GÖTEBORGS UNIVERSITET

Sea-Ice Microbial Ecosystems, 4 ETC

Course period: 26 Oct - 30 Oct 2015, Lectures 3 Nov – 5 Nov 2015, Symposium 3-7 Dec, Examination	Last day for application: 2015-09-30
Course leader/Address for applications: Leif Anderson / leif.anderson@gu.se	

Course description (Advertisement for Ph.D. students):

Sea ice, as a porous medium on the surface of polar oceans and subpolar seas, represents an important interface between the ocean and atmosphere. This interface is drawing attention for its biogeochemical implications, especially in the Arctic, given rapid climate change and thinning of its sea ice, which may enhance exchanges with overlying atmosphere and underlying seawater. In this course, we will examine the physical framework for sea ice formation and demise, with the known biogeochemical processes that occur within, above and below the ice on a seasonal basis. The focus will then shift to the ice-dwelling microbes and their known, unknown and predicted contributions to gas and material exchanges. In the process we will consider the basic biology of ice-adapted microbes, how they interact as an ecosystem, and emerging information and predictions from genomic analyses and modelling efforts.

Aim of the course
This PhD course, hosted by the Department for Marine Science, will describe the microbial ecosystems in the sea ice environment and its role for transformation of chemical constituents, and be given by the Hasselblad Foundation Guest Professor Jody Deming who is a world leading expertize within this topic.

Target group
The course is aimed for any marine PhD student that is interested in the microbial mediated transformation of chemical constituents. The course contains a mixture of lectures, group discussions as well as participation in an international symposium.

Location and time
Lectures will be given during the week of 26 Oct - 30 Oct 2015, followed by the international symposium 3 Nov – 5 Nov 2015. Examination will be during the period 3-7 Dec, 2015.

Course costs
The course is free of charge but students will need to cover their own travel costs.

Credit points
The course is recommended to correspond to 4 ECTS, (4 HP) in total. Constituting one week of intense studies, participation in an international symposium, and an individually presentation (written and orally) of a given subjected with examination on scheduled occasions.

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Responsible department and other participating departments/organisations: Course organisers: Prof. Leif Anderson, Department of Marine Sciences and Prof. Jody Deming, Hasselblad Foundation Guest Professor. Co-financing: Hasselblad Foundation
Teacher Jody Deming, University of Washington, Seattle, USA. Hasselblad Foundation Guest Professor
Examiner: ???