Institute of Molecular Life Sciences

STA 426: Statistical Analysis of High-Throughput Genomic and Transcriptomic Data

- We've received 4/6 pull requests from last week's technology day. The rest are due: 18.00 Wed 12th Oct
- If you were away on 3th Oct, your assignment is the same: a pull request for one of the technologies from https://liorpachter.wordpress.com/seq/ (not one of the ones already taken)
- The **17 Oct** class is a hands-on RNA-seq session (we will see some of the statistical theory in a few weeks), run by Charlotte Soneson. The whole session will take place in **Y11-J-05**. If you want to use your own computer for it, please: i) install the list of software that Charlotte will post; ii) download the raw data (~300MB) to your computer. More details will be given on Slack this week.

Mark D. Robinson, Statistical Genomics, IMLS



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- Projects: can be done in groups (size 2-3). Or, it can be done solo. (See the slides from the first lecture for more description.)
- Projects: someone contacted me last week about a project involving differential expression of long non-coding RNAs, 48 samples paired end. This collaboration would be a reasonable project for the course.



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- Journal club: please start thinking about a journal club paper. There was a question in lecture a couple of weeks ago, and, YES, it would be fine if a group of up to 3 work together to prepare the journal club presentation.
- See schedule on next slide. Some pressure will be applied soon (doodle or similar) to sign up for the journal club slot.

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Note the schedule for journal clubs

Tentative Schedule

Date	Lecturer	Topic	JC1	JC2
19.09.2016	Mark; Hubert	admin, mol. biology basics, R markdown		
26.09.2016	Hubert	exploratory data analysis		
03.10.2016	Mark; Hubert	interactive technology session		
10.10.2016	Hubert	NGS intro; mapping		
17.10.2016	Charlotte	hands-on RNA-seq session		
24.10.2016	Mark	limma 1		
31.10.2016	Mark	limma 2	x	X
07.11.2016	Hubert	RNA-seq quantification	x	x
14.11.2016	Mark	edgeR+friends 1	x	x
21.11.2016	Mark	edgeR+friends 2	x	x
28.11.2016	Hubert	classification	x	x
5.12.2016	Mark	epigenomics, DNA methylation	x	х
12.12.2016	Mark	gene set analysis	x	х
19.12.2016	Mark	single-cell	x	x