



**STAR-IDAZ**  
International Research  
Consortium on Animal Health

# The Future of Bovine Tuberculosis Research:

Insights from the  
STAR-IDAZ IRC Workshop

February 28, 2023,  
Birmingham, UK



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More information on STAR-IDAZ IRC can be found at [www.star-idaz.net](http://www.star-idaz.net)

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The report is a presentation of the current initiatives and recent scientific literature, organised to identify and highlight trends and advances in research on animal health, with a focus on priority animal diseases at a global level. The report does not target initiatives aimed at implementing animal disease control strategies (e.g., roadmaps for the control or eradication of infectious diseases) or at improving animal health control infrastructures.

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# The Future of Bovine Tuberculosis Research:

## Insights from the STAR-IDAZ IRC Workshop

February 28, 2023, Birmingham, UK

On February 28th, 2023, **STAR-IDAZ IRC** organized a workshop in Birmingham, UK to address the challenges of **bovine tuberculosis (bTB)** and discuss research roadmaps to guide future activities in the area. The workshop brought together 15 online and 61 in-person experts on bTB from different regions of the world, including Algeria, Argentina, Brazil, Ethiopia, France, India, Ireland, Italy, Mexico, Morocco, Netherlands, South Africa, Spain, Switzerland, UK, and USA. Experts were experienced researchers in the field of bTB diagnostics, vaccines, epidemiology, and host-pathogen interactions.

The workshop was facilitated by Liz Ogilvie and her team from the collective. Latifa Elhachimi (Kreavet and member of STAR-IDAZ secretariat) welcomed the participants and kicked off the meeting with the STAR-IDAZ objectives and principles. James Wood (University of Cambridge, UK) and Vivek Kapur (Penn State University, USA) led the three discussion sections during the workshop, and Johannes Charlier (Kreavet and member of STAR-IDAZ secretariat) concluded the meeting and presented a plan regarding the next steps section in the STAR-IDAZ roadmap development workshop.

During the workshop, experts engaged in active discussions around tables and participated in three sections: gaps and challenges, looking forward, and reflections and next steps. During the first section, the experts discussed the challenges of tackling bTB, focusing on diagnostics, control tools/strategies, and vaccines. The group recognized the importance of developing solutions that are economically viable and have a real impact on farmers and their families. They agreed that a bottom-up approach was needed, and there was no one-size-fits-all solution given the huge differences in animal husbandry, epidemiology and disease impact around the world. The group emphasized the need to think outside of regulatory and policy boxes and prioritize ideas that can make a difference in the **next 10-15 years**.

In the second section, the experts discussed the future of bTB solutions for a fairer future. The group identified research questions such as identifying new markers, developing better vaccines, and creating pen-side tests. They also discussed the need for more knowledge transfer, context-appropriate solutions and a focus on the socio-economic context of the problem, using multi-disciplinary approaches to tackle this issue.

In the final section, the experts reflected on 6 research leads emerging from the previous discussions: (1) **designing 15-minute animal pen-side tests** to identify infection/infectious; (2) assessing **the economic case** for control; (3) identifying routes of transmission and how to disrupt them; (4) **implementing alternative control strategies** that might include husbandry, management, and treatment; and (5) designing studies to **define correlates of immune protection** and **develop a vaccine** that is better than BCG (6). The group acknowledged the importance of considering **different species** within domestic livestock and emphasized the need for a **globally connected research community**.

The insights gained from the workshop will guide future activities and ensure that they are context-appropriate and focused on achieving a fairer future. The group's multi-disciplinary approach to tackling this issue will be crucial in developing solutions and ensuring that they are implemented successfully. The six questions for further study will help to create, refine and validate bTB roadmaps for future research and innovation in this area.

Overall, the STAR-IDAZ IRC organized a successful workshop on bovine tuberculosis, fostering active discussions and developing solutions for a fairer future. We would like to thank all the participants for their valuable contributions to the workshop and their commitment to finding solutions for bTB. We look forward to working together in the future to tackle this important issue.



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