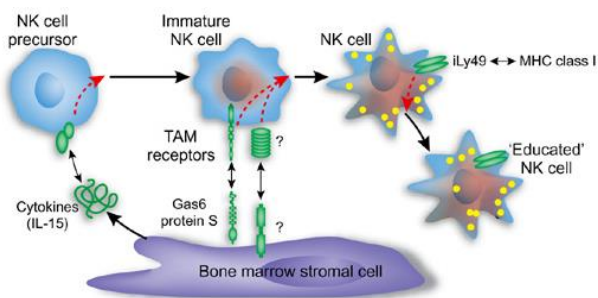
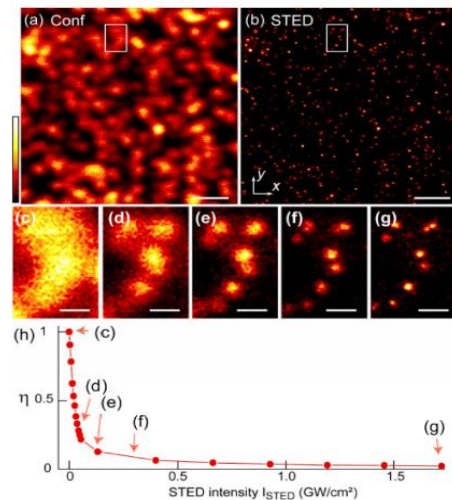


International workshop on Applications of Ultrasensitive Fluorescence Techniques in Immunology

February 10th – 13th 2013, Järvsö, Sweden



STINT

Stiftelsen för internationalisering av
högre utbildning och forskning

E-mail info@stint.se <http://www.stint.se>

CONTACTS

Stefan Wennmalm, mobile phone +46-(0)70-713 78 70, email: stewen@kth.se
Harsagården 1, 820 40 Järvsö, Sweden, phone: +46-(0)651-495 11, www.harsa.se

PARTICIPATING GROUPS

Experimental Biomolecular Physics, Applied Physics, Royal Institute of Technology (KTH), Sweden

<http://www.biomolphysics.kth.se/>

Björn Önfelt Lab, Cell Physics, Applied Physics, Royal Institute of Technology (KTH), Sweden

http://www.onfeltresearch.com/onfeltresearch/Bjorn_1.html

Dan Davis Lab, Division of Cell and Molecular Biology, Life Sciences, Imperial College, London, UK

<http://www.dandavislab.co.uk/>

Nadia Guerra Lab, Division of Cell and Molecular Biology, Life Sciences, Imperial College, London, UK

<http://www3.imperial.ac.uk/people/n.guerra>

Laboratory of Physical Chemistry of Polymers and Membranes (LCPPM), École polytechnique fédérale de Lausanne (EPFL), Switzerland

<http://lcppm.epfl.ch/>

Lymphocyte Function Group, Ludwig Center for Cancer Research, Université de Lausanne, Lausanne, Switzerland

<http://www.unil.ch/licr/page82829.html>

Petter Höglund Lab, Center for Hematology and Regenerative Medicine (HERM) Department of Medicine Huddinge, Karolinska Institutet

<http://ki.se/ki/jsp/polopoly.jsp?d=42677&l=en>

Sofia Johansson Lab, Department of Microbiology, Tumor and Cell Biology (MTC), Karolinska Institutet, Stockholm, Sweden

<http://ki.se/ki/jsp/polopoly.jsp?a=132789&d=23387&l=en>

Institut für Physicalische Chemie, Heinrich Heine Universität, Düsseldorf, Germany

<http://www.mpc.uni-duesseldorf.de/>

SCHEDULE

Sunday February 10th

11.15: Gathering at Östra station/Tekniska högskolan for transport with "Ellénus Buss"

11.30: Departure from Östra station

12.00-12.15: Pickup of six participants from UK at Arlanda airport, Arrivals, Terminal 5

12.20-12.40: Pickup of seven participants from Switzerland at Terminal 2

14.30-15.30: Lunch

17.30: Arrival at Harsagården, Järvsö

19.00: Dinner

20.00 – 21.15: evening session

Session chair: Jerker Widengren

Petter Höglund, KI, Stockholm

"Mechanisms of NK cell immunology – an update"

Shaun-Paul Cordoba, Imperial College, London

"Super-resolution imaging of the Natural Killer cell immune synapse"

Evangelos Sisamakos, KTH, Stockholm

"As sensitive as it seems? Assessment of the sensitivity of a confocal microscope by FCS and TRAST"

Monday February 11th

08.30 – 10.25: morning session

Session chair: Werner Held

Adam Cartwright, Imperial College, London

"Establishing the molecular size threshold of immune synapse penetration and the amount of perforin secreted by NK cells: Implications for drug access and application"

Romain Wyss, EPFL, Lausanne

"A solid-state nanopore for vesicles sensing"

09.20 – 09.30: short break

09.30 – 10.25: morning session cont.

Joana Guedes, Imperial College, London

"Investigating NK cell function and location in a mouse model of hepatocellular carcinoma" (10 min)

Nadia Guerra, Imperial College, London

"NKG2D regulates spontaneous intestinal tumorigenesis" (15 min)

Ralph Kühnemuth, HHU, Düsseldorf	“Tuning microfluidic mixers for ultrasensitive kinetic measurements using FCS and numerical methods”
10.25 – 16.00	Skiing and other voluntary outdoor activities
11.30 – 14.00	Lunch at Harsagården
15.30 – 16.00	Coffee available in the cafeteria

16.00 – 17.50: afternoon session

Session chair: Petter Höglund

Horst Vogel, EPFL, Lausanne	“Thermal Unfolding of a Mammalian Pentameric Ligand-gated Ion Channel Proceeds at Consecutive, Distinct Steps”
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Stefan Wennmalm, KTH, Stockholm	“Two novel fluctuation techniques for analysis of nano-objects in solution or on surfaces”
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16.50 – 17.00, short break

17.00 – 17.50: afternoon session cont.

Björn Önfelt, KTH, Stockholm	"Classification of NK cells based on cytotoxic response"
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Luc Veya, EPFL, Lausanne	“Deciphering the fate of individual NK1 receptors in the cell membrane”
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17.50 – 19.00: dinner

19.00 – 20.50: evening session

Session chair: Sofia Johansson

Ismaël Perrin, EPFL, Lausanne	“Structural and functional studies of the mouse Eugenol olfactory receptor : towards an improvement of its computational model”
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Lei Xu, KTH, Stockholm	"Study of choline binding proteins in virulent Streptococcus pneumoniae using fluorescence correlation spectroscopy"
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19.50 – 20.00: short break

20.00 – 20.50: evening session cont.

Thamani Dahoun, EPFL, Lausanne	“Activation of multiple intracellular transduction pathways by different agonists of the mouse olfactory receptor mOR256-17”
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Shuguang Yuan, EPFL, Lausanne

“Lipid receptor S1P1 activation scheme concluded from microsecond all-atom molecular dynamics simulations”

Tuesday February 12th

08.30 – 09.45: morning session

Session chair: Nadia Guerra

Jerker Widengren, KTH, Stockholm

“TRAST and STED imaging as possible tools to detect cancer-specific cellular states”

Sofia Johansson, KI, Stockholm

“Quantitative aspects of Ly49-MHC Class I interactions”

Sunitha Bagavath-Singh, KI, Stockholm

“Differentiation between educated and non-educated NK cells”

09.45 – 16.00

Skiing and other voluntary outdoor activities

11.30 – 14.00

Lunch at Harsagården

15.30 – 16.00

Coffee available in the cafeteria

16.00 – 17.50: afternoon session

Session chair: Björn Önfelt

Peter Zentis, HHU, Düsseldorf

“Cancer diagnostics by multiparameter fluorescence image spectroscopy: A bioinformatic classifier trained on cultured immunostained cells”

Per Olofsson, KTH, Stockholm

“Quantitative analysis of NK cell migration and killing in microwell chips”

16.50 – 17.00: short break

17.00 – 17.50: afternoon session cont.

Sam Sheppard, Imperial College, London

“Characterisation of a novel NKG2D/NKp46 double mutant mouse”

Per Thyberg, KTH, Stockholm

“Demodulation of images from scanning-iFCS”

17.50 – 19.00: dinner

19.00 – 20.50: evening session

Session chair: Horst Vogel

Mihailo Rabasovic

“Development of SHG, TPEF and THG microscope at the Institute of Physics in Belgrade”

Volodomyr Chmyrov, KTH, Stockholm

“*Trans-cis* isomerization of lipophilic dyes provides a measure of membrane microviscosity in biological membranes and in live cells”

19.50 – 20.00: short break

20.00 – 20.50: evening session cont.

Stephan Meinke, KI, Stockholm

“Creating HLA-deficient platelets for transfusion”

Werner Held, Universite de Lausanne

"Self-control of Natural Killer cells"

Wednesday February 13th

07.00 – 08.00:

Breakfast

08.15:

Gathering and getting onboard the bus

08.30:

Departure

12.30:

Arrival at Arlanda airport

13.30

Arrival at Albanova, Roslagsvägen 30

13.45

Arrival at Östra station/Tekniska Högskolan