FROM THE EDITOR

Saving Science by Doing Less of It?

In the current issue of *The New Atlantis*, Daniel Sarewitz, professor of science and society at Arizona State University, argues that science is broken because it is managed and judged by scientists themselves, operating under Vannevar Bush’s famous 1945 declaration that scientific progress depends on the “free play of free intellects . . . dictated by their curiosity.” With that scientific agenda, society ends up with a lot of unnecessary, uncoordinated, and unproductive research. To save science, holds Sarewitz, we need to put it in the hands of people who are looking for practical solutions to specific problems.

In this issue of the *Report*, Kirstin Borgerson poses a question in this same conceptual space: are there too many clinical trials? Borgerson answers in the affirmative, grounding her argument on the idea that clinical trials are justified by their expected social value: if studies were reliably beneficial, then their exponential growth in recent decades would be tolerable, but in fact, quantity is not matched by quality. “[W]hether one’s measure of research quality tracks applicability . . . or sticks with more widely shared markers, such as objectivity and sample size, we can agree that there is much low-quality research,” declares Borgerson.

Given this conclusion, the obvious question is what to do about it. Borgerson calls on research ethics committees to use the social-value requirement and cut down on the proliferation of low-quality research: “At the very least, if researchers are pressed by RECs to explain why their trials aren’t better than they are—aren’t perhaps even the best they could be under the circumstances—this might be a much-needed nudge.”

Other items in this issue cover a mix of issues. A special report found in a supplement to the issue offers a round of analysis and recommendations about the provision of medical care to professional football players, and articles cover topics in biotechnology and access to care. The lead article addresses some of the challenges that will have to be faced as “artificial organs” become available.Implantable devices that replace the heart, lungs, kidneys, or liver are in development and coming incrementally closer to clinical use, but as authors Katrina Hutchison and Robert Sparrow note, there will be no magical moment in which they can be put into a body and then more or less ignored. “The more sophisticated these devices become,” they write, “the more likely it is that they will need to be tuned, serviced, and repaired if they are to function inside the patient for any length of time.” To begin to understand these challenges, Hutchison and Sparrow consider a present-day analog. Pacemakers, they argue, present five general categories of ethical issues: surgical risks of maintaining something found inside the body, potential harms and injustices introduced by the sheer complexity of the devices, privacy and security issues generated by software, the question of whether continued improvement of the devices generates an obligation to provide periodic replacement or updating, and the influence of commercial interests. Hutchison and Sparrow close with some recommendations for how to assign responsibility for addressing these challenges.

A final article in the issue takes a look at how crowdfunding sites like GoFundMe can be used to make public appeals for medical funding. In 2013, notes author Jeremy Snyder, the site GivingForward claimed that 65 million dollars had been raised in a total of fifty thousand medical fundraising campaigns. The money can make an enormous difference to the people who benefit from it, but at what societal cost? Snyder argues that medical crowdfunding is not a solution to health system injustices; it is both a symptom and a cause of them. —GEK