



# Systemic addiction to research funding

Although Alberts et al. (1) correctly identify many of the systemic problems facing investigator-initiated research funding, their solutions appear (to me) similar to that of an addict demanding that others save them from themselves.

The authors neglect the reality that faculty are increasingly treated as small business owners—we are expected to be more “entrepreneurial,” our funding is expected to cover all of the associated costs (e.g., we are renting rooms), and the ability to assemble a large research program is generally considered evidence of professional success. Tenure decisions take into account how much money the candidate has raised.

Also, Alberts et al. seem to be unaware of history. Physicists faced this same problem about 25 y ago—the signal event was cancellation of the superconducting super collider.

In response to continuing year-over-year reductions in extramural funding from the usual suspects, Department of Energy, Department of Defense, National Science Foundation, and National Aeronautics and Space Administration, physicists began to spread out to other disciplines: engineering, chemistry, and biology, finance, and patent law. Although physics has already implemented some of the proposed solutions (broader career paths and limiting the amount of salary that will be paid for from a grant, for example), the underlying problem was never solved—the problems highlighted in this Perspective still exist in “physics world.” Long-term trends are not surprising—lower enrollments by US students through the 1990s, disillusionment with choosing physics as a career, and ambivalence by faculty to encourage students to choose physics as a career.

It is not entirely clear what goal(s) the authors want to achieve: an R01 success rate that is back up to 30%? That would require a 50–70% drop in the number of applications. Who is going to stop submitting applications?

Do the authors just want to return to some simpler, less stressful time?

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**1** Alberts B, Kirschner MW, Tilghman S, Varmus H (2014) Rescuing US biomedical research from its systemic flaws. *Proc Natl Acad Sci USA* 111(16):5773–5777.

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