International Workshop
on Computational & Integrative Biology
A satellite meeting of the International Conference of
Integrative Biology
September 18th to 20th, 2009
Hangzhou, China
http://www.cls.zju.edu.cn/binfo/ib/2009

Universität Bielefeld

Booklet

of

CIB'2009

Zhejiang University

Sep 9th, 2009

Contents

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Introduction

This Computational and Integrative Biology workshop (CIB'09) is a satellite meeting of the series Integrative Bioinformatics International Symposium (IB).

This meeting will be of interest to Bioinformaticians, Computer Scientists, Biologist and others working in, or interested in finding out more about, the developing area of integrative biology. There will be opportunities to present and discuss methods, theoretical approaches, and their practical applications.

IB series meetings are chaired by Prof. Dr. Ralf Hofestädt, University of Bielefeld, Germany.

This CIB is co-organized by the Prof. Dr. Ming Chen, Zhejiang University, China.

Topics of Interest:

Database integration

Molecular databases / Data warehouses

Tool integration and workflow systems

Prediction and integration of metabolic and regulatory networks

Network analysis

Protein-protein interactions

Integrative microarray modeling and analyses

Virtual cell

Computational systems biology

Integrative modeling and simulation frameworks

Integrative data and text mining approaches

Data visualization and visual analytics

Publication:

Accepted abstracts/papers will probably appear in the Journal of Integrative Bioinformatics and will be available as conference proceedings.

Local Organizers:

Xiang Chen, Zhejiang University

Donglin Huang, Zhejiang University

Cong Luo, Zhejiang University

Shaolei Lv, Zhejiang University

Organizing Committee:

Ming Chen, Zhejiang University, China

Ralf Hofestädt, University of Bielefeld, Germany

Matthias Lange, IPK Gatersleben, Germany

Uwe Scholz, IPK Gatersleben, Germany

Falk Schreiber, IPK Gatersleben & University of Halle, Germany

Andrew Harrison, University of Essex, UK

Paul Verrier, Rothamsted Research, UK

Hiroshi, Matsuno, Yamaguchi University, Japan

Social Events / Tour:

The workshop will feature a number of special events to help you enjoy your stay in Hangzhou and to give you insight into Chinese art, culture and history.

➢ West-lake & Zhejiang Museum

➢ Tea Garden & Song City

➢ Night of Hangzhou Show

General Schedule:

Date	Time	Proceeding
Friday, 17th September 2009	14:00~20:00	Registration
Friday, 18th September 2009	08:00~09:30	Registration
	09:30~09:45	Opening Ceremony
	09:45~10:00	Tea Break
	10:00~11:30	Morning Session
	11:30~11:45	Photograph
	12:00~13:30	Lunch
	14:00~17:15	Afternoon Session
	18:00~20:00	Dinner
Saturday, 19th September 2009	09:00~11:45	Morning Session
	12:00~13:30	Lunch
	14:00~16:45	Afternoon Session
	16:45~18:00	Demo/Poster
Sunday, 20th September 2009	09:00~11:45	Morning Session
	11:45~12:00	Closing Ceremony
	12:00~13:30	Lunch
	13:30~	Hangzhou tour

Conference room: Conference Room, 6th floor, Zi Jin Gang Hotel.

Programme

Registration Place: Zi Jin Gang Hotel, Hangzhou, P.R.China

Conference Hall: Conference Room, 6th floor, Zi Jin Gang Hotel, Hangzhou, P.R.China

Friday, 17th September 2009

 14:00~20:00 Registration of Participants

Friday, 18th September 2009

 08:00~09:30 Registration of Participants

Opening Ceremony (Chair: Ming Chen)

 09:30~09:45 Ming Chen (General Chair, Zhejiang University)

       Ralf Hofestädt (CIB Chair, University of Bielefeld)

       Andrew Harrison (CCC Chair, Essex University)

 09:45~10:00 Tea/Coffee Break

Morning Session (Chair: Andrew Harrison)

 10:00~10:45 *Transcriptomic evidence for neutral evolution*

       Neil Graham (University of Nottingham, UK)

 10:45~11:30 *Can in silico evolution outperform natural evolution? Hidden opportunities to increase plant productivity*

       Xinguang Zhu (CAS, China)

 11:30~11:45 Photograph

 12:00~13:30 Lunch

Afternoon Session (Chair: Hiroshi Matsuno)

 14:00~14:30 *Models of SIGIRR inhibiting the toll-like receptor TLR4 signaling pathway*

       Tiandi Wei (Ludwig-Maximilians-Universität München,Germany)

 14:30~15:00 *Integration of -omics data and networks for biomedical research*

       Christian Klukas (Leibniz Institute of Plant Genetics and Crop Plant Research, Germany)

 15:00~15:30 *Predicting the oncogenic pathway activities of individual samples from microarray gene expression profiles*

       Gaofeng Huang (University of Oxford, UK)

15:30~15:45 Tea break

15:45~16:15 *Reconstruction of biological networks based on life science data integration*

B. Kormeier (Bielefeld University, Germany)

16:15~16:45 *Simulation-based model checking approach for cell fate specification - using cell illustrator online: A computational platform for systems biology*

Chen Li (University of Tokyo, Japan)

16:45~17:15 *Towards identification of human disease phenotype-genotype association via a network-module based method*

Qiang Jiang (Shanghai Institutes for Biological Sciences, China)

18:00~20:00 Dinner

Saturday, 19th September 2009

Morning Session (Chair: Matthias Lange)

09:00~09:30 *An algorithm to produce conditional equation for smooth signal flows in the petri net model of a signaling pathway*

Yoshimasa Miwa (Yamaguchi University, Japan)

09:30~10:00 *Gene identification and the regulation of phenylpropanoid pathways in plants*

Jie Luo (Huazhong Agricultural University, China)

10:00~10:15 Tea break

10:15~10:45 *Genome-wide survey of rice microRNAs and miroRNA-target pairs in the root of a novel auxin-resistant mutant*

Yijun Meng (Zhejiang University, China)

10:45~11:15 *Using surveys of Affymetrix GeneChips to study antisense expression*

Sanchez Graillet, Olivia (University of Essex, UK)

11:15~11:45 *Developing a human transcriptome array for clinical genomics*

Junhee Seok (Stanford University, USA)

12:00~13:30 Lunch

Afternoon Session (Chair: Sean May)

14:00~14:30 *Highlight of genomics: Discovering novel non-coding RNA genes*

Zhi John Lu (Yale Univeristy, USA)

14:30~15:00 *Evaluation of protein phosphorylation site predictors*

Huaqin He (Fujiang agriculture and forestry university, China)

15:00~15:30 *Identifying the impact of G-Quadruplexes on Affymetrix Exon Arrays using Cloud Computing*

Farhat N. Memon (University of Essex, UK)

15:30~15:45 Tea break

15:45~16:15 *Centroid extensions of de novo motif detection algorithms*

Hendrik Mehlhorn (Leibniz Institute of Plant Genetics and Crop Plant Research, Germany)

16:15~16:45 *Simulation of the phase decision processes of clock gene expressions by promoter transcriptional regulations*

Kenji Miyamoto (Yamaguchi University, Japan)

16:45~18:00 *Demo/Poster* (see supplementary table, page 6)

Sunday, 20th September 2009

Morning Session: (Chair: Ralf Hofestädt)

09:00~09:30 *Structural bioinformatics, TCM Databases, and personalized drug design*

Dongqing Wei (Shanghai Jiaotong University, China)

09:30~10:00 *The LAILAPS search engine: Relevance ranking in life science databases*

Matthias Lange (Leibniz Institute of Plant Genetics and Crop Plant Research, Germany)

10:00~10:15 Tea break

10:15~10:45 *LIMS lite: a system for management and search of primary lab data*

Matthias Klapperstück (Leibniz Institute of Plant Genetics and Crop Plant Research, Germany)

10:45~11:15 *RiboNucleic acid tertiary structure comparison using graph theory*

Zain-ul-Abdin Khuhro (Univerisity of Essex, UK)

11:15~11:45 *Proteomics based pattern analysis in clinical practice: a robust analysis strategy*

Thomas Wolf (German Cancer Research Center, Germany)

11:45~12:00 CIB close

12:00~13:30 Lunch

Afternoon

13:30~ Hangzhou tour (Xixi national wetland park).

Supplementary table: demo/poster list

Title	Author	Affiliation
SBGN-ED: a VANTED add-on for systems biology graphical notation	Czauderna Tobias	IPK
Protein structure quality analyser	Amadev Rajesh Vataparti	Dravidian University
Homology modeling of human Toll-like receptors 7, 8 and 9 ligand-binding domains	Jing Gong	University of Munich
1) Establishment of promoter sequences and annotations database 2) Identification of SNPs by 454 sequencing and convertion of CAPS markers in soybean	Yong Li	Northeast Agricultural University
Simulation analysis of the enzyme expression patterns in E.coli towards the understanding of biological systems	Tomoaki Yamamotoya	Yamaguchi University
Experimentation and evaluation of SOM-based classification of cancer cells with the information of proteins	Maya Tachibana	Yamaguchi University
Prediction method of essential points in a biological pathway for cell system stability by using recurrent neural network	Hironori Kitakaze	Yamaguchi University
A multi-level model accounting for the effects of JAK2-STAT5 signal modulation in Erythropoiesis	Xin Lai	University of Rostock
Simulation-based model checking approach for cell fate specification using cell Illustrator online:	Chen Li	University of Tokyo
CELLmicrocosmos 4.1: A Software Approach for the Localization of Metabolic Pathways in a Virtual Cell Environment (Demo)	Bjoern Sommer	Bielefeld University

Tips

On behalf of the organizing committee of "2009 International Workshop on Computational and Integrative Biology (CIB' 2009)", we want to show our appreciations to all attendants for your concern and kind support to the workshop. In order to guarantee a complete success of the workshop and your pleasant stay in Hangzhou, we want to remind you about several matters needing attention.

1.   The Attendant Card is the only valid card for entering the conference. It will facilitate us to recognize your identity and offer better service, so please carry the card with you all the time during the workshop.

2.   Please take part in every activity on time as scheduled, set your phone to vibrate in the meeting room and keep the meeting in order.

3.   Speakers should send their PPT or other related files to Mr. Xiang Chen (ptxchen@zju.edu.cn) in advance. For demo, related software should be sent also.

4.   Posters should be sent to the staff in advance.

5.   Accommodation address: Zi Jin Gang Hotel and Hangzhou Hua Jia Shan Resort (see page 7). Booking could be made at discounted rates.

6.   Please keep your personal belongings in a safe place during the workshop and you had better take your valuables with you.

7.   Any cost for personal phone calls, alcoholic beverages, food, articles for use, laundry etc should be on the participants' own expense.

8.   If you require further information, please refer yourselves to the workshop staff or contact with the secretariat: room 1108, Zi Jin Gang Hotel, tel: +86-(0)571-87992288(please dial 1108).

9.   The weather during the workshop: cloudy or passing shower, otherwise, considerable cloudiness; the temperature will be between about 18°C and 26°C.

Thank you for your cooperation!

Committee Secretariat

Sep. 9th, 2009

Accommodation & Traffic

Accommodation:

Zi Jin Gang Hotel(紫金港大酒店)

浙江省杭州市西湖区申花路 798 号

No. 798, Shenhua Road, West Lake District, Hangzhou

Hua Jia Shan Resort(花家山庄)

浙江省杭州市西湖区三台山路 25 号

No. 25, Santai Shan Road, West Lake District, Hangzhou

Homepage: http://www.hzhjsz.com/eindex1.asp

Our Laboratory: Zhejiang University, Zi Jin Gang Campus(浙江大学紫金港校区)

浙江省杭州市西湖区紫荆花路 388 号

No. 388, Zijinghua Road, West Lake District, Hangzhou

Traffic:

From Zi Jin Gang Hotel(紫金港大酒店) to Quyuan Fenghe of West Lake(西湖-曲院风荷):

➢ By bus: On the opposite of the hotel is the Zi Jin Gang Campus bus station, you can take No. 10 bus to Wen Er Lu Kou(文二路口) and transfer to take No. 82 bus to Quyuan Fenghe(曲院风荷).

➢ By taxi: In the front of the hotel, there are many taxis and it will cost about 25 RMB to Quyuan Fenghe(曲院风荷).

From Hua Jia Shan Resort(花家山庄) to West Lake(西湖):

➢ On foot：Walk along the Santaishan Rd at the front of the Hua Jia Shan Resort to the east to the Hupao Rd and turn left until to the Yanggongdi(杨公堤) which on the west side of the West Lake. The whole trip may take 15 min.

From Hua Jia Shan Resort(花家山庄) To Cheng Zhan train station(城站火车站):

➢ By bus: You can walk east along San Tai Shan Rd(三台山路) to Chi Shan Bu(赤山埠) after out of the resort gate and take No. 808 bus(3 RMB) to Hu Xueyan Gu Ju(胡雪岩故居). After you get off, walk east for about 500m to the Cheng Zhan train station(城站火车站).

➢ By taxi: It may cost 17 RMB direct to Cheng Zhan train station(城站火车站) from Hua Jia Shan Resort.

From Zi Jin Gang Hotel(紫金港大酒店) To Cheng Zhan train station(城站火车站):

➢ By bus: Work along the Shen Hua Rd(申花路) which at the front of the Hotel to the east, turn left at the first crossing, walk about 100 m to reach Ji Dong Che Liang Guan Li Suo(机动车辆管理所). Take No. 900 bus to the last station-Cheng Zhan train station (城站火车站), 3 RMB.

➢ By taxi: The fee is about 45 RMB by taxi.

From Hua Jia Shan Resort To Hangzhou Xiaoshan International Airport(杭州萧山国际机场):

➢ By bus: Take a taxi to Wulinmen(武林门机场巴士点) to take airport shuttle bus to Xiaoshan International Airport. The taxi fee is about 25 RMB and the airport shuttle bus ticket is 20 RMB.

➢ By taxi: It costs about 120 RMB to take a taxi directly to Xiaoshan International Airport.

From Zi Jin Gang Hotel To Hangzhou Xiaoshan International:

➢ By bus: Work along the Shen Hua Rd(申花路) which at the front of the Hotel to the east, turn left at the first crossing, walk about 100 m to reach Ji Dong Che Liang Guan Li Suo(机动车辆管理所). Take No. 900 bus to Wulinmen(武林门机场巴士点), 3 RMB. And you can take the airport shuttle bus to Xiaoshan International Airport, 20 RMB.

➢ By taxi: It will spend you about 135 RMB directly to Xiaoshan International Airport by taxi outside Zi Jin Gang Hotel.

From Hua Jia Shan Resort(花家山庄) To Shanghai Pudong International Airport(上海浦东国际机场) (Homepage: http://www.shanghaiairport.com/en/index.jsp) :

➢ Take a taxi to Wulinmen(武林门机场巴士点)(about 25 RMB) and take the **Pudong International Airport shuttle bus(7:00 8:30 10:30 12:30 14:30 16:00)** (100RMB) to Pudong International Airport. **The whole trip may take 4 hours or longer, so check your airport ticket previously and make sure you can catch the plane.**

From Zi Jin Gang Hotel(紫金港大酒店) To Shanghai Pudong International Airport(上海浦东国际机场):

➢ Take a taxi to Wulinmen(武林门机场巴士点)(about 30 RMB) and **take the Pudong International Airport shuttle bus(7:00 8:30 10:30 12:30 14:30 16:00)** (100RMB) to Pudong International Airport. **The whole trip may take 4 hours and a half or longer, so check your airport ticket previously and make sure you can catch the plane.**

NOTICE: If you want to take a taxi, you may call one from the front desk of the hotel previously.

Travelling:

Travel to Hangzhou, a city rich in history and spectacular scenery on this day trip from Shanghai. Cruise on Hangzhou's famous West Lake and take in the stunning views that have inspired poets and artists for centuries. Also visit the Six Harmonies Pagoda, a magnificent example of ancient Chinese architecture. You'll come to appreciate why Marco Polo once referred to Hangzhou as 'the most beautiful and magnificent city in the world'.

Hangzhou is a city rich with history and culture, spanning back over 2000 years. It made a name for itself in the Seventh Century; when the Grand Canal, the world's longest canal opened and linked Hangzhou to Beijing and other centers of trade. The South Song Dynasty (A.D. 1127-1279) helped make Hangzhou famous when the imperial family settled here early in the 12th century.

On arrival to Hangzhou, your first stop is Six Harmonies Pagoda, also known as Liuhe Pagoda. Overlooking the Qiantang River, this massive structure is a masterpiece of ancient Chinese architecture. Visit the museum that exhibits the various ancient Chinese pagoda styles. Continue to Meijiawu Tea Village for a traditional tea ceremony and an insight into its significance in Chinese culture.

After lunch, cruise across West Lake to experience peace and serenity like no place else in China. Your cruise ends at Flower Harbor where you can walk along on Su Causeway and feed the fish in the Red Fish Pond to pray for the good luck.

Finally, experience nature and visit '9 Creeks and 18 Gullies'. Enjoy a lovely walk amongst this peaceful environment. There are some quaint places to stop off along the way too, including a lagoon and a small pavilion which has been converted into a great tea and snack hous.
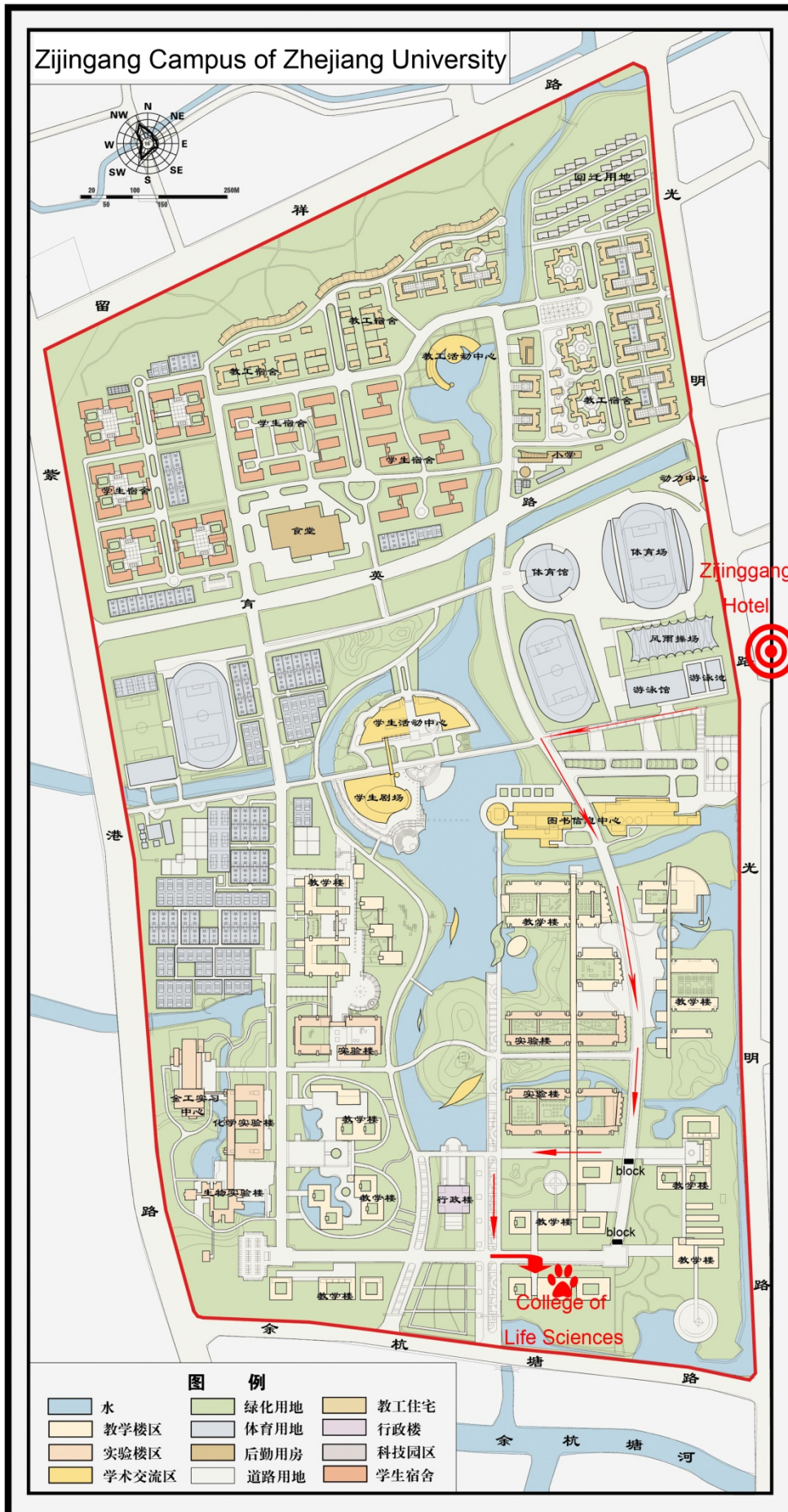
Here are some websites about Hangzhou:

http://wikitravel.org/en/Hangzhou

http://www.chinaspringtour.com/guide/city.jsp?cityId=37&gclid=CPWogPST4pwCFcIvpAodkQyGJQ

http://www.chinahighlights.com/hangzhou/

http://www.morehangzhou.com/index.html

Zijingang Campus of Zhejiang University

Important Telephones

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Fire Alarm…………………………………………………………………119

First Aid……………………………………………………………………120

Security Department of Zhejiang University……………+86-(0)571-88206110

School Hospital of Zhejiang University……………+86-(0)571-88981120

Ming Chen's Laboratory………………………………+86-(0)571-88206612

Reception of Zi Jin Gang Hotel………………………+86-(0)571-87246581

Reception of Hua Jia Shan Resort……………………+86-(0)571-87976688

Embassy:

Germany........................Tel: +86-(0)21-34010106   Fax: +86-(0)21-64714448

U.K……………………Tel: +86-(0) 21-32792000   Fax: +86-(0) 21-62797651

Japan…………………..Tel: +86-(0)21-52574766   Fax: +86-(0)21-62788988

U.S.A…………..………Tel: +86-(0)21-32174650   Fax: +86-(0)21- 62172071

Ireland…….…….………Tel: +86-(0)21-62798729   Fax: +86-(0)21-62798739

Pakistan………………Tel: +86-(0)21-62377000   Fax: +86-(0)21-62377066