scholar, I'm used to framing challenges as opportunities for our students, so what better time to demonstrate creative leadership and truly practice what I preach?" Chris explained.

"While rather time-consuming to plan, record and edit, these lectures were incredibly fulfilling to create and did end up generating quite a buzz on Teams on Monday mornings, as the students waited to see what direction I would surprise them with that week!

I was genuinely blown away to find out about the Lord Dearing Award for my teaching this year. I'm lucky to work with so many equally deserving colleagues who have not only survived this past year, but thrived in the situation, too."



### Adapting to change

### Innovative approaches

Dr Tom Coogan's first year undergraduate module Entrepreneurship: Theory and Practice was forced to quickly move entirely online this year as a large cohort of over four hundred students made it incompatible with any degree of social distancing. As the name suggests, ETP's content includes both theory and practice, and so presented a particular challenge in working within the confines of online delivery platforms such as Moodle and MS Teams.

After consideration, Tom made the decision to deliver much of the content via short pre-recorded videos on Moodle, while lecture engagement sessions on MS Teams were devoted to Q&As on the week's material and group activities involving student development of a social enterprise. This delivery evolved considerably over the course of the first few weeks as Tom and his students became accustomed to the new modes of learning, working out what worked best for them.

While both students and staff missed face to face interaction, there were some advantages to this method of delivery. Students could move through the lecture videos at their own pace, so the content could be made more compact and richer than a live lecture moving at the pace of the room. They also had the benefit of being more accessible, with each being scripted and captioned.

In the previous version of the module, group activity was limited by the need for block bookings of rooms for a whole day of seminars, and by the need for a supply of mentors to spend the day interacting with groups, meaning that these gatherings only happened three times over the module. Online, however, the creation of virtual group space by allocating each group a channel within Teams meant that they could break out into group work every week, and mentors could easily drop-in on groups at every session.



The EIM programme has been amazing and as a business owner, I have gained a lot of practical insights in creativity, innovation and business management, which will be key to growing my business and launching other future businesses.



## MSc Entrepreneurship Innovation and Management A transformative experience

Peter Paul Akanko is a creative entrepreneur from Ghana, who studied MSc Entrepreneurship, Innovation and Management this year. Peter came to the university on the Chevening Scholarship programme, looking to expand his knowledge in the field of entrepreneurship, having started his own social enterprise back home.

His business, Kente Master, works with various weaving communities in Ghana, helping to economically empower them through access to new markets. As well as contemporary clothing, the company produces personalised graduation stoles (pictured above), styled with the traditional patterns of Ghanian kente fabrics.

"My time here has been very transformative. Not only did I get the chance to gain great knowledge and experience from the various modules, I also had the chance be a part of the Ingenuity Lab, which has given me the chance to engage with and learn from their network of Entrepreneurs in Residence" Peter explained.

"My classes have been great and although they have been virtual, it almost felt like being in the classroom. All the modules involved some research and presentations on existing organisations and other practical case studies which have been very insightful.

The entrepreneurship project in our second semester gave me the opportunity to engage with an existing business and introduced me to consultancy, which was a great experience.

The EIM programme has been amazing and as a business owner, I have gained a lot of practical insights in creativity, innovation and business management, which will be key to growing my business and launching other future businesses."

Peter will go on to gain more practical experience after completing his Masters. Thanks to help from the university's careers team, he was successful in gaining an internship with Austrian health company SanusX. He will spend seven weeks with them, helping develop new products and services.





Focus on MSc Entrepreneurship Innovation and Management Champion of innovation for Africa

Gabriella Kisoi is an entrepreneur from Kenya and was this year's Course Representative for the MSc in Entrepreneurship, Innovation and Management.

Her passion for innovative sustainable development and climate action led her to start a social enterprise that empowers Kenyan fruit and vegetable vendors to join the modern economy by manufacturing climate-smart, solar-powered market stalls. She came to Nottingham University Business School to expand her entrepreneurial knowledge and build a strong foundation for her career.

"I chose Nottingham because of its international reputation for excellence and world-class EIM programme, but I have been won over by the tight-knit community, as well as the endless opportunities for growth and personal development.

The academic element has exceeded my expectations, enabling me to bridge theory to practice. Most notably, I enjoyed the Entrepreneurial Creativity module that gave me the creative freedom to submit coursework in the form

of interactive blogs, as well as launch an environmental enterprise centred around food waste and group diversity. This module taught me as much about innovation as it did about my thinking style and has shaped the way I approach collaboration in an entrepreneurial environment.

Another favourite was the Entrepreneurship Project in which I had the chance to be a consultant for the Ingenuity Lab. Throughout the module I gained practical insights from industry professionals about the ins and outs of consulting, and it was a rewarding experience knowing that the final report would go towards making a meaningful difference.

My time at the Business School has allowed me to discover how I can hone my skills and experiences to become a champion of innovation for Africa. My motivation plan is to shape entrepreneurship and innovation within the African continent to deliver more sustainable enterprises that make both an impact and an income."





### Research

**Dr Lorna Treanor and Dr Robert Wapshott** 

Research Directors, Haydn Green Institute

HGI's scholars carry out high-quality research in areas such as entrepreneurship education, technology entrepreneurship, government enterprise policy and entrepreneurial activity among marginalised groups both in the UK and internationally. Our team undertakes research with impact in line with the UN's Sustainable Development Goals such as Gender Equality and Poverty Alleviation.

Examples include researching the impact of Covid-19 on women entrepreneurs, working with agricultural workers in rural China and exploring diversity and inclusion in business. Over the next few pages, we cast a spotlight on just some of the research being carried out at the Institute.



nottingham.ac.uk/go/hgi-research



Research Research The Haydn Green Institute for Innovation and Entrepreneurship **Impact Report 2021** 

### Inclusive entrepreneurship and innovation

### Making a difference through research









Much of the research undertaken at HGI in the past year has focussed on inclusion in entrepreneurship and innovation, in particular exploring disability and gender equality in these contexts.

Dr Tom Coogan (photo top right) co-authored a report on Supporting Diversity and Inclusion in Innovation, published by Innovate UK and sponsored by the Economic and Social Research Council. The study outlines barriers, challenges, opportunities and support needs for minority ethnic groups and disabled people to participate in business innovation, and UK Research & Innovation has already committed to implementing several of its recommendations.

Dr Lorna Treanor (photo top left) received the University of Nottingham's Rising Star: Impact Award for her work highlighted the disproportionate impact of the global

Covid-19 pandemic upon women entrepreneurs, and she shared her research with D2N2, the Local Enterprise Partnership and Nottingham City Council. This led to the establishment of a regional forum to promote women's entrepreneurship and support the recovery of womenowned businesses.

Dr Treanor also met and shared her work with politicians in Northern Ireland, including the First and Deputy First Ministers, and with the Minister for Business, Enterprise and Industrial Strategy, Paul Scully MP. Over this past year Lorna was also commissioned by the Enterprise Research Centre to draft a State of the Art Review of research and current thinking on Diversity in R&D and Innovation for a policymaker audience.

Across a fifteen-month period, Dr Isobel O'Neil (pictured second from left) and Dr Lorna Treanor have also carried out research exploring the entrepreneurial aspirations and activities of women from low-income households in the UK. They shared their initial findings at the Gender, Work and Organization conference in June 2021. Meanwhile, Dr Punita Bhatt (pictured second from right) has been continuing her research exploring the experiences of impoverished women entrepreneurs in India and the







### **Entrepreneurs hiring** their first employee

This year, Dr David Achtzehn (above left) and Dr Robert Wapshott (above right) have been working on a new project to understand how entrepreneurs approach the prospect of hiring their first employee. Having made a start on the first round of data collection, Robert Wapshott explained the progress the team has been making:

"It's been a busy year on the project and, thanks to the support of various networks across the university, we have been recruiting participants to our study. We have started with research interviews and already we're picking up some very interesting insights and perspectives on this topic. We're really looking forward to holding further interviews in the coming weeks and months."

The project team intend to share their initial findings and ideas with academic colleagues at conferences and workshops during the autumn, as they continue to grow the study.



### **Innovation management**

Dr Rachael Lamb's research focusses on innovation management, examining how early-stage innovation is evaluated. The aim is to enable organisations to broaden the range of possible innovations they consider and create sustainable value. Rachael is currently working with Aerospace Unlocking Potential, a £20m initiative to support the aerospace supply chain in the Midlands by helping to unlock its innovation potential.

Research

The Haydn Green Institute for Innovation and Entrepreneurship

Impact Report 2021

Research





### PhD focus Investigating the challenges faced by entrepreneurial women refugees

Nkechi Adeeko was awarded a Nottingham University Business school scholarship in 2018 to conduct doctoral research in Business and Management. Her research examines how refugee women overcome multiple societal challenges as they engage in entrepreneurial activities.

Data collection and analysis during the pandemic introduced an unexpected opportunity to evaluate the project not only as a research task, but also as part of the women's identity work.

"Being a researcher in these circumstances was a sobering experience," said Nkechi. "As the women reflected on their experiences during this particularly challenging time, the interview process itself became part of their identity work process.

As such, it reinforced their position as entrepreneurs and reminded them of how they were striving to hold on to their entrepreneurial identities whilst caring for their families. One participant in particular mentioned how therapeutic she had found one of the interview sessions during this period."

Now in the third year of her PhD, Nkechi's research has evolved under the supervision of Dr Lorna Treanor and

Professor Susan Marlow. This year, an article she coauthored with Lorna was published in the 3\* International Small Business Journal. The paper, Negotiating stigmatised identities: Enterprising refugee women in the United Kingdom, explored how women refugees undertake dynamic identity work to recreate themselves as entrepreneurs, attempting to move on from the stigmatised identity of the refugee.

"Having my work published has motivated me to see the potential for further interesting insights held in the data such as how the women manage the complexities of their entrepreneurial identities in the context of their households, as well as exploring a more critical examination of how good entrepreneurship really is for the women and their families – and consequently, how can it be made to be a better experience and route for empowerment and financial independence.

My supervisors have shown me how rich the PhD experience can be beyond the original research idea, not just in terms of personal and professional development, but also in engaging in research that has impact."





### International focus Addressing Sustainable Development Goals

Dr Bin Wu, Senior Research Fellow at HGI, continued his international research activity this year, embedding collaboration with partners from across the world. His work contributes to the university's strategic goals around the UN's Sustainable Development Goals such as alleviating poverty.

December 2020 saw the publication of his Global Challenges Research Development Fund (GCRF) pilot project investigating cooperative ecosystems and rural agricultural workers in China, in association with Sichuan Agricultural College and funded by the British government.

The overall aim of the project was to understand the composition, evolution, and different types of cooperative ecosystems and their impact in Sichuan Province in the last decade. The report included case studies on potato farmers, beekeeping cooperatives and e-commerce training for female agricultural workers in Southwest China.

Coinciding with the culmination of the Chinese government's national campaign for rural poverty alleviation, an online international event was held in December, with over 160 delegates from the UK, China and beyond. Contributors included guests from the Department for International Trade, the YouChange Foundation, British Standards Institution and the Chinese Academy of Agricultural Sciences.

As well as discussing the research's potential impact on international policy, the event provided opportunities to develop UK-China partnerships along the lines of sustainable agriculture, rural development and entrepreneurship in less developed regions of China.

In June 2021, Bin received a research grant from the Newton Fund and the National Natural Science Foundation of China to build on the successful completion of the GCRF project.

Dr Wu will co-ordinate the new project, Systematic Innovation for Food Security and Rural Sustainability in China, alongside Dr Tongquan Sun from the Rural Development Institute of Chinese Academy of Social Sciences. A workshop is scheduled for December 2021 for early career researchers, with support from research partnerships, internationally renowned scholars and industrial mentors.

"Global challenges in rural poverty, food security, climate change call for international research collaboration in sustainable agriculture and rural transformation," said Dr Wu. "This workshop offers a unique opportunity for early career researchers from the UK and China to address the above challenges and opportunities through cross-disciplinary research collaboration and engagement with multiple stakeholders such as governments, NGOs and farmers' organisations."

As well as his work on agricultural workers and rural sustainability, in April 2021 Bin co-authored a new report with HGI colleague Dr Chris Carter. The bond and retention of Chinese seafarers for international shipping companies was published by the Journal of Shipping and Trade and highlights the necessity and complexity of the mutual commitment and long term cooperation between global seafarers and foreign shipping companies.

### The Ingenuity Lab





and working, 2021 became a year of adapting to those changes. This year we have continued to support our members during a very uncertain time, while seeking to expand and diversify our events programme, bringing more expert advice and insight than ever before.

This year we had the privilege of introducing several new contributors as we gratefully welcomed back a host of Entrepreneurs in Residence, academics and speakers from the Lab community who delivered a stellar series of Roundtable events.

We started with a fantastic seminar by alumni Richard Hillson, financial services entrepreneur and an expert in the field of alternative investments. It was amazing for our members to hear from a successful entrepreneur, now based in New York, who once walked in their shoes as a University of Nottingham student.

Later in January Rachel Hayward, founder of Swap Shop, introduced her innovative new business which helps its members to survive and continue developing during the Covid-19 lockdown by allowing them to access key business services, sustaining their businesses during such a crucial time.

We were also excited to launch our very first pitch competition this year, 'Pitch to Win', where Lab members were given a chance to polish their elevator pitches and be in with a chance to win a £1,000 prize. There were three winners and lots of smiles in the end, and we can't wait to do it again.

In addition to our traditional business events, we had the honour of welcoming our very

While 2020 introduced us to new ways of living own Director, Professor Simon Mosey for an innovative lunchtime concert - Ingenuity though Music. Simon played a selection of audience requests on his piano, while sharing incredible insights around ingenuity and how it relates to music. The event was attended by enthusiastic listeners from far and wide, including Lab members currently overseas - truly demonstrating the possibilities now available through virtual events.

> This year was full of first-time launches and collaborations as we also held our 'She's the business' event, celebrating the strength, courage and promise of female entrepreneurship, bringing together leaders from across our university, who also happen to

Other collaborations include our first ever Venture Innovation Challenge between our Lab venture members and Witty Scholars and the inaugural running of Scale, our new accelerator programme. We also launched an exciting collaboration with myNexus, a smart-matching system for early-stage investment, and various other exciting relationships and networking opportunities throughout the year.

I can certainly say that 2021 has been a year of great exploration, with many more exciting things to come.

nottingham.ac.uk/ingenuity-lab



### Scale

In July 2020 the Lab successfully ran its first accelerator programme, Scale. The objective of the programme was to ensure Lab members' businesses are viable, innovative and scalable beyond the pandemic, learning how to overcome perceived barriers to scaling their business.

Support came from five Entrepreneurs in Residence, who generously lent their time to mentor participants, as well as academic staff from HGI delivering seminars on issues like marketing, HR and scaling financial processes.

"The Scale programme is dynamically designed, systematically organised, and delivered with optimal mix of didactic talks

and interactive group learning", said Jun Xia, who runs Systematic Review Solutions Ltd from the Ingenuity Lab. "The multidisciplinary EIR team brought the audience a feast of essential knowledge in scaling up a small business. Attending the programme has enhanced my understanding in a range of areas of business operation, in particular, enhanced my strategic planning skill."

### Scale Accelerator programme Take your business to the next level

### Lab member focus The PC Security Channel

Originally from India, Rohit Satpathy studied for a Master's in Computer Science and graduated with a distinction in 2019. While studying, Rohit had built up a successful YouTube channel, sharing his thoughts on the cybersecurity industry and testing online security solutions. After graduating he wanted to expand on the philosophy behind the channel and start his own cybersecurity business in the UK, so he sought help from the Ingenuity Lab to successfully apply for a start-up visa.

As well as continuing to grow the YouTube channel - which now stands at over 160,000 subscribers - Rohit provides businesses with comprehensive cybersecurity testing, ensuring they are fully equipped to protect themselves and their clients' information from malware attacks. The PC Security Channel was listed as the fifth most recognised security testing lab in Europe in the AV Comparatives IT Security Survey 2020.



**66** The insight from the Ingenuity Lab and its associated events helped me formulate ideas for a long term business plan. The visa process was quite simple and the Lab was very supportive. The online surgeries by the Ingenuity Lab have definitely been helpful in keeping focussed."

### **Entrepreneurs in Residence**



66 The Ingenuity Lab is a brilliant network of diverse people and ideas who are united by the belief that we can make positive changes happen. The Lab has been instrumental in helping my business develop, grow, survive and adapt."

### Lab member focus **China Britain Regional Initiative**

Rob Avery-Phipps graduated from the university's Ningbo Campus in 2012 with a Masters in International Relations. Inspired by his experiences in China, he decided to create the China Britain Regional Initiative (CBRI) upon his return to the UK. CBRI works directly with local authorities in China and the UK, enabling meaningful and long-term programmes that generate economic, educational and cultural connections.

The Haydn Green Institute for Innovation and Entrepreneurship

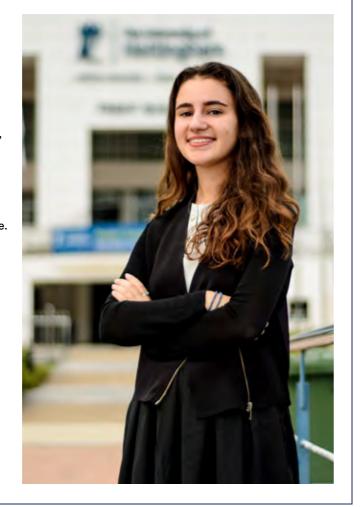
The Midlands has some of the UK's strongest regional connections into China, and CBRI helped set up the Midlands Engine China Group. They have also coordinated a high-level mission to key regions in China, and supported the Midlands Engine Internationalisation Strategy.

This work was recognised by UK and Chinese central governments as the Midlands was awarded the honour of hosting the UK-China Regional Leaders Summit in 2020.

### Lab member focus **Third Culture Nellie**

Nellie Khossousi graduated from the University of Nottingham with a BSc in Economics in 2018 and joined the Lab last year. Her business, ThirdCultureNellie.com, is a platform designed to equip people with the tools to affordably work and study abroad, by sharing paid programmes, scholarships, grants, application advice and affordable accommodation options. The aim is to encourage others to step outside their comfort zones and make travel and learning languages more accessible.

**66** The Lab has been a great way for me to meet other entrepreneurs, access expert advice on my business plan and also think about the legal side of things. I feel inspired and motivated, being part of an incredible community from all around the world. I am happy that I can still feel connected to the University of Nottingham."



### **Experienced entrepreneurs** lend their expertise

The Entrepreneurs in Residence (EIR) network, formed in collaboration with the Small Businesses Charter (SBC), started in 2017 and has become a vital source of ongoing support for the Haydn Green Institute. The EIRs are a group of experienced entrepreneurs who have a relationship with the University of Nottingham and enjoy helping aspiring entrepreneurs develop their ventures. Bringing a range of disciplines and entrepreneurial backgrounds, EIRs regularly engage in activities including mentoring alumni and student businesses, guest speaking, supporting MSc and MBA courses and aiding academics in their research.

"The current group of over 50 business experts provide hours of volunteer support and have raised the bar during the pandemic, providing vital support through their one-to-one surgery sessions when our businesses truly needed it most" explained Dr Terri Holloway. "The EIRs were also involved in delivering the new accelerator programme, Scale, designed to take companies to the next level of success."

Rob Carroll, Professor of Practice, said: "The generosity and camaraderie of the network has become a true ethos of the group, as they continue to support our businesses and students even in challenging times. As we look to enhance our growing network, we aim to embrace more disciplines, increase diversity and provide networking opportunities within the group for further collaboration and partnership. We celebrate the success of our EIR network thus far and are excited about the future possibilities it holds. We genuinely thank our EIRs for all they have contributed to our institute as a whole and look forward to another year of great opportunities."









66 Sharing my stories and experiences in the world of business is a great way of giving back to those who are iust starting out on their own iournevs in business and being a part of the EIR family allows me to meet some amazingly inspiring people who I also enjoy learning from."

Fiona Duncan-Steer, RSViP



55 During very challenging times the quality of enquiries for our surgeries has been of a high standard. The businesses have continued to seek innovative solutions to some of their in house issues and BDO has been able to support them on that journey and looks forward to continuing that support as the Ingenuity Lab reopens in the not too distant future."

Tom Preece, BDO



I love working with the Ingenuity Lab members, to enable them to get the best out of themselves. All new business start-ups are very challenging but so exciting. Having the support of others who have more or relevant experience is the speed dial that helps in many ways. It's great that I can support, guide and help these businesses flourish."

Mel Berry, Her Spirit

### **Ingenuity Programme**



The Ingenuity Programme supports the creation of start-ups that find innovative and sustainable solutions to tackle the UK's biggest challenges, working in partnership with industry, education, and communities.

Due to Covid-19 pandemic, the rescheduled online 2021 Programme brought together over 300 industry, academic, and third sector volunteers, and saw applications from 800 participants. This year's Programme saw its most diverse cohort to date, with 50% female innovators and just under half of participants from communities experiencing racial inequality.

In early March, Ingenuity hosted virtual Challenge Summits, designed to provide a deeper understanding of some of the biggest issues facing the UK. The Summits featured over 50 keynotes, followed by lively Q&A sessions from across the four Ingenuity regions.

The Summits were supported by an online learning programme, the Develop Platform, featuring national insights into four Challenge Pathways: Creating

Prosperity, Improving Health, Building Community and Tackling Climate Change.

Participants then had the opportunity to discuss their initial ideas with a mentor, before creating an outline business plan. They followed an 11-step process to build the plan, supported by tutorials and drop-in sessions with industry and academic experts.

The participants went through three rounds of judging, each with a panel of academic or industry experts. Those reaching the national finals received specialist mentoring ahead of their final pitch. The three-month Programme culminated in the Ingenuity Impact Evening, featuring award presentations from pioneers across the UK's charity, enterprise, and social innovation sectors.

The virtual event celebrated the Programme's national finalists and prize winners, and included keynotes from Cemal Ezel of Change Please, Nigel Kershaw OBE, Chair of the Big Issue Group, and Claire Dove CBE, the Crown Representative for Voluntary, Community and Social Enterprise.



Find out more about the Ingenuity Programme: ingenuityimpact.org



100 speakers and thought leaders













### **Partnerships**

The Ingenuity Programme welcomed a host of new partners to its 2021 Programme, including the addition of Charity Challenge Partners to create specific challenges that aligned with each organisation's values and strategic goals. Partners included Crisis, the Centre for Ageing Better, Groundwork, Engineers in Business Fellowship, Youth Futures Foundation, Birmingham City Council, Nottingham City Council, The Albion Foundation, Notts County Foundation and Nottingham Forest Community Trust.

The University of Nottingham was joined by 22 other universities across the country, including our regional hosts: the University of Warwick, the University of Gloucestershire, and Sussex Innovation Centre at the University of Sussex.

Elizabeth Smith, Head of Programme, said: "With the backing of our partners, we have been able to reach out and engage with more people than ever before, including those from under-represented groups. Working together, we have been able to help some incredible people to turn their brilliant ideas into reality. It has been so inspiring to see how our partners and changemakers are working together to build a fairer and greener society."







During the Impact Evening, over £200,000 worth of prizes and support packages were awarded to the most impactful business ideas from the South Coast, West of England, East Midlands, and West Midlands. Charity partners from across the Ingenuity network awarded support package prizes to ideas that most aligned with their values, and responded to one of the four Challenge Pathways.

### Focus on ChangeXtra



Former University of Nottingham PhD researcher, Claire Mann, joined the Ingenuity Programme to see how she could use her own experience to support others going through the menopause. After struggling to get

appropriate advice from her GP and finding that symptom-tracking apps were not inclusive enough, she felt unsupported and uninformed. After reaching out to friends for guidance, she discovered that they also encountered difficulties in accessing support and information to help understand their symptoms. This experience gave Claire the idea for her business concept — ChangeXtra. This will use counselling, coaching, support and access to learning to support and empower women going through the menopause.

At Ingenuity's Impact Evening, Claire won six awards totalling £25,000. Alongside the prestigious Impact Entrepreneur of the Year award of £10,000, Claire also received the Brenda Dean Award for Female Entrepreneurship, the East Midlands Champion Award, and the 'Improving Health' National Champion Award.

"I went from just having a spark of an idea but having no idea how to plan a business, to submitting a winning plan and pitch in under a year, and I only did that because of Ingenuity. Winning the awards means that I can start helping women sooner. I can't wait to get started," said Claire.



Find out more about this year's winners: ingenuityimpact.org/winners

# Next year's programme

Ingenuity's 2022 Programme will launch in late 2021, with State of the Nation Summits taking place in December, followed by an online insight and training programme and business plan competition running from February to May 2022. The programme will include ongoing mentoring and support for this year's winners to ensure they are investment-ready and creating impact.

We continue to be committed to building our local, regional and national partnerships in order to widen the pool of impact-driven ideas, and reach into underrepresented communities to work with those who would not traditionally consider themselves entrepreneurs."

Director of Ingenuity, Steve Chapman

### Witty Scholarships



**Janet Wallace** Entrepreneurial **Scholarships** Manager

The Witty Entrepreneurship Scholarship is for students at the University of Nottingham who have an interest in setting up their own business, being creative, innovative, having a distinctive career, supporting social enterprises and giving themselves an edge in a competitive jobs market.

This past year has seen the Witty Scholarship grow with 25 new scholars welcomed to the programme, which was extended to include online Challenge events to help scholars develop and meet each other.



The Haydn Green Institute for Innovation and Entrepreneurship

Challenges included consultancy support for Ingenuity Lab businesses, working with HGI academic staff to run a fictitious bicycle company, and being the first University of Nottingham team to enter the SAP "ERPsim" competition, where the scholars competed against students from business schools across Europe.

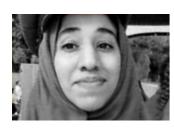
Janet Wallace, Scholarship Manager said: "Mentors supported business ideas, career paths and helped the Scholars through the lockdowns. Despite the pandemic we have much to celebrate this year, with scholars continuing to set up their own businesses and pursue careers in a variety of areas.

"Kathryn Moore won the UK First Generation Undergraduate of the Year, which was a huge achievement and we are incredibly proud of her. Kathryn has always been an enthusiastic member of our community and she joined in our events from Estonia, where she was fortunate to study for some of this year."

nottingham.ac.uk/go/wittyscholar

### **Venture Innovation Challenge**

### Finding solutions to real world problems



The Venture Innovation Challenge provided Witty Scholars with the opportunity to work with businesses based at the Ingenuity Lab, to provide a solution for a real-world problem they were facing. Prizes were awarded for the teams that found the most innovative solution and the team that had the most innovative pitch.

The winners of the most innovative idea award (pictured top to bottom) - Ikra Mahmood (Medicine), Jessica Langton (BSc Animal Science) and Lucy Fergusson (BA Modern Languages with Business) - share their experiences on the Challenge below.

"On the first day, we heard from a range of businesses, who each had unique problems needing innovative solutions. As a team, we felt drawn to the business Henrique's Holograms as the problem this presented felt contemporary and relevant to us.

We worked with Ingenuity Lab Manager, Dr Terri Holloway who was really helpful as she encouraged us not to funnel our ideas, but to consider as many solutions as possible.

Once we had decided on our idea, we only had 24 hours to turn this into a legitimate proposal. We split our presentation pack into three topics: market research, specific applications within the education industry and benefits and drawbacks of diversification.

Although it was a tight turnaround, we all really enjoyed this challenge. We were so proud to present our idea to Henrique and receive the award of most innovative idea. As a team, we found this to be a challenging but rewarding experience, which encouraged us to be brave with our ideas and think outside of the box."

### **Working with Experian**

**Charagh Bibi Kwakye BA Geography with Business** 



In August 2020, Bibi Kwakye was commissioned by Experian to design their Black at Experian Logo and their 2020 Black History Month campaign. She had built a relationship with Experian through her role on the Finance Education Committee that was set up in partnership with the Witty Scholarship programme.

**66** I received great feedback and was part of a monumental culture change for Experian. Through the design process, I was able to take onboard feedback and improve my design through agile working. This working style was useful as I was able to see how honest feedback can improve the quality of my work. I have adapted this style of working to my professional life and really enjoy using it. I am grateful to the Witty Entrepreneurial Scholarship for pushing me in the right direction as this opportunity would not have been possible without them."

### **Putting theory** into practice

**Matthew Tompkins BSc Management** 



Matthew Tompkins is a third year BSc Management student, and a Witty Entrepreneurial Scholar under the mentorship of Dr David Achtzehn. As well as studying for his degree, Matthew runs a web design and digital marketing agency, which he has developed by implementing knowledge and experiences learned on both his degree and the Witty programme.

**66** The Witty Scholarship has been extremely helpful - the financial support took some of the pressure off, and, the start-up fund provided a way of accessing funds in order to start and grow my business. My mentor gave me lots of advice that I was able to action in my business. Learning first-hand from real-world entrepreneurs has been both inspiring and informative and given me knowledge on top of my business degree."

### **Getting social**

**Azraf Bor BSc Microbiology** 







Third year Microbiology student Azraf was appointed social media ambassador for the Scholarship this year. As part of his role, he was tasked with growing the online presence of the programme, improving his digital marketing skills and gaining work experience in the process.

**66** This year I was fortunate enough to be the Witty Scholarship Ambassador. My main goal was to increase awareness on social media platforms. This led to me post several times a week to motivate our followers and our community with motivational quotes every Monday and introducing the Witty community every Friday. Not only has this increased my skills but also led to our followers increasing by 50% and improved the community feel within the Witty Scholarship Programme."

# Celebrating 25 years of ingenuity

### **YES21 Competitions**



The Young Entrepreneurs Scheme (YES) is an innovative global competition designed to raise awareness among postgraduate students and postdoctoral researchers of how ideas from science and engineering can be commercialised.

Over the 24 years of YES, more than 6,000 researchers have taken part to create new ideas to address societal and environmental challenges. Participants develop

a business plan for a start-up company based on a hypothetical but plausible idea during an intense three-day residential workshop.

"The workshop is where the magic happens," explained YES Manager, Tracey Hassall-Jones. "It includes presentations and mentoring sessions from leading figures in industry and culminates in business pitches to a panel of equity investors. This year, we had to host the workshop online, bringing challenges but also new opportunities, to expand the delivery of the programme to different audiences."

In the lead up to the workshop, 22 online seminars were delivered covering subjects like due diligence, leadership, market access and regulatory affairs, with high demand for the creative thinking session run by Paul Kirkham. researcher at HGI.

Paul said: "Early on I realised that what we were doing was really special. We were reaching further than ever and hearing the quieter voices that are sometimes missed face-to-face. There was a real sense of occasion as people took an hour or two out of their busy days to do something different. By the time the finals came around, together we had built a collaborative, supportive community, in the very best traditions of YES."

Another new addition to the programme was a virtual careers fair, held in response to an upsurge in alumni asking for help with their next career move. A number of industry experts and YES alumni spoke at the event, informing and inspiring hundreds of researchers about what it takes to set up their own company, work in the field of intellectual property, become a venture capitalist. join the technology transfer profession and break into management consulting.

With such fantastic outputs and feedback, we will be adding this event to our YES annual calendar!



www.yescompetitions.co.uk





**UK universities** represented



The importance of YES was cited by Dr Malcolm Skingle, Director of Academic Liaison at GSK, in the State of the Relationship Report 2020. Published in December by the National Centre for Universities and Business, the report highlighted how entrepreneurship is crucial to ensuring the UK's economic recovery and reflected on its ability to improve youth employment.

Relationship Report at: Read the State of the ncub.co.uk/insight/the-state-of-therelationship-report-2020/

### 2020 winners

**Biotechnology YES** GeneSense University of Cambridge

**Engineering YES Pipeline Organics** University of East Anglia and University of Nottingham

**Environment YES** CyanoCycle University of Oxford

Best consideration of financial planning strategy

### **Sponsored by James Cowper Kreston**

BugBiome London School of Hygiene and Tropical Medicine and St George's University of London

Best consideration of IP strategy

### **Sponsored by Potter** Clarkson

Mycrobio University of Leeds, University of Sheffield and University of York

Best healthcare business plan

### Sponsored by GSK

**OMV Therapeutics** University College London

Best plant, microbial and environmental business

Sponsored by Syngenta CyanoCycle University of Oxford

People's choice award

Sponsored by Indigo Air Energy Renewable University of Nottingham

**GeneSense Winners of Biotechnology YES** 

# GeneSense

Left to right: William McCarthy, Neesha Kara, Sabila Chilaeva, Anna Suchankova and Daniel Kottmann

The The Biotechnology YES winners – from the University of Cambridge - presented an at-home finger-prick blood test allowing real-time monitoring of cancer patients undergoing therapy. This new solution aims to reduce costs and the need for inconvenient hospital visits.

**Young Entrepreneurs Scheme** 

Daniel Kottmann said: "It was a great experience participating in YES20. Coming together from five different departments and not knowing each other before, we had a fantastic team experience. Not only did we learn a lot about biotech entrepreneurship and business, we also built important connections and even friendships on the way."

### **Pipeline Organics Winners of Engineering YES**



Left to right: Natalia Balashova, Arielle Torres, Andrew Raslan, Eric Lehder and Kevvan Jodeiri

Engineering YES winners - from the universities of East Anglia and Nottingham - presented PipeTronics, a 3D-printed, enzyme-powered biofuel cell designed to maximise efficiency of energy capture from organic material in wastewater. This green technology aims to help the UK water industry achieve its ambitious pledge to achieve carbon neutrality by 2030.

Arielle Torres said: "Participating in YES20 was a highly rewarding, informative experience - winning the Engineering prize was the cherry on top! We proudly took an innovative product idea and developed it into a viable 'business' through the support of mentors whose invaluable experience and knowledge helped to refine our work. We look forward to utilising the network we've built throughout the process."

### **CyanoCycle Winners of Environment YES**



Left to right: Clare Cocker, Jochem Nielsen, Lisa J. K. Zillig, Andrew Wood and Ashwin Kumar Jainarayanan

The winners of Environment YES - from the University of Oxford - presented CyanoFlow Technology, which aims to significantly reduce energy usage during wastewater treatment, producing high-grade biological fertiliser in the process.

Andrew Wood said: "YES20 was an eyeopening experience for us. We learnt so much about pitching to investors and starting a business. To win against such tough competition was a big confidence booster for us all! We now feel like we know how to successfully develop a scientific idea into a commercial one and feel that this will definitely help us as we advance our careers."

### Meet the team



Co-director of MSc Entrepreneurship Programmes, Assistant Professor of Entrepreneurship and Innovation





**Josef Bone** Marketing and Digital Assistant, Haydn Green Institute and Ingenuity Programme



**Dr Chris Carter** Co-director of MSc Entrepreneurship Programmes, **Assistant Professor of Entrepreneurship and Innovation** 



Administrative Assistant, Ingenuity Lab



The Haydn Green Institute for Innovation and Entrepreneurship

**Dr Punita Bhatt** Assistant Professor of **Entrepreneurship and Innovation** 



**Professor Rob Carroll Professor of Practice** Venture Capital and Private Equity



Senior Administrator,

Ingenuity Programme

**Steve Chapman** Director, Ingenuity Programme



**Dr Tom Coogan Assistant Professor of** Entrepreneurship and Innovation



**Professor David** Falzani MBE Professor of Practice,

Sustainable Wealth Creation



**Andras Fesus** Administrator, Ingenuity Lab



Dr Andrew Greenman Tracey Hassall-Jones **Assistant Professor of Small Business Growth** 



Manager, Young **Entrepreneurs Scheme** 



**Dr Terri Holloway** Manager, Ingenuity Lab



**Amanda Miller** Marketing Manager, **Nottingham University Business** School and Haydn Green Institute



Dr Isobel O'Neil Director of MSc Entrepreneurship, Innovation and Management Associate Professor of **Entrepreneurship and Innovation** 



**Professor Simon Mosey** Director, Haydn Green Institute Professor of Entrepreneurship and Innovation



**Professor David Park** Professor of Practice, Director of **Executive Education, Associate** Dean (External Engagement)



**Dr Rachael Lamb** Assistant Professor of Entrepreneurship and Innovation







**Dr Hannah Noke** 

Deputy Director,

**Elizabeth Smith** Head of Programme, The Ingenuity Programme



**Dr Lorna Treanor** Co-research Director, Haydn Green Institute Assistant Professor of Entrepreneurship and Innovation



**Janet Wallace** Manager, Witty Entrepreneurial Scholarships



**Dr Robert Wapshott** Co-research Director, Associate Professor of Entrepreneurship and

Innovation



Dr Bin Wu Senior Research Fellow in Innovation

### Haydn Green Institute for Innovation and Entrepreneurship

Nottingham University Business School Jubilee Campus Nottingham NG8 1BB

+44 (0)115 846 7739

innovation-enquiries@nottingham.ac.uk

nottingham.ac.uk/enterprise

### Follow us at:

**●** @UoN\_HGI

**f** @theingenuitylab

in Haydn Green Institute for Innovation and Entrepreneurship