

# 63RD ANNUAL CONFERENCE OF INDIAN SOCIETY OF HAEMATOLOGY & BLOOD TRANSFUSION

## **HAEMATOCON 2022 WORKSHOP**

**Molecular Biology Techniques** 

**3<sup>RD</sup> November 2022** 

**COORDINATOR:** Dr. Maitreyee Bhattacharyya

SCIENTIFIC PROGRAM

| 10:30 - 10:45 | Theory sessions: Introduction  |
|---------------|--|
|               | <ul> <li>Application of Molecular biology Techniques in<br/>Hematology</li> <li>Speaker: Prof. (Dr.) Maitreyee Bhattacharyya</li> </ul>        |
| 10:30 - 10:45 | Theory sessions: PCR   |
|               | <ul> <li>Introduction, Basics and Principles</li> <li>PCR chemistry</li> <li>Clinical applications</li> <li>Speaker: Dr. Atanu Adak</li> </ul> |
|               | Theory sessions: Real Time PCR   |
|               | <ul> <li>Introduction, Basics and Principles</li> <li>Real time PCR chemistry</li> <li>Clinical applications</li> </ul>                        |

Speaker: Dr. Atanu Adak



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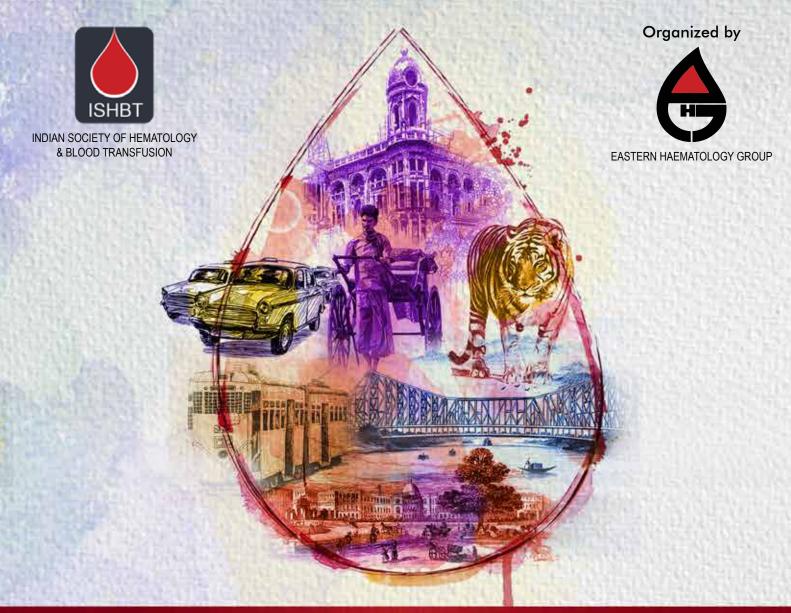
**3<sup>RD</sup> November 2022** 

**COORDINATOR:** Dr. Maitreyee Bhattacharyya

| SCIENTIFIC PROGRAM - |  |
|----------------------|--|
| 11:00 - 11:15        | Theory sessions: Primer and probe design   |
|                      | Introduction, Basics and Principles     Speaker: Dr. Biswabandhu Bankura   |
|                      | Theory sessions: Capillary Sequencing of DNA   |
|                      | <ul> <li>Introduction, Basics and Principles</li> <li>Reaction chemistry</li> <li>Clinical applications</li> <li>Speaker: Dr. Biswabandhu Bankura</li> </ul>               |
| 11:15 - 13:15        | Hands on training: PCR   |
|                      | <ul> <li>Reaction setup</li> <li>PCR programme setup</li> <li>Speaker: Dr. Biswabandhu Bankura</li> </ul>  |
|                      | Hands on training cDNA synthesis and Real Time PCR   |
|                      | <ul> <li>Reaction setup</li> <li>RT-PCR programme setup</li> <li>Data analysis and Quantization using Standard Curves</li> <li>Speaker: Dr. Biswabandhu Bankura</li> </ul> |

Lunch

13:15 - 14:00



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## SCIENTIFIC PROGRAM

14:00 - 14:30 Theory sessions: Agarose Gel Electrophoresis of PCR product Sample loading and running the gel Visualizing the PCR product in Gel Speaker: Dr. Biswabandhu Bankura 14:30 - 14:50 **Demonstration: Genomic DNA isolation** Sample isolation and storage Column purification Speaker: Dr. Atanu Adak **Demonstration: RNA Isolation** Sample isolation and storage Column purification Speaker: Dr. Atanu Adak 14:50 - 15:10 **Demonstration: Capillary Sequencing of DNA** Machine work-flow Reaction setup Data analysis Speaker: Dr. Biswabandhu Bankura 15:10 - 16:00 **General Discussion** Prof. (Dr.) Maitreyee Bhattacharyya, Dr. Atanu Adak,



Dr. Biswabandhu Bankura