



Introduction to IRC research roadmaps

Luke Dalton, Washington, December 2018



What do they do?

- Way of visualizing a complex problem showing the gaps and helping to decide what projects need to be developed to create workable solutions.
- Structure and focus on where research is most needed, identifying bottlenecks and critical gaps
- Interactive, 'living' tool publicly available online at www.star-idaz.net
- Provide a valuable resource for the research community including funders



Animal Vaccine Development **Research Roadmap** Naturally attenuated candidates Safety Identity of virulence **Delivery Route** factors Delivery Platform Efficacy in Challenge Model Host-pathogen Identity of immunomodulate **Attenuated Organisms** Rationally attenuated candidates interactions Entry Safety Replication **Delivery Route** Host Responses to Natural Infection Persistence/clearance **Delivery Platform** Efficacy in Challenge Model Adjuvant **Inactivated Vaccines** Pathogen Genome Safety **Delivery Route** Delivery Platform Efficacy in Challenge Model Vaccine **DNA/RNA** vaccines Identity of mechanisms Identity of protective **Expression System** of protection antigens Safety Antibody Response **Delivery Route** Cell Mediated Immunity **Delivery Platform** Efficacy in Challenge Model Subunit vaccines Safety **Delivery Route Delivery Platform**

Vector



Efficacy in Challenge Model

Vectored vaccines

Safety
Delivery Route
Delivery Platform
Efficacy in Challenge Model

Animal Vaccine Development Research Lead

Vectored vaccines



Development of a cross protective multivalent vectored PRRSV vaccine

Research Question



State of the Art

Solution Routes

Dependencies

Projects





Generating a strong protective immune response with CTCs and VN Abs



Importance



Overview

Projects





Development of Recombinant Porcine Cytomegalovirus (pCMV)vaccine vector(s) using Korean pCMV field isolates

Project Objectives & Deliverables

Project Outputs

Principal Investigator

Project Progress

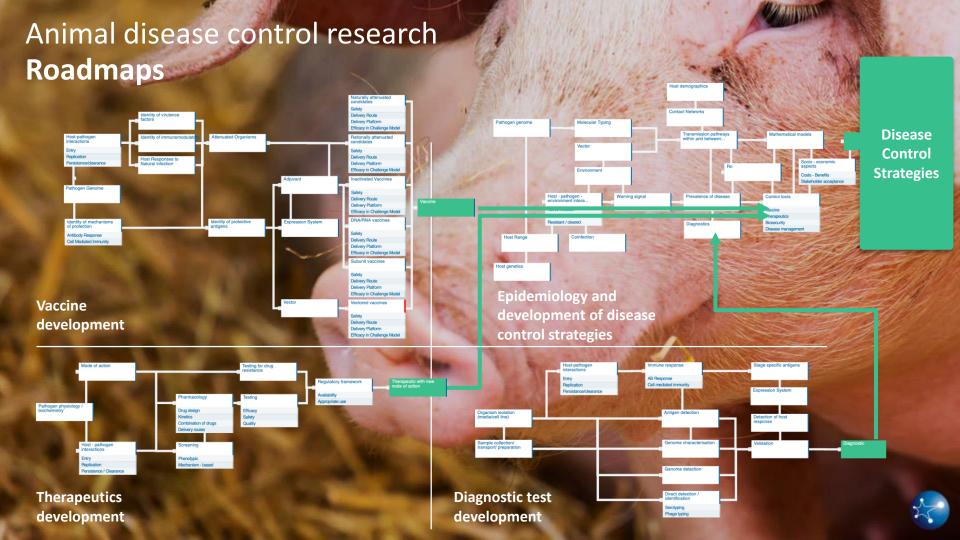
Challenges



Leads







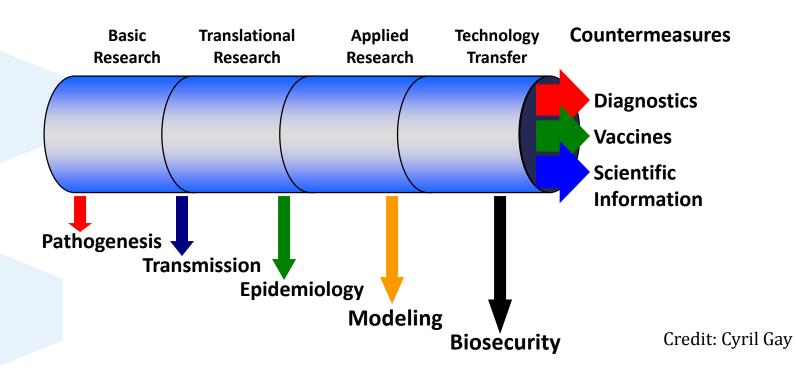


Purpose of the workshop

- Wider engagement in the IRC
- Wider capture of project data
- Identify ways to shorten the innovation pipeline

The Research/Innovation Pipeline









- Data capture and engagement with roadmaps
- Cross-cutting research needs and priorities between sectors: shortening the innovation pipeline





Data capture and engagement with roadmaps

- 1) Will the roadmap system be useful to you and how?
- 2) What are the barriers to your organisation engaging with the roadmap system?
- 3) What would you like to get out of participating in the STAR-IDAZ IRC?





Cross-cutting research needs and priorities between sectors: **shortening the innovation pipeline**

- 1) What are the barriers to working together?
- 2) What information would you like/do you need from each other and why?
- 3) What can STAR-IDAZ IRC do to help shorten the innovation pipeline?

