



MC-GARD Workshop “Genome bioinformatic techniques”
Life and Health Science Research Institute (ICVS),
School of Health Sciences (ECS),
University of Minho, Braga 8-13 September 2008

<i>Day / Hour</i>	<i>Topics</i>	<i>Speaker(s)</i>	<i>Local</i>
Monday 8th	Arrival		Hotel Dona Sofia
16:00-18:00	Registration		ICVS –U. Minho
18:00-18:15	Welcome	Rui M Reis	ICVS –U. Minho Room - A0.03
18:15-19:00	Bioinformatics - Dissecting the Genome	Fátima Al-Shahrour	ICVS –U. Minho Room - A0.03
19:00	<i>Dinner –University Restaurant</i>		<i>U. Minho</i>

Day / Hour	Topics	Speaker(s)	Local
Tuesday 9th	Bioinformatics overview and statistical foundation of genome experiment design		
9:00-9:45	Overview of genome-scale technologies	Outi Monni	ICVS –U. Minho Room - A0.03
9:45-10:45	Experimental design (Sample size and power for microarray studies)	Mei-Ling Ting Lee	ICVS –U. Minho Room - A0.03
10:45-11:15	<i>Coffee-break</i>		ICVS –U. Minho
11:15-12:15	Functional Analysis of Genome- scale experiments	Fátima Al-Shahrour	ICVS –U. Minho Room - A0.03
12:15-13:45	<i>Lunch</i>		ICVS –U. Minho
13:45-14:45	Statistical testing for genomics problems using R	Mark van de Wiel	ICVS –U. Minho Room - A0.03
14:45-15:45	Statistical testing for genomics problems using R hands-on	Mark van de Wiel/Josien Haan/Miguel Rocha	ICVS –U. Minho Room – A2.07
15:45-16:15	<i>Coffee-break</i>		ICVS –U. Minho
16:15-17:30	Poster presentations and discussion	6 min/student	ICVS –U. Minho
17:30-18:15	<i>Contractors meeting (Contractors to MC-GARD.eu only)</i>		ICVS –U. Minho Room – I1-15
18:00	<i>Guide visited to the historical part of Braga and dinner</i>		<i>Braga</i>

Day / Hour	Topics	Speaker(s)	Local
Wednesday 10th	Array data handling		
9:00-10:15	Segmentation of array CGH data with application to allele specific copy number, clonality, and copy number variation	Adam Olshen	ICVS –U. Minho Room - A0.03
10:15-11:15	Translational studies of cancer therapeutics using genomic profiles from cancer cell lines	Joel Greshock	ICVS –U. Minho Room - A0.03
11:15-11:45	<i>Coffee-break</i>		ICVS –U. Minho
11:45-12: 45	Translational studies of cancer therapeutics using genomic profiles from cancer cell lines hands-on	Joel Greshock	ICVS –U. Minho Room – A2.07
12.45-14:15	<i>Lunch</i>		ICVS –U. Minho
14:15-15:00	The benefits of calling and regioning for aCGH profiles	Mark van de Wiel	ICVS –U. Minho Room - A0.03
15:00-16:15	Segmentation and calling of aCGH profiles hands-on	Adam Olshen/ Mark van de Wiel /Josien Haan	ICVS –U. Minho Room – A2.07
16:15-16:45	<i>Coffee-break</i>		ICVS –U. Minho
16:45-17:30	In Silico analysis of expression levels of 17330 human genes across 9783 samples from 175 types of healthy and pathological tissues	Sami Kilpinen	ICVS –U. Minho Room - A0.03
17:30-18:00	Poster presentations and discussion	6 min/student	ICVS –U. Minho
18:30	<i>Visit to Bom Jesus, Braga and dinner</i>		<i>Braga</i>

Day / Hour	Topics	Speaker(s)	Local
Thursdays 11th	Statistical data analysis		
9:00-10:00	Statistical methods for high dimensional data: variable selection, dimension reduction and evaluation	Anne-Laure Boulesteix	ICVS –U. Minho Room - A0.03
10:00-10:45	Class prediction and validation	Marc Zapatka	ICVS –U. Minho Room - A0.03
10:45-11:15	<i>Coffee-break</i>		ICVS –U. Minho
11:15-12:00	Inference of regulation networks	Celine Rouveirol	ICVS –U. Minho Room - A0.03
12.00-13:30	<i>Lunch</i>		ICVS –U. Minho
13:30-15:00	Statistical methods for high dimensional data: variable selection, dimension reduction and evaluation hands-on	Anne-Laure Boulesteix/Josien Haan/Sami Kilpinen	ICVS –U. Minho Room – A2.07
15:00-16:15	Class prediction and validation hands-on	Marc Zapatka	ICVS –U. Minho Room – A2.07
16:15-16:45	<i>Coffee-break</i>		ICVS –U. Minho
16:45-17:45	Poster presentations and discussion	6 min/student	ICVS –U. Minho
18:00	<i>Visit to Mosteiro de Tibães, Braga and dinner</i>		<i>Braga</i>

Day / Hour	Topics	Speaker(s)	Local
Friday 12th	Genome and gene annotation analysis		
9:00-9:45	Genome copy number variation	Dalila Pinto	ICVS –U. Minho Room - A0.03
9:45-10:30	Using bioinformatics to predict the function of noncoding RNAs	Marcel Dinger	ICVS –U. Minho Room - A0.03
10:30-11:15	Epigenetic analysis: gene candidate and genome-wide analysis	Esteban Ballestar	ICVS –U. Minho Room - A0.03
11:15-11:45	<i>Coffee-break</i>		ICVS –U. Minho
11:45-12:30	Genome copy number variation databases hands-on	Dalila Pinto	ICVS –U. Minho Room – A2.07
12:30-14:00	<i>Lunch</i>		
14:00-15:00	Long noncoding RNAs in mammalian differentiation and development hands-on	Marcel Dinger	ICVS –U. Minho Room – A2.07
15:00-15:45	Epigenetic analysis: gene candidate and genome-wide analysis hands-on	Esteban Ballestar	ICVS –U. Minho Room – A2.07
15:45-16:15	<i>Coffee-break</i>		ICVS –U. Minho
16:15-17:15	Functional profiling of genomic experiments hands-on	Fátima Al-Shahrour	ICVS –U. Minho Room – A2.07
18:00	<i>Guided visit to the city of Guimarães and dinner</i>		<i>Guimarães</i>

Day / Hour	Topics	Speaker(s)	Local
Saturday 13th	New technologies and uses		
9:00-9:45	Large scale resequencing of cancer genomes: An introduction to tools, sequence alignment and identifying mutations for cancer genome analysis	Hanlee Ji	ICVS –U. Minho Room - A0.03
9:45-10:30	Cross species genome comparisons	Mariano Rocchi	ICVS –U. Minho Room - A0.03
10:30-11:00	<i>Coffee-break</i>		
11.10-12:00	Large scale resequencing of cancer genomes: An introduction to tools, sequence alignment and identifying mutations for cancer genome analysis hands-on	Hanlee Ji/Georges Natsoulis	ICVS –U. Minho Room – A2.07
12:00- 12:30	Closing Remarks	Bauke Ylstra	ICVS –U. Minho Room - A0.03
14:00	<i>Visit to the city of Oporto, Porto Wine Cellars and dinner</i>		<i>Porto</i>

Affiliations Speakers/Trainers:

1. Anne-Laure Boulesteix- Sylvia Lawry Centre for Multiple Sclerosis Research, Munich, Germany
2. Adam Olshen – SKCC/ USA
3. Mark van de Wiel- Dep of Pathology /VU Medical Center and Dep of Mathematics (VU), Amsterdam, The Netherlands –
4. Celine Rouveirol- Université Paris Sud, France
5. Mariano Rocchi- Bari University, Italy
6. Bauke Ylstra- Dep of Pathology /VU Medical Center, Amsterdam, The Netherlands
7. Outi Monni- Biomedicum Biochip Center and Institute of Biomedicine, University of Helsinki, Finland
8. Nick Gilbert- Cancer Research Center, The University of Edinburgh, UK
9. Esteban Ballestar- Centro Nacional de Investigaciones Oncológicas, CNIO, Madrid, Spain
10. Josien Haan- Micro-array Facility, VUMC Cancer Center, Amsterdam, The Netherlands
11. Fátima Al-Shahrour - Bioinformatics Department at the Centro de Investigación Príncipe Felipe (CIPF), Valencia, Spain.
12. Miguel Rocha- Informatics Department of the University of Minho
13. Sami Kilpinen - Genome-Scale Biology Research Program, Biomedicum, University of Helsinki
14. Hanlee Ji – Clinical Cancer Genomics Group/ Stanford University
15. Joel Greshock -Discovery & Translational Medicine, GlaxoSmithKline
16. Dalila Pinto - The Centre for Applied Genomics The Hospital for Sick Children, Ontario, Canada
17. Marcel Dinger - Institute for Molecular Bioscience, The University of Queensland, Australia
18. Mei-Ling Ting Lee, Biostatistics Division, College of Public Health, The Ohio State University. Columbus, Ohio, USA
19. Marc Zapatka, Dept. Theoretical Bioinformatics, German Cancer Research Center, Heidelberg, Germany
20. Georges Natsoulis - Clinical Cancer Genomics Group/ Stanford University

Affiliations Organizers:

Rui M. Reis – Life and Health Science Research Institute (ICVS), School of Health Sciences, University of Minho, Braga, Portugal

Bauke Ylstra- Micro-array Facility, VUMC Cancer Center, Amsterdam, The Netherlands

Conference management:

Margreet Werveij-Deddens- Micro-array Facility, VUMC Cancer Center, Amsterdam, The Netherlands