News

The following news items illustrate some of our activities during the first half of 2016 (January – June 2016). To keep up to date with our activities, please take a look at our news pages at:

http://www.reading.ac.uk/foodbiosciences/about/foodbio-news.asp

Follow us on www.facebook.com/FoodatReading

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CWTS Leiden Ranking & Guardian University Guide 2016

The CWTS Leiden Ranking is an annual global university ranking based exclusively on bibliometric indicators. The rankings are compiled by the Centre for Science and Technology Studies (Dutch: Centrum voor Wetenschap en Technologische Studies, CWTS) at Leiden University in the Netherlands.

University of Reading has been ranked 116 out of 842 institutions internationally, and 22 out 47 institutions from the UK in the headline citation impact measure in the CWTS Leiden Ranking 2016. Based on publications in the Thomson Reuters' Web of Science database, the ranking is produced by the Centre for Science and Technology Studies at Leiden University. Life and Earth Sciences is the strongest disciplinary area for the University, being ranked 49 in the world and 11 in the UK. More details can be found on the Leiden website.

At subject level, the University of Reading is ranked in the top 5 in Agriculture and Food, Design and Crafts, Building and Town & Country Planning, and Film Production and Photography, and is in the top quartile in six other subjects according to Guardian University Guide 2016.
The truth about Eating – ‘Super Foods’

In April 2016, the Department of Food and Nutritional Sciences was visited by Fiona Phillips to film for an episode of the popular BBC ONE programme ‘The Truth About ….’ This time, the topic were “superfoods” and the Department was asked to compare different types of foods. To make this more interesting for TV, this had to include some experiments and therefore a number of volunteers were recruited who had to try different superfoods, quinoa and goji berries.

Dr Gunter Kuhnle and Natasa Giallourou were busy over several days to keep the volunteers happy (and compliant), and on the final day explain everything to Fiona Phillips in a way that was suitable for television.

In the end, we could not confirm that any of the superfoods was better (or worse) than the cheaper control - a result that was not surprising for us but for some of our volunteers.

Ready Steady Nutriton …

On Sunday 5th June 2016 the University of Reading held its “Big Band Big Lunch” event at the London Road campus. On a gloriously sunny day, in between performances from the university swing band, our undergraduate students, Ben Smith and Amber Davey, did two cooking demonstrations (Pan-fried mackerel with harissa, orange and lime couscous & Smoked mackerel pate with crostini – recipes can be found on page xx) informed by our nutrition research here in the department. The aim was to inform people how they might go about incorporating more oily fish into their diet, the recipes are below for you to try yourselves!

A team of nutrition PhD students led by Professor Julie Lovegrove and Dr. Danny Commane were on hand to explain the latest nutrition research to members of the public.
‘Gut Bacteria and Healthy Eating’ at the Nursery

Dr Sandrine Claus visited Apricot nursery in Upper Basildon for a 30 minutes session about ‘Gut bacteria and healthy eating’. Dr Claus was asked to talk to toddlers (2 - 4 years) and a few babies of 12-18 months. The session went well and staff were extremely pleased to see the children being captivated by the bacteria soft toys. They enjoyed giving them healthy food and Dr Claus received a good feedback from parents of the oldest ones.
The Reading Biscuit Experience

Bompas & Parr leads in flavour-based experience design, culinary research, architectural installations and contemporary food design. The studio first came to prominence through its expertise in jelly-making, but has since gone on to create immersive flavour-based experiences ranging from an inhabitable cloud of gin and tonic, the world’s first multi-sensory fireworks and a Taste Experience for the Guinness Storehouse in Dublin, officially the best place to taste Guinness in the world.

Bompas & Parr brought their expertise in flavour-based experience design, culinary research, architectural installations and contemporary food design to Reading during June’s Eat Reading to create a biscuit experience that immersed visitors in the seductive world of the biscuit.

Canvas of Crumbs is part of Eat Reading, a month-long celebration of food and dining. Canvas of Crumbs, also known as the Reading Biscuit Experience, took 30 guests an hour for a dunk in the town’s culinary heritage. Along the way, visitors added their own decorative twists to a finished biscuit, with a range of professional tools and ingredients to let the imaginations of even the smallest of bakers run wild.

The event was a great success and the feedback from visitors was fantastic. One comment from an Instagram post: "Thanks #bompasandparr for the amazing #canvasofcrumbs Reading biscuit experience! It was so lovely to celebrate Reading's industrial past in such a fun, participatory way, and I love how you themed and managed the event (which I will always remember as 'the magical biscuit palace')"
RESEARCHER HIGHLIGHTS

Professor Parveen Yaqoob has been appointed as a panel member on the following international funding councils:
1. RCUK and National Council of Science and Technology Newton Fund, Nutrition & Health theme, partnerships with Mexico and

Prof Julie Lovegrove gave the following invited lectures:
March 2016 German Nutrition Society Annual Meeting, ‘Diary and health’. Fulda, Germany.
Feb 2016 Nutrition workshop. ‘Science Fats or Science Fiction’. London, UK
Jan 2016 FoodFluence. 'Clearing up the Science Fiction on Dietary Fats'. London, UK

Professor Jeremy Spencer received the Lifetime Honorary Membership award for the Oxygen Club of California. He gave a plenary lecture on ‘Dietary flavonoids and their impact on human vascular and cognitive function’. http://oxyclubcalifornia.org/OCC2016/index.php

Professor Bob Rastall was invited to give a talk on Prebiotic Manipulation of the Human Gut Microbiome for Health at the International Scientific Conference on Probiotics and Prebiotics 2016 in Budapest (June 2016).
Dr Kimon-Andreas Karatzas and his PhD student, Marcia Boura gave oral presentations at the IAFP European Symposium on Food Safety, which was held 11-13 May 2016 in Athens, Greece at Megaron Athens International Conference Center.

Marcia Boura presented on the "Non-protective Role of sigB against Oxidative Stress in Listeria monocytogenes" (https://iafp.confex.com/iafp/euro16/webprogram/Paper12206.html) and Dr. Kimon Andreas Karatzas presented on the "Maleic Acid Enhances Acid Sensitivity of Listeria monocytogenes through Inhibition of the Glutamate Decarboxylase Activity" (https://iafp.confex.com/iafp/euro16/webprogram/Paper12597.html)

Dr Sandrine Claus was invited to give a talk at the Probiota2016 conference (Amsterdam, 2nd April 2016).

Dr Sandrine Claus gave an invited lecture at the 3rd Microbiome R&D and Business Collaboration forum, London 11-12 April 2016. The follow-up interview is posted on my website: http://clauslab.net/interview-following-the-3rd-microbiome-rd-and-business-collaboration-forum/

Dr Sandrine Claus and her team, Giulia Mancano and Joanna Boberska, attended the annual MyNewGut meeting in Copenhagen (10th May) where Joanna and Giulia presented an update of their project.

Dr Vimal Karani was invited to give a talk on ‘Genetic Epidemiology of Obesity traits’ at the Women’s Christian College Centenary International Conference - Celebrating 100 years of yeoman service in Women’s Education and empowerment (January 2016, Chennai, Tamil Nadu, India).

http://wcc.edu.in/centenary-international-conference/

Dr Vimal Karani was invited as a speaker for the webinar on 'The Science behind Anti-ageing: More than Skin deep?' organised by NUTRAIingredients (France). He gave a talk on 'Vitamin D and Cardiovascular Disease' (March 2016)
**Dr Vimal Karani** was invited to give a special lecture on ‘Genes, Lifestyle and Nutrition’ at the Thammasat University (Bangkok, Thailand) (February 2016).

*Dr Jirada and Dr Karani →*

**Dr Vimal Karani** was invited to give a talk on ‘From Nutrigenetics to Personalised Nutrition’ at the ‘Food Vision’ Conference at Cannes, France (March 2016).

The follow-up interview can be found in the following link: [http://www.foodnavigator.com/Science/Gene-diet-insights-key-to-personalised-nutrition-success](http://www.foodnavigator.com/Science/Gene-diet-insights-key-to-personalised-nutrition-success)

*Dr Vimal Karani →*

**Dr Vimal Karani** was invited to deliver a special lecture on ‘Nutrigenetics and Personalised Nutrition’ at the Centenary Conference, Department of Food Science and Nutrition, University of Mysore, Karnataka, India (April 2016).

*Dr Vimal Karani and Prof Asna Urooj →*

**Dr Vimal Karani** presented the findings of the First Nutrigenetics study in the Indian population (GeNuIne Collaboration) at the 10th Congress of the International Society of Nutrigenetics and Nutrigenomics (ISNN, Tel Aviv, Israel). Dr Karani’s talk was mentioned as one of the highlights of the ISNN conference 2016 ([http://marietteabrahams.com/2016/05/highlights-isnn-2016-personalized-nutrition/](http://marietteabrahams.com/2016/05/highlights-isnn-2016-personalized-nutrition/))

*Dr Karani giving the lecture →*
**Dr Vimal Karani** presented at the UK-Thailand Project collaboration meeting on “Food Matrix Microstructure and Gut Health” funded by British Council and Newton fund at Bangkok, Thailand (February 2016).

**Dr Vimal Karani** gave a talk on ‘Milk intake and cardio-metabolic traits’ at the 6th Conference on Epidemiological Longitudinal Studies in Europe at Oulu, Finland (June 2016).

Invitations for **Dr David Jukes** and his Omani PhD student, **Moza Al-Buasaidi**, to attend and speak at the Oman Food Safety Conference in mid-April provided them with an opportunity to combine some research activity with attendance at the conference. Moza Al-Buasaidi is from Oman and her research involves an investigation into the safety control issues associated with fishery products from her country. By travelling out a week early they were able to hold meetings with senior officials at both the Ministry of Agriculture and Fisheries and the Ministry of Commerce and Industries. Additional visits included tours of the national Fish Quality Control Centre, the main Central Fish Market (to see one of the daily auctions) and three different commercial fish processors.

With about 300 delegates from Oman and neighbouring countries, the three-day conference provided them both with further opportunities to discuss issues linked to the research and broader food control strategies. At her presentation Moza Al-Buasaidi provided details of her research and provided some initial recommendation based on her studies. These focussed on the problems of adopting modern food management systems, including HACCP, into the controls implemented by the commercial processors and how more effective enforcement of legislation could enhance the fish quality overall. David Jukes spoke about the lessons that could be learnt from the experiences of the European Union in moving to a harmonised system of legislative controls and the implications for Oman and the other countries in the Gulf Cooperation Council (GCC).
Biotechnologies to Valorise the regional food Biodiversity in Latin America (BiValBi) project

Dr Paula Jauregi and Dr Maria Jose Oruna-Concha participated in the last meeting of the European project BiValBi in Salamanca, Spain on the 5th June.

The BiValBi project started in October 2013 and the Reading team led by Dr Jauregi collaborated with several universities in Europe (3) and Latin America (4) in a project that focuses on the valorisation of food and agricultural waste such as soya and grape pomace and the development of technologies to produce products with food applications. The project funded the mobility of researchers over three years and in particular, one year placements of PhD researchers. One of the main achievements of this project has been that all mobilities (27) have been completed despite of the diversity of countries and researchers participating which has also led to a large number of PhD thesis co-supervised by the participating institutions. Reading has supported five mobilities in total. Moreover a second project has been submitted to give continuation to this successful partnership and the outcome will be known at the end of the summer, fingers cross!

Dr Ditte Annie Hobbs was invited to speak at the following conferences:


Mar 2016 AHDB Dairy Research and Development Conference. “Sustainable diets for the future: what is the role of dairy?”. Kegworth, Derby, UK


Mike Lewis continues to be busy. His main task since Christmas has been to complete a book on “UHT and other High-temperature Processing of Milk and Milk Products” to be published by Wiley Blackwell. The manuscript is now complete and this will give him time to put the finishing touches to several more papers which have been substantially drafted… and perhaps a second edition of Physical Properties of Foods and Food Processing Systems.

Consultancy, advisory work and workshop activity has taken him to Singapore, Jersey, Edinburgh, Somerset and four times to Ireland.
Mike is enjoying running workshops and is getting good feedback. He enjoys meeting people and sharing his experiences and enjoys catching up with past Reading students, to show them his prowess with powerpoint. In March he did a four day workshop for FMC in Singapore. Whilst there, Shaun organized a dinner with some Reading food alumni.

In the photograph are Mei-Yin Low, Mike Lewis, Joy Poh, Kexuan Lee, Shaun, Zac and Renaldo Santosa. He is particularly grateful to Renaldo and Greenfields for their sponsorship to allow him to attend scientific meetings.

Mike is currently external examiner at Cardiff Metropolitan University and attended student presentations for their NPD module (Level 5) and final year project poster sessions (Level 6) where he talked to all 27 students.

He has been involved in evaluations for the Irish Research Council Postdoctoral International Assessment Board and also for the Food Institutional Research Measure (FIRM) for the Department of Agriculture Food and Marine. He is still refereeing papers for several food and dairy journals.

He also does some zumba, yoga and tennis with Alistair Grandison and meets up with Alistair, Jim Brennan and Alan Reynolds at Zero degrees for a liquid lunch and a chat about the “good old days”.

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**Dr Roz Fallaize** was chosen as FNS candidate to present a poster for the annual University Annual Fairbrother Public Lecture on the 4th May 2016.

The Fairbrother Lecture is a University public lecture established in 2014. Named after Jack Fairbrother, who in 1929 became the first student to be awarded a PhD from the University, the Fairbrother Lecture is an annual event at which a current, or recent, Reading doctoral researcher will present their work to a wider audience.

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**DEPARTMENTAL SUCCESS IN OBTAINING RESEARCH GRANTS**

**Prof Parveen Yaqoob** has been awarded £401K to investigate the effects of n-3 PUFA on the generation and functional activities of microparticles. Co-Is: Dionne Tannetta (Food), Jon Gibbins, Chris Jones (SBS)

**Prof Parveen Yaqoob** has been awarded the University full PhD studentship for Ruihan Zhou, starting October 2016.

**Dr Carol Wagstaff (PI), Dr Lisa Methven (Co-I) and Luke Bell** have been successful in securing a BBSRC LINK grant worth around £900k to study the genetic basis for phytochemical and sensory traits in rocket.

**Prof Simon Andrews (PI) and Prof Glenn Gibson, Dr Sandrine Claus and Dr Gemma Walton (Co-Is)** have been awarded £469K to study “The relationship between dietary iron and the gut microbiota. Can dietary iron regime be exploited to improve health?”
Dr Paula Jauregi has been awarded £18K by CONACYT (Chilean Research Council) on “Valorisation of artichoke wastes: a contribution to the agricultural industry of the Valparaiso region”. The project started on 1st May 2016 and will end on 1st November 2017.

Prof Bob Rastall has been awarded £137K by Optiobiotix Health Ltd on “Development of synbiotic products”.

Dr Colette Fagan has been awarded a Royal Society research grant (£15K) on “Development of algorithms to predict critical quality parameter in real-time during cheese manufacture using a front-face fluorescence sensor”.

Dr Gemma Walton has been awarded a grant by Equi Life Ltd (£61K) on “An integrative approach towards understanding the equine metabolic syndrome by evaluating impact of diet and season on the gastrointestinal microbiota in ponies”.

Prof Martin Woodford has been awarded a research grant from Eli Lilly & Company (£140K) to develop a vaccine against Avian Pathogenic Escherichia coli (APEC) and another one from Intervet UK Ltd (£5K) to demonstrate the efficacy by a metagenomic and metabonomic analysis of poultry tested with AVIGUARD.

Prof Glenn Gibson has been awarded a research grant from Metagenics Inc (£163K) to develop synbiotic combinations of probiotics and prebiotics (milk oligosaccharides) utilizing in vitro fermentation and fecal batch culture methodologies.

Prof Ian Givens, Prof Julie Lovegrove and Dr Ditte Annie Hobbs have received £50,106 from AHDB to conduct a 6 month project investigating ‘The relationship between red meat consumption and nutritional adequacy, dietary patterns and metabolic profile in UK children and adults using data from years 1-4 of the NDNS’.

Dr Vimal Karani has been awarded funding (£20K) by the Thailand RC to conduct the ‘First International Workshop on Nutrigenetics and Nutrigenomics’ at the Thammasat University, Bangkok, Thailand.

Dr Vimal Karani has been successful in receiving the ‘Rank Prize Funds Nutrition Committee Award’ (£7.5K) to conduct a large-scale analysis of gene-diet interactions on 500,000 individuals and to get trained on advanced statistical genetics.

Dr Vimal Karani has been successful in getting a student (Cindy Xin Ying Bei, final year) as part of the Nutrition Society Summer Studentship to perform a gene-diet interaction analysis on metabolic traits.

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**FUNDING OPPORTUNITIES**

Anyone interested in regular updates on funding opportunities can subscribe to the Food and Nutrition Magazine, a compilation of relevant funding opportunities from ResearchProfessional.com. This email listing comes out at the end of every month. To subscribe, email researchfunding@reading.ac.uk with your name, email and the name of your department.

You can also search the funding databased at ResearchProfessional.com on your own at any time. Please see this link for more details: [http://www.reading.ac.uk/closed/res/ResearchSupportClosed/FindingFunding/rea-redFindingfunding.aspx](http://www.reading.ac.uk/closed/res/ResearchSupportClosed/FindingFunding/rea-redFindingfunding.aspx)

You can create and save tailored funding alerts based on your particular research areas and have these regularly emailed to you.

If you would like help applying to any of these grants or help searching for opportunities for your particular research project, please contact your Research Development Manager, Tristan Glenn at t.glenn@reading.ac.uk.

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**Upcoming funding opportunities**

Title: Wolfson research merit awards – Royal Society
Closing Date: 4th July

Summary text: These enable universities to recruit, or keep in the UK, respected researchers in all areas of the life and physical sciences, including engineering, but excluding clinical medicine.

Awards are made to the university and therefore researchers must remain at the university named on the application. Researchers may be of any nationality but must hold or have received a firm offer for, a permanent post at a UK university.

Awards take the form of salary enhancements and are usually worth from £10,000 to £30,000 per year over a maximum period of five years. Research expenses may be considered for overseas researchers to support integration into the UK research environment.

Website: [https://royalsociety.org/grants-schemes-awards/grants/wolfson-research-merit/](https://royalsociety.org/grants-schemes-awards/grants/wolfson-research-merit/)

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**Title: Wellcome Trust University Awards – Wellcome Trust**

Closing Date: Preliminary application deadline 6th July
Full application deadline: 20th September

Summary text: These enable universities to attract research staff by providing support for up to five years after which time the award holder takes up a guaranteed permanent post at the university. Teaching and other non-research commitments are expected to be minimal during the period of full support.

Applicants must be nominated by their prospective head of department. Support is normally available only at lecturer level, although in exceptional cases awards to senior-lecturer level may be possible. Academics holding a permanent post are not eligible to apply to this. Funds are for salary costs.

Website: [https://wellcome.ac.uk/funding/university-awards-humanities-and-social-science](https://wellcome.ac.uk/funding/university-awards-humanities-and-social-science)

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**Title: Biomedical catalyst – regenerative medicine research committee – Medical Research Council**

Closing Date: 7th July

Summary: Proposals should advance the preclinical or early clinical development of regenerative medicine therapies. This call supports confidence in concept studies that if successful will promote the translation of fundamental discoveries toward benefits to human health.

This call funds preliminary work or feasibility studies to establish the viability of an approach, through addressing focussed research questions needed to unlock progress in pre-clinical development and/or early clinical testing of novel regenerative medicine therapies

This call forms part of the MRC’s Translational Research Strategy and forms part of the Biomedical Catalyst funding stream, operating in conjunction with the Developmental Pathway Funding Scheme

Proposals are funded on the basis of 80% of full economic costs.

Website: [http://www.mrc.ac.uk/funding/browse/biomedical-catalyst-regenerative-medicine-research-committee/#Costs](http://www.mrc.ac.uk/funding/browse/biomedical-catalyst-regenerative-medicine-research-committee/#Costs)

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**Title: Royal Society Innovation Award – Royal Society**

Closing Date: 7th July 2016

Summary: This supports scientists who wish to develop a proven novel concept through to a near-market product ready for commercial exploitation. The award is designed to promote innovation and fill the funding gap between scientific research and the exploitation of an idea through venture capital investment. Applicants of any nationality who have a PhD or are of equivalent standing in their profession, who hold a substantive post in a UK university and will be in post at the host organisation for at least the duration of the project may apply. Applications from
individuals or groups who already have established contacts with industrial or commercial collaborators are particularly encouraged.

Two awards worth up to £250,000 each are available for a duration of up to two years.


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Title: Collaborative Awards in Humanities and Social Science – Wellcome Trust

Closing Date: 8th July

Summary: This scheme is for teams with a track record of working together to tackle research questions that can only be approached collaboratively. Teams can come from the same discipline or from a combination of disciplines. They can be from the same university department or a number of organisations (anywhere in the world).

We encourage applications that combine humanities and social science research with biomedical science research and/or product development and applied research.

Awards can be up to £1.5 million each over a maximum period of five years. Funding may cover research expenses, travel and subsistence, collaborative activity, capacity-building initiatives and research leave, symposia and dissemination activities, research management and support costs, and public engagement costs.

Website: [https://wellcome.ac.uk/funding/collaborative-awards-humanities-and-social-science](https://wellcome.ac.uk/funding/collaborative-awards-humanities-and-social-science)

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Title: Pump Priming Awards for Preliminary Research using IMPC Knockout Mice – Medical Research Council

Closing Date: 8th July

Summary: These are pump priming awards to support the receipt and preliminary use of gene knockout mouse lines developed and phenotyped through the International Mouse Phenotyping Consortium (IMPC).

Pump-priming investment of up to £1 million is available through a two-phased initiative opening in May 2016 and May 2017, with 10-25 awards made in September 2016 and 2017. As the awards are for preliminary studies only, they will be of 1-2 years duration and up to £20-40k in value.

Applications are invited from UK-based research groups to receive knockout mice and undertake early biological investigations that build on existing research expertise and underpin longer-term research goals that would be supported through standard funding mechanisms.

Website: [http://www.mrc.ac.uk/funding/browse/pump-priming-awards-for-preliminary-research-using-impc-knockout-mice/](http://www.mrc.ac.uk/funding/browse/pump-priming-awards-for-preliminary-research-using-impc-knockout-mice/)

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Title: £1M Priming Food Partnerships call now open – BBSRC, EPSRC, ESRC, MRC, STFC

Closing Date: Expression of interest deadline: 13 Jul 2016, 4pm. Sandpit workshop: 19-21 Sep 2016

Summary: BBSRC, EPSRC, MRC, ESRC and STFC have launched a joint £1M pre-competitive research partnering call to prime collaborations between range of organisations across the food supply chain. Both stakeholders and academics are invited to submit an Expression of Interest to participate in the Sandpit Event and to help develop the resulting research programme.

The call is an opportunity to foster new partnerships in pre-competitive research between the food industry, the academia community and the wider research base in the public and third sectors to work together on pre-competitive research, with the ultimate aim of stimulating innovative research and technological advances of relevance to the food industry.
Title: **Tackling antimicrobial resistance: behaviour within and beyond the Healthcare Setting – ESRC, NIHR, AHRC, MRC, Defra, VMD**

Closing Date: Pump Priming grant: 20th July, 4pm

Collaborative Grants: EoI: 27th July, 4pm

Collaborative Grants: Full applications: 8th September, 4pm

Summary: Supporting the UK Five Year Antimicrobial Resistance Strategy, and in line with the cross Research Council initiative, this call is specifically relevant to resistant bacteria of humans and animals rather than other classes of pathogens and other target species. This means that it seeks proposals which relate primarily to understanding or influencing behaviours relevant to antibiotics (either their use, or behaviour that might lead to their use not being necessary). Proposals that are also relevant to other classes of pathogen are permissible as long as the primary focus is antibiotics.

Pump priming grants can be a maximum of £250,000 at 100% fEC for up to 24 months.

Collaborative grants can be a maximum of £2 million at 100% fEC for up to 48 months.


Title: **Investigator Awards in Biomedical Science – Wellcome Trust**

Closing Dates: 27th July

21st November

Summary: These enable researchers at any career level to address important research questions relevant to human and animal health and disease.

Applicants based in the UK, Republic of Ireland or a low or middle-income country must have an established academic post at an eligible higher education or research institution.

Awards are worth a maximum of £3 million for up to seven years. They may cover research expenses, including research assistance, animals, equipment, fieldwork costs and funding for collaborative activities, travel and subsistence, and overseas allowances. Joint applications are eligible.

Website: [https://wellcome.ac.uk/funding/investigator-awards-science](https://wellcome.ac.uk/funding/investigator-awards-science)

Title: **Biomedical Catalyst: Developmental Pathways Funding Scheme (DPFS) – Medical Research Council**

Closing Date: Outline Proposals: 27th July

Summary: Goals are to improve prevention, diagnosis, prognosis, or treatment of significant health needs, or that focus on developing research tools that increase the efficiency of developing interventions.

- The following activities are eligible for support:
- Developing candidate therapeutic entities (e.g. drug discovery)
- Pre-clinical testing of novel therapeutic entities
- Early-phase clinical studies of novel therapeutic entities (phases 1 and 2)
- “Repurposing” clinical studies – using existing therapies for new indications
- Developing and testing novel devices
- Developing and testing diagnostics (including biomarker validation)
• Individual projects can start and finish at any point along the translational pathway but would not typically progress from initial development through to phase 2 clinical testing in a single application.

Website: http://www.mrc.ac.uk/funding/browse/biomedical-catalyst-developmental-pathway-funding-scheme-dpfs/

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Title: Sir Henry Dale Fellowships – Wellcome Trust

Closing Date: 17th August

Summary: Salary and research expenses are covered. Duration for funding is 5 years. It may be held on a part-time basis and you can apply for renewal for an additional three years. The award includes:

- a basic salary (determined by your host organisation)
- a fellowship supplement of £7,500 for your personal support
- research expenses, normally including one research post (postdoctoral, graduate RA or technician)
- a contribution towards indirect and estate costs of £11,000 a year (from the Royal Society)

Eligibility: You can apply for a Sir Henry Dale Fellowship if you have no more than seven years' postdoctoral research experience (from the date of your PhD viva to the date of the interview) or you're currently an early career fellow.

Website: https://wellcome.ac.uk/funding/sir-henry-dale-fellowships

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Title: Research Career Development Fellowships – Wellcome Trust

Closing Date: Preliminary application deadline: 17th August

Full application deadline: 24th October

Summary: A Research Career Development Fellowship in Basic Biomedical Science is for five years and may be held on a part-time basis. The award includes:

- a basic salary (determined by your host organisation)
- a fellowship supplement of £7,500 for your personal support
- research expenses, normally including one research post
- You can also apply for public engagement funds to involve the public in your research and inspire learning.

Eligibility: You can apply for a Research Career Development Fellowship if you have:

- No more than seven years' postdoctoral research experience (from the date of your PhD viva to our final decision date). Or you're an early career fellow (eg Henry Wellcome Postdoctoral Fellow) and this is the new step in your career as a research scientist.
- A strong track record in your area of research.
- Sponsorship from a head of department or equivalent at an eligible host organisation in the Republic of Ireland.
- A research project that is within Wellcome Trust's scientific remit.
- You do not hold an established post or hold an intermediate fellowship supported by another UK or Republic of Ireland funding body.

Website: https://wellcome.ac.uk/funding/research-career-development-fellowships

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Title: Collaborative Awards in Science – Wellcome Trust

Closing Date: Preliminary applications: 22nd August

Full application deadline: 11th November

Summary: Collaborative Awards are for teams of researchers bringing together the relevant expertise and experience to address the most important scientific problems. Each applicant must be essential to the proposed collaborative research and have:
Proven research expertise and experience in their field.
An academic or research post (or equivalent).
A salary for the duration of the award period.

Awards can be up to £4 millions over a maximum period of five years.

Website: https://wellcome.ac.uk/funding/collaborative-awards-science

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**Title: £15M Innovate UK R&D "Open" Competition – Innovate UK**

Closing Date: Registration deadline: noon on 31 August. Application deadline: noon on 7 September

Summary: Innovate UK is investing up to £15M in innovative R&D projects through the first of its "Open" funding competitions. IUK expect projects to last 6 to 36 months. These can range in size from total eligible project costs of £25,000 up to £1 million.

The competition is open to the best business-led ideas or concepts, which can be drawn from any technology, engineering or industrial area, including Innovate UK’s 4 priority sectors for growth (Emerging and Enabling Technologies; Health and Life Sciences; Infrastructure Systems; Manufacturing and Materials). The aim is to fast-track ideas to commercial success. Projects should demonstrate disruptive, cutting-edge innovations and businesses should demonstrate ambition and potential for growth. The competition is open to all UK companies - small and medium-sized enterprises and large companies.

Website: https://www.gov.uk/government/publications/innovate-uk-open-funding-competition?utm_campaign=412757_1606%20Food%20Newsletter%20Jun%202016&utm_medium=email&utm_source=dotmailer&dm_i=2VFU,8UHH,1J882J,T9B1,1

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**Title: Sir Henry Wellcome Postdoctoral Fellowships – Wellcome Trust**

Closing Date: Preliminary application deadline: 10th October
Full application deadline: 13th December

Summary: Duration is 4 years. What is offered:

- A basic salary (determined by University)
- A fellowship supplement of £2,500 a year
- Research expenses directly related to your proposal.

Eligibility: You can apply if you’re in the final year of your PhD studies, or if you have no more than two years of postdoctoral research experience (from the date of your PhD viva to the date of the interview). The research project must be within the remit of the Wellcome Trust and be a UK/European Economic Area national.

Website: https://wellcome.ac.uk/funding/sir-henry-wellcome-postdoctoral-fellowships

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**Title: Research Career Re-entry Fellowships – Wellcome Trust**

Closing Date: Preliminary application deadline: 10th October
Full application deadline: 13th December

Summary: The Research Career Re-entry Fellowship is for four years and may be held on a part-time basis. The award includes:

- a basic salary (determined by your host organisation)
- a fellowship supplement of £7,500 for your personal support
- research expenses
- funds for relevant research retraining, eg for a skills or MSc course.

You can also apply for public engagement funds to involve the public in your research and inspire learning.
Eligibility: You can apply for a Research Career Re-entry Fellowship if you're a researcher in basic biomedical science, clinical science or public health who has had a continuous career break of at least two years. We accept career breaks taken because of family commitments, ill health and work outside of research. You must have:

- a strong research track record, or have demonstrated the potential for a strong research career before your career break (normally with at least two years' postdoctoral research experience)
- an eligible host organisation in the UK or Republic of Ireland
- a research project that is within our scientific remit.

Website: [https://wellcome.ac.uk/funding/research-career-re-entry-fellowships](https://wellcome.ac.uk/funding/research-career-re-entry-fellowships)

Title: **Follow-on Funding call - BBSRC**

Closing Date: Application deadline 11th October

Summary: The Follow-on funding programme is designed to support the translation of fundamental research funded by BBSRC into practical application, including commercialisation. The aim of the programme is to help researchers maximise the societal and economic benefits of their research.

This programme is a proof-of-concept model where further work on an idea will take it through to the stage at which the route to application is clear, which may include a spin-out or licensing opportunity. The programme enables activities essential to preparing a robust business plan and secure, where appropriate, further funding and support to progress.

There are three types of grant application available:

* **Pathfinder Follow-on Fund**
  - Projects up to 6 months in duration
  - Valued at under £20k (100% FEC)

* **Standard Follow-on Fund (FOF)**
  - Projects up to 12-18 months in duration
  - Valued at under £250k (100% FEC).

* **Super Follow-on Fund (SuperFOF)**
  - Projects between 12-24 months in duration
  - Valued at between £0.25M and £2.0M (100% FEC)
  - Applications are by invitation only, following an outline phase.

Website: [http://www.bbsrc.ac.uk/funding/filter/follow-on/](http://www.bbsrc.ac.uk/funding/filter/follow-on/)

Title: **Senior Research Fellowships - British Academy/Leverhulme Trust**

Closing Date: tbc, likely to be November.

Summary: This enables mid-career scholars to have one year’s research leave with funding being provided to cover the costs of replacement teaching. There is an annual closing date in the autumn.

Eligibility: The Academy takes no account of an applicant's age or current status (e.g. Professor, Lecturer) in determining eligibility for these awards. Rather, in all cases, award-holders are expected to be able to disseminate the results of their research not only through publications, but also through feeding into their future academic career after the end of the awards. Any field of study in the humanities and social sciences is suitable for support.

Website: [http://www.britac.ac.uk/readfell.cfm](http://www.britac.ac.uk/readfell.cfm)
TRAVEL FUNDS FOR STUDENTS

All the information regarding travel funds for students can be found at:
(http://www.reading.ac.uk/life/life-travel-fund.aspx)

STAFF TRAINING MOBILITY (STT)

Erasmus+ programme is not just for students – one of its core components is to encourage more staff mobility within Europe, and in future years to targeted countries across the world (to be integrated into the programme) in order to MODERNISE etc. In essence Erasmus+ provides funds to help Staff mobility to occur, and a framework to enable it to happen. Thereafter it is up to you how take advantage of and benefit from the opportunities available.

Full details of the programme are available on the ESAO website (http://www.reading.ac.uk/studyabroad/staff/vso-internalstaff.aspx), however colleagues are welcome to make direct enquiries regarding possibilities either via studyabroad@reading.ac.uk or m.a.dowse@reading.ac.uk.

Miss Yizhen Ding (one of the 2+2 students in the department) has been awarded Undergraduate Professional Work Experience Bursary (500 pounds) from Job shop in the University.

This year we have the following 4 UG students who will start placement in Europe and will be receiving €430 per month:

1. Yizhen Ding (student number 23021139) in Solina, Belgium
2. Daniel Oliver Borer (student number ) in International Flavours and fragrances, Netherlands
3. Xing Ling Chua (student number 23019714 ) in Solina, Belgium
4. Annie Yee Chi POH (student number 23017690 ) in Solina, France

PhD STUDENT NEWS

Agi Fekete passed her PhD viva (May 2016) with external examiner Prof Arne Astrup from University of Copenhagen. Prof Astrup is one of the global leaders in nutrition and obesity research. He is also the Director of the Nordea Foundation OPUS research Centre 2009-13 responsible for developing and testing the New Nordic Diet. He is Knight of the First Order of Dannebrog 2012.

Prof Spencer, Prof Astrup, Dr Fekete, Prof Lovegrove, Prof Givens (left to right) →

Kumari Rathnayake was awarded the ISSFAL New Investigator Award for her abstract to be presented at ISSFAL congress in September 2016. http://www.issfal.org/conferences/awards-and-scholarships
Samantha Stone presented at the UK-Thailand Project collaboration meeting on “Food Matrix Microstructure and Gut Health” funded by British Council and Newton fund at Bangkok, Thailand (February 2016).

Robert Grimaldi did a poster and an oral presentation at the ISAPP conference.

Photo showing Roberta Grimaldi presenting her research during poster session to one of the judges

Luke Bell has received the nomination for the ‘Food’ research theme in the University PhD Researcher of the Year competition. There are 5 themes, including ‘Food’, and presentations will be given on the 23rd of June to determine the overall winner.

Randah Alquarashi did an oral presentation the 16th international conference in the ISANH Middle East polyphenols & Antioxidants World Congress, Dubai, UAE, from April 12th to 14th, 2016.

She has been successful in getting £1,000 from the the Arthur Hosier and Meyer Sassoon Travel Fund to attend the Dubai World Congress 2016.

PhD Vivas

The following students successfully defended their PhD theses and we pass our congratulations to all of them:

Salisu Abubaka, “Phytochemical content and function effects of Hibiscus”, Prof Julie Lovegrove and Prof Jeremy Spencer.

Agnes Fekete “Impact of milk protein (casein and whey) on vascular function and cardiovascular risk”, Prof Julie Lovegrove and Prof Ian Givens.

Onyinye Ezeh, “Edible Oil from Tiger nut: Mechanical Pressing and Aqueous Enzymatic Extraction Methods”, Professor Keshavan Niranjan.
Ashleigh Stewart, "The Flavour Chemistry of Milk-based Confectionery Products", Dr Jane Parker.

Yue Liu, "The impact of high fat diets, prebiotics and probiotics on gut microbiota and immune function, with relevance to elderly populations", Prof Glenn Gibson.

Choosit Hongkulsup, "Enzyme assisted extraction of chitin from shrimp shells and its application as an antimicrobial agent", Professor Keshavan Niranjan.

Glynn Martin, "Impact of gut microbial metabolites on models of liver and heart metabolism", Dr Jonathan Swann.

Alice Turner, "Production, processing and application of ferulate-rich grain for prevention of cardiovascular disease", Prof Jeremy Spencer.

Hanady Albadran, "Encapsulation of probiotics: study on drying and coating of microcapsules and on novel delivery formulations", Dr Dimitris Charalampopoulos


Randah Alquarashi, "The Potential Benefits to Health from Consuming Acai (Euterpe oleracea Mart)", Prof. Ian Rowland & Dr. Daniel Commane.

Jumoke Bukola Olatujoye, "The study of the effect of sweet whey proteins on the astringency or red wines", Dr Paula Jauregi and Prof Mike Gordon.

PhD Transfer vivas

The following students successfully passed their PhD transfer vivas and we pass our congratulations to all of them:

Balqees Alawadhi, "Impact of personalized nutrition in dietary change in Kuwait", Prof Julie Lovegrove and Dr Roz Fallaize.

Simon Steenson, “Impact of sugar on intestinal lipid production”. Dr Kim Jackson, Prof Julie Lovegrove, Prof Margot Umpleby (University of Surrey) and Dr Barbara Fielding (University of Surrey).

Micael de Andrade Lima, “Recovery of phenolic acids from fruit and vegetable by-products”, Dr Dimitris Charalampopoulos

Tiffany Lau, “Recovery of valuable polyphenols from corn cobs”, Dr Maria Jose Oruna-Concha

Xuedan Wang, “Synbiotic development in lactobacillus”, Prof Glenn Gibson

Motunrayo Ayomipo Usikalu, “Sensory preferences within a Food choice Model”, Dr Lisa Methven

Ezzat Azman, "Exploitation of fruit and vegetable processing waste", Dr Dimitris Charalampopoulos

Ogemdi Florence Eze, “Production of prebiotic oligosaccharides from okara”, Dr Dimitris Charalampopoulos

Prima Luna, “Production of Arabinoyxylans from Sorghum by-products and their application”, Dr Dimitris Charalampopoulos

Sanchai Yotmanee, “Characterization of pigmented rice wine”, Dr Maria Jose Oruna-Concha

Zuharlida Binti Tuan Harith, “Production of lipids from fungi”, Dr Dimitris Charalampopoulos
UNDERGRADUATE NEWS

Food Industry Symposium

Once again the Department staged a ‘Food Industry Symposium’ for all students in February. Ten industry speakers attended and represented a wide cross-section of food industry activities. These included presentations from major multinationals, including Mars Drinks and Modalez, and well as two speakers who were in the early days of creating new companies including Ben Mason (of ‘Masons Beans’) who had recently made a successful appearance on the TV show ‘Dragons Den’ promoting his concept of a new line in fresh baked beans. Retailers were represented by one of our graduates working for Marks and Spencer and it was particularly pleasing to welcome back several graduates as speakers. This was our 6th annual ‘Food Industry Symposium’ and plans are well advanced for speakers at our 7th Symposium next February. We are though always keen to hear from anyone willing to provide a stimulating and challenging talk and recent graduates who are able to illustrate how their degrees are providing access to interesting careers are always well received by the students. Please contact Dr David Jukes in the Department if you would like more information.

UCAS Day

It has been a very busy Spring term for admissions. There were three UCAS visit days, which were a great success and great feedback from the applicants has been received. Dr Maria J Oruna-Concha has organised this event. These three days days basically give applicants an opportunity to get a closer insight into the Department of Food and Nutritional Sciences. There were many activities during the day including talks about the Department by Professor Richard Frazier and talks about the Industrial placement year by Stephanie Owens, Elin Fflur Jones, Katherine Pitt-Hardrake (three of our final year students).

In addition there were talks by industry representatives from companies such as Pepsico, International Food Network, Ella’s Kitchen, LR Suntory, Baxter Storey, a laboratory session with John Schollar, a flavour demonstration by Dr Jane Parker (manager of the Flavour Centre at Reading University) and finally all the applicants had an interview with an academic member of staff. In addition, our current students were around to answer questions and give their perspective on the department.

We wish the applicants well in their forthcoming examinations and hope to see them again in September 2016. We look forward to another busy term and welcoming more applicants to the Department after the summer break.
New Product Development (Final Year Students)

On 17th March 2016, final year students were able to show their creations as part of their New Product Development (NPD) exercise. Twelve stands were set up in the Pilot Plant, where very enthusiastic students presented their final products to both, representatives of the Food Industry as well as staff members from our Department.

There was a great variety of products designed to cater for different age groups all of which had to meet the required nutritional needs, excel in presentation and organoleptic properties but still being financially competitive within the market place.

All the products were of a very high quality which made it very difficult for the panel to decide the winning team. This will be announced at Graduation on the 8th July!

It was a great occasion as the students’ enthusiasm was clearly evident and they were very appreciative of the opportunity to speak to some company representatives.
The comments from the “industrial” visitors (Sue Howlett, WSH; Simon Hails, Sensory Dimensions; Pauline Guilbert, Mondelez; Evelien Beuling, Mondelez; Libby Good, Business Development Manager - The Food Advanced Training Partnership) were very positive and encouraging.

“The overall standard was great and they were all very professional in their approach, products & presentations”.

“The biscuit project developed a fantastic packaging idea. They really captured the flavour with aspects of Reading considered. Excellent team work”.

“It’s not easy to pick a winner amongst them to be honest!”

This year four of the teams (Clean and Green, Melt, Roasted Courgette and Spinach Muffin and Smoked Coley Arancini) submitted their products to ECOTROPHELIA UK, a national competition organised jointly by the Institute of Food Science & Technology and Campden BRI rewarding student teams who have developed the best eco-innovative food products. Well done to all!

Furthermore, as part of the Reading 2016 Year of Culture celebrations “The Superior Reading biscuits” created by our finalists Thomas Morgan, Litai Liu with the help of Mrs Manik Praveen Puranik, Dr Lisa Methven, Dr Colette Fagan, Dr Afroditi Chatzifragkou and Dr M Jose Oruna-Concha around Reading’s heritage of Beer, Bulbs and Biscuits as well as the Birthday biscuit created to celebrate the 90th anniversary of Reading University were displayed at “Eat Reading” on the 3rd June in Reading town centre. They were extremely popular!
The 4th Nursten Postgraduate Flavour Symposium – 11th & 12th April 2016

Relaunched in memory of eminent flavour chemist Prof Harry Nursten in 2013, this two day symposium is now in its fourth year. It is an opportunity for early career researchers within Flavour and Sensory Science research to present and share their work. This year it was hosted by Reading University and presentations were given by delegates from the Universities of Nottingham, Reading and Agri-Food and Biosciences Institute Belfast who were joined by a number of industry and visiting researchers as well as representatives of the IFST SSG, RSC and SCI. This year we were also honoured to welcome Jean Nursten, the wife of Professor Harry Nursten along with her nephew Peter Nursten.

The afternoon started with an introduction from this year’s organiser, Dr Maria Jose Oruna-Concha from the University of Reading followed by the first session of the symposium chaired by Dr Lisa Methven also from the University of Reading on Aroma and Flavour Perception. Day two started with the session on Flavour Generation and Release, chaired by Dr Linda Farmer from AFBI-Belfast, followed by the talk from one of our invited speakers, Dr Elaheh Jamalzadeh, a Senior Associate Scientist at DSM Food Specialties B.V., who gave us an insight into her career path and the work of DSM. The final session of the symposium, chaired by Rob Linforth from the University of Nottingham, looked at Methods in Flavour Research followed by the talk of our second invited speaker, Dr Dave Baines, who introduced many of us to the taste phenomenon of kokumi, and the subtleties of defining flavour modifiers and flavour enhancers in the EU.

All the student presentations were of a high standard: ranging from final year students with well-rounded results and conclusions, to the detailed plans of a PhD student in his first week. We heard from a variety of scientific disciplines, with influences from pharmacological techniques, sensory science, and flavour analysis; and about a vast range of different food substances, with talks on coffee, rice wine, brassica vegetables, beer, and beef, among other things.

To round off the conference, awards were given by the RSC and SCI, represented by Dr Kathy Ridgway and Dr Craig Duckham, respectively. Four runner up prizes were awarded to: Tiffany Lau, for her flash presentation on the “Recovery of functional ingredients from sweetcorn cob”; Farhana Diana, for her flash presentation on the “Impact of taste sensitivity and repeated taste exposure on vegetable acceptance in children”; Luke Bell, for his oral presentation on “Taste and flavour in rocket salad” and Stephanie Bull who presented her work on “The mechanism of whey protein derived mouthdrying”. The second place prize was awarded to Bola Oloyede from the University of Reading, who gave an engaging talk on “The impact of plant variety and domestic cooking methods on the flavour profile of cabbage”. The overall prize was awarded to Nicola Caporaso from the University of Nottingham, who gave an in-depth presentation on “hyperspectral imaging of coffee beans”.

Another award, sponsored by the IFST Sensory Science Group, was decided by an audience vote, and was awarded to Adel Omar from the University of Reading, who gave an insightful talk on “The effect of industrial processing on the flavour of camel milk”.

Bola Oloyede, pictured here on the right, being presented with his award by Dr Kathy Ridgway (RSC) and Dr Craig Duckham (SCI).

Adel Omar pictured here being presented with his award by Dr Lisa Methven, Associated Professor in Food and Sensory Science at Reading University
The symposium was supported by RSC, IFST, SCI, BSF, Nutricia-Danone & DSM.
The First FNS Graduation Ball

The Graduation Ball marks the end of the University life. The first Food and Nutritional Sciences (FNS) Graduation Ball took place at the Crowne Plaza, Reading on the 20th of May. This glamorous black-tie ball turned out to be a night of fantastic food, great music and dance. The event also included the Lecturers and Professors from the FNS.

Final year students and the staff

Lecturers and Professors from the Department of Food and Nutritional Sciences
POSTGRADUATE NEWS

The Third NRG PhD Conference


The third Hugh Sinclair Nutrition Research Group Doctoral Conference took place in February 2016 at the University of Reading, UK. This exciting event aimed to showcase and communicate projects undertaken by current PhD students of the Nutrition Research Group, and student presenters from all years presented a fascinating range of innovative and original projects as oral presentations, poster presentations and 3-minute theses.

The event was attended by PhD and MSc Nutrition students from Reading, and also by jointly supervised PhD students from the University of Surrey. The 2016 PhD Conference was scheduled to coincide with the University of Reading’s Spring Enhancement Week, which is designed to enhance BSc student study skills and employability, and BSc final year Nutrition students were invited to attend for the first time.

Winners:

**Cancer & Immunity/ Cardiometabolic Health:**
Year 1: Gulten Soycan
Year 3: Dafni Vasilopoulou
Year 4: Anna Amini

**2nd year (posters):**
Israa Shatwan
Simon Steenson

**Public Health/ Crops & Sustainability:**
Year 1: Shelini Surendran
Year 4: Skevoulla Christou
Food Industry visits for Masters Students

Now that the formal modules and lectures are over and our Masters students are doing individual projects, there is an opportunity to take some time out to visit some food factories and see the practical application of the taught material. In early June 2016, a group of 16 MSc students, accompanied by Dr David Jukes, visited Arla Foods at Aylesbury. This is the largest unit in the world for the ‘bottling’ of milk for the retail market. With a capacity of nearly a billion litres a year, the company brings raw milk from farms across the country for pasteurisation and/or skimming before placing it into a range of sizes of plastic bottles – also made on the site. Being only 2 years old, the whole unit is highly automated to allow rapid processing of the milk with most of it being processed and distributed within 24 hours. This was the first of a series of 5 visits arranged for our MSc students this year.

SCI Young Researchers in Agri-Food 2016: Food Quality and Sustainability from Plough to Plate

Dr Ditte Hobbs and Dr Charlotte Mills (King’s College London) helped to organise the SCI Young Researchers in Agri-Food 2016: Food Quality and Sustainability from Plough to Plate conference, which was held on Thursday 12th May at the University of Reading.

The event, which was sponsored by SAB Miller and Syngenta was an opportunity for early career scientists working in agricultural, environmental, food and other relevant sciences to present the findings of their research and gain valuable experience in presenting in front of an multidisciplinary audience. Scientists attended the event from a wide range of disciplines such as agronomy, animal physiology and nutrition, environmental sciences, molecular biology, food sciences, analytical chemistry, flavour and sensory science. In addition to the student presentations Libby Good, ATP Business Development Manager at the University of Reading gave an excellent keynote presentation on career development and Alexandra Carrick from Wiley gave an interesting talk on ‘how to get your research published’. There were a number of student competition winners:

**Oral 1st prize (£150 pounds iTune vouchers)**

Izzadora Andrew, University of Reading, UK
Title ‘Competitive wheat cultivars for the sustainable suppression of the weed Alopecurus myosuroides’

**Oral runner-up** (£150 pounds iTune vouchers)

Luke Bell, University of Reading, UK

Title ‘Changes in rocket phytochemicals within the industrial supply chain: a case study of UK-grown produce’

**Poster 1st prize** (£100 pounds iTune vouchers)

Alexandra Holden, Royal Holloway University of London, UK

Title ‘Biochemical and Molecular Mechanisms Underlying Colour Retention in Capsicum annuum’

**Poster runner-up** (£50 pounds iTune vouchers)

Jack Gillan, Royal Holloway University of London, UK

Title ‘Characterisation of three ripening-related transcription factors downstream of the master regulator RIN in Solanum lycopersicum’

**‘Flash’ or 5 min presentation prize** (£50 pounds iTune vouchers)

Tiffany Lau, University of Reading, UK.

Title ‘Recovery of functional ingredients from sweet corn cob’

There was also a Twitter competition where delegates were invited to enter a photo of themselves with their research (a research-selfie) for a chance to win £50 in iTune vouchers. The winner was Nikolaos Koukiasas, University of Reading, UK.

The winning entry ‘Testing new ways of herbicide application’

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*Photo of conference delegates along with competition winners*
Flavourist Training Course

Since this annual course started in 2002, over 140 young flavourists and food scientists from all over the world have participated. This is a truly international course and we have had participants from all six continents representing 42 different countries. The course is organised and taught jointly by members of the British Society of Flavourists and staff in the Flavour Group in the Department. It is unique with no other course like it being offered anywhere in the world, which accounts for its international appeal and increasing popularity.

The 2016 Flavourist Training Course was held in the Department from 3th to 20th May, with thirteen participants from eleven countries: Argentina; Austria, Germany, Ireland, Japan, Philippines, Spain, South Africa, Sweden, UK and USA. The popularity of the course meant that we were unable to offer places to all the applicants and many of these have already requested to attend the 2017 course.

The course aims to provide an understanding of the flavour characteristics of a wide range of key aroma compounds and essential oils and teaches how they can be incorporate into food flavourings. The teaching comprises a series of lectures on flavour science and practical work involving tasting a wide range of flavour ingredients and creating different flavourings by mixing ingredients.

The emphasis of the course is on practical participation in flavour creation. The course is primarily designed for graduates working in the flavour or food industries seeking to upgrade their skills.

Over the years that the course has been running, the department has received generous sponsorship from the International Federation of the Essential Oil and Aroma Trades and they have promoted the course among their members throughout the world.

Next year’s course is scheduled to start on Tuesday 2nd May 2017. It is expected that all the places will be filled well before the start of the course.

Further information can be found at: http://www.reading.ac.uk/food/shortcourses/foodbio-flavourist.aspx
FOOD ATP NEWS

Latest news from the Food ATP

Our modules and students

This month our students have joined module lead Dr Jane Parker (The Flavour Centre) for some more rum and raisin! Our highly popular “Flavour: From Farm to Fork & Beyond” module is back in full swing, with the return of industry flavour experts Dr Dave Baines (Baines Food Consultancy), Richard Seal Food Technologist Food Dynamics Ltd and Len Gates –Flavourist Chemist.

April and May was all about Sustainability. Back to back modules “Sustainable Supply Systems” and “Sustaining Quality in Raw Material Supply Chains” were both led by our own Dr Carol Wagstaff – Food ATP Director. The students got a mixture of classroom time and an opportunity to get their wellies on with site visits to various farm and food production sites. Both modules welcomed some big industry speakers from ADAS, Syngenta and Bakkavor.

Industry Forum News

March brought the Food ATP’s Industry Forum back to campus. There was a record turnout of attendees, with graduate training and recruitment very much on its agenda.

There were presentations from IFST’s Jon Poole and John Bassett, HR Director Iain Slater from ABF UK Grocery Groups delivered an interesting presentation on their graduate recruitment process. Members from Berkshire College of Agriculture joined the Food ATP for the event and look set to work alongside each other going forward, and have kindly offered to host the next Industry Forum in October. There was some ‘added glamour’ with a “Finding Talent in Produce” presentation from Natalie Pavich & Emma Grant from The London Produce Show.

The event’s highlight had to be the return of fellow University of Reading student Victoria Knight – from the Coop, who was happy to share her success and experiences of training and working within the food industry, from a student and employee’s perspective.

Lastly you can now follow the Food ATP on Facebook and Twitter.

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Department of Food and Nutritional Sciences – Newsletter June 2016 Issue 31
FoodWasteNet

FoodWasteNet, the BBSRC funded Network in Industrial Biotechnology & Bioenergy, continues to grow and now has 350 members from industrial and academic communities in the UK and worldwide.

FoodWasteNet events

We welcomed 50 delegates to the Biopolymers and bioplastics from waste event on 10 May 2016. The workshop was a great success with plenty of lively scientific exchange and delegates took the opportunity to develop plans for future collaborations during networking sessions.

The next FoodWasteNet workshop, Catalysis and waste valorisation will take place at Aston University on 1 September 2016. The meeting will bring together experts in the areas of materials design for catalytic applications, process optimisation, and biocatalytic transformations to discuss how recent advances could be applied to the challenge of valorising waste materials from the food and agricultural sectors. To attend this meeting, register at https://www.eventbrite.co.uk/e/catalysis-and-waste-valorisation-registration-25735462461. Registration is free of charge to FoodWasteNet Members and you can join the network at www.foodwastenet.org/register/.

FoodWasteNet Business Interaction Voucher funding call now open

The Business Interaction Voucher (BIV) application closing date is 8 August 2016. BIV encourage and support short collaborative projects, on food waste valorisation, between academic partners and industrial partners within the network. The collaboration can be any defined piece of work by an academic partner for an industrial partner. The work must be clearly defined from the outset and must be completed within 6 months. For funding guidelines and application forms, please go to http://www.foodwastenet.org/funding/business-interaction-vouchers/.

NEW APPOINTMENTS

Promotions

Congratulations to Dr Colette Fagan for becoming an ‘Associate Professor’.

Congratulations!
UPCOMING CONFERENCES/ MEETINGS/WORKSHOPS/COURSES:

First Elsevier conference on Food Chemistry

30 October 2016 - 1 November 2016, Hotel Krasnapolsky, Amsterdam.

Abstract submission deadline: 1 July, 2016

The conference is to mark 40 years of success for the Journal “Food Chemistry” and will include the following:

- Emerging non-nutrient bioactives in food - chemistry, analysis, function and health
- Chemical reactions in foods: mechanisms, kinetics and impact on quality and health
- Food structure, food quality and health including novel digestibility, processing technologies,
- Nanotechnology and food packaging
- Risk/benefits evaluation of food components
- Food authenticity and integrity
- Novel and rapid methods for food quality, integrity, and safety
- Future research needs and funding opportunities

Nutrition Society Student Conference (8-9 September 2016)

Venue: Riverside Innovation Centre, Chester, University of Chester, UK
Abstract submission deadline: 3 July 2016

The Nutrition Society Student Conference in September is the first time that postgraduates, undergraduates and prospective university students will have the opportunity to engage with each other, researchers, academics, representatives from the food industry and public health nutritionists at one event. The conference has been organised by the Student Body with input from local organisers. Its uniqueness is that it is a conference developed, organised and run by students for students and thus has a developmental and supportive focus. The two day event will be ideal to establish new networks, build on early career development skills and hear experts talk about current topics in their field of nutrition.

The conference will provide a unique platform to increase knowledge across a range of disciplines within nutrition including sports nutrition, public health, nutritional science, food industry and animal nutrition from nationally and internationally renowned speakers who are committed to student development.

Students are invited to attend to learn networking skills, engage with employers from industry, academia and public health.

For further details, please visit the website: https://www.nutritionssociety.org/student-conference
The 7th African Nutrition Epidemiology Conference (ANEC VII) (9th – 14th October 2016)

For further details, please visit the website: https://www.nutritionssociety.org/events/nutrition-dynamics-africa-anec-vii-morocco

4th World Congress on Targeting Microbiota (Paris, France; October 17 -19, 2016)

The conference will include the following sessions

- Microbiota 2016: Recent Advances & Perspectives
- Microbiota analysis 2016: The challenge of big data interpretation
- Skin Microbiota: Recent advances and perspectives
- Challenges to control the diversity and quality of microbiota by:
  - Phage therapy
  - Diet, probiotics and prebiotics
  - CRISPR/Cas system
  - Quorum sensing
  - Fecal Microbiota Transplantation: Clinical & Practical Issues

For further details please visit the website: http://www.microbiota-site.com/venue-167
2nd International Conference on Public Health (28th – 29th July, 2016; Columbo, Sri Lanka)

The 2nd International conference on Public Health (ICOPH 2016) will be held on 28th and 29th of July 2016 in Sri Lanka. The organizing committee of ICOPH 2016 devotes itself to supply to you and all conference participants the most cutting-edge updated information relevant to public health. ICOPH 2016 refers to Bridging the gap between research and policy and creating a global platform to discuss evidence based health policies and interventions in public health. The ICOPH 2016 program consists with interactive presentation sessions, keynote presentations from expertise in the related fields, case studies and social events including cultural show along with the networking dinner, and post conference tour.

For further details please visit the website: [http://publichealthconference.co/2016/](http://publichealthconference.co/2016/)

18th World Congress of Food Science and Technology (IUFoST 2016) (Dublin, Ireland)

The Institute of Food Science and Technology of Ireland (IFSTI) will host IUFoST 2016, the 18th World Congress of Food Science and Technology. IFSTI is a professional body representing the interests of Irish food scientists and food technologists. The Institute is a professional body of food scientists and technologists and aims to promote their professional standing and their continuing professional development through further education and training.

For further details please visit the website: [http://www.iufost2016.com/index.html](http://www.iufost2016.com/index.html)
RESET – Leading New Directions in Dairy Foods and Health 2016

Thursday 1 September 2016 | 9.00am–4.00pm

Henley Business School, Whiteknights Campus, The University of Reading, Berkshire, RG6 6UD

Featuring world leading experts in the field of Dairy Food and Health, the day will give you a new perspective on the effects of different dairy foods on cardiometabolic risk. We will present the latest findings from our RESET study, which examines the effects of replacing a proportion of the saturated fatty acids in milk fat with monounsaturated fatty acids by manipulation of the cow’s diet on markers of risk for cardiometabolic diseases.

In addition, the event will also feature several current research projects as we are joined by some of our collaborative partners to share our findings.

The event also features some of the Department's other work on dairy and health, including:

- Whey2Go study – investigating the effects of milk proteins on vascular health
- The study on modelling dietary patterns with varying amounts of dairy products and their association with environmental, nutritional and financial costs
- Presentations from world leading experts with whom the Department collaborates

If you have any queries, please do not hesitate to contact Elena Carp
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RECENT PUBLICATIONS

Latest peer-reviewed publications from members of the Department of Food and Nutritional Sciences:


Recipes from Big Band Big Lunch

Pan-fried mackerel with harissa, orange and lime, couscous (serves 4)

Harissa:

- 1 teaspoon coriander seeds (or ½ teaspoon ground)
- 1 teaspoon cumin seeds (or ½ teaspoon ground)
- 1 teaspoon caraway seeds (or ½ teaspoon ground)
- 1 red bell pepper
- 3 red chilli peppers
- 3 cloves garlic, roughly chopped
- 1 teaspoon tomato paste
- Salt to taste, around ¼ to ½ teaspoon

Method:

- If using whole spices, toast in a dry pan over medium heat until just starting to smoke, grind in a mini food processor or pestle and mortar
- Char the peppers over a gas flame, turning frequently with tongs, until blackened all over. Alternatively, toss the peppers with a little oil to coat, then roast at 200°C until starting to blacken
- Peel the peppers, deseed the red bell pepper. Keeping the seeds from the chilli will make for a spicier harissa so remove seeds to adjust the heat, or keep them in for a hotter sauce
- Blend all of the ingredients together in a food processor, adding salt to taste

Couscous:

- 400g couscous
- 3 tablespoons olive oil
- 1 stock cube
- Assorted vegetables, diced and fried (peppers, courgette, aubergine) or raw (cucumber, tomato)
- Fresh herbs (chives, coriander, mint, parsley)

Method:

- Measure the volume of the couscous in a measuring jug
- Add the couscous to a baking tray or bowl, add the olive oil and mix to coat
- Measure out the same volume of boiling water as couscous and mix in the stock cube
- Pour the hot stock over the couscous, quickly mix then cover the tray or bowl with cling film
- Leave for 4-5 minutes, then stir with a fork, trying to break up any lumps
- Stir again with a fork, leave for another 4-5 minutes
- Give the couscous a final stir, breaking up any remaining lumps then mix in your vegetables and herbs

Mackerel:

- 8 small-medium mackerel fillets, skin on
- Zest and juice of 1 orange
- Zest and juice of 1 lime
- 1 tablespoon of harissa
- Salt and pepper
- Oil to fry

Method:
• Preheat a frying or grill pan over high heat (or use a hot barbeque)
• Season mackerel with salt and pepper
• Add a tablespoon of oil to the pan. As soon as it starts to just smoke, add the mackerel fillets skin side
down and start to fry. Press the fillets down lightly as they start to curl up
• Fry for around 3 minutes on the skin side, until the skin is starting to colour and crisp up, then turn down
the heat to low and flip the fish to the flesh side
• Remove the pan from the heat and add the harissa and zest and juices. Keep the pan off the heat until it
cools a bit until the juice and harissa is gently bubbling.
• Cook the fish for another couple of minutes over low heat until the sauce has thickened up a touch,
spooning the sauce over the fish to get a good coating. The fish is cooked when it flakes apart easily when
you press it with your finger
• Serve on a bed of couscous with the sauce drizzled over

**Smoked mackerel pate with crostini (serves 4)**

3 fillets of smoked mackerel
100g cream cheese
100g crème fraiche or Greek yoghurt
3 teaspoons of horseradish
Zest and juice of ½ a lemon

Method:
• Slice the baguettes into ½ cm slices, arrange
on a baking sheet and bake at 180°C until
lightly toasted
• Place cream cheese in a bowl and beat with a
spoon to soften, add the crème fraiche or
yoghurt, mix well, add the lemon zest and
juice, horseradish and dill, mix well
• Remove the skin from the mackerel and cut
out any bones, flake with a fork or hands and
mix into the cream cheese mixture
• Season to taste, serve with the crostini

**Roast salmon with beetroot, orange and rocket salad (serves 4)**

4 portions of salmon, skin on if they are scaled- ask
your fishmonger!
4 medium beetroot
2 medium oranges
1 bag of rocket (or 1 bunch of watercress)
½ a bunch of coriander
Juice of ½ an orange
1 tablespoon red wine vinegar
5 tablespoons olive oil
Salt and pepper

Method (salad):
• If using fresh beetroot, wrap in tin foil and roast for around 45 minutes at 180°C or until soft
• Peel and segment the oranges
• Peel and cut the beetroot into wedges roughly the same size as the orange segments
• Wash the watercress and pull apart into small sprigs
• Pull apart the coriander into small sprigs
• Mix the orange juice and vinegar, whisk in the oil (or just shake up in a clean jam jar)
• Add salt and pepper to taste to the dressing
• Mix together the salad ingredients in a bowl, but don’t add the dressing until the salmon is ready

Method (salmon):
• Preheat a frying or grill pan over high heat (or use a hot barbeque)
• Season salmon with salt and pepper
• Add a tablespoon of oil to the pan. As soon as it starts to just smoke, add the salmon fillets skin side down and start to fry. Press the fillets down lightly as they start to curl up
• Fry for around 5 minutes on the skin side, until the skin is starting to colour all over, then flip the fish onto the flesh side
• Continue to cook for 2-3 minutes (depending on thickness) until just cooked
• Give the salad dressing another mix or shake and add to the salad and gently mix
• Serve the fish skin side up alongside a pile of salad

Hot smoked salmon with pineapple and chilli salsa (serves 4)

4 pieces of hot smoked salmon
½ a pineapple
1 red chilli, deseeded and finely chopped
½ a red onion, finely diced
1 tablespoon chopped coriander
Juice of ½ a lime
1 red pepper, deseeded and diced
1 tablespoon of olive oil
Pinch of salt

Method:
• Remove skin from salmon, cut into portions
• Mix together all of the salsa ingredients
• Serve a piece of salmon with salsa artfully dribbled across, garnish with a few salad leaves or fresh herb sprigs
• The salsa also works great with pork!
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Food and Nutritional Sciences

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