Discovering new Darwins

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considerable time elsewhere, raising money when they should be pursuing their research.

All this has added intense pressure to the already difficult lives of scientific researchers. Their sights are too often set just on surviving — on getting their next grant funded. This has a serious hidden cost: as the next generation of scientists watches its mentors struggle, many are growing disheartened and turning away from biomedical research because of its insecurity as a career.

And yet the outcomes of scientific research have helped each and every one of us. We live in an era in which the consequences of unraveling the human genome are becoming known. Remarkable progress is being made in the life sciences. The genes and their protein products that make us human, that define each of us as a unique individual, are being determined. More is being learned about more subjects than ever before. This is no time to turn back — or to turn down legitimate, promising proposals.

Unimaginable: We are far along the road toward maintaining health and combating disease in ways unimaginable even a decade ago. Novel scientific insights have already led to successful therapies that target the causes and not just the symptoms of disease. But sustained reductions in federal funding are now endangering the pace of further discoveries and discouraging scientists. Both the diversity and the vibrancy of our scientific community will suffer if these reductions are not reversed. We need a renewed commitment to scientific funding and a new, long-term approach to this funding.

It has taken a long time to build our scientific enterprise, but it would take a short time to break it. We can create a scientific corps that will improve higher education and public health, advance the public interest by stimulating the economy, and ensure our nation’s security if we take the necessary steps to fund this generation of researchers and to nurture the next. We need only look to other countries to see how their substantial scientific investments could jeopardize our current dominance in this area.

Powerful tools: We are just beginning to see the benefits of the life-science revolution that began in the middle of the 20th century. Much has changed since Darwin’s time. More powerful tools are now in hand, and they are being intelligently used. Even as the virtues of a team approach to research are being championed, the importance of leadership from exceptional scientists, like Darwin, endures.

Federal funds have broadened the pool of outstanding individuals who become scientists. Their contributions can be seen in the long list of discoveries that now promise to keep us healthy. The national commitment to use public funds to support science must be preserved and enhanced. We might even have the good fortune to discover the Charles Darwins of our own time... or of tomorrow.