

Bacteria not welcome at the MRC? The MRC response

In a recent editorial, we argued that the UK's Medical Research Council (MRC) was neglecting the field of bacteriology. Here, Colin Blakemore FRS, Chief Executive of the MRC, responds to these criticisms.

The editorial in your January 2006 issue, '[Bacteria not welcome at the MRC?](#)', asked whether the MRC could be doing more to further our understanding of bacteria and the diseases linked to them.

As you pointed out, the MRC has a proud history of achievements, not only James Watson and Francis Crick's solution of the molecular structure of DNA in 1953, the discovery of monoclonal antibodies at the MRC Laboratory of Molecular Biology in Cambridge, and Sir Richard Doll's work linking smoking to cancer, but also Ernst Chain and Howard Florey's breakthrough in purifying penicillin in pharmaceutical quantities.

In your editorial, you carried out what you admit was a rudimentary analysis of recent funding trends by the MRC in bacteriology. At the time of writing, it was broadly correct to say that new MRC awards amounted to approximately £3 million, but that was only part of the picture. I can now bring the figures up to date for the whole financial year.

The MRC does not have sufficient resources to fund all the research that it would wish. Despite the increase in our budget over the past few years, our research boards are still only able to fund less than 20% of all the applications we receive and cannot even fund all internationally competitive proposals submitted. The Infections and Immunity Board of the MRC is responsible for funding research in virology, parasitology, bacteriology and immunology. In 2005–2006, more than 20% of the board's budget for grants was invested in bacteriology — a figure of £4.8 million. Furthermore, your calculations did not account for research in bacteriology being supported in MRC units and institutes, principally at the [National Institute for Medical Research](#) in Mill Hill, London, and the [MRC laboratories in The Gambia](#).

The total adds up to a budget for bacteriology of £8.5 million pounds each year, or more than 2% of the MRC's total spend. The portfolio includes grants for food-borne pathogens and hospital-acquired infections. It is interesting to note that the MRC (then the Medical Research Committee) was established in 1913 specifically to tackle the problem of tuberculosis, and it developed the first effective treatments. Tuberculosis is, of course, a re-emerging problem, and approximately

50% of our current budget for bacteriology is spent on research into this disease.

You also acknowledged that "the remit of the MRC is huge — their portfolio encompasses the whole spectrum of biomedical science, from basic research to bedside clinical practice." And you were correct to say that we are the largest provider of public funds for medical research. However, we are not the only funder of medical research and we are working in partnership with the others, many of which are themselves supporting bacteriology. We work closely with all the Health Departments, charities such as [The Wellcome Trust](#) and [Cancer Research UK](#), as well as the biotechnology industry through the [UK Clinical Research Collaboration](#) (UKCRC). Some organizations support areas of bacteriology that complement ours, such as the work of The Wellcome Trust in "deciphering the genome sequence of medically important bacterial pathogens". Other agencies are also addressing the broader questions of the UK's capacity in microbiology. For instance, the [Biotechnology and Biological Sciences Research Council](#) is currently reviewing microbiology. The MRC will also take part in a look at microbiology and infection research to be carried out by UKCRC, which can be expected to pick up on issues highlighted by the [Academy of Medical Sciences](#), among others, in earlier reviews.

For some time, the MRC has been listening to and addressing concerns like those raised by your editorial. The Infections and Immunity Board of the MRC, the budget for which has increased significantly, and disproportionately, over the past two years, is monitoring the balance between the different parts of its research portfolio. More importantly, we are working with the bacteriology community to enhance the competitiveness of their proposals so that funding is as full and fair as possible. This effort is beginning to bear fruit. Scientists are telling us that they recognize our increased commitment to this field. We are dedicated to building on the legacy of our previous Nobel laureates and continuing our quest to tackle disease and improve human health, not least through support for research on infectious diseases.

1. Bacteria not welcome at the MRC? [Editorial] *Nature Rev. Microbiol.* **4**, 2 (2006).