

APPENDIX A

Citation and Response of the 2005 O. Max Gardner Award Recipient DR. KENNETH BRUCE ADLER

Citation:

Esteemed scientist, teacher and mentor, Dr. Kenneth Bruce Adler, Professor from the Department of Molecular Biomedical Sciences in the College of Veterinary Medicine at North Carolina State University is internationally recognized for his achievements in pulmonary biology.

Chronic obstructive lung disease and asthma are two of the major causes of human suffering worldwide. It is in this global arena of human suffering that Professor Adler has chosen to contribute. Adler has developed a state-of-the-art biomedical research program which receives national and international recognition. Importantly, he developed a novel system whereby lung cells from humans and other animals can be maintained, in the laboratory, under conditions which allow for these cells to be identical to the structure and function normally found in the body. This extremely important advance has allowed him to make many important and fundamental discoveries that provide information essential to development of therapeutic remedies for respiratory diseases such as asthma and cystic fibrosis.

Dr. Adler's pioneering research in lung physiology has resulted in a discovery which will benefit millions of people who suffer from debilitating respiratory diseases. Excess mucus production in the lungs is a hallmark of asthma, chronic bronchitis, cystic fibrosis, and other diseases. This impairs the ability of the lungs to obtain sufficient oxygen and also provides a rich environment for the growth of harmful micro-organisms. In a brilliant series of experiments he has outlined the pathways involved in mucus secretion and then developed a compound called MANS that blocks mucus production and has the potential to decrease the morbidity and mortality associated with many respiratory diseases.

Just this year, in recognition of a life time of excellence in scientific research, Dr. Adler received a MERIT award from the National Institutes of Health. Fewer than five percent of NIH-funded scientists receive MERIT Awards, which are given to researchers with a proven

track record of scientific excellence and productivity over the previous 10 years. He was recognized by the North Carolina State Board of Trustees when he received the Alexander Quarles Holladay Medal for Excellence in 2004. The Holladay Medal is the highest honor bestowed on a faculty member by the trustees and the university.

In addition to his distinguished contributions to the global scientific enterprise, Professor Adler is the ultimate teacher, mentor and role model. His laboratory has served as the focal point for the superb training of post-doctoral fellows in his department and as a resource for graduate students and faculty alike. The Board of Governors is honored to recognize Kenneth Bruce Adler, Professor from the Department of Molecular Biomedical Sciences in the College of Veterinary Medicine at North Carolina State University as the recipient of the 2005 Oliver Max Gardner Award.

Response:

Thank you very much Mrs. Robinson. That was a very nice introduction. Members of the Gardner Family, President Broad, Board of Governors, Chancellor Oblinger, Dean Arden, guests and relatives, I am greatly honored to be here today to receive the O. Max Gardner Award. I thank you for this recognition and tribute.

This is not the usual audience I speak to, so I will try to settle my remarks to that. For me, this award really firms my belief that there is a beauty in academia. We hear the term *academic freedom* all the time; unfortunately, it is usually in the context of a faculty member disposing an unpopular point of view. But to the majority of the faculty members in universities throughout the country, it carries a much more noble meaning. In the course of my career the academic freedom that I talk about has afforded me the opportunity to pursue my own research, however iconoclastic my ideas might have been at the time, in an environment that fosters creativity and fosters original thinking. We biomedical researchers, who choose academia over the more lucrative private sector, have a different kind of reward. We are rewarded with the unique opportunity to make our own research choices and study biological processes at the cell level with the hope of contributing to the understanding of disease. With all of this, I have been extremely fortunate in my career to receive full support for my research from the administration of North Carolina State University and the College of Veterinary Medicine. As a result of this

support, I am one of the lucky few basic researchers who have had the unique experience of watching work done at a basic science laboratory move to the development of a drug that actually may be used to treat patients who suffer from diseases like bronchitis, asthma, and cystic fibrosis. This potential therapy, as the video might have pointed out, is due to be tested in humans later this year and hopefully will create a drug that can treat these terrible diseases. Because biomedical research shouldn't be looked at as a competitive sport, my academic freedoms also allowed me to collaborate with and guide related research endeavors all over the world. I have shared my work with colleagues in Sweden, China, Taiwan, France, Italy, Finland, Mexico, and England, just to name a few. Through these collaborations, I think our collective understanding of the mechanisms of pulmonary disease is enhanced. But even with these worldwide collaborations, biomedical research to me remains something this is quintessentially American although the term *outsourcing* may be popular in the business world at this time. The United States is and remains the unequivocal mecca for science. It has always been and still remains the single place in the world where all scientists want to come to and train. And why is that? There is no question in my mind that this is because creativity and freedom of thought are valued here. And it is here that funding and support for breakthrough research is available based only on talent, not on status or social connections like in other areas of the world. So, on a personal level, I am grateful to the UNC system for its support, and as was mentioned before, you can say in return that I have given my family to the UNC system. My wife, Diane, is a Professor in the Department of Foreign Languages and Literatures at NC State. My daughter, Jordana, just finished her freshmen year at Carolina. My son Peter and his fiancée Lori both graduated from Carolina and my son is presently in his third year of medical school there. I think we are all privileged to be part of the UNC system and I think the award means that much more to me because of that. I am very grateful to the UNC system, I don't think there are many other careers where the feeling that one gets driving to work on Monday morning is the same as the feeling driving home on Friday evening. Again, I thank everyone involved for the award and I feel greatly honored to receive it. Thank you.