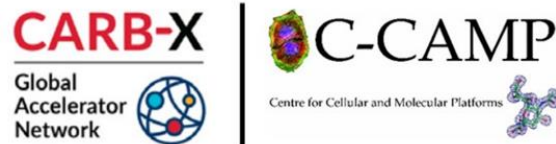


C-CAMP AMR INNOVATOR SCHOOL 2024

Focused on In Vitro Diagnostic (IVD) Product Development

12th-14th March 2024

***Centre for Cellular and Molecular Platforms (C-CAMP),
Bengaluru, India***



Context:

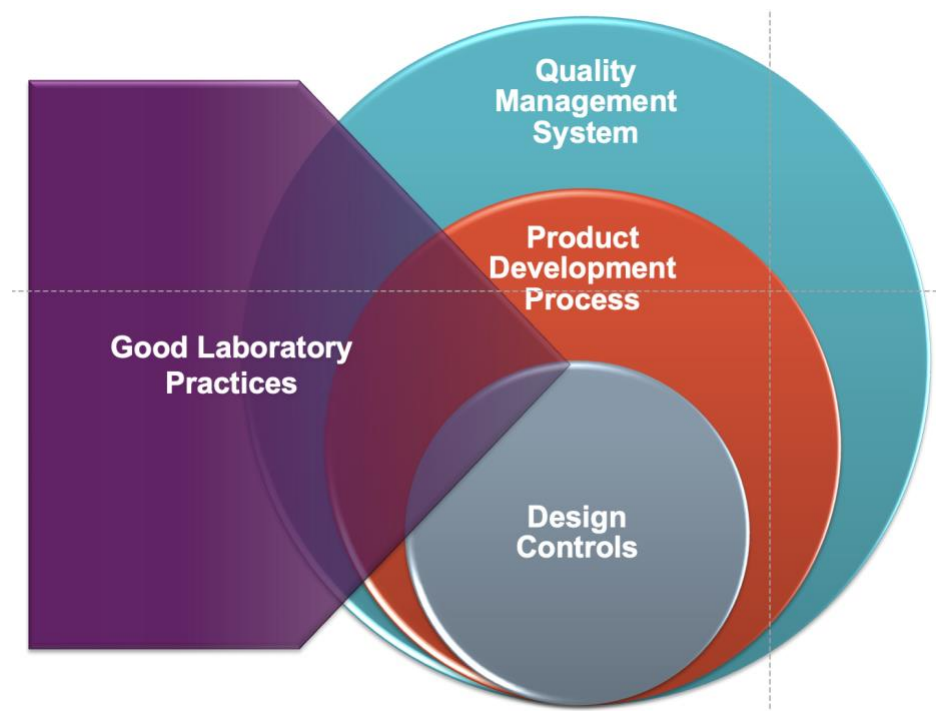
Antimicrobial resistance (AMR) has emerged as a global health crisis, posing significant challenges to healthcare systems worldwide. AMR is a major threat to global health and development. It is estimated that AMR could cause 10 million deaths annually by 2050 and cost the global economy \$100 trillion.

Drug-resistant pathogens are a growing threat to global health. They are becoming increasingly difficult to treat, and this is leading to more deaths and longer hospital stays. There is an urgent need for new strategies and treatments to combat drug resistance. One way to address this challenge is to promote innovation in AMR research. This could involve developing new antibiotics, vaccines, and diagnostics. It could also involve finding new ways to use existing treatments. Innovations are essential to stay ahead of the AMR curve due to the ever-evolving nature of the causal pathogen.

The pathogens that cause these infections are constantly changing and evolving due to various factors, and thus it is imperative that our methods of identification and intervention change appropriately. Innovations in the field of AMR can help in timely public health interventions with better surveillance and screening platforms; they can steer clinical decisions and appropriate treatment regimens with better diagnostics; and can generate more treatment options in a fast-drying arsenal of effective antimicrobials against resistant pathogens. Further, effective innovations in diagnostics can drive preventive strategies to bring down infection rates can overall impact by diffusing the pressure on our existing infrastructure and resources that manage infections and their spread. Promoting innovation by enabling innovators in the domain of AMR can play a big role in preventing the next potential pandemic.

Purpose:

The AMR Innovator School is meant to train and equip academics, entrepreneurs, and early-stage companies with an improved understanding of the skills, principles, and systems required for effective *in vitro* Diagnostics (IVD) **product development**. This training will help attendees to make the transition from academic and grant-based research to quality compliant product development. Attendees will learn the **FUNDAMENTALS** for moving an IVD product from concept through development.



For whom this content is intended:

The school is open to early-stage start-up innovators, academic innovators; and also to late-Stage startup, and companies interested in transitioning to infectious disease diagnostic product development. R&D managers and scientists in early-stage diagnostic companies / academic groups, and IVD manufacturers.

Scope:

- Infectious disease IVD development with an emphasis on diagnostics for bacteria and antimicrobial resistance
- Product development – concept, technical feasibility, and development stages
- The fundamentals of IVD development – what they are, why they are important, and when you need to implement them.

Overview of the AMR Innovator School Curriculum*:

- Overview of the IVD Product Development
- Global Perspective on IVD Product Development
- Module 1: Introduction – IVD Product Development
- Module 2: The Product Development Process
- Module 3: Design Controls
- Module 4: Quality Management System

Module 5: Good Lab Practices

Module 6: Case-Study: Why the Fundamentals Matter

Module 7: Regulatory Landscape in India

Module 8: IP/ Tech Transfer

Innovations in AMR

- Demonstration of Products (existing innovations)
- Pitching Sessions (early innovations)

(*For Detailed Course Curriculum, refer to Annexure#1)

Organizing Team:

- **CARB-X**
Ms Betsy Wonderly Trainor, Alliance Director, CARB-X, Boston, MA
- **C-CAMP**
Dr. Taslimarif Saiyed, Director and CEO, C-CAMP, Bengaluru, India
Dr. Swati Subodh, Program Lead-AMR, C-CAMP, Bengaluru, India
Dr. Yogesha M, Project Manager-AMR, C-CAMP, Bengaluru, India
Dr. Raturaj Gowaikar, Consultant-AMR, C-CAMP, Bengaluru, India

Faculty:

- Dr Peter Dailey, Consultant, CARB-X
- Guest Faculty & Experts

No of participants: The maximum number of participants for the event is 20. This includes a specific allocation for up to 05 participants who are winners of the C-CAMP AMR Quest 2023. The remaining 15 participants will be selected through an open nation-wide call.

When: 12th-14th March 2024

Duration of the program: 03 days

Type of the program: The program is designed as a full-day residential program, providing participants with intensive learning and networking opportunities.

Towards the end of every day's session, a dedicated time slot will be allotted for networking. The networking session will provide participants with an opportunity to connect with each other/startups/companies and form new partnerships, and alliances.

How to apply:

For admission to C-CAMP AMR Innovators School 2024, applications can be submitted through an online application system. The link to submit the application as follows:

<https://tinyurl.com/2sud7vte>

Applications by any other mode are not acceptable.

Important Dates:

Applications Open: 22nd December 2023

Application Close: 22nd January 2024

Communication to the Selected Participants: 12th February 2024

Start of the C-CAMP AMR Innovator School: 12th March 2024

Travel Guidelines for Applicants

1. **Upper Limit:** The maximum allowable travel expense (all modes) is Rs. 15,000 only (round trip). The amount will be reimbursed on the show of actual paperwork, boarding card etc ONLY. The amount to be reimbursed will be at the sole discretion of the organizing committee, based on the distance of travel between the place of work/residence, and Bengaluru.
2. **Flight Travelers:** Those opting for air travel should book tickets solely in economy class **at least 3 weeks before the date of travel**. Flights booked at escalated costs less than 3 weeks might not be honored for full reimbursement, even if within the upper limit. Please note that expenses for additional luggage, meals, and seat upgrades will not be covered.
- Re-imbursements won't be processed in instances of modification of itinerary from the participant, resulting in cancellation of the flight.
3. **Train Travel:** For individuals traveling by Train, AC 3-tier charges will be reimbursed. The reimbursement on the show of actual receipt and proof of travel.
4. **Bus travelers:** For individuals travelling by road, reimbursement on the show of actual receipt and proof of travel.
5. **Bangalore Residents:** For individuals residing in Bangalore, reimbursement will cover one-time cab charges from home to the institute and back. Any additional travel, for any reason, during the 3 days of the residential school has to be borne by the participant.

Contact Information:

AMR Program Team
Centre for Cellular and Molecular Platforms (C-CAMP)

Email: amr@ccamp.res.in

Website: <https://www.ccamp.res.in/amr>

Annexure#1:

Details of the Sessions:

Keynote Lecture - Need and Opportunities in AMR Testing in India

The participants to understand the critical importance of AMR testing in India through an engaging keynote address. Also, they will understand the urgent need for innovative testing solutions to combat antimicrobial resistance and discover the vast opportunities for positive impact.

Overview of the IVD Product Development Bootcamp

This session will provide an overview of the IVD Product Development Bootcamp. Gain a comprehensive understanding of the curriculum, objectives, and expected outcomes of this immersive learning experience.

Module 1 – Introduction to IVD Product Development

In this session, we will introduce the participants to IVD Product Development and will explain the foundational concepts and reasons behind its significance. The session will also involve the formation of teams with participants, allowing them to collaborate and work together throughout the week. At the end of the week, the delegates will have the opportunity to present their innovative ideas to the pitching competition jury.

Module 2 -- The Product Development Process

In this module, we will explain about the intricate process of product development in the context of IVD. The audience will learn about various stages, challenges, and strategies that are integral to bringing innovative IVD solutions to life.

Keynote Lecture – Global Perspective on IVD Product Development

In this keynote, we will provide a global perspective on IVD product development. The audience will gain valuable insights into the international trends, and challenges that shape the dynamic landscape of diagnostic innovation.

Module 3 – Design Controls

A comprehensive exploration of design controls within the IVD product development process. This session will also involve collaborating within breakout groups to deepen the learning.

Module 4 – Quality Management System

In this session, audience will understand the role of a robust quality management system in IVD product development. This session will also involve collaborating within breakout groups to deepen the learning.

Module 5 – Good Lab Practices

We will explain the participants the principles of good lab practices within the context of IVD product development. Also, the participants will be engaged in insightful discussions.

Module 6 - Case-Study: Why the Fundamentals Matter

This module presents a compelling case-study session that stresses the importance of strong fundamentals in driving successful IVD product development. This session will also involve collaborating within breakout groups to deepen the learning.

Module 7 – Regulatory Landscape in India

In this session, the participants will gain a comprehensive understanding of regulatory requirements, approvals, and compliance strategies vital for the successful development of IVD products.

Module 8 – IP/ Tech Transfer

We will share invaluable insights into intellectual property and tech transfer. This session will also involve collaborating within breakout groups to deepen the learning.

Demonstration of Products (existing innovations)

The Startups/companies will showcase their existing AMR related innovations/solutions through live demonstrations and engage.

Pitching competition.

Building upon their learning and experiences, participants will have the opportunity to present their innovative project ideas to a distinguished pitching competition jury. Each team will have a designated time slot to present their project idea to the pitching competition jury.

Frequently Asked Questions (FAQs) - AMR Innovator School 2024

1. What is the purpose of the AMR Innovator School?

The AMR Innovator School aims to train and equip academics, entrepreneurs, and early-stage companies with the necessary skills and knowledge required for effective in vitro Diagnostics (IVD) product development. Attendees will learn fundamental concepts, principles, and systems essential for transitioning from academic and grant-based research to quality-compliant product development.

2. Who is the intended participants for this program?

The program is open to early-stage start-up innovators, academics, and individuals from late-stage startups who are interested in transitioning to infectious disease diagnostic product development. It is also suitable for R&D managers and scientists associated with early-stage diagnostic companies or academic groups.

3. What are the key topics covered in the AMR Innovator School?

The program focuses on:

- Infectious disease IVD development with emphasis on diagnostics for bacteria and antimicrobial resistance.
- Product development covering concepts, technical feasibility, and developmental stages.
- Understanding the fundamentals of IVD development, their significance, and implementation timelines.

4. What is the course structure of the AMR Innovator School?

The program comprises modules such as Introduction to IVD Product Development, Product Development Process, Design Controls, Quality Management System, Good Lab Practices, Regulatory Landscape in India, and more. For a detailed curriculum, please refer to Annexure#1.

5. How many participants can attend, and what is the selection process?

The event accommodates a maximum of 20 participants, including five winners of the C-CAMP AMR Quest 2023. The remaining 15 participants will be chosen through an open nationwide call.

6. When and for how long will the program run?

The AMR Innovator School is scheduled from 12th to 14th March 2024, spanning three days as a full-day residential program.

7. How can one apply for the program?

Applications for the AMR Innovator School 2024 can be submitted through the online application system available via the provided link.

8. Is it compulsory to reside on the campus during the program?

Yes, it is mandatory to stay on campus for the duration of the program.

9. Are there any important dates applicants should note?

- Applications Open: 22nd December 2023
- Application Close: 22nd January 2024
- Communication to Selected Participants: 12th February 2024
- Start of the AMR Innovator School: 12th March 2024

10. Are there any travel guidelines for participants?

Yes, participants should adhere to the specified travel guidelines. The maximum travel expense allowed is Rs. 15,000 (round trip). Further details are available in the provided guidelines.

11. How can one contact the AMR Program Team for inquiries?

Contact the AMR Program Team at C-CAMP via email: amr@ccamp.res.in or visit the program's website for additional information.

For more information, please visit - <https://www.ccamp.res.in/amr>