PhD position available at WasserCluster Lunz

The inter-university center for aquatic ecosystem research, WasserCluster Lunz, Austria (www.wcl.ac.at), seeks to hire a PhD candidate for research on a project focused on the importance of omega-3 long-chain polyunsaturated fatty acids (n-3 LC-PUFA) for development and evolution of brain and cognitive skills in wild brown trout. The successful candidate will conduct field and laboratory experiments on this topic including research visits at the University of Glasgow and Charles University in Prague, and pursue PhD studies at the University of Vienna.

Project description
The aim of the project is to use the framework of Tinbergen’s four essential questions to understand the mechanism through which dietary intake and internal synthesis n-3 LC-PUFA affects biochemical and cellular quality of brain and cognitive traits of brown trout. The project puts especially strong emphasis on ecologically relevant context of the research. Therefore, the laboratory and experimental work will be accompanied by extensive sampling of wild populations of brown trout and assessment of behaviour and fitness of focal fish in their natural river environment (e.g., by using radio telemetry and mark-recapture study design). The main supervisor will be Dr. Libor Závorka from WasserCluster Lunz and co-supervisors will be Dr. Martin Kainz (WasserCluster Lunz), Dr. Pavel Němec (Charles University in Prague), and Prof. Shaun Killen (University of Glasgow).

Job description
The PhD candidate will be to conduct the PhD thesis work under supervision, which includes development of the PhD student’s methodology experience, analytical skills, and theoretical depth and breadth. Techniques used within the project will involve behavioural scoring of the fish, stable isotope and fatty acid analyses, telemetry (passive integrated transponder and radio telemetry), and histological methods for neuron counting. The studies will be a combination of field and laboratory work and specific skills and interests of the successful candidate will be considered in shaping the focus of the thesis across the above-mentioned topics. Results of this PhD research are expected to be published in peer-reviewed scientific journals.
Host institution
WasserCluster Lunz (WCL) is an inter-university research center for Aquatic Ecosystems Research at Lake Lunz (160 km from Vienna) with an international community of students and researchers. WCL offers a dynamic research environment with experts conducting fundamental and applied ecological research on aquatic ecosystems from microscopic to catchment scales. The research center WCL is well-equipped with state-of-the-art analytical and biochemical laboratories and with several in- and outdoor experimental facilities including a fish husbandry facility.

Eligibility
The eligible applicant must have been awarded a second-cycle qualification (i.e., M.Sc. degree or its equivalent) in a relevant subject area in the natural sciences (e.g., Biology, Ecology).

In addition to this requirement, the applicant must have i) excellent communication skills, written and spoken, in English, ii) the ability to work both independently and as part of a team.

It is advantageous if the applicants also have i) personal car driving license, ii) communication skills, written and spoken, in German, and iii) experience on statistical analysis.

Candidates of any background who meet the required profile criteria are expressly invited to apply for this position. WasserCluster Lunz sees high innovation potential in the diversity of its employees and is committed to diversity as a guiding principle.

How to apply
Applicants should submit
- a letter of interest (max 1 page),
- CV including publications (max 3 pages), and,
- names of two references

to the PI of this project, Dr. Libor Závorka (libor.zavorka@wcl.ac.at). The application deadline is July 1st, 2022. Starting date of the contract: 1st of October 2022 or upon agreement.

The duration of the contract will be three years at FWF PhD-salary rate (https://www.fwf.ac.at/de/forschungsfoerderung/personalkostensaetze). Researchers from Ukraine are eligible to apply for additional funding to prolong the contract by up to 12 months (https://www.fwf.ac.at/en/research-funding/ukraine-support). During the whole duration of the appointment, the PhD candidate will be based at WasserCluster Lunz, located in the village of Lunz am See, Austria.