KBC DAYS 2017
7th – 8th November 2017
Programme and Abstracts
Tuesday, 7th November

8.30 Registration, poster mounting

9.00 Welcome introduction and update
Per Gardeström
Scientific coordinator of KBC

9.15 Critical thinking and myth debunking
Martin Rosvall
Department of Physics, Director of IceLab

9.45 Coffee break

New Faculty Members and Awardees at KBC
(Chairperson: Lars Lövgren)

10.15 Catalyst Design: Searching for perfectly defective nanomaterials
Eduardo Gracia Espino
Department of Physics

10.35 How HIV-1 wraps its genome into new virus particles - and a bit about how other viruses make theirs
Lars-Anders Carlson
Wallenberg Centre for Molecular Medicine and Department of Medical Biochemistry and Biophysics

10.55 Possibilities and challenges with small molecules targeting G-quadruplex DNA structures
Erik Chorell
Gunnar Öquist Fellow 2016
Department of Chemistry

The KBC Interactive Focus Environment

11.15 The KBC Focus Environment – Presentation of the possibilities
Hardy Hall
Facilitator KBC Focus environment

11.30 Lunch with Live Music from PJs Funk

12.30 Inauguration of the KBC Focus Environment
Ribbon cutting with Katrine Riklund, Pro-Vice Chancellor, Umeå University, and Per Gardeström, Scientific Coordinator for KBC

Mingle at the KBC Focus Environment with Live Music and dessert
New Faculty Members and Awardees at KBC (cont.)
(Chairperson: Andrei Chabes)

13.15 Carbon cycling in Arctic lakes at decadal to millennial timescales
John Anderson
Loughborough University, UK,
HM King Carl XVI Gustaf Professorship of Environmental Science 2017-2018 at Umeå University, Department of Ecology and Environmental Science

13.35 Unearthing the overarching principles governing bacterial cell wall homeostasis
Felipe Cava
The Laboratory for Molecular Infection Medicine Sweden (MIMS), Department of Molecular Biology
Jaime Ferran Award, Spanish Society for Microbiology (Sociedad Española de Microbiología), SEM, Best Microbiologist in Spain 2017

13.55 Crystalline cellulose affinity; a link between prokaryotic and eukaryotic intermediate filaments
Linda Sandblad and Niklas Söderholm
Group Linda Sandblad
Department of Molecular Biology and Umeå Core Facility for Electron Microscopy (UCEM)

KBC Postdoctoral Fellows
(Chairperson: Stefan Björklund)

14.15 Household energy and air pollution worldwide: transitions from traditional to cleaner biomass-fired stoves
Ricardo Carvalho
Kempe Postdoctoral Fellow at UPSC
Thermochemical Energy Conversion Laboratory (TEC-Lab), Department of Applied Physics

14.30 Live and let die – Understanding the regulation of plant leaf senescence in darkness
Daniela Liebsch
Kempe Postdoctoral Fellow at UPSC

14.45 Genome contact map explorer: a platform for the comparison, interactive visualization and analysis of genome contact maps
Rajendra Kumar
Kempe Postdoctoral Fellow at Department of Physics/IceLab
The KBC Midterm PhD students
(Chairperson: Magnus Wolf-Watz)

15.00 Midterm PhD students present their Research Projects in “elevator talks” (2 minutes each)
Dan Adolfsson
Department of Chemistry
Mohammad Jani Basha
Department of Medical Biochemistry and Biophysics
Irena Fundova
UPSC, Department of Forest Genetics and Plant Physiology
Jessica Gard Timmerfors
Department of Chemistry
Nasibeh Mohammadi
MIMS and Department of Chemistry
Majid Mustafa
Department of Chemistry
Mirva Niinipuu
Department of Chemistry
Aleksandra Skrobonja
Department of Chemistry
Anders Rebbeling
Department for Applied Physics and Electronics (TEC-lab)
Bernard Wessels
UPSC, Department of Plant Physiology
Adelijiang Xiamuxiding
Department of Chemistry

15.20 Coffee break and Poster presentation
The midterm PhD students present their posters in the KBC Focus Environment (printed and digital presentations)

18.00 Dinner with PJs Funk (Live music)
New Research Projects, Outreach, Doctoral Programmes
(Chairperson: Fredrik Almqvist)

9.00 Decoding Signalling Networks Controlling Plant Stress Responses - SSF Framework Grants for Research on Systems Biology
Åsa Strand
Umeå Plant Science Centre (UPSC), Department of Plant Physiology

9.15 Abisko Citizen Science: documenting a century of climate change
Keith Larson
Climate Impact Research Centre, CIRC, EMG

9.30 Can we break out of the bubbles? Communication by Future Forests
Annika Mossing
Communication officer, SLU Umeå

9.45 The MIMS affiliated National Doctoral Programme in Infection and Antibiotics NDPIA (National PhD activity)
Anna Holmström
Department of Molecular Biology, MIMS, NDPIA, National Director of Studies

10.00 Coffee break and Poster session

Research Highlights at KBC
(Chairperson: Torbjörn Lestander)

10.30 Why to become the asteroid 11807 Wannberg?
Asta Pellinen Wannberg
Department of Physics

10.50 10,000 year-old DNA proves when fish colonialized our lakes
Göran Englund
Department of Ecology and Environmental Science, EMG

11.10 Atomic-level mechanism of enzymatic ATP versus GTP selectivity
Magnus Wolf Watz
Department of Chemistry

11.30 Mediator binds chromosomal interacting domain boundaries
Stefan Björklund
Department of Medical Biochemistry and Biophysics

11.50 Somatic embryogenesis in Norway spruce - promises & challenges
Henrik Svennerstam
Umeå Plant Science Centre (UPSC), Department of Plant Physiology

12.10 Lunch
Updates from the KBC Infrastructures  
(Chairperson: Thomas Moritz)

13.10 The Electronic Laboratory Notebook  
Madeleine Ramstedt, Department of Chemistry  
The KBC infrastructures present themselves

13.20 1. Short presentations (max 5 minutes)  
• Chemical and Biological Analysis at UMF (Siv Huseby, UMF)  
• Mesocosm Facilities (Henrik Larsson, UMF)  
• The Laboratories for Chemical Biology Umeå, LCBU (Stina Berglund, Chemistry)  
• Computational Life Science Cluster, CLiC (Jeanette Tångrot)  
• NMR Core Facility (Jürgen Schleucher, Medical Biochemistry and Biophysics)  
• Protein Expertise Platform, PEP (Uwe Sauer, Chemistry)  
• X-Ray Crystalisation (Uwe Sauer, Chemistry)  
• UPSC Plant Cell Wall and Carbohydrate Analytical Facility (Junko Takahashi Schmidt, UPSC)  
• Umeå Core Facility for Electron Microscopy, UCEM (Linda Sandblad, Molecular Biology)  
• XPS Platform (Madeleine Ramstedt, Chemistry)

14.10 2. Presentations and discussion at the SurfaceHubs  
(See separate schedules at the registration desk)  
• Biochemical Imaging Centre Umeå (Irene Martinez Carrasco)  
• Umeå Core Facility for Electron Microscopy, UCEM (Linda Sandblad)  
• The Electronic Laboratory Notebook (Charlotta Sundin)  
• The Vibrational Spectroscopy Core Facility (András Gorzsás)

14.30 3. Guided tour through the facility  
(See separate schedules at the registration desk)  
• LCBU (Stina Berglund)  
• PEP (Uwe Sauer)  
• Swedish Metabolomics Centre, SMC (Jonas Gullberg)  
• UCEM (Linda Sandblad)  
• X-Ray Crystalisation (Uwe Sauer)

Please take a note of the presentation outside of the Carl Kempe salen, which gives an overview over all available scientific infrastructures and other coordinated services at KBC.

15.00 Presentation of the KBC Poster Award and Conclusion  
Closing of the KBC DAYS 2017  
Per Gardeström  
Scientific coordinator of KBC