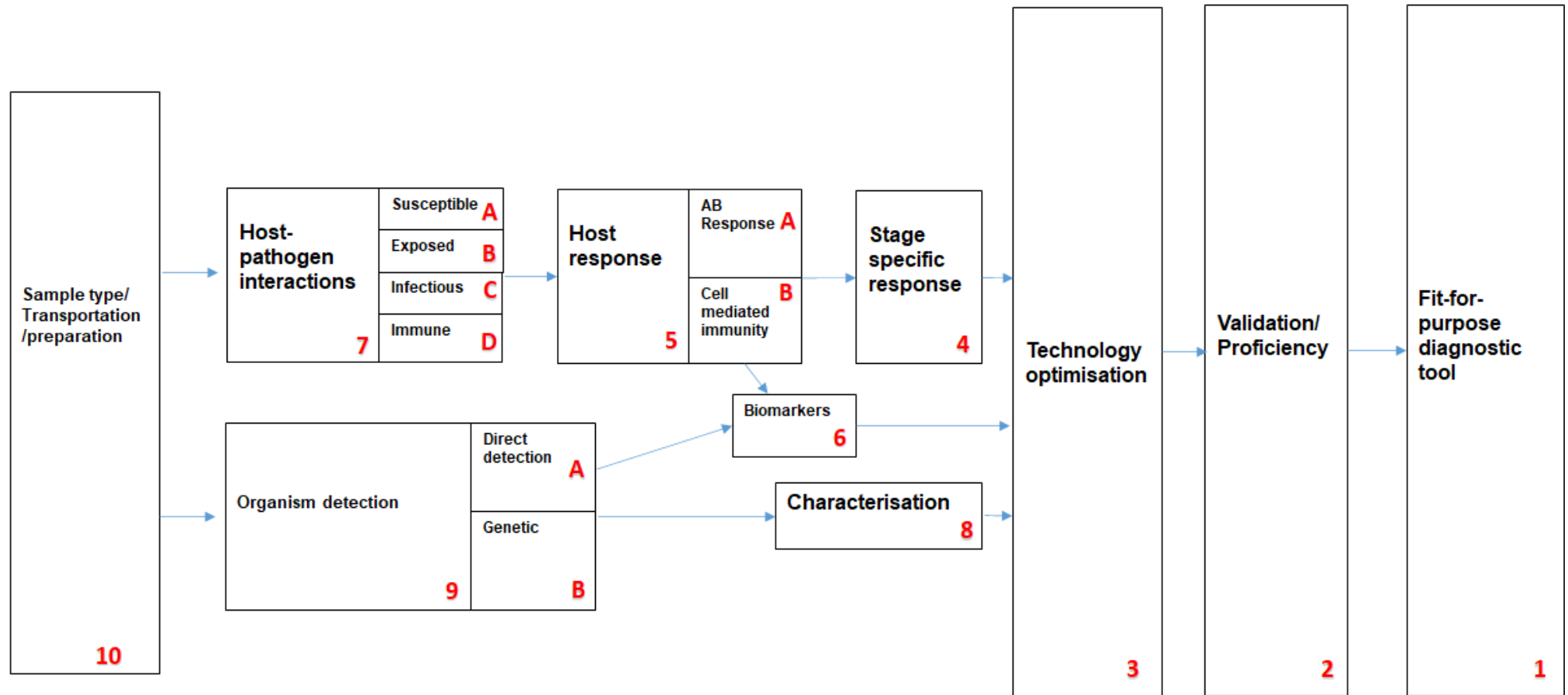


## Roadmap Lead Summaries

| Roadmap Lead Summaries |                                 |            |  |  |  |  |
|------------------------|---------------------------------|------------|--|--|--|--|
| Disease/pathogen       |                                 |            |  |  |  |  |
| Roadmap type           | Development of Diagnostic tests |            |  |  |  |  |
| Version: Date          | Template v1                     | 09/11/2022 |  |  |  |  |
|                        |                                 |            |  |  |  |  |
|                        |                                 |            |  |  |  |  |
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|                        |                                 |            |  |  |  |  |
|                        |                                 |            |  |  |  |  |
|                        |                                 |            |  |  |  |  |

Please delete the roadmap types in the table above and the roadmap diagrams in the following pages that do not apply before completing the Lead Summaries

## Diagnostic Test Development Roadmap



## XXX Diagnostics - Lead Summary 1

**Title:** Diagnostic

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## XXX Diagnostics - Lead Summary 2

**Title:** Validation

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 3

**Title:** Detection of host response

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 4

**Title:** Expression system

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 5

**Title:** Stage specific antigens

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 6

**Title:** Immune response

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 6A

**Title:** Antibody response

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 6B

**Title:** Cell-mediated immunity

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 7

**Title:** Host-pathogen interaction

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 7A

**Title:** Entry

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 7B

**Title:** Replication

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 7C

**Title:** Persistence/clearance

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 8

**Title:** Antigen detection

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 9

**Title:** Genome characterisation

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 10

**Title:** Genome detection

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 11

**Title:** Direct detection/identification

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 11A

**Title:** Serotyping

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 11B

**Title:** Phage typing

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 12

**Title:** Organism isolation (media/cell line)

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*

## Lead Summary 13

**Title:** Sample collection/transport/preparation

### Research Question

*What are we trying to achieve and why? What is the problem we are trying to solve?*

### Challenge(s)

*What are the scientific and technological challenges (knowledge gaps needing to be addressed)?*

### Solution Routes

*What approaches could/should be taken to address the research question?*

### Dependencies

*What else needs to be done before we can solve this need?*

### State of the Art

*Existing knowledge including successes and failures*

### Projects

*What activities are planned or underway?*