**Experimental LéXPLORE platform**

**Call for Interdisciplinary Projects**

**Deadline: 15th October 2020**

**1. About LéXPLORE**

Since mid-February 2019, the LéXPLORE Platform ([www.lexplore.ch](http://www.lexplore.ch); ) is installed on Lake Léman near Pully at a depth of 110 m and at 570 m from the shoreline. The pontoon with a surface of 10 m by 10 m is equipped with electricity and a closed cabin (with toilet). Around the pontoon, a surface of ~15’000 m2 is protected from drifting nets by a circle of buoys (70 m radius), and allows to deploy sub­mersible instruments. This infrastructure provides excellent working conditions, also to test new in-situ technologies.

The goal of LéXPLORE is to acquire simultaneously physical, geochemical and biological measurements at high temporal and vertical resolutions, days and nights in any weather conditions. This will allow investi­gating key processes in stratified aquatic systems in unprecedented detail and resolution. To bring many disciplines together, LéXPLORE is a partnership between EPFL, Universities of Lausanne and Geneva, Eawag and our French colleagues from [CARRTEL](https://www6.dijon.inrae.fr/thonon/) (INRAE - USMB). In addition, LéXPLORE is open to any international researcher that would like to collaborate and benefit from the infrastructure / data. Currently, 30 research projects are collecting data in a large variety of domains.

To provide a background dataset, the following scientific instruments are installed on LéXPLORE, and data are provided openly through the DATALAKES portal (<https://www.datalakes-eawag.ch/>):

* A meteostation with temperature, pressure, solar radiation, rain, wind speed and direction
* Continuous measurements of temperature, oxygen, photosynthetic active radiation (PAR) at different fixed depths
* Current velocities throughout the water column with two Acoustic Doppler Current Profilers
* Vertical profiles of depth, oxygen, chlorophyll-a, pH, temperature and conductivity in the productive zone, taken automatically with an Idronaut probe.
* Deep vertical profiles taken occasionally with a Sea&Sun multiparameter probe
* Vertical profiles of detailed optical properties and usual parameters taken with a Thetis profiler. It is also used to calibrate remote sensing.

You can find detailed information in *“Wüest et al (2021): LéXPLORE – a floating laboratory on Lake Geneva offering unique lake research opportunities”.* [*https://doi.org/10.1002/wat2.1544*](https://doi.org/10.1002/wat2.1544)

**2. Call for Interdisciplinary Projects - conditions**

With this ***Call for Interdisciplinary Projects***, we encourage research groups from LéXPLORE partner institutions to apply for seed money up to 40 kCHF on integrated research questions related to the LéXPLORE Platform. The goal is to foster novel collaborative research across different disciplines.

To be eligible, the proposal must (1) involve at least two investigators from different disciplines, and (2) at least one investigator works at one of LéXPLORE partner institutions (EPFL, Eawag, UniGE, UNIL, CARRTEL).

Your project should be finalized by end 2023.

**3. Submission**

For the proposal, please fill in the application form containing (< 4 pages in total):

1. Description of the applicant (< 1/3 page)
2. Research question and work plan (< 1.5 page)
3. Technical feasibility (< 1/2 page)
4. Timeline
5. Budget (up to 40 kCHF)
6. Additional information.

**4. Evaluation**

The proposal will be evaluated by the members of the Limnology Center by the following evaluation criteria:

* Scientific merit
* Synergies across different domains and complementarity of the team
* Technological innovation
* Feasibility
* Fit to the overall LéXPLORE projects (see <https://lexplore.info/current-projects/>).

The evaluation results will be transmitted to applicants latest before 30th October 2021. Successful appli­cants will receive a grant agreement from Limnology Center and the fund will be paid in 2022. Before any payment, LéXPLORE application form (appendix 1) will have to be filled-in and approved by the LéXPLORE Steering Committee.

Be aware, that the Limnology Center can support only a small number of projects, independent of the quality of the proposals.

For any additional information or for the submission, please contact or send to natacha.tofield-pasche@epfl.ch