



Council for the Defence of British Universities

Response to Call for Evidence

Triennial Review of the Research Councils

Please find on the following pages a submission on behalf of the Council for British Universities (<http://cdbu.org.uk>) to the call for evidence from the Department of Business, Innovation and Skills regarding the triennial review of the research councils.

Our submission does not contain confidential material.

On behalf of the Council for the Defence of British Universities:

Prof. Philip Moriarty, University of Nottingham, philip.moriarty@nottingham.ac.uk
Prof. Mary Margaret McCabe, King's College London, mm.mccabe@kcl.ac.uk
Prof. Stephen Curry, Imperial College London, s.curry@imperial.ac.uk
Prof. Thomas Docherty, University of Warwick, T.Docherty@warwick.ac.uk
Prof. Gordon Campbell, University of Leicester, Campbell,leb@leicester.ac.uk
Prof. Howard Hotson, University of Oxford, howard.hotson@st-annes.ox.ac.uk



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Response to Call for Evidence

Triennial Review of the Research Councils

PURPOSE

1. Do the Royal Charter objectives for the Research Councils need to continue to be delivered?

The Royal Charter objectives should continue to be delivered but it is essential that an appropriate balance of delivery across those objectives be maintained. We note, in particular, that the objective below, taken from the Royal Charter for EPSRC, features in a very similar form in the charters for all research councils:

“...to advance knowledge and technology (including the promotion and support of the exploitation of research outcomes), and provide trained scientists and engineers, which meet the needs of users and beneficiaries (including the chemical, communications, construction, electrical, electronic, energy, engineering, information technology, pharmaceutical, process and other industries), thereby contributing to the economic competitiveness of Our United Kingdom and the quality of life”

These are laudable aims but it is vital to recognise that the advancement of knowledge in state-of-the-art research is not always well-matched to “the needs of users and beneficiaries”, whether in the sciences, the social sciences or the humanities. There is an increasing, and troubling, drive by the research councils to incentivise researchers to focus on work which has identifiable near-term/near-market application. This is exemplified by RCUK’s tips on how to write a Je-S application¹ which include, as tip number 1, the following: “*Draft the Impact Summary very early in your preparation, so that it informs the design of your research*”. Moreover, in addition to the two page impact statement which is a requirement for all research councils, EPSRC now also requires a discussion of the national importance of the proposed research (in terms of, for example, its ability to foster new industries). AHRC, while conceding that ‘not all research will have obvious or direct impacts’, and that AHRC will continue to fund such research, nonetheless encourages applicants to shape their proposals in terms of potential impact, and devotes a large amount of their advice to applicants in terms of impact.² It is not only in the humanities that such a focus for research, in advance of the research itself, is likely to narrow and impoverish the work that eventually appears.

¹ <http://www.rcuk.ac.uk/kei/impacts/Pages/top10tips.aspx/>

² <http://www.ahrc.ac.uk/Funding-Opportunities/Pages/Research-Grants---Standard-Route.aspx>

As well as often having vital social and economic applications and being subject to accountability, academic research seeks to enhance our knowledge and understanding of the physical world, of human nature and of all forms of human activity. These benefits of university research are far less tangible, or quantifiable, or short-term. But they are at grave risk of being side-lined in favour of work which meets relatively narrow, and ostensibly 'predictable', commercial imperatives, research council priorities, and/or strategic government objectives.

A particularly troubling aspect of RCUK's drive towards greater near-term socioeconomic 'impact' of academic research is that this could not only damage the fundamental ethos and standing of the UK's research base - which, by a variety of metrics, is world-leading in many areas - but, rather counter-intuitively, also has the potential to be economically damaging. We return to this point in our responses to Q18 and Q19 below.

2. How well aligned do you think Research Council priorities are with these Royal Charter objectives?

The Research Council priorities are well-aligned with the Royal Charter objectives but, as noted in our response to Q1 above, the significant issue of balanced delivery needs to be addressed.

3. How closely are and should Research Council research objectives be aligned with those of Government?

There has been a worrying trend across the research councils in recent years to skew funding towards areas and proposals which align with pre-defined strategic priorities and meet RCUK impact criteria. (It is a moot point as to the extent to which RCUK's strategic priorities are driven by explicit pressure from government or are, instead, defined by a rather more subtle dynamic with the councils attempting to 'second-guess' government priorities: witness, for example, AHRC's ill-fated engagement with the 'Big Society' in 2010). While targeted research programmes are of course an essential element of the funding landscape in order to address major socioeconomic challenges, investigator-/curiosity-driven research is clearly the bedrock of innovation across all disciplines. One need only point to the oft-cited example of graphene to make a strong case for the continued funding of traditional responsive mode research. Graphene science and technology, along with countless other ground-breaking discoveries and innovations, did not stem from a targeted research council programme. Although commercial exploitation of graphene *will* require significant intelligent targeting of funding (which falls more readily within the remit of the Technology Strategy Board), this type of R&D is worlds apart from fundamental scientific research. (More on this distinction below).

The research councils argue, however, that they have maintained the balance between 'responsive mode' and 'targeted' research. This is a false distinction because responsive mode research in essence no longer exists in the traditional sense. All research proposals now require a two page impact statement (complemented by, in the case of EPSRC, a discussion of national importance³). As a consequence the proposal itself is already 'targeted'. When RCUK advises that

³ Although there were suggestions that the national importance criterion was to be removed by EPSRC, recent statements strongly suggest that this is not the case: www.epsrc.ac.uk/newsevents/pubs/mags/connect/2013/89/Pages/chairmanannouncetwoindependentreviews.aspx

perceived impact should inform the direction of a research programme it directly undermines the support for curiosity-driven research. Moreover, programme managers at the research councils play an increasingly important role in mapping out the strategic direction of research via, for example, initiatives such as EPSRC's Shaping Capability process or AHRC's 'horizon-scanning'.⁴ When this is coupled with a much stronger focus on Centres for Doctoral Training (CDTs) at the expense of project studentships, and extended funding for those researchers identified as research leaders by the councils, then it is clear that there are very strong moves towards a funding landscape which is dominated by RCUK- and government-defined objectives⁵.

In an important and well-considered speech last year⁶, David Willetts voiced the concern that "Governments picking winners can easily become losers picking government programmes". He stressed the importance of balancing targeted funding and strategic priorities with support for new research directions which originate from basic research focused on exploring the boundaries of knowledge. Research council policies over the past three to four years, however, demonstrate that the balance is being skewed very heavily towards council-defined "winners".

EFFECTIVENESS AND EFFICIENCY

4. How effective are the Research Councils at delivering their objectives?

CDBU is of the opinion that this question is best addressed via independent reviews of each of the research councils by international panels comprising world-leading researchers, funding body representatives, and policy experts. EPSRC, for example, has recently said that an independent review of its policies and strategies would be carried out in the near future. We welcome this but were disappointed to note that the panel will predominantly comprise UK experts with "at least one" international representative⁷. To ensure maximum independence, and to better inform the review with regard to international comparisons, the panel should comprise a majority of international representatives. We would suggest that each of the research councils should similarly be subject to international review of this type.

5. Are the current disciplinary divisions appropriate to allow the Research Councils to foster excellence and innovation in the research base?

Funding of interdisciplinary research projects is a perennial issue, and one which has different points of tension in different research contexts. Although the councils have individually and collectively made laudable and sustained attempts to address interdisciplinary funding over the years, with a particular focus on the physical-life sciences interface, there remain a number of areas which are a matter of some concern.

⁴ <http://www.ahrc.ac.uk/News-and-Events/Publications/Documents/AHRC-Vision-and-Strategy-2007-2012.pdf> p. 7

⁵ It is interesting to consider David Willetts' strong, and frequently voiced, support for the Haldane principle in the context of the Impact, National Importance, and Shaping Capability policies. Those policies enable research council and government strategy to strongly influence the peer review process at the 'granularity' of an individual proposal.

⁶ <https://www.gov.uk/government/speeches/our-hi-tech-future--21>

⁷ See

<http://www.epsrc.ac.uk/newsevents/pubs/mags/connect/2013/89/Pages/chairmanannouncetwoindependentreviews.aspx>

Prime amongst these in terms of the physical sciences is mathematical physics. Proposals in this area, which underpins a wealth of discipline-spanning research, unfortunately have often been subject to a great deal of uncertainty as to whether STFC or EPSRC should handle the peer review process, with, in the worst cases, fellowship applications in mathematical physics being office-rejected due to a perceived lack of overlap with the funding remit of one of the councils. The lines of communication between STFC and EPSRC, particularly with regard to defining the remit of their respective research programmes, need to be strengthened considerably to address this problem. The lack of resubmissions and the “demand management”⁸ policy of EPSRC are also both far from conducive to supporting speculative and adventurous multi-disciplinary research.

More broadly, it is essential that interdisciplinary proposals are not subject to what is generally termed the ‘double jeopardy’ problem where the same proposal has to be reviewed by two distinct research council processes. The EPSRC–NSF joint funding mechanisms, however, are not subject to this problem as in each round only one of the funding bodies is charged with securing peer review reports. A panel comprising both EPSRC- and NSF-funded academics (and EPSRC/NSF representatives) then ranks the proposals on the basis of the peer review reports. This strategy appears to work well and could be adopted more widely.

Conversely, in the Humanities, the focus on interdisciplinary work can have deleterious consequences, in undermining the original disciplines which support such research, and in underestimating the serious complexities of doing interdisciplinary work well. The frequent requirement to show an interdisciplinary component to research both underestimates the difficulties and has a distorting effect on research proposals, once again forcing new research to be dictated by RC directives not by peer review and the imperatives of the research itself.

This prioritisation of interdisciplinarity has led to supposed collaboration among some research councils, but that this has driven a further diminution of responsive-mode funding. For example, when AHRC works with the other councils, but in a leading role, it led to the prioritisation of funding for projects that were realisable as part of a 'Connecting Communities' project. The result is that applicants are required to skew their project to make it appear to be consistent with the aims of the interdisciplinary themes.

6. To what extent is there duplication between the functions of the Research Councils (from promoting and support research through to advancing and disseminating knowledge, generating awareness and providing advice) and other providers in the sector?

There would appear to be little duplication. Indeed, a number of other grant providers – including, in particular, the Leverhulme Trust – ask applicants to describe why the research proposal they have submitted could not be funded by one or more of the research councils. It is particularly noteworthy that the European Research Council does not require applicants to detail the perceived socioeconomic impact or national importance of their work, in contrast to both the UK research councils and the other EU Framework 7 funding programmes. A similar ‘tensioning’ of UK research council funding for proposals which are heavily tilted towards basic research against those with a more applied/targeted flavour –

⁸ Colloquially known as the “black-listing” policy within the EPSRC research community.

as opposed to the current 'one size fits all' approach to perceived impact and predicted national importance – might be a useful alternative funding strategy to consider.

7. What is your view on whether seven Research Councils is the right number?

First, there are obvious cost implications with regard to research council reorganisation. It is not at all clear that there would be “economies of scale” in merging two or more councils into a single entity. The implementation of the RCUK Shared Services Centre certainly does not inspire confidence in initiatives designed to improve cross-council interactions, let alone facilitate council mergers. It is also only relatively recently that STFC has recovered from the ‘fallout’ due to its creation from a merger of PPARC and CCLRC.

These cost implications notwithstanding, the reorganisation of the research councils – perhaps to return to a single central council, as in SERC, the forerunner of the RCs – could in principle help to address some of the issues related to multidisciplinary research described above. In addition, there are historical ‘anomalies’ arising from the creation and subsequent merger of certain councils. For example, STFC currently handles funding of access to large scale facilities but the staff and consumables costs are covered by EPSRC, as described at the EPSRC website:

“EPSRC provides support for groups to carry out projects which use the facilities through research grants. Typically EPSRC funds the research staff and consumables needed for a project, with the research group accessing beam time at the facilities free at the point of access. STFC is responsible for allocating access to the facilities.”

This is a rather disjointed and unsatisfactory approach.

One could alternatively ask whether the division of a single council into two entities might be helpful. During the HoL Science and Technology Select Committee session on EPSRC policies (Nov. 29 2011) Lord Broers asked whether it was appropriate for both engineering and the physical sciences to be funded by the same council. The methods, mindsets, and motivations of engineers as compared to those of scientists are far from identical. Lord Broers’ question, although perhaps somewhat ‘mischievous’, did not receive the attention it warranted during the Select Committee session.

INTERACTION AND COORDINATION

8. How effective do you consider RCUK to be and why?

An ‘overarching’ body which coordinates strategies and disseminates information common to all research councils (e.g. open access framework, research ethics, and the concordats with regard to research career development) is necessary and generally RCUK serves this purpose well. It has, however, been found lacking in terms of its engagement with the academic community regarding open access policies⁹, echoing the recent lack of community engagement of a number of the research councils including AHRC and EPSRC.

⁹ See <http://www.timeshighereducation.co.uk/story.asp?sectioncode=26&storycode=422775&c=1>

9. Are there any functions currently performed by RCUK that you think should be performed at Research Council level or vice versa?

No comment.

10. Where do the Research Councils need to work in partnership and how good are the Research Councils at doing this?

Key areas for which the research councils need to work in partnership include open access, early career development, public engagement/outreach, and research ethics. For the latter areas RCUK is performing well but, as discussed in our answer to Q8, there have been significant problems with the RCUK approach to open access policies. Given that there are distinct disciplinary – and, indeed, subdisciplinary – differences of opinion on the matter of open access, it is perhaps difficult for a single council-wide organisation to capture the rather diverse and nuanced arguments underpinning the debate. This problem is, of course, exacerbated by the lack of engagement noted above.

11. How good are the Research Councils at challenging the status quo – both in the sectors they support and in Government?

Far from challenging the status quo, the research councils are embedding a culture in which the so-called ‘Matthew effect’ in research funding¹⁰ is dominant. EPSRC again leads the way. The council recently ‘rebranded’ itself as a sponsor, rather than funder, of research. This means that, for one, EPSRC now focuses increasingly on interactions with what it terms its ‘framework’ universities (of which there are twelve) and ‘strategic relationship partners’ (of which there are eleven). These partners are selected on the basis of total EPSRC grant income.

As described at the EPSRC website, “*Framework agreements give us a structured and systematic basis for our discussions with universities and help to identify activities we can work on together. The agreements don’t provide any extra funding to universities, but may help to identify opportunities to use existing EPSRC funding more flexibly.*”

Thus, EPSRC’s policies and strategic objectives are driven by interactions with a small subset of universities in the UK HE sector. This far-from-impartial process is, of course, seen as deeply unfair by those universities not within the ‘chosen few’. Moreover, although EPSRC states that “the agreements don’t provide any extra funding” (directly), they of course provide a distinct funding advantage to those universities privy to direct discussion with council representatives. When coupled with EPSRC’s drive to focus funding on research leaders (who seem to be currently defined as those researchers who hold or have held EPSRC fellowship status), the removal of project studentships in favour of doctoral training centres, and the shaping capability process, the net effect is to bolster, not challenge, the status quo.

As regards interactions with government, the research councils in many cases would appear to view themselves as government departments, rather than funding bodies

¹⁰ So named after Matthew 25:29, “*For to all those who have, more will be given, and they will have an abundance; but from those who have nothing, even what they have will be taken away.*”
See K Merton, *Science* **159** 56 (1968)

whose decisions should be reached 'at arm's length' from government. Although there are a number of examples of research council strategies (and peer review processes) being directly influenced by government policy, perhaps the most egregious was AHRC's inclusion of five references to the Coalition's "big society" in its delivery plan published in Dec. 2010. One of the most uncomfortable exercises of recent years was AHRC's attempt to justify this after the event.

12. Do the Research Councils have effective ways to share best practice?

No comment.

DISSEMINATION AND COMMUNICATION

13. How do Research Councils ensure that use of research is maximised, including by those in other Councils, the private, public and third sector?

A key difficulty with government – and, by extension, research council – policy is that the terms "science", "R&D", and "innovation" are apparently considered to be synonymous. Prof. Richard Jones, PVC for Research and Innovation at the University of Sheffield, made this point eloquently last year in a well-informed and important blog post, "*Why isn't the UK the centre of the organic electronics industry?*"¹¹ It is worth quoting the final paragraph of Jones' post in full:

"The story of plastic electronics should remind us that science is not the same as innovation, that innovation in the material world (as opposed to the digital domain) needs patient, long term, capital, and that it matters where manufacturing takes place. Above all, internationally leading science doesn't automatically translate into economy transforming innovation."

The research councils, particularly EPSRC, are suffering from what might best be termed "mission creep". Although it might serve the councils well to argue, particularly in the run-up to each CSR, that RCUK-funded research in and of itself can simultaneously serve as the engine of economic growth, as a catalyst for the growth of the UK's manufacturing base, and as the means to maintain the UK's world-leading position in fundamental scientific research, this is hopelessly naïve. By attempting to be all things to all people, the research councils are compromising their support of one of the few UK successes over a prolonged period of financial downturn - i.e., our record of outstanding research and the associated impact this has on the prestige, and thus economic impact, of the UK HE sector - in order to chase economic returns which, in very many cases, they are fundamentally ill-equipped to pursue. In any case, there is already a highly lauded mechanism for translating university research results to industry and for fostering stronger links between business and the academic sector: the Technology Strategy Board.

The principal point is that the university sector is just one component of the innovation 'ecosystem'. There are many problems outside the university sector, and to a greater or lesser extent also outside the remit of the research councils, which need to be addressed in order to maximise the take-up of research, including, in particular, the degree to which private industry investment in R&D lags behind that of our competitor nations. The use of research results in private industry is, however,

¹¹ <http://www.softmachines.org/wordpress/?p=1276>

very unlikely to be enhanced significantly by the requirement that all applicants for research council funding write two pages of purple prose on the perceived potential impact of their work, nor by their predicting the long term national importance of the work (long before the project starts). In the Humanities – where some scholars are dealing with material that has a far longer history than the short-term requirements of impact – such a preface is often frankly ridiculous.

14. How well do you think the funding mechanisms are understood by applicants (existing and new)?

Although the research council websites provide a wealth of helpful information regarding the different funding mechanisms, and RC programme managers and representatives generally respond promptly and positively to requests for information, there remain a number of areas where there is a lack of clarity and transparency regarding funding mechanisms.

The Pathways to Impact and National Importance criteria discussed in the responses to previous questions are unpopular both with applicants and reviewers, largely because they require a great deal of nebulous speculation about the outcomes of a research project, regardless of where the proposal lies on the ‘fundamental research-to-near-term-exploitation’ spectrum. The research councils frequently argue that this unpopularity arises from applicants’ lack of understanding of the criteria. This is not the essential issue, although it is clear that EPSRC itself (along with the referees of proposals) struggles to delineate the concept of national importance from “pathways to impact”. The unpopularity of the criteria is instead due fundamentally to their inappropriateness for very many research proposals. The fact that RCs feel the need to defend this strategy to the limit engenders deep suspicion among academics.

It is also important to realise that although the research councils claim that Pathways to Impact and National Importance are “secondary” criteria, in that the primary consideration is always the research quality, for many prioritisation panel meetings these become *de facto* primary criteria due to the high standard of the proposals.

15. How well do you think Research Councils communicate with the general public?

This is one area where perhaps there could be better coordination across the research councils via RCUK. One issue that is somewhat frustrating is the lack of a dedicated funding stream for public engagement for some research councils (where it is expected that funds can be sought via the “Pathways to Impact” component of the grant – this is not always appropriate). The extent to which RCUK and the research councils are visible to the general public(s) is something that is difficult for us to gauge. Vince Cable’s comments regarding the quality of the UK research base (during a Today programme in September 2010), however, would suggest that even at government level there exist some misconceptions about the respective roles of the research councils and HEFCE in funding UK universities.

FUNDING MECHANISM

16. Is the funding mechanism appropriately open to a range of institutions/researchers, including new entrants as well as incumbents?

In principle, yes. In practice, the answer is rather more equivocal. The steady evolution to a system involving a much greater number of managed programmes, to

a larger focus on research 'leaders', and selective consultation with "framework" and "strategic relationship" universities skews the funding mechanisms towards the "old guard". It is particularly disappointing that EPSRC is in the vanguard of these changes as up until a few years ago it was an exemplar with regard to support of early career academics.

17. Does Research Council funding work well alongside block grants to institutions?

CDBU is of the opinion that in its present incarnation the dual support system, from the perspective of the STEM subjects, is inefficient because of relatively low funding rates, which means that many researchers face the problem of overcoming fallow periods in which they have little or no funding. This problem is particularly acute in the university sector where staff are also under pressure to teach students who become ever more demanding with each rise in fees.

While competition is healthy, at present it is too extreme. The fluctuations in lab funding, particularly for relatively small labs, creates enormous stress and inefficiency due to the excessive effort spent chasing funds and the too-rapid churn of short-term staff through labs, which means that much tacit knowledge is lost and has to be relearned by new appointments.

CDBU would like to see a shift of more funds to block grants so that universities were able to offer more financial support to their staff to smooth out some of the fluctuations due to the processes of competition. If such funding were geared to teaching contributions this would also help to resolve some of the eternal tension between these two activities. If each University-based PI had sufficient funding for a long-term tech or PDRA, this would enhance lab efficiency as well as providing a career point for those who are talented and productive scientists but have no real ambition to be a group leader.

In the arts and humanities the dual support system has unfortunately generated a culture of 'grant capture' that is utterly at odds with the needs of those disciplines. In practice, the modest needs of research in the humanities can be met by a modest amount of formula funding.

ECONOMIC IMPACT

18. How good is the UK at attracting private investment and human talent into research in comparison with other countries? What factors influence this?

In the physical sciences the UK is exceptionally good at attracting talented scientists. Data from the Institute of Physics showed that in 2009/2010, non-UK academics in physics outnumbered their UK counterparts by a small margin (51% vs 49%). Non-UK nationals are more likely to move to the UK from leading competitor nations to take up senior (i.e. professorial) level posts for a number of STEM disciplines. These researchers, including the winners of the 2010 Nobel Prize for Physics (Geim and Novoselov) have been attracted here by the high international reputation of UK research. However, the issues surrounding UK immigration, coupled with the stagnant (i.e. 'flat cash') investment in the science base - as compared to, for example, Germany's 6% rise in spending for science in 2013 - are compromising the attractiveness of the UK research environment.

On the matter of private investment in research it is worth again referring to a blog post by Prof. Richard Jones (see also our response to Q13), in this case, *The UK's thirty year experiment in innovation policy*¹²:

"It is in the business sector that the largest absolute drop in R&D intensity [over the period 1980 – 2010] has taken place – from 1.48% of GDP to 1.08%."

As Jones points out, "One way of interpreting the pressure on universities to demonstrate the "impact" of their research, which is such a prominent part of the discourse in UK science policy at the moment, is as a symptom of the disproportionate importance of university research in the overall national R&D picture."

As we have stressed in our response to Q13, the most appropriate way to address the lack of private sector investment in UK R&D is not to expect UK academics to "pick up the slack" at the expense of focussing on maintaining, and strengthening, the UK's internationally leading presence in fundamental research.

There is also the important question of the extent to which student fees will subsidise research funding. There is a real danger that Band D students (in the humanities and social sciences, etc.) are paying £9,000 fees in order to fund research, not merely in their own discipline (which would be regrettable) but in other ones (which is deplorable). The UK already devotes 45% of its HE spending to research -- a very high proportion, lower than only Switzerland and Sweden. But Switzerland and Sweden's universities are overwhelmingly publicly funded, while over 50% of UK HE spending now comes from private sources, mostly from graduates. This raises the suspicion that the £9000 tuition fees for humanities students have been designed, not primarily to ensure that humanities education itself is lavishly funded, but to cross-subsidize expensive research elsewhere. Given the growing insistence that this research be undertaken to meet the needs of industry, the new English funding arrangements effectively require today's students to use their future earnings to finance the research and development which British businesses need but are unwilling to pay for themselves.

19. How effective is the funding mechanism at delivering value for public money and deciding the best targets for new research?

The key question here is just how "value for public money" might be defined and quantified. This is a vexed issue which has been studied in some detail by sociologists and funding policy experts for decades. A seminal report in the UK context is that of Salter and Martin¹³ who, after detailed analyses, reached the stark conclusion that "*no simple model of the economic benefits from basic research is possible.*" While it is clear that curiosity-driven research of the type funded via the traditional responsive mode has been responsible for major socioeconomic impacts and technological innovations, it is practically impossible to quantify the total return on public investment. Citing Salter and Martin again, "*...there are considerable economic benefits to the public funding of basic research. These benefits are often subtle, heterogeneous, difficult to track or measure, and mostly indirect.*"

Pioneering and disruptive innovation necessitates exploration at the boundaries of knowledge without the imposition of constraints due to the perceived short-term

¹² <http://www.softmachines.org/wordpress/?p=1213>

¹³ AJ Salter and BR Martin, *Research Policy* **30**, 509 (2001)

commercial viability or socioeconomic impact of the work. The most innovative companies recognise this and it is one of the reasons why they support fundamental research. Moreover, a fascinating, and heavily cited study by Stern¹⁴ reached the following conclusion:

“... if the producers of abstract knowledge (a long-term public good) are sensitive to the integrity and prestige associated with the production of “pure” knowledge, then society may be able to produce such knowledge at lower cost than would be the case if researchers were only sensitive to the trade-off between effort and realized income.... total spillovers from knowledge production into technological innovation may depend on the degree of insulation from commercial incentives ”

Stern’s conclusion would strongly suggest that in many cases it is economically counter-productive to incentivise researchers into pursuing more commercially-focussed work.

Academic research has also historically been seen as more independent, disinterested, and trustworthy by the public than research carried out, or commissioned by, industry. The independence of university research thus represented an essential public good, delivering significant value for public money. One downside of the RCs’ drive towards ensuring stronger commercial returns (via its impact agenda) from the body of work it funds is that the disinterestedness of university research can be compromised. This is particularly problematic with regard to the pharmaceutical industry, for example, which has an appalling track record in the suppression of negative results.

Re. deciding targets for new research: As noted in the answer to a previous question, David Willetts clearly recognises the dangers associated with attempting to “pick winners”. The research councils, however, are allocating ever-increasing amounts of their budgets to specific, council-selected, areas of research in a misguided attempt to second-guess where the greatest national benefit will arise. There are countless examples, however, of where truly ground-breaking ideas have sprung out of left-field and could not have been predicted. In the UK, investigator-driven – rather than targeted – research programmes have been responsible for the majority of these innovations. (We hesitate to mention graphene yet again).

20. How easy is it for UK businesses, individuals and policy makers to access the research base?

The research council websites are generally easy to navigate and are a valuable public resource. Developments in open access in the coming months and years will significantly enhance access to the research base, although CDBU has major reservations regarding RCUK’s implementation of the Finch recommendations. We are also of the opinion that instead of requiring academics to spend a great deal of time on writing and reviewing impact (and national importance) statements in advance of a research project being carried out, publicising the impacts of a piece of research during and at the end of a project is a much more appropriate use of university resources. The RCUK Research Outcomes project is a step in the right direction but much greater use of blogs and social media channels could be made. This would represent a rather more productive and socially engaging approach to the impact question.

¹⁴ R. Stern, Management Sci. 50 835 (2004)