## NATIONAL INSTITUTES OF HEALTH

## Summary of the Seventh Comparative Medicine Resource Directors Meeting October 7-8, 2008

The views expressed in written conference materials or publication and by speakers and moderators at HHS-sponsored conferences do not necessarily reflect the official policies of the Department of Health and Human Services, nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government

## Introduction

Dr. Stephen Barthold of the University of California at Davis was awarded a conference grant that supported the Seventh Comparative Medicine (CM) Resource Directors Meeting held on October 7-8, 2008, at the National Academy of Sciences in Washington, D.C. Principal Investigators were invited to attend if they held resource-related grants or contracts from the Division of Comparative Medicine (DCM), National Center for Research Resources (NCRR), a component of the National Institutes of Health (NIH) and the Department of Health and Human Services. The meeting provided a forum to highlight activities of the DCM-supported resource centers and to exchange additional information. The attendees included the Principal Investigators of NCRR-supported centers funded by contracts, P40, U24, and U42 grant mechanisms, as well as grantees that have resource-related projects funded via the R24 mechanism. During the Seventh CM Resource Directors' Meeting, extensive material was provided on a compact disc prepared by NCRR staff and distributed to the attendees.

## **Meeting Agenda**

Dr. Barthold welcomed the attendees to the Keck Center of the National Academy of Sciences. Dr. Franziska Grieder, Director of the DCM, NCRR, NIH presented a short talk and video clip regarding the newly released NCRR 2009-2013 Strategic Plan. Dr. Edmundo Kraiselburd of the Caribbean Primate Center them moderated a session called "Introduction of New Resources and Resource Consortia." DCM-funded resources are described in the Comparative Medicine Research Resources Directory on the NCRR website. In addition, selected resources are periodically highlighted in the NCRR Reporter and the new E-Reporter, available via regular e-mail upon request. Grantees are requested to check their resources' entries in the NCRR Comparative Medicine Research Resources Directory, and to send updates to Dr. Ray O'Neill at OneillR@mail.nih.gov. Overviews of the following new resources or evolving consortia and their Principal Investigators included the following:

- Development of an Specific Pathogen Free (SPF) *Macaca nemestrina* Breeding Colony (Dr. Robert Adams, The Johns Hopkins University)
- Wake Forest *Macaca fascicularis* SPF Breeding Colony (Dr. Janice Wagner, Wake Forest University)
- A Baboon cDNA Sequence Resource (Dr. Roger Bumgarner, University of Washington)
- Informatics, Coordination and Service Center (ICSC) of the Mutant Mouse Regional Resource Centers (MMRRC) (Dr. Muriel Davisson, The Jackson Laboratory)
- Mutant Mouse Regional Resource Centers (Dr. Lela Riley, University of Missouri)
- International Knockout Mouse Consortium (Dr. Kent Lloyd, University of California Davis)
- National Primate Research Center (NPRC) Consortium Activities (Dr. Joseph Kemnitz, Wisconsin NPRC)

The first Panel Session was moderated by Dr. Muriel Davisson of The Jackson Laboratory, and was titled "Informatics - Uses and Interoperability." Dr. Davisson launched the session by describing the multiple informatics efforts underway at The Jackson Laboratory. The subsequent four topics and presenters were:

- Linking Animal Models and Human Diseases (ZFIN , FlyBase and NCBO ) (Dr. Monte Westerfield, University of Oregon)
- <u>caBIG</u> Support for Cancer Models Research (Dr. Cheryl Marks, National Cancer Institute, NIH)

• What the BIRN Can Do for Your Resource (co-presented by Dr. Stuart Zola, Yerkes NPRC and Mr. John Nylander)

Dr. Franziska Grieder gave a short talk titled "Resource Data Needed for Competitive Review and Congressional Reporting."

The second Panel Session was moderated by Dr. John VandeBerg of the Southwest Foundation for Biomedical Research and Southwest NPRC. His talk set the stage for the Session and was titled "Maintaining the Viability of Resources During a Difficult Financial Era." Additional talks and their presenters in this session included the following:

- Creating Public Private Partnerships (Lili Portilla, M.P.A., NCRR, NIH)
- The <u>Small Business Grant Program</u> (Dr. Amy Swain, Division of Biomedical Technology (DBT), NCRR and Michael Chang, DCM, NCRR)
- Overview of the Foundation for the NIH [ (Dr. Andrea Baruchin, Foundation for NIH)
- Extramural Intellectual Property: Considerations for Success (J.P. Kim, Esq., DEITR, OPERA, OER, NIH)

Dr. John Critser of the University of Missouri moderated a series of presentations regarding relevant meetings and workshops that occurred in late 2006 through October 2008. Reports concerning these events are available on the <u>Reports</u> page of the NCRR website. These presentations included the following:

- Flies, Monkeys, and Supercomputing Highways: Animal Models Informatics and Access Working Group, August 19-20, 2008, Seattle (Dr. Harold Watson, DCM, NCRR)
- **Primate Genomics and Human Disease,** April 13-16, 2008 (Dr. John Harding, DCM, NCRR and Dr. Michael Katze, University of Washington)
- Achieving High Throughput Repositories for Biomedical Germplasm Preservation

  ☐ (Dr. John Critser, University of Missouri and Dr. William Rall, DCM, NCRR)
- Animal Research in a Global Environment: Meeting the Challenges →, September 23-26, 2008 in Washington, DC (Dr. Joanne Zurlo, Institute of Laboratory Animal Research, National Academy of Sciences, and Dr. William Watson, DCM, NCRR)

Posters from representative NCRR-supported resources were then displayed in the Atrium of the Keck Center. This allowed the opportunity for the attendees to have individual and detailed discussions with Resource Directors from scientific fields that differed from their own fields. There were multiple detailed examples of translational research being conducted at the DCM-funded resources.

Dr. David Wildt of the Conservation Research Center of the Smithsonian's National Zoological Park delivered a Keynote Address on the activities of his center. Some missions of the Conservation Research Center overlap with the NIH mission, and some regarding wildlife conservation are unique to the Smithsonian.

The second day of the meeting opened with a presentation by Dr. Barbara Alving, Director of NCRR, on "The Evolution of CTSAs and Translational Research." Dr. Alving outlined the overall goals of the Clinical Translational Science Awards (CTSAs) and their relationship to preclinical studies using animal models. Thirty-eight CTSA grants were funded in the first three years of the new program, with plans for funding of additional awards in 2009 and 2010.

The third Panel Session was introduced and moderated by Dr. Kent Lloyd of the University of California Davis, and was titled "Interaction of DCM-Funded Animal Resources with CTSAs."

Fifteen of the 38 institutions with CTSA grants had representatives attending this meeting as DCM-funded grantees. In addition, approximately seven different institutions located in IDeA states had representatives at the meeting. Subsequent talks in this session included the following:

- Facilitating Collaborations Between Disease Models Resources and Clinical/Translational Science Centers (Dr. Harold Watson, DCM, NCRR)
- Finding NIH-funded Collaborators (Dr. Ray O'Neill, DCM, NCRR)
- Biomedical Technology in Translation: Biomedical Technology Research Centers and CTSA Translational Steering Committee
- CTSA Training Programs (T and K) for Veterinarians and Ph.D.s (Dr. Manuel Moro, DCM, NCRR)
- RCMI and IDeA State Programs for Animal Resources (Dr. Willie McCullough, Division of Research Infrastructure, NCRR).

When the group evaluated this meeting, it was the consensus opinion that the mixing of the varied NIH staff and the DCM-funded Resource Directors had resulted in a productive meeting. The Keck Center's physical and audiovisual capabilities at the National Academy contributed to the success of the meeting, and the NCRR and its Resource Directors thank the Institute for Laboratory Animal Research for providing the venue.

This meeting impacted multiple different aspects of running an animal resource. As a practical example, it seems that two "best practices" at the time of ordering from a stock center would often be to collect the purchaser's NIH grant numbers when the order is placed, and to consider making a "Condition of Use" apply rather than separately negotiate a Material Transfer Agreement. Also, due to the new NIH policies announced at the meeting, several resource directors were now considering applying for SBIR/STTR grants. Many of the attendees were also considering how to best take advantage of the reductions in cost associated with DNA sequencing by newer technologies, and the abundance of available genomic data of several types. Novel ways of analyzing data, such as computing the branch distance in an ontology of phenotypes (each characterized by an entity and a quality), are expected to lead to identification of the relevant pathways, and thereby better utilization of animal models. The interactions among directors from different resources catalyzed discussions that may lead to potential new models of specific human diseases (such as a possible model of human inflammatory bowel disease in pigtail monkeys). Last, the resource directors as a group gained additional insight into accelerating translational biomedical research.

The main meeting concluded with discussions of the 2010 Eighth Comparative Medicine Resource Directors Meeting. A discussion ensued regarding possible venues and dates. Because the participation of staff from all NCRR Divisions and other NIH Institutes was very productive during this seventh meeting, a location proximal to NCRR and other NIH Institute staff is preferred. Additional extramural NIH staff that should be invited could be identified by canvassing the Resource Directors when planning the meeting. Most attendees agreed that the Poster Session should be repeated and elongated in 2010. Some attendees believe the costs are superseded by the training benefits of having a new investigator attend in conjunction with their resource director. Last, the value of the CDs to be handed out could be enhanced by inclusion of late-breaking news from each of the funded resource directors.

Additional feedback from the DCM community should be directed to Dr. Franziska Grieder, Director of DCM, NCRR. Selected PowerPoint presentations from this meeting are expected to become available on the Internet to attendees for reference, as well as for interested persons not in attendance.