# Programme

## Day 1: Tuesday 10 November 2015

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<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>8.30 - 9.00</td>
<td>Registration poster hanging</td>
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<tr>
<td>9.00 - 9.15</td>
<td><strong>WELCOME</strong> &lt;br&gt;Per Gardeström, Scientific coordinator for KBC</td>
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<td>9.15-10.15</td>
<td><strong>Keynote Speaker: The Genetics of Common Diseases</strong> &lt;br&gt;Kari Stefansson, <em>deCODE genetics, Reykjavík, and Faculty of Medicine, University of Iceland, Iceland</em> &lt;br&gt;<em>Chair: Erik Johansson</em></td>
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<tr>
<td>10.15-10.45</td>
<td>Coffee break</td>
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<td>10.45-12.00</td>
<td><strong>RESEARCH NEWS FROM KBC DEPARTMENTS</strong> &lt;br&gt;<em>Chair: Andrei Chabes</em></td>
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<td>10.45-11.00</td>
<td><strong>MicroBiorefine</strong> &lt;br&gt;Christiane Funk, <em>Chemistry</em></td>
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<td>11.00-11.15</td>
<td><strong>Techno-biological green Chemistry: Enzymes love Ionic liquids</strong> &lt;br&gt;Jyri-Pekka Mikkola, <em>Chemistry</em></td>
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<td>11.15-11.30</td>
<td><strong>Physiological Branch-Points with Ecosystem Consequences: Carbon and Water in Boreal Forests</strong> &lt;br&gt;John Marshall, <em>Department of Forest Ecology and Management, SLU</em></td>
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<td>11.30-11.45</td>
<td><strong>Evolutionarily conserved mechanisms of stress response that converge on Mediator and chromatin structure</strong> &lt;br&gt;Stefan Björklund, <em>Medical Biochemistry and Biophysics</em></td>
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<td>11.45-12.00</td>
<td><strong>What to do with great ideas?</strong> &lt;br&gt;Madeleine Ramstedt, <em>Department of Chemistry and Ambassador for the innovation support system at UmU</em> &lt;br&gt;Camilla Viklund, <em>Uminova</em></td>
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<td>12.00-13.00</td>
<td>Lunch</td>
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13.00-14.00  PANEL DISCUSSION-OUTREACH ACTIVITIES AT UMEÅ UNIVERSITY
Examples for outreach at Umeå university? Who is participating in outreach? What is the policy for outreach? What can we improve?
Participants:
Åsa Rasmuson-Lestander, Dean, Faculty of Science and Technology
Tobias Sparrman, Chemistry
Keith Larson, Ecology and Environmental Science
Anna-Lena Lindskog, Faculty of Science and Technology
Moderator: Eva-Maria Diehl

14.00-15.00  RESEARCH AT CIRC (CLIMATE IMPACT RESEARCH CENTRE)
14.00-14.15  Abisko Climate Impacts Research Centre (CIRC)
Jan Karlsson, Ecology and Environmental Science
14.15-14.30  The arctic and our changing climate - do ecosystems matter?
Ellen Dorrepaal, Ecology and Environmental Science
14.30-14.45  Herbivores influence the function of arctic ecosystems
Johan Olofsson, Ecology and Environmental Science
14.45-15.00  Tundra streams in a changing climate
Reiner Giesler, Ecology and Environmental Science

15.00-15.30  Coffee break

15.30-ca. 16.00  THE MIDTERM PHD-STUDENTS AT KBC PRESENT THEIR POSTER (2 min each)
Chair: Linda Pommer
Participating PhD-students:
Roland Bergdahl, Chemistry
Daria Chrobock, UPSC, Plant Physiology
Anne Deininger, EMG
Dagmar Egelkraut, EMG
Beatrix Galindo-Prieto, Chemistry
Haleh Hayatgheibi, UPSC, Forest Genetics and Plant Physiology
Amir Khodabakhsh, Physics
Martina Kulén, Chemistry
Mattias Lindh, Physics
Philipp Ochtrop, Chemistry
Lars Nygård Skalman, Medical Biochemistry and Biophysics (MBB)
Stefano Papazian, UPSC, Plant Physiology
Jonna Venkateswara Rao, MBB
Farahnaz Ranjbarian, MBB
Umut Rende, UPSC, Forest Genetics and Plant Physiology
Michael Saleeb, Chemistry
Shashank Sane, UPSC, Forest Genetics and Plant Physiology
Barbara Terebieniec, UPSC, Plant Physiology
Phong Tran, MBB
Tung Pham, Chemistry
Marcus Östman, Chemistry
Additional presentations:
Joanna Antoniadi, UPSC, Forest Genetics and Plant Physiology
James Good, Chemistry
Natuschka Lee, Dept Ecology Environ Science

16.00-18.00  Poster Session PhD-students present their posters

18.00  Dinner and presentation of the KBC poster award
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9.00-10.00  AWARDEES AND NEW FACULTY MEMBERS
            Chair: Thomas Wågberg

9.00-9.15  Cell surface dynamics
            Richard Lundmark, Medical Biochemistry and Biophysics
            Fernström prize for young scientists

9.15-9.30  Time-resolved photoelectron spectroscopy of surfaces
            Piotr Matyba, Physics
            Gunnar Öquist Fellow

9.30-9.45  Seed orchard – the link between tree breeding and forest production
            Xiao-Ru Wang, Ecology and Environmental Science, EMG

9.45-10.00 Biotic interactions and climate change effects on communities and ecosystem functioning in mountain landscapes
            Maja Sundqvist, Ecology and Environmental Science

10.00-10.30 Coffee break

10.30-11.45 AWARDEES AND NEW FACULTY MEMBERS
            Chair: Richard Bindler

10.30-10.45 Molecular Detection with Optical Frequency Combs
            Aleksandra Foltynowicz-Matyba, Physics
            Kungl. Skytteanska Samfundets Pris 2015

10.45-11.00 Regulation of inflammation in the gut
            Andrea Puhar, The Laboratory for Molecular Infection Medicine Sweden MIMS/Dept of Molecular Biology

11.00-11.15 Gram-positive Type 4 Secretion Systems
            Ronnie Berntsson, Department of Medical Biochemistry and Biophysics

11.15-11.30 Integration of flowering time signals in Arabidopsis thaliana
            Markus Schmid, Department of Plant Physiology

11.30-11.45 Molecular level investigations of clay mineral interfaces
            Michael Holmboe, Department of Chemistry

11.45-12.45 Lunch
# Programme

**Day 2: Wednesday 11 November 2015**

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| 12.45-12.55 | The interactive focus environment at KBC  
Per Gardeström, Scientific Coordinator KBC                                   |
| 13.00-14.00 | **NEWS FROM THE INFRASTRUCTURES AND CORE FACILITIES**  
*2 mins each plus max 1 min for questions*  
*NOTE longer information at Poster presentations*  
Biochemical Imaging Centre Umeå (BiCU)  
Irene Martinez Carrasco, Integrative Medical Biology/Medical Biochemistry and Biophysics  
Laboratories for Chemical Biology Umeå (LCBU)  
Per-Anders Enquist, Chemistry  
Clean Room Facility at the Physics Department  
Roushdey Salh, Physics  
Swedish Metabolomics Centre (SMC)  
Thomas Moritz, UPSC, Forest Genetics and Plant Physiology  
**Umeå Core Facility for Electron Microscopy (UCEM)**  
Linda Sandblad, Molecular Biology  
NMR Core Facility - NMR for Life  
Gerhard Gröbner/Jürgen Schleucher, Chemistry/Medical Biochemistry and Biophysics  
Protein Expertise Platform (PEP)  
Mikael Lindberg, Chemistry  
Proteomics Core Facility  
Gunnar Wingsle/Thomas Kieselbach, UPSC, Forest Genetics and Plant Physiology  
Vibrational Spectroscopy Core Facility  
András Gorzsás, Chemistry  
Computational Life Science Cluster (CLiC)  
Johan Trygg, Chemistry  
Climate Impacts Research Centre (CIRC)  
Jan Karlsson, EMG  
Umeå Marine Sciences Centre  
Siv Huseby, UMF, Henrik Larson, UMF  
X-Ray Crystallography Facility  
Uwe Sauer, Chemistry  |
<p>| 14.00-15.00 | <em>Coffee break and poster viewing</em>  |
| 15.00-16.30 | Visits at the Core Facilities  |</p>
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<th>Last name</th>
<th>First name</th>
<th>Title</th>
<th>Poster n°</th>
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<tr>
<td>Bergdahl</td>
<td>Roland</td>
<td>Structural insights of the assembly and repair of Photosystem II complex</td>
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<td>Chrobok</td>
<td>Daria</td>
<td>Deciphering the role of mitochondria during leaf senescence</td>
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<td>Deininger</td>
<td>Anne</td>
<td>Pelagic food-web response to whole-lake N addition in boreal Sweden</td>
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<tr>
<td>Egelkraut</td>
<td>Dagmar</td>
<td>Long-lasting effects of reindeer grazing on tundra vegetation</td>
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<td>Galindo-Prieto</td>
<td>Beatriz</td>
<td>New developments in Variable Influence on Projection (VIP) methods for sharper interpretation of multivariate data</td>
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<tr>
<td>Hayatgheibi</td>
<td>Haleh</td>
<td>Quantitative genetic survey of lodgepole pine (<em>Pinus contorta</em>)</td>
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<tr>
<td>Jonna</td>
<td>Venkateswara Rao</td>
<td><em>Pseudomonas aeruginosa</em> class Ia ribonucleotide reductase represents a new mechanism of overall activity regulation</td>
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<td>Khodabakhsh</td>
<td>Amir</td>
<td>Fourier-transform cavity-enhanced optical frequency comb spectroscopy</td>
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<td>Kulén</td>
<td>Martina</td>
<td>Ring-fused 2-pyridones inactivate the virulence regulator PrfA of Listeria monocytogenes</td>
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<td>Lindh</td>
<td>Mattias</td>
<td>Luminescent Line-Art by Direct-Write Patterning</td>
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<td>Nygård Skalman</td>
<td>Lars</td>
<td>Endocytosis of <em>Helicobacter pylori</em> outer membrane vesicles and the VacA toxin</td>
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<td>Ochtrop</td>
<td>Philipp</td>
<td>Covalent protein labeling by enzymatic phosphocholination</td>
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<td>Papazian</td>
<td>Stefano</td>
<td>Metabolomics and transcriptomics of the mustard plant <em>Brassica nigra</em> in response to ozone and herbivore stress</td>
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<tr>
<td>Pham</td>
<td>Tung</td>
<td>Novel carbon foam - Versatile applications</td>
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<td>Ranjbarian</td>
<td>Farahnaz</td>
<td>Targeting the nucleotide metabolism of <em>Trypanosoma brucei</em></td>
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<td>Rende</td>
<td>Umut</td>
<td>Sucrose cleavage during wood formation in aspen</td>
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<td>Saleeb</td>
<td>Michael</td>
<td>Superbug needs drugs: Targeting <em>Pseudomonas aeruginosa</em> type III secretion via inhibition of ADP-ribosylating toxins</td>
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<td>Sane</td>
<td>Shashank</td>
<td>Role of microRNA to determine Bud Phenology in trees</td>
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<td>Terebieniec</td>
<td>Barbara</td>
<td>A systems genetics approach to understanding natural variation of leaf shape in <em>Populus Tremula</em></td>
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<td>Tran</td>
<td>Phong</td>
<td>Roles of translesion polymerases in mutagenesis in the presence of dNTP pool imbalance</td>
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<td>Östman</td>
<td>Marcus</td>
<td>Antimicrobial compounds in Swedish sewage treatment plants</td>
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<td>Antoniadi</td>
<td>Ioanna</td>
<td>Cell-type-specific cytokinin distribution within the Arabidopsis primary root apex</td>
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<td>Good</td>
<td>James</td>
<td>Thiazolino 2-pyridone amide inhibitors of <em>Chlamydia trachomatis</em> infectivity</td>
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<td>Lee</td>
<td>Natuschka</td>
<td>Advanced microscopy techniques for <em>in situ</em> detection of microbes in their natural environment</td>
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Chemical Biological Centre

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