



PhD Grant: SeafoodTomorrow - Development of (genetic) molecular methods to detect food fraud and food integrity.

This PhD grant is situated within the project SeafoodTomorrow, a multi-disciplinary EU Horizon 2020 project with 35 international partners. It offers the selected PhD candidate the chance to become an expert in food fraud detection and food integrity with respect to different marine (seafood) species, from basic scientific developments to real market applications..

Job Description

Fish fraud - where expensive fish is replaced by cheap alternatives – has become a significant problem, attracting the attention of both scientists and policy makers. The main challenge of the SeafoodTomorrow project is to develop and implement fast and accurate methods to identify fish species, and to perform sound quality controls of marketed seafood products. The project is linked with the new EU legislation on product labeling and adheres to one of the EU priorities to ban food fraud, including fraud in fish and other seafood products.

Fraud with seafood species can be detected via genetic and other molecular methods. However, standardization of methods and markers is necessary, and technologies need to be developed to allow for a fast and uniform identification process in the real world. Moreover, genetic methods are to be further developed for a proper analysis and quantification of different species in complex food samples, such as mixed samples or patés.

As a Phd researcher, your tasks within this EU-project involve:

- setting up methods for marine species identification based on genetic (and potentially other) molecular technologies
- setting up a reference DNA database for the EU list of seafood species
- setting up (molecular) methods for the quantification and identication of species in complex (food)matrices
- developing fast and advanced technologies to perform species identification

Candidates Profile

- You recently obtained a degree of Master of Science, Master of Applied Sciences or similar level
- You are eager to fulfill the requirements of a PhD fellowship as mentioned in the general terms for a PhD within ILVO http://www.ilvo.vlaanderen.be/language/en-US/EN/Work-at-ILVO/General-terms-and-regulations.aspx#.WINIKmeWwy8

Candidates Skills

• Knowledge and interest in marine biotech and food science

- Interest in applied research for food safety
- Knowledge of molecular methods (PCR, RT-PCR, Droplet PCR, NGS....)
- Good communication skills, including good written and verbal command of the English language
- Able to work independently
- Working with a creative, critical and analytical mindset
- Willing to apply for extra funding
- General terms for a PhD within ILVO http://www.ilvo.vlaanderen.be/language/en-us/EN/Work-at-ILVO/General-terms-and-regulations.aspx#.WINIKmeWwy8
- Candidates that will obtain their degree in this academic year, are also stimulated to apply

Our Offer

- A PhD contract at ILVO and an internationally competitive salary
- A position situated within the international H2020 project SeafoodTomorrow, offering a broad network and collaboration with 35 partners
- Work within an international challenging project in the sustainable food science area, which is indicated by EU as one of the promising growth sectors
- A multi-disciplinary project dealing with several aspects of the valorization chain in the food sector, from source to market
- The PhD will be a joined PhD ILVO (Dr. Robbens Phd MBA) and KULeuven (Prof. Volckaert)
- Place of activity: Ostend

Further information and how to apply?

At ILVO

Johan.Robbens@ilvo.vlaanderen.be

How to apply?

All applications must be sent by email to Bart Sonck (<u>Bart.Sonck@ilvo.vlaanderen.be</u>) no later than 30/06/2018 at 23:59 (CET), with subject of your mail 'Application PhD grant SFT'. The following documents should be attached as one file:

- o Motivation letter
- o CV
- o A transcript of the required degree
- o An overview of your study results
- o The name and contact data of a reference person

A pre-selection will be made based on the incoming application. We stimulate candidates to apply as soon as possible. In case of good candidates, a selection will already be done, and the procedure continued. The procedure consists of a case-study which will provided in preparation of an interview.