EMBO
reports

editorial

Oliver Twist and Santa Claus

In the film version of Charles Dickens' famous novel, the innocent-looking Oliver Twist approaches Mr Bumble, the orphanage's powerful controller of nourishment, and asks for an extra helping of gruel. "More!?" thunders an indignant Bumble, visibly upset by such an impertinent request. Apparently it was the 'management's' policy that only minimal support was adequate for the children in their care, who as it happened, also generated their wealth—in this case by pick-pocketing.

Similarly, scientists in the USA and Europe have also dared to approach their masters to ask for more. When Harold Varmus started his term as Director of the US National Institutes of Health (NIH), doubling the agency's budget seemed to be impossible, yet he achieved it. Others have followed suit. Earlier this year, the European Commission requested additional funding for research and asked for a substantial increase in support for the Framework programmes, which may even double the current budget. Slowly, those who control the provisions are meeting the demands of the 'hungry' scientists. This has not happened because of a sudden appreciation of the genius of the white-coated brigade or because of the recognition that knowledge is one of the defining aspects of human society. It happened because governments think that it is in the best interests of their economies to be more supportive of research. However, we have come to believe in their commitment, as a child does in the generosity of Santa Claus. The danger with such a belief is that things tend to change. Suddenly, the magic disappears and reality replaces our reveries.

In fact, when the US government increased NIH funding, it was selective. Not all agencies thrived; and some actually had to cut back their activities due to lack of funds. The NIH received its budget increase because its leaders promised better health care throughout the USA and the rest of the world. Consequently, support for research on fundamental topics was strongly linked to real health problems. It is therefore telling that, in a recent document, the European Commission referred to the NIH as an "applied agency" (European Commission (2004) Europe and Basic Research, COM 9), whereas it regards the US National Science Foundation as an agency more dedicated to fundamental research.

It is not clear whether the increases in the NIH budget would be achievable today—and this is not a political comment. Governments worldwide now worry more about problems of national security, unemployment and education. The collapse of the 'dot-com' industries has further shaken confidence in the rapid returns on R&D investments. Governments and private investors are becoming increasingly cautious as they realize again and again that even good products take substantial time and money to reach the market. At an earlier stage in my career in Ireland I learned that politicians placed a high value on a construction project that provided employment and an asset at the end and put a question mark on support for a research project where the outcome was not tangible or even guaranteed. Things have changed in Ireland and elsewhere, but the nagging doubt about investing in research still lingers in the background. In Europe we see the hypocrisy, or at least inconsistency, of governments talking the 'right' talk about increasing R&D investment to dizzying new heights, thus allowing Europe to take a lead role among the knowledge-based economies that all expect soon to dominate commerce. But then the very same governments take no real action when it comes to fixing their annual science budgets. Apparently, an 8% increase per annum is needed for Europe to meet its goal of spending 3% of its GDP on R&D. In reality, the increase is closer to 3% per annum, and in some countries there is no increase at all. In the case of EMBO, we had to make a very strong effort to convince the governments of the largest countries to increase their contributions to our programmes. There was a general acceptance of new and expanded actions that should be included in the plan for a nine-year period. But when it came down to actually providing the money that was needed for these activities, the initial reaction was similar to that of Mr Bumble: 'more' was not a logical consequence of previous agreements. In the end, the governments supported a 5% per annum increase for the next six years, which is a reasonable outcome. But it did raise the spectre of a strong and unyielding refusal to our requests.

So we have to be careful not to take for granted the current relatively favourable climate for research. We scientists, as a community, are in competition with other demands for money, both nationally and internationally. We therefore have to send clear messages about why investment in our 'enterprise' will create better returns both directly and indirectly. Directly, this will come from the high-quality jobs generated by research. Indirectly, it will be from the new industries that are attracted to excellent and ground-breaking research. The number and quality of papers that we publish do not impress those who decide on funding unless we manage to convince them of the inexorable link between high-quality research and economic benefit. We have to ensure that they know this by consolidating such marketing with examples based on reality. Oliver was eventually able to get more food because he convinced Mr Bumble that such an investment meant that he could work harder and bring in more money. A transition to a more realistic post-Santa world does not mean the end of great gifts. In the end, we have to show that we perform according to our promises, and, with increased funds for research, this should follow. If it does, we must make sure that the benefits are also tangible, and we must not forget to tell the providers of money that they made the right decisions.

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