## Trajectory of National Research Foundation (NRF) funding

Sir – The research funding climate in South Africa has changed dramatically. A summary of how these changes are likely to affect researchers follows, but more details can be obtained at http://www.nrf. ac.za/doc/trajectories\_nrf\_funding.pdf.

It is important to understand that the NRF receives three separate forms of income: a discretionary grant of about R279 million which can be used at its discretion; ring-fenced grants that are earmarked for particular projects, e.g. centres of excellence and equipment grants (ring-fenced grants in 2009 total about R115 million); and contract fund-

ing in the form of individual contracts, e.g. the African Geographic Advantage Programme and the South African National Antarctic Programme (contracts arise mainly from the increased number of strategic interventions driven mainly by government, and their use is directed and strictly limited to the intentions outlined in the contract: such funding in 2009 will total about R830 million).

Increases in NRF funding over the past three years are almost entirely accounted for by significant increases in government-sponsored contract funding, with an average annual growth rate of 63% in nominal terms. During this same period ring-fenced funding has grown on average by only 6% annually (lower than inflation) and discretionary funding has grown on average at 11% annually (almost equaling inflation).

Thus, in essence, the business of the

NRF has changed significantly over the last three to four years. Simply put, while funds have increased, the freedom to invest research monies at our discretion has been significantly curtailed. As a result, our operational planning has moved from independent investment to complementary investment of discretionary funds in order to close emergent gaps in the national funding landscape.

Despite growing demands on salaries (driven by the need to service growing numbers of contracts), the percentage of the discretionary budget devoted to grants was 74%, 73% and 84% in 2006, 2007 and 2008, respectively. We are also now employing full-cost budgeting to new government contracts, something that has not happened historically.

Despite the growth in the overall grant budget, there are very real limitations on available 'free standing' funds for academic projects. Today, of every ten projects deemed fundable by peer evaluation only four are actually funded; and for every ten students that apply only three are funded. Yet on average, the NRF's grant beneficiaries manage to spend only three-quarters of funds awarded to them.

The NRF has engaged in a number of new initiatives, with a number of purposes, to assist in addressing this complex situation while realising our strategic plan. Some have involved a re-allocation of existing funds, and others entail the development of new programmes. The Focus Areas Programme (FAP) predates the inception of the NRF in 1999 (http:// www.nrf.ac.za/publications/news@nrf/ oct2000/grants2001.stm), and comprised nine focus areas that were used to more closely align research to societal needs and national imperatives. Its strategic context was the Reconstruction and Development Programme (RDP). The FAP core purpose has remained constant-to provide strategic direction for research in the new South Africa.

However, over the intervening years the RDP has been overtaken by a number of other government-sponsored strategies. Two consequences arose from these new strategies. First, the government increased its spending on R&D but placed its spending outside the discretionary budget of the NRF. This increased spending was closely aligned with the unfolding strategies. Second, this new layer of sharply focused spending over and above the NRF focus areas meant that nowhere was there room for fundamental curiositydriven research. Researchers were confronted by layers upon layers of directed research funding calls, with little room for pursuing their disciplines in ways of their own choosing. There were calls from the academic community for the NRF to fund basic research on a discipline-specific basis to counter-balance the growing strategic investment in the science landscape.

In the light of this, following a recommendation from the 2005 NRF Institutional Review (http://www.nrf.ac.za/ news/ review05.stm), an independent review of the Focus Areas Programme (http://evaluation.nrf.ac.za/Content/ Documents/PrgDocs.htm) was commissioned, with the possible softening of the Breakdown of the NRF discretionary grant budget

Name	Purpose	2009 budget R' 000 000	% of total discretionary grant budget in 2009*
Incentive funding for rated researchers	Incentive (discipline based)	37	13
Blue Skies	Novel (discipline based)	7	2.5
Collaborative research at national facilities	Facility	5	1.8
Research into community engagement	Outreach	1	0.36
Competitive support for unrated researchers	Discipline based	5	1.8
Competitive support for rated researchers	Discipline based	0**	0
Subtotal		55	20
Old Focus Areas Programme grants	Focused research	115	41
Thuthuka	Development	28	10
Research Niche Areas	Development	32	11
Free-standing scholarships & fellowships	Development	34	12
Subtotal		209	75
International liaison	Collaboration	6	2.2
Travel and events support	Collaboration	6	2.2
Other		3	1.1
Sub-total		15	5.4
Total discretionary budget		279	100

\*R279 million. \*\*Yet to be launched.

extreme 'directedness' of research funding in mind. A decision was subsequently taken to phase out the FAP.

Simultaneously, the NRF considered what new funding programmes should be developed to gradually take up the investment released by naturally terminating FAP grants and to complement the strategic investments being made by government. Crucially, these new programmes should not add further strategic focus but should rather support disciplinary research endeavours.

Before 2008, the Focus Areas Programme used 57% of the discretionary budget of the NRF. The remainder is taken up by the Thuthuka and Research Niche Areas funds. With the phasing out of the FAP in 2008–11, six new programmes have been developed and they will be implemented gradually as funds are released from the FAP. The early allocations to these six new funding programmes are summarised in the table above. It is important to note that the funding available for these programmes will increase over the period 2009 to 2012 as the FAP is phased out and funds are made available for re-allocation.

The NRF, like other similar organisations, uses peer review to assess the quality of research proposals and their alignment with various selection criteria. This process is used to filter out applications that are not worthy of funding and to prioritise those that are worthy of funding. The NRF uses two types of peer review: **postal/e-mail peer review** for the assessment of the quality of proposed research projects; and **panel meetings** comprised of committees of experts.

We intend to open our peer review processes to public and stakeholder scrutiny. As peer review and transparent and accountable decision-making are key principles of the NRF, it is important to ensure that our peer review processes are benchmarked against the best international practices. It is intended that this process will be completed by the end of 2009.

This shift in the funding framework that emerged from NRF Vision 2015 (http:// www.nrf.ac.za/doc/nrf vision 2015.pdf) is the most fundamental re-alignment of the national funding regime in 15 years. Re-aligning a complex organisation such as the NRF will take time, and we do not foresee that it will be a painless exercise. In the process, the NRF anticipates that there will be plenty of advice from all quarters, some of it which we will be able to take on board. However, we are confident that the NRF and national funding system will emerge from this exercise both well-aligned with national strategic priorities, yet adequately counter-balanced by appropriate investment in fundamental discipline-based research.

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