



CCST Council Meeting

Susan Hackwood
California Council on Science and
Technology
October 19, 2010

CCST is a not-for-profit organization created to provide credible, independent and objective findings on public policy issues involving science and technology



CCST is now comprised of...

- 16 Board Members
- 30 Council Members
- 135 Senior Fellows
- 12 Cal TAC Members
- 10 S&T Policy Fellows

And includes:

- 5 Nobel Laureates
- 84 National Academies' Members
- 10 National Medal of Science or Technology Recipients
- 5 National Board Certified Teachers

- First state program in the nation placing Ph.D.-level or equivalent scientists and engineers in formal fellowship program in a state legislature
- Modeled after AAAS Congressional S&T Fellows Program
- Five-year pilot program will place up to 10 fellows/year for one-year appointments in Assembly and Senate legislative offices



- 5 in State Assembly, 5 in State Senate
- In members' offices or committee staff
- Includes Assembly Republican Caucus and Senate Office of Research
- Developing bill ideas (in some cases writing bills)
- Analyzing bills
- Writing reports for the Legislature

"We want to thank all of the science fellows for a marvelous year... It's been tremendously productive."

- Senator Joe Simitian (Palo Alto) 8/20/10



2010-11 Fellows

- 2 neuroscientists
- 2 entomologists
- 1 horticulturist
- 1 zoologist
- 1 integrative biologist
- 2 chemists
- 1 engineer

UC Davis, Cornell, UC Berkeley, UCLA,
U Minnesota, UC Irvine, U Chicago

Recruiting the 2011-2012 Class of Fellows

- Contact relevant graduate programs across the country, as well as assistance from other organizations to expand and diversify recruitment
- New recruitment cycle: 12/1/10 – 3/31/11
- Welcome ideas to identify remaining funding needs

California Science+Technology+Policy Fellowships

Can you apply the laws of science to the science of laws?

An exciting California Fellowship opportunity!

The California Council on Science and Technology seeks PhD scientists and engineers to serve as Fellows to provide the California State Legislature with critical, unbiased scientific and technical advice. If you are looking for a professional development opportunity that enables you to incorporate science and technology into public policy, we encourage you to apply for a one-year fellowship.

Applications for the 2011-2012 program will be accepted starting on December 1, 2010. For information or to complete an on-line application, visit fellows.ccst.us.

Members of the Fellows' class of 2009

CALIFORNIA COUNCIL ON SCIENCE AND TECHNOLOGY

Personalized Healthcare



- Developing new model of electronic health record system platform as prototype approach
- Benchmark model being developed in domain of diagnosing and treating breast cancer
- Three key case studies developed, being used to develop an appropriate ontology to support the knowledge-based system
- Ontology: knowledge representation model that allows information to be aggregated, integrated, and evaluated based on commonly understood terms

Ontology panel

- Hope S. Rugo, M.D. (lead) Professor of Medicine, Director, Breast Oncology and Clinical Trial Education, UCSF Helen Diller Family Comprehensive Cancer Center
- Matt Williams, M.D., Ph.D., Clinical Oncology SpR, University College London
- Maryann E. Martone, Ph.D., Professor-in-Residence, Department of Neurosciences and Co-Director, National Center for Microscopy and Imaging Research, UCSD
- Barbara Parker, M.D., Medical Director, Oncology Services, UCSD Cancer Center

Intended outcome

Records



Genomics



Open source, publicly available application ontology that reflects the domain and provides a suitable platform for integrating both clinical and genomic data.

Ontology will be comprehensively evaluated & used in final product of pHIT pilot study.

Insurance



Care Providers



A unique partnership



Business, Transportation
& Housing Agency
State of California



UC San Diego



University of California
San Francisco



Turning the promise of genomics
into the practice of medicine™



MYRIAD.



CALIFORNIA'S ENERGY FUTURE

- CEF report being completed, going out for peer review within the month
- Report focuses on what California must do in order to meet its aggressive 2050 target of reducing greenhouse gases to 80% below 1990 level
- How far can we go with existing technology? What is the technology gap between this and meeting the 2050 target? How can the gap be filled?



Bounding Portraits

Examine outer bounds of what specific technologies could achieve in 2050

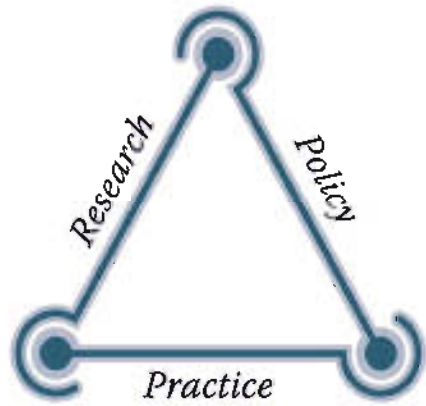
Realistic portraits

Combinations of efficiency measures, supply technologies, transportation system choices to identify “gaps” between what these energy cases could actually provide given constraints in the real world



CALIFORNIA'S ENERGY FUTURE

- Experts from LLNL, LBNL, UC Davis' Institute of Transportation Studies, Stanford's Energy Modeling Forum, EPRI, and the NRDC help CEF team leverage energy expertise within California
- Legislative staff briefed on report in August
- Burt Richter will testify on report to California Senate Energy, Utilities & Communications Committee on October 27



CaTAC

California Teacher Advisory Council

Cal TAC to hold a second symposium
October 21, following highly successful
one in 2009

*Working Towards an Assessment System
with Value:
Informing and Strengthening STEM
Teaching and Learning*

Focus will be on high quality formative and summative assessments
as the base on which learning and teaching rest

First step in ongoing process to inform policy

Legislative request for report on California's innovation infrastructure



The bipartisan signatories include the letter author, Assembly member Portantino, President pro Tempore Darrell Steinberg, Senator Negrete-McLeod, chair of the Senate Business, Professions & Economic Development Committee, Assembly member V. Manuel Perez, chair of the Assembly Jobs, Economic Development & the Economy


Assembly Member Anthony J. Portantino


President pro Tempore Darrell Steinberg

Dear Dr. Pister:


Assembly Member Sam Blakeslee


Senator Dean Florez

It has been a pleasure to work with CCST on the implementation of the Science and Technology Fellowship. We are very impressed with your work and commitment to laudable pursuits, as well as the caliber of individuals you have selected to work as Fellows in our legislative offices.


Assembly Member Marty Block


Senator Gloria Negrete-McLeod


That is why we again turn to you and your staff to request assistance with an additional important undertaking on behalf of our great State.


Assembly Member Joan Buchanan


Assemblymember Jared Huffman

The types of information we would like to see in an assessment and report should include, but not be limited to, the following:


Assembly Member Wilmer Amina Carter


Assemblymember V. Manuel Pérez

- (1) A discussion of the changing nature of science and technology innovation in the 21st century and identification of emerging S&T innovations and innovation trends.
- (2) A discussion of California's innovation capacity and global competitiveness in science and technology.


Assembly Member Connie Conway


Assemblymember Sandra Swanson

- (3) Identification of barriers to innovation and productivity in science and technology.
- (4) Recommendations for strategies and methodologies to improve the state's competitiveness in science and technology innovation.
- (5) Recommendations for facilitating economic growth and employment opportunities made possible by science and technology.


Assembly Member Nathan Fletcher

Request asks that report include:



- Discussion of the changing nature of S&T innovation in the 21st century
- Discussion of California's innovation capacity and competitiveness
- Identification of barriers to innovation and productivity in S&T
- Recommendations for strategies and methodologies to improve state's competitiveness in S&T innovation
- Recommendations for facilitating economic growth and employment opportunities made possible by S&T

Approach



- Water and Education prominent issues
- To kick off discussion on digital education, CCST partnering with CSU East Bay and Technet to host a digital education forum held October 14
- Roundtable discussions will then bring together leaders to explore issues impacting the state:
 - UC Merced – October 26
 - Stanford – October 27
 - CSU San Marcos – October 28
 - CSULA – October 29
- CCST proposes “fast-track” approach to deliver preliminary report in December 2010 to coincide with legislative process and Governor-elect’s transition



smart meter project

Assembly Members Huffman and Monning request to CCST:
are there health safety issues regarding the new SmartMeters
being installed by utilities?

“I request that the Council specifically determine whether FCC standards for SmartMeters are sufficiently protective of public health taking into account current exposure levels to radiofrequency and electromagnetic fields, and further to assess whether additional technology specific standards are needed for SmartMeters and other devices that are commonly found in and around homes, to ensure adequate protection from adverse health effects.”



smart meter project

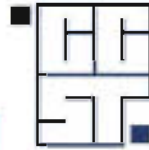
- Project Team chaired by CCST Board Member Rollin Richmond
- CCST has approached over 2 dozen technical experts to contribute their opinion to inform CCST response
- Special attention being paid to real or perceived conflicts of interest
- Experts being asked to provide written comments, referrals to other experts, and literature that should be reviewed



INVITATION
to a Private Screening of

HUBBLE 3D

Tuesday, May 25, 2010
5:30 p.m. — Reception
6:45 p.m. — Program and Movie
Esquire IMAX Theatre
1211 K Street, Downtown Sacramento



Sacramento
goes to the
movies



Laboratory Affiliates



SLAC



JPL



SLAC



JPL

- California Congressional delegation not fully informed of the instrumental role that the California Federal Labs play in overall California economy
- Outreach meetings with members of Congress over the summer designed to redress situation

NASA DC trip, July 2010

- All offices receptive to CCST's message in support of the NASA FY2011 budget and the impact NASA Federal Labs have on the overall California economy
- Also hosted lunch briefing with California Institute for Federal Policy Research for congressional staff interested in NASA and the Federal Labs
- Closed loop with senior NASA headquarters officials, provided overview of presentations to Congressional Members & staff, as well as feedback received



Trust and Accountability in Science and Scientist



Humans don't cause climate change.



Bananas as good as drugs for treating HIV, say scientists



Spinning Scientific Stories

CPUC ANNOUNCES EXPERT PANELISTS FOR INDEPENDENT STUDY OF SAN BRUNO EXPLOSION

SAN FRANCISCO, Oct. 14, 2010 - The California Public Utilities Commission (CPUC) today announced the names of the experts of an Independent Review Panel that will conduct a comprehensive study and investigation of the September 9, 2010, explosion of a Pacific Gas and Electric Company (PG&E) pipeline in San Bruno, including examining the root causes and making recommendations for action by the CPUC to best ensure such an accident is not repeated elsewhere.

Karl S. Pister, Chair of the Governing Board of the California Council on Science and Technology; Chancellor Emeritus, University of California, Santa Cruz; Dean and Roy W. Carlson Professor of Engineering, Emeritus, University of California, Berkeley