It is an honor for me to introduce Dr. Sari Izenwasser to you today as the recipient of the 13th Joseph Cochin Young Investigator Award of the College on Problems of Drug Dependence. It is a particular honor for me because I have known Sari longer than any other member of the College has. We go back to 1982 when I was a new Assistant Professor in the Psychology Department at Boston University and Sari was a new graduate student. I am indebted to Sari to this day because she helped me establish my first lab and collect data for several studies on mouse aggression that in an up-side-down, inside out, turn-about kind of way led me to the drug abuse research field several years later. But in the meantime, Sari had a deep intellectual interest in drug abuse research, and so, in 1984 she joined Conan Kornetsky's group in the Pharmacology Department at Boston University School of Medicine.

Conan taught Sari the fine art of Electrical Brain Stimulation Reward. Through a series of carefully designed studies, Sari was able to show a dissociation of dopaminergic and noradrenergic involvement in opioid analgesia and reward. Importantly, this early work suggested that noradrenergic drugs might be used to augment the analgesic effects of opioids without concern for increased abuse potential. It was also at this point in her career that Sari first met Joe Cochin, whose lab was just down the hall. Given their mutual interest in opioids, Joe would often visit Sari in the lab to chat with her about the latest developments in the field.

After completing her Ph.D. requirements in 1987, Sari's goal was to obtain training in neurochemistry. She believed that she could make more solid contributions to the drug abuse field if she could monitor not only the behavioral effects of drugs, but also the neurochemical substrates upon which these drugs acted. Her first stop was Shreveport, LA and Jim Smith's laboratory at the LSU Medical Center. Here, Sari had her first "grind and bind" experience with benzodiazepine receptors. But she continued to suffer separation anxiety from her beloved opioids and so she joined Brian Cox's lab at the Uniformed Services University of the Health Sciences in 1988.

It was here that Sari really blossomed as a neurochemist. In a novel and innovative way, Sari examined dopamine transporter function in different brain regions after chronic treatment with cocaine and other stimulants using different treatment paradigms. Her findings were instrumental for explaining the disparate behavioral effects of chronically administered cocaine as reported in the literature. This work has had a high impact because four of her numerous publications from this post-doctoral period have received over 250 citations alone thus far.

Sari’s growing recognition for outstanding work in the neurochemistry of abused drugs led Jonathan Katz to jump at the opportunity to offer her the job of setting up the Neurochemistry Lab in the Psychobiology Section at NIDA's Division of Intramural Research. Her lab was responsible for testing the in vitro structure activity relationships of compounds generated by the Medicinal Chemistry section, headed by Amy Newman, as well as compounds provided by her collaborator Mark Trudell. Independently, Sari continued the work she had begun at Brian Cox’s lab on the interactions between cocaine and opioids, the effects of chronic cocaine on the dopamine transporter as well as the role of D1 receptor efficacy for stimulating adenylyl cyclase activity. From this work, Sari developed the idea that cocaine, compared to other uptake inhibitors, may be interacting with the DA transporter in a unique way to produce its high abuse liability.

Five years, countless collaborations, 60 publications and over 600 citations later, Sari knew it was time to put all her accumulated knowledge together and enter the world of academia. Deborah Mash recruited her to join the faculty of the University of Miami School of Medicine. It was on the strength of Sari's reputation and contributions to the drug abuse field that secured her a starting position at the Associate Professor level. Within months of beginning her faculty appointment, Sari attracted extramural grant support to study the role of kappa opioids in stimulant abuse. These studies may pave the way for the development of new pharmacotherapies for cocaine addiction. Dr. Cochin must have been a heartfelt inspiration to Sari during those lab-side chats so many years before, because as we can see, Sari is still deeply 'addicted' to opioid research to this day.

To sum things up, Sari has established herself as a truly outstanding scientist who has made numerous significant contributions to the drug abuse field. She has been actively involved in CPDD since 1988 and is currently serving the College as a member of the travel awards committee. Given that this was her last year of eligibility for the Joseph Cochin Young Investigator Award, it is a fitting tribute to both Sari, who is a graduate of Boston University, and Dr. Cochin, who was a Professor of Pharmacology at Boston University, to have this award bestowed upon the last eligible nominee of the College to have actually known the man for whom this award commemorates.

Kathleen M. Kantak
Professor of Psychology
Boston University
June 13, 1999