COUNCIL OF SCIENTIFIC SOCIETY PRESIDENTS

1155 16th Street, NW • Washington, DC 20036 • 202-872-4452 • FAX 202-872-4079

May 4, 2010

We represent the leadership of over 1.4 million scientists in over 150 scientific disciplines.

The acceleration of greenhouse gas (GHG) emissions from human activity is increasingly leading to harmful climate change and ocean acidification. Societies must act urgently to reduce these emissions to protect the life-sustaining biophysical systems of the Earth. As noted by DoE Secretary Steven Chu in his April 28, 2010 testimony to the Senate Subcommittee on Energy and Water Development, the necessary transitions "will require nothing short of a new industrial revolution." We agree with this assessment of the scale of response needed. We need to work aggressively to conserve energy and increase the efficiency of energy use, and we need rapidly to develop less polluting energy systems. Objective science has a critical role to play, and we urge that the nation fully use and incorporate the best available science in designing and implementing the energy and environmental policies necessary to guide the revolution.

America should move ahead quickly to develop a comprehensive energy policy to greatly reduce our GHG emissions. We urge that any potential approach be first evaluated in terms of the net benefits on environmental integrity, including a full analysis of GHG emissions, recognized by the Supreme Court as air pollutants, as well as other environmental concerns. The analysis of GHG emissions should include indirect land use effects and emissions of methane and nitrous oxide as well as carbon dioxide. No policy should be implemented without a full understanding of the consequences on the environment. Uncertainties will remain, which points to the necessity of also having the ability to reverse a policy action if unintended consequences are discovered.

Some energy bridges that are currently encouraged in the transition away from GHG-emitting fossil energy systems have received inadequate scientific analysis before implementation, and these may have greater GHG emissions and environmental costs than often appreciated. We find that their environmental impact studies and EPA determinations necessary to proceed are absent or inadequate. These include the production of ethanol from corn, where recent, more inclusive research concludes this is a poor option. As scientists we are concerned about the impact of the ethanol scale-up on water supply and quality, land use, GHG emissions, and net energy gain. In 2007, the nation used 27% of its corn harvest to produce 1.3% of total liquid fuels. One unintended result is greater nutrient flows down the Mississippi River, aggravating the ecological disaster underway in the Gulf of Mexico. Other biomass fedstocks produce more energy from less land, with less environmental harm. A recent report from the National Academy of Sciences lists many topics that deserve further scientific scrutiny before the nation further expands the role of ethanol as a fuel.

The production of natural gas (methane)from shales represents a major new domestic energy resource that can reduce reliance on imported crude oil. However, the development of methane from shale formations is another example where policy has preceeded adequate scientific study. Economic recovery of methane from shales requires the drilling of long-reach horizontal wells and the high-pressure injection of millions of gallons of water with chemical additives to release the gas through a process called hydrofracking. Despite the utilization of millions of gallons of water and the flow back to the surface of these injected fluids, hydrofracking is exempted from the Clean Water Act. Exploitation of the Marcellus Shale Formation in the Appalachian basin, recognized as the largest shale-gas reserve in the U.S., could occur across a five-state region. Prior, thorough science-based studies are required to evaluate the impact of massive shale development on rural land uses, water supply and quality, and full-life-cycle greenhouse gas emissions.

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Courrier International Blogs (Blog)
The cloud chamber was used in the discovery of the first antiparticle, the positron, for which CD Anderson (of Swedish descent) was awarded the 1936 Nobel ...

Protein Implicated in Many
U.S. News & World Report
The protein showed up in 11 kinds of tumors examined by a French-US research team but was notably absent in most healthy tissues. The discovery suggests ...
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Gene therapies for
Mass Device
... reported in the journal Alcoholism: Clinical & Experimental Research the discovery of a gene that influences individuals' responses to alcohol. ...
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Space Shuttle Discovery: A
RedOrbit
The new module will be a storeroom and provide additional research space. Robonaut2 is a technology demonstration to learn how humanoid robots can assist ...
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Welcome to the CSSP FrontPage

CSSP Goals And Objectives

CSSP is organized for the following purposes:


House Transportation Chairman, James Oberstar (D-MN), discusses forthcoming Clean Water Act renewal with CSSP


FDA Commissioner, Margaret Hamburg, and Deptartment of Interior Asssitant Secretary, Anne Castle, discuss with CSSP issues they will be addressing in coming years


S&T Chairman Bart Gordon (D-TN) discusses mathematics issues with C. Kessel (AWM) and T. Chan (NSF)


Tom Friedman, three time Pulitzer prize winner, exchanges ideas on how science can impact big global issues with House Science Agencies Appropriations Subcommittee Chairman, Alan Mollohan (D-WV)

To perpetually enhance leadership skills development in the science community;

To develop an enduring network of past and present national leadership in science;

To provide communication and collaboration among the various scientific disciplines through the presidents of scientific societies;

To deliberate and adopt public policy positions and act upon science research and education issues of national or international scope;

To develop ways to enhance the public understanding and appreciation of science;

To foster scientific research, science study, and dissemination of discoveries; and

To improve the free flow of scientific information.


National Science Foundation Deputy Director, Cora Marrett, says most education research at NSF will be hypothesis driven and evidence based

Gene discovery reveals new
Zenopa
New research from Yale University published in the medical journal Nature Medicine has shown that the gene MKP-1 may be responsible for deactivating a ...
Autres articles »

Italian bank backed Cabot
Montreal Gazette
Historians probing medieval archives and a dead scholar's research notes have unearthed surprising new details about the financing of John Cabot's 1497 ...

PM wants new ways to
Sify
It is meant to facilitate sharing of research results on drug discovery. The PM said an equal amount would be raised from the international community for ...
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PPD Appoints Andreas
MarketWatch (press release)
PPD is a leading global contract research organization, celebrating 25 years of providing drug discovery, development and lifecycle management services. ...

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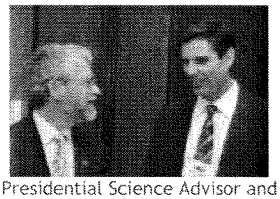
C. Seeley (NCTM) explains mathematics education needs to Director A.Bement (NSF) and president R.Cicerone (NAS)


NAE President C. Vest (center) addresses engineering grand challenges with CSSP


Arun Majumdar, Director of ARPA-E, explains his strategic approach to energy progress with NCTM president H. Kepner


Craig Barrett, Chairman of Intel, and Linda Darling-Hammond, Stanford Graduate School of Ed., focus on how to improve US education outcomes


Presidential Science Advisor and Director of OSTP, John Holdren, discusses Mark Jacobson's data on reaching 100% of zero CO2 emitting energy by 2030

What is CSSP?

The Council of Scientific Society Presidents is an organization of presidents, presidents-elect, and recent past presidents of about sixty scientific federations and societies whose combined membership numbers well over 1.4 million scientists and science educators.

Since 1973 CSSP has served as a strong national voice in fostering wise science policy, in support of science and science education, as the premier national science leadership development center, and as a forum for open, substantive exchanges on emerging scientific issues.

Council membership spans the top elected officers of the full spectrum of physical, mathematical, and life sciences, and science and mathematics education. The Council is supported by dues and contributions from the supporting societies and annual contributions from Institutional Affiliates.


CSSP Presidents Visiting in the White House.

The current CSSP Brochure in PDF format can be viewed/downloaded here:

2009 CSSP Brochure

Read more...

The Council of Scientific Society Presidents

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OUR FOURTH DECADE OF CSSP LEADERSHIP

Martin Apple, President

CSSP President Martin Apple

The Council of Scientific Society Presidents celebrates its 37th anniversary this year. It has evolved since its formation in 1973 into the nation's premier center of science policy development and science leadership development. CSSP successes have been built on the effectiveness of communications among our members. Earlier in our history, the pace of change permitted us to consider ideas and actions over a period of years before action was necessary. Our semi-annual meetings sufficed to provide the communications needed for effective decisions and the time to ensure their evolution into new national policy and actions. The pace of change in the 21st century no longer permits this luxury.

As scientists, our passion and commitment is to discover new knowledge. This new knowledge improves our lives, our economy, our environment, and our society. We have experienced four to five decades of unprecedented growth in science investment and scientific discovery. The last decade of the 20th Century witnessed the end of the Cold War--appreciated only in retrospect as a major driver of that discovery and investment--followed by the abrupt halt of the growth of federal investment in science. At the same time, international economic competition has caused a shift in our industrial investment in research from long term to short term, so that now only about 5% of that industrial research is fundamental science. While these two developments are serious and need our attention, even more disturbing is a recent study that shows our nation's children compared to the rest of the world complete high school at the bottom of the scale in mathematics and science achievement.

The health and robustness of scientific endeavor underpins the nation's future. Our community of scientists see the 21st Century as an unparalleled period of development in new fundamental knowledge, of research-based economic growth, of development of human potential through effective life-long learning, of preemptive health care, and of world -wide environmentally-sustainable development. A rapidly growing fraction, now exceeding over two-thirds, of our commercial patents stem from university-based federally sponsored scientific research. Yet our "return on investment" over decades of measurement of federally funded scientific research is 25-50% a year, year after year, still so high that it indicates a significant degree of underinvestment. The growth in that small fraction of our GDP that encompasses the young "high tech" industries accounted for one-third to one-half of national economic growth in the

1990s. Much of this new knowledge and economic oportunity will grow in other nations in the 21st Century. The Nation has the largest economy and started this decade with the largest federal budget surplus in history, due in large part to past federal investments in fundamental science.

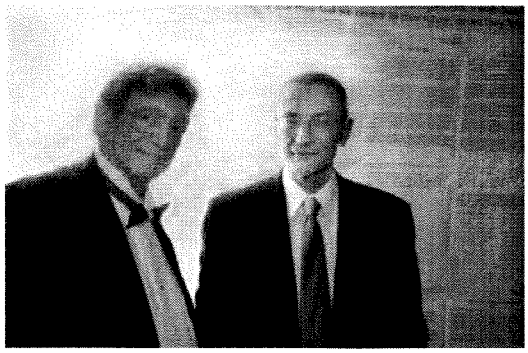
In the difficult transition at the end of the 20th Century we faced ongoing rapid readjustments to new political, economic and scientific realities. We have entered an era characterized by new threats that require innovative solutions to maintain our security, freedom and liberty and the greatest environmental threats in centuries. The consequences of deepening national debt and negative trade balances are a dark cloud over future investment in science. The science community will help the Nation to overcome these threats-we are unalterably committed to ensuring that freedom and liberty prevail as the future direction of mankind in a sustainable world.

CSSP is taking responsibility and leadership to establish those policies and programs that will ensure a bright future for 21st Century science. We have established our own goals for the 21st Century: (i) newer understandings of nature, (ii) achieving sustainable systems, (iii) maximizing lifelong learning, (iv) preempting mental and physical disease, (v) vibrant economic systems, (vi) energy autonomy, and (vii) reimagining science as the foundation for creating the most positive futures. We must be vigilant to ensure that we seize every opportunity to make them happen.

CSSP works to ensure a strong scientific future for the nation. CSSP can look back on many achievements and growing influence. CSSP has worked for a public accounting that keeps track specifically of university-based and peer-reviewed research investments and supports an active White House Office of Science and Technology Policy. CSSP keeps in touch with and advises all members of Congress interested in and working on issues relevant to science and mathematics, as well as heads of Federal Agencies regarding their plans and policies for science and technology. This successful activity is made possible through the unique network of the top science leadership worldwide.

Just ***imagine*** what scientists' passionate commitment can do to make our lives healthier, our environment healthier and our society healthier! We honor our commitment. Join us in investing in people's future. Support unleashing our imaginations. Our discoveries inspire our next generation of youngsters, will create entirely new kinds of careers for them, will improve our quality of life, open exciting new horizons that expand our freedom, and make a clean, safer, better environment.

We are the constituency for the future and that requires that we perpetually expand the quality of our scientific leadership. Science is hope. We need your help to make it happen.



Martin A. Apple, CSSP president (left), and John Podesta (right), leader of President Obama's transition team, discuss the prominence of science in the new Administration.

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