

## **PROTECT AMERICA'S COMPETITIVE EDGE ACT (PACE ACT)**

The PACE Act is comprised of three bills implementing 20 recommendations contained in the October report by the National Academies of Sciences, *The Gathering Storm*. The Bill was introduced by four Senators: Lamar Alexander (R-TN), Pete Domenici (R-NM), Jeff Bingaman (D-NM) and Barbara Mikulski (D-MD). The purpose of this package is to help America maintain its leading edge in science and technology.

This report came in response to a question raised by Sens. Alexander and Bingaman to the National Academy of Sciences and Engineering and the Institute of Medicine in May 2005. **What are the top 10 actions that federal policy makers could take to enhance the science and technology enterprise so that the United States can successfully compete, prosper and be secure in the global community of the 21<sup>st</sup> century?**

In December 2005, Sens. Alexander and Bingaman met with President Bush at the White House to discuss the findings of the National Academies' report and the plans for the PACE Act legislation. They asked the President to make competitiveness and maintaining America's brainpower advantage a focus for the three remaining years of his administration. Only by doing this can America maintain our jobs, stay on top and be globally competitive in the future.

### **The potential impact of the PACE Act for Tennessee includes:**

#### **1) *Scholarships for 200 Future Tennessee Math & Science Teachers:***

Each year, approximately 200 bright Tennesseans would receive 4-year scholarships (up to \$20,000 a year) to earn a bachelor's degree in science, technology, engineering or math, while concurrently earning teacher certification. After becoming a teacher, he or she would also be eligible for a new fellowship (\$10,000 a year for five years) from the National Science Foundation, to encourage new teachers to stay in that profession.

#### **2) *Summer Academies for 1,000 Tennessee Math & Science Teachers:***

Oak Ridge National Laboratory (ORNL) and universities across the state such as UT, Tennessee State, Vanderbilt and Rhodes College would host one to two-week academies each summer for 1,000 Tennessee math and science teachers.

#### **3) *AP Training for 2,000 Tennessee Math & Science Teachers:***

The bill would provide training and support for 2,000+ Tennessee teachers to teach Advanced Placement (AP) classes or pre-AP classes.

#### **4) *Support for a Proposed Math & Science Specialty High School:***

The State of Tennessee would be eligible to partner with ORNL for financial and expert assistance in teaching at a new residential high school specializing in math and science that students from across the state would be eligible to attend.

**5) *High-Tech Internships for Tennessee Middle and High School Students:***

The bill would provide unique internship and program opportunities for Tennessee middle and high school students at ORNL, the UT Health Science Center in Memphis, and other technology and scientific research facilities across the state.

**6) *Scholarships and Fellowships for 600 Future Tennessee Scientists:***

Each year, about 500 Tennesseans would receive 4-year competitive scholarships (of up to \$20,000 a year) to earn a bachelor's degree in science, technology, engineering or math. About 100 Tennesseans who have already earned their bachelor's degrees would receive competitive graduate research fellowships to cover education costs at schools across the state from East Tennessee State to the University of Memphis.

**7) *Growing Tennessee-based Research to Produce New High-Tech Jobs:***

The bill would increase research and development spending by 10 percent per year for seven years at several federal agencies, thereby creating hundreds of new research jobs at Tennessee research institutions like the ORNL, UT and Vanderbilt. This investment could generate dozens of new high-tech companies in Tennessee in next decade.