

President Robert C. Dynes
U.S.-India Summit on Education, Research and Technology
California Institute for Telecommunications and Information
Technology, UC San Diego
Wednesday, May 31, 2006

It is a privilege to be here for what I think is an historic event. Today's summit, in my mind, celebrates a longstanding partnership between the University of California and our Indian collaborators. This summit actually represents an opportunity to raise that collaboration to the next level.

We have, of course, been exchanging talent and ideas between the University of California and India for decades; there's been a flow of people in both directions. We have an awful lot in common. We both embrace innovation. We both strive to harness knowledge to serve society. So it is an historic event today between the University of California and academia, industry, and government in India.

To set the framework, let me remind some of you, and inform some of you, of the scope of the University of California. Then I'll discuss my own views about the University of California's international strategy and how it has evolved and how it continues to evolve. Then I'll say a few words about what I see as the UC-India partnership and the strengths of that partnership.

Let me start out with the University of California. The University was started in 1868 with virtually no money and no land by people who had a desire to bring the brightest minds to California. Nearly 140 years later, UC has grown into a network of 10 campuses with over 200,000 students that stretches 1,000 miles along California from the north to the south.

Nine of our campuses would be considered in their own right a supreme academic institution. The 10th, which we opened just last September, is heralded as the first research university of the 21st-century century. Today, as one university, we have had remarkable success in carrying out our mission. And that mission, as I try to remind people whenever I speak, is first, to create new knowledge; second, to create the next generation of those who will create, because if we don't do that, everything stops; and third, to use those creations in service to society. People often think of it as research, education, and public service, but I would rather think of it more in a creation mode.

To give you a greater sense of what the University has accomplished, I'll give you a few benchmarks, things that we are particularly proud of. To date, 52 scholars affiliated with the University of California have won Nobel Prizes, including 19 in the past decade. Last year, the University of California topped the list of universities worldwide in developing new patents. We create on average about three inventions a day. And one in four biotech companies in California were created by students or faculty from the University of California. And if you go through every biotech company in the state of California, there are UC alumni and faculty up and down the management ranks.

After taking over as UC President in 2003, I thought the University really had to develop a global international strategy. As I said, we have many, many collaborations between various groups at UC and throughout industry. Our university has a world-class research capacity, and I'm really eager to expand that in a mission that I regard as R, D, and D: research, development, and delivery. We cannot do that by ourselves. We must do that with industrial partners and with government partners. I believe the University is responsible for the research, of course, for development in partnership, and for delivery to society. We cannot just drop it off and expect it to be delivered by someone else. R, D, and D allows us to collaborate across public and private sectors, and I think what's going on here in CalIT2 at UCSD is a supreme example of R, D, and D. One other example in our health care mission is basic fundamental research, development of new drugs, and delivery through clinical trials.

As I mentioned earlier, the University takes great pride in its partnerships with Indian collaborators. We've been collaborating with India and individual Indians for years. And I'll mention two collaborations that I believe have had global impact. The first, from the realm of science, is centered here but spread throughout the world, and that's the Atmospheric Brown Cloud Project. The second, from the realm of art, is the Satyajit Ray Archives. Let me give you a few details on both of those as examples that lay out the road map for how we can move into the future.

The Atmospheric Brown Cloud Project, which a lot of you know, is led by Ram Ramanathan of the Scripps Institution of Oceanography here at UC San Diego. This multinational effort assesses the global impact of air pollution caused by the burning of fuels and agricultural wastes. That burning goes on throughout the world. There's no one nation, no one person to blame for this. We have a global responsibility for it. It

affects climate, water cycles, agriculture, public health, and quality of life.

The Brown Cloud Project is unprecedented in its global sweep. Ram has created a network of over 100 collaborators from the University of California, Japan, Korea, Europe, China, India, and other parts of the United States, with 10 Indian and 20 East Asian institutions participating. The team is assessing such specific impacts as: the extent to which atmospheric brown clouds have masked global warming due to greenhouse gases; the effects of climate change on the South and East Asian Monsoon System; and the impact of precipitation changes on food production.

The Project has been made possible by \$15 million in funding from the UN Environmental Program, the United States, Sweden, India, Japan, Thailand and China. It's remarkable. It's the vision of the future. It's what we have to do as universities, as government agencies, to face these huge problems we're facing. These partners and collaborators are united in one basic human desire, one that I've articulated many times. I grew up looking at stars and blue skies. I would like my grandchildren, and my grandchildren's grandchildren, to see the same stars and blue skies.

One other example far on the other end of the spectrum of our academic activities is the Satyajit Ray Archives. These Archives at UC Santa Cruz are directed by History Professor Dilip Basu. Dilip made history himself in 1992 when he was sent to India by the Academy of Motion Picture Arts and Sciences to present a Lifetime Achievement Oscar to his ailing mentor, director Ray. Since that time, Dilip has devoted himself to preserving the legacy of that great Indian filmmaker – I remember in the '60s seeing these films – he has helped establish this world-class archive for this famous director.

Film is a very fragile, as you all know, and a world-class treasure, something that has to be maintained; you can't just put it in a box and leave it. Thanks to the Ray Archive, Californians and Indians have a superb opportunity to work together to preserve this treasure for future generations. UC Santa Cruz also has established two other endowments in Indian classical music, one named after the outstanding Ali Akbar Khan. The arts and humanities are, and will remain, a key part of the UC-India collaborative portfolio.

Let me wrap up by looking at the future of our partnership. We have a goal, and we have a road map to it; we now must accomplish that

goal. In March, we signed a landmark Memo of Understanding with the Indian government. I was supposed to be there, I was putting fires out here instead, but I'll get back there. It's ambitious. It's ambitious educationally; it's ambitious technologically; it's ambitious politically. I'm delighted that our partners are here today. And I'm honored to have President Abdul Kalam, who will be with us via technology very shortly.

This Memo of Understanding is open-ended in scope. It's up to our own imaginations how broad and far we will reach with this. As we proceed down this path together, let us keep in mind that the citizens of California and India have placed their trust in us. For you techies, there's no "sum rule" here. This is not a "zero sum" game, or in more colloquial language, this is "win-win." We can all benefit.

At this historic event, let's renew our dedication to work together to serve our citizens and raise the quality of life throughout the world. On behalf of the University of California, I want to express my appreciation to each of you for being here today, either physically here or here throughout the world via technology. I'm eager to learn from these discussions, and I'm eager to move forward with our partners to solve these huge world problems. Welcome and thank you.

###