



# CALIFORNIA COUNCIL ON SCIENCE AND TECHNOLOGY

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December 7, 2006

The Honorable Governor Arnold Schwarzenegger  
State Capitol Building, First Floor  
Sacramento, CA 95814

Dear Governor Schwarzenegger:

For many decades, California has been a magnet for attracting creative talent in research, education, and innovation. That talent has transformed every economic sector—health and medicine, communications, education, transportation, manufacturing, and the entertainment industry. The world has long looked to us for new ideas and marveled at our remarkable achievements.

But California is at a crossroads, and executive decisions made in the near term will shape the future and determine whether or not we stay at the vanguard of research and discovery while maintaining an economy that thrives on California-based creativity, informed risk taking, and investment in innovation. Unless bold action is taken now, the state will quickly face significant challenges. Our K-12 educational system, for example, is far from the powerhouse it once was. Shifts in the economic and business climate, as well as federal provisions regarding non-U.S. citizens threaten our ability to attract and retain the best and the brightest for research and innovation. Furthermore, California's competitive environment is being adversely affected by high energy costs—30% above the national average. We should be looking for opportunities to provide Californians and California businesses with near and long term options to meet the twin goals of economically attractive energy supplies as well as mitigating potential environmental impacts including climate change.

At the national level, similar issues were highlighted in the National Academies' report "*Rising Above the Gathering Storm*." But as you have stated, California is not waiting for the federal government to provide leadership. At your request, we have examined these issues within the context of our state with the assistance of corporate leaders who are committed to ensuring that California's economy remains strong.

We are pleased to present to you our findings and recommendations, which, we believe, provide a road map for California's future. We also see the potential for your administration to leave a powerful legacy—an opportunity to chart the course for systematic and ongoing innovation, leadership, and achievement. Science and technology long have under girded our state's economy, but we also know that the future is anything but certain. We strongly believe that an opportunity exists now for bold actions that reassert California's unique attributes as the premier S&T leader in the nation. The consequences of inaction are great; small actions will likely only

achieve small results. Therefore, whatever actions are taken must be of a scale large enough to have a measurable impact.

Given the need for decisive action, our recommendations focus around a few key themes that build on your unique blend of experience as a political leader and as a business leader in the entertainment industry. CCST reached consensus on these recommendations by convening four CEO-led task forces to address issues of K-12 science and mathematics education, science and engineering research, research talent, and innovation. We particularly wish to point out four compelling areas they identified for specific attention. The task forces concluded that you should:

- Initiate an aggressive “California Campaign for Talent” by creating a highly competitive environment that attracts and retains top talent in science, technology, engineering, and mathematics (STEM), both from the U.S. and around the world. This initiative is about bringing to California the best and the brightest in all fields—including K-12 teaching—and it will require that we both increase our support for K-12 science and mathematics teachers and reexamine some of the difficult issues of immigration posed by a post-9/11 world.
- Fully leverage your position with the entertainment industry to make S&T education and careers the envy of all youngsters across all segments of California’s diverse population. Were you to lead this as a key communications campaign, your influence could generate enormous enthusiasm, and gain significant traction across a wide range of sectors—from students across diverse cultural and economic backgrounds, to K-12 teachers and leaders within higher education, entrepreneurial enterprises and industry.
- Create a cabinet-level science and technology policy function, similar to the White House Office of Science and Technology Policy. Doing so would elevate S&T issues to the place where they rightfully belong—among the highest of priorities in the state—and help ensure that California remains the most competitive location in the world for S&T education, research at the frontiers of knowledge, and innovation.
- Make California the most productive place in the world to do research and to innovate through strategic investments in research that address grand challenges and business-friendly policies that support investments in manufacturing and R&D.

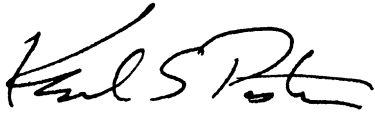
The work of each task force generated much discussion and, at the same time, enormous enthusiasm, imagination, and hope. Each of us comes from the perspective that California holds a unique position in the world: a history of creativity and invention; a culturally rich and diverse population; a research and educational infrastructure that is second to none; and, leadership that strongly values the role that a robust S&T enterprise plays in enhancing the quality of life.

We are heartened, as well, that you have taken an interest in the compelling findings of the Academies’ report, and view them as a guide to shape the State’s future. We each were enormously gratified to be involved in this effort, and are ready to continue working on these issues with you.

The consolidated recommendations from CCST's four task forces are enclosed. Additional detail for each issue is available upon request.

We would appreciate the opportunity to meet with you to carry these messages to you in person.

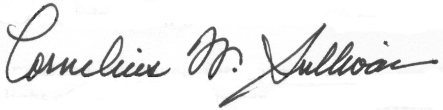
Sincerely,



Karl S. Pister, Ph.D.  
Board Chair



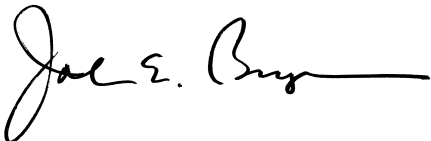
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Enclosures: Task Force Members  
Task Force Recommendations

cc: Susan Kennedy, Chief of Staff, Office of the Governor  
Bonnie Reiss, Senior Advisor, Office of the Governor  
David Crane, Special Advisor for Jobs and Economic Growth, Office of the Governor  
Sunne Wight McPeak, Secretary, Business, Transportation and Housing Agency  
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