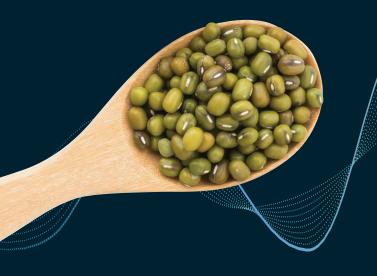




Plant Protein Connect: Shaping the Future of Food

INOX Sheffield, 12 March 2024





Join **CHAP**, speakers, and exhibitors, to eliminate the barriers of collaboration within the plant-based protein sector in the UK.









Plant Protein Connect: Shaping the Future of Food

INOX Sheffield, 12 March 2024

AGENDA

9.00 - 9.50

WELCOME / REGISTRATION

9.50 - 10.25

PRESENTATIONS

CHAP involved alternative protein projects

Dr Réka Haraszi, CHAP

The role of CHAP in the alternative protein sector

Dr Harry Langford, CHAP

— The role of open innovation in the plant-based alternative protein sector

Dr Jen Bromley, Vertical Future

Vertical farming as a source of plant-derived protein

Dr David McNaughton, Soya UK

Sustainable lupin production project

Dr Victoria Nash-Woolley, CHAP

Sustainable inputs for UK legumes

10.25-10.35 HOST TALK

Renew Food Manufacturing: Food Production for a Nourished, Resilient Nation

Prof. Tuck Seng Wong, University of Sheffield

10.35 - 11.35

KEYNOTE PRESENTATION / Q&A

Understanding the challenges and opportunities across the funding and regulatory landscape in the alternative protein sector

Andrew McLay, Innovate UK

Prof. Rick Mumford, Food Standards Agency

Chair: Dr Maria Masoura, Campden BRI

11.35-12.00 BREAK

12.00-12.50

PANEL SESSION / Q&A

Sustainability and plant-based proteins

Jenny Bussell, GWCT

Sustainable farming for nutritious proteins

Amy Stockwell, Eando

— The impact of LCA for sustainable operations

Tom Allen-Stevens, BOFIN

— The NCS Project – a farmer-led approach to achieve net zero

Chair: Dr John-Henry Looney, Sustainable Directions

12.50 - 13.45

LUNCH BREAK / NETWORKING

- live cooking show 13.10-13.30

13.45 - 14.45

PANEL SESSION / Q&A

Protein quality, nutrition and health

Dr Alan Javier Hernandez Alvarez, University of Leeds

— From seeds to solutions: the revolutionary impact of plant proteins

Prof. Donal O'Sullivan, University of Reading

— High protein, added-value, faba beans for food applications (FABAPLUS)

Dr Kieran Tuohy, University of Leeds

— Plant-based proteins for human health – getting to the guts of the matter

Dr Mark Young, CIEL

— The future of animal proteins

Chair: Ian Givens, University of Reading

14.45-15.00

BREAK

15.00 - 16.00

PANEL SESSION / Q&A

Industry and consumer perspective

Sophie Armour, GFI

— 'Will people eat it?' The highs and lows of consumer acceptance

Clare Otridge and Marie Charles, England Marketing

Finger on the pulse

Dr Sarah Gaunt, Rootiful/SPG Innovation

— Utilising by-products to improve the nutrition and economics of plant-based food

Mark Horler, UKUAT and CEA Proteins

 Controlled environment growing technologies for alternative plant-based proteins

Chair: Dr Aurelie Bovi, CHAP

16.00-17.00 NETWORKING

17.00-17.05

CLOSING REMARKS

Don't miss your chance to participate! Click here to enter the live Q&A and

ask your questions in real-time!

CHAIRS



Dr Maria MasouraFood and Drink Risk Consultant,
Campden BRI

Maria has over eight years' expertise in food safety and has engaged in multidisciplinary regulatory and research work spanning the fields of food, biotechnology, and molecular biology. With a PHD in life sciences and has a broader research experience in food microbiology and biotechnology, and engineering.



Dr John Henry Looney Director/Professor, Sustainable Direction Ltd

A sustainability management consultant for over 36 years (financial, environmental and social metrics) focused on helping organisations improve performance.



Prof. lan Givens

Director, Institute for Food Nutrition and Health and Professor of Food Chain Nutrition, University of Reading

With a background in biochemistry and nutrition Professor Ian Givens is a UK Registered Nutritionist. Currently Professor of Food Chain Nutrition and Director of the Institute for Food, Nutrition and Health (IFNH) at the University of Reading his research has a primary focus on the consequences of consuming animal-derived foods, including their contribution to nutrient supply and their association with chronic disease risk across the key life stages.



Dr Aurélie Bovi Innovation Sector Lead, CHAP

A molecular biologist and plant scientist by training, Dr Aurélie Bovi is a connector who has worked in business innovation facilitating roles for near 15 years, engaging and collaborating with UK and international organisations in cross-cutting industry sectors and disciplines to deliver solutions to the agri-food sector.

SPEAKERS



Dr Réka Haraszi Innovation Sector Team Lead, CHAP

Introduction to the Agri-tech Centres and their role in delivering innovation.



Dr Harry Langford Innovation Network Lead, CHAP

Harry will introduce the concept of open innovation, explore the need for open innovation in the plant-based alternative protein sector, and overview the New Innovations Programme that CHAP have recently conducted as a multi-stakeholder programme, across the sector, and its key findings.



Dr Jennifer Bromley Chief Scientific Officer, Vertical Future

Amaranth is an under-used crop/leaf despite its unusual amino acid profile. We have evaluated Amaranth amongst other leaf crops to understand their potential for use as ingredients in plant-derived protein products.

We have also explored growing methods, looking at both glasshouse and vertical farms and the latter was found to result higher protein yield. We have completed a comprehensive LCA and our results suggest equivalent carbon efficiency as current sources of plant-derived protein.



Dr David McNaughton, Managing Director, Soya UK Ltd

An overview of the sustainable Lupin project, highlighting who the partners are in the project, its main goals, and progress so far.



Dr Victoria Nash-Woolley Innovation Sector Lead, CHAP

Our project aims to identify and develop sustainable inputs including biopesticides and biostimulants that are effective for stress control in combining peas and Faba beans. These will maintain yields and increase resilience to future climate shocks for existing legume farmers as well as reducing the risk and increasing the likelihood of adoption of these crops by other farmers.



Prof. Tuck Seng WongProfessor of Biomanufacturing,
University of Sheffield

A discussion on the application of precision fermentation, a technique involving the programming of microorganisms to synthesize targeted proteins. Shedding the light on the intricate process of translating benchtop research from academic institutions into practical and commercially viable solutions.



Andrew McLay Innovation Lead, Innovate UK

The UK's funding landscape related to the alternative protein sector, focusing on plant-based proteins.



Prof. Rick MumfordDeputy Director for Science and Research,
Food Standards Agency

An overview of existing CEA growing technologies and environments, and how these might be utilised to support the production of alternative plant proteins – be that seed-to-sale or as part of an integrated chain.



Dr Jenny BussellSoil Scientist,
The Allerton Project

A soil science view on sustainable agriculture, considering how sustainable agriculture works across a farm rotation and how management decisions influence carbon storage and green house gas emissions.

SPEAKERS (Continued)



Amy Stockwell Senior LCA Specialist, Fando

Exploring the role of life cycle analysis (LCA), why it is important, and the challenges faced in completing the calculations.



Tom Allen-StevensFounder,
British On-Farm Innovation Network (BOFIN)

Introduction to the $\pounds 5.9m$ Defra-funded NCS Project and how farmers can get involved.



Dr Alan Javier Hernandez Alvarez Lecturer in Nutrition and Global Health, University of Leeds

Innovation in plant proteins for human consumption is crucial for promoting health, ensuring environmental sustainability, and achieving food security. Plant proteins can be produced more sustainably and in larger quantities than animal proteins to address malnutrition and provide affordable, nutritious food options worldwide. Despite the benefits, there are challenges including consumer preferences, cultural norms, and technological (taste, texture, functionality and protein quality). Future research needed to make plant proteins more appealing and accessible to a broader population.



Prof. Donal O'SullivanProfessor of Crop Science,
University of Reading

Detailed analysis of seed samples from diverse populations grown over multiple locations has revealed key "rules" governing variation in faba bean seed protein quantity and quality. Current genomic prediction models suggest a route to rapid improvements in bean seed quality that could drive a step change in efficiency of protein extraction.



Dr Keiran TuohyProfessor of Energy Metabolism and Microbiome
University of Leeds

A presentation on how diets high in whole plant foods and plant protein and low in meat improve metabolic health and markers of healthy ageing and that these health effects appear to be linked to the gut microbiota. It will introduce how different dietary components influence the gut microbiota and describe new advanced in vitro systems for studying the gut microbiota.



Dr Mark YoungInnovation Specialist,

Mark facilitates the use of CIEL-supported research capability and contributes to development and delivery of industry relevant research and innovation projects. Previously a senior geneticist for 15 years at Beef + Lamb New Zealand he has a wide-ranging knowledge and experience of the ruminant sector and has worked to help breeders and farmers better understand the scientific elements of genetics, facilitating communication between scientists and farmers.



Sophie ArmourSenior Communications Manager,
The Good Food Institute Europe

Sophie leads GFI Europe's communications team, and uses thought leadership, messaging, and multi-sector engagement to accelerate Europe's shift to a sustainable, secure and just food system.



Clare Otridge
Director
England Marketing

Understanding consumer demand for plant-based protein and what it means for UK food and agri supply chains.



Marie Charles
Insight Manager
England Marketing

Understanding consumer demand for plant-based protein and what it means for UK food and agri supply chains.



Dr Sarah GauntManaging Director,
SPG Innovation/Rootiful

We will present a case study demonstrating the work of Rootiful in taking a hemp protein flour to market as a textured vegetable protein and ongoing work in this space.



Mark Horler Founder / Chairman, CEA Proteins Ltd / UKUAT Ltd

An overview of existing CEA growing technologies and environments, and how these might be utilised to support the production of alternative plant proteins – be that seed-to-sale or as part of an integrated chain. The presentation will also cover some of the complexities and challenges, and the innovations required to address these.

EXHIBITORS



Dr Dave GeorgeReader in Precision Agronomy,

Newcastle University



Preyesh Patel
Co Founder, Eat Curious



Nitrogen efficient plants for Climate Smart arable cropping systems







Richard Fox Co-Founder, Jampas

Rebecca McDowell Innovation Manager, SPG Innovation/Rootiful

VIP Leaf Project

Chairs





Dr Maria MasouraFood and Drink Risk Consultant
Campden BRI

Maria, with over eight years of expertise in food safety, has engaged in multidisciplinary regulatory and research work spanning the fields of food, biotechnology, and molecular biology. Maria holds a Ph.D in Life Sciences and has a broader research experience in food microbiology and biotechnology, and engineering. Before joining Campden BRI, Maria served as a scientific co-ordinator at the European Food Safety Authority (EFSA). Her responsibilities included conducting peer reviews and risk assessments for pesticides, along with contributing to various other food science-related activities such as food additives and novel foods. At Campden BRI, Maria offers consultancy services, specialising in microbiological and chemical food safety, risk assessment, supply chain resilience, and scientific regulatory affairs.

www.campdenbri.co.uk



sustainable direction

Dr John Henry LooneyDirector / Professor
Sustainable Direction Ltd

John Henry has been a sustainability management consultant for over 36 years' (financial, environmental and social metrics) focused on helping organisations improve performance. His strength is a very strong combined technical, business and project management background to deliver improvements through engineering solutions and by motivating behaviour change. He has owner and large multinational director level experience, in consultancies and contracting organisations, providing practical consulting expertise to small companies, multinational corporations and government bodies and agencies. He has delivered extensive and detailed technical and project management of environmental engineering projects and environmental management consultancy in over 30 countries. This includes the role of client advisor / bank's engineer on large EPC contracts in Europe. He sees sustainability as the working out of the long-term success strategies for companies and organisations, motivating people to be their best and using resources in a circular joined up economy.

www.sustainabledirection.com

Chairs







His PhD is in Physiological, Chemical and Statistical Plant and Soil Ecology. His focus here is the use of LCA and circular economy methods to demonstrate the optimal sustainable solutions for agriculture and technologies, delivering these for large agritech / aquaculture projects for strawberries, lettuces, prawns and transport systems. He organised the G7 Sustainability Conference in 2021 that led into COP26 where one of his projects was showcased by the UK Government.

research.reading.ac.uk/ifnh



CHAP CROP HEALTH & PROTECTION

Dr Aurélie Bovi Innovation Sector Lead Crop Health and Protection Ltd (CHAP)

A molecular biologist and plant scientist by training, Dr Aurélie Bovi is a connector who has worked in business innovation facilitating roles for near 15 years, engaging and collaborating with UK and international organisations in cross-cutting industry sectors and disciplines to deliver solutions to the agri-food sector. Through previous roles at CHAP, Agrimetrics, The Biorenewables Development Centre (BDC) and the Knowledge Transfer Network (KTN), she has gained a broad view on the challenges affecting the agri-food sector and is committed to facilitate game-changing solutions.





Dr Réka Haraszi Innovation Sector Team Lead Crop Health & Protection Ltd (CHAP)

A qualified bioengineer (MSc) with a PhD in chemistry, Réka has worked in food science in organisations such as Budapest University of Technology (Budapest, Hungary), CSIRO Plant Industry (Canberra, Australia), EC JRC IRMM (Geel, Belgium) and Campden BRI (UK). Protein biosciences were in focus of her research career, including cereal and food proteins' composition, techno-functional properties, allergenicity and related analytical methodologies, all reflected in a track record of scientific publications.

Her role at CHAP as an innovation sector lead is to accelerate innovations in the agri-tech and agri-food sectors towards sustainability and resilience by forming collaborative projects from ideation to delivery. This diverse role includes stakeholder interactions, networking, meeting/event facilitation, partnership development, bidding for funding, consortium building and innovation business case development.

Recent years Réka has led the build-up of CHAP's crop and protein diversification research pillar, including the coordination of a number of industry and academic consortia, purposed, won and set up grant funded projects in the alternative protein theme. Currently leading an open innovation business case development for the UK's plant-based alternative protein sector, and keep developing engagement in the sector. Main drivers of innovation are health, net zero, sustainability and diversity.





Dr Harry Langford
Innovation Network Lead
Crop Health & Protection Ltd (CHAP)

Harry is a dynamic, interdisciplinary environmental scientist and agri-tech innovation expert, working within the agri-tech sector to advance crop productivity and food system sustainability. With a background in soil micro-structure and function, Harry has expertise across soil health and sustainable agriculture, novel environmental sensing and controlled environment agriculture. His current role within CHAP is to support and develop collaborative R&D, and exchange knowledge, across the agri-food supply chain and around CHAP's five key themes: intelligent agronomy, innovative crop health strategies, controlled environment agriculture, soil & crop health, and crop & protein diversification. He also leads on CHAP's New Innovations Programme, a collaborative innovation programme that works with sector stakeholders to develop realistic and robustly assessed solutions to critical sector challenges to drive sector growth and impact.

chap-solutions.co.uk



vertical future

Dr Jennifer BromleyChief Scientific Officer
Vertical Future

Jen is Chief Scientific Officer at Vertical Future, a vertical farming technology and data company. Her team's research focuses on understanding how to produce high yields of crops in vertical farms without impacts on quality whilst reducing the costs of production. Her team's focus spans plant science from indoor agronomy and smart plant manufacturing to plant physiology and biochemistry. Our collaborators include the universities of York, Cambridge, Reading and Essex, and CHAP, NIAB, JHI, The ARC Centre of Excellence in Plants for Space and Axiom Space (with whom Vertical Future are working on developing plant production systems for off-Earth farming on Axiom Station and beyond) amongst others. Jen has PhD in Plant Sciences from University of Cambridge and is a professional by-fellow at Churchill College, Cambridge. Her 19 years in applied plant science has taken her into academic and industrial application of plant science from biofuels to leafy crop production in both food and non-food crops.

www.verticalfuture.com





Dr David McNaughtonManaging Director Soya UK Ltd

Agriculture has been my whole life. I was born and brought up on a family farm in Argyllshire, and after my school years were over, I worked on a dairy farm before going to agricultural college in Ayrshire, to study for an HND in agriculture. After that, I worked on various farms in Australia, before doing a BSc in agriculture at Writtle College in Essex. From there, I joined the seeds industry in 1992 and 8 years later, I started my own seed company (Soya UK Ltd) in the year 2000. After 26 years of close co-operation with the plant researchers at the Institute of Agriculture in Chabany, Kyiv, Ukraine, I recently received an Honarary Doctorate from the National Academy of Agrarian Sciences of Ukraine, in recognition of my contribution to Ukrainian agriculture – a huge honour and particularly so given their current circumstances.

www.soya-uk.com





Dr Victoria Nash-Woolley
Sector Lead
Crop Health and Protection Ltd (CHAP)

Victoria is a Sector Lead in CHAP's Innovation team. Prior to joining CHAP she completed her PhD at the University of Warwick and post-doc at the University of Greenwich. Her PhD focused on understanding the impact of secondary metabolites of entomopathogenic fungi on the insect immune system and how these could be used for Integrated Pest Management (IPM). While at the University of Greenwich she researched how beneficial insects could support pest management on smallholder farms in East Africa. Since joining CHAP she has applied this experience to support the development and delivery of innovative grant-funded and commercial projects.





Prof. Tuck Seng Wong
Professor of Biomanufacturing
University of Sheffield

Prof. Tuck Seng Wong is a Professor of Biomanufacturing within the Department of Chemical and Biological Engineering at the University of Sheffield. He is the Director of the UK-South East Asia Vaccine Manufacturing Research Hub, a £7.6M initiative jointly funded by the Department of Health and Social Care (DHSC) and the Engineering and Physical Sciences Research Council (EPSRC). He holds two adjunct positions in South East Asia, affiliating with the National Centre for Genetic Engineering and Biotechnology (BIOTEC, Thailand) and the Bandung Institute of Technology (ITB, Indonesia).

He is a recipient of multiple prestigious fellowships, including the RAEng | The Leverhulme Trust Senior Research Fellowship (2019), the Royal Academy of Engineering Industrial Fellowship (2016), and the MRC Career Development Fellowship (2007). With over two decades of expertise in protein engineering and engineering biology, his research spans diverse applications, including alternative foods, biopharmaceuticals, and enzyme biocatalysis. His extensive portfolio is supported by funding from UKRI (BBSRC, EPSRC, and Innovate UK), the Royal Academy of Engineering, The Leverhulme Trust, Royal Society, and various industrial partners (e.g., Planeat Foods, WhatIF Foods, AstraZeneca, ACM Biolabs, Valitacells, Croda, Invista, and Agilent etc).

His guidance has led the team to remarkable achievements, earning them several accolades, including Gold Medals in 2019 and 2022, as well as the Best Open Project award in 2019. Additionally, he founded and directs the Summer Undergraduate Research Fellowship (SURF) in Sheffield, a programme designed to nurture undergraduate research and stimulate student enterprise.

www.sheffield.ac.uk/cbe/people/academic-staff/tuck-seng-wong



Andrew McLay Innovation Lead Innovate UK



Andrew has worked with Innovate UK's agri-food team for over five years developing and delivering a wide rage of funding opportunities from small-scale farmer led research projects to multi-million pound actor projects.

Prior to joining Innovate UK – Andrew worked as a strategy consultant for Promar International, the consulting arm of Genus Plc, completing market research, strategy and validation projects for UK and international clients. Andrew is originally from New Zealand and has also held industry marketing roles with various Australian agri-food organisations including, Dairy Australia and the Australian Meat and Livestock Corporation.

Innovate UK – UKRI



Prof. Rick Mumford
Deputy Director for Science & Research
Food Standards Agency

a Fellow of the Royal Society of Biology.

and Deputy Director of Science & Research at the Food Standards Agency, where he co-leads a multi-disciplinary team of over 160 staff, providing expert risk assessment and scientific evidence to support UK food safety and standards. He also leads on PATH-SAFE, a major cross-government bio-surveillance initiative. A virologist and molecular biologist by training, he has over 28 years' experience, as both a practising, applied scientist (focusing on diagnostics and biosecurity), and as a science leader, including senior roles up to executive level, within government and the private sector. An author on over 75 scientific publications, Rick is a Visiting Professor of Practice at Newcastle University and

Professor Rick Mumford is Deputy Chief Scientific Advisor (dCSA)

www.food.gov.uk







Dr Jenny BussellSoil scientist
The Allerton Project

Dr Jenny Bussell specialises in exploring how soil management impacts on soil health in agricultural systems. She has previously worked as a research fellow for the University of Nottingham, investigating water uptake, nutrient acquisition, and soil structure in sugar beet fields, with an aim of improving land management and cultivation in sugar beet crops. Before this she studied how climate change predictions of elevated CO₂ and UV-B influenced plant and soil interactions. The work focused on greenhouse gas emissions and soil microbial health, which have remained a key interest for Jenny during her career.

www.allertontrust.org.uk



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Amy Stockwell Senior LCA Specialist Eando

Amy Stockwell is an LCA (life cycle analysis) expert with experience in Food R&D.

After graduating with a MSci in Natural Sciences, Amy spent 18 years in coffee research with Jacobs Douwe Egberts. During this time, she worked in a wide variety of areas, including packaging, patents, and factory optimisation, before specialising in sustainability and LCA. Here she wrestled to balance the needs of detailed calculation methodologies with the lack of data available and the huge variety of coffee farming practices. She also tested the coffee category rules for PEF (product environmental footprint) providing feedback on their practicality.

Amy is now a consultant at Eando, helping companies to understand the impacts of their products and processes. She has published more than 40 EPDs (environmental product declarations) for products across the construction industry. Most recently she has been working on the impacts of biochar.

As a vegan, Amy has a strong personal interest in the future of plant-based proteins.

www.eando.se





Tom Allen-StevensFounder
British On-Farm Innovation Network

Tom Allen-Stevens is an arable farmer and founder of BOFIN, he is an award-winning journalist with 25 years' experience in communications to an arable farming audience and collaborating with farmers on field trials. He has focused on conveying technical innovations, especially in plant-breeding, to a more progressive farming audience, including early adopters. He is a former director and chair of Oxford Farming Conference with a family farm in Oxfordshire.

BOFIN is a network of 800+ members who carry out on-farm trials, looking for a more scientific approach to progressing farm practice. 50% of the membership are farmers with scientists, knowledge exchange managers, tech innovators and the 'just curious'. BOFIN has a number of projects underway, including The NCS Project (pulses), SLIMERS (slugs), TRUTH (soil/root health), 'slug-resistant' wheat, harvest weed seed control.

www.bofin.org.uk



UNIVERSITY OF LEEDS

Dr Alan Javier Hernandez AlvarezLecturer in Nutrition and Global Health
University of Leeds

Dr. Hernández-Álvarez joined the School of Food Science and Nutrition at the University of Leeds in 2019. He holds a Bachelor's degree in Biochemical Engineering and a PhD in Food Science from the Research and Graduate Department of Food Science at the National School of Biological Sciences, National Polytechnic Institute, Mexico, awarded in 2011. During his doctoral studies, he conducted research at the Food Phytochemistry Laboratory, Fat Institute, CSIC (Spanish National Research Council), Seville, Spain. From 2012 to 2013, he served as a Lecturer at the Food Biochemistry Faculty, Biochemical Engineering Department at the National School of Biological Sciences, National Polytechnic Institute, Mexico. After a Postdoctoral Fellowship with AAFC (Agriculture and Agri-Food Canada) supported by a CONACyT scholarship in 2014, he received the Visiting Fellowships in Canadian Government Laboratories (VF) Award from NSERC (Natural Sciences and Engineering Research Council of Canada) for the period 2014-2017.

During his tenure at the Food Research and Development Centre in St. Hyacinthe, Quebec, Canada, Dr. Álvarez worked on a variety of research projects in value-added food processing and food quality, providing expertise in protein quality assessment, protein extraction and characterization, pilot-plant scale-up, and technofunctional properties assessment. He has also collaborated with various Canadian industry companies, such as Nature Zen, InnoVactiV, SEMICAN, among others as a research and scientific advisor. Furthermore, in the UK, he has collaborated with different plant-based food companies such as THIS, Meatless Farm, SPG Innovation, STARS, among others.

His research focuses on novel and emergent sources of proteins such as insects, algae, oilseeds, pulses and agrifood-waste. The aim is to develop sustainable and efficient methods for extracting, isolating, and purifying proteins and bioactive peptides from these sources, contributing to food security and innovation. Dr Alvarez research involves the functional, quality, and structural analysis of food proteins to understand their properties and potential applications in food products applications of various physical, chemical, and biological methods to preserve, process, and enhance the quality of food. This includes traditional and novel processing techniques that improve the safety, nutritional value, and sensory attributes of food products. His research goals include understanding how proteins interact with other biomolecules within food matrices, and how these interactions can affect the nutritional quality, functionality, and bioavailability of proteins and other food components. Investigations on how food proteins and peptides behave and are transformed in the gastrointestinal tract using in-vitro dynamic simulated GI tract systems to mimic human digestion and absorption. Overall, his expertise and research interests are at the forefront of developing innovative, sustainable, and health-promoting food products. Thus, contributing to advancing our understanding of food science and nutrition, addressing global challenges related to food security, nutrition, and health.

environment.leeds.ac.uk/food-nutrition/staff/8812/dr-alan-javier-hernandez-alvarez





Prof. Donal O'SullivanProfessor of Crop Science
The University of Reading

Donal O'Sullivan, with 29 years of research experience, is an internationally recognised crop geneticist, with a strong focus in recent years on faba bean improvement. He spent 10 years as a research group leader at NIAB in Cambridge, where he was a pioneer of genome-wide association studies in crop plants. His research group developed the first SNP genotyping assays and high density mapping technology for faba bean and used these tools to characterize critical genetic resources (multiparent and breeding populations, inbred lines, global diversity panels), to reveal genetic basis for variation in accumulation of the anti-nutrient vicine, hilum colour and seed size and to chart out the future of genomics-enabled faba bean breeding. He has recently initiated a commercially-oriented breeding programme aiming to develop novel faba bean varieties (www.fabaplus.com).

www.reading.ac.uk/apd/staff/d-m-osullivan.aspx



UNIVERSITY OF LEEDS

Dr Kieran TuohyProfessor of Energy Metabolism and Microbiom
University of Leeds

Born in Mayo, Ireland, Professor Kieran Tuohy received his PhD from the University of Surrey (UK) in 2000 after graduating from University College Dublin, Ireland (BSc, Industrial Microbiology). He also holds an MSc in Environmental Microbiology from the University of Aberdeen. After training as a post-doctoral researcher, Kieran was appointed lecturer in Food Metabonomics at the Department of Food Science and Nutrition, University of Reading. Kieran led the Nutrition and Nutrigenomics Group at the Fondazione Edmund Mach in Trento, Italy between 2010–2022, was Head of Department of Food Quality and Nutrition (2017–2022) and in February 2022, was appointed chair in Energy Metabolism and Microbiome at the School of Food Science & Nutrition, University of Leeds, UK.

Kieran is the Editor in Chief of the European Journal of Nutrition and a visiting Professor at Ulster University (UK). His publication record includes over 195 international peer reviewed articles and book chapters in the areas of food chain microbiomes, nutrition,

gut microbiology and diet:microbiome interactions. Today Kieran is co-lead on the BBSRC funded ORIC hub, INFORM, which is designed to investigate the role of functional foods and beverages, probiotics, prebiotics and plant stanols to improve health and recovery.

Professor Kieran Tuohy, Faculty of Environment, University of Leeds



Dr Mark Young Innovation Specialist CIEL



Mark is an Innovation Specialist with CIEL and has been in position for over 7 years. He facilitates use of CIEL-supported research capability and contributes to development and delivery of industry relevant research and innovation projects. Mark contributes to CIEL knowledge exchange, and engagement in debate on industry needs and opportunities for innovation.

Previously Mark spent 15 years as senior geneticist at Beef + Lamb New Zealand and has wide-ranging knowledge and experience of the ruminant sector. Throughout his career Mark has worked to help breeders and farmers better understand the scientific elements of genetics, encouraging and facilitating communication and understanding between scientists and farmers.

cielivestock.co.uk



Sophie Armour Senior Communications Manager The Good Food Insitute Europe

Sophie leads GFI Europe's communications team, and uses thought leadership, messaging, and multi-sector engagement to accelerate Europe's shift to a sustainable, secure and just food system. Her background in communications spans the UK parliament, politics, academia, and the NGO sector.

3fi/Europe

gfieurope.org







Clare Otridge Director England Marketing

Marie Charles Insight Manager England Marketing

Following 10 years in a career in marketing across household names in conservation, charity and finance brands, Clare moved into market research with the family business, becoming a director of England Marketing in 2020.

The business was established in 1994 and is one of the only research agencies to operate the length of the supply chain, from grower to consumer delivering insight led trends and NPD in the food and drink sector for over 25 years.

Under Clare's influence, England Marketing now has its own independent consumer panel as well as an independent farmer panel and works with start-up innovation brands looking to launch, through to the biggest names in food supply, agriculture and retail.

Marie spent five years in the agricultural industry as a Rural Business & Farm Consultant, with the last two also being spent with a Rural Research Consultant hat on.

She has a strong background in rural consultancy, she was involved in advising farmers and landowners on natural capital opportunities, such as Biodiversity Net Gain, Nutrient Neutrality, generation of carbon credits, peatland restoration, conservation agriculture and rewilding. As part of the rural research team at Strutt & Parker between 2021 and 2024, Marie produced internal and external insight pieces on changes and trends in the agricultural sector, including policy, natural capital, carbon markets and sustainable food production. She recently qualified as an Agricultural Valuer (FAAV) and is a BASIS-certified Environmental Adviser.

www.englandmarketing.co.uk







Dr Sarah Gaunt
Managing Director
SPG Innovation/Rootiful

Sarah has extensive experience of taking ideas from concept to commercial reality in a number of different organisations including large multinational companies, academic groups and small start-up businesses. Possessing a broad technical background, she is an expert in commercialising intellectual property within short timeframes to produce profitable business opportunities. Specialising in developing IP from Academic source and providing the translation to large businesses, Sarah has worked in a number of different organisations at the interface between Academia and industry.

She has an academic background in chemistry and nano ceramics and extensive commercial experience in the pharma and food industries. More recently Sarah has been heavily involved in the preparation of Novel foods submissions for foods such as CBD and insects.

Previous successes include taking a sodium reduction product, Soda-Lo, from a once in the laboratory product to a multi-million dollar licensing deal with Tate and Lyle, a large multinational company.

At SPG Innovation Sarah is responsible for the organisation's strategic direction and ideation. She leads on the regulatory elements as well as the consultancy arm of the business.

SPGInnovation.co.uk







Mark Horler
Founder / Chairman
CEA Proteins LTD / UKUAT LTD

Mark has been involved in the vertical farming industry for around 10 years. He is the founder and chairman of UK Urban AgriTech (UKUAT), bringing together the leading companies, universities and individuals in the UK urban agritech industry. He is also the founder of CEA Proteins, and does freelance consulting work across the industry.

In his work he has dealt extensively with industry standardisation, sustainability certification, vertical farming education and vertical farming policy. His expertise is in building networks and associations that maximise value for their members, and for the industry as a whole.

Mark's primary interest is in taking a systemic overview of how vertical farming can be integrated with other systems, to deliver on its promises of regenerative food production and resilient societies.

www.cea-proteins.org

ukuat.org





Prof. Donal O'SullivanProfessor of Crop Science
The University of Reading

Donal with 29 years of research experience, is an internationally recognised crop geneticist, with a strong focus in recent years on faba bean improvement. He spent 10 years as a research group leader at NIAB in Cambridge, where he was a pioneer of genome-wide association studies in crop plants. His research group developed the first SNP genotyping assays and high density mapping technology for faba bean and used these tools to characterise critical genetic resources (multiparent and breeding populations, inbred lines, global diversity panels), to reveal genetic basis for variation in accumulation of the antinutrient vicine, hilum colour and seed size and to chart out the future of genomics-enabled faba bean breeding. He has recently initiated a commercially-oriented breeding programme aiming to develop novel faba bean varieties (www.fabaplus.com).

The University of Reading is internationally renowned for the quality of its research in sustainable agriculture, being the highest ranked UK university in the QS World University 'Agriculture and Forestry' Ranking. The better use of crop legumes to drive simultaneous increases in sustainability of food production and transition to healthier diets for all is a strategic research theme addressed on a multidisciplinary basis.

www.reading.ac.uk/apd/staff/d-m-osullivan.aspx





Dr Dave GeorgeReader in Precision Agronomy Newcastle University

Newcastle University Farms encompasses 800ha of Red Tractor assured mixed arable and grazing operations, with a commercial dairy herd and pig enterprise. Spread across three sites in Northumberland, the farms marry commercial, research and teaching objectives, underpinning a vision to "provide an open innovation platform enabling researchers to work with farmers, industry, and environmental and government stakeholders". Led by complementary and co-developed commercial and academic strategies, the farms facilitate evidence-based innovation in core theme areas, including: resilient and regenerative farming; novel crops and inputs; high welfare and precision practices; digital and molecular 'smart surveillance' for biodiversity, soil, crop, emissions and livestock monitoring; and agri-food system governance and safety. Independent and collaborative on-farm R&D in these subjects is currently being supported through EU, UKRI, Defra, DESNZ, HEIF, the Elizabeth Creek Trust, and a range of other public, private and charitable bodies, with the farms currently underpinning some £8m of R&D funding awarded to the university across around 50 separate projects.

The fifteen long-term experimental farm 'platforms' focus on strategically important topics, from designing production practices in the Nafferton Factorial Systems Comparison to build natural capital and maximise soil, crop and ecosystem services, to sustainable grazing management and in-field phenotyping of arable and biomass crops. These are supported by on-farm laboratories, glasshouses and events facilities, utilised for teaching, research and knowledge exchange by the university and our partners. Cockle Park is also home to a suite of animal science facilities.

Assisted by an industry-facing Farm Board, dedicated onfarm support is provided through an experienced and leading commercial team, managed by our Farm Director, James Standen, core administrative staff, and on-site technical teams.

www.ncl.ac.uk/farms







Preyesh Patel
Co-Founder
Eat Curious and Syan Farms

With over 15 years' experience in healthcare, Preyesh has a passion for sustainable living and has an understanding of plant-based nutrition with the ability to promote and activate innovative plant-based food solutions. Keen focus on innovation and is dedicated to enhancing the nutritional quality, consumer acceptability, and sustainability of plant-based food.

Eat Curious is a plant-based food development company, creating food for health. Offering innovative plant-based solutions that are not only versatile and easily adaptable but also prioritise delivering the utmost in quality and nutritional value.

Preyesh will be presenting some Eat Curious powerballs with our protein to sample. INOX catering team will be serving Eat Curious products for lunch.

www.eat-curious.com

syanfarms.com









Dr Sarah GauntManaging Director Rootiful

Rebecca McDowell Innovation Manager SPG Innovation Ltd

Rootiful is committed to: using sustainable, locally grown ingredients to create healthy alternatives to meat; great tasting versatile foods which can be used on their own or in meals; re-utilising co-products in food manufacture to reduce and upcycle side streams; and aim to reduce the environmental burden of the food industry while increasing the variety of grains, pulses and beans in our diet.

rootifulfood.co.uk

SPG Innovation Ltd uses science to solve food and ingredient development problems in sustainable nutrition. With a team of seasoned food scientists, chefs, and industry experts, we bring a wealth of knowledge and expertise to every product development project. Our collaborative approach ensures that we can tackle the trickiest product development problems. Our focus on sustainable nutrition means we have spent years working on innovation in this sector. Areas of interest include:

- Plant-based foods, the use of whole plant, protein, starch and fibre
- Texturisation of plant-based proteins
- Utilisation of waste/co-streams
- Reduction of salt
- Use of local/underutilised crops

Our research and development facilities serve as incubators for ideas that shape the future of conscious eating. From pioneering new ingredients to developing cutting-edge processing techniques, we are committed to staying ahead of industry trends and delivering sustainable solutions. Our research and development facilities are hubs of creativity, where ideas come to life.

SPGInnovation.co.uk





Richard Fox Chef Founder Jampa's

Having been classically trained, Richard worked for many years cooking privately for celebrity and business clients. He is an award-winning writer, cookbook author and chef presenter, having won a prestigious British Guild Award for Food & Beer Writing. He was resident chef presenter on BBC1 Regional Look North. He was a regular chef on BBC 2's Food Poker and has appeared on UKTV Food, Saturday Cooks on ITV, The Good Food Show on BBC Radio 4 – to name but a few.

Richard's expertise in the world of food and drink, as well as his talents as an exuberant and entertaining demonstration chef and public speaker has made him a favourite personality for hosting and demonstrating at gourmet events around the world. His live interview credits include Jamie Oliver, Heston Blumenthal, Michelle Roux Jr and Hugh Fearnley-Whittingstall, to name but a few.

He has toured the UK extensively performing cookery demonstrations as an Ambassador for the Love Food Hate Waste campaign. He has also worked in Australia as an Ambassador for OzHarvest, promoting their cause in redistribution of potential waste food to charitable organisations. His cookbook on the subject, entitled 'How to be an Everyday Kitchen Magician' was published by Green Books in 2012.

In August 2018 he switched to an exclusively plant-based diet which has had the most profound impact on his career to date. Having channelled his decades of experience into exclusively plant-based cooking, he offers plant-based culinary and recipe consultancy to the food industry and hospitality, speaks regularly on panels at industry events, and has now founded and launched Jampa's – a company dedicated to producing high quality, natural, plant-based meat substitute products. When previewed at the World Plant-Based Expo in London, Jampa's pork-style pie won the Dragon's Pantry feature at the event. Jampa's products have also won multiple awards at The Farm Shop and Deli Show at the NEC.

www.jampas.co.uk





Thomas Wilkinson Senior Crop Research Consultant The NCS Project

Thomas is a crop research consultant in the crop physiology sector of RSK ADAS Ltd which focuses on improving performance and sustainability of cropping systems for food, feed and biofuel production. Tom's specific interests are around supporting the uptake and production of legumes in agricultural systems as well as maximising the utilisation of their environmental benefits.

Tom is a technical lead of the Pea and Bean Yield Enhancement Networks (yen.adas.co.uk) which are cross industry supported initiatives that aim to understand limitations to pulse production through a grower participatory approach. Tom is aiding in the development of the digital Pulse Performance Enhancement Platform (PulsePEP) which aims to collate and index pulse production knowledge from different available sources and connect across researchers, industry and growers. Tom also leads a work package in the newly funded Horizon Europe project, LegumES, which aims to unlock the benefits of the wider ecosystem services provisioned by legumes across Europe.

The NCS Project – BOFIN



vertical future





Katie Wilkins Senior Scientist Vertical Future

Lucy Plowman
Technical Liaison Officer
CHAP

Vertical Future – the fastest-growing UK-based next-generation vertical farming technology business, has announced it is leading the Innovate UK-funded Vertical Indoor Protein from Leaf (VIP Leaf) research project, within the farming innovation programme, aiming to develop a new source of alternative plant protein.

The two-year project will develop methods to use vertical farming facilities to grow amaranth, a plant known for its many health benefits and numerous antioxidants, which is also undervalued in the current UK food market. The amaranth crops will be used to develop a new source of plant protein that will decrease the UK's reliance on imports of plant proteins such as soy and pea, boosting not just the UK economy and environmental impact but also the health of the average UK consumer. Amaranth has been proven to be a lower cost alternative to the more commonly used pea protein. Amaranth is commonly eaten in Southern Africa, Southeast Asia and South America and with indoor farming technology, could be grown in the UK year-round.

Vertical Future partners with Eat Curious, Syan Farms, University of York and CHAP to develop VIP Leaf, an alternative plant protein – Innovations Food

