

The 475th Convocation

Address: "Wearing White: Reflections in a Changing Environment"

By Halina Brukner

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I am addressing a most diverse audience today. About 16 percent of you are receiving bachelor's degrees from the College; about 44 percent are receiving master's degrees or Ph.D.'s from the various divisions of the University (Biological Sciences, Humanities, Physical Sciences, Social Sciences); 35 percent are receiving degrees from the Graduate School of Business; and the remaining 5 percent are receiving degrees from the Irving B. Harris Graduate School of Public Policy Studies, the Divinity School, the Law School, the School of Social Service Administration, and the Graham School of General Studies. Wow. How does one tailor remarks to such an audience, an audience that incidentally does not include one graduate with the M.D. degree, the degree that I hold? I thought I would share with you some personal thoughts about the changes that my own profession has witnessed over the years. While your particular experiences in your particular fields will be different, I believe that the common thread among all our experiences will prove to be an ability to witness change, to critically analyze its causes and effects, and to react appropriately when faced with unforeseen challenges. It is this flexibility of thought and mind that the University of Chicago fosters in its graduates, and it is what you all have in common.

Let's go back more than 450 convocations ago, about 100 years, to what my own world, the world of medicine, would have been like at that time. Chances are that few, if any, of the medical students then were women. I wonder how many of you are familiar with the name Harriot Hunt. She was probably the earliest female medical practitioner in the United States, opening a medical office in 1835 in Boston after an apprenticeship. In 1847, she applied to Harvard Medical School. Oliver Wendell Holmes, who was the dean at the time, agreed to accept her, as did the faculty, but the students rebelled. They drew up resolutions against the decision, and I would like to read a portion of one of them to you:

Resolved, that no woman of true delicacy would be willing in the presence of men to

listen to the discussion of subjects that necessarily come under the consideration of the students of medicine.

Resolved, that we object to having the company of any female forced upon us, who is disposed to unsex herself, and to sacrifice her modesty by appearing with men in the lecture room.

Ultimately, Hunt got her M.D. in Syracuse and went on to be a professor of midwifery and of diseases of women and children at Rochester College.

Elizabeth Blackwell, “the first woman doctor,” is probably a more familiar name to many of you. You may not know that she was admitted to the Geneva College of Medicine in upstate New York by a fluke. The dean told the students that if they voted unanimously to support her application for admission, he would agree to admit her. He was confident that the vote would be negative. The students apparently thought this was a big joke, and they voted “yes.” Despite a very hostile atmosphere, she not only graduated but actually passed her qualifying exams with the highest average. She received her M.D. degree in 1849.

By 1903, one hundred years ago, there were a few more women in medical school, but it would take the better part of a century for the talent represented by women in medicine to be more fully appreciated and integrated. In 2003, women constitute 49 percent of applicants and 49 percent of new entrants to medical schools in the United States. At the leadership level, however, there is still a long way to go. The proportion of all women faculty at the full professor level in U.S. medical schools today is 11 percent, compared with 30 percent of men at full professor rank.

One hundred years ago, entire fields as we know them had not yet been created. Freud published his *Studies in Hysteria* in 1895 and his *The Interpretation of Dreams* in 1900, seminal writings which changed the approach to psychiatric issues. The discovery of effective antibiotics that would revolutionize the way in which physicians could treat patients was still far away. As dramatic as these changes over a century might be, the pace of change does not seem to be slowing down a bit. In the last ten to fifteen years alone, we have witnessed revolution after

revolution. HIV infection has gone from an undefined syndrome which seemed to have a predilection for homosexual men, to a worldwide epidemic caused by a known entity but for which there seemed to be little effective treatment, to (most recently) a condition which is known to be largely preventable but also controllable with newer agents such as protease inhibitors and antiretroviral drugs.

Our view of ulcer disease has changed dramatically within the last fifteen years. Who would have thought that most ulcers were related to a bacterial infection? The standard of treatment has changed from bland diets and the old milk-and-Maalox regimen for all to antibiotic treatment for most, with the discovery that a bacterium called *Helicobacter pylori* is the etiologic agent for the vast majority of peptic ulcers.

The identification of genes that are related to many cancers, to Alzheimer's disease, to diseases such as cystic fibrosis and sickle cell anemia not only gives hope for new ways of curing and controlling these diseases, but also raises a host of ethical and moral issues that would have been unheard of a generation ago. The medical profession has had to adapt to a new environment—in which physicians do not control resources, in which financial forces outside of the profession try to decide what is best or at least what is “most cost-effective.” Finally, we have had to acknowledge a certain degree of public cynicism and even frank antagonism towards our profession. The previously assumed trust that physicians act in the best interest of their patients has been undermined to a significant extent.

While on the one hand, our patients' views of our profession may not be entirely positive, on the other hand, patients' expectations about what we can do for them may be overly positive. I would like to tell you about a very interesting study published in the *New England Journal of Medicine* a few years ago, entitled “Cardiopulmonary Resuscitation on Television: Miracles and Misinformation.” Dr. John Lantos, one of the three authors of the study, is a faculty member in the departments of pediatrics and medicine, as well as the MacLean Center for Clinical Medical Ethics here at the University of Chicago.

The authors watched all the episodes of the television programs *ER* and *Chicago Hope* during

one television season, as well as fifty consecutive episodes of *Rescue 911* over a three-month period. I will leave it to you to decide whether to envy or to feel sorry for these investigators! They identified all occurrences of CPR and recorded various facts about those occurrences. I think their findings were fascinating.

First of all, 65 percent of the patients given CPR on these television shows were children, teenagers, and young adults. In reality, cardiac arrest is much more common in the elderly than in children or young adults. Secondly, most of the incidents of cardiac arrest were due to acute injury such as gunshot wounds and accidents. In fact, 75 to 95 percent of arrests result from underlying cardiac disease. Most importantly perhaps, 75 percent of the patients with cardiac arrest on all three shows combined were alive immediately after their arrests. Do you know what the actual survival rates are in the medical literature? Unfortunately, they range from 2 to 30 percent for out-of-hospital arrests and 6.5 to 15 percent for in-hospital arrests. The authors also documented a focus on “miracles.” On *Rescue 911*, for example, the term “miracle” was used in 56 percent of instances of CPR. So what is the point? I cite these interesting observations to emphasize that in order to be effective physicians, in order to understand our patients’ fears and concerns properly, we need to appreciate that an effective therapeutic relationship requires more than a knowledge of pathophysiology, diagnosis, and therapeutics. It requires a willingness to address our patients’ fears and expectations, a willingness to admit that what we expect and what our patients expect may be very different things. We physicians need to remember that the laboratory in which we practice medicine is, in reality, the society in which we live.

One area in which this ever-shifting landscape is evident is in the very symbol of the medical profession itself, the white coat. Hippocrates advised that the physician should “be clean in person, well-dressed, and anointed with sweet smelling unguents.” Over the centuries, physicians have adopted various symbols of purity and cleanliness—including the white coat in the late nineteenth century—in order to convey those qualities to patients and to society. Many medical schools, including our own, have developed “white coat ceremonies” at the very beginning of medical school, in order to welcome students into the profession and to affirm the humanistic values that underlie the profession.

But what does the white coat mean to our patients? Is it a symbol of cleanliness, of scientific rigor, of professionalism? Or, in today's environment, is it a hierarchical symbol of elitism, of privilege, of power? Actually, there has developed a substantial literature on this subject in the world of medicine. Many studies have documented that patients prefer physicians to be dressed formally, including wearing the white coat, because they interpret the coat as a symbol of competence and training. On the other hand, Delese Wear points out in an interesting paper entitled "On White Coats and Professional Development: The Formal and Hidden Curricula" that physicians, and especially physicians in training, may "become the coat." She worries that because of the inherent asymmetry in the doctor-patient relationship, wearing the white coat may enable physicians to "lose sight of the importance of critical self-reflection." While she is right to worry about it, I think I disagree with her. I remember the first time I put on a white coat, as a first-year medical student. I felt like a complete imposter, as if I was dressing up as a doctor for Halloween. I am more comfortable now, but every time I don the white coat I am acutely reminded of the implicit trust and obligation that stems from wearing this powerful symbol. If anything, I believe it forces the wearer to engage in self-reflection on a regular basis.

By the way, there is a practical reason for wearing a white coat, especially for women who have few pockets in their clothing. White coat pockets bulge with medical equipment, organizers, and pocket guides. Interestingly, several studies have documented an inverse correlation between the mean weights of white coats and the seniority of the wearer: while the coats of medical students and residents overflow with equipment, books, and devices, the coats of senior faculty are less crowded and weigh almost a kilogram less. In fact, one study documented that the white coat pocket of the chair of medicine contained only a pen!

So how do these musings relate to your lives, with your new degrees in everything but medicine? I believe the essence of a Chicago education, regardless of the field, is its cultivation of the ability to reflect, to integrate disparate viewpoints and values, and to use the valuable tools acquired during an education here to adapt successfully to the inevitable changes that every field of endeavor will surely require. The story is told of two rivals who go out to chop wood for the winter. One is small and rather frail, the other large and well-muscled. After about an hour, the larger man notices that his rival has amassed considerably more wood, despite leaving for a few

minutes. He chops harder and harder, but no matter how hard he chops and how quickly he works, he cannot keep up with the smaller man who has nevertheless been leaving regularly. Finally, exhausted, the larger man asks the smaller, “How can you be so far ahead of me? What do you do when you leave here?” The smaller man answers, “I’ve been sharpening my axe.” An education at the University of Chicago teaches you how to sharpen your axe. Take the time to reflect, to look carefully at your changing environment, to use the tools this institution has given you to accomplish more. Louis Pasteur said, “In the field of observation, chance only favors prepared minds.” I am confident that this great institution has created minds prepared to seize the opportunities that emerge before them. I wish you all the best for the future.

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