## Citation for Macalester's Excellence in Teaching Award Given To Danny Kaplan April 26, 2006

Danny Kaplan joined the Department of Mathematics and Computer Science in 1996. In this age of academic super-specialization, he is quite a rarity—a faculty member who teaches mathematics, statistics, and computer science, but who does not have a degree in either mathematics, statistics, or computer science! Danny received a B.A. in Physics from Swarthmore, an M.S. in Engineering Economics from Stanford, and M.S and Ph.D. degrees in Biomedical Physics from Harvard.

In the 10 years Danny has been here, he has become well known to virtually every faculty member at the college through his outstanding work as Chair of RPC and his informative, and sometimes daunting, presentations at our monthly faculty meetings, where he earned the nickname "Dr. Data." However, many of us may not be aware of his equally outstanding work in the classroom and in the area of curriculum development. Danny is devoted to the goal of improving the quantitative thinking and logical reasoning skills of all students at Macalester, regardless of major, and has worked tirelessly to create courses and programs to help meet this goal. Mathematicians are often viewed, rightfully so, as hidebound traditionalists unwilling to tamper with the classical curriculum that has been in place for one hundred years. Thankfully for our students, you do not belong to that group. Along with David Bressoud you helped create the course Quantitative Methods for Public Policy, which demonstrates the use of quantitative skills to address problems in the humanities and social sciences. In the last 2 years you completely revamped both the introductory Calculus and introductory Statistics sequences to make them more interesting, more challenging, and, most important, more relevant to the hundreds of students who take these courses each and every semester. You helped design a new program in Computational Science and even wrote the textbook for the first course. You were the recipient of a \$300,000 grant from the Keck Foundation to equip a new computerized classroom to modernize and enhance the teaching of courses in mathematics, statistics, and computer science. And, finally, we cannot forget your efforts in helping formulate the college's new QT quantitative thinking graduation requirement. In the words of one of your colleagues, your contributions to the curriculum have made Macalester a national leader and role model among liberal arts colleges in undergraduate mathematics education.

Inside the classroom you are a respected and beloved teacher. Your students admire you for challenging them to acquire the necessary mathematical skills, even when they mistakenly think they cannot. They appreciate the support and effort you are willing to provide when the work is tough and the concepts are difficult. One student writes, "Prof. Kaplan was one of the most interesting as well as challenging professors. His liveliness and devotion to our class inspired me to learn and to try the best that I could to understand the material." Inside the classroom you are an innovator and a risk taker willing to try new techniques and tools as long as they foster learning and understanding. One of your colleagues describes how you would use both the Mona Lisa and Google.earth to demonstrate how digital images are stored and processed. You have

brought in recordings of Winston Churchill, Thomas Edison, and Jimmy Stewart to describe and explain the mathematics of sound. Your enthusiasm, passion, and your creative teaching techniques make learning fun and exciting—words not often used to describe the teaching of mathematics. I can think of no greater compliment to a professor that the words of one of your students who said that they were truly sorry when the class period ended and they had to leave.

Danny, you have done a superb job helping prepare the next generation of "Dr. Datas" to do important social, cultural, economic, governmental, and scientific work. You have demonstrated to all students at Macalester, from Art to Zoology, the importance of a fundamental grounding in quantitative thinking and logical reasoning. For all of this we are most grateful, and I am proud to award you the Macalester Excellence in Teaching Award for 2006.