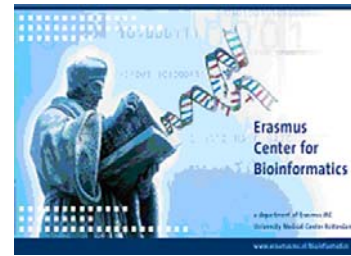


**Molecular Medicine  
Postgraduate School**



**Workshop  
Basic data analysis on gene expression arrays (BAGE) 2010  
Wednesday 28 & Thursday 29 April 2010**

vs 100421

**Introduction**

The aim of this Workshop is to give a basic and advanced introduction on data analysis on gene expression arrays. It will cover basic understanding of workflow, required for the analysis of gene expression arrays (Illumina and Affymetrix). The second day will be mainly advanced Ingenuity Pathway Analysis. The workshop is primarily organized for PhD students and postdocs of the Erasmus Postgraduate School Molecular Medicine, NiHes and MGC. Other participants are also welcome but need to pay a fee. The total number of participants is limited to **18**, due to number of computers available.

**Program**

The program features several short, concentrated presentations on various aspects of the data analysis, followed by interactive practical sessions behind the computers. We owe special thanks to **Adam Corner, Ingenuity**, as an excellent speaker who specially comes over from the UK to spend the main part of the second day to this course.

**Location:** Dept. of Bioinformatics, computer room, Ee-15.28 (15<sup>th</sup> floor), Erasmus MC  
**Duration:** 9.30/9.15 – 17.00  
**Maximum participants:** 18  
**Registration:** [www.molmed.nl](http://www.molmed.nl)

**(Non commercial) attendance fees**

This two-day course is free for all participants from the MolMed and MGC. Non commercial participants from outside the Erasmus MC need to pay €200, PhD students, post docs and Master students from elsewhere pay a 50% reduced fee of €100.

**Commercial participants & sponsors**

These are invited to inquire for participation and sponsoring.

**Invoices**

Fees can be paid upon an INVOICE. Shortly after your registration you will receive the INVOICE per mail. Payment per bank can be done on account: 43.47.01.408 / Erasmus MC, (IBAN code bank: NL86ANBA0434701408; SWIFT code bank: ABNANL2A), together with the number on your INVOICE.

Late participants can also pay in cash upon signing in for the Course.

**Cancellations**

Our cancellation policy is that **cancellation is possible up to one week before the start** of the Course. Later cancellation will not be accepted, but you are allowed to send a substitute.

<b>DAY 1, Wed. April 28</b>			
<b>Basic data Analysis on Gene Expression arrays (BAGE); room Ee-15.28</b>			
<b>Time</b>	<b>Title</b>	<b>Keywords</b>	<b>Teachers</b>
9.30	Platforms (1)	Hardware (chips), basic workflows	Mario Pescatori
10.15	<b>COFFEE BREAK</b>		
10.30	Platforms (2)	Illumina (bead studio) and Affymetrix	Mario Pescatori
11.15	Normalisation and QC	MAS, RMA	Justine Peeters
12.00	<b>LUNCH</b>		
12.45	Class comparison/discovery (1)	T test, FDR, clustering	Johan de Rooij
13.15	Class comparison/discovery (2)	T test, FDR, clustering	Mario Pescatori
14.00	<b>Practical</b>	Class comparison using BRB tools	Mario Pescatori, Justine Peeters
15.00	<b>COFFEE BREAK</b>		
15.15	Short & general introduction to tools for pathway analysis	Text analysis, Omniviz, Ingenuity pathway analysis (IPA)	Andreas Kremer
15.30	Text analysis	PubGene; Anni; iHOP	Martijn Schuemie
16.15	Omniviz	Analysis and text	Stefan van Yper
±17.00	<b>END</b>		

<b>DAY 2, Thurs. April 29</b>			
<b>Basic data Analysis on Gene Expression arrays (BAGE) advanced; functional analysis; Ingenuity Pathway Analysis (IPA); room Ee-15.28</b>			
<b>Time</b>	<b>Title</b>	<b>Keywords</b>	<b>Teachers</b>
9.15	Introduction to pathway analysis		Andreas Kremer
10.30	Ingenuity pathway analysis (IPA)	Commercial tool for pathway analysis & visualisation	Adam Corner, Ingenuity
10.45	<b>COFFEE BREAK</b>		
11.00	Ingenuity: HT Data Analysis	HT Data Analysis; Data upload, transcriptomics, genomics; Analysis parameters and pre-analysis filters; Core analysis data review; Network overlay: adding biological context	Adam Corner
12.15	<b>Practical</b>	HT Data Analysis (etc., see above)	Adam Corner
13.00	<b>LUNCH</b>		
13.45	Ingenuity: Biomarker identification and validation	Biomarker identification and validation; Data upload, filter use and results comparison; Pathway building and phenotype tagging; Network overlay: adding biological context	Adam Corner
14.30	<b>Practical</b>	Biomarker identification and validation	Adam Corner
15.00	<b>COFFEE BREAK</b>		
15.15	Ingenuity: Advanced Search & Explore	Advanced Search & Explore Using the search window: molecules, functions/diseases, drugs; Advanced Search: filtering on subcellular location and molecule type; Using results of a search: pathways and lists; Comparing results of a search; Building a pathway of a biological model	Adam Corner
16.30	<b>Practical</b> , also for questions and own data	Advanced Search & Explore; also: bring your own data!	Adam Corner
±17.30	<b>END</b>		