Highlights of the 2007 caBIG™ Annual Meeting

The 2007 caBIG™ Annual Meeting, held February 5 – 7 at the Wardman Park Marriot in Washington, D.C., attracted more than 1,000 members of the caBIG™ community, including over 600 "Newcomers" interested in a comprehensive introduction to caBIG™. All attendees were able to discuss past, present, and future developments within the community and to attend hands-on learning sessions. The meeting was highlighted by three separate Plenary Sessions, featuring the following speakers:

- **John Loonsk, M.D.**, Director of Interoperability and Standards, Office of the National Coordinator for Health Information Technology, U.S. Department of Health and Human Services;

- **Kenneth H. Buetow, Ph.D.**, Associate Director for Bioinformatics and Information Technology, National Cancer Institute;

- **Mark Boguski, M.D., Ph.D.**, Vice President and Global Head of Genome and Proteome Sciences, Novartis Institutes for Biomedical Research;

- **Peter Covitz, Ph.D.**, Chief Operating Officer, NCI Center for Bioinformatics, National Cancer Institute; and

- **Elias A. Zerhouni, M.D.**, Director, National Institutes of Health.

On Monday, the opening day of the meeting, caBIG™ Newcomers, a group made up of both those new to the community and existing members interested in aspects of the initiative outside of their workspaces, were given a comprehensive introduction to caBIG™ and associated opportunities and challenges. Newcomers were given the opportunity to attend presentations about the caBIG™ Workspaces, as well as a presentation from Duke University's Patrick McConnell about caTRIP, the cancer Translational Research Informatics Platform.

In the evening, over 80 caBIG™ community members were recognized with awards for their contributions to the initiative in a Welcome Session that featured John E. Niederhuber, M.D., Director, National Cancer Institute, and Anna Barker, Ph.D., Deputy Director for Advanced Technologies and Strategic Partnerships, National Cancer Institute.

The second day featured opening remarks from John Loonsk, M.D., and Kenneth H. Buetow, Ph.D., in the first Plenary Session. Dr. Loonsk, while crediting Health and Human Services Secretary Michael Leavitt for forging a strong national health IT agenda, also underscored the need for interoperability across the broader health IT landscape. Loonsk discussed barriers to adoption, including the fact that many efforts currently underway possess differing standards, while noting that the goal can eventually be achieved through incremental steps. He also noted that caBIG™ is an important partner in the broader health IT effort.

Dr. Buetow followed by providing an overview of the accomplishments of the three year caBIG™ pilot, the role of caBIG™ as an enabler of Molecular Medicine and how caBIG™ will facilitate greater adoption across the broader cancer research community. Buetow highlighted the fact that cancer, as a complex set of diseases, requires complex answers. He stressed that caBIG™ set out to embrace this complexity and to be able to better manage it, by building a complete set of software and data management systems with inter-connectivity built-in throughout.

The second Plenary Session on Tuesday featured Mark Boguski, M.D., Ph.D. of Novartis, who spoke about the inherent complexity of molecular analysis and systems biology, noting the need for information technology to better manage the outputs of these sciences. While noting that interoperability is essential, he stated the need for large-scale, collaborative research efforts that are enabled by caBIG™-like technology infrastructures. Dr. Boguski also spoke about "mining the bibliome" – the curation of scientific research in literature. He pointed specifically to Ultralink, an in-house Novartis tool used for contextual hyper linking that facilitates more efficient knowledge extraction from scientific literature.

The third day of the meeting opened with the third and final Plenary Session, featuring Peter A. Covitz, Ph.D., and Elias A. Zerhouni, M.D. Dr. Covitz spoke about the technical challenges that caBIG™ has overcome in the course of its three year pilot. Covitz detailed the development of caGrid and its robust data management and security features, as well as the suite of tools caBIG™ offers in the clinical, pathology, imaging and molecular analysis fields.

Dr. Zerhouni spoke about caBIG™ as a model for other disease research areas as the era of precision medicine arrives, in which treatments are predictive, personalized, and preemptive. Dr. Zerhouni echoed Dr. Buetow's statements about the complexity of cancer, noting that the biomedical research community cannot represent the complexity of biological systems without an equally complex research and discovery system. Dr. Zerhouni added that caBIG™ has "picked the right wave" in riding the momentum of health IT and molecular based approaches.

Throughout the meeting, community members were given the opportunity to attend educational breakout sessions and technology demonstrations to further their knowledge about the caBIG™ suite of tools and to learn how to build or extend their own tools and systems. The meeting also featured the caBIG™ Hack-a-Thon, an informal, hands-on, technical hacking session designed to give attendees an experiential understanding of select caBIG™ software applications. In addition, over 80 caBIG™-related posters and seven exhibitors were on display in the exhibit hall throughout the meeting.