

## Editorial

### A missing ingredient - more active participation by younger scientists

The title of this editorial is virtually a refrain of modern international organizations. What some have called "the frozen demographics" seems to threaten the future of science in many fields, not least Antarctic science.

For the most part, younger scientists are expected by their employers to do four things: win grants, publish in high impact factor journals, win additional grants, and, depending where they find themselves, either teach or undertake some other form of public service. Attendance at scientific meetings is encouraged if the meetings are discipline-based, and if a paper is being presented, or better yet, a keynote address. Granting agencies are very much interested in the same sorts of things, though the order of importance is different. Moreover, funding is often difficult to obtain and the competition for money and jobs is fierce. Faced with these kinds of pressures, spending time on activities that will not be directly rewarded is not immediately appealing. The rewards for participation in large international organizations usually come in the form of a pat on the back - rarely do they count as an acceptable excuse for a shortage of research papers. Thus, the only option is to avoid international organizations at all costs - except when there is money to be had.

There is a global trend towards big science and that means big meetings. The combination of pressure to perform, and an increasing demand to attend meetings for large grants means that scientists have to apportion their remaining time carefully. Almost inevitably, meetings of international organizations, which have no short-term benefits, fall by the wayside. Ironically, if such a meeting is attended, the "younger scientist" mantra often means that within no time at all, an office bearing position, with several additional duties, is on offer to anyone outside the 95% confidence limits of the members' mean age. This can be a scary prospect, especially when careful negotiations in formal international meetings (often mind-numbingly dull), forms a part of the duties.

In essence, it appears that the incentives to participate in large international organizations are dwindling. The capitalist economy that has come to dominate so much of the world means that science is increasingly regulated, and that regulation is by production (measured by numbers - numbers of papers, size of impact factors, numbers of dollars). Not only are scientists encouraged to play the numbers game, but less tangible outputs are difficult to measure, and so are less often used in formal assessments. In other words, lack of interest by young scientists in large organizations that have little tangible to offer might well be a consequence of the way in which the scientific endeavour is currently managed. If patches offer no tangible rewards they are seldom visited.

Generally, only established scientists, who are older by definition, might expect some relaxation of the numbers game. Thus, at present, with a few interesting exceptions, it is these older scientists that not only form the body of the organizations, but also their leadership. Curiously, it is this leadership that often not only demands more active participation, but also neglects to fight to have it recognized in the context of the hard-nosed assessments that constitute institutional performance appraisals.

If we want to engage younger scientists with their enthusiasm, energy and innovative ideas in our international initiatives it is the older scientists who need to make the changes. What can be done to change the current selective regime and the ways in which it is imposed? How can service for the international good to be more adequately recognised? More is likely to be gained from acting on these questions than simply chanting the "more active participation by young scientists" refrain whilst sitting firmly on our hands.

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