Cancer immunologist Alan Houghton

I didn't give biomedical research my complete focus until after I arrived at Memorial Sloan Kettering Cancer Center in 1977 as a clinical fellow in medical oncology. Having grown up in a small New England town, I couldn't imagine living in New York City, so my intention at the time was to stay only for the required two years, then to move on. Needless to say, I never imagined that I'd still be here, more than 25 years later, nor that I would quickly grow to love living in New York City.

My real interest in research began at the conclusion of my clinical fellowship, when I had the good fortune to be accepted into Lloyd Old's Laboratory of Human Cancer Immunology at the Sloan Kettering Institute. This was during the very early days of monoclonal antibody technology. We were able to demonstrate that monoclonal antibody therapy could shrink solid tumors in people with cancer. I found laboratory work fascinating, particularly where it intersected with clinical research, and I realized that I wanted to be both a physician and a scientist.

Having worked in the lab and the clinic, one of the inevitable trends I see starting to develop is that biomedical sciences, which historically have been driven by individual researchers, are becoming more team-based, like medicine. This will allow new discoveries to bridge the gap more quickly between lab and clinic. With the creation of Memorial Sloan Kettering Cancer Center's Experimental Therapeutics Center and the initiation of new research fellowships for clinically trained investigators, we are well positioned to narrow this gap.

In addition to the divide that exists between the lab bench and the bedside, there is a troubling distance that can exist between doctors and patients. And, again, I happen to have experience on both sides, having been diagnosed in 1993 with ALS, a progressive neurodegenerative disease, commonly known as Lou Gehrig's disease, which attacks motor neurons in the brain and spinal cord.

I've always felt that the patient/doctor divide is extremely artificial and overused in medicine, and my experience as a patient has taught me how often people hide behind the white coat. As a doctor, it's essential that you are able to show your patients how much you care and your willingness to fight for them. This is the difference between a competent doctor and an excellent one.

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As a newly diagnosed patient, I was depressed, sad, angry — all the usual emotions you go through following a serious diagnosis. But after roughly two months, I decided that I was just going to keep living as normally as possible. While I phased out some of my patient-care duties, I was fortunate to be able to continue my research, my teaching, and my administrative responsibilities, all of which, when combined with the critical support of my family, friends, and staff, has really kept me going.

One of the things that can happen when you're diagnosed with a serious disease like ALS or cancer is that you can become the disease. People can become totally absorbed in trying to uncover every possible treatment, following any lead. No matter what happened to me, I didn't want the disease to rule my life. That was very important to me.

In addition to the personal challenges presented by ALS, I have also confronted common misconceptions. Some people feel sad just looking at me, so they think I must feel sad, too, which isn't the case. I'm no more or less emotionally fragile than I was before the illness. In fact, it's made me stronger. Then there's the opposite misconception: that I must be a truly remarkable person. In truth, faced with this situation, many people would react in the same way that I did.

I understand the sense of urgency patients feel for science to come up with new drugs and therapies. For me that sense of urgency is tempered by my knowledge of the pace of science and drug development. These things are incremental, and new breakthroughs don't happen overnight. It's because of this that I haven't jumped at any of the latest experimental ALS treatments. I've read all the data, and in almost every case I've decided not to pursue it. Still, most patients don't have the luxury of that kind of scientific understanding, which leaves them frustrated with the seemingly slow pace.

In some cases, such as HIV, patients' anger can be harnessed and directed by applying both political and social pressure until new treatments are developed. I don't believe we've been quite so successful with cancer, but some of the activism for breast cancer, for example, has succeeded in drawing more attention and funding. Even so, there is a danger that by putting a large chunk of our research dollars into only a few common cancers, we will miss out on treatments discovered by basic science research. For example, one of the most promising new cancer drugs, STI-571 (Gleevec™), was originally developed to target and treat cardiovascular disease.

Looking back, I have learned so much from my colleagues, my students, and all the patients I've cared for at Memorial Sloan Kettering relationships. And in terms of the progress we're making against cancer, I think we are reaching a critical point in understanding the biology of cancer, which will translate into better cancer therapies.