

## **DOE Biological and Environmental Research Advisory Committee (BERAC) Meeting**

**Teleconference held June 17, 2011**

BERAC members in attendance:

Gary Stacey, Chair  
Janet Braam  
Robert Dickinson  
James Ehleringer  
Paul Gilna  
Susan Hubbard  
Andrzej Joachimiak  
Ruby Leung  
Jay Mace  
Stephen Padgette

Joyce Penner  
Karin Remington  
Philip Robertson  
Gary Saylor  
Hank Shugart  
James Tiedje  
Judy Wall  
Warren Washington  
Mavrik Zavarin  
Minghua Zhang

David Thomassen (Designated Federal Official)

David Thomassen opened the meeting and announced that it was an official BERAC public meeting. Records are being taken and a recording is being made. This will be made available via website.

The reason for the call is to review a draft BERAC data policy document that was prepared in response to an official charge from the Office of Science (SC). Each of the SC programs is having to deal with this. It's part of a broader Federal effort. The National Science Foundation has held meetings on this. What the committee submits to SC will be combined with input from the other SC Advisory Committees. The way information was gathered was discussed at the previous BERAC meeting. Individual BERAC members responded to a questionnaire for their own areas of science. This material was compiled by David into the current draft document.

### DISCUSSION

QUESTION: What is the actual arrangement of responses?

The bulleted research areas were the areas identified as the fields you identified as the ones you represent. For some of the questions, there seemed to be a lot of information for individual fields so it was broken down by discipline area. However, there is not a discipline breakdown in each section.

Susan Hubbard stated that on page 13 there are some comments on subsurface science. The surface biogeochemistry program recently held a data management workshop and has made some real tangible steps in improving their protocols. Susan will provide this update.

Paul Gilna added that there are specific data release policies cited for the Bioenergy Research Centers that are not called out here because it needs to be added or that it's essentially assumed by the general genomic sciences data release policies.

QUESTION: Is this information on the Bioenergy Research Center websites and easily accessible?

Paul Gilna stated that it's a policy that was essentially written by DOE BER and that has been applied to all of 3 centers. We all follow the same policy, and it's essentially a BER policy that is part and parcel of the funding here.

No other comments.

QUESTION: How was access provided and controlled?

No comments.

QUESTION: Is access limited in any way?

Jim Tiedje stated that the second paragraph on the large amount of DNA sequence makes an important point that needs to be recognized by the public. There's going to be so much data that it's not going to be feasible to have it all available.

In terms of the subsurface science, there were a couple of statements talking about the fact that within the DOE programs there are databases being formulated but they are specific to particular EM sites that generally have quite a bit of access limitations.

No other comments.

QUESTION: Does access come with any additional functionality?

No comments.

QUESTION: Is the version of the written material or data provided?

No comments.

QUESTION: Are there are specific policies at DOE user facilities by which the policy is currently upheld?

The journals certainly play a role in some circumstances because American Society for Microbiology journals have a policy which suggested that if you do not abide by the stated policies of sharing materials and giving references to micro array data and allowing those data to be available, you can be banned from publishing in their journals.

There should also be some language added that the journals play a role in enforcing policies by the requirements that they have for submission of the manuscripts.

Paul Gilna agreed to write a paragraph on the topic.

QUESTION: In addition to dissemination, long-term stewardship is accounted for by existing policy practice. This is a real issue for the journals.

Phil Robertson noticed that the associated databases with the journals disappear over time.

The moderator asked for brief descriptions of the kinds of digital data that are generated and how they are stored.

Janet Braam and Judy Wall discussed adding RNA sequence and proteomics. And metabolomics in the future would be a major database and flux modeling that is associated with them. They will write some information to add this to the description.

Also add modeling data as people build networks connecting genes.

QUESTION: What is your perspective on which dissemination model that successfully maximizes the potential benefit of research results in a way that is sustainable within the research community? (Individual comments by field are listed here.)

No comments.

QUESTION: Include any observations regarding opportunities for public access policies that could enhance the discovery potential of office of science research results.

Judy Wall added that under the first of those questions there is a sense that it might be useful to indicate open access. There's a push for open access. And also to add peer reviews.

#### Other general comments:

Phil Robertson – Didn't recall seeing any mention of DOI (digital object identifiers) data that bears on the access issue. It makes the data much more accessible if in a primary publication there is a DOI that links to the data online.

This comment might fit best at the bottom of page 15.

Paul Gilna – Is there a general level of comfort on the part of the people pulling this document together that we are answering the mail with respect to what's being asked.

Text will be provided by Susan Hubbard, Paul Gilna, Andrej Joachimiak, Jim Tiedje, Mavrik Zavarin, Judy Wall, and Phil Robertson. Everyone will need to provide a paragraph or less.

Along with these additional submissions, the committee voted unanimously to approve the document with no abstentions. A letter to Bill Brinkman will accompany the document and will be the official BERAC response to his request.

Meeting adjourned.