

The Wild East (from Leipzig) June workshop 2018

Genome Bioinformatics for Health

Topics:

- Genomic regulation in health and disease
- Transcriptomics, Epigenomics, Genetics causes of diseases
- Disease phenotypes, describing disease progression, treatment resistance
- Sequencing bioinformatics, understanding the genome
- Machine learning, clever tools and methods
- Cancer, inflammatory and civilization diseases, ageing
- Pharmacogenomics, microbiomics
- Pathway Bioinformatics
- Modeling, Systems Biology
- ...and whatever fits into this topic

The workshop is part of the joint program ‚PathwayMaps‘ between the Interdisciplinary Centre for Bioinformatics of LE-University and the Institute for Molecular Biology of the Academy of Sciences of the Republic of Armenia. We are very happy to welcome our friends from Ukraine (Kiev), Czech Republic (Olomouc), Poland (Warsaw).

Third circular

Dates:

June 25th – 27th 2018

25th: arrival in Grossbothen

26th and 27th workshop

27th evening: transfer to LE

Venue:

The WS will take place in the ‚Ostwald-Park‘ (W. Ostwald Nobel-price for Physical Chemistry 1909 for his work on catalysis and chemical equilibria...this was bioinformatics at those times!!!!)

Wilhelm Ostwald Gedenkstätte in Grossbothen (ca. 30 km to the East from LE)

<http://www.wilhelm-ostwald-park.de/kontakt.php>

Transfers and accommodation:

...will be organized on personal basis...

Please let us know your arrival and departure dates and places (check your details in the participants list at the end of this document)

Contact:

Johanna Rau (rau@izbi.uni-leipzig.de): organization

Hans Binder (binder@izbi.uni-leipzig.de): scientific program, all issues



Third circular

Program

Talks are 25 min plus discussion.

Monday, June 25th

17.00 Barbecue, Beer & Co

Tuesday, June 26th		
9.00 -9.30	Welcome: Genome Bioinformatics for health – a wild perspective?	Hans Binder
9.30 –10.00	Genome Bioinformatics for health – an eastern perspective!	Arsen Arakelyan
10.00 -10.30	Biomedical data – challenges and pitfalls	Eva Kriegova
10.30 -11.00	Break	
11.00 -11.30	Machine learning to disentangle tumor heterogeneity and progression	Henry Löffler-Wirth
11.30 -12.00	Analysis of disease associated genetic risk factors distribution across different populations using machine learning technique	Maria Nikogoshyan
12.00 -12.30	Footprints of infections in the blood transcriptome	Lydia Hopp
12.30 -13.30	Lunch	
13.30 -14.00	Telomere length inheritance: lessons from the Netherlands Genome Project	Lilit Nersisyan
14.00 -14.30	NGS in Biomedicine: Are you ready for SMRT revolution?	Leszek Pryszcz
14.30 -15.00	Feature selection	Pavel Kromer
15.00 -15.30	break	
15.30 -16.00	Bayesian inference	Alina Frolova
16.00 -16.30	Assessment of somatic mutations impact on the activity of biological pathways in tumors	Siras Hakobyan
16.30 -17.00	Discussion of the day	
	Dinner in Ostwald park	

Wednesday, June 27th		
9.00 -9.30	Premature termination codon containing mRNA content in tumors	Anna Hakobyan
9.30 –10.00	Between tumor protective and supportive response on DNA damage: Epigenetic deregulation in the intestine.	Jörg Galle
10.00 -10.30	Networks as Visual Data Mining Tool	Milos Kudelka
10.30 -11.00	Break	
11.00 -11.30	Computational flow cytometry	Zuzana Mikulkova
11.30 -12.00	Single cell bioinformatics	Henry Löffler-Wirth
12.00 -12.30	Transcriptome-based cytometry in the blood and in cancer tissues	Erik Fortenbacher
12.30 -13.30	Lunch	
13.30 -14.00	Bivalent chromatin in cancer	Stephan Bernhart
14.00 -14.30	Integrating tools into the galaxy framework	Jörg Fallmann

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14.30 -15.00	Transcriptional subgroups of Celiac Disease in Children	Edith Willscher
15.00 -15.30	break	
15.30 -16.00	ClinCNV: novel method for large-scale CNV and CNA discovery	German Demidov
16.00 -16.30	Discussion of the day	
Ca. 17.00	Transfer to LE	

Third circular

Participants:

Yerevan: (Monday to Saturday; 25th to 30th)

Arsen Arakelyan
Lilit Nersisyan
Anna Hakobyan
Maria Nikogoshyan
Siras Hakobyan

Leipzig:

Hans Binder
Henry Löffler-Wirth
Lydia Hopp
Edith Willscher
Erik Fortenbacher

Jörg Galle
Stephan Bernhart
Jörg Fallmann
Markus Loeffler

Kiev: (Sunday – Wednesday; 24th – 27th)

Alina Frolova

Kharkov (Sunday – Friday; 24th to 29th)

Elena Scherbak

Olomouc: (Monday – Friday 25th – 29th)

Eva Kriegova
Zuzana Mikulkova
Milos Kudelka
Pavel Kromer
Petr Gajdos
Marek Dohnalek

Warsaw: (Monday - Wednesday)

Leszek Pryszcz

Tübingen: (Monday – Wednesday)

German Demidov