

Eric Holtzman (1939-1994):

## He elevated teaching to an art

by Professor Robert E. Pollack '61

**Editor's note:** *The suicide of Professor of Biological Sciences Eric Holtzman '59 on April 6 deprived Columbia of one of its most devoted teachers and scholars. On April 15, family members, friends, students, alumni and faculty gathered in John Jay Lounge for an informal memorial service. Among the speakers were College Dean Steven Marcus '48 and former Dean Robert Pollack '61, whose remarks are excerpted here.*

Eric Holtzman and I were born within a few months and a few miles of each other. We were both brought up in progressive households. That word, now a bit musty, once carried great charge: to be "progressive" meant to take the world's ills and injustices as personal affronts, to turn one's talents to the largest political issues of the day, even at the expense of one's career.

Eric elevated the teaching of science to an art. In recognition of his teaching—a recognition filled with the irony he saw in almost everything that came his way—the Society of Older Graduates has voted to award him the 1994 Great Teacher Award in the fall. The award will be posthumous, but the decision was not. This award is an easy compliment to some, suggesting he was just a great teacher. But it speaks to much greater gifts and deeper commitments than are usually associated with blackboards and chalk dust.

Really great teaching—inspired, inspirational teaching, the sort of teaching you remember twenty years later—has a daunting set of prerequisites. To be a great teacher you have to know your material inside and out. You have to remain aware of what has happened in the last month, always updating your lectures, but without ever distorting their basic structure, nor loosening the overall coherence of your thoughts. You have to work very hard and meet a deadline twice a week, and never, never have a

disorganized, punitive class, no matter how bad you may be feeling.

The most difficult part of being a great teacher is this: you have to hold on to two conflicting ideals, and meet them both. You have to be as territorial about your subject as any of your colleagues in the field, defending your right to intellectual ownership of all its boundaries. Yet you have to be totally given over to the transcendent importance of sharing what you know with the least informed people you are likely to meet, young women and men who cannot help you in your work, and who can only thank you properly by their later success elsewhere, perhaps in some unrelated field.

So it isn't surprising that great teachers are rare. They have to be both competitive and cooperative; they have to be proud of their mastery of a subject, yet prepared to measure that mastery only by their ability to transfer it to strangers. To put it another way: a great teacher must be rich, but always give away everything he has. And that is just what Eric did.

Some words about the kind of science he did are in order. Eric lived inside the cell, not where the genes are, but in the cytoplasm, where clean genetic instructions give way to a turbulent traffic flow of molecules, as the cell builds itself into a nerve or a photoreceptor in the eye. He took it upon himself to map these movements, to freeze them in place, so that other scientists might, if they chose, try to get at the molecular motors driving the flow.

The hundreds—thousands?—of physicians who got their first taste of rigorous analysis from his fabled course Cell Biology 3041 were taught to think about these problems in uniquely creative ways. These days it is easier to find a biologist committed to the direct visualization of cellular events. Eric was one of the pioneers.



James P. H. / Courtesy of Sally Rothman '87

I cannot close without acknowledging another irony, this one truly terrible. Eric, the student of neurons, himself suffered from one of the illnesses our neurons are prone to, a sickness that proved in the end to be fatal. We cannot honor his great life, his love for us all, unless we admit to our fear and awe of such illnesses.

In his memory we should also know, and teach, that such illnesses are no more the fault of their victims than a heart attack or stroke would be. All of us who loved him did our best, but this disease, like too

many others, will sometimes run its course despite all we know how to do.

Those of us like Eric, who worry a great deal about the abuses of science, must be the first to say this: science—good science, and only good science—offers us any hope of understanding, curing and preventing diseases of the sort that took his life. The work he taught and did, the work of our department, the joint work of scientists and physicians, must go on.

I believe with all my heart that if he were here, he would agree with me on this.