

Field-based master and bachelor thesis in:

ECOLOGY OF GLACIER MICROORGANISMS



Cryoconites are water filled cylindrical melt-holes on glacial ice surfaces that are inhabited by microorganisms and small grazing animals (rotifers and tardigrades). We want to know how do the cryoconites and communities within develop over the melting season, where do they get their energy from and how do the different trophic levels interact with each other.

Field work (Svalbard)

- Glacier sampling
- Field measurements & experiments
- Microscopy, sample pre-processing
- Glacier surface scanning using drones

Lab work (Czech Republic)

- Molecular work & bioinformatics
- Nutrient and stoichiometry analysis
- Laboratory experiments
- Data processing

We are offering:

- Work in a young, dynamic, international team
- Work on a multidisciplinary project => collaboration on several publications
- Possibility to visit and work at different scientific institutes
- Exciting and exotic fieldwork in the Arctic
- Training in many useful field and laboratory methods as well as many other areas (glacier safety, drone flying, rifle training just to name a few)

Minimal Requirements:

- Need to spend 2 months continuously (Jul-Aug 2018) at the Czech Arctic station on Svalbard
- No medical condition precluding prolonged stay in the Arctic, good fitness level
- Basic laboratory and data processing skills
- Own suitable field clothing and boots (glacier gear and safety equipment is provided)
- Scientific curiosity, interest in Arctic research
- Ability to knuckle down, work independently and have a positive attitude



Contact: Marie Šabacká
Centre for Polar Ecology
sabacka.marie@gmail.com
web: polar.prf.jcu.cz
www.facebook.com/czechpolar

