

Newsletter 1/2017

Ladies and Gentlemen, dear colleagues,

the Alpine Research Centre Obergurgl releases its first newsletter of 2017, giving a short retrospect of its activities in 2016 and a preview of its programme in 2017.

Announcements

Workshop (29.09 - 03.10.2017, University Centre Obergurgl)



The Alpine Research Centre Obergurgl, <u>hepia Geneva</u> and the <u>LTSER Plattform Tyrolean Alps</u> organize the workshop *Long-Term Research in Mountain Areas* at the <u>University Centre Obergurgl</u> from September 29 to October 3, 2017. For more information, please visit the workshop's <u>webpage</u>.



Report 2016

The yearly report contains information on research activities, publications and events realized or supported by the Alpine Research Centre Obergurgl.

It is available online at https://www.uibk.ac.at/afo/publikationen/pdf/taetigkeitsbericht-2016-final.pdf (in German language only).

Open day at the University Centre Obergurgl (03/10/2017)

The Alpine Research Centre and the University Centre Obergurgl have been organizing open days regularly since many years. In 2017, the open day will be on 3rd of October. Scientists of the University of Innsbruck and employees of the Nature Park Ötztal will present their activities and research projects to school classes and other interested people. Of course, the admission is free. For further information, please contact Klaus.Schallhart@uibk.ac.at.





Pictures from the open day 2016 (photos: University Centre Obergurgl)

Research

A complete list of current research projects, PhD-, Master- and Bachelor thesis, can be found in the report of the Alpine Research Centre mentioned above, as well as information on progress of projects funded by the Alpine Research Centre ("Soil fungi and collembolans in early successional").

stages of a glacier foreland as a basis to investigate trophic interactions of pioneers", submitted by Univ.-Prof. Mag. Dr. Ursula Peintner and "Biological ice nucleators for artificial snow production", submitted by Assoz.-Prof. Dr. Martin Tollinger).

Additionally, 2 new projects were launched recently, containing field experiments in Obergurgl:

• The Alpine Plant Conservation & Research Programme, Europe.

This is an international cooperation project (Kew/U.K., Italy, France, Switzerland, Austria) with the contribution of the University of Innsbruck (Konrad Pagitz, Brigitta Erschbamer) funded by the David & Claudia Harding Foundation. It focuses on harvesting and conserving seeds of alpine plants to study their germination abilities under changing climatic conditions.

As part of this project, Vera Margreiter will carry out her PhD-Thesis in Obergurgl, entitled: *Germination, establishment and phenotypic plasticity of alpine species.*

• Soil microbial community dynamics and biogeochemical cycles under global change: effects of climate and vegetation change in alpine ecosystems.

This international cooperation project with contributions of the Universities of Manchester (Richard Bardgett), Innsbruck (Michael Bahn), Munich and others, is funded by the NERC (Natural Environment Research Council). Study sites of this project are located in Obergurgl Vent and Sölden and the Alpine Research Centre Obergurgl is supporting this project logistically and with manpower.

Researchers in Obergurgl



Univ.-Prof. Mag. Dr. Ursula Peintner
Institute of Microbiology, University of Innsbruck

Ursula Peintner is an expert for fungi. Certainly, not only for edible mushrooms, but also for unremarkable species existing in unexpected habitats and therefore remaining undetected by most people.

Ursula Peintner was awarded the research funding of the Alpine Research Centre 2015/16 (see above), already boasting an extensive research and publishing record on her work in the inner Ötz valley. Her main fields of interest are the biodiversity of fungi in alpine and arctic habitats and their interactions with plants and animals. Even the fungi found with the Iceman

(frozen fritz) were examined by Ursula Peintner. More information about her research activities can be found at: https://www.uibk.ac.at/microbiology/team/peintner_ursula/index.html.en

Publications

Recently published scientific articles from the area around Obergurgl

- ERSCHBAMER, B.; CACCIANIGA, M.S. (2017): Glacier forelands: Lessons of plant population and community development. Progress in Botany 78, S. 259-284.
- RUTZINGER, M.; HÖFLE, B.; LINDENBERGH, R.; ELBERINK, S.; PIROTTI, F.; SAILER, R.; SCAIONI, M.; STÖTTER, J.; WUJANZ, D. (2016): CLOSE-RANGE SENSING TECHNIQUES IN ALPINE TERRAIN. ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences III-6, S. 15-22
- SOLOMINA, O.; BRADLEY, R.S.; JOMELLI, V.; GEIRSDOTTIR, A.; KAUFMAN, D.S.; KOCH, J.; McKAY, N.P.; MASIOKAS, M.; MILLER, G.; NESJE, A.; NICOLUSSI, K.; OWEN, L.A.; PUTNAM, A.E.; WANNER, H.; WILES, G.; YANG, B. (2016): Glacier fluctuations during the past 2000 years. Quaternary Science Reviews 149, S. 61-90
- ZIEHMER, M.M.; NICOLUSSI, K.; SCHLÜCHTER, C.; LEUENBERGER, M. (2016): Challenges in Establishing Multi-Millennial Tree Ring Records for the Holocene. Geophysical Research Abstracts 18, Nr. EGU2016-12343
- ZIEHMER, M.M.; NICOLUSSI, K.; SCHLÜCHTER, C.; LEUENBERGER, M. (2016): Early and Mid-Holocene Climate Variability A Multi-Proxy Approach from Multi-Millennial Tree Ring Records. Geophysical Research Abstracts 18, Nr. EGU2016-12240-3

Pictures from Obergurgl



The feet still standing on snow but the head is already in the field season

Contact

If you have any suggestions for the next issue, any questions or if you don't want to receive any further newsletter please contact Klaus.Schallhart@uibk.ac.at.

For more information on events, publications and other activities of the Alpine Research Centre please visit http://www.uibk.ac.at/afo/aktuelles/index.html.en.

Universitätszentrum & Alpine Forschungsstelle **Obergurgi**





