



# THE PLIGHT OF YOUNG SCIENTISTS

A special issue explores how the research enterprise keeps early-career scientists from pursuing the most important work, and what can be done to help.

**Y**oung researchers aspire to explain the world and fix its problems — but they are increasingly finding their ambitions thwarted. The challenge comes from the scientific enterprise itself. Grants and permanent positions are scarce, and administrative burdens can be crushing. Scientists, when judged on steady funding or publication streams, pursue projects that are certain to produce a ‘publishable unit’ even if they do not address big questions. Ultimately, this is bad for science and scientists alike.

This issue attempts to give young scientists a voice. An infographic on page 444 helps to explain the pressures: funding for basic science has been level or is declining in most

countries, but the number of scientists seeking funds has grown. This means that scientists are putting time into preparing grant applications with a lower chance of pay-off. That burden is felt most acutely by young scientists, who often lack administrative experience and resources. A News Feature on page 446 tells the stories of three researchers as they have fought to establish their labs, highlighting the relentless struggle to secure grants and publish more papers.

What’s to be done? In a Comment on

page 451, four researchers recognized for their innovation propose ways of enabling scientists to pursue promising ideas. They recommend accommodating shifts in research focus, and accepting the temporary interruption in research outputs that such pivots entail. On page 453, two sets of academic administrators describe efforts to wean promotion committees away from an undue focus on paper counts.

On page 543, the Careers section presents voices from three erstwhile researchers who have each left the bench to fix the scientific enterprise. But as the Editorial on page 427 argues, it is up to everyone — young and old — to ensure that the next generation of scientists is not lost. ■

