EMBnet contribution to Bioinformatics in Sri Lanka

by Kanchana Senanayake, EMBnet Sri Lankka

The IBMBB (Institute of Biochemistry, Molecular Biology and Biotechnology, University of Colombo) became the Sri Lankan National node of EMBnet in 2007, when it was unanimously voted in at the AGM in Málaga (ES). The aim of this InFocus is to thank EMBnet for its contribution to our Bioinformatics MSc course, the first cohort of which has now successfully graduated. Needless to say, EMBnet made a significant contribution to developing the field of bioinformatics in Sri Lanka.

Dr. Erik Bongcam-Rudloff, current Chair of EMBnet, visited IBMBB in 2006, responding to an invitation made by SIDA and UPPMAX, University of Uppsala (SE). He convinced us to join EMBnet, highlighting the benefits we could receive as a member of this bioinformatics community. Prior to his visit, we could only organise 1- or 2-day workshops when experts in the field visited Sri Lanka. In 2009, supported by EMBnet, IBMBB initiated discussions with the University of Colombo School of Computing (UCSC) to start a joint MSc programme in bioinformatics. Guided by EMBnet, IBMBB and UCSC began formulating the course structure and syllabus. As a result, the first Bioinformatics MSc programme in Sri Lanka commenced in May 2012. This is a 4semester, full-time course, with a research project that begins half-way through the third semester course-work and runs throughout the fourth semester.

Along the way, we continued to receive invaluable support from EMBnet. Dr. Jose Valverde (EMBnet Spain), ran a 4-day course on Structural & Functional Analysis of Proteins, and supervised an MSc disser-





tation. He generously held discussions with our researchers to solve their problems and provide new insights into their research projects. Drs Goran Neshich and Emiliano Barreto (EMBnet Brazil and EMBnet Colombia respectively) extended their support by evaluating MSc dissertations.

We have now produced five Bioinformatics MSc graduates. Three students did not want to proceed with a research project to earn the Master degree, so they will graduate with Postgraduate Diplomas in Bioinformatics. We hope EMBnet will continue to extend its support towards further development of bioinformatics in Sri Lanka.





NETTAB & IB 2015 "Two-Day Hands-on Tutorial"

IB2015

by Domenica D'Elia, EMBnet Italy

The NETTAB & Integrative Bioinformatics *Two-Day Hands-on Tutorial: Bioinformatics Analysis of Omics Data* was held 12-13 October 2015, in Bari (IT) as a satellite event of the NETTAB & IB 2015 Joint Symposium. Organised by Domenica D'Elia (EMBnet Italy) and Paolo Romano (IRCCS San Martino IST, Genoa (IT)), it received generous support from EMBnet (which granted 10 free tutorial registrations), from the InterOmics project and from the IT resources of the ReCaS project (Programma Operativo Nazionale Ricerca e Competitività 2007-2013 – 4).

The tutorials (four in total) were held at the University of Bari's Department of Computer Science and organised in full- and half-day parallel sessions, the last replicated on both days. The aim of the programme was to provide researchers and students opportunities to learn about best practices in challenging bioinformatics tasks. Specifically, a full-day tutorial was dedicated to the analysis of re-sequencing data for detecting genomic variants in human diseases, such as somatic single nucleotide variants (SNVs) in cancer (run by Fabio lannelli, IFOM, Milan, IT) and germline SNVs in rare Mendelian disorders (run by Anna De Grassi, Professor at the University of Bari).

The other full-day tutorial, run by loannis Vlachos (from the DIANA-Lab, Pasteur Institute of Athens and the Department of Computer & Communication Engineering of the University of Thessaly (GR)), covered the design and analysis of small-RNA-Seq experiments, methods for genome alignment and/or microRNA expression estimation, and the state-of-the-art of online tools for microRNA functional analysis. Emek Demir, from the Sloan Kettering Institute, New York (USA), ran a half-day tutorial on the use of the Pathway Commons Web service and BioPAX, a standard, community-developed language for the description of biological pathways. Pasqualina D'Ursi, from the CNR-ITB in Milan (IT), focused her tutorial on applications of fast and inexpensive docking protocols, combined with accurate molecular dynamics techniques to predict proteinligand complexes.

I would like to thank first of all EMBnet, InterOmics, the ReCaS project and the Department of Computer Science for their precious support, and all the teachers and students both for their dedication and for the enthusiasm they expressed for this initiative.

















"Hello, nice to meet you"

by Antonio Santovito, **EMBnet Editorial Assistant**

It all began this summer when my sister sent me a link, "Why don't you apply?" Months later, an invite for a Skype interview rattled my inbox. "Go to lunch, we want you at your best", someone wrote me before that call started on time that afternoon. "Hello, nice to meet you", said a voice from my computer..

Two months have passed since the day I met the EMBnet Editorial Board for the first time, and I am now the new Editorial Assistant, I am an Italian communicator, a media studies student and the owner of Creactive, my communication and marketing business. After a decade as a Web designer, almost two years as a journalist, and three as a contributor for an advertising agency, my experience with EMBnet began and it has been engaging since the first day. Working with a non-profit is an honour and also a pleasure for me because it's related to another of my favourite topics: science.

I had confirmation that this would be an amazing job when I met Domenica D'Elia in Bari (IT). She welcomed me in the best way, and we began working together with some media content. Meanwhile, the meetings with the Editorial Board were becoming more and more interesting. All is proceeding with one eye on the past and the other to the future, solving some technical issues with old publications, while making plans for the journal's promotion,



including a new logo and a new layout, both for print and Web.

I know the EMBnet Journal Editorial Board is giving me a very important opportunity. Honestly, it daily fills my inbox with hundreds of conversations with scientists from all over the world, each with his personality, opinions and questions to monitor, manage and answer. I have to admit that sometimes these interactions can be very funny - my expectations have been more than satisfied. I will do my best to keep working with such a great network. So it's now my turn to say to you, "Hello, nice to meet you".





EMBnet.Spotlight is a quarterly release of InFocus sections published in EMBnet.digest (www.embnet.org/embnet-digest), EMBnet's monthly publication that provides a round-up of news from the community. The InFocus section features member activities, projects, initiatives, etc., especially from new members, that may be of interest both to the network and to EMBnet's associated communities, societies and projects.