

April 3, 2008 Teleconference

Meeting convened at 2:00 pm

Members Present:

Michelle Broido, BERAC Chair  
James Adelstein  
Gene Bierly  
Bob Dickinson  
James Ehleringer  
Joanna Fowler  
Ray Gesteland  
David Kingsbury

Steve Larson  
Margaret Leinen  
Stephen Padgett  
Joyce Penner  
James Tiedje  
Ray Wildung  
Mavrik Zavarin

Ray Orbach, Under Secretary for Science

- Welcome to Anna Palmisano as new Associate Director for BER
- Thanks to Bob Dickinson for chairing workshop last week on climate. A number of specific questions raised by Senator Domenici at hearing last week on climate.
- Thanks to all who helped with the workshop. Speculation that it may impact legislation. Keep Ray in the loop as versions are available.
- Bush quote on why SC budget was proposed. Last few years have been increasingly difficult. President continues to put limited discretionary funds into science. Lots of SC \$ have been redirected in prior years. Extraordinary commitment to science by the President and to the physical sciences. Issue not with the President but through the people and their elected representatives.
- Reason for this call – first House mark of budget will be before May BERAC meeting. Don't want to start after it's too late. Have given same remarks to all advisory committees.
- Favored status of BER. FY08 appropriation above President's request. ASCR the only other part of SC that got additional FY08 funds above request. Message that our programs are of utmost importance to congress both in biology and the climate sides. Language to this effect in the Appropriations bill. Our responsibility to show that their confidence is warranted.
- Work remains. Biofuels – haven't made anticipated breakthroughs yet but on track. Climate – will be looked at more and more as the effective lead agency by Congress (NOAA is the official lead) as they look for the basic science to inform policy.
- Don't take this for granted.
- Status of BER slide. BRCs up and running – very exciting. Sustainability high on the national agenda today and GLBRC has an emphasis on sustainability – of critical importance to the country.
- Broadening of radiochemistry and instrumentation program for greater utility to DOE.
- Support we got from Congress based on success and promise.

- BRCs – Distinct but interwoven. Work with each other in interesting fashion. Very complementary. Covering the field of biofuels in a fascinating fashion. Looking to reach 2022 goals of 36 equivalent gallons per year of liquid biotransportation fuels. Not just about ethanol. Focus on both microbial and plant inputs for gasoline equivalent fuels with higher energy content than 2 carbon ethanol. Center involve broad collaboration at many institutions.
- Climate - ~\$20M more requested in FY09. Working to ensure that US is a leader in climate prediction tools and environmental observation and measurement. Goal to make US the leader.
- BER now well beyond the half billion level. A remarkable achievement. Congratulations. Artificial retina – wouldn't have happened without us and our contributions in materials.
- The plan for BER – Final bullet is key! The advisory committee and your colleagues are key. Important that constituency understand its responsibility. Not an entitlement. In the midst of many tough years. Among many sound competing programs across government competing for limited discretionary resources. These other programs are just as important to their constituencies as we are to ours. Can't tell you what to do – that's up to you. If we don't make our case the President's request will not see the light of day. Needs to be done as part of the SC budget. Implore you to do what you believe is necessary and effective in communicating the case for science and the President's budget.
- Our challenge – essentially flat enacted budget over last 3 years.  $\frac{3}{4}$  increase requested from FY08 to FY09. Every temptation to take the SC request to fund other priorities that the Congress feels are important. This budget is not a done deal in spite of the America COMPETES Act and the Advanced Competitiveness Initiative.
- Specific example slide 11. Science has lost \$790M over the past two years from the President's Request. This money will never be recovered.
- It is now up to us make the case.

#### Comments / Questions

- \$17.5M increase for nuclear medicine research in FY08. Presumed based on NAS report. No inclusion of support in FY09. ~\$13M in FY09 request. Renaming in FY09 as Radiochemistry and Imaging research. More discussion at May BERAC meeting.
- When is the first markup expected? House – HEWD Subcommittee about mid April? Senate – late June / mid July?
- Viskowsky complaining about EERE cuts. Are other parts of DOE looking to SC for donation of funds? Yes. What are members of Congress taking home “for them?” Should we get in and talk about details? Many members interested in and impacted by DOE? Our interest goes beyond the DOE labs. All of their constituents are affected by research in this area, especially BER.
- Environmental Remediation – Does Congress really understand what our contributions are to the science of remediation? Not apparent from documents that I read. Working hard in the DOE to bring together the basic and applied research areas to put together an integrated research budget. 6 areas of integration – one is in environmental remediation – EM and SC. Especially contaminant motion

underground. The use of microbes so they don't migrate. Now this coordination is explicit in the budget. We both do our own research but they are coupled together. Important because EM has reduced its financial commitment to research over the past years. They are beginning to increase their financial commitment again but it will take time. Have constituent interests across the country.

- Bioenergy – Recent challenges to bioenergy agenda, e.g., Time – traction in Congress? Absolutely. There have been several in Science as well. Responses based on the Science have been made in the past. Confusion between corn-based and cellulosic ethanol just so wrong. Lumping like this is a dangerous communication issue. Different in terms of CO<sub>2</sub>, energy balance, land use – just missed the whole point. Staff does so much work. Why couldn't someone like Jim Tiedje call Dixon Butler (202-225-3421) (Clerk of HEWD on Appropriation).
- Nuclear medicine – long term mission for developing tools for nuclear medicine? Will start looking at this in a different way than we have in the past. Broadening not leaving the radiochemistry and imaging areas. We now have isotope production responsibility. SC playing more important role for the nuclear medicine community. Working Group meeting with Nuclear Physics, BER, NIH – we aren't doing human health component. Workshop sometime this summer/fall with nuclear medicine community to prioritize the resources we have and need for research. Community uses tools from SC. What should SC be doing?
- Concern that there is reluctance to use the term nuclear medicine at DOE. Multi billion industry developed because of BER / SC support in the past. Still very big need. What do you mean by "broaden?" Want community to lay out what it's needs are. We will do everything we can to meet those needs. No intention for diluting opportunities to be outlined later this year. Looking to expand to broader applications for DOE mission needs.
- Thank you to BERAC members for your invaluable advice!

Michelle Broido, BERAC Chair

- At last BERAC meeting we heard presentations 2 joint BERAC / ASCAC reports. Will discuss not what we hope is final report on climate. GTL report not ready for final discussion yet. ASCAC still has concerns with the GTL report. This report will be discussed at the May meeting. Generally supportive of the climate report at our last meeting. A few management issues, e.g., allocation of computer resources for investigators already funded for research – this has been addressed in the latest version of the report before BERAC now.
- Specific comments raised by BERAC members at last meeting have been addressed in latest version of this report.
- Role call vote – unanimous approval of those members present

Meeting adjourned 3:10 pm