Getting involved! Activities of Asia-Pacific Bioinformatics Network (APBioNet)

Asif M. Khan 1, 2, 3, Tin Wee Tan 4, Christian Schönbach 5, 6, Shoba Ranganathan 4, 7, *

- 1 Perdana University Centre for Bioinformatics and 2Graduate School of Medicine, Malaysia
- 3 Department of Pharmacology and Molecular Sciences, The Johns Hopkins University School of Medicine, United States of America
- 4 Department of Biochemistry, Yong Loo Lin School of Medicine, National University of Singapore, Singapore
- 5 Department of Biology, School of Science and Technology, Nazarbayev University, Republic of Kazakhstan
- 6 Center for AIDS Research, Kumamoto University, Japan
- 7 Department of Chemistry and Biomolecular Sciences and ARC Centre of Excellence in Bioinformatics, Macquarie University, Australia

ABSTRACT

The Asia-Pacific Bioinformatics Network (APBioNet: www.apbionet.org) is a non-profit, nongovernmental, international organization founded in 1998 that focuses on the promotion of bioinformatics in the Asia-Pacific Region. Since its inception, APBioNet has been pioneering the growth and development of bioinformatics awareness, training, education, infrastructure, resources, and research among member countries and economies. It has coordinated or co-organized more than 30 international and national meetings in cooperation with members in different economies. The International Conference on Bioinformatics (InCoB), the flagship conference of APBioNet has been held in countries throughout the region: Bangkok (2002), Penang (2003), Auckland (2004), Busan (2005), Delhi (2006), HongKong/Hanoi (2007), Taipei (2008), Singapore (2009), Tokyo (2010), Kuala Lumpur (2011), Bangkok (2012; 10 year homecoming), Taicang (2013), and Sydney (2014). APBioNet has been actively engaged in bridging the bioinformatics capability gap, such as through cooperation with the S* Life Science Informatics Alliance to facilitate online/distance bioinformatics education and training, long before Massive Open Online Courses (MOOCs) became common. APBioNet also provides various services such as the BioMirror project with the Asia Pacific Advanced Network (APAN) as well as APBioBox (a suite of shrink-wrapped software), a project funded by the International Development and Research Centre (IDRC) Canada, and BioSlax in collaboration with the National University of Singapore. Moreover, it is active in ASEAN nations, particularly acting as liaison for the ASEAN Committee on Science and Technology's Subcommittee on Biotechnology. It is currently working on promoting more conference journal issues including those in BMC Bioinformatics, BMC Genomics, BMC Systems Biology, Bioinformation and most recently PeerJ, as well as in partnership with other professional organisations in other impact-factored journals. APBioNet is also spearheading another interesting initiative, the MIABi standards: the minimum information about a bioinformatics investigation. In addition, a new initiative, the BioDB100 of 100 MIABi-compliant databases was launched at InCoB 2010 Tokyo. Future plans include: i) championing the formation of a joint Asian "super conference" to foster cooperation between the various bioinformatics organizations in the region; ii) bringing InCoB to uncharted territories; iii) streamlining bioinformatics educational activities to cover wider topics and outreach to a wider audience; iv) partnering and collaborating with public and private institutions to offer high performance computing and storage resources for big data analyses by the community; v) lobbying for wider implementation of the various bioinformatics standards initiatives started, such as MIABi and BioDB100; and vi) proposing and executing a joint "big science" research project to tackle a pressing research agenda common to the region and leveraging on the collective expertise of the community and resources at disposal. APBioNet is fostering wider involvement from the region for a broader reach and impact of its activities, and cordially invites participants of GIW/ISCB-Asia 2014 to get involved.