

The Changing Spectrum of Biomedical and Clinical Research

Author Commentary

CHAPTER ABSTRACT:

The landscape of extramural funding for biomedical and clinical research has been undergoing substantial change over the last five years. Among the drivers of change is diminished NIH funding, fewer training opportunities, reduced interest among physicians to pursue research careers, and an aging faculty at academic health centers. This chapter offers a framework to enhance research competitiveness—including reengineering academic health center practices to successfully achieve a vibrant faculty, a more efficient operating research model, and a governance with sufficient flexibility to adapt in a highly-dynamic competitive context.

**Howard J. Federoff,
MD, PhD**

*Executive Vice President for
Health Sciences
Executive Dean of the School
of Medicine
Georgetown University
Medical Center*

We tried in our chapter to capture the trajectory of the decline in research funding as it relates to the biomedical research enterprise, and discuss the implications of that with regard to what operating models might be effective in this current era. Writing the chapter gave us an opportunity to develop a more granular understanding and to comprehensively update ourselves around a lot of data with which we were familiar.

I think the most important takeaway message is that we need to restructure and reorganize the way that we think about biomedical research. Some of the historical mechanisms used to sustain that activity are no longer relevant. We need to think about a series of new concepts. Some of this has to do with the structure and support of the enterprise. In addition, we also need to investigate new concepts around the way we encourage, incentivize, and reward investigators as they seek and find financial support—both individually and, more likely in the future, collaboratively. And then, how does one think about the faculty as able to meet the tripartite mission, and what does one do in thinking about building the faculty of the future, given that it will be different than that of the past.

Whether and how what we learned is applicable to other institutions is going to be variable. But some of the tenets that we espoused are not unique to our organization. In some cases, some of the principles we discussed can be readily adopted. In other cases, our principles might be a little more challenging to adopt, depending on some of the legacy, historical, and cultural issues at given institutions.

It is always productive to work with colleagues to try to frame an understanding of the depth of a problem that you confront regularly, and have in that time the ability to reflect on it in a more systematic and comprehensive way. I believe these exercises are important for all of us in the academy, especially as we try to do more with less.