



# micrometabolite

**Marie Skłodowska Curie Ph.D. student / Early Stage Researcher (f/m)**

## **Role of microbiomes and secondary metabolite production of medicinal plants**

- **Organisation/recruiting unit:** AIT Austrian Institute of Technology
- **Location:** Tulln (35 km outside Vienna), Austria
- **Research field:** Microbiology
- **Research profile:** First Stage Researcher (R1)

For the Innovative Training Network (ITN) project **MICROMETABOLITE** - *Research Training Network on the Microbial Enhancement of Bioactive Secondary Metabolite Production in Plants* (H2020-MSCA-ITN-201 – grant agreement number: 721635) we are looking for an early stage researcher in the field of microbiology, agronomy and biochemistry. The researcher fellow will be hosted at AIT for a period of 36 months.

Microbiomes associated with medicinal plants (e.g. members of the Boraginaceae family) may play an important role in modulating bioactive secondary metabolites. In MICROMETABOLITE the interaction between microbiomes, metabolomes and environment and the underlying microbial functions and mechanisms will be investigated. Suitable plant production systems integrating microorganisms will be developed to improve the production of desirable bioactive compounds.

### **Objectives**

- to study the succession of root-associated endophyte communities of Boraginaceae plant species during plant development and to identify taxa that correlate with high secondary metabolite production
- to study root-associated microbiomes associated with Boraginaceae plant species and to correlate microbial community structures and plant genotype with metabolome characteristics
- to screen microbial endophytes for increasing metabolite production and plant growth

### **Secondments**

The fellow researcher will have to follow a number of secondment(s):

- at the University of Athens, Greece, to quantify A/S contents in plant samples and to determine enantiomeric ratio (1 month)
- at Skylab-Med, Greece to be trained in instrumental chemical and microbiological analyses (1 month)
- at the University catolique de Louvain, Belgium, to study the effect of bacterial endophytes on root growth characteristics (2 months)
- at University of Ghent, Belgium, to taxonomically characterize selected isolates (2 months)
- at Wilhelm's Best, Germany, to receive training on the development and production of a microbial product (3 months)

### **Additional Information**

#### **1. Specific Requirements**

- **Requirement 1 (early-stage researchers):** Applicants must, at the date of recruitment by MICROMETABOLITE, be in the first four years (full-time equivalent research experience measured from the date when the researcher obtained the degree entitling him/her to embark on a doctorate) of their research careers and have not been awarded a doctoral degree.

- **Requirement 2 (mobility rule):** Applicants must not have resided or carried out their main activity (work, studies, etc.) in the country of the recruiting institution for more than 12 months in the 3 years immediately before the recruitment date. This excludes short stays such as holidays or compulsory national service.
- **Requirement 3 (specialisation):** Candidates should have a master level degree or equivalent in microbiology, agronomy, biology, biotechnology or plant physiology. Experience in the research scope of MICROMETABOLITE is a vital asset.
- **Requirement 4 (English):** Proficiency in English is essential, as it is the working language of the MICROMETABOLITE Network.

## 2. Benefits

- Enrollment for PhD studies at the Vienna University of Natural Resources and Life Sciences (BOKU)
- Individual research training trajectory, on-site supervision
- Full-time contract
- Salary according to Horizon 2020 Marie Skłodowska Curie Actions funding scheme including a monthly living allowance (3110 €) a monthly mobility allowance (600 €), a monthly family allowance (500 €). A correction factor will be applied per country, therefore the exact gross salary will be confirmed upon appointment. Please consider that the net salary may be 20-30% lower due to taxes, social benefit premiums etc.
- Conducting research in dynamic, international and multicultural team
- For more information on MICROMETABOLITE, please visit:  
[http://www.micrometabolite.eu/micrometabolite/Eligibility criteria](http://www.micrometabolite.eu/micrometabolite/Eligibility%20criteria)

## 3. Application procedure and selection process

Recruitment will follow the principles set out in **the European Charter for Researchers** and in **the Code of Conduct for the Recruitment of Researchers** (2005/251/EC; <http://ec.europa.eu/euraxess>), in accordance with the hosts' standard procedures and in line with their **Equal Opportunities Policies**. Recruitment will integrate the gender dimension to ensure equal employment opportunities for both sexes. The project will ensure an **open competition at international level**.

The **selection** will be made by a **Recruitment Committee**, which will be gender balanced and comprise diverse expertise and competences.

The selection process will take into consideration the whole range of experience of the candidates (**judging merit**). For instance, their creativity, curiosity, motivation, and level of independence will be considered. Similarly, **mobility experience** will be considered as a valuable contribution to the professional development of the researcher.

- A first selection will be made on CV. Each candidate will be informed about the strengths and weaknesses of his/her application.
  - A short list of potential candidates will be contacted and interviews conducted within the following two weeks by skype.
  - Final decision will be taken within one week and each candidate will be informed about the outcome.
- **Offer starting date:** 15/05/2017
  - **Application deadline:** 15/07/2017
  - **Interviews:** between 21/08/2017 and 08/09/2017
  - **Envisaged job starting date:** between 01/10/2017 and 15/10/2017
- To apply, please send your CV together with a letter of motivation and referee(s) to Angela Sessitsch ([angela.sessitsch@ait.ac.at](mailto:angela.sessitsch@ait.ac.at))