

# Julia Goodfellow – BBSRC Research Investments in the UK

Michael Gross



Julia Goodfellow

After a long and distinguished career in biophysics, Professor Julia Goodfellow took over the helm of the Biotechnology and Biological Sciences Research Council (BBSRC) at the beginning of 2002. In this role she is responsible for most of the government funding for the life sciences in the UK, which amounts to an annual budget of over a quarter of a billion pounds. The remit of the council includes research areas with widely different problems, from the agricultural sciences (dealing with hot issues such as foot and mouth disease and BSE) through to the most modern developments of biotechnology and molecular biology, which include controversial issues such as stem cell research.

Starting out with a physics degree from Bristol and research experience in Oxford and Stanford, Goodfellow spent most of her academic career at the department of crystallography, Birkbeck College, London ([www.cryst.bbk.ac.uk](http://www.cryst.bbk.ac.uk)). The college, originally founded by George Birkbeck as a pioneering adult learning institution, is now a fully-fledged university, offering both full time and evening students the opportunity to gain a University of London degree. Goodfellow entered the department of crystallography as a research officer

more than 20 years ago to pursue her research using computer simulation of protein structures. She was appointed a Professor of Biomolecular Science in 1995. During the last years at Birkbeck, she was also head of the crystallography department and vice-master of the college, gaining administrative experience which should come in handy with her new job.

Based at Swindon in Southern England, the BBSRC ([www.bbsrc.ac.uk](http://www.bbsrc.ac.uk)) is one of the seven research councils in charge of distributing the research funding handed out by the UK government's Office of Science and Technology. It emerged from a reorganisation of the councils in 1993, and its founding chief executive, Tom Blundell, also came from Birkbeck's crystallography department. In January 2002, Goodfellow took over the position from Ray Baker. The current budget is 265 million pounds per annum to pay for institutes, research centres, and grants ranging from PhD fellowships through to full research grants, across the entire range of the life sciences and associated technology (but excluding medicine, which is covered by the MRC).

In spite of the sheer size of this endeavour, Goodfellow remains modest and keeps a relatively low profile, focussing

on the job at hand rather than any manifestations of the power she now has. Her first administrative obligations already illustrate the wide range of responsibilities that the research council faces. She appointed new directors for two research institutes: The Roslin institute which is famous for the work that led to the cloning of Dolly the sheep, and the Institute for Animal Health, which delivers expertise in areas that have made many headlines following the recent outbreak of foot and mouth disease, not to mention the BSE crisis of the early 90s.

Apart from the headline-grabbing issues from food production to cloning, Goodfellow will also have to make important decisions in the field that is her academic home ground: structural biology. As the frontline of life science research moves on from genomics to proteomics, structural biology has become "big science" in that major investments are required to reap the benefits of the revolutionary changes we have witnessed in the past few years. It is also a field in which the UK has traditionally maintained a strong presence. Hence, the BBSRC's strategy board decided in January 2002 to commission a review of the requirements for UK structural biology. The review, which was presented in July



**Prof Julia Goodfellow with Prof Grahame Bullfield meeting Dolly the cloned sheep.**

2002, recommends that the research council should launch a new initiative to support a small number of large scale multi-disciplinary projects, which would

apply high-throughput technologies to important biological problems. This spring, when the new budget is set, the BBSRC's council will decide what action it will take to ensure that UK structural biology can maintain its leading position.

Another important issue mentioned in the report is the infrastructure around the new synchrotron facility, called Diamond, due to operate at the Rutherford Appleton Laboratory near Oxford in 2006. As interdisciplinary researchers funded by different sponsors will make use of the new radiation source, a certain amount of coordination will be necessary to ensure that the required laboratory facilities will be available for them.

So what does Julia Goodfellow make of all this, after one year in the top job? "For me, this last year has been both challenging and exciting," she says. "As a research community we have seen very positive increases in the science budget to cover a range of areas, from rural economy and land use through to stem cells and proteomics." Coming from a department that deals with both inorganic

materials and protein structures, she was obviously well-prepared to oversee such diversity on a bigger scale. But what are the challenges that lie ahead of her? "The publication of the Roberts' Report in 2002 has made us even more aware of the need to make careers in science more attractive. There is also a growing need for us to devote more time to encouraging public engagement with science through open dialogue and debate." Clearly, there's a lot of work for her, but she seems to be looking forward to it.

#### **Dr Michael Gross**

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