

CSBio 2010 Technical Program

Wednesday, November 3, 2010

- 08:15 – 15:30 *Registration* [Foyer, 1st Fl. SIT Building]
- 08:30 – 10:15 **Tutorial** [Training room 1, 1st Fl. SIT Building]
KWOH Chee Keong (Nanyang Technological University, Singapore),
Fundamental of Genomic Sequence Analysis – Part I
- 10:15 – 10:30 Coffee Break
- 10:30 – 12:15 **Tutorial** [Training room 1, 1st Fl. SIT Building]
KWOH Chee Keong (Nanyang Technological University, Singapore),
Fundamental of Genomic Sequence Analysis – Part II
- 12:15 – 13:15 Lunch
- 13:15 – 15:00 **Tutorial** [Training room 1, 1st Fl. SIT Building]
Stjn Meganck (Vrije Universiteit Brussel, Belgium),
Genomics at your fingertips: The InSilico DB
- 15:00 – 15:15 Coffee Break
- 15:15 – 17:00 **Tutorial:** [Training room 1, 1st Fl. SIT Building]
Philip Shaw (BIOTEC),
A molecular biologist's view of Bioinformatics: the tools we use and the tools we will need

Thursday, November 4, 2010

- 08:15 – 15:30 *Registration* [Foyer, 1st Fl. SIT Building]
- 08:45 – 09:15 **Opening Ceremony and Welcome Speeches** [Conference Room (LIB 108), KMUTT Library]
- 09:15 – 10:05 **KEYNOTE TALK** [Conference Room (LIB 108), KMUTT Library]
FOONG Sew Bun (IBM),
Smarter Planet Initiatives
Chair by Borworn Papasratorn
- 10:05 – 10:25 Coffee Break
- 10:25 – 11:15 **PLENARY TALK** [Conference Room (LIB 108), KMUTT Library]
Nikhil Pal (Indian Statistical Institute, India),
Discovery of Protein Phosphorylation Motifs Through Exploratory Data Analysis
Chair by Sung-Bae Cho
- 11:15 – 12:05 **PLENARY TALK** [Conference Room (LIB 108), KMUTT Library]
Sung-Bae Cho (Yonsei University, South Korea),
Machine Learning Primer for Gene Expression Profile Analysis
Chair by Nikhil Pal
- 12:05 – 13:15 Lunch
- 13:15 – 14:55 **Technical Session: CSBio1**
- CSBio1: Biological Modeling and Sequence Analysis** [Training room 3, 1st Fl. SIT Building]
Chair by Jean-Paul Comet and Nikhil Pal
- (013) A Formal Model for Gene Regulatory Networks with Time Delays
Jean-Paul Comet, Jonathan Fromentin, Gilles Bernot, and Olivier Roux
- (019) Modeling *fim* Expression in *Escherichia coli* K12
Patrick de Vries, Colin G. Johnson, and Ian C. Blomfield
- (030) Mining Regulatory Elements in Non-coding Regions of Arabidopsis Thaliana
Xi Li and Dianhui Wang
- (027) Prediction of Non-coding RNA and their Targets in Spirulina Platensis Genome
Tanawut Srisuk, Natapol Pornputtpong, Supapon Cheevadhanarak, and Chinae Thammarongtham
- 14:55 – 15:15 Coffee Break
- 15:15 – 16:30 **Technical Session: CSBio2**
- CSBio2: Medical and Biomedical Informatics** [Training room 3, 1st Fl. SIT Building]
Chair by Sung-Bae Cho and Dianhui Wang

- (014) Sequential Application of Feature Selection and Extraction for Predicting Breast Cancer Aggressiveness
Jonatan Taminau, Stijn Meganck, Cosmin Lazar, David Y. Weiss-Solis, Alain Coletta, Nic Walker, Hugues Bersini, and Ann Nowe
- (024) Multi-objective Particle Swarm Optimisation for Phase Specific Cancer Drug Scheduling
Mohammad S. Alam, Saleh Algoul, M. Alamgir Hossain, and M.A. Azim Majumder
- (038) A Vaccine Strategy for Plant Allergy by RNA Interference – an In-Silico Approach
Ramya Ramadoss and Chee Keong Kwoh
- 16:45 – 17:15 Shuttle buses to the conference banquet venue at Marriott Resort and Spa Bangkok
- 18:30 – 22:00 **Conference Banquet** [Marriott Resort and Spa Bangkok]

Friday, November 5, 2010

- 08:15 – 12:00 *Registration* [Foyer, 1st Fl. SIT Building]
- 09:00 – 09:50 **KEYNOTE TALK** [Conference Room (LIB 108), KMUTT Library]
Michael Brudno (University of Toronto, Canada),
Discovering INDEL and Copy Number Genomic Variation from High-Throughput Sequencing
Chair by Yaochu Jin
- 09:50 – 10:10 Coffee Break
- 10:10 – 11:00 **PLENARY TALK** [Conference Room (LIB 108), KMUTT Library]
Yaochu Jin (University of Surrey, UK),
Analysis and Synthesis of Gene Regulatory Networks and Their Application to Morphogenetic Robotics
Chair by Michael Brudno
- 11:00 – 11:50 **PLENARY TALK** [Conference Room (LIB 108), KMUTT Library]
David W. Ussery (The Technical University of Denmark, Denmark),
On the Minimal Set of Conserved Gene Families across a Thousand Bacterial Genomes
Chair by Asawin Meechai
- 11:50 – 13:00 Lunch
- 13:00 – 14:40 **Technical Session: CSBio3**
- CSBio3: Bio-data Visualization and Biological Databases** [Training room 3, 1st Fl. SIT Building]
Chair by Chee Keong Kwoh and Matloob Qureshi
- (044) Catalog of Genetic Variations (SNPs and CNVs) and Analysis Tools for Thai Genetic Studies
Sattara Hattirat, Chumpol Ngamphiw, Anunchai Assawamakin, Jonathan Chan, and Sissades Tongsim
- (047) The Genome Atlas Resource
Matloob Qureshi, Eva Rotenberg, Hans-Henrik Stærfeldt, Lena Hansson, and David W. Ussery
- (025) INVERTER: Integrated Variable Number Tandem Repeat Finder
Adrianto Wirawan, Chee Keong Kwoh, Li Yang Hsu, and Tse Hsien Koh
- (048) Design of an Enterobacteriaceae Pan-genome Microarray Chip
Oksana Lukjancenko and David W. Ussery
- 14:40 – 15:00 Coffee Break
- 15:00 – 16:30 **Technical Session: CSBio4**
- CSBio4: Posters, Demonstrations and Competitions** [4th Fl. SIT Building]
Chair by Saowalak Kalapanulak, Treenut Saithong, and Chakarida Nukoolkit
- (017) Genome-based Screening for Drug Targets Identification: Application to Typhoid Fever
Arporn Juntrapirom, Saowalak Kalapanulak, and Treenut Saithong
- (018) Reconstruction of Starch Biosynthesis Pathway in Cassava using Comparative Genomic Approach
Oratai Rongsirikul, Treenut Saithong, Saowalak Kalapanulak, Asawin Meechai, Supapon Cheevadhanarak, Supatcharee Netrphan, and Malinee Suksangpanomrung
- (020) Extended Constraint-based Boolean Analysis: a Computational Method in Genetic Network Inference
Somkid Bumee, Chalothorn Liamwirat, Treenut Saithong, and Asawin Meechai
- (029) 3D Structure Modeling of a Transmembrane Protein, fatty Acid Elongase
Sansai Chumningan, Natapol Pornputtpong, Kobkul Laoteng, Supapon Cheevadhanarak, and Chinae Thammarongtham
- (042) Mining LINE-1 Characteristics that Mediate Gene Expression
Naruemon Pratanwanich, Apiwat Mutirangura, and Chatchawit Apornetawan

- (043) Study of the Structural Pathology caused by CYP2C9 Polymorphisms towards Flubiprofen Metabolism using Molecular Dynamics Simulation
Yuranat Saikatikorn, Panida Lertkiatmongkol, Anunchai Assawamakin, Marasri Ruengjitchatchawalya, and Sissades Tongsima
- (045) Unsupervised Method for AIMS Selection on Population Classification Problems
Apaporn Rodpan, Pongsakorn Wangkumhang, Anunchai Assawamakin, Santitham Prom-on, and Sissades Tongsima
- (046) On Assigning Individuals from Cryptic Population Structures to Optimal Predicted Subpopulations: an Empirical Evaluation of Non-parametric Population Structure Analysis Techniques
Pornchalearm Deejai, Anunchai Assawamakin, Pongsakorn Wangkumhang, Kanokwan Poomputsa, and Sissades Tongsima

+ Late breaking papers

16:30 – 17:30 Farewell party [4th Fl. SIT Building]

Saturday, November 6, 2010

07:00 – 16:00 Social Event