

13th of February 2018

Fellowship resources

Announcement of two research grants for a short stay at the UNESCO Chair on Personalized and Adaptive Distance Education in Switzerland

Interested in conducting research on innovative e-learning in Switzerland during 4 months? Learn more about it below:



The research agenda of the UNESCO Chair

Since 2016 the Swiss University of Applied Sciences (FFHS) is holder of the UNESCO Chair on Personalized and Adaptive Distance Education – Prof. Dr. Per Bergamin. The chair is integrated into the Institute for Research in Open, Distance, and eLearning (IFeL).

The UNESCO Chair carries out research into the effectiveness of adaptive learning processes and the didactic details involved. The technological possibilities for the implementation and integration into usual Learning Management Systems and various curricula are also investigated.

The two main areas of research are:

- (1) the development and evaluation of *personalized and adaptive instructional designs* to promote individual learning experiences and pathways.
- (2) the development and validation of innovative *measurement methods for emotions* relevant to learning.

The first research focus is investigating instructional design principles (Cognitive Load Theory), technological plugins and organizational factors (Delphi studies) for adaptive learning. We are currently running laboratory experiments on didactical implications of cognitive factors, curiosity, and procrastination during learning.

The second research focus involves the application of modern measurement methods such as eye tracking, facial expression recognition (via webcams), and physiological measures (wearables). We aim at validating these measurements for emotions and learning behavior with more traditional measures (e.g. questionnaires). How well can we measure for example curiosity or anxiety during learning without having to ask students about it? In the future, these measurements are planned to be integrated into adaptive learning systems in the form of sensors (basis for interventions).

More information to our organization can be found here:

https://www.ffhs.ch/home/portraits/portrait_en

Fellowships for NWU-researchers as a part of UNESCO Chair's activities

During the first four years, the Chair's activities will concentrate on partnerships in Europe and Africa. Cultural and economic differences, both at organizational and regional level, serve as research catalysts. In this context, the chair will include the establishment and further development of an international competence pool in the field of technology-based, personalised and adaptive learning. Within this scope, a partnership between FFHS and NWU has been established.

The research results will be used to develop an international second-cycle academic degree – the 'International Executive Master's for Adaptive Learning'. All activities will be documented in the form of websites, publications, workshops and guidelines. They will be made available to the public as an open source. As such, the Chair will help to establish and further develop awareness and competence in personalized and adaptive learning systems, at both a national and international level.

Within this scope an exchange program for researchers is established to promote international networking and research competence. In 2018, this includes three FFHS grants for NWU researchers for short research stays (4 months). They will aim to identify situation-specific research requirements, support the execution of laboratory experiments and prepare a field test at the NWU.

Details regarding the fellowships

The fellowships are planned in form of a stay abroad in Brig, Switzerland during 4 months in 2018.

The fellows work along with the local IFeL-team. Depending on their interests and skills they will participate in research projects of the UNESCO Chair.

Financial support

The financial support includes travel and subsistence expenses as well as financial compensation due to the higher cost of living in Switzerland.

Participation requirements

- Master's degree or PhD in social sciences, informatics, media sciences, economics or similar
- Member at NWU (PhD-Student or Post doc)
- Knowledge and experience in the domain of technology enhanced learning
- Knowledge of quantitative and/or qualitative research methods or willingness to learn them:
 - Quantitative: descriptive and inferential analysis of questionnaires and/or learning data sources (e.g. log files, eye gaze patterns, facial expressions, physiological indicators) preferably with R
 - Qualitative: content analysis Texts (interviews, questioners, posts etc.), preferably MAXQDA or similar
- Programming skills (R, Python) of advantage (depending on research interest)
- Willingness to spend 4 months in Brig, Switzerland
- Concrete interest in the areas of research of the UNESCO Chair
- Project idea
- Project idea in line with the activities and goals of the UNESCO-Chair and its partnership with the NWU
- Willingness to transfer the research done during these 4 month in Switzerland to NWU (e.g. follow-up field studies, cross-cultural validation)
- As for communication, good English or German skills

Application details

Please send you full application Please send the complete application in digital form until 10th of March to per.bergamin@ffhs.ch.

Applications should include:

- CV
- List of publications
- Motivation letter (1-2 pages) explaining the experience in research, research interests and the motivation to participate in the fellowship
- Project idea (1 Page)

Contacts:

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