



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.rdg.ac.uk/food/news.htm>

As part of the work to enhance the University brand image, the University has been updating its web site. The main pages of the University have now adopted the new style and the next stage is to update the many Departmental sites. Food Biosciences is the first science Department to be enhanced (and only the second in the University) and our new site is nearly complete and ready to be launched. Our web address will be changing from

<http://www.food.rdg.ac.uk> to <http://www.rdg.ac.uk/food/>

and lower level pages are also being reorganised and moved. Look out for the new site which is scheduled to be launched on 1st August. Please take care when using our old addresses and links.

6 July 2007: Summer sun arrives to brighten our student's Graduation Day

It has been a wet and cool summer so far in the United Kingdom but, just in time, summer arrived to provide our new graduates with a chance to enjoy their successes at today's graduation.



With our graduation ceremony scheduled for 5.00 pm, the Department hosted a prize giving within the Department earlier in the afternoon. Here all students

were congratulated on their performance by the Head of Department, **Professor Glenn Gibson**, and several outstanding performances were recognised by the award of prizes.

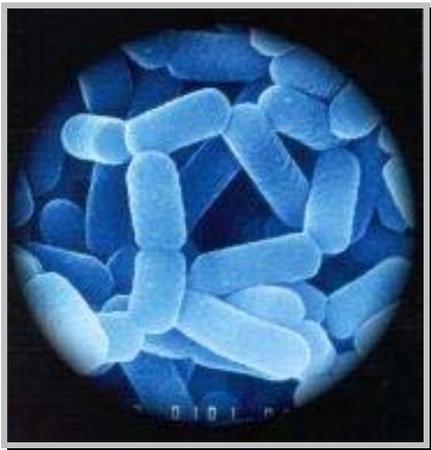
We wish all our new graduates the best of luck in their future careers and hope that they remain in contact with us as they move away. All graduates are encouraged to register on our special graduate website at: <http://www.grads4food.org.uk/>

5 July 2007: Royal Society showcase for Departmental research on gut bacteria

Every year the Royal Society in London hosts a Summer Science Exhibition. It is an opportunity to present science in a unique way to a large and varied audience. This year the department was selected to provide its very own display entitled "A microbial journey through human digestion".

Bacteria in the human digestive tract are acquired at birth and develop and change throughout our lives. What we eat affects our health both positively and negatively. New foods have been designed to change the micro-organisms in the gut to improve health.

Micro-organisms are sometimes associated with illnesses such as gastroenteritis. But most are not at all bad – many of the foods we enjoy, such as bread, cheese, wine and chocolate, are made with the help of micro-organisms. The bacteria in our gut digest this food, and the make-up of the food we eat can affect our wellbeing.



Lactobacilli are commonly used in many probiotic products such as drinks and yoghurts. They are also found in yoghurt and cheese starter cultures and many other fermented food products

“Micro-organisms are found everywhere in our environment, and many are found in foods that we eat. Our team is looking to better understand the delicate balance of the bacteria we use to digest our food so that we can help regulate their activity to improve health and prevent diseases,” says **Professor Bob Rastall**. “Our diet has developed and changed over thousands of years and it is important to understand how and why our diet affects health so that we can improve our future dietary choices.”

In addition to Professor Bob Rastall, the display was created and manned by a team of our researchers including: **Dr Adele Costabile, Professor Glenn Gibson, Dr Sofia Kolida, , Dr Kieran Tuohy and Dr Gemma Walton**. The team were inundated with interested visitors for the full 4 days of the exhibition.

The stand was designed to include interactive activities for visitors. Visitors were asked to guess the only non-microbial product within a shopping basket containing many everyday foods from chocolate to bread. There was also a computer game to encourage gamers to

explore what the bacteria in our guts can actually do for us.

The research that we undertake was illustrated with the display of one of our glass “gut models”. This was used to show the technique we have developed to study the growth behaviour of different bacteria in the gut. This enabled the concepts of prebiotics and probiotics to be explained and how they might be use for changing the microbial balance - a key element of our current research.

Further information about the Summer Science Exhibition 2007 is available on their official website at: www.summerscience.org.uk

26 June 2007: University allocates research funding to Dr Anne Marie Minihane

The University of Reading, one of the foremost research universities in the UK, has recently launched a new Research Endowment Trust Fund (RETF) competitive scheme. The RETF is used to fund high quality applications from staff, to support research in line with the University's Research Strategy.

The Research Leadership Awards scheme provides a maximum of £50,000 to each successful applicant, so that they can be bought out of their teaching and administration for a year. The aim is to enable the award holders to strengthen their research standing and leadership potential, and contribute to the wider development of their research area within the University.

It was agreed that, for this year, the awards would go to people working within the University's established research themes. Four awards have been announced today including one to **Dr Anne Marie Minihane**, a Reader in the Department.



Anne Marie is already active within the University Food Chain and Health research theme. She was

recently appointed as leader for the Diet, Genes & Health subtheme, one of 5 subthemes within the main theme.

During the coming year she will be helping to develop many aspects of the subtheme including:

- Enhancing the Food Chain and Health web site into a comprehensive professional and informative site
- Developing an intranet site for theme members providing information on research calls, recent relevant publications, upcoming conferences, analytical capabilities etc.
- Helping to submit joint multi-disciplinary, grant applications
- Organising a 1-day conference in Reading based around the theme.

We are very pleased that **Dr George Grimble**, who has already been with us for a year on a temporary contract, will take on Anne Marie's teaching commitments.

For information on the Food Chain and Health research theme, see the University page at: <http://www.rdg.ac.uk/research/themes/res-food.asp>

20 June 2007: Academic staff attend an 'Away Day' to review teaching developments

With increased student numbers last October and a further increase expected for next October, the teaching staff in the Department have spent the day reviewing teaching activities. The Department received a good report from the External Review which was conducted in February but needs to continue to work hard to maintain and, where possible, improve.

There are good indications that student intake will rise again this year. Undergraduate applications are up by over 15% with firm acceptances up by over 10%. The BSc Nutrition and Food Science (NFS), introduced fully in October 2006, is proving very popular and looks likely to have the largest intake this year. Numbers for BSc Food Science remain good although it has inevitably lost some students to the NFS programme. MSc applications are also up, by about 20%, with all 3 of our programmes showing increases. The vast majority of MSc applications are international with India, China, Nigeria, Ghana and Saudi Arabia being the top five nationalities.

The 'Away Day' reviewed teaching developments during the past year and noted in particular the strong

performance of the new Chinese students who joined the second year of our undergraduate courses. With strong support from our International Student Tutor, **Dr Cathy Lau**, the group settled in well and have largely obtained good results in their examinations. A further group is expected to start next October. The Department will continue to support these students and, to help ensure this, Dr Lau's appointment has been made permanent by the University.

Staff reviewed the suggestions from the Review Panel and made progress on enhancing assessment criteria, drafting learning outcomes and procedures for the moderation of marks. The development of effective advice for students on plagiarism, illustrated with examples from the food bioscience literature, was another area agreed to be important. New advice will be drafted for inclusion in handbooks for our new students.

The Department is committed to providing our students high quality courses from a highly committed team of academics - all who combine strength in research with a commitment to giving students the best of learning opportunities.

23 May 2007: New Saudi Food and Drug Authority seeks advice from food law specialist

The Saudi Food and Drug Authority (SFDA) was officially created earlier this year although planning has been taking place for a number of years. One of the Authority's first tasks is to update the legislation on food to provide a modern framework meeting international requirements.

To assist them in the drafting of the new law, the SFDA invited **Dr David Jukes**, a Senior Lecturer in the Department, to visit the Authority in Riyadh and provide guidance on the components for their new law. The aim is to develop a new law that provides both protection for consumers at home and ensures fair trading conditions internationally. This is particularly important as Saudi Arabia became a member of the World Trade Organisation in December 2005 and is required to ensure that its regulations comply with international requirements.

Dr Jukes, a specialist in fundamentals of food law, spent several days working with officials in the SFDA to prepare a new draft law and supporting bye-laws. These will now be subject to a period of consultation prior to the submission of the new law to the Parliament.

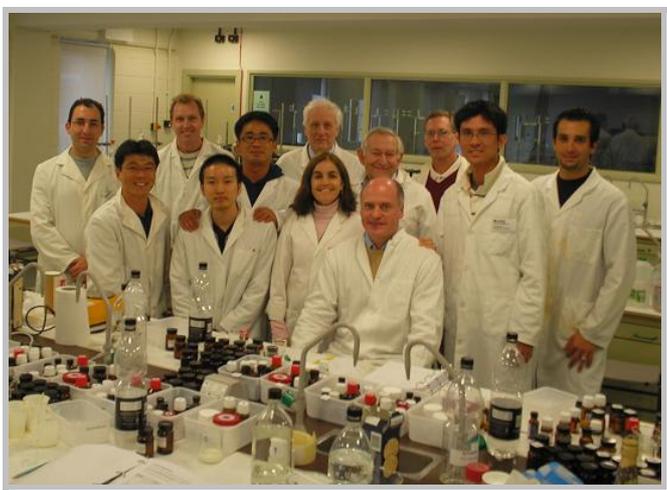


The photograph shows Dr Jukes with the SFDA President, Dr Mohammed AL Kanhal (to the right in the photograph) and the Vice President for Food Affairs, Dr Ibrahim AL Mohizea (to the left). Details of the SFDA can be seen on their website at: <http://www.sfda.gov.sa/>

19 May 2007: Flavourists course attracts students from around the world

Today marks the end of the fifth annual training course for flavourists hosted by the Department of Food Biosciences. The course is organised in conjunction with the British Society of Flavourists (BSF) with support from the International Federation of Essential Oil and Aroma Trades. This year the course attracted participants from Japan, USA, Germany, Denmark, Korea, Brazil and Malta.

During the three-week course, the participants learn how to use the relationship between chemical structure and the sense of smell to develop flavour systems for different foods, and to understand some of the chemical and biochemical pathways involved in flavour formation in foods.



The major emphasis is on practical flavour creation which is carried out under the guidance of Jack Knights, a highly experienced flavourist with wide international reputation. Other members of the BSF contribute to the programme as well as members of the School's Flavour Chemistry Research Group led by **Professor Don Mottram**.

The photograph shows delegates in a laboratory session. More details of the course can be found on the Flavourists Training Course page on our web site.

17 May 2007: Professor Rowland addresses the International Dairy Federation

Our new Hugh Sinclair Professor of Human Nutrition, **Professor Ian Rowland**, has already been active in international conferences.

Today Professor Rowland has been in Moscow as a guest speaker at the International Dairy Federation (IDF) Regional Conference on "Fermented Milks - Technology and Nutrition". Professor Rowland's presentation was entitled "Dairy Probiotics and Gut Health". Organised by the North-Caucasus State Technical University and the IDF, the meeting was held in the Russian Academy of Public Administration (RAPA). The Conference was held in conjunction with an IDF Symposium on "Lactose and its Derivatives".

Earlier this month, on the 8 May, Professor Rowland was in Geneva at the Vitafoods International Conference where he was presenting research developments linking probiotics with the prevention of colon cancer. This 3 day conference was run alongside the major nutraceutical exhibition Vitafoods International, now in its tenth year.

Further details of the IDF conference can be found at: <http://lactose.ru/>. Further details of the Vitafoods conference can be found at: <http://www.vitafoods.eu.com/>

4 May 2007: Congratulations to our new Professor of Food Chemistry

The Department of Food Biosciences is pleased to announce the promotion of **Dr Michael Gordon** to Professor of Food Chemistry. The University has recognised his contributions to strategic management and leadership in Food Biosciences and his extensive

research activity in food antioxidants over a period of 25 years,



Since being appointed as the Director of Teaching and Learning in Food Biosciences, he has made a very significant contribution to the development of the School. He also played a leading role in facilitating the establishment of a Department of Pharmacy in the University by chairing the Infrastructure Committee.

In the School of Food Biosciences, he led new initiatives in degree programmes including the launch of BSc Nutrition and Food Science, and took the lead in restructuring the School's teaching to improve efficiency. Recruitment of international students has been actively pursued under his leadership. Following the creation of the new School of Chemistry, Food Biosciences and Pharmacy, he was appointed to be its first Director of Teaching and Learning.

Professor Gordon's research work is focused on natural antioxidants and their properties in food and nutrition. His reputation in the field, extending over twenty-five years, is evidenced by invitations to speak at international conferences, by significant grant awards and by frequent requests to referee grant applications and manuscripts for international journals. His research has demonstrated that phytochemicals in green tea can switch from antioxidant activity to pro-oxidant activity in the presence of metal ions, and that the food matrix affects the activity of antioxidants present in olive oil.

Professor Gordon's record of research publications has been consistently good with 24 papers in international refereed journals since 2002. His research output (72 published research papers, 5 books and 35 reviews) has been enhanced by the successful supervision of 25 past and 8 current PhD students.

Professor Gordon was given awards for outstanding paper presentations at the American Oil Chemists' Society Annual Meetings in Atlanta, USA (1994) and

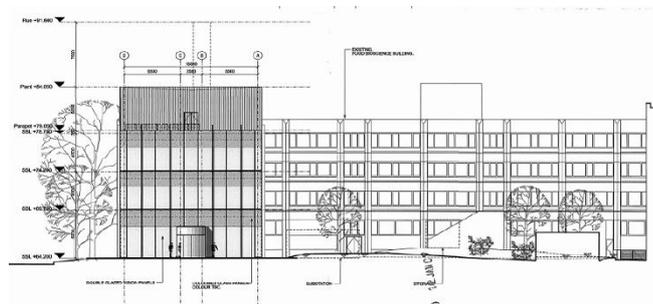
Seattle, USA (1997). He has been Principal Investigator for 4 successful grant applications since 2002, and is also a co-investigator and acts on the Management Committee for a major project funded by the Research Councils under the Rural Economy and Land Use Programme. He has been coordinator of the Plant Bioactives sub-theme within the Food Chain and Health research theme in the University.

Finally, Professor Gordon is a former Chairman of both the Royal Society of Chemistry Lipid Chemistry Group, and Society of Chemical Industry Oils & Fats Group.

5 April 2007: University to build new Life Sciences building next to Food Biosciences

As part of its commitment to enhancing the provision of science teaching and facilities for research, the University has today obtained planning permission for a new Life Sciences building.

The new building will be constructed on land to the North of the Food Biosciences building and will be linked to it by a 'bridge' over the service road which will run between the two buildings.

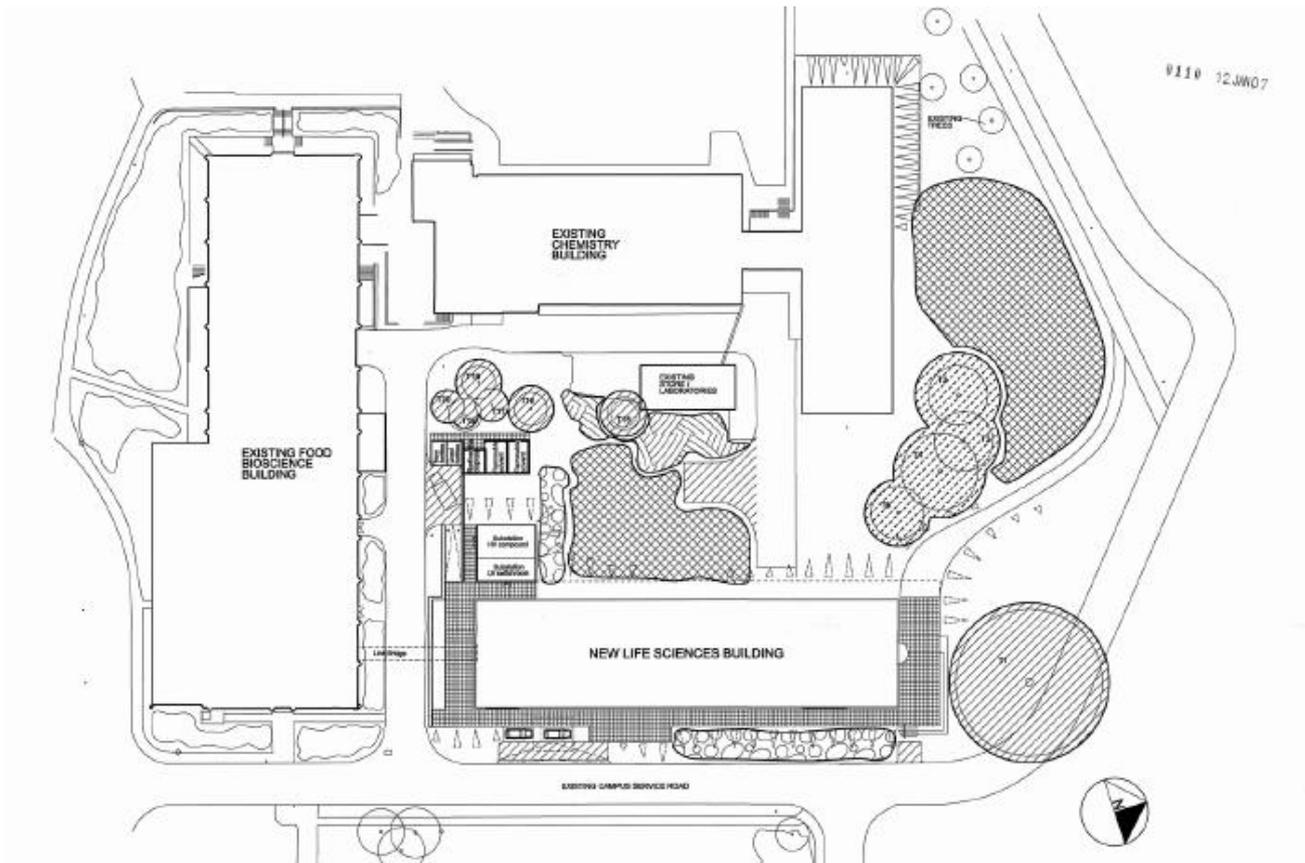


Currently much of the work on life sciences takes place in the Animal and Microbial Sciences (AMS) building (the "tower") across campus. The tower is however coming to the end of its life and will need considerable expenditure if it is to be retained. The University has decided that a move across campus will provide benefit by bringing the AMS researchers closer to us in Food Bioscience and to those in the Plant Science Building - already just across the road from us.

The investment shows that the University is committed to continue funding in all areas of the Life Sciences. The new laboratories will be available to Food Bioscience students taking modules in areas of life sciences - particularly some of the fundamental

science courses taken in the first year of the BSc programmes.

Building work is expected to start in the near future.



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.rdg.ac.uk/food/index.htm>