

Statement of

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and

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before the

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Committee on Science, Space, and Technology  
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THE RELATIONSHIP BETWEEN BUSINESS AND RESEARCH UNIVERSITIES  
Collaborations Fueling American Innovation and Job Creation

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Good morning, and thank you Chairman Brooks, Ranking Member Lipinski and the entire subcommittee for the opportunity to testify before you today on a subject I am extremely passionate about.

My name is William Green, and I am the Executive Chairman of Accenture. I previously served as Chief Executive Officer from September 2004 to December 2010. I have been with Accenture for more than 34 years, and during my tenure as CEO, our global employee population doubled.

I also recently had the honor of serving as a Member of the Committee on Research Universities of the National Research Council.

I am testifying today in my capacity as Chairman of the Board of Accenture to discuss the relationship between business and our national research universities, which is critical to the future prosperity and security of our nation. In addition to discussing this issue with you based on my own experience at Accenture, I will draw upon the work of the Committee on Research Universities, which is detailed in its report, *Research Universities and the Future of America: Ten Breakthrough Actions Vital to Our Nation's Prosperity and Security*.

Accenture is a global management consulting and technology services company with over 250,000 employees serving clients in more than 120 countries. We are proud that more than 37,000 of those employees are based here in the United States, and last year, we hired more than 5,000 people in the U.S., many of whom came to us directly from college campuses.

Accenture has traditionally been one of the top college campus recruiters in the United States, hiring people with undergraduate and advanced degrees.

Accenture's business is helping companies and organizations improve their performance and competitiveness. We serve most of the global *Fortune* 500 companies, and I am privileged to see firsthand how critical skills, knowledge, technology and innovation are as the essential differentiators in competitiveness, high quality jobs and rising standards of living.

Global competitiveness is the key CEO issue, and having the talent to compete is what keeps CEOs up at night. The companies -- and the countries -- with the best talent win.

To sustain and enhance our standards of living -- to lead, and to ignite our economic engines to win -- it is about talent, research, and innovation.

Our national research universities are our secret weapons. They are a national asset we have invested in for decades. In fact, last year, I traveled to more than 40 countries. Every country wants to build national assets like we have, and they will. We must aggressively leverage this national asset to fuel our economic renaissance. Our universities are underutilized and underleveraged. We have a strength here we must utilize.

We have a profound shortage of talent, especially people with a background in science, technology, engineering and mathematics – the STEM disciplines that are so critically important today. We have little recognition of the vast power and potential at

our fingertips with these institutions, across government, society, and business. It is time to seize this opportunity!

### **National Academy of Sciences Report**

The NAS report -- *Research Universities and the Future of America* -- provides a compelling review of the strengths and challenges of our research universities and the opportunities and threats they confront as they move forward.

It also recommends 10 strategic steps that the federal government, state governments, universities and business can take to strengthen our country's university research. The recommendations are designed to accomplish three broad goals:

- (i) strengthen the partnership among universities, federal and state governments, philanthropy and business in order to revitalize university research and speed its translation into innovative products and services;
- (ii) improve the productivity of administrative operations, research and education within universities; and
- (iii) ensure that America's pipeline of future talent in science, engineering and other research areas remains creative and vital, leveraging the abilities of all of its citizens and attracting the best students and scholars from around the world.

Several of those recommendations focus on the need to develop new, enhanced partnerships between universities and business to prepare the next generation of talent,

build an innovation-driven economy, ignite our economic engines, and create new jobs with rising wages and standards of living.

Some highlights of the recommendations include:

#3 Accelerate Strategic Partnerships with business collaboration on research

- Improve time to innovation
- Create an “outcomes multiplier”
- Leverage assets and funding

# 8 Reform/Create new Graduate Degree programs. Business involvement to:

- Define Business Human Capital needs
- Shape curriculums to fill skill gaps
- Prepare for “jobs of the future”
- Create more “inspiration” of career potential
- Improve attrition rates

#9 STEM Pathways and Diversity

- Help institutions improve outcomes

#10 International Students and Scholars

- advocacy for attracting and keeping them

## **Pathways Through Graduate School and Into Careers**

People with graduate degrees drive research and development which fuels U.S. innovation and job creation. The Commission on Pathways through Graduate School and Into Careers, on which I served, urges increased attention to the issue of preparing graduate students for the broad array of careers available in the 21st century.

Among other things, the report specifically recommends enhancing professional development and training opportunities for graduate students, and increasing collaboration between higher education and business/industry.

I urge business leaders, as well as policymakers, to maintain investments in our graduate education system, so that investments are aligned with talent development to address key state and national needs and priorities.

## **Training the Next Generation of Business Leaders**

The NAS report found that businesses and universities should work closely together to develop talent. Again, talent is the great differentiator in the 21<sup>st</sup> century. Firms with the best talent win. Nations with the best talent lead. Our research universities have an excellent track record in turning out the talented individuals who have driven innovation over the last 50 years, by building the country's academic bench strength and supplying U.S. industry with the best, brightest and most innovative people. However, we must do more.

Experiments with graduate education, such as the professional science masters (PSM) program, have shown that deeper collaboration between graduate programs and

employers are able to address both the career aspirations of students and the strategic workforce needs for science-based employers.

As the report urges, employers -- businesses, government agencies and non-profits -- that hire masters and doctorate level graduates should more deeply engage with the programs being developed by research universities. They should provide internships, student projects, advice on curriculum design and real-time information on employment opportunities.

Businesses should seize opportunities to incentivize early stage research collaboration with universities. Over the last several decades, industry has largely dismantled the large corporate research laboratories that drove American industrial leadership in the 20th century (e.g., Bell Labs), but it has not yet fully partnered with research universities to fill the gap. Nor has it adequately partnered with university programs to help produce the advanced graduates that industry needs.

Let me take just a minute to discuss some of Accenture's partnerships with universities, which have proven to be highly rewarding.

### **Accenture's University Partnerships**

At Accenture, we collaborate on major research initiatives in a variety of ways. For example, through the Accenture Institute for High Performance, we've teamed with research institutions on the performance of American companies in the global economy, the implications of new information technologies on business and how to address the U.S. talent gap. These collaborative programs help us bring the best new thinking into

our research, forecasting and technology, which we can apply to our own business and to finding solutions to mission-critical problems for U.S. business.

The Institute has also conducted research with individual faculty to create specific deliverables such as tools for use in capability development, articles, data analysis and presentations at Accenture workshops. We have teamed on specific client engagements, including hiring faculty to serve as subject matter experts, and we have hired interns from graduate programs to participate in ongoing research projects at the Institute.

The Institute maintains an extensive network of relationships with individual faculty and research centers as a result of its publications. It provides peer reviewers in numerous academic publications and participates in professional societies and meetings, such as the Academy of Management, the Strategic Management Society, the Marketing Sciences Institute, the International Consortium for Executive Development Research and the Institute of Electrical and Electronics Engineers (IEEE). In addition, the Institute maintains a small number of close working relationships with faculty who serve as Institute Fellows.

Over the past five years, Accenture has had relationships with faculty and research centers at Harvard, Massachusetts Institute of Technology (MIT), Wharton, Carnegie Mellon, the University of Chicago, and the University of Virginia, among others.

At MIT, we have a joint research venture in the area of analytics to solve complex problems. At Harvard University, we are currently participating in a joint research and writing project on CEOs' perspectives on global talent management. At Babson

College, we are working on analytics strategy, which has led to the publication of two best-selling books and the formation of a new Analytics Business at Accenture.

In the area of cyber security, a popular topic with governments and the business community, Accenture funded and collaborates with the International Cybersecurity Center at George Mason University.

Accenture has also had a relationship that has lasted more than 10 years with the Software Engineering Institute (SEI) at Carnegie Mellon University. SEI is a Federally Funded Research & Development Center (FFRDC) that was established in 1984. Its focus is on software engineering-based improvements.

Developed by SEI, the Capability Maturity Model Integration for Development, CMM-DEV, in particular, is one of the most used quality models in the world and is the de facto standard for software development improvement. Accenture was one of SEI's earliest business partners and began implementing its models with clients in the mid-1990s.

Today, our partnership with SEI continues. A number of Accenture employees are certified appraisers and instructors, our business teams provide some client consulting related to implementation of SEI products, and we have also used the standards and models created by SEI for our own corporate benefit. Accenture is one of the largest users of the standards in the world, and we currently apply them to our largest delivery centers.

Mr. Chairman, as you know, our nation faces many business and economic challenges. Successfully meeting those challenges requires us to have a laser focus on

repurposing and leveraging our unique educational assets and research engines. Much of our past economic success and improved standard of living in the U.S. can be attributed to collaboration between government and our research universities.

By deepening and enhancing that collaboration, and aligning our businesses closely with them, we can ignite our next economic renaissance, creating innovation-driven, globally-competitive companies and jobs with rising wages that support improved standards of living.

Thank you for this opportunity to address the subcommittee on these issues so critical to our nation and our future.