

PROJECT GREENLAND

MicroArctic is an EU science project with multiple collaborators (France, Denmark, England, Wales, Slovenia Iceland, Germany, Austria, Switzerland & Romania).

<http://www.microarctic.eu/>

The objective is to investigate the impact of climate change – global warming and the melting of the ice in the Arctic, including Greenland, on microbial processes that affect agriculture, release of pathogens, discovery of natural products, and of antibiotics. These micro-bio processes are happening where people live and work. The purpose of the one-day (9h00 – 17h00) ‘Project Greenland’ conference on Monday March 13th 2017 is to bring together scientific researchers, linguists, teachers and students to understand the links between the scientific and social dimensions of these changes and to raise awareness about them. The first half-day will be presentations and discussions about the research being done and related questions. The second part would be an exploration of ideas about what the concrete problems are and how to address them for people living in Greenland and the Arctic regions (as well as communicate to others living elsewhere) and potential/initiatives/projects. The EU greatly values outreach activities and involvement by the public in these issues, and supports the bringing together of interested parties at a variety of levels and age groups.

The MICROARCTIC researchers in Lyon will provide initial environmental microbiology course and lab work to students during the weeks before the 13th of March.

Program for the 13th of March 2017 :

9 :00 Introduction (salle de conférence)

9 :15 Rapid Round Table

9 :45 Presentations (15 minutes each)

- 1) The Arctic (Catherine)
- 2) Microarctic Project (Alex)
- 3) Fieldwork in Greenland (Carsten)
- 4) PhD presentation (question and experiment)
- 5) PhD presentation (question and experiment)
- 6) Greenland (Aviaja)
- 7) Language (Pierre Louis)

12h Lunch (invited to student cafeteria)

13h40 Brainstorming (Pierre Louis and Catherine)

14h30 Discussion groups (up to 7 and each with at least one external Microarctic expert) – one per idea (salle multimédia, salle conseil, salle 111, salle de conférence)

15h30 Group reporting

17h30 End

Participants :

CSI : Anglophone Section : 11 year olds (44) + 15 year olds (70)

CSI : EuroAnglais : 15 year olds (19) and 16 year olds (10) taking biology in English (Nathalie Bisson, Yves Modigliani).

Researchers :

1. École Centrale de Lyon, France, Laboratoire AMPERE, Env Microb Genomics, Prof Timothy M. VOGEL, Benoit BERGK-PINTO
2. Centre National de Recherche Scientifique (CNRS), Laboratoire AMPERE, Env Microb Genomics, Dr. Catherine Larose,
3. Univ. Bristol, UK, School of Geog. Sci. : Prof. Alexandre ANESIO
4. mBioInform, Copenhagen, Denmark Prof. Carsten S. JACOBSEN
5. ENOVEO, Lyon, France, Rose Layton
6. Univ Grenoble, Prof Aurélien DOMMERGUES
7. Novo Nordisk Foundation Center for Biosustainability, Copenhagen, Denmark, Aviaja Lyberth HAUPTMANN
8. Sorbonne, Paris, France, Pierre-Louis PATOINE

The following is some of the ideas that the teachers are considering as related activities – this is just to give you an idea of the generally thinking going on at the CSI.

IDEAS:

ILYMUN linked topics: cultural identity of indigenous cultures, human diversity, promoting self-determination

CSI applying to become a UNESCO school

6eme (6th grade – 11 year olds): This year group already studies the impact of climate and adaptation to extreme environments, snow/mountain trip. In run-up to conference, investigate photographic evidence about climate change and its impact on indigenous cultures. Produce very large format photos. Students research and write blurbs to tell the story. Create a link with school in Greenland???

Seconde (10th grade – 15 year olds): List of issues, areas of interest/problems for students to research before conference (2 weeks before winter vacation, introduce with 'An Inconvenient Truth' and TMV talk to the students during a class about the role of microbiology in life, and then follow-up discussion and allocation of research topics).

Potential issues: impact of climate change on Greenland (and the Arctic generally) on - geology/geography/environment – pollution, agriculture, economic activity, cultural identity, social and political implications, including polar governance , and the effect of microbial response to climate change on these aspects, too. Also, focus on specific locations of interest, eg. Disko Bay. Use climate change data as a starting point. Create blogs as a follow-up to conference. Some of the research materials to be provided by TMV. More info about MicroArctic? Historical climate data available?