

**iPLANTA COST Action CA15223**

*2<sup>nd</sup> iPLANTA Conference*

**RNAi: THE FUTURE OF CROSS TALK**

Focus on RNAi Technology (WG1) and  
Applications (WG2)

Faculty of Biology, Adam Mickiewicz University  
Poznań, Poland

<http://iplanta2018.home.amu.edu.pl/>

**FEBRUARY, 14-16, 2018**

**CALL OF ABSTRACTS**



## **2<sup>nd</sup> iPLANTA Conference AIMS AND THEMES**

The 2<sup>nd</sup> iPLANTA Conference will focus on the unique aspects of Double-stranded RNAi technologies to induce resistance to pests and pathogens. The small RNAs (sRNAs) that mediate cross-kingdom RNAi in plant hosts represent a novel class of pathogen effectors that inhibit host immunity for successful infection. e.g. sRNA trafficking from fungal pathogens to host plants. Plant transgene-derived artificial sRNAs can induce gene silencing in certain interacting pests and pathogens, a phenomenon called host-induced gene silencing (HIGS). To improve the use of RNAi technology, bidirectional cross-kingdom RNAi and two-way sRNA trafficking between pests/pathogens and hosts need to be better understood. Furthermore, information is needed on the specificity of silencing and whether the produced dsRNA may also trigger non-specific (off-target) effects that affect plant physiology or non-targets. Information is also required on the efficiency and specificity of RNAi systems so that they can be designed to maximize the desired gene silencing and minimize off-target effects. The main focus of the 2<sup>nd</sup> iPlanta conference will be addressed to understanding RNAi mechanisms and specificity (WG1) and the novel pest and disease control applications (WG2) that are unlikely to be developed by other new breeding technologies (NBT), such as gene editing.

The conference will also consider the issues discussed at iPlanta Ghent workshop on RNAi biosafety (WG3), which relate to data requirements for environmental risk assessment of RNAi systems for pest and disease control and to the likelihood of off target and non-target effects. The conference will consider what form future risk assessments should take so that they are proportionate to potential risks and proportionate for organisations developing new systems.

The WG4 plan for creating a framework of existing knowledge on the socio-economic impacts of new technologies on the food production, processing and marketing, will be presented. In addition, a study of the contribution of RNAi technologies to this production and marketing chain is being considered. A proposal for a survey of EU scientist's attitude and perceptions of RNAi and NBT technologies, will be also presented and discussed.

The WG5 communication plan to stakeholders and consumers will be presented and discussed, including the identification of a specific message to be communicated with a podcast based on a "story telling approach" and an event to be organized at the EU parliament.

Depending on the number of abstracts received, parallel sessions will be organized for topics related to WG1 and WG2. A session will be dedicated to topics related to WG3 and one to WG4&5. Finally, a session will be addressed to discuss the demand from stakeholders and consumers.

### **ABSTRACTS ARE INVITED ON THE MAIN FOCUS OF CONFERENCE:**

#### **RNAI: THE FUTURE OF CROSS TALK.**

**DEADLINE DECEMBER 10<sup>TH</sup>, 2017**

**AUTHORS OF SELECTED ABSTRACTS (ORAL AND POSTER) WILL BE INVITED ON  
COST IPLANTA BUDGET**

**THE CONFERENCE WILL BE OPEN TO ALL PARTICIPANTS**

**DAY 1 - WEDNESDAY FEBRUARY 14<sup>TH</sup>, 2018**

*8:00 registration*

*9:00 Welcome – Opening session RNAi Research in Poland*

**International Invited Lecture**

AUTHORS		ORAL PRESENTATION
INTERNATIONAL INVITED LECTURE	<i>Andrzej Wierzbicki</i> Department of Molecular, Cellular and Developmental Biology, University of Michigan (USA)	45 min

*Oral presentations to be defined*

*12:30 Lunch*

*13:45 Opening of 2<sup>nd</sup> iPLANTA Conference*

*14:00 Open Session 1*

**Topic 1 RNAi Technology**

AUTHORS		ORAL PRESENTATION
INVITED SPEAKER		30 min
ORAL PRESENTATION		15 min
ORAL PRESENTATION		15 min
ORAL PRESENTATION		15 min
ORAL PRESENTATION		15 min

*15:30 Coffee break*

*16:00 Open Session 2*

**Topic 2 RNAi Technology**

AUTHORS		ORAL PRESENTATION
INVITED SPEAKER		30 min
ORAL PRESENTATION		15 min

<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min

17:30 General Discussion

18:00 Closure

**DAY 2 - THURSDAY FEBRUARY 15<sup>TH</sup>, 2018**

09:00 *Open Session 3*

**Topic 3 RNAi Technology**

<b>AUTHORS</b>	<b>ORAL PRESENTATION</b>	
<b>INVITED SPEAKER</b>		30 min
<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min

10:30 *Open Session 4*

**Topic 4 RNAi Applications**

<b>AUTHORS</b>	<b>ORAL PRESENTATION</b>	
<b>INVITED SPEAKER</b>		30 min
<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min

12:00 Discussion

12.30 Lunch

13:30 *Open Session 5*

### Topic 5 RNAi Applications

AUTHORS		ORAL PRESENTATION
INVITED SPEAKER		30 min
ORAL PRESENTATION		15 min
ORAL PRESENTATION		15 min
ORAL PRESENTATION		15 min
ORAL PRESENTATION		15 min

15:00

*Invited speaker*

### International Invited Lecture

AUTHORS		ORAL PRESENTATION
INTERNATIONAL INVITED LECTURE	<b>Hailin Jin</b> (University California, Riverside) Cross kingdom RNAi and fungal uptake of external RNAs confer plant protection	45 min

15:45 *Coffee break*

16:15 *Open Session 6*

### Topic 6 STAKEHOLDERS AND CONSUMERS

AUTHORS		ORAL PRESENTATION
INVITED SPEAKER		30 min
ORAL PRESENTATION		15 min
ORAL PRESENTATION		15 min
ORAL PRESENTATION		15 min
ORAL PRESENTATION		15 min

17:45 *General Discussion*

18:30 *Closure*

20:00 *Social Dinner*

**DAY 3- FRIDAY FEBRUARY 16<sup>TH</sup>, 2018**

09:00 *Open Session 7*

### Topic 7 Biosafety issues

<b>AUTHORS</b>	<b>ORAL PRESENTATION</b>	
<b>INVITED SPEAKER</b>		30 min
<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min

*10:30 Open Session 8*

**Topic 8 Socio-economic impact and communication**

<b>AUTHORS</b>	<b>ORAL PRESENTATION</b>	
<b>INVITED SPEAKER</b>		30 min
<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min
<b>ORAL PRESENTATION</b>		15 min

*12:00 Discussion*

*12.30 Lunch*

*13:00* iPlanta MC meeting (only iPlanta MC members) to discuss future program and Communication strategy (WG leaders to present plans) including workshops, training schools, conferences. Discussion of STSMs.

*15:30 Closure*





**iPlanta**

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