

MARY JEANNE KREEK — Introduction for Eddy Award  
June 13, 1999  
Acapulco Princess Hotel

Two years ago, at the CPDD meeting in Nashville, I sat in the front row in the audience and listened as Dr. Bill Dewey said a whole bunch of great things about me when he introduced me as the winner of the Nathan B. Eddy Award. That was the proudest moment of my professional life, although it was sometimes difficult to believe that it was me that Bill was talking about. Well, now it's my turn to say some wonderful things about the person about to be presented with the 1999 Eddy Award.

As I'm sure you all know, the winner is Dr. Mary Jeanne Kreek. Mary Jeanne, I don't want you to become overly troubled by this, but do you realize that you are the last person that will ever receive the Eddy Award in this century? Actually, I think that's very appropriate because you are truly an outstanding and unique individual.

For those who may not know you very well, I would like to provide a brief history of your professional life. Dr. Kreek graduated from Woodrow Wilson High School in Washington, D.C. and then attended Wellesley College where she received honors in chemistry and biology. She went to Columbia for her M.D. where she won an award for her research. Her internship and residency at Cornell University-New York Hospital Medical Center included internal medicine, gastroenterology, and neuroendocrinology. She also did a research rotation at the Rockefeller Institute in 1964 with Dr. Vincent Dole, a former winner of the Eddy Award. Working with Dr. Dole and Dr. Marie Nyswander, who received the Eddy Award with Dr. Dole, Dr. Kreek was part of the team that performed the initial studies of the use of methadone in the chronic management of heroin addiction. There is no need to tell this audience of the importance of this work in the treatment of addiction. As important as were her efforts as part of that group, Dr. Kreek's career really went uphill after that. Dr. Kreek joined the Rockefeller as Associate Physician in 1967 and rose to the rank of Professor and Head of the Laboratory of the Biology of Addictive Diseases and Senior Physician at the Rockefeller University Hospital. That was in 1994. Dr. Kreek was the first woman to become a Head of Laboratory at the Rockefeller. Glass ceilings are just another temporary slowdown for Dr. Kreek. I should also mention that Dr. Kreek is the Director of a P50 Center from the National Institute on Drug Abuse titled "Treatment of Addictions-Biological Correlates" and she has been the recipient of a NIDA Senior Research Scientist Award since 1978.

When I was preparing these comments, I tried to determine which of Dr. Kreek's many, many contributions to research I would mention. She has long espoused the view that addictions are diseases of the brain with associated behaviors, she provided evidence that methadone maintenance therapy provides stability for the neuroendocrine system, she developed new analytical

techniques for pharmacokinetic studies of opioids, and she provided strong support for the hypothesis that genetic factors play a major role in addiction but that early developmental and environmental factors are also important. In addition, she has provided strong evidence that the endogenous opioid system exerts its effects via interactions with other neuropeptide and neurotransmitter systems ( a belief that she and I have shared for many years), she was among the first to demonstrate opioid interactions with disease states, and she helped provide data supporting a link between prevalence of HIV-1 and parenteral drug abuse. In the past 10 years, Dr. Kreek has not only continued her work with opioids, but has made numerous contributions to our knowledge about cocaine. For example, she developed the "binge" model for studying cocaine effects and has demonstrated that cocaine can alter mu and kappa opioid receptor densities and 5HT1a serotonergic receptors. In collaboration with a group in Japan, she used PET scans to study cocaine and its effects on D1 and D2 receptor binding.

Finally, with regard to Mary Jeanne's research, I want to draw your attention to her studies with opioids and the immune system, studies that are near and dear to me and my group at Temple University. She is one of the leaders in the very rapidly developing field of the relationships between drugs of abuse, addiction, and the immune system. The reasons for the markedly increased incidence and severity of a number of diseases in drug abusers are not well understood at this time. However, it is certain that the differences are not due solely to lifestyle or contaminated needles. Rather, various abused drugs, including the opioids, have a profound effect on the immune system and may act as cofactors in such diseases as HIV and opportunistic infections such as hepatitis B and C, and tuberculosis.

At his point, I might just add that Dr. Kreek has over 300 papers, that she has collaborated with many laboratories throughout the world, and that she is one of the best examples that I know of a scientist who truly goes from genetic and molecular approaches to studies in humans and then back again. I could then sit down and all of you would fully understand why Dr. Kreek is so richly deserving of the Eddy Award and marvel about how much she has accomplished. But I'm not going to do that. Rather, I will take just a couple of more minutes to tell you of some of the things that Mary Jeanne does in her spare time:

CPDD - Dr. Kreek has played a vital role in the evolution of the CPDD into a membership society. She has served the CPDD as a member of the Board of Directors, as Chairman (President) for 2 years, as Chairman of the Scientific Program Committee for 5 years, and as a member of the Long-Range Planning Committee for 2 years. She is also responsible for beginning the CPDD Travel Awards Program and many of you in this audience have that program to thank for your involvement with CPDD.

Federal Government - Mary Jeanne has served on numerous governmental committees. Of particular note are her service on various FDA Advisory Committees, on the Search Committee for the Director of NIDA, on several study sections at NIH and NIDA, on the NIDA National Advisory Council, and most recently, on the Peer Review Oversight Group (PROG) at NIH.

International Groups - Mary Jeanne has been involved with several WHO committees, and with several NIH and State Department missions. She is an extremely articulate spokesperson. Mary Jeanne has participated in 3 Central European/USA meetings and one to China, and her contributions invariably represent one of the highlights of each meeting.

I apologize for taking so long, but I'm going to take one more minute from Mary Jeanne's time to relate my favorite Mary Jeanne story. When a team from NIDA site-visited her for her Center grant renewal a couple of years ago, Mary Jeanne handed us a schedule that had her talking for 45 minutes. I was asked to tell her that she only had 20 minutes. I thought that she might be upset, but she just looked at me and the rest of the committee and said "Don't worry about it, 20 minutes is fine, I'll just talk faster."

When I stood here 2 years to accept the Eddy Award, I looked at the audience and saw my wife, my 2 children, and my 2 grandchildren. Their support was a vital element in any success that I achieved and I was thrilled to see how proud they were that day. Well, now I look into the audience and I see Mary Jeanne's husband Bob, her son Robert, and her daughter Esperance and I see that same pride. So to the 3 of you, I want to say that you certainly have a right to be proud. Without any further ado, it is my great pleasure to introduce to you the winner of the 1999 Nathan B. Eddy Award for Research in the field of drug abuse — the irrepressible and dynamic Dr. Mary Jeanne Kreek.