

# Horticulture 4.0 Conference

- 09:00 Arrival, Networking & Refreshments
- 10:00 Welcome to the Conference Graham Bryant, Chair of WSGA
- 10:05 Gillian Keegan - MP for Chichester
- 10:20 David Thompson - Ricardo
- 10:40 Tim Pratt - FEC Energy
- 11:00 Dr Martin Stoelen - University of Plymouth
- 11:20 Refreshment Break
- 11:40 Professor Simon Pearson - University of Lincoln
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+ Tour of the Engineering and Digital Technology Park



## Gillian Keegan - MP for Chichester

Gillian has been the Conservative MP for Chichester since the 2017 general election. She started work as an apprentice at Delco Electronics, a subsidiary of General Motors in Kirkby aged 16. Whilst learning about the manufacturing industry she was sponsored to study a degree in Business Studies at Liverpool John Moores University. Gillian is particularly interested in improving career opportunities for school leavers and attracting more business investment. She is also a big fan of high quality apprenticeships which gave her the right start in life to go on and build a successful career.

Gillian is a keen supporter of the WSGA and the significant industry it represents in her constituency.

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## Dave Thompson C.Eng MIMechE - Ricardo UK Ltd

Dave Thompson is a Technical Specialist for Ricardo looking after manufacturing, design for manufacture and design for assembly. Essentially this means ensuring Ricardo's clients can manufacture Ricardo designs to high levels of quality and to an acceptable cost.

This involves a strong understanding of lean manufacture and designing processes to eliminate error.

Dave was responsible for the installation of Ricardo's niche volume engine assembly facility at Shoreham.

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## Tim Pratt – FEC Energy

Tim has worked at FEC Energy since 1993, helped form a management buyout in 2000 and more recently the sale of FEC Energy to the NFU in 2017. He specialises in helping clients to buy and sell energy, as well as how to manage their combined heat and power and renewable electricity generation plant. Tim very much believes that understanding how and why businesses use energy and/or the operating characteristics of their generation plant is absolutely key to getting the best for his clients.



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## Dr. Martin F. Stoelen – University of Plymouth

Martin Stoelen is a Lecturer in Robotics at the University of Plymouth. He leads the Soft and Adaptive Robotics research group, and is Director of the spin-out company Fieldwork Robotics Ltd. His research interests include soft and variable-stiffness robots, embodied cognition, and agricultural robotics. He has significant research income over the last 4 years (in excess on £500k), and has developed the GummiArm soft robot arm platform (Stoelen et al., 2016) now replicated in multiple research labs around the world. He currently leads 3 projects on selective harvesting of raspberries, tomatoes and cauliflowers with robotic systems.

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## Professor Simon Pearson – University of Lincoln

Professor Simon Pearson is Director of the Lincoln Institute of Agri-Food Technology. The Institute sits within the College of Science of the University of Lincoln and helps develop and run cross disciplinary research projects on behalf of the agri food sector. This includes a large focus on the use and deployment of agri food robotic systems, including robotic crop harvesting and food processing systems, use of autonomous vehicles in the agri food sector, the application of actuators within agri food robotic systems.

Prior to joining Lincoln, he was the CEO of a large UK farming company, worked for Marks and Spencer plc in a technical role and as a scientist at the University of Reading.

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## **Martin Collison BSc (Hons), FRSA, FCIEA, FRAgS, MIAgrM – Collison Associates**

Since 1987 Martin has combined a career as an agrifood academic with commercial farming and glasshouse horticulture, importing and consultancy and established his own specialist economic development consultancy Collison and Associates Limited in 2002. He leads on the agrifood sector for Greater Lincolnshire LEP and co-ordinates LEPs input to the DEFRA/LEP Food Group.

In 2016-17 Martin helped lead the Future Food Processing theme for the Midlands Engine SIA (2016), the AgriTech theme in the East of England SIA (2017) and the Food Strand of the UK Industrial Digitalisation Review. Martin continues to work with partners across the UK and Europe with a major focus on Industry 4.0 and automation in the food chain.



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## David Ball - CEO of Bridge Farm Group

David is CEO of the Bridge Farm Group of companies incorporating the Neame Lea brand. After graduating in Economics from Sheffield University, David combined his business acumen with his family background in Horticulture to purchase the Bridge Farm Group family business. David has developed the Neame Lea brand of companies, acquiring Zyon UK, to achieve a combined turnover of £30m within 6 years. The Neame Lea operation focusses on low cost production and has invested in the latest horticultural technology while streamlining the supply chain and developing sustainable routes to market. The Bridge Farm Group continues to innovate and lead development in the horticultural industry.

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## Ali Capper - NFU Horticulture and Potatoes Board Chair

In Partnership at Stocks Farm, Suckley, Worcestershire UK with her husband Richard and his father Mark, the Cappers specialise in growing hops and apples. They farm dessert & cider apples and hops.

Ali's former career was in Advertising & Marketing. Today, in addition to numerous roles at the farm, her work includes membership of the Boards of Wye Fruit, the British Hop Association, the Norton Cider Growers Association and as Chairman of the UK's NFU's National Horticulture & Potatoes Board, English Apples & Pears and Wye Hops. Ali is a Nuffield Scholar, a Trustee of The Nuffield Farming Scholarships Trust and a non-executive Director of NFU Mutual.



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## Professor Salah Sukkarieh – University of Sydney

Salah is an international expert in the research, development and commercialisation of field robotic systems. He has led a number of robotics and intelligent systems R&D projects in logistics, commercial aviation, aerospace, education, environment monitoring, agriculture and mining. He was awarded the NSW Science and Engineering Award for Excellence in Engineering and Information and Communications Technologies in 2014, and the 2017 CSIRO Eureka Prize for Leadership in Innovation and Science.

Unfortunately, Professor Sukkarieh is unable to join us in person. He has prepared a video presentation on his recent work in horticultural robotics.

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## Dr Matthew Howard - Kings College London

Matthew is a senior lecturer at the Centre for Robotics Research, Department of Informatics, King's College London. His research interests span the fields of robotics and autonomous systems, statistical machine learning and adaptive control. His current work focuses on robotic skill learning and fast re-programming by demonstration for soft robotic devices, driven by analysis of human musculoskeletal control. He works with a number of large growers of fresh produce and is principle investigator of the GROWBOT project, sponsored by the AHDB, looking at automation through collaborative robotics in horticulture.

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## Neville Stein - Ovation Consulting

Neville is principal and founder of Ovation Business Consultants. Primarily working in the 'land based' sector Neville has become recognized as an expert business consultant amongst SMEs and family enterprises and has worked with a wide range of organizations both in the UK and internationally including Eastern Europe and China.

Neville is an associate tutor at West Suffolk College and delivers training and workshops in sales and marketing, presentation skills and finance for non-financial managers. He is also a tutor on the MHort for the RHS, is an independent board member for AHDB Horticulture and he holds several ex officio posts at board level.



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## Kit Franklin MEng, AMIAgrE

Kit is an Agricultural Engineering Lecturer from Harper Adams University. His role includes developing undergraduate course structure and content, student recruitment, international business development and innovative agricultural engineering research. Kit's research focusses on "future farming systems" with the most notable project to date being the award winning Hands Free Hectare. As co-creator and co-Investigator he successfully managed the day-to-day running of the collaborative, Innovate UK backed, project which set out to achieve a world's first; using automated machines to grow the first arable crop remotely, without operators in the driving seats or agronomists on the ground. From planting to harvesting the barley crop, no person entered the Hands Free Hectare. Kit sits on the Executive Committee of the Institution of Agricultural Engineers IAgRE.

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## Professor Seamus Higson - University of Chichester

Professor Higson joined the University as Deputy Vice Chancellor (Sustainability and Enterprise) in September 2015.

Central to his role is lead for the development and launch of a Science, Technology, Engineering and Mathematics (STEM) portfolio of education and research for the University.

Professor Higson brings to this project more than 20 years' experience of bringing fundamental research through to practical implementation and full commercialisation – based on technologies ranging from electrochemical fuel cells and electrolyzers as enablers for the hydrogen economy – through to biomedical biosensors and sensors for use within the water industry and environmental monitoring.

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## Jane King – Chief Executive, AHDB

Jane joined the Agriculture and Horticulture Development Board (AHDB) in February 2015 as CEO and has led a significant review and restructuring of the organisation to improve value for money for farmers from the levy. The transformation programme has involved the merging of six separate levy organisations into one, the development of a new vision and strategy to inspire success for the UK's farmers, growers and industry in a rapidly changing world.

Jane's aim is to create a coalition of agriculture and horticulture stakeholders that together build a world class industry competing with the best globally. To do this, she believes the industry needs to think radically about how it organises itself to drive productivity growth and put our natural capital centre stage