

## Alternatives to Antibiotics, Workshops October-November 2021

In October and November 2021, STAR IDAZ IRC and [IDRC](#) (International Development Research Centre, Canada) organized 5 workshops on Alternatives to Antibiotics (ATA). More than 60 experts from 15 countries across the world actively participated in the workshops, to construct research roadmaps by identifying key areas of research to develop alternative to antibiotics in livestock production.

The experts participating in the workshops based their discussions on the results of an earlier research gap analysis workshop organized by STAR IDAZ IRC and held alongside the *3rd International Symposium, Alternatives to Antibiotics, Challenges and Solutions in Animal Health and Production*, Bangkok, Thailand, on December 16 -18, 2019.

The overall goal of STAR-IDAZ IRC, for the current activities on AMR, is to develop alternatives to antibiotics and to reduce/rationalise the use of medically important antimicrobials in livestock so as to safeguard their effectiveness, decreasing the level of use in livestock and the development of resistance to antibiotics, while maintaining/enhancing production levels, and control of animal diseases.

The five workshops were focused around different aspects of research into finding alternatives to antibiotic use in livestock production:

1. Alternatives to antibiotics acting directly on the pathogen, including establishing their mode of action (with a focus on phage technologies) - 12 October 2021
2. Agents and compounds for their ability to enhance the hosts resistance to disease, including establishing their mode of action, with a focus on immunomodulators - 15 October 2021
3. The role of the microbiome in the maintenance of health, and how it can be manipulated - 18 October 2021
4. Antibiotics as growth promoters: how antibiotics work as growth promoters - 22 October 2021
5. Taking new alternatives to antibiotics to market - 9 November 2021

The next steps will be to prioritise the research gaps identified at the workshops, and to include them in the review of the research roadmaps. The roadmaps will be published on the [dedicated area](#) of the STAR-IDAZ IRC website, together with a recommendation on key research priorities areas. Meeting agendas are posted below.

## **Alternatives to Antibiotics Webinar 1**

*Alternatives to antibiotics acting directly on the pathogen, including establishing their mode of action (with a focus on phage technologies)*

**Tuesday 12<sup>th</sup> October 2021**

**16:00 – 18:00 CET**

### **AGENDA**

1. Welcome and overview of the workshop objectives
2. Background to IDRC and STAR-IDAZ International Research consortium
  - a. Overview
  - b. Research roadmaps
  - c. Logical Framework for structuring research needs on ATA
3. Target Product Profile
4. Validate previous consultation of research needs
5. Prioritisation of research gaps

#### **Goal of STAR-IDAZ IRC:**

To coordinate research at the international level to contribute to new and approved animal health strategies for at least 30 priority diseases/infections/issues.

#### **Objectives of the meeting:**

To identify and prioritise the research needs relating to identify alternatives to antibiotics acting directly on the pathogen, including establishing their mode of action (with a focus on phage technologies) and taking these to market

To validate the previous consultations relating to new alternatives to antibiotics acting directly on the pathogen, with a focus on phage technologies.

## **Alternatives to Antibiotics Webinar 2**

*Agents and compounds for their ability to enhance the hosts resistance to disease, including establishing their mode of action, with a focus on immunomodulators*

**Friday 15<sup>th</sup> October 2021**

**15:00 – 17:00 CET**

### **AGENDA**

1. Welcome and overview of the workshop objectives
2. Background to IDRC and STAR-IDAZ International Research consortium
  - a. Overview
  - b. Research roadmaps
  - c. Logical Framework for structuring research needs on ATA

3. Target Product Profile
4. Validate previous consultation of research needs
5. Prioritisation of research gaps

**Goal of STAR-IDAZ IRC:**

To coordinate research at the international level to contribute to new and approved animal health strategies for at least 30 priority diseases/infections/issues.

**Objectives of the meeting:**

To identify and prioritise the research needs to identify agents/compounds for their ability to enhance the hosts resistance to disease, including establishing their mode of action, with a focus on immunomodulators, and how these could be taken to market.

To validate the previous consultations relating the research needs required to identify agents/compounds with the ability to enhance the hosts resistance to disease, including establishing their mode of action, with a focus on immunomodulators.

**Alternatives to Antibiotics Webinar 3**

*The role of the microbiome in the maintenance of health, and how it can be manipulated*

**Monday 18<sup>th</sup> October 2021**

**15:00 – 17:00 CET**

**AGENDA**

1. Welcome and overview of the workshop objectives
2. Background to IDRC and STAR-IDAZ International Research consortium
  - a. Overview
  - b. Research roadmaps
  - c. Logical Framework for structuring research needs on ATA
3. Target Product Profile
4. Validate previous consultation of research needs
5. Prioritisation of research gaps

**Goal of STAR-IDAZ IRC:**

To coordinate research at the international level to contribute to new and approved animal health strategies for at least 30 priority diseases/infections/issues.

**Objectives of the meeting:**

To identify and prioritise the research needs relating to the role of the microbiome in the maintenance of health, and how it can be manipulated and taking these to market

To validate the previous consultations relating to the role of the microbiome and how it can be manipulated.

**Alternatives to Antibiotics Webinar 4**  
*Antibiotics work as growth promoters*

**Friday 22<sup>nd</sup> October 2021**  
**15:00 – 17:00 CET**  
**AGENDA**

1. Welcome and overview of the workshop objectives
2. Background to IDRC and STAR-IDAZ International Research consortium
  - a. Overview
  - b. Research roadmaps
  - c. Logical Framework for structuring research needs on ATA
3. Validate previous consultation of and further consider research needs
4. Prioritisation of research gaps

***Goal of STAR-IDAZ IRC:***

To coordinate research at the international level to contribute to new and approved animal health strategies for at least 30 priority diseases/infections/issues.

***Objectives of the meeting:***

To identify and prioritise the research needs to establish how antibiotics work as growth promoters

**Alternatives to Antibiotics Webinar 5**  
*Taking new alternatives to antibiotics to market*

**Tuesday November 9<sup>th</sup>, 2021**  
**15:00 – 17:00 CET**  
**AGENDA**

1. Welcome and overview of the workshop objectives
2. Background to IDRC and STAR-IDAZ International Research consortium
3. Presentation around Bringing alternatives to antibiotics to Market
  - a. Armando Heriazon (IDRC): Product development – private sector approach
  - b. Javier Pozo Gonzalez (EMA): Perspectives from a regulatory agency
  - c. Michael Shaw (Wellspring Inc.): Commercialization and Knowledge of markets
  - d. Simon Labrie (SyntBioLab): Commercialization of bacteriophages – lessons learned
4. Discussion and identification of challenges and solutions