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UNIVERSITÄT
BERN

OESCHGER CENTRE
CLIMATE CHANGE RESEARCH

Oeschger Centre, Hochschulstrasse 4, CH-3012 Bern

Bern, October 2021

1 Postdoc and 2 PhDs in Paleolimnology University of Bern, Switzerland

One Postdoc (2+2 years) and two fully funded PhD positions (3-4 years) are open for enthusiastic young researchers to work in the Paleolimnology research group at the Oeschger Centre for Climate Change Research www.oeschger.unibe.ch & Institute of Geography, University of Bern, Switzerland

http://www.geography.unibe.ch/research/paleolimnology_group/index_eng.html.

The project will explore biogeochemical responses of small and deep lakes to events of Rapid Climate Change (Dansgaard-Oeschger Events, MIS-5e) across Europe (N-S transect, W-E Transect) and NE China. The focus is on the dynamic interplay between primary productivity, hypolimnetic anoxia and related chemical feedbacks (internal P, Fe and Mn cycling) as responses to rapid climate and vegetation changes. Sediments from a large number of lakes will be investigated using chronological (varve counting, ¹⁴C AMS), sedimentological and biogeochemical methods including μ XRF, hyperspectral imaging (VNIR), HPLC (analysis of sedimentary pigments), sequential extraction of P, Fe, and Mn fractions, stable isotopes (¹³C, ¹⁵N) and statistical analyses (clustering, time series analysis, Tipping Points). The project is an international cooperation under the leadership of the University of Bern (PI Martin Grosjean) with partners at CNR (Italy), Universities of Mainz (Germany), Gdansk (Poland) and Hefei (China) and GFZ Potsdam (Germany).

The successful candidates hold an MSc (90 ECTS) or PhD in Earth or Environmental Sciences, Physical Geography, Quaternary Science, Paleoecology, Environmental Chemistry or similar. The candidates are motivated to work with advanced laboratory techniques, GB to TB data sets, and will be trained. Experience in paleolimnology, sedimentology, biogeochemistry and an interest in statistics is an additional asset. Strong language skills (English) and interpersonal skills are expected; German command is not a condition but helpful for everyday life. The PhD candidates will enrol in the Graduate School Climate Sciences, U of Bern <http://www.climatestudies.unibe.ch/>.

Supervisor/mentor: Prof. Dr. Martin Grosjean, Oeschger Centre & Institute of Geography.

Salary: PhD Fellowships 47,000 - 50,000 CHF p.a., Postdoc 87,750 - 91,650 CHF p.a.
The positions are available from **March 1, 2022** or earlier, negotiable.

Review of applications starts on 10 November 2021 and continues until the positions are filled.

Please direct inquiries to Prof. Dr. Martin Grosjean martin.grosjean@oeschger.unibe.ch.

Applications: ONE (!) pdf with CV, letter of motivation, transcript of MSc with Grades, publication list, addresses of three referees) should be sent by email to:
Prof. Dr. Martin Grosjean, Oeschger Centre, University of Bern; Hochschulstrasse 4, 3012 Bern, Switzerland; martin.grosjean@oeschger.unibe.ch; Tel: + 41 31 684 31 47