

Editorial

Biocuration Virtual Issue 2012

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Curated databases are a cornerstone of research in the life sciences providing essential encyclopedic-like reference information on genes, their products and interactions, nomenclature standards, reference genome sequences and their annotations. Research laboratories and experimental techniques rely on resources such as databases and bioinformatics software that provide integrated tools to facilitate their research workflow. The next big challenge in research is to make data analysis as efficient as data generation has become. Curation of biological data is an interdisciplinary effort, combining computer scientists and biologists from all areas of the life sciences, and is aimed at the interpretation, organization and presentation of scientific data.

Organized by the International Society of Biocuration in collaboration with the Protein Information Resource (PIR), The International Biocuration Conference assembles those interested in biocuration, biology software development, database design and maintenance, and scientific publishing from around the world to explore new advances and share ideas that will result in better resources and thus enhance exploration and discovery in biology. This meeting is the forum for biocurators and software developers to exchange their successes and ideas on meeting the current challenges these resources face. This conference addresses many aspects of biocuration including: community annotation; protein annotation; functional annotation; pathways; structure; complexes; interactions; genomics; metagenomics; comparative genomics; biocuration workflows, productivity and analysis tools; the integration of text

mining in biocuration workflows; and ontologies and standards.

In addition to the organization of meetings such as Biocuration 2012, the goals of the International Society for Biocuration (<http://biocurator.org>) include promoting interactions among database specialists, improving the collective expertise and fostering the professional development of biocurators, promoting best practices, ensuring interoperability, and creating and maintaining standards and distribution formats for biological information, as well as promoting relationships with journal publishers.

The 5th International Biocuration Conference takes place in Washington, DC, from 2–4 April 2012. For the conference, *DATABASE: The Journal of Biological Databases and Curation* (<http://database.oxfordjournals.org/>) is publishing this 'Biocuration Virtual Issue' http://www.oxfordjournals.org/our_journals/databa/biocuration_virtual_issue.html

The present collection of papers provides a snapshot of activities in biocuration, and highlights the dynamic nature of this field. We provide this special issue of *DATABASE* to encourage a broad discussion of these topics for the enhancement of biological databases, their creation and always improving utility.

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