

PRESIDENT'S REPORT

Cold Spring Harbor Laboratory enjoyed a highly successful year in 2013, despite uncertainty about how a political logjam in Washington, D.C., would impact the ability of our scientists to obtain federal grants. In the 20 years since I was appointed Director of the Laboratory, our faculty has grown from 39 to 52 and our federal grant income has increased more than 2.5-fold. Even so, it is clear that federal funding is not keeping pace with the cost of doing science. Federal grants

from professional scientists attending one of the world-famous CSHL Meetings or Courses, to a doctoral candidate matriculating in our Watson School of Biological Sciences, to 5th graders at the DNA Learning Center (DNALC) getting their hands-on exposure to the tools that scientists use to study DNA. In this Report, I focus on our programs that reach young people.

The DNALC was founded 26 years ago to help children and their parents and teachers thrive in the genome age. The vision that guided the founders was notably democratic and pragmatic: We envision a day when all elementary students are exposed to principles of genetics and disease risk, when high school students have the opportunity to do hands-on experiments with DNA, and when all families have access to genetic information that they need to make informed health care choices.

The central achievement of the DNALC program, as developed by David Micklos, Executive Director of the Center since its inception, has been to educate all students, not just those who profess and display at an early age an interest in science. My main purpose here is to propose that, in the coming years, the DNALC's hands-on learning model be emulated and reproduced across the sciences and throughout the nation, to the greatest benefit of all. It can do much good if scaled up.

What has worked on Long Island and to date has impacted half a million students can work

Another of the DNALC's great successes is in using the hands-on approach to inculcate the single most important take-away skill from any K-12 science class: the ability to understand scientific reasoning. In the same respected national survey I have already cited, 58% of American adults in 2010 failed to demonstrate a basic understanding of scientific inquiry (regarding the use of evidence to test theories and the concept of "controls"). The P

