President Jennings, fellow faculty, graduates of 1989 and invited guests. I would like to thank Dr. Jennings for the honor of being invited to deliver this commencement address. Most of all, I would like to congratulate the winter graduating class of 1989 of The Ohio State University. It is rare that one is given 15 minutes to philosophize before an audience as large as this. Some of you who have already begun celebrating your graduation will spend the next 15 minutes catching up on badly needed sleep. Others who are excited and charged with their own adrenalin surge will hopefully survive the next 15 minutes without lapsing into a coma and perhaps even remember some of these words. You have passed the first educational milestone which distinguishes you from the "herd". Your education through high school was mandatory. Your University diploma, for most of you, is your first voluntary step to achieve more than the average. Whether you go on to graduate school or enter the work force, new expectations will be placed on you which will significantly differ from what you have experienced up till now. As you accept these new challenges, I urge you to remember the teachers and
role models that have stimulated your interest, the University that has provided you with the environment to acquire new knowledge and direction and society which has provided you with the opportunity for a college education. I would like to use examples from my own career and environment to stimulate you to accept the challenges which await you.

Cardiac surgery attracts some very strong personalities. There is a story about a cardiac surgeon who dies and goes to heaven. He approaches the Pearly Gates in his scrub suit assured that he will enter without difficulty. After all, he is a heart surgeon. Saint Peter, however, tells him that he must wait his turn. The heart surgeon, not used to this type of treatment is upset. He returns to the waiting area and watches as the crowd in which he is standing gradually diminishes. With only a few people left a large white Cadillac limousine pulls up from which a distinguished gray-haired heart surgeon, donned in scrub suit and long white lab coat, emerges. He walks up to Saint Peter, they exchange pleasantries, shake hands, and he enters the Pearly Gates. The heart surgeon is now furious. He goes up to Saint Peter and complains that he has waited patiently for days for his turn to enter the Pearly Gates while this other heart surgeon enters readily without waiting. Saint Peter smiles and says, "Oh, that's not a heart surgeon, that's God - he thinks he's a heart surgeon."

Role models are terribly important in career decision making and life's choices in general. What student has not been "turned
on" to a particular career by a teacher who was able to personally demonstrate the excitement and rewards of their own profession. As a college student and psychology major, I was committed to a career as a psychotherapist and even upon entering medical school had decided upon a career in psychiatry. However, I became fascinated with the physiology of the human heart and circulation. During my senior year, I was allowed to place my finger inside a beating human heart to palpate a diseased valve by one of the nation's leading heart surgeons, Dr. Glenn Morrow at the National Institutes of Health. Not only did this man "turn me on" to cardiac surgery, but he also served as a role model both as a human being and as a physician. Many of the principles to which I try to adhere in my own practice today were learned from that man 20 years ago. Just as you have benefited from people who have served as a role model for you, at some point in your life you will likely serve as a role model for someone else. In addition to serving a vital function for that individual, I can assure you that there is nothing more rewarding than watching someone progress through life using your early guidance and advice as a map for their own trip.

When I was a junior resident in surgery, I worked with a surgeon who devoted a great deal of his practice to end-stage cancer patients who required drug therapy to try to prolong their lives. As a surgeon, I could not comprehend how another surgeon would shape their practice to include so many non-surgical patients. When asked why he had oriented his practice in this
manner, the surgeon replied, "I was told very early in my career to find one problem that was unsolvable and to try to solve that problem as one of my life's goals." I believe that this is an important philosophy for you to remember. As Don Quixote said in Man of LaMancha "To dream the impossible dream..." Even if unsuccessful, if you attempt to solve only one of life's unsolvable problems, you will have accomplished a great deal. Do not be afraid to dream.

Another challenge awaiting you is to repay society for the opportunity that it has given you in allowing you to accomplish your college education. No matter what your field of endeavor, you will be given opportunities to repay the system for the rewards that it has given you and will continue to give you in the future. If your career is education, much of your life will be spent repaying the system by teaching others what you have learned. As a physician, you may spend time taking care of the sick. As a researcher, you may participate in the discovery of new knowledge. Many of you who are embarking on a career in business may be wondering how this can be relevant to you. Your primary goal may be to become financially successful. The acquisition of wealth, no matter what your field, is more than merely a method of obtaining material things, although there is certainly no sin in living a comfortable lifestyle. However, this wealth will also provide you with an opportunity to pay back society. As a proud alumnus of The Ohio State University, you may decide to contribute to the fund raising campaigns; or you
may give of your personal time contributing your specialized skills to the benefit of your Alma Mater and to society as a whole. By contributing to the further development and expansion of this great University, you will be allowing future students, perhaps your own children, to benefit from the advantage of a higher education. There are numerous other important voluntary jobs that require the guidance of skilled business people in the community. Philanthropic organizations such as The Columbus Foundation, health organizations such as The American Heart Association and local community action groups are just a few of the ways in which you can pay back society for the advantages it has given you. To paraphrase a statement of one of the most exciting political leaders of my college years, "Ask not what society can do for you, but what you can do for society."

You are graduating from one of the largest and greatest Universities in this country. I was recruited to The Ohio State University from another Big Ten School, the University of Wisconsin in Madison, three years ago. The transition from a "Badger" to a "Buckeye" was not at all difficult. In Wisconsin I had enjoyed the tradition of a Big Ten school. On many Saturday afternoons I sang, along with 80,000 others, as the marching band played the Budwiser song "When you say Wisconsin, you've said it all". It was quite easy to accept the tradition of the Scarlet and Gray. Watching the band spell out script Ohio, singing Carmen Ohio (usually in the rain) and watching the crowd erupt over the band playing "Hang on Sloopy" are Ohio State traditions
that I was more than happy to adopt as my own. After observing first-hand the excellence of the institution from which you are graduating today, I can tell you, "When you say Ohio, you've said it all." The tradition of The Ohio State University, however, goes far beyond the football field. As a physician who receives many referrals from the alumni of the College of Medicine, I can assure you that as you move on in the world, you will always have a special feeling for and loyalty to your Alma Mater. Regardless of your own area of endeavor, you should become familiar with and take pride in all of the outstanding features of this institution. The Division of Thoracic and Cardiovascular Surgery which I direct, deals with the treatment of diseases of the heart and lungs. We have brought state-of-the-art cardiothoracic surgery to this institution including a successful heart transplant program with 38 patients having undergone heart transplantation in the last 2½ years. Included in this list of successful heart transplant recipients are two members of your own student body. We have instituted a program to assist the failing heart with external mechanical pumps and have bridged five patients to transplantation using this device. We have started the first experimental laboratory outside of Salt Lake City to study the circulatory effects of the Jarvik total artificial heart and have implanted the device as a bridge to transplantation in a patient. There are only a handful of surgical programs in this country that have the capability of using both of these devices to support patients with failing
hearts until such time as a suitable donor heart becomes available. We are developing an aggressive multi-disciplinary program for the treatment of lung cancer which promises to be on the forefront of this field over the next few years. We have also begun laboratory investigation aimed at developing techniques for successfully performing lung transplantation, a procedure which is in its infancy. Thus, as a graduate of The Ohio State University, you should take tremendous pride in the accomplishments of your institution's College of Medicine and you should understand that each of these projects attacks one of life's unsolvable problems.

I participate in one of the most exciting fields of human endeavor. On a routine basis, I perform procedures in which the patient's heart is stopped and the entire circulation is supported by a machine. Valves, arteries, or defects within the heart are repaired and the heart is restarted. Cardiac surgery has been described as "Long periods of boredom interspersed with short periods of sheer terror." I can think of no more appropriate description. A heart transplant is one of the most exciting and perhaps one of the most final acts that a surgeon can perform. It is impossible for me to describe to you the thrill of starting up a new non-diseased heart and watching it pump vital oxygenated blood to a previously incapacitated body knowing that this person will soon be working, playing with his children, or attending classes at The Ohio State University. Taking patients who are near death and implanting mechanical
pumps which totally support the patient's circulation and allow them to be awake, conversant, and yes, even walking about the room and exercising on a bike without their own heart functioning or even present is about as close as one can get to Doctor McCoy on Star Trek as far as medical technology in 1989. Many of you are entering fields involved in high technology developments. Hard decisions await you in how to implement these types of programs whether it be space exploration or artificial hearts. We are, perhaps, ten years away from the development of a totally implantable artificial heart. Unfortunately, the technology that we have already developed today is so expensive that we can hardly afford it. Who will pay for the ability to sustain life, perhaps eventually indefinitely by the use of artificial organs? You, as members of our society, must be involved in these decisions and that participation will determine how far we are able to advance our ability to treat disease and prolong useful life.

One discouraging part of heart transplantation is the interaction with patients on the waiting list, knowing that an almost equal number will die while waiting as will receive the scarce donor organs. You, as individuals, are capable of influencing the outcome of these people also. By signing your donor card for organ donation you are committing yourself to repay society with perhaps the most precious gift that one can give - the gift of life. If every potentially usable donor organ were available for transplantation, there would be no deaths on
the waiting lists of heart transplant programs such as our own.

Thus, as you march onto the podium today to receive your diploma, remember the people who as teachers have etched some part of their being into you as a role model and remember to serve willingly in this capacity yourself should the opportunity arise. Remember the inspirational people that you have come in contact with during your formative years, friends, parents, relatives, or associates, people who have in many ways shaped your lives, your personalities, your goals, and your hopes. Remember to be proud of all of the accomplishments of your institution no matter what the field of endeavor, because this is your Alma Mater. Remember to try repay society, no matter how small that contribution may seem to you, for the opportunities it has given you. Remember to attack some seemingly unsolvable problem in life as one of your goals - remember to dream. And most of all, no matter where you go, remember the Scarlet and Gray - remember your Ohio State University.

Thank you.

March 13, 1989