

CRIG's Single Cell mini-symposium

Dec 5, 2018 - UGent-VIB (FSVM building), Technologiepark 927, 9052 Ghent

https://www.crig.ugent.be/en/events/crigs-single-cell-mini-symposium

8:45 – 9:10	registration and coffee
9:10 – 10:50	session 1
• 9:10	Intro and overview of upcoming talks and technologies Prof. Geert Berx (Molecular and Cellular Oncology Lab, UGent, CRIG)
• 9:25	Keynote presentation 1 'Contribution of genetic versus nongenetic intratumor heterogeneity in tumor evolution and therapy resistance' Prof. Jean-Christophe Marine (Lab for Molecular Cancer Biology, VIB-KU Leuven Center for Cancer Biology)
• 10:00	Isolation of fetal cells and circulating tumor cells using VyCAP Dr. Arjan Tibbe (VyCAP) Drs. Ann-Sophie Vander Plaetsen (Lab of Pharmaceutical Biotechnology, UGent
• 10:25	Isolation of circulating tumor cells via DEPArray Prof. Katleen De Preter (Center for Medical Genetics, UGent, CRIG) Drs. Steffi Oeyen (Center for Oncological Research, University of Antwerp)
10:50 – 11:20	coffee break (+ poster viewing, exhibitors)
11:20 – 12:45	session 2
• 11:20	Flow cytometry for single cell applications and downstream analyses Mr. Gert Van Isterdael (Flow Cytometry Core, VIB-UGent) Prof. Yvan Saeys (VIB-UGent Data Mining and Modelling for Biomedicine Group CRIG)
• 11:50	Storm session - short pitches of selected abstracts on single cell technology and applications
• 12:30	Complementary technology pitches
	 'Protein analysis using MILO Single-Cell Western platform' – prof. Frank Speleman (Center for Medical Genetics, UGent, CRIG)

o 'MS-based proteomics on low input samples for target identification' -

 'Biomolecular interactions on low input material using microscale thermophoresis' – dr. Kenneth Verstraete (VIB-UGent Center for

prof. Francis Impens (Proteomics Core, VIB-UGent)

Inflammation Research, Unit for Structural Biology)

12:45 – 13:55 lunch, poster session and exhibitors

13:55 – 15:35 **session 3**

• 13:55 Keynote presentation 2 'Gut stem cell turnover and recruitment in health and disease'

Prof. Heiko Lickert (Institute of Diabetes and Regeneration Research & Institute of Stem Cell Research, Helmholtz Zentrum München)

14:30 Single cell RNA sequencing platform at VIB

Dr. Niels Vandamme (UGent Molecular and Cellular Oncology lab, VIB-UGent Data Mining and Modelling for Biomedicine Group, CRIG)

14:55 Trajectory inference and modelling of scRNAseq data

Drs. Wouter Saelens (VIB-UGent Data Mining and Modelling for Biomedicine Group)

• 15:20 ScRNAseq reveals the in vivo differentiation potential and transcriptional dynamics of immature human thymocytes

Drs. Marieke Lavaert (UGent Department of Diagnostic Sciences)

15:35 – 16:05 coffee break (+ poster viewing, exhibitors)

16:05 – 17:10 session 4

• 16:05 Laser Capture microdissection for microscopy-guided cell isolation and downstream applications

Prof. Ward De Spiegelaere (Angiogenesis Lab, UGent Dept. Morphology, CRIG)

• 16:15 High content screening at single cell resolution

Dr. Dominique Audenaert (c-BIOS, Screening Core, VIB-UGent)

• 16:35 Phenotypic assays on cancer cell populations using IncuCyte

Drs. Liselot Mus (Center for Medical Genetics, UGent, CRIG) **Prof. Olivier De Wever** (Lab of Experimental Cancer Research, UGent, CRIG)

16:55 Data-analysis pipelines to resolve imaging data at single cell resolution

Dr. Daniel Peralta (VIB-UGent Data Mining and Modelling for Biomedicine Group)

17:10 – 17:30 panel session and Q&A with experts

'Opportunities and limitations of different single cell technologies & future perspectives'

17:30 reception

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