# INTERFUTURE

### 11 PhD positions within the project "INTERFUTURE": From microbial interactions to new-concept biopesticides and biofertilizers

Eleven PhD positions are offered in the frame of the project **INTERFUTURE- From microbial interactions to new-concept biopesticides and biofertilizers-**, a Marie Sklodowska-Curie Innovative Training Network Action. Each of these positions is for a period of **36 months starting in April – June, 2017.** 

INTERFUTURE will train a new generation of scientists with complementary and interdisciplinary skills in Microbiology, Plant Pathology, Entomology, Organic Chemistry, Molecular Biology. The main objectives of the research projects are:

- 1. to overcome bottlenecks in bio-based products application by exploring the ecology of microbe-host interaction at the community level
- 2. to improve existing microbial biofertilisers by unravelling the biology and exploiting the complementarities of nitrogen-fixing and growth-promoting bacteria
- 3. to exploit natural molecules to shape plant-beneficial microflora and improve plant resilience to disease
- 4. to develop novel volatile organic compounds of bacterial origin for the control of soilborne diseases
- 5. to design and develop innovative insect traps and trapping strategies based on the activity of kairomones produced by microorganisms



The Marie Sklodowska-Curie Innovative Training Network (MSCA-ITN-EID) INTERFUTURE": From microbial interactions to new-concept biopesticides and biofertilizers -

Grant Agreement n. 722642

Coordinator: Ilaria Pertot Funding: EU under project number H2020-MSCA-ITN-2016 – 722642 Timeframe: 01.12-2016 — 30.11.2020

**University/Department**: Fondazione Edmund Mach, Department of Sustainable Agroecosystems and Bioresources

**Network Partners**: Fondazione Edmund Mach (Coordinator), Italy; University of Reims Champagne-Ardenne, France; University of Natural Resources and Life Sciences, Austria; University of Newcastle Upon Tyne, UK; University of Molise, Italy; Desarrollo Agrícola y Minero, S.A., Spain; BIOBEST, Belgium; BIPA NV, Belgium; INOQ GmbH, Germany; and Azotic Technologies Ltd, UK.

## We are currently recruiting 11 Early Stage Researchers (ESRs) – 11 PhD student positions are open!

Each of these positions is for a period of 36 months starting in April – June , 2017. The first 18 months will be spent in an academic institution while the second 18 months will be spent as a secondment in a private enterprise. The recruitment is done on a competitive basis across all applicants for each project.

Details on the 11 individual positions are provided by following the links of each beneficiary below:

ESR position 1 – "Novel biofertilisers based on endophytic bacteria. Innovative approaches to bridge plant- microbe interaction research and bio-product development."

**Host Institute:** Fondazione Edmund Mach (San Michele all'Adige, Italy)

PhD Enrolment: University of Newcastle Upon Tyne (Newcastle, United Kingdom)

**Secondment at:** Desarrollo Agrícola y Minero, S.A.(Zaragoza, Spain)

ESR position 2 – "Untapping the keg of microbial bioproducts using innovative approaches to cultivation. New bio-based products from plants"

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**Host Institute:** Fondazione Edmund Mach (San Michele all'Adige, Italy)

PhD Enrolment: University of Newcastle Upon Tyne (Newcastle, United Kingdom)

Secondment at: Desarrollo Agrícola y Minero, S.A.(Zaragoza, Spain)

ESR position 3 – "Interactions between crop genotypes, antagonistic root colonizing endophytes and arbuscular mychorrizal fungi"

Host Institute: University of Newcastle Upon Tyne (Newcastle, United Kingdom)

PhD Enrolment: University of Newcastle Upon Tyne (Newcastle, United Kingdom)

Secondment at: Inoq GmbH (Schnega, Germany)

## ESR position 4 – "Characterization of stimulators of the phyllosphere microbiota as innovative biocontrol products"

Host Institute: Fondazione Edmund Mach (San Michele all'Adige, Italy)

PhD Enrolment: University of Reims Champagne-Ardenne (Reims, France)

Secondment at: BIPA(Londerzeel, Belgium)

#### ESR position 5 – "Characterization of the mechanism of action of protein- and sugarbased biocontrol products on target and non-target microorganisms"

Host Institute: University of Reims Champagne-Ardenne (Reims, France)

PhD Enrolment: University of Reims Champagne-Ardenne (Reims, France)

Secondment at: BIPA(Londerzeel, Belgium)

## ESR position 6 – "Employment of volatile organic compounds produced by *Lysobacter* members for the biological control of soilborne plant pathogenic fungi and oomycetes"

Host Institute: University of Natural Resources and Life Sciences (Vienna, Austria)

PhD Enrolment: University of Natural Resources and Life Sciences (Vienna, Austria)

Secondment at: BIPA(Londerzeel, Belgium)

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ESR position 7 – "The interactions of the endophytic nitrogen fixing bacterium *Gluconacetobacter diazotrophicus* with fungal endophytes and rhizosphere microorganisms associated with ryegrass, *Lolium perenne*"

Host Institute: Azotic Technologies Ltd (Nottingham, United Kingdom)

PhD Enrolment: University of Nottingham (Nottingham, United Kingdom)

**Secondment at:** Fondazione Edmund Mach (San Michele all'Adige, Italy)

### ESR position 8 – "Plant and bacterial factors determining host colonization by, and intracellular uptake of *Gluconacetobacter diazotrophicus*"

Host Institute: Azotic Technologies Ltd (Nottingham, United Kingdom)

PhD Enrolment: University of Nottingham (Nottingham, United Kingdom)

**Secondment at:** Fondazione Edmund Mach (San Michele all'Adige, Italy)

### ESR position 9 – "Selection of microorganisms to develop new tools for the management of *Drosophila suzukii*"

Host Institute: University of Molise (Campobasso, Italy)

PhD Enrolment: University of Molise (Campobasso, Italy)

Secondment at: BioBest (Westerlo, Belgium)

ESR position 10 – "Development of a commercial liquid food trap with addition of bioactive microorganisms to improve attractiveness and specificity for *Drosophila suzukii*"

Host Institute: Fondazione Edmund Mach (San Michele all'Adige, Italy)

PhD Enrolment: University of Molise (Campobasso, Italy)

Secondment at: BioBest (Westerlo, Belgium)

ESR position 11 – "Conventional delivery strategies for bioproducts based on microbial bioproducts"

Host Institute: Fondazione Edmund Mach (San Michele all'Adige, Italy)

PhD Enrolment: University of Newcastle Upon Tyne (Newcastle, United Kingdom)

Secondment at: Desarrollo Agrícola y Minero, S.A.(Zaragoza, Spain)



#### Here you can find the link for the positions at Fondazione Edmund Mach:

http://www.fmach.it/Servizi-Generali/Lavora-con-noi/Annunci-lavoro-borse-di-studio-etirocini/N.-5-five-temporary-positions-for-36-months-within-the-project-INTERFUTURE-G.A.-n-722642-From-microbial-interactions-to-new-concept-biopesticides-andbiofertilizers-a-Marie-Sklodowska-Curie-Innovative-Training-Network-Action-MSCA-ITN-EID-227\_CRI\_

#### and the other positions of the network:

http://www.fmach.it/Servizi-Generali/Lavora-con-noi/Opportunita-presso-altri-enti-oaziende/6-Early-Stage-Researchers-ESRs-PhD-student-within-the-project-INTERFUTURE-From-microbial-interactions-to-new-concept-biobesticides-and-biofertilizers

For more information on this project contact

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