

International Workshop

Molecular Ecology of Sea Ice Communities in a changing world – the Genomic Perspective



Organizers

Stephan Frickenhaus

Klaus Valentin

Gerhard Dieckmann

Location

Hochschule Bremerhaven

Germany, March 29/30 2011

Building K – ALTE MENSA

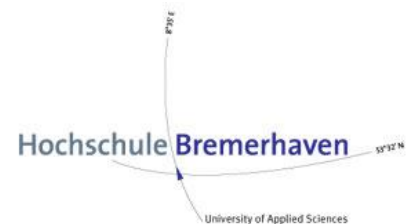
Partner



**Alfred-Wegener-Institut für
Polar- und Meeresforschung**
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Institute for Polar and Marine Research

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Pogramme Sea Ice Workshop Hochschule Bremerhaven March 29/30, 2011

Tuesday March 29

Session I – Introduction to Sea Ice, Chair: Gerd Dieckmann

13.00 – 13.15 Welcome by Stephan & Klaus

13.15 – 13.40 Introduction to Sea ice I, Gerd Dieckmann

13.40 – 14.05 Sea ice extent, thickness, and optics, Marcel Nicolaus

14.05 – 14.30 Introduction to Sea ice II, Dave Thomas

14.30 – 15.00 Break

Session II – Sea ice biota, Chair: Dave Thomas

15.00 – 15.20 Sea ice primary productivity, Ilka Peeken

15.20 – 15.40 Sea ice bacteria, Elisabeth Helmke

15.40 – 16.00 Metagenomics, Christine Klockow

16.00 – 16.20 Sea ice organisms in the Baltic Sea, Hermanni Kaartokallio

16.20 – 16.45 Break

Session III – Antifreeze proteins, chair: Thomas Mock

16.45 – 17.05 Antifreeze Proteins in Polar Diatoms, Christiane Uhlig

17.05 – 17.25 AFP II, Maddalena Bayer

17.25 – 17.55 Lateral transfer of ice-binding genes among microorganisms, Jim Raymond

17.55 – 18.15 Sea Ice Formation, Silke Thoms

19.30 Dinner at Caspar David

Wednesday March 30

9.00 – 9.30 joint (second) breakfast at Mensa

Session IV – Sea ice genomics and metagenomics, Chair: Jim Raymond

9.30 – 10.00 The first psychrophilic eukaryote genome, Thomas Mock

10.00 – 10.20 Metatranscriptomes from marine microbes, Andrew Toseland

10.20 – 10.40 Environmental genomics of polar phytoplankton communities, Ramos/Pearson

10.40 – 10.50 break

Session V Metagenomics/transcriptomics, Chair: Klaus Valentin

10.50 – 11.20 Transcriptomics in *Paulinella*, Gernot Glöckner

11.20 – 11.50 Transcriptomics in Dinoflagellates, Ahmed Moustafa

11.50 – 12.20 Cold signatures in proteins, Stephan Frickenhaus

12.30 – 14.00 Lunch at Caspar David

14.00 – 14.30 Round table I – Sampling strategies (where, when, how, joint sampling), Chair: Gerd Dieckmann

14.45 – 15.15 Round table II – Sequencing strategies (what to sequence next, how), Chair: Thomas, Gernot

15.30 – 16.15 Round table III – Bioinformatics (which tools are needed, joint developments), Chair Ahmed, Stephan

16.30 – 17.15 Round table IV – Future projects (DFG, UK, EU, JGI, Moore ...), Chair Klaus

19.00 meeting / social event

List of contributors

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Possible informal meetings on Thursday in AWI E2470 (media room with beamer), Hustedt Collection (with diatoms and café), E3155 (Klaus Office, < 18°C), Cafeteria (with a view)... we have the entire day, cafe, lunch, snacks available at cafeteria all day long.

Please let us know which subjects you are interested in, we try to make a schedule. Did we miss something?

Joint breakfast 9.00 – 10.00 at Cafeteria

- Green diatoms II paper (Ahmed, Bank, Stephan, Klaus ...)
- *F.kerguelensis*, *Nitzschia alba*, *Chara*, freshwater diatom genomes (Bank, Ahmed, Thomas, Gernot ...)
- *Laminaria* paper (Sandra, Gernot, Stephan, Klaus)
- Metatranscriptome paper (Thomas, Klaus, Andrew, Fabian, Christiane ...)
- Mocks plastid paper (Thomas, Bank, Klaus ...)
- Joint bioinformatics (Stephan, Ahmed, Andrew, Bank, Fabian ...)
- Joint sampling (Gerd, Thomas, Ana/Gareth ...)
- Future grants
- EU calls?