

Office of Congressman **Ciro D. Rodriguez**
SACNAS Event
September 28, 2002

- i Thank you for the kind introduction. I am honored to be with you today. I would like to start by recognizing the leadership of Dr. Maria Elena Zavala, President of the Society for the Advancement of Chicanos and Native Americans (SACNAS). On a personal note, I would also like to thank Dr. Cecilio Barrera and Dr. John Aldrete for their kind invitation.

- i As some of you know, Dr. Alderete is from my hometown of San Antonio, Texas. He has been an extraordinary leader at the UT Health Science Center and in the greater San Antonio community.

- ii SACNAS has been dedicated to the advancement of Chicanos and Native Americans in graduate science education for nearly 30 years. I congratulate you all for the wonderful work that you do to open the doors of opportunity for our youth. The internship and fellowship programs you support have inspired the lives of countless students. In addition you have initiated and supported research which is invaluable to us all.

- ii It is clear to me and my colleagues in Congress that in order for America to maintain and build upon our global economic competitiveness we must have a capable scientific and technological workforce.

- ï To meet this goal, we must ensure quality instruction in our schools in the areas of science and mathematics. Even if students do not pursue a career in these fields, they still will need basic knowledge in science and technology to be successful in our competitive workforce.
- ï As a country we cannot afford to have students complete high school scientifically and technologically illiterate.
- ï With the beginning of the 21st Century, a larger proportion of the U.S. population will be composed of African Americans, Hispanics, and Native Americans. As a group, these populations have traditionally been under represented in the science and engineering disciplines compared to their proportion of the total population.
- ï A recent report produced by the National Science Foundation (NSF) reveals that African Americans, Hispanics and Native Americans as a whole comprise 23% of the population and earn, as a whole, 14.7% of the bachelor degrees, 8.2 % of the masters degrees, and 5.5 % of the doctorate degrees in science and engineering.
- ï There are few within the scientific community who

argue about the effect of demographics on the future science and engineering workforce. These fields have been the primary domain of white males. This can and must change. African Americans, Hispanics, and Native Americans, with Hispanics, being the fastest-growing, will comprise a more significant segment of the workforce and will need to fill more positions within the scientific community.

- ii Hispanics are improving their academic achievement levels. They have increased their share of earned bachelors degrees from 4% in 1990 to 6.5% in 1998. The proportion of masters degrees received by Hispanics increased from 2.2% in 1990 to 3.5% in 1998. In doctoral candidates our progress has slowed in 1990 at 2% and in 1998 at 2.8%. Unfortunately, Native Americans have remained at less than 1% in all classifications. We must continue to move forward and in order to succeed it will take a national commitment to education.
- ii We must work at increasing the numbers of students of color in college preparatory courses, reducing inexcusable drop-out rates, and recognizing the potential of all students.
- ii It is clear that the 21st century will bring global competitions and rapid advances in science and technology which will surely require a workforce that is

increasingly more scientifically and technically proficient.

- i The question will be how do we meet the need? A recent report commissioned by the National Commission on Mathematics and Science Teaching for the 21st Century, *Before It's Too Late*, revealed that by the year 2008 jobs in the computer industries and health sciences requiring science and mathematics skills will increase by 5.6 million. Also, 60% of all new jobs will require skills that are held by just 20% of the current workforce.
- i What is the solution if as a country we are unable to meet these workforce demands? The continuation of programs which bring in foreign workers who have the expertise we lack domestically.
- i Next Congress we will consider the re-authorization of the H1B visa program. This program allows a variety of industries to extend invitations for employment to workers abroad to fill jobs they are unable to fill domestically.
- i A majority of these H1B visas are offered to workers in the fields of computer related occupations (58%) followed by engineering (12.2%) and educational research fields (7%). Companies like Motorola Inc., Oracle Corporation, and Microsoft Corporation are the

leading employers of these workers.

- ï I raise this issue not to discount the many contributions of these foreign workers to our workforce, but rather to further highlight the needs.
- ï It is important to note the lack of federal and corporate support for the investment in the training and development of African American, Hispanic, and Native American youth.
- ï As a country we are dedicating more and more federal dollars in the areas of research and development, yet we do not understand that in the coming years we will lack the researchers to develop our plans. We must invest now.
- ï As a member of Congress I understand from a policy perspective the importance of research. The recommendations of experts in the field, like many of you, are often the deciding factors in whether or not we dedicate federal dollars to a project.
- ï Further, I am often called upon to provide testimony before some of the most powerful committees of Congress. When I speak I call on you, the research and academic community, to provide statistics and data.
- ï The work you do is critical, you inform and guide the

political process more than you might think.

- ï Continue your leadership, get involved, vote, participate. Provide policy research to your elected officials at all levels on programs that are successful, conduct research and you will continue to be invaluable to the success of our community.
- ï Let me just close by speaking directly to the youth with us tonight. When I was a young person (*yeah, not that long ago*) I could not imagine that we could one day have a Latina in space. Today we do.
- ï Dr. Ellen Ochoa, a native of southern California, dreamed of space exploration as a young girl, she worked hard earning a doctorate degree in electrical engineering and co-inventing three patents for optical engineering systems. In April 1993, Ellen became the first Hispanic American woman in space and is now the veteran of four NASA Space Shuttle flights.
- ï Dr. Ochoa is the proof that when we put our minds and hard work behind a project we can succeed. Remember Dr. Ochoa when you think calculus and physics are boring and have no application in real life. They do and you will accomplish great things if you apply yourself.
- ï It is certain that the future workforce will bring great challenge and opportunity, so dream big and you will

achieve.

ï Thank you all very much.