

nature cell biology

Science funding: how to sell biology

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Amongst a number of other tasks, writing grant proposals in order to support the manpower and equipment of their laboratory has now become one of the most time-consuming activities of most 'senior' scientists. Except for a lucky few whose laboratories are funded permanently or on renewable five-year grants, it seems that most scientists now spend as much, if not more, time in gathering funding, especially for their postdoctoral fellows, as they do on science itself, and running a laboratory is getting closer and closer to running a business. Indeed, this seems to be expected by many science funding agencies.

Not only industry but also some governmental and some non-governmental agencies are now reluctant to fund scientific projects without any immediate economic or medical benefits. One of the most dramatic such examples is the European Union's Fifth Framework Programme, which will, for example, in the next five years fund a number of programmes that focus "on immediate socio-economic market needs" as well as "research and technological developmental activities" that "aim to build up the knowledge base in identified areas of strategic importance". Researchers allegedly learn to adapt to these requests, and admit that they "learn how to lie and to propose to do something [they] are not interested in".

But what of serendipity?

Although it seems logical, in liberal economies, that funding science should be viewed as an investment and that science should be adapted to the socio-economic context, a causal relationship between the amount of money invested in a given field of research and the advance that is made in this field does not necessarily exist. Such a policy deprives science of serendipity and the benefits of investigating what could initially be thought of as side aspects of a project but which could lead to a major breakthrough. A major investment in one given subject area should thus not be made at the expense of other fields that seem to be more fundamental but which sometimes prove to be more 'productive'.

Anticipating the medical or technological outcomes of a research project can, most of the time, be achieved only once the project is well advanced. In this respect, the Fifth Framework Programme would favour ongoing projects at the expense of more innovative projects — a very short-term policy. Scientists need the science funding agencies to be more flexible. Indeed, a balance between short-term and long-term support should be sought, with short-term contracts being best suited to funding ongoing projects with expected outcomes, and long-term contracts funding more innovative projects. The evaluation time should also be adapted to the kind of grant proposal, with some funding being more rapidly made available for ongoing projects. And science funding agencies should look into alternatives and develop leasing arrangements rather than spending on projects that require investment into rapidly evolving, high-technology equipment.

Scientists, politicians, economists and businessmen are all very much aware of economic matters, but let's hope that this is not at the expense of the most valuable investment — into knowledge and education.