



January 2007



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>

28 December 2006: Congratulations to Dr Parveen Yaqoob and her husband on the birth of their son!



The Department is delighted to hear of the successful delivery of Baby Aden to **Dr Parveen Yaqoob** and her husband, Philip.

Aden weighed in at 3.77 Kg (8lbs 5oz) and we hear that mother and baby are progressing well.

Parveen, Reader in Cellular and Molecular Nutrition, is on maternity leave but will rejoin the Department in early summer.

20 December 2006: Christmas festivities for staff and researchers

For many years, it has been the practice in the Department for the Professors to provide a festive meal for staff and researchers. Using the resources of our own pilot plant, the professors provide a traditional roast turkey meal with numerous vegetables. The meal is preceded by a drinks' reception and usually concludes with an activity in the early evening.

Professor Glenn Gibson, Head of Department, has provided this account of the various events this year:

"The traditional Christmas lunch was held on December 20th in the Food Processing Hall. As always the food was prepared by the professors and management team, with expert guidance from secretaries and technical staff. First up, **Dr Grandison's** nuclear fuelled punch did its usual job of dulling everyone's taste buds, which was just as well as the catering was more Cyril Smith than Delia Smith. The HoD carried out a moving and emotional 30 second speech thanking everyone for sterling efforts throughout the year and not complaining too loudly about the menu. Alastair hosted an excellent quiz which saw the Professor's table coming in at a comfortable last place. The quiz was won by some lucky cheating crowd able to tell the difference between Liberty X and a Liberty Bodice. A good time was had by all."

Our thanks to the professors and helpers for this meal and to Alistair for co-ordinating the drinks and arranging the quiz!

18 December 2006: School researchers hold joint research session to help develop links

Following the merger of the 3 separate Schools of Food Biosciences, Chemistry and Pharmacy into a single School work has been progressing on building the links between the main subject areas. Today saw a major step towards closer collaboration in the area of research.

Staff from all three Departments which make up the new School attended the half day session at which short presentations were made by key staff from each Department.

This was followed by an informal session during which staff had provided posters outlining their research activities. Researchers - staff and students - were then able to wander around the displays and get an insight into the wide range of research taking place within the new School.

Commenting on the session, **Professor Bob Rastall**, Head of Research in the Department of Food Biosciences said: "Collaborative research is one important way to maximise synergy across the School. The new school has a rich diversity of skills and interests in chemistry, pharmacy and food science and nutrition. The event was a great success at communicating our activities and facilitated the staff of the new School to identify new academic links. I am certain that we will build on these to generate new research activity."

18 December 2006: Food Biosciences contribute to BBC TV programmes

The Flavour Research Group, lead by **Professor Don Mottram**, have contributed to two recent BBC TV programmes. In Heston Blumenthal's new TV series "Full on Food" on BBC2 this 3-Michelin starred chef was seeking the best way to prepare classic food dishes and he described some of the underlying food science.

In the first programme of the series, Heston was seen in the flavour chemistry laboratories in the Department evaluating the aroma compounds found in golden syrup used to prepare treacle tart. The contribution of the Flavour Group to the preparation of this

programme is also featured in the book which accompanies the series.

Heston received an honorary DSc from the university last July in recognition of the contribution this world-renowned chef has made to the promotion of food science through his writings and TV programmes. He has been a frequent visitor to the Department of Food Biosciences over the past 4 years. He has worked with Don Mottram on the flavour and taste of tomatoes and meat. **Dr Mike Lewis** has helped Heston in developing freeze drying techniques in the preparation of novel food dishes, while **Dr Bernard Mackey** has provided advice on the cooking of meat.

In a recent item on the BBC Breakfast programme, the Flavour Chemistry laboratory was shown with Andrew Dodson preparing some samples for flavour analysis. The item was about recent trends in the snack food industry which have given rise to a wide and exotic range of flavoured potato crisps in the retail market. Don Mottram was interviewed about the creation of these flavours and he described how the food industry prepares the flavouring mixtures from natural food ingredients including herbs and spices.



The photograph shows Heston Blumenthal with Don Mottram during a break in filming in the Department. Further details about Full on Food can be found on the programmes website at the BBC:

http://www.bbc.co.uk/food/tv_and_radio/fullonfood_index.shtml

16 December 2006: Graduation ceremony to mark new MSc and PhD graduates

The University stages two graduation ceremonies each year - the one in the summer is predominately for successful undergraduates. The smaller December ceremony is largely for our MSc and PhD students.

On a cold but bright morning, our graduates have today attended the 11.45 ceremony along with graduates from other Life Science Schools. Although quite a number of our international students had

already returned to their home countries, it was a delight to see so many of our graduates attend the ceremony.

After the ceremony itself, our graduates were invited to return to the Department of Food Biosciences where a small informal reception of wine, coffee and mince pies was laid on. This enabled us to hear how our graduates were progressing in their new careers and for them to show their relatives and friends around the building where they had spent their last year (MSc students) or longer (PhD students).



The photograph shows four of our new graduates with **Dr David Jukes**, MSc Programme Manager for the Department, following their graduation.

8 December 2006: Northern Foods announces major programme of support for undergraduate students

As one of the UK's leading food companies, Northern Foods has recognised the importance of food scientists and technologists in making great tasting, high quality food. And they have chosen Reading, as one of the top UK food universities to help them achieve this.

There are lots of great career opportunities in the food industry and the company want to encourage A-Level science students to study food related degrees at university. They also wish to promote the career opportunities available and encourage those with degrees in food science to join the food industry to help Northern Foods to continue to produce high quality, nutritious food.

In partnership with the UK's leading universities for studying food science, the company has established the Northern Foods Foundation for Science and Technology. Through the Foundation they aim to:

- Raise awareness within schools of the great career opportunities following a food science degree

- Encourage science students to study food science at university
- Provide, in collaboration with the universities, opportunities for students to further enhance their studies with up to date food industry knowledge and work experience opportunities and placements
- Reduce the financial burden of studying for a food science degree.

Northern Foods are working in partnership with Reading, Nottingham and Leeds Universities - the UK's leading universities for food science. At Reading, applicants for a food related degree within the Department of Food Biosciences will be eligible to apply for support. It is anticipated that 10 students joining us in October 2007 will each receive £1000 for each of the 3 years that they are at the University.

Further details of this exciting development can be found on our Scholarships page:
<http://www.food.rdg.ac.uk/teaching/scholarships.htm>

1 December 2006: Three Reading Professors in Sweden for Young Scientist Workshop

Three professors from the Department lent their support to the INYS (International Networking for Young Scientists) workshop held from the 29th November to 1st December at Lund University in Sweden. INYS is a British Council initiative aimed at promoting the exchange of ideas and knowledge between young researchers from UK and other countries. The initiative is specifically targeted at PhD students and post doctoral researchers who have been tenured for five years or less.

British Council Sweden - supported by Lund University (Sweden), University of Reading (UK) and Centre for Advanced Food Studies (LMC, Denmark) - organised this workshop on Functional Foods with the aim of bringing together young researchers from Reading, Sweden and Denmark. Ten promising young researchers from each of the three countries were joined by world-renowned experts on functional foods. The three day event was built around keynote talks given by the experts, rapid fire poster presentations given by the young researchers, and highly participative group discussions. Overall, the event was designed to give the participants maximum opportunity to interact and network.

The conference opened with a scene setting keynote by our **Professor Christine Williams** who showed how dietary recommendations had changed over the years from being population-based to becoming increasingly individualised, this change being driven

by our ability to unravel genetic responses to various components within our diet (nutrigenomics). Professor Williams also highlighted how the population could be screened for susceptibility genes for obesity and chronic diseases, and how functional foods could be used as a key part of preventative strategies aimed at reducing the burden of such diseases. Of course, time alone will determine whether consumers would find dietary advice based on genetic risk assessment to be acceptable and ethical.

Professor Glenn Gibson (our Head of Department) described gut microbial ecology and showed how imbalances between bacterial populations, which damaged and promoted health, could be redressed by probiotic and prebiotic functional foods. Professor Gibson also discovered relatively higher counts of clostridium in the guts of autistic children, and suggested that such children may find relief of their gut symptoms by consuming probiotics or prebiotics which tended to reduce the relative load of this species in the gut.

Professor Niranjan, as one of the organisers also attended and participated in the workshop discussions.



The photograph shows Professor Niranjan in discussion at the workshop with a group of the young scientists.

27 November 2006: Exciting opportunities for graduates to experience international travel as part of business experience

A University of Reading professor has teamed up with Sainsbury's to encourage more young people to start a career in food technology after a 25 per cent drop in new recruits.

Professor Christine Williams, former Head of the Department of Food Biosciences, an expert on food and nutrition, advised Sainsbury's in the setting up of the scheme. She hopes it will help reverse the sharp decline in newly-qualified food science experts - food

science graduates have halved in the past decade, leaving one in four jobs vacant.

The scheme – called Taste the World – launches today (November 27 2006) and offers qualified foodies the chance to travel the world on a 12-month 'gap year', visiting suppliers and sourcing quality ingredients.

Professor Williams said: "Encouraging graduates to become interested in food technology is crucial to the industry and ultimately the future of Britain's health. It seems quite ironic that despite the UK becoming a nation of foodies, there has been a decrease in people wanting to become food experts. We hope this scheme whets their appetite in joining the industry. Traveling is also something that appeals to young people so this scheme will attract the best candidates which is a positive step for the food industry."

Successful graduates will work with suppliers and partners worldwide, from exotic fruit growers in South America, to fish markets in Australia, to not only cement relationships but to learn about what it means to source fresh, safe and tasty food for Sainsbury's.

Liz Jarman, Sainsbury's head of product technology, said: "The last three years has seen a massive turnaround in what supermarkets, and suppliers, are doing to clean up their acts to make food healthier, and to feed the nation. It couldn't be a more exciting time to join the industry. We wanted to come up with an interesting way of attracting the best people to the business as they'll help shape the future of food. Sainsbury's is committed to selling healthy, fresh and tasty food, but we need good quality colleagues to help achieve this for our customers."

In August this year the Confederation of British Industry (CBI) confirmed that like other sciences courses, applicants for food science degree courses have more than halved in the last decade, while Britain's Institute of Food Science and Technology has warned that the sector is struggling to fill empty seats. 'Taste the World' is part of a major investment to attract the best food experts to the business during a particularly exciting time for the food industry and its rapid developments.

To be eligible for the 'Taste the World' scheme, graduates must have a food or science based degree and pass through the Sainsbury's Graduate Assessment Centre and be accepted onto the Sainsbury's graduate scheme as a product technologist.

Graduates will work for 12 months post graduation, prior to full time employment with Sainsbury's, and can chose where there work in world and plan their

trip around their preferred suppliers and partner. Work will vary and be paid at the local rate to cover basic expenses. Sainsbury's will contribute £1000 for the cost of flights, insurance cover and help plan the trip and ensure all health and safety checks have been made. Graduates will be required to write web based journals or 'blogs' whilst they travel

Further details can be found on the Sainsbury's web site at:
<http://www.sainsburys.co.uk>

22 November 2006: GSK presents scholarships to new undergraduate students



GSK, GlaxoSmithKline, has long established links with the Department of Food Biosciences at Reading. For several years they have provided two scholarships for the most academically qualified students entering the Department.

Dr Phil Camburn, GSK's Research and Development Director and a former Food Technology graduate of ours, visited the Department today. He spoke to the first year students at the start of a practical this morning before presenting the cheques to this year's lucky students (see photograph). The selected students receive the scholarship for each of the three years that they attend the university.

14 November 2006: Public Lecture on 'Dietary Fat - Friend or Foe?' attracts full turnout

Professor Christine Williams' Public Lecture on 'Dietary Fat - Friend or Foe?' has tonight attracted a near capacity audience to the University's Palmer Building.

The problem of obesity is not simply the over consumption of any particular type of food. Recent research indicates major beneficial properties of certain types of dietary fat, especially unsaturated fats, and that certain fatty acids influence genes that may aid energy balance and body weight, blood clotting,

inflammation and immune function. It is important this knowledge is exploited through changes in the type of fats in the food chain. Professor addressed these issues with an informative and challenging presentation full of interesting facts about the growing obesity problem.

Professor Christine Williams is the Hugh Sinclair Professor of Human Nutrition at the University of Reading; in August 2006 she was appointed Dean of the Faculty of Life Sciences. Her research is concerned with the impact of dietary fat on human health, particularly in relation to coronary heart disease and the metabolic syndrome. She has been a member of a number of expert and advisory committees on diet and health in Europe and the UK, and is currently a member of the Scientific Committee on Nutrition which advises UK government on all aspects of diet in relation to public health.

Professor Williams dealt clearly and effectively with a series of questions which followed her talk.

Want to see the slides used during the presentation. They can be downloaded from web pages at:
<http://www.food.rdg.ac.uk/Fatfriendorfoe.ppt>
(PowerPoint presentation, 14.7 MB)

30 October 2006: Department welcomes group of researchers from Wageningen University in The Netherlands

A group of young researchers from the University of Wageningen have today visited the Department for an exchange of ideas on current research topics in Reading and Wageningen.

The Group were welcomed by **Professors Gibson** (Head of Department) and **Rastall** (Departmental Head of Research) before hearing short presentations from four PhD students from Reading and four from Wageningen.



The visitors were then given a guided tour of our laboratories and held discussions with different research teams.

9 October 2006: A warm welcome to all our students – new and old!

At the start of a new academic year, the Department welcomes a large number of new students onto our programmes – BSc, MSc and PhD. We also welcome back our second and final year BSc students. Many of our final year students will have spent a year away on industrial experience.

The number of new students joining our undergraduate programmes is the largest for many years. Current numbers stand at about 64 with the BSc Nutrition and Food Science proving very popular. Now into its second year, the programme has recruited 24 students. BSc Food Science also has attracted well with 20 new students. The remaining 20 students are shared between our other 3 programmes – BSc Biotechnology, BSc Food Technology and BSc Food Science with Business.

This year also sees the first large intake of students from Henan University of Technology in China. The students do an initial two year programme in China which provides them with direct entry to the second year of our programmes. 16 students have joined us under this scheme and we wish them well as they settle into their new programmes.

Our MSc intake is similar to last year with 41 students here. As usual these come from all over the world – this year we have MSc students from: Barbados, Brunei, Cyprus, Greece, India, Iran, Kuwait, Lebanon, Malaysia, Maldives, Mexico, Nigeria, P. R. China, Poland, Sri Lanka, Sweden, Thailand, and the United Kingdom.

Our Degree Programmes

The **Department 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>