Programme

2.30	Welcome and introduction George Freeman MP, APPGSTA Chair
2.40	Land sharing vs land sparing – what the science tells us Professor lan Bateman
2.55	The contribution of genetics to sustainable crop productivity gains Dr Steffen Noleppa
3.10	R&D challenges for UK crop improvement Professor Jane Langdale
3.25	The importance of genetic improvement in farmed animals Professor Bruce Whitelaw
3.40	Closing the yield gap: the role of translational research Dr Rosie Bryson
3.55	Break – refreshments
4.15	Uniting UK agriculture behind a common vision Andrew Meredith
4.20	Farming innovations to deliver Net Zero – panel discussion Chaired by Charlie Dewhirst MP with panellists Jonathan Westlake, Dr Craig Lewis and Johnny Mackey
4.50	Harnessing the power of real-time farm data Rob Chester
5.05	Making farm assurance and data-sharing work in farmers' best interests Hugh Broom
5.20	Summary George Freeman MP
- 70	Finish

FEEDING BRITAIN SUSTAINABLY TO 2050

THE 30:50:50 MISSION



The APPG on Science and Technology in Agriculture provides a forum for Parliamentarians and stakeholders to debate and highlight the vital contribution of agricultural science and innovation in tackling urgent global challenges of climate change, food security and protection of natural resources.

APPGSTA 30:50:50 Agri-Science Summit

Launched during Agri-Science Week in Parliament in January 2025, the APPGSTA 30:50:50 Innovation Agenda for UK Agriculture sets out an ambitious, high-level vision to increase domestic food production by 30% by 2050 while reducing UK agriculture's environmental footprint by 50% in terms of greenhouse gas emissions, land use, water use and soil health.

The 30:50:50 initiative has attracted widespread industry engagement and positive media coverage for its simplicity in setting a clear, long-term ambition to help UK farmers produce 'more from less', harnessing the latest advances in agricultural science and innovation.

Following an evidence-gathering programme involving expert roundtables and APPG meetings, call for written evidence and attendance at events, the Agri-Science Summit includes publication of the final 30:50:50 report. As the Government progresses plans for a new farming roadmap, SFI reset, food strategy, land use framework and farm profitability review, the 30:50:50 report will set out recommendations for a coherent approach to the development of farming, regulatory and R&D policies, and to benchmark and monitor progress over time against the 30:50:50 objectives.

The Summit, chaired by APPGSTA chair and former science minister George Freeman MP, provides an important opportunity to showcase some of the scientific evidence, innovations and disruptive thinking which have helped shape the 30:50:50 agenda and its associated call for a radical re-think of the current agricultural policy environment.



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Agri-Science Summit

Monday 3 November 2025 2.30-5.30pm

The Attlee Suite, Portcullis House London SW1A 2JR

Speakers

Professor lan J. Bateman OBE, US-NAS, FBA, FEAERE, FRSA, FRSB

lan is Director of the Land, Environment, Economics and Policy Institute (LEEP) at the University of Exeter, UK. His main research interests revolve around the issue of ensuring sustainable wellbeing through the integration of natural and physical science with economics and by working with business and policy makers. Ian has been advisor on environmental improvement to senior Government Cabinet ministers for over a decade, advises the First Minister of Scotland, is a member of various HM Treasury working groups and was a member of the Natural Capital Committee and the Board of the UK Joint Nature Conservation Committee.

Hugh Broom

Surrey farmer and Farmers Weekly podcast host Hugh Broom worked full time as a broadcast journalist in radio for 10 years, first in local radio in Reading before moving to Capital Radio, LBC and Classic FM in London and then going part time with BBC Radio Five Live doing news and travel until it moved to Manchester. Throughout that period he was also running the family farm in Surrey where he is the fourth generation to farm. The business is currently focused on rearing dairy beef cattle but in the past also had a sheep enterprise and various direct sales ventures. From 2004 to 2009 he wrote for Farmers Weekly and when they launched their podcast at the beginning of Covid, Hugh was the obvious choice to sit alongside Johann Tasker as co-host. He has served on numerous NFU committees in various roles including as south east livestock chair and National Beef Chair.

Dr Rosie Bryson

Rosie is Research Director for ADAS Sustainable Agricultural Systems based near Cambridge. She is a plant pathologist with a degree in Applied Biology (specialising in Crop Protection) from the University of Bath and a PhD in Fungal Genetics from the University of Birmingham. She has over 35 years of experience in applied agriculture with specific experience in crop protection and production, remote sensing and precision farming, spray application systems and European and UK plant protection regulation. Rosie has held technical, marketing and leadership positions in both public and private sector organisations including ADAS, HGCA (now AHDB), Velcourt Ltd., Crop Health and Protection (CHAP) and for 16 years with, BASF – 10 years of which were based at the European headquarters in Germany. Rosie returned to the UK in 2022 and later took up the role of Research Director with ADAS SAS where she now focuses on business development for translational applied agricultural research projects with specific emphasis on crop protection and the interrelationships with crop production. In addition, she is the Chair of the Institute of Innovation and Knowledge Exchange.

Rob Chester

Rob founded SCI in 2021, an award-winning start up that provides assurance and certification services to the some of the biggest names in the food industry. SCI specialises in innovation, having developed the concept of real-time assurance over the last decade. SCI help customers find challenges sooner, so they can act earlier and reduce hassle and cost. Previously to SCI Rob ran NSF international, a UK certification body, following a 25-year career working around the world in retail. He spent 12 years at Walmart, including stints as the Chief Compliance Officer in China and running compliance for the 5,000 US stores. Prior to Walmart he worked at Tesco for 12 years. He lives in Leeds with his wife, Caroline and an assortment of pets that bring joy and hassle in equal measure.



Charlie Dewhirst MP

Charlie has served as Conservative MP for Bridlington and the Wolds since July 2024. From a pig farming family near Driffield in East Yorkshire, he is a former policy adviser at the National Pig Association. A strong advocate of farming and rural interests in Parliament, Charlie is a member of the House of Commons EFRA Committee and vice-chair of the All-Party Parliamentary Group on Science & Technology in Agriculture.



George Freeman MP

George Freeman MP was elected to Parliament in 2010 after a 15-year career in technology venture capital. Over 14 years, he served in key science and technology ministerial roles under four Prime Ministers. As the UK's first Minister for Life Sciences, he led the Life Science Industrial Strategy; as Minister for Decarbonisation and Digitalisation of Transport, he secured the Oxford-Cambridge rail link; and as the first Minister of State at the Department for Science, Technology and Innovation, he shaped UK strategies for Quantum, Fusion, Engineering Biology, and Space. George has long championed science and technology in agriculture. He launched the UK Agri-Tech Industrial Strategy in 2014 and co-chaired the Taskforce on Innovation, Growth & Regulatory Reform. Re-elected APPGSTA chair in 2024, he leads the 30:50:50 campaign to boost productivity while reducing farming's environmental footprint.

Professor Jane Langdale CBE FRS FAA

Professor of Plant Development at the University of Oxford, Jane's research aims to understand how developmental mechanisms evolved in plants, with a focus on the evolution and development of leaves. Jane graduated from the University of Bath with a BSc in Applied Biology and then went on to do a PhD in Human Genetics at the University of London. Postdoctoral research in plant developmental genetics at Yale University was followed by SERC and then Royal Society Research Fellowships at the University of Oxford. In 1994, she was appointed University Lecturer in the Department of Plant Sciences at Oxford and a Tutorial Fellow of The Queen's College. Jane was Head of Department of Plant Sciences from 2007-2012 and Associate Head of the Mathematical, Physical and Life Sciences Division from 2008-2013. She has advised the Gatsby Charitable Foundation's Plant Science Programme since 1997, was elected a Member of EMBO in 2007 and was awarded a CBE for services to plant sciences in 2018.

Dr Craig Lewis

Craig is a member of the PIC Global Product Development team, based in Barcelona, overseeing genetic services for the European, Russian, and African region and is active in PIC's global research programme. He joined PIC in 2011 spending two years in the North American Genetic Service Team prior to his current role. External to PIC, Craig is currently the chair of the steering committee for the European Forum of Farm Animal Breeders (EFFAB) and is on the advisory board for Science for Sustainable Agriculture (SSA). Raised on the family pig farm in Herefordshire, Craig has a degree in agriculture and a master's in animal welfare and behaviour obtained in the United States. He completed his PhD at the Roslin Institute on quantitative genetics, and then proceeded to a research fellowship at the Animal Breeding and Genetics Unit (AGBU) in Armidale, Australia. Craig has been published in numerous international research journals and contributed to extension projects all over the world. He was the recipient of the 2025 Sir John Hammond award.

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Johnny Mackey

Johnny is the stakeholder engagement lead for MSD Animal Health in the UK. He joined the Allflex business in 2017 as national sales manager following an 18-year career focused on the Scottish livestock and red meat industries, including roles with NFU Scotland, Quality Meat Scotland and the Luing Cattle Society. Following the acquisition of Allflex by MSD Animal Health in 2019, Johnny's role covered aftersales, market access and public policy. He is a graduate of Aberdeen University in Biological Sciences of Agriculture. Johnny lives in Blairgowrie, Perthshire with his wife Susie and their three teenage sons Fergie, Sandy and Euan. They run a commercial beef and sheep breeding farm and in his spare time Johnny enjoys distance running and following the mighty Dundee United FC.

Andrew Meredith

Andrew has been Farmers Weekly editor since January 2021 after first joining the publication in 2016. He first served as arable reporter before moving on to become deputy business editor. He became the 91-year-old brand's youngest ever editor 12 months after the business was acquired by specialist publisher Mark Allen Group (MAG) in what was at the time MAG's biggest single acquisition. As well as overseeing the editorial and production team to produce impartial and quality content across print, web, podcast and events, his key contribution each week is Farmers Weekly's editorial column, where he blends political analysis and reaction to the events of the week with as much humour as the situation permits. Before joining the team, he studied agriculture at Aberystwyth University and then worked on his family's upland beef and sheep farm in mid Wales, as well as at Welshpool Livestock Market as a drover.

Dr Steffen Noleppa

For more than 30 years, working as an agricultural economist, Steffen has been involved in the analysis of global agricultural markets and rural policies as well as environmental and transition processes. He has long-standing experience in ex-post and ex-ante impact assessments and evaluations of agricultural technologies and policies, in modelling of agricultural markets and food sectors, and in cost-benefit and societal analysis. He has also worked intensively in the field of climate change and environmental economics, and advises private companies, governments and administration as well as NGOs on agricultural and environmental change processes across the globe. Steffen is the Managing Director as well as the owner of HFFA Research GmbH. He holds a PhD in agricultural economics and a master's degree in animal husbandry, both from Humboldt-Universität zu Berlin. In 2017, Steffen was listed by SeedWorld as one of 20 highly influential seeds-people in Europe.

Jonathan Westlake

Jonathan is Business Development Director for Bovaer in the UK. He joined DSM-Firmenich in September 2024 following 15 years' senior experience in the dairy industry including a variety of sales and marketing roles for Dairy Crest/Saputo Dairy UK. He has detailed knowledge about UK food provenance and the supply chain. Prior to his dairy industry roles, Jonathan spent ten years at Procter & Gamble, gaining specialist experience in many aspects of fast moving consumer goods. Passionate about the green agenda, he holds a diploma in sustainability.

Professor Bruce Whitelaw

A professor of animal bioscience, Bruce is a molecular geneticist and was, until August 2025, Director of The Roslin Institute at the University of Edinburgh.

Retaining a position at Edinburgh he is now focused on innovation in India. His research career has focused on genetic engineering of animals, most notably farm animals, aimed to advance both animal production and biomedical applications.

Bruce has worked with a range of technologies, most recently pioneering the use of genome editors in monogastric and ruminant livestock; he is part of the current and exciting PRRSV-resistant genome edited pigs story. Bruce has had roles with the OIE (now World Organisation for Animal Health), Nuffield Council of Bioethics and various commercial Scientific Advisory Groups. He is currently a member of Food Standards Agency's ACNFP and a Fellow of the Royal Society of Biology.