

TRIBUTE TO DR. STANLEY B. PRUSINER, A "MOZART OF SCIENCE," ON HIS RECEIVING THE NOBEL PRIZE IN MEDICINE

HON. TOM LANTOS

OF CALIFORNIA

IN THE HOUSE OF REPRESENTATIVES

Thursday, October 9, 1997

Mr. LANTOS. Mr. Speaker, it is my privilege and pleasure to hail the accomplishments of Dr. Stanley B. Prusiner, the 1997 recipient of the Nobel Prize in Medicine. Dr. Prusiner, a professor at the University of California San Francisco, joins 30 other Nobel laureates in the UC system, including UCSF's two previous medical honorees—microbiologists J. Michael Bishop and Harold Varmus, the current head of the National Institutes of Health. Dr. Prusiner was awarded this premier distinction for his landmark discovery of prions, rogue protein particles that function as infectious agents. This remarkable innovation could eventually lead to a cure for dreaded neurological diseases such as Alzheimer's, Parkinson's, Huntington's, and amyotrophic lateral sclerosis, ALS, better known as Lou Gehrig's disease. In the citation announcing Prusiner's \$1 million prize, Sweden's noted Karolinska Institute lauded the social impact of his achievement.

"Stanley Prusiner's discovery provides important insights that may furnish the basis to understand the biological mechanisms underlying other types of dementia-related diseases, for example Alzheimer's disease, and establishes a foundation for drug development and new types of medical treatment strategies."

For Dr. Prusiner and for his entire research team at UCSF, this recognition marks the zenith of a 15-year battle for a revolutionary theory that flew in the face of earlier scientific judgments about the causes of communicable brain diseases.

Prusiner's commitment to using his medical genius to helping others began long before his discovery of prions. Born in Des Moines, IA, he graduated from the University of Pennsylvania Medical School and, after long doing biochemistry research at the National Institutes of Health, moved to the Bay Area in 1972 to begin his residency in neurology at UCSF. That year, a pivotal event shaped the direction of Prusiner's expertise: He began treating a Marin County woman affected with Creutzfeldt-Jakob disease, an exceptionally rare and always fatal condition that mercilessly destroys the brain. Prusiner's patient passed away after 7 weeks in the hospital, but her sickness impelled her doctor to examine further links between Creutzfeldt-Jakob and similar neurological illnesses, and to seek the cause of these devastating diseases. "At that time," said Prusiner years later, "most people believed that the brain diseases were caused by slow viruses, but since I didn't know any virology, I figured I ought to look for some other explanation—and that's when I started hunting for proteins that might be involved." This research continued throughout his tenure as a Howard Hughes Investigator at UCSF from 1976 to 1981, culminating in his development of the prion theory in 1982.

Prusiner's then-radical pronouncement stated that the cause of Creutzfeldt-Jacob and related maladies was not a virus at all; rather, these illnesses emanate from prions, bio-

logically unique proteins which contain no DNA. Rather, in place of genetic reproduction, prions convert neighboring proteins, creating more disease-causing agents. This phenomenon has a devastating effect on nerve cells in the brain, ravaging tissue and leading to a certain death.

The scientific community greeted the prion theory with disbelief and outright criticism that targeted not only Prusiner's conclusions, but his ethics as well. His financial grants quickly vanished, and he was forced to operate for years with only in-house grants from the loyal UCSF administration. These frustrations strengthened Prusiner's dedication to his work and as the years progressed, the case for the prion theory became stronger and stronger. His opponents found little evidence to discredit his conclusions, and Prusiner and his dedicated team of researchers, notably brain pathologist Stephen DeArmond and pharmacologist Stephen Cohen, published hundreds of papers substantiating the role of the prion in a variety of contagious neurological diseases.

The grants returned, with significant contributions including a \$2.5 million prize from the W.M. Keck Foundation in Los Angeles and the Israeli Government's prestigious \$100,000 Wolf prize. Such resources enabled Prusiner to tie the existence of prions to the recent British epidemic of bovine spongiform encephalopathy, BSE, better known as mad cow disease, and to chart the course for eventual cures to BSE and other disorders. He also won the coveted Albert Lasker Basic Medical Research Award in 1994, generally regarded as a strong indicator of a future Nobel Prize. In the words of his colleagues, neurologist and biochemist Jiri G. Safar, Prusiner "carried on his shoulders the burden of proving this extraordinary new idea. * * * He single-handedly validated his theory. To do that, it takes a person of strong conviction and real guts." Mr. Speaker, we are all in debt to the courage of this outstanding man.

Dr. Prusiner's next challenge is to eradicate these diseases from the face of this planet. In the aftermath of the BSE outbreak in Great Britain, he has used his findings concerning the replicating and infectious nature of prions to lobby the Food and Drug Administration and the Department of Agriculture to protect our food supply and make sure that such a plague will never occur in this country. Prusiner's research will also continue to seek the causes of Alzheimer's, Parkinson's, Huntington's, and ALS. Once the origins of these diseases are discovered, treatments such as gene therapy and prion-blocking medications may be created to cure them or to prevent them from spreading. Prusiner expects that within the next 5 to 10 years we will see a drug to stop the progression of Creutzfeldt-Jakob, the disease that led him to this area of neurological research a quarter century ago.

Mr. Speaker, Dr. Prusiner has earned our utmost gratitude and respect. As his UCSF colleague Dr. DeArmond remarked, he is truly a "Mozart of science." Prusiner's brilliance, dedication, and, most of all, his persistence are a credit to his country and to the San Francisco community where he has lived with his wife, Sandy, and his family for over 25 years. I ask all of my colleagues to join me in congratulating the 1997 recipient of the Nobel Prize in Medicine, Dr. Stanley B. Prusiner, for his most-deserved award, for his devotion to

finding answers to questions that have vexed the scientific world for generations, and for his dogged commitment to standing up for his life-saving beliefs in the face of cynicism and skepticism.

SALUTING PEG LEG BATES ON HIS 90TH BIRTHDAY

HON. MAURICE D. HINCHEY

OF NEW YORK

IN THE HOUSE OF REPRESENTATIVES

Thursday, October 9, 1997

Mr. HINCHEY. Mr. Speaker, I would like to ask my colleagues to join me in saluting Peg Leg Bates on his 90th birthday. Mr. Bates is a world renowned entertainer, a successful businessman, and a local legend for Kerhonkson, NY, who has been a good friend to many people and warmed the hearts of even more.

Mr. Bates performed with some of the greatest names in show business: Pearl Bailey, Ed Sullivan, Sarah Vaughn, Cab Calloway, Nat King Cole, Lena Horne, Billy Eckstein, and many others. With his indefatigable spirit, determination, and considerable charm, Mr. Bates showed the world that there were not obstacles, only opportunities, and not insurmountable barriers, but barriers to be danced over. He did this, and so much more, with class, poise, and brilliance.

So on his 90th birthday this weekend I would like to have my fellow Members of the House of Representatives join me in saluting Pet Leg Bates and wish him many years of good health and happiness to come.

TRIBUTE TO CELIA CRUZ, THE QUEEN OF LATIN MUSIC

HON. JOSÉ E. SERRANO

OF NEW YORK

IN THE HOUSE OF REPRESENTATIVES

Thursday, October 9, 1997

Mr. SERRANO. Mr. Speaker, I rise to pay tribute to Celia Cruz—world renowned singer of Latin music. The Smithsonian Institution will honor her on October 16, during a special program entitled "¡Azúcar!" The Smithsonian Honors Celia Cruz".

The Smithsonian will present Celia Cruz with the Lifetime Achievement Award for Excellence in Music from the National Museum of American History's Programa Latino. Celia Cruz, popularly known as the "Queen of Latin Music", will donate one of her most famous costumes to the National Museum of American History.

Cruz first rose to fame in her native Cuba as one of the most exciting and creative performers of "mambo" of the late 40's. Since then, Cruz has achieved one success after another. In 1950, she joined the legendary orchestra La Sonora Matancera with whom she recorded 20 gold albums and toured the United States and Latin America. Her artistic alliance with Tito Puente—"the King of Latin Music"—as well as with Johnny Pacheco, Willie Colon, and the Fania All-Stars in the 1970's resulted in numerous albums and enduring fame. More recently, she has performed with David Byrne, Ray Barretto, Emilio Estefan, Willie Chirino, and Olga Tañón.