



News

The following news items illustrate some of our activities during the last 3 months. To keep up to date with our activities, please take a look at our news pages at:

<http://www.food.rdg.ac.uk/news.htm>

30 September 2005: Farewell to Drs Richard King and David Owens



Today the School of Food Biosciences said farewell to two very long standing members of the academic staff who, between them, have provided 59 years of service to the University.

Dr Richard King joined the university in 1971 as Lecturer in Food Technology and since then has supported teaching, research and enterprise across the full range of the Schools portfolio, although his biggest contribution has been to the establishment of our very successful MSc Food Technology Quality Assurance degree.

Dr David Owens was appointed as Lecturer in Microbiology in 1980 and as well as teaching and research in food microbiology has made a significant contribution to the support of our postgraduate research training and administration. Dr Owens will remain as a part-time lecturer for the coming year so will still be a regular visitor to the School.

Many colleagues, past colleagues, students and friends came to the School farewell event today to thank them for their service to the School and the University and to wish them both well in their future retirements.

The photographs show David (left) and Richard (right) receiving gifts from Professor Christine Williams, Head of the School of Food Biosciences.

29 September 2005: Dr Kieran Tuohy appointed as Lecturer in Food Metabolomics

The School has made a further key appointment to strengthen its research base in the area of food sciences and nutrition. **Dr Kieran Tuohy** has been developing his expertise in the study of gut microflora and their role in metabolism. This is seen as an area where further research is likely to provide important health advances.

Dr. Tuohy was awarded his PhD from the University of Surrey in 2000 and since then has worked within the Food Microbial Sciences Unit of the School of Food Biosciences. His research career to date has focused on the safety and efficacy of functional foods (including probiotics, prebiotics, whole-grains and fruit juices) using in vitro models of the human gastrointestinal tract and in vivo, in human feeding studies. Recent advances in molecular biology and analytical techniques, and their application to human biology, has opened up the possibility of effectively determining both the functional capability of different foods or nutraceuticals to improve health, and elucidate their underlying mechanisms of action. Over the next five years his research will focus on applying these advanced tools to study the inter-relationships between food, the human metabolome and our commensal microbiota. These interactions between dietary components and the human metabolome (comprising both human encoded metabolic pathways and those linked to the gut microbiota) are increasingly recognised as playing central roles in chronic disease, including heart disease and cancer, and in maintaining human health.

Kieran will also contribute to teaching on our degree programmes - both undergraduate and postgraduate. The School is pleased to welcome him as a member of the academic staff team.

20 September 2005: Outstanding student wins national SET 'Student of the Year' Award



The School is delighted that our recent Food Science graduate **Vanessa Clark** was placed first in the Food, Nutrition and Health category at the SET awards ceremony held in London

The SET Awards (Science, Engineering & Technology Student of the Year) are Britain's most important awards for science and technology undergraduates. Supported by British Industry, and many of Britain's leading scientific and technical institutions, the SET awards are multidisciplinary to reflect the wide range of degrees our universities have to offer.

We understand that Vanessa impressed the judges with her excellent project dissertation combined with a highly articulate and enthusiastic 'viva'. Vanessa's reward was a wonderful trophy to keep and an evening to remember for ever. We are delighted that Vanessa will be starting a PhD in the School with Jeremy Spencer next week.

The research performed by Vanessa entitled "Comparison of glycation and advanced glycation end-product modification of bovine serum albumin by sugar and sugar degradation products". Congratulations also go to her supervisors, Jenny Ames and Davinia Hinton, to whom she gave sincere thanks in her 'acceptance speech'. We also send thanks to our colleagues at Cadbury's for their continued sponsorship of this category at the SET Awards – it provides real inspiration for science graduates.

The SET awards provide a showcase for educational excellence by publicly recognising the exceptional achievements of both students and universities. They are presented at a magnificent gala dinner bringing together hundreds of technology students and academics, as well as senior figures from industry, government, science and the media.

Designed in 1997, and first presented in London in 1998, the Awards were created to meet a widely perceived need to raise the status of technology education in Britain and since their launch the Awards have become the "Oscars" of British technology education, with entries being received from all of Britain's leading universities.

For further details of the SET awards visit their homepage at: <http://www.setawards.org/>

13 September 2005: Nutrition researchers attend European collaboration meeting in Italy



Ten members of the School of Food Biosciences recently attended NuGO Week 2005, which took place in Tuscany, Italy between the 9th and 13th September.

NuGO is the acronym for The European Nutrigenomics Organisation, a new Network of Excellence that is funded by the European Commission.

What is Nutrigenomics? Simply, it can be described as how the food we eat affects our health depending on our individual 'make-up' (our genes). It is now one of the major focuses of worldwide nutrition research, as it has the potential to tell us all how to personalise our diet in order to optimise our health. You will no doubt here more about Nutrigenomics over the coming years.

NuGO comprises 22 partner institutes Europe wide, including Reading. NuGO is providing money for 5 years to train students and researchers, develop new technologies, and apply these new technologies to the area of Nutrigenomics.

If you would like to find out more about NuGO, please see the web site at <http://www.nugo.org/> or contact Dr Rafe Bundy on r.bundy@reading.ac.uk.

Photo caption : From left: Maria Lima, Francesca Fave, Davinia Hinton, Simon Hughes, Anne Marie Minihane, Kieran Tuohy, Wendy Hall, Anne McCartney, Rafe Bundy, Jilly Grew (University of Oxford), Andrew Wells.

9 September 2005 - Sinclair Unit of Human Nutrition Celebrates its 10th Birthday

On Friday 9th September members of the Hugh Sinclair Unit of Human Nutrition, colleagues, collaborators and friends celebrated the 10th birthday of the establishment of the Unit with a scientific and social event that went on until the late hours.

Scientific presentations from some of the senior researchers in the Unit (**Dr Parveen Yaqoob**, **Dr Anne Minihane**) and their research collaborators (**Dr Graham Burdge**, **Professor Philip Calder**, **Professor Ian Given**) provided fascinating insights into recent developments in omega-3 fatty acid nutrition and implications for human health. **Professor Christine Williams** and **Dr Ann Walker** illustrated just some of the many facets of the life of Hugh Sinclair - his early work on vitamin biochemistry, his role in nutritional surveys of the population in World War II, his controversial relationships with colleagues in the University of Oxford and the development of his interest in essential fatty acids and latterly omega-3 polyunsaturated fatty acids from fish. Ann Walker talked about Hugh's great love of teaching and his role as

Visiting Professor in the (then) Department of Food Science at Reading during the 1980s.

After the science came dinner and the quiz - where senior members of the university demonstrated variable degrees of competence in nutrition. Dancing to John's band – 'Easy Way Out' (total age 305 years), went on for many hours and allowed the Unit staff and students to demonstrate their well known ability to remain vertical under extreme provocation.

It is highly appropriate that we will mark the celebration of the 10th anniversary of the Unit with the establishment of the first undergraduate degree in Nutrition and Food Science at Reading and look forward to welcoming our first undergraduates in October 2005. We all look forward with great enthusiasm and confidence to the next 10 years.

7 September 2005: Death of Vic Lilly, former lecturer in the School



It is with regret that we report the death of **Vic Lilly** a former member of the academic staff of the school/department. Vic passed away on 7th September after a short illness. He was 84.

Vic joined the staff of the National College of Food Technology (NCFT), Weybridge, as a lecturer in 1966, bringing with him a wealth of industrial experience. He quickly settled in and developed his own teaching interests including sorting and grading of raw materials, preparation of foods for processing and heat processing of foods. He proved to be a very able lecturer, popular with students. He became well known for his use of examples and anecdotes from his time in industry in his lectures. He also was very much involved in teaching practical classes and supervising project work in the food processing laboratory, activities he very much enjoyed. He also acted as a consultant to industry on a part-time basis. Together with three NCFT colleagues he co-wrote the book *Food Engineering Operations* which was first published in 1969 and, after three editions, was finally taken out of print about five years ago. Vic came to work in Reading when the college moved to the Whiteknights campus in 1982.

Vic was an amiable colleague with a good, if quirky, sense of humour. He was not slow to put his point of view over to individuals or at meetings. He was also a very supportive and loyal friend. He was a keen golfer and continued to play up to a few weeks before his death. Vic retired in 1986. He continued to act as a consultant to industry for some years after he retired.

The last two years of Vic's life were not happy ones. In 2003 his wife Irene died following an accident in their home. They had been married for over fifty years. Vic is sadly missed by his son Adrian,

daughter Stephanie and their families which include several grandchildren and one great grandchild and by former colleagues from Weybridge and Reading. Rest in peace Vic.

With our thanks to Jim Brennan for this obituary. The photograph is from the School archives and dates from 1984

23 August 2005: New appointment - lecturer in fermentation / bioprocessing

The School is pleased to announce the appointment of **Dr Dimitris Charalampopoulos** as a new lecturer to strengthen our teaching in bioprocessing and aspects of fermentation.

Dimitris has worked in the biopharmaceutical industry for more than two years as a senior fermentation scientist. His work involved the development of processes for the production of active pharmaceutical ingredients, such as recombinant and native proteins, and plasmid DNA, from microbial cell factories. He has extensive experience in process development, fermentation scale up, bioprocess design and product manufacture in accordance to Good Manufacturing Practices. Before that Dimitris completed his PhD at the department of Chemical Engineering at UMIST in the area of probiotic foods. The aim of his work was to investigate the growth of probiotic lactic bacteria in complex cereal substrates, develop a controllable fermentation process and construct mathematical models for predicting the fermentation kinetics and the properties of the final product.

Dimitris will join us in early September and will be fully active in time for the new term in October.

11 August 2005: World's best chef with long relationship with School to receive Honorary Degree



Acclaimed chef **Heston Blumenthal**, whose restaurant The Fat Duck in Bray, Berkshire, was recently voted the best in the world, will be awarded an honorary degree at the University of Reading's summer graduation ceremonies in 2006.

Professor Gordon Marshall, Vice-Chancellor of the University, said: "Heston has a long-standing and fruitful relationship with our School of Food Biosciences. As it's the largest and most successful food science department in the UK, we thought it highly appropriate to recognise the contribution that Heston – a Berkshire resident – has made to the promotion of food science."

28 July 2005: Student researcher wins prize for cereal science presentation

Congratulations to **Ana Rodriguez Mateos** for winning The Rank Prize Funds prize for the most outstanding short paper presented at the Mini-Symposium on Bread held in The Lake District from 25 to 28 July.

This meeting showcased research by young postgraduate and postdoctoral scientists (under the age of 30) working in the field of cereal science and technology. Ana's presentation was titled "The formation of dityrosine crosslinks during breadmaking" and described results from her PhD research sponsored by the RETF and Campden & Chorleywood Food Research Association and supervised by Dr Richard Frazier.

Ana's research is concerned with whether the formation of oxidative crosslinks between tyrosine residues in wheat proteins during breadmaking is a significant factor towards determining the quality of the final baked product.

20 July 2005: Student researcher wins prize at major US food technology annual meeting

Each year the US based Institute of Food Technologists hosts a major Annual Meeting combining technical symposia and a large exhibition. This year's IFT Annual Meeting and Food Expo was held in New Orleans from 16 - 20 July and the School was well represented amongst the 18,000 attendees.

Highlight for the School was the award to **Alex Tsioulpas** of the Manfred Kroger Award for the best student presentation in the Dairy Foods Division Group. Congratulations to him. His paper, jointly written with **Dr Mike Lewis** and **Dr Alistair Grandison**, Senior Lecturers in the School, was entitled: 'Milk stability affected by season, stage of lactation, and mineral composition'.

Other students present at the meeting were **Josefin Haedelt**, **Alix Ferrandon** (nee Dubert) and **Yemisi Adebawale**. Josefin gave an oral presentation entitled 'Sensory response of bubble-included chocolates' and Yemisi gave an oral presentation entitled 'Isolation and fractionation of protein from mucuna bean' (jointly written with Dr Adeyemi at Ladoko Akintola Univ. of Science and Technology, Nigeria and Professor Niranjana of the School).

Also present at the IFT meeting were **Dr Mike Lewis** and **Dr David Jukes**.

The School's presence in the USA will be reinforced when **Dr Alistair Grandison** and PhD students **Alix Ferrandon**, **Helen Grimley** and **Camila Kohen** present papers at the American Dairy Science Association conference being held in Cincinnati, 24-28 July.

14 July 2005: Professor Niranjana chairs keynote lecture at World Congress of Chemical Engineering

The 7th World Congress of Chemical Engineering was held at SECC (Scottish Exhibition and Conference Centre) in Glasgow between 7 and 14 July.

Professor Niranjana, Professor of Food Bioprocessing in the School, chaired the Seligman Lecture which was the food engineering keynote lecture of the Congress given by Professor Jose Miguel Aguilera of the Universidad Catolica de Chile. The Seligman Lecture is a prestigious lecture in food engineering held in memory of Richard Seligman, the inventor of the Plate Heat Exchanger and the founder of Aluminium Plate and Vessel Company (better known as APV, now a part of the Invensys Group).

Professor Niranjana also gave an oral presentation at the World Congress entitled: "Bubbles in food: Creating Structure out of thin air".

Professor Leo Pyle, Emeritus Professor in the School and a former Head of the School, also chaired two oral sessions and gave 3 papers.

7 July 2005: Congratulations to all our graduates and good luck for the future!



The School today welcomed this year's graduates and their families and friends to their Graduation Ceremony and our Prize Giving.

It was a time to celebrate the results of three or four year's work. In her address at the Prize Giving, Professor Christine Williams, Head of School, praised the graduates for their hard work, their successes, the support provided by their families and friends and the contribution of all the school's staff - academic, administrative and technical - to their achievements.

The Graduation ceremony itself was in the University's Great Hall in the morning with the School Prize Giving taking place after lunch in a marquee next to the School of Food Biosciences.

The School would very much like to keep in contact with our graduates and to hear how your careers develop. Please use our graduate web site at <http://www.grads4food.org.uk/> to keep us and your friends informed of your progress.

6 July 2005: Summer School demonstrates role of science in food, nutrition and biotechnology to 50 young scientists



The School of Food Biosciences has once again hosted a successful Summer School for young scientists.

50 Lower 6th Form (Year 12) pupils from all over the UK have spent 3 days participating in a series of activities. These included:

- looking at how food is manufactured, how safety is ensured, how quality and nutritional values are assessed;
- hearing about hot topics affecting the food we eat;
- taking part in a business game run by Marks & Spencer and Northern Foods which demonstrated how difficult it is to produce safe, appealing sandwiches on a commercial scale;
- meeting graduates working in the food industry to find out what they really do.

The course is sponsored by manufacturing and retail companies in the food industry.

The Food Biosciences Summer School aims to inform young scientists how exciting these courses can really be. The taster course has been held at the University of Reading since 1987, and has proved to be extremely popular, inspiring many students to go on to study Food Science and Technology at university and later to go on to a career in the food industry, where demand for food science and technology graduates is greater than the supply.

The photograph shows Dr Kieran Tuohy, a Research Fellow in the School, with some of the participants using an anaerobic chamber to grow microbiological cultures for use in yogurt.

1 July 2005: School contributions to Annual Meeting of the Nutrition Society

Several staff and students from the School have been attending the Annual Meeting of the Nutrition Society in Norwich this week.

Professor Christine Williams gave a lecture in the Symposium on Plant Foods and Public Health. Her title was 'Long chain omega-3 polyunsaturated fatty acids: plant versus marine sources'. In addition, **Dr Anne Walker** gave a Plenary Lecture entitled: 'Herbal Medicine: the science of the art'.

At the meeting there is also an opportunity for research students to present results of their work. This is competitive from across the whole of the United Kingdom and Ireland. This year one of our students, **Katerina Vafeiadou**, was successful and was invited to present her work to the prestigious postgraduate symposium. This is the fourth consecutive year that a Reading student in the School has been selected to speak.

Our Degree Programmes

The **School of Food Biosciences** offers the following programmes

- BSc Food Science;
- BSc Nutrition and Food Science;
- BSc Food Technology;
- BSc Biotechnology;
- BSc Food Science with Business

- MSc Food Science;
- MSc Food Technology Quality Assurance;
- MSc Nutrition and Food Science

- PhD, MPhil - Research degrees

For full details, visit our web site at:
<http://www.food.rdg.ac.uk/index.htm>