Earlier this year, Nature published an article on the enormous challenges many postdoctoral researchers face in securing academic appointments. The article struck a nerve. To many, it’s basic math: too few faculty jobs relative to the number of postdocs. But is there a clever fix?

We asked autism researchers at different stages in their careers to come up with possible solutions to this ‘postdoc pileup.’
A culture of dissent can effect change

The postdoctoral fellowship was originally conceived as a sort of ‘pre-sabbatical’ period that allowed a freshly minted Ph.D. to learn a new technique before starting his or her own lab. A generation or two ago, these fellowships were typically between one and three years long. Longer postdoc stints were uncommon — not only because permanent academic positions were more abundant, but also because it was possible to collect enough data for publication in the most prestigious journals in that amount of time.

Comparing my own postdoctoral experience to that of the generation before me, the transformation is striking. For example, the first Nature paper published by each of my mentors contained fewer than four figures (Bear, et al., 1983¹; Malenka, et al., 1986⁵; Kauer et al., 1988¹), while mine had 22 (Dolen, et al., 2013³). What’s more, I was roughly 10 years older than they’d been at the time of publication, and my fellowship was as much as four times as long.

Four possible solutions emerged from the Nature article: term limits, reducing the number of postdoc positions, increasing postdoc salaries and creating more staff scientist positions. Each of these possibilities is reasonable, but they restrict the scope of the discussion to what I would call ‘troubleshooting austerity.’

It is painfully obvious that the real problem is the dearth of permanent academic positions in the face of recent funding cuts. Yet eliminating austerity is rarely even considered as a possible solution.
To seriously participate in the worldwide debate over austerity, we as a scientific community must be better informed about the economic and political structure that produced it. For example, it is significant to note that the U.S. federal government spends only 3 percent of its discretionary budget on science, but about 55 percent on the military. What's more, the entire discretionary budget is less than what the government gives away in tax breaks to various groups (which notably does not include postdocs receiving federal fellowship awards).

Together, these figures are a brutal reminder of the failure of academic scientists to influence political discourse. How can we do better?

Perhaps the most important side effect of the tenure system is protecting scientists who speak their minds and thereby enabling intellectual and political dissent among the academic class. Unfortunately, this protection has been eroded by the increasing financial insecurity imposed by austerity.

In my experience, there is a tacit hostility toward political discourse — at conferences, at dinners with invited speakers and even, to some extent, at private faculty meetings. I suspect this is partly due to a fear that the government will resent scientists for ‘taking sides’ on politically sensitive issues. What this approach fails to recognize is that Congress will ignore us if we don’t take a strong position.

I believe encouraging a culture of dissent is a priority if we are to effect meaningful policy change. Integral to this cultural shift is the recognition that we as scientists must develop and promote legislative reforms that ‘take a side’ — which need not, and indeed should not, be restricted to two-party politics — in order to achieve the political and economic goals that best serve science.

In the end, fearless political engagement from the research community will get us closer to fixing a broken postdoctoral system than will tweaks to academic programs.