



UNIVERSITY OF  
BIRMINGHAM



स्वास्थ्य अनुसंधान विभाग  
Department of Health Research  
स्वास्थ्य एवं परिवार कल्याण मंत्रालय  
Ministry of Health and Family Welfare



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INDIAN COUNCIL OF  
MEDICAL RESEARCH

NIRT  
NATIONAL INSTITUTE FOR  
RESEARCH IN TUBERCULOSIS

# INTERNATIONAL MASTERCLASS ON SYSTEMATIC REVIEWS AND META – ANALYSIS OF DIAGNOSTIC TEST ACCURACY STUDIES

Date : 05–07 Aug 2026

Venue: ICMR-NIRT, Chennai

## Organizing Chairperson:

Dr Srinath Satyanarayana, Director, ICMR- NIRT

## Organizing Secretary :

Dr Leeberk Raja I, Scientist – E, ICMR- NIRT

## Organizing Team:

Dr Mukesh Kumar S | Dr Vignes Anand S  
Dr Adhin Bhaskar | Dr Jefferson Daniel  
Dr Sharon Suresh

Organized by:  
Technical Resource Centre,  
ICMR-NIRT, Chennai

Funded by:  
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Government of India

## FACULTY



**Prof Yemisi Takwoingi** is Professor of Test Evaluation and Evidence Synthesis and Head of Applied Health Sciences at the University of Birmingham. A biostatistician and methodologist, she leads and contributes to diagnostic evaluation and evidence synthesis research, serves on the Cochrane Editorial Board and PRISMA Executive and is an editor of the Cochrane Handbook for Systematic Reviews of Diagnostic Test Accuracy.



**Dr Clare Davenport** is a Consultant in Public Health Medicine and Associate Clinical Professor at the University of Birmingham. She has extensive experience in systematic reviews of test accuracy and has contributed to QUADAS-C and QUADAS-3. She is a Senior Editor for Cochrane DTA reviews and has contributed to the Cochrane Handbook for Systematic Reviews of Diagnostic Test Accuracy.



**Dr Jacqueline Dinnes** is a Senior Research Fellow in test evaluation and evidence synthesis at the University of Birmingham. Her work focuses on diagnostic test evaluation, systematic reviews, and methodological research. She is an Editor for Cochrane DTA reviews and contributed to the Cochrane Handbook for Systematic Reviews of Diagnostic Test Accuracy. She is a senior member of key NIHR and Warwick-Birmingham evidence synthesis groups.



**Dr Leeberk Raja** leads the TRC at ICMR-NIRT and led key DTA reviews on molecular diagnostics that informed WHO's TB guidelines. He is also the recipient of the Kenneth Warren Prize in 2025 by the Cochrane collaboration. He serves on the editorial board of BMJ Evidence-based Medicine and leads the multi-centric INSHORT trial on TB meningitis.

## IN-PERSON WORKSHOP SCHEDULE

| Day 1<br>05th August 2026                                                                     | Day 2<br>06th August 2026                                                                                         | Day 3<br>07th August 2026                                                                              |
|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>8.45–9.00</b><br><b>ARRIVAL / REGISTRATION</b>                                             | <b>8.45–9.00</b><br><b>ARRIVAL</b>                                                                                | <b>8.45–9.00</b><br><b>ARRIVAL</b>                                                                     |
| 9.00–9.15<br>Introduction and overview of course                                              | 9.00–10.00<br>7: Meta-analysis of test accuracy                                                                   | 9.00–10.30<br>13: Practical – Using Stata/R for meta-analysis of a single test                         |
| 9.15–10.15<br>1A: Understanding test accuracy<br>1B: Exercise                                 |                                                                                                                   |                                                                                                        |
| 10.15–10.45<br>2: Steps in a diagnostic systematic review                                     | 10.00–11.00<br>8A: Planning analyses<br>8B: Exercise                                                              | 10.30–11.00<br>14: Practical – Using R for test comparisons and investigations of heterogeneity        |
| <b>10.45–11.00</b><br><b>BREAK</b>                                                            | <b>11.00–11.15</b><br><b>BREAK</b>                                                                                | <b>11.00–11.15</b><br><b>BREAK</b>                                                                     |
| 11.00–12.00<br>3A: Formulating a DTA review question and eligibility criteria<br>3B: Exercise | 11.15–13.00<br>9: Practical – Using RevMan and R output for meta-analysis of a single test (Part I and Part II)   | 11.15–12.15<br>14 (cont): Practical – Using R for test comparisons and investigations of heterogeneity |
| 12.00–13.00<br>4: Study designs & reference standards                                         |                                                                                                                   | 12.15–13.00<br>15: Interpreting and presenting review findings                                         |
| <b>13.00–14.00</b><br><b>LUNCH</b>                                                            | <b>13.00–14.00</b><br><b>LUNCH</b>                                                                                | <b>13.00–14.00</b><br><b>LUNCH</b>                                                                     |
| 14.00–15.00<br>5: Sources of bias and variability                                             | 14.00–15.00<br>10: Meta-regression – investigating heterogeneity & test comparisons                               | 14.00–14.30<br>16: Exercise – Understanding, interpreting and presenting review findings               |
|                                                                                               |                                                                                                                   | 14.30–15.30<br>17: Recommendations for practice – accuracy in the evaluation of tests                  |
| <b>15.00–15.15</b><br><b>BREAK</b>                                                            | <b>15.00–15.15</b><br><b>BREAK</b>                                                                                | <b>CLOSE</b>                                                                                           |
| 15.00–15.30<br>6A: Methodological quality assessment and QUADAS-3                             | 15.15–16.30<br>11: Practical – Using RevMan and R output for test comparisons and investigations of heterogeneity |                                                                                                        |
| 15.45–17.15<br>6B: QUADAS-3 practical                                                         | 16.30–17.10<br>12: Understanding and presenting numerical findings                                                |                                                                                                        |
| 17.15–17.30<br>Discussion                                                                     | 17.10–17.30<br>Discussion                                                                                         |                                                                                                        |

## REGISTRATION DETAILS

### What to expect?

- Foundational understanding of Diagnostic Test Accuracy (DTA) methodology taught by leading global experts in DTA reviews
- Hands-on training in using the QUADAS-3 tool for risk of bias assessment
- Hands-on training in performing meta-analysis using the “R”.

### Who should attend

- Hold one of the following degrees: MBBS, BDS, MD/MS/MPH, or a PhD in Medicine or allied disciplines.
- Have authored or co-authored at least one systematic review publication in a PubMed-indexed journal or have proven experience in systematic reviews.
- Participants may be working as faculty or researchers in government or private organisations across India

### No Registration Fee

- Participants will not be provided with accommodation or TA/DA
- Selected participants will be notified through email.

### APPLICATION DEADLINE - 10 July 2026

Kindly use the following link or scan the QR code to access the application form:

<https://forms.gle/s7ByqZEkdY3ikEiZ9>

**For any queries, kindly get in touch with us:**

Dr Sharon Suresh

Research Associate III

TRC, ICMR-NIRT

📞 7837970741

✉️ [trcnirt@gmail.com](mailto:trcnirt@gmail.com)

