

# DIRECTOR'S REPORT

This year, Cold Spring Harbor Laboratory witnessed one of the most significant events in its history: the establishment of our own School of Biological Sciences. With the ability to grant the degree of Doctor of Philosophy (Ph.D.), we expect to attract some of the world's brightest young people to the shores of Cold Spring Harbor for an experience that will change their lives and, we expect, ours. As we enter into a new era, the Watson School of Biological Sciences will have a broad impact on the future of the Laboratory, much like other new educational programs have in the past.

For much of its existence, CSHL has played two overlapping roles in biological science. One stems from the need in the late nineteenth century for a gathering place for people—primarily teachers—to practice and teach biology. Biology was at that time predominantly devoted to the study of the organism and its environment, so the bountiful resources of the shocQrRZeotblpri-



A particularly important event in the evolution of the interactions between Stony Brook and CSHL was the collaboration between Stony Brook's Nicholas Muzyczka, director of Stony Brook's Genetics Graduate Program, and Winship Herr, who spearheaded the involvement of CSHL scientists in the recruiting and teaching students. The interactions between Stony Brook and CSHL flourished and expanded to include students from the graduate programs in molecular and cellular biology, pharmacology, and, most recently, neurobiology. CSHL scientists are also members of the Medical Scientist Training Program that trains M.D./Ph.D. students at Stony Brook. In 1998, we had 57 graduate students from Stony Brook working at the Laboratory, making up a sizable fraction of our total research scientists. As we established our own graduate school, maintaining and even strengthening the interactions between Stony Brook and CSHL were of the utmost importance. These interactions not only promote the training of graduate students, but they are the basis of the relationship between our two institutions and thereby broaden the intellectual environment on Long Island, a highly desirable goal for all involved.

Throughout this period, there had often been discussions about whether CSHL should establish its own graduate program, but they were usually tabled because we were busy venturing into new research fields. In addition, many people quite rightly questioned whether our own program might change the nature of the Laboratory. This was a very appropriate question to ask. Eventually, however, the notion that we start a graduate school at CSHL emerged as one of the principal topics for discussion, encouraged by the Board of Trustees under the strong and enthusiastic leadership of David Luke. As a result, we embarked on a journey that, I believe, will have as much of an impact on the Laboratory as the starting of the postgraduate courses did in 1945.

CSHL has always enjoyed the ability to be flexible in its programs and not having to follow what people elsewhere have done. This key thread was woven into the plans for the new graduate program. Beginning from scratch, Winship Herr again took on a major new challenge to lead the design of a graduate program with CSHL faculty that was appropriate for the modern era of biology and that would serve us well far into the future. He also had to guide our application through the New York State Board of Regents' stringent approval process while not compromising on our desire to be innovative. In both of these, he and the Laboratory were spectacularly successful.

Incorporating the experiences of our diverse faculty who have studied in many different countries and graduate programs, the design of our graduate school took shape. Several important principles emerged that guided the thinking behind the design process and that became part of the graduate school curriculum. Many graduate students in the United States spend far too long in graduate school (up to seven years in some cases), so the program was designed to take about four to four and a half years. For the highly motivated students we expect to attract, this time frame should be more than adequate to embark on a life-long journey as a scientist. (I was fortunate to have completed a successful Ph.D. degree in three years and thus come to Cold Spring Harbor as a postdoctoral fellow having just turned 25. But I was trained well enough to appreciate all that CSHL had to offer.)

To ensure that our students can maximally benefit from the exciting environment at CSHL, we have incorporated a two-tier mentoring system. Students will have an academic mentor from the faculty, who will guide their intellectual and individual development, in addition to a research mentor to guide their thesis research. The relationship between a student and a research advisor is particularly unique and affects both people and their careers in significant ways. Indeed, it is a very special relationship that develops. But there are potential conflicts because the research advisor's research goals often have little to do with the education of a

