

BY BRIAN ATHEY, PhD

Fulfilling the Promise of the NIH Roadmap Through National Engagement by the National Centers for Biomedical Computing (NCBC) and the CTSA Informatics



For major team-based Roadmap initiatives, National Institutes of Health (NIH) officials expect grantees to look beyond the focus of their individual projects to build bridges not only among funded projects but also between themselves and the research community as a whole. These collaborations are an important part of creating a national biomedical computing infrastructure. And the National Centers for Biomedical Computing (NCBCs) and the Clinical and Translational Sciences Award Informatics programs (CTSA Informatics) are stepping up to the plate.

In August 2008, the leadership of the NCBCs held a third successful “all hands meeting” in Bethesda, MD. It is a tremendous credit to the vision of the NCBC Roadmap initiative (as specified by the Botstein-Smarr Report to the Biomedical Information Science Technology Initiative) that each of the Centers is now launched and productive. Direct feedback from NIH Director Elias Zerhouni and National Institute of General Medical Sciences Director Jeremy Berg points to the NCBC program as a “crown jewel of the NIH Roadmap.”

A major highlight of the all hands meeting was the talk by Simbios co-principal investigator Russ Altman, who described the many collaborative activities of the NCBC “Big P” (where P=“Program”). To the NIH, these additional activities constitute evidence that the NCBCs are helping to create a “national biomedical computing infrastructure.”

Meanwhile, another complementary component of

this national infrastructure is being created from the CTSA—an aggregation of Biomedical Informatics Programs of the National Center for Research Resources (NCRR) Roadmap initiative. This more than \$500 million per year program currently supports 38 sites and is projected to go to 60 sites within 2 years. This Roadmap program is intended to truly transform the way academic health centers do clinical and translational research. Interestingly, like the Big P of the NCBCs, the CTSA has its “Informatics Consortium.” Its first annual All Hands Meeting is scheduled for October 16, 2008, at NIH with more than 180 participants expected to attend.

To build a national biomedical computation infrastructure, it is also important to make good use of existing computational resources. To that end, three NCBCs (CCB, NCBO, and NCIBI) have recently been awarded administrative supplements by NIGMS to collaboratively support the creation of a “Biositemaps” protocol to address the issues of (i) locating, (ii) querying, (iii) traversing, (iv) composing or combining, and (v) mining biomedical computing and computational biology software tools and information resources on the Internet. This is a joint project of the “Yellow Pages/Resourceome” and Software Ontologies Working Groups, part of the NCBC Software and Data Interchange Working Group (SDWIG). This effort builds from the earlier, productive NCBC collaboration that created the “iTools” resource to organize and make web-accessible the NCBC software tools and data resources (published in *PLoS ONE* in 2008).

The CTSA Informatics Inventory and Resources Workgroup (IRWG) and the Biomedical Informatics Programs at the University of Pittsburgh Medical Center and the University of Michigan have also received an Administrative Supplement from NCRR to use the iTools and Biositemaps capabilities to organize the growing list of tools and data emanating from other CTSA working groups. This will lead to more effective and efficient communications for the CTSA Consortium overall, as well as produce useful tools for use at local CTSA sites.

These highly visible and potentially high-impact national collaborations bode well for the eventual fulfillment of one of the NIH Roadmap’s promise: to develop and sustain the nation’s capacity to perform biomedical research in the digital age. □

DETAILS

National Centers for Biomedical Computing:
www.ncbcs.org

Clinical and Translational Science Award:
(<http://www.ctsaweb.org/>)

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