



Mobility of junior researcher

Name of institution	University of South Bohemia in České Budějovice
Name of part	Faculty of Fisheries and Protection of Waters
Name of project	Development of JU - International Mobility II
Job title	Junior researcher_01_FFPW_Italy_Agriculture sciences
Research field	Agriculture sciences
Job description	Mobility will focus on mastering of analyzes of microbiome composition in the gut and other samples (gills, mucus, feed, biological filter) concerning the diet used as well as other interventions in intensive fish farming. In addition to the technical mastery of the analysis, an important part of the mobility will be the biostatistical evaluation of the results and data interpretation. The research will focus on the possibilities of using insect meal in fish feed, including the evaluation of a wide range of effects associated with the inclusion of new ingredients in aquafeed formulations. The main task of the laboratory work will be the extraction of nucleic acids from biological samples, DNA extraction, RNA cleavage, DNA quantification, and amplification of the V3 – V4 region of the 16S rRNA gene. The work will be done in accordance with Illumina's metagenomic best practices (Illumina Inc, San Diego, USA). Sequencing using a MiSeq Illumina instrument will follow. Additionally, the employee will learn about the technology behind intensive insect production using a variety of substrates. The scope of work will include laboratory work as well as taking part in a feeding experiment with a focus on alternative protein sources and sharing in the evaluated parameters (chemical composition of fish and feed, quantification of feed intake, digestibility of nutrients, and calculation of production parameters). Last but not least, the research work will include the daily routine during experiments and the daily care of experimental fish.
Objectives and expected benefits	This mobility will aim to deepen cooperation with the University of Torino as a leading Italian university in introducing new resources into aquafeeds, and to gain unique and in-depth knowledge of microbiome composition analysis and understanding of microbiome composition in fish and culture environment. These experiences and techniques would then be further developed at FFPW JU in future research on nutrition and intensive fish farming. Another benefit of mobility will be the establishment of new contacts (outside the mentor) or the preparation of a joint European project or other joint experiments.
Requirements for applicants	
Mandatory requirements	
Departures from the CR – in house	
„junior“ researcher – departures of juniors from the CR	<p>A person selected to participate in mobility of Work stays of researchers - juniors abroad must simultaneously:</p> <ol style="list-style-type: none"> 1. be a researcher - a junior who is a Ph.D. student (in the institution based on the territory of the Czech Republic) or fulfils the definition of Post-doc (researcher – max. 7 years after getting the title of Ph.D. or its foreign equivalent (level 8 ISCED). 2. be an employee of the grant beneficiary at the time of realization of the mobility for a minimum working-time of 0.5 and have the recommendation of the supervisor (in case of a Ph.D. student). 3. have a mentor abroad who must meet the following performance criteria: <ul style="list-style-type: none"> • H-index¹ – a minimum value of 8.5 calculated in accordance with the standardization table mentioned below. The source for converting the H-index values is the Web of Science or Scopus.

¹ The researcher in the social and human sciences does not document the level of H-index.



The normalizing factor ² $f: h_N=f \times h$	
Discipline	f
Agricultural Sciences	1.27
Biology & Biochemistry	0.60
Chemistry	0.92
Clinical Medicine	0.76
Computer Science	1.75
Engineering	1.70
Environment/Ecology	0.88
Immunology	0.52
Materials Science	1.36
Mathematics	1.83
Microbiology	0.63
Molecular Biology & Genetics	0.44
Neuroscience & Behaviour	0.56
Pharmacology & Toxicology	0.84
Physics	1.00
Plant & Animal Science	1.08
Psychiatry	0.88
Space Science	0.74
<ul style="list-style-type: none"> a participation in at least one international grant or a national grant in the last 5 years, as a main researcher or co-researcher. It must not be an internal grant, or the mentor must prove the publishing activity registered in the database of Thomson Reuters Web of Science, Scopus or ERIH PLUS, as well as publications such as "article", "book", "book chapter", "letter" and "review" - at least 3 publication outputs in the last 5 years. 	
Other requirements	
	<ul style="list-style-type: none"> Completed doctoral education in the field Fisheries or related field. Knowledge of statistics and IT technology Good knowledge of English in both word and script. Minimum length of mobility is 3 months
Place of work	Italy
Considered start	16.9.2022 (fixed term employment to 30st June 2023) 16. 9. 2022 – 16. 12. 2022 – departure of the researcher 17. 12. 2022 – 17. 6. 2023 – return phase to JU
Working time	0,8

² Source: Doing Hirsch proud; shaping H-index in engineering sciences.



Wage	Contractual wage of CZK 85,000 per month gross
We offer	<ul style="list-style-type: none">- Interesting work in an international team;- Nice working environment;- Possibility of personal and professional development (language and employee's courses);- Additional employee's benefits (5 weeks of leave, meal vouchers, advantaged mobile calls, or bank services at a partner bank, MS Office free of charge for private use).
When interested in this position, please provide	
Mandatory documents	
<i>Departures from the CR – in house</i>	
„junior“ researcher – departures of juniors from the CR	<p>A person selected to participate in the mobility Work stays of researchers - juniors abroad must at least prove:</p> <ul style="list-style-type: none">• Diploma (or its recognition, in the case of Ph.D. student a confirmation of study.)• Professional Curriculum Vitae• Mentor's professional CV with reference to publishing activity• The document (s) demonstrating the mentor's participation in at least one international grant or national grant for the last 5 years as a main researcher or co-researcher. It must not be an internal grant, or the mentor must demonstrate publishing activity registered in the database of Thomson Reuters Web of Science, Scopus or ERIH PLUS and at the same time publications such as "article", "book", "book chapter", "letter" and "review" - at least 3 publication outputs in the last 5 years (publication activity can be demonstrated in the mentor's professional CV)• Calculation of the normalized h-index of the mentor, if relevant• Recommendation of the supervisor in case of the Ph.D. student
Other requirements:	
	<ul style="list-style-type: none">• Current activities: Fish nutrition with the use of alternative ingredients, digestibility of various feeds, evaluation of fish fitness, quality of farmed fish, and fish physiology. Statistical processing of test results using R studio. Evaluation of microbiome diversity in different samples. Laboratory work is associated with molecular genetic techniques and chemical analysis.• Mobility is needed to deepen existing collaborations with several labs at the University of Torino that deal with research in fish nutrition, insect production, and the effects of new ingredients in fish as well as to transfer this knowledge to domestic workplaces to further develop the nutrition of important fish species.
Contact	Dipl.-Ing. Mirka Průšová, mprusova@frov.jcu.cz
Selection process and evaluation method	by submission and evaluation of required documents, by oral interview
Time schedule for selection	
Publication date of advertisement from	20. 6. 2022
Publication date of advertisement to	18. 7. 2022 (This period is equal to the period for the position proposal submission.)
Evaluation of applicants to	25. 7. 2022
Notification of result to	1. 8. 2022