

Sun CB-SIG Agenda: Pittsburg, 7 Nov 2004

Time	Topic	Speaker	Affil	Topic
08:45 am	n	Speaker	Affil	Topic
09:00 am	Introduction	Stefan Unger	Sun	Introduction and Sun in Computational Biology
09:15 am	Sun	Simon See	Sun	APSTC: Asia Pacific Science and Technology Center
09:30 am	COE	Terry Dalton	NRC/CBR	Sun COE: Clusters with Jumbo Frame
10:00 am	COE	Nobuaki Miura	Hokkaido	Sun COE: Computer Assisted Glycoscience and Glycotechnology – Computational Chemical Biology and Glycoconjugate Data Bank
10:30 am	Break	Break	Break	Break
10:45 am	ISV	Tim Leite	VNI	Mathematical Solutions for Applications in Computational Biology
11:00 am	Bx	Carol Lushbough	U.So.Dakota	BioExtract Server – Federated Database Service for Biological Data
11:30 pm	Bx	Bernard Li	British Columbia Cancer	Bioinformatics cluster deployment and applications at the GSC
12:00 pm	Wrap-up	Stefan Unger	Sun	



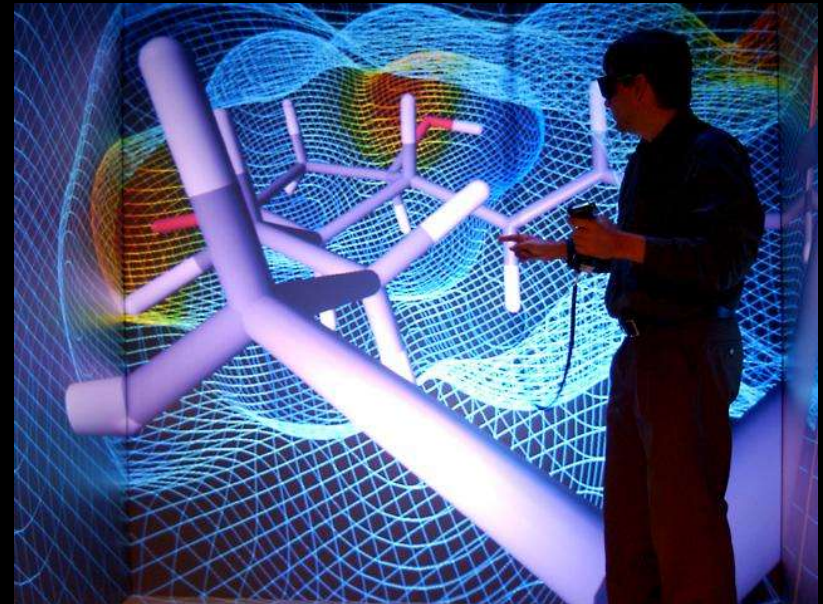
COMPUTATIONAL BIOLOGY

Problems, Solutions, Initiatives and Vision

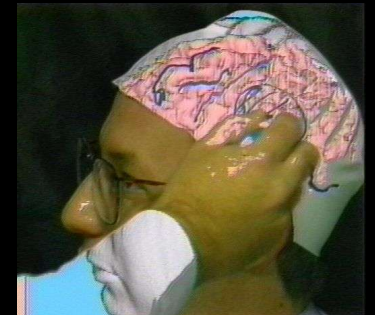
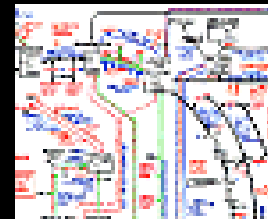
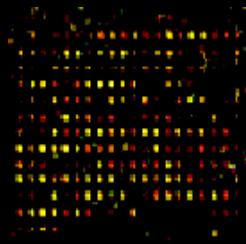
Stefan Unger, PhD
Business Development Manager
Science & Engineering
Global Education and Research

Computational Biology at Sun ... What is it?

- Bioinformatics (BioX)
 - Genomics
 - Post-Genomics
- Macromolecular Structure
- Drug Discovery Technologies
- Bioengineering/Biosimulation
- Clinical Informatics
- Medical Imaging



Sequence 1	TCTAAAACAAACACAAAAAGGCGTTG
Sequence 2	TTTAATAAAAATTTCAAAACACTTTC
Sequence 3	AGCTGTTTTTTTACTTTCAGTCCATG
Sequence 4	TGCATATTAATTACTTTCAGTCAATG
Sequence 5	GTTAATATAAATTTCAAAACACTTTC



Sun's Vision in Computational Biology

- Hardware: #1 in UNIX (64% units)
 - "Desktop to Teraflops"; "Gigabytes to Petabytes";
 - Xeon, Opteron, Sparc; ; Linux, Solaris x86, Solaris
- Software
 - Sun Java Enterprise System; N1
- Services
 - Consolidated services
- Partners
 - Sun Does **Not** Compete in Applications!
- Programs
 - Building and Supporting a Community



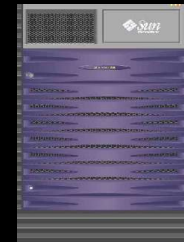
SunRay



SunBlade



V210, V20z, V40z



SF V240, E6900



SF25K

Programs

- Support Open Standards
 - Sun Life Sciences
 - OMG-LSR
 - Open-Bio.org (**server**)
 - BioXML, BioJAVA, BioPerl, BioDAS, BioOntologies, BioSOAP, ...
 - BioCyc Biological Pathways Web Site (**server**)
 - BioPathways Consortium (**server**)
 - MGED Soc. (Microarray Gene Expression Data) (**sponsor**)
 - CellML, HUPO, Micromass (eMS), CDISC and HL7 (Clin. Data)
 - SBML Hackathon @ VBI

Programs

- **Build Community**

- Sun HPC Consortium
- Computational Biology Special Interest Group
- Sun Centers of Excellence
- Sun Lecturers
 - Imperial College London, Dr Steve Newhouse, e-Science
 - Australian National University, Dr Alistair Rendell, Computational Science
- Other Projects
 - Discover Life (**server**)

Sun Computational Biology SIG: CB-SIG

- compbio-sig-ext@sun.com
 - 2-3/month
 - Nov '04 : 1300+ members
- www.sun.com/edu/commofinterest/compbio/sig
 - News, proceedings
 - Up-to-date info
- **CB-SIG Events**
 - 9 Previous Events
 - [Pittsburgh @ HPC Consortium, 11/04](#)
 - [VBI, VA “WebServices for Computational Biology”, 5/05](#)

Global COE in Computational Biology - NA/EMEA

Virginia Bioinformatics Institute	US	Bioinformatics
Delaware Biotechnology Institute	US	High Performance Comp Bio
RTP (7 NC Institutions)	US	Bioinformatics and Computational Biology
UC Davis	US	Public Health and Safety Informatics
Dartmouth	US	Neuroscience (fMRI)
U. Calgary	CANADA	Visual Genomics
NRC/CBR	CANADA	Distributed Bioinformatics
Blueprint	CANADA	Systems Biology (BIND Project)
Graz U Technology/U.Vienna	AUSTRIA	Computational Genomics and Biomedical Informatics
Parque Cientifico de Madrid	SPAIN	Biocomputing
Bielefeld	GERMANY	Bioinformatics and Data Integration
ETH	SWITZERLAND	Biomedical Simulation
Leeds	UK	Virtual Tissue Engineering

Global COE in Computational Biology - APAC

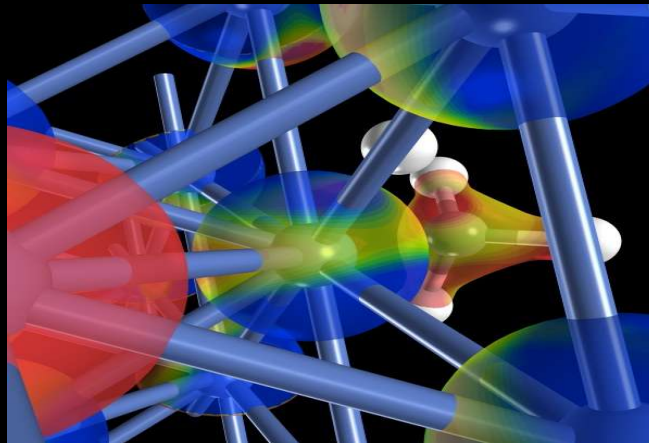
Nat. Cheng Kung U.	TAIWAN	Bioinformatics
Tokyo U. Science	JAPAN	Biological Data Mining
Genome Institute Singapore	SINGAPORE	Digital Biology/Integrated Medical Genomics
Hokkaido U	JAPAN	Glycoinformatics and Glycotechnology
CDFD	INDIA	Medical Bioinformatics
U. Queensland	AUSTRALIA	Molecular Simulations of Bio- and Nano-Systems

Why Sun for Computational Biology?
Because We Don't Own Your Competitors...

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