

This project has received funding from the European Union's Horizor 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 722642

# From microbial interactions to new-concept biopesticides and biofertilizers

## <u>Mid-Term meeting</u>, <u>INTERFUTURE PhD day</u> and <u>Winter PhD Courses</u> on 'Tools for successful dissemination of results' and 'Use of microbial signals to control plant diseases'

# February 10-16, 2019 San Michele all'Adige, c/o Fondazione Edmund Mach

Marie Skłodowska-Curie Actions (MSCA) Innovative Training Networks (ITN) H2020-MSCA-ITN-2016 EID-722642-INTERFUTURE





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## Program overview

Date	Activity	Start	End
Sunday February 10, 2019	Arrival		
Monday February 11, 2019	Tools for successful dissemination of results Session 1. Successful scientific communications and new generation tools	9.00	12.30
	Lunch	12.30	14.00
	Tools for successful dissemination of results Session 2. Practical exercises on successful dissemination (for INTEFUTURE members only)	14.00	18.30
	Free evening		
Tuesday February 12, 2019	Use of microbial signals to control plant diseases Session 1. Microbial and plant signals against phytopathogens	9.30	12.00
	Lunch	12.00	14.00
	Use of microbial signals to control plant diseases Lab experience 1. Microbial signals against phytopathogens	14.00	18.00
	Free evening		
Wednesday February 13, 2019	Use of microbial signals to control plant diseases Session 2. Novel and old players in microbe- microbe communications	9.00	12.30
	Lunch	12.30	14.00
	Use of microbial signals to control plant diseases Session 3. Communication systems within the microbiome and with the plant host	14.00	17.30
	Bi(tri)lateral meetings for ESRs	17.30	19.00
	Dinner <sup>#</sup>	20.00	21.30
Thursday February 14, 2019 (for INTEFUTURE members only) <sup>*</sup>	Mid-term meeting Session 1. Scientific and administrative aspects	9.00	12.30
	Lunch	12.50	14.00
	Mid-term meeting Session 2. Feedback and discussion	14.00	18.00
	Dinner <sup>#</sup>	19.30	21.00



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Friday February 15, 2019	Supervisory board	8.30	9.30
(for INTEFUTURE members only)*	General assembly	9.30	10.00
oniy)	INTERFUTURE PhD day	10.00	12.30
	Session 1. ESR4, ESR5, ESR7 and ESR8		
	Lunch	12.30	13.00
	INTERFUTURE PhD day	14.00	18.00
	Session 2. ESR6, ESR9, ESR 10, ESR1, ESR2 and ESR11		
	Bi(tri)lateral meetings for ESRs	18.00	19.00
	Dinner <sup>#</sup>	20.00	21.30
Saturday February 16, 2019	Use of microbial signals to control plant diseases	9.00	13.00
	Lab experience 2. Microbial signals against phytopathogens		
	Departure		

All activities are compulsory for all ESRs. Supervisors are welcome.

\* Mid-Term meeting and INTERFUTURE PhD day are compulsory for all ESRs and supervisors (at least one for each ESR and partner).

Attendance to sessions specified as 'for INTEFUTURE members only' is restricted to the project partners.

<sup>#</sup> Please book your dinner at: <u>https://doodle.com/poll/8t8m72ca9i8zpyqz</u>





### Training on TOOLS FOR SUCCESSFUL DISSEMINATION OF RESULTS

#### Monday February 11, 2019

Room PRC 6302 – seminar room 3<sup>rd</sup> floor, building of Research

9.00	12.30	Training session 1.	
		Successful scientific communications and new generation tools	5
9.00	10.30	The history of science in public: from practice to theory and	Ilaria
		back	Ampollini
10.30	11.00	Break	
11.00	12.30	How to increase the impact on your research with social	Anna
		media: the case study of the E-STaR project	Eriksson
12.30	14.00	Lunch	
14.00	18.30	Training session 2. (for INTEFUTURE members only)	
		Practical exercises on successful dissemination	
14.00	14.20	ESR1. Novel biofertilisers based on endophytic bacteria.	Nikoletta
		Innovative approaches to bridge plant-microbe interaction	Galambos
		research and bio-product development	
14.20.	14.40	ESR2. Untapping the keg of microbial bioproducts using	Maria F.
		innovative approaches	Vasseur
			Coronado
14.40	15.00	ESR3. Interactions between crop genotypes and arbuscular	Mirjam
		mychorrizal fungi	Seeliger
15.00	15.20	ESR4. Characterization of the mode of action of innovative	Abdessalem
		biocontrol products for plant defence	Chahed
15.20	15.40	ESR5. Characterization of the mechanism of action of sugar-	Nikola
		based biocontrol products on target and non-target	Mijailovic
		microorganisms	
15.40	16.00	Break	
16.00	16.20	ESR6. Employment of VOCs produced by Lysobacter members	Anthi
		for the biological control of soilborne plant pathogenic fungi	Vlassi
		and oomycetes	
16.20	16.40	ESR7. The interactions of the endophytic nitrogen fixing	Martina
		bacterium Gluconacetobacter diazotrophicus with fungal	Franchini
		endophytes and rhizosphere micro-organisms associated with	
		crop plants	
16.40	17.00	ESR8. Plant and bacterial factors determining host	Michele
		colonization by intracellular uptake of Gluconacetobacter	Pallucchini
		diazotrophicus	
17.00	17.20	ESR9. Selection of microorganisms to develop new tools for	Amani
		the management of Drosophila suzukii	Alawamleh
17.20	17.40	ESR10. Development of a commercial liquid food trap with	Gordana
		addition of bioactive microorganisms to improve	Durovic
		attractiveness and specificity for Drosophila suzukii	
17.40	18.00	ESR11. Conventional delivery strategies for bioproducts based	Muhammad
		on microbial bioproducts	Aammar Tufail
18.00	18.30	Conclusions and discussion	
		Free evening	

In the training session 2 each ESR will have time for 10 min of presentation (according to the guidelines sent in advance) and 10 min of discussion.



### **Training on USE OF MICROBIAL SIGNALS TO CONTROL PLANT DISEASES**

#### February 12,13,16, 2019

Room PRC 6302 – seminar room 3<sup>rd</sup> floor, building of Research

Februa	ary 12, 2	2019 Use of microbial signals to control plant dis	eases
9.30	12.00	Training session 1.	
		Microbial and plant signals against phytopathogens	
9.30	10.30	The interaction between grapevine inflorescence and the	Claudio
		fungus Botrytis cinerea as an example of host/pathogen system	Moser
		to analyse the reciprocal molecular communication	
10.30	11.00	Break	
11.00	12.00	Silence, please! The bacteria are talking	Gerardo
			Puopolo
12.00	14.00	Lunch	
14.00	18.00	Lab experience 1.	
		Microbial signals against phytopathogens	
14.00	18.00	Laboratory activities on the detection of microbial signals	Gerardo
		(Lab. Plant pathology and applied microbiology, Building of	Puopolo,
		Phytopathology)	Michele
			Perazzolli
		Free Evening	

February 13, 2019		2019	Use of microbial signals to control plant dis	eases
9.00	12:30		Training session 2.	
			and old players in microbe-microbe communications	
9.00	10.00	Below	-ground chemical interactions	Paolina
				Garbeva
10.00	11.00	The de	evelopment of a biopesticide against aboveground and	Christine
		below	ground pathogens	Vos
11.00	11.30	Break		
11.30	12.30	Decry	oting the role of bacterial signals in microbial interactions	Ana
		to enh	ance the establishment of bacterial biocontrol agents in	Bejarano
		the rhi	izosphere	Ramos
12.30	14.00	Lunch		
14.00	18.00	Traini	ng session 3.	
		Comm	unication systems within the microbiome and with the p	olant host
14.00	15.00	Inters	pecies signalling in plant associated bacteria	Vittorio
				Venturi
15.00	16.00	Engine	eering bacterial quorum sensing to modify plant-	Rupert
		microb	pe interactions	Fray
16.00	16.30	Break		
16.30	17.30	Signals	s and mechanisms of plant-mycorrhiza recognition and	Carolin
		intera	ction	Schneider
17.30	18.00	Round	I table and general discussion	
18.00	19.00	Bi(tri)l	ateral meetings for ESRs	
20.00	21.30	Dinner	r (Restaurant Da Pino, San Michele all'Adige) <sup>#</sup>	





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Februa	ary 14, 2	2019	Mid-term meeting (for INTEFUTURE members only)
9.00	18.00	detaile	ed program in the following pages
19.30	21.00	Dinner	r (Restaurant Da Pino, San Michele all'Adige) <sup>#</sup>

Februa	ary 15, 2	2019	INTERFUTURE PhD DAY (for INTEFUTURE members only)
8.30	19.00	detaile	ed program in the following pages
20.00	21.30	Dinne	r (Restaurant Da Pino, San Michele all'Adige) <sup>#</sup>

Februa	ary 16, 2	2019 Use of microbial signals to control plant dis	eases
9.00	13.00	Lab experience 2.	
		Microbial signals against phytopathogens	
9.00	11.00	Laboratory activities on the detection of microbial signals (Lab. Plant pathology and applied microbiology, Building of Phytopathology)	Gerardo Puopolo, Michele Perazzolli
11.30	12.00	Break	
12.00	13.00	General discussion and conclusions	
		Departure	

Attendance to sessions specified as 'for INTEFUTURE members only' is restricted to the project partners.





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#### INTERFUTURE MID-TERM MEETING

Thursday February 14, 2019 (for INTEFUTURE members only)

Room PRC 6302 – seminar room 3<sup>rd</sup> floor, building of Research

09.00	9.15	Welcome and Introduction.
		Short introduction by the REA Project Officer, the External expert (Monitor) and the
		Project Coordinator.
09.15	9.45	Tour de table.
		Presentation by all Beneficiaries representatives describing their research team and
		their role within the network.
9.45	11.20	Coordinator's report.
		Presentation of the Network and the Mid-term report covering the scientific and
		training aspects reported here below
09.45	10.10	- Scientific aspects: Scientific aspects: i) overview of the research project, ii) research
		objectives, iii) scientific highlights of the work so far and advancement
10.10	10.30	- <b>Training aspects:</b> i) overview of the training programme and progress, ii) short
		presentation of the training events already organized, iii) presentation of the ESR
		secondments
10.30	11.00	Break
11.00	11.10	- <b>Networking aspects</b> : i) how the beneficiaries cooperate in practice, ii) interaction
		with industrial sector, iii) dissemination and outreach activities
11.10	11.20	- Management aspects: i) recruitment report, ii) deliverables; iii) milestones,
		management meetings, iv) critical implementation risks and mitigation actions
11.20	12.50	Fellows' individual reports.
		Power point presentations by ESR1, ESR2, ESR3, ESR4, ESR5, ESR6
12.50	14.00	Lunch
14.00	15.15	Fellows' individual reports.
		Power point presentations by ESR7, ESR8, ESR9, ESR10, and ESR11
15.15	15.45	Feedback and open discussion.
		Feedback from the REA Project Officer and the External Expert (Monitor) and
		discussion on the output of the Network so far
15.45	16.15	Break
16.15	17.30	Restricted session 1.
		Meeting between the ESRs and the REA representative
17.30	18.00	Restricted session 2.
		Meeting between the coordinator, Project Officer and the REA representative
18.00	18:30	Restricted session 3.
		Meeting between coordinator/partners/financial managers and Project Officer to
40.20		discuss financial issues and periodic report
18:30	24.00	End of the meeting and farewell
19:30	21:00	Dinner (Restaurant Da Pino, San Michele all'Adige) <sup>#</sup>

Attendance to this session is restricted to the project partners.





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#### **INTERFUTURE PhD DAY**

## Friday February 15, 2019 (for INTEFUTURE members only)

Room PRC 6302 – seminar room 3<sup>rd</sup> floor, building of Research

8.30	9.30	Supervisory board	Ilaria Pertot
9.30	10.00	General assembly	Ilaria Pertot,
		Presentation of new project partners and updated consortium,	Riccarda Moser,
		objectives, important deadlines and administrative aspects	Michele Perazzolli
10.00	12.30	PhD Session 1	
		Interactions and mode of actions of biofertilizers and biofungicide	
10.00	10.30	ESR4. Characterization of the mode of action of innovative	Abdessalem
		biocontrol products for plant defence	Chahed
10.30	11.00	ESR5. Characterization of the mechanism of action of sugar-	Nikola
		based biocontrol products on target and non-target	Mijailovic
11.00	11.30	microorganisms Break	
11.30	12.00	ESR7. The interactions of the endophytic nitrogen fixing	Martina
		bacterium <i>Gluconacetobacter diazotrophicus</i> with fungal	Franchini
		endophytes and rhizosphere micro-organisms associated with crop plants	
12.00	12.30	ESR8. Plant and bacterial factors determining host colonization by	Michele
12.00	12.00	intracellular uptake of <i>Gluconacetobacter diazotrophicus</i>	Pallucchini
12.30	14.00	Lunch	
14.00	15.30	Meeting Session 2	
		Volatile organic compounds as novel eco-friendly pesticides	
14.00	14.30	ESR6. Employment of VOCs produced by <i>Lysobacter</i> members for	Anthi
		the biological control of soilborne plant pathogenic fungi and	Vlassi
		oomycetes	
14.30	15.00	ESR9. Selection of microorganisms to develop new tools for the	Amani
15.00	15 20	management of <i>Drosophila suzukii</i>	Alawamleh
15.00	15.30	ESR10. Development of a commercial liquid food trap with addition of bioactive microorganisms to improve attractiveness	Gordana Durovic
		and specificity for Drosophila suzukii	Durovic
15.30	16.00	Break	
10.00	10.00		
16.00	18.00	Meeting Session 3 Plant growth promoting microorganisms for a more sustainable a	griculture
16.00	16.30	ESR1. Novel biofertilisers based on endophytic bacteria.	Nikoletta
10.00	10.50	Innovative approaches to bridge plant-microbe interaction	Galambos
		research and bio-product development	
16.30	17.00	ESR2. Untapping the keg of microbial bioproducts using	Maria F. Vasseur
		innovative approaches	Coronado
17.00	17.30	ESR3. Interactions between crop genotypes and arbuscular	Mirjam
		mychorrizal fungi	Seeliger
17.30	18.00	ESR11. Conventional delivery strategies for bioproducts based on	Muhammad
		microbial bioproducts	Aammar Tufail
18.00	19.00	Bi(tri)lateral meetings for ESRs	
20.00	21.30	Dinner (Restaurant Da Pino, San Michele all'Adige) <sup>#</sup>	

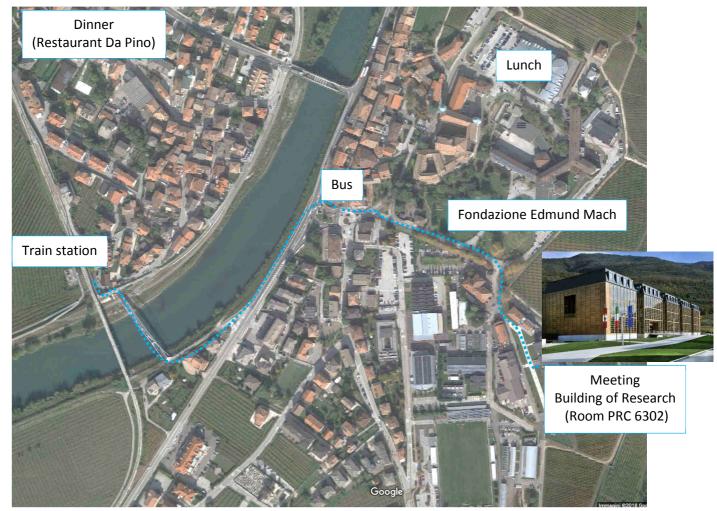
Attendance to this session is restricted to the project partners.

## INTERFUTURE



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Fondazione Edmund Mach Via Edmondo Mach 1 38010- San Michele all'Adige (Trento)



Connections from Trento: **Train:** <u>http://www.ttesercizio.it/Treno/</u> **Bus:** <u>http://www.ttesercizio.it/OrariDiLinea/OrariDiDirettrice-E18I-104A.PDF</u>

Book your dinner at: https://doodle.com/poll/8t8m72ca9i8zpyqz

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Riccarda moser <u>riccarda.moser@fmach.it</u> +39 0461 614 812





#### HOTELS

#### San Michele all'Adige:

Hotel La Vigna	https://www.booking.com/hotel/it/garni-la-vigna.en-gb.html?aid=375647;label=msn-
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#### Mezzocorona (6 Km from San Michele)

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#### Trento (25 Km from San Michele)

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Grand Hotel Trento	https://www.booking.com/hotel/it/boscolotrento.en-gb.html?aid=375647;label=msn-
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