## Workshop on high-resolution respirometry CSIR-Centre for Cellular and Molecular Biology 7 - 8 February 2017

Jointly organized by CCMB, SMRM, OROBOROS

Programme

| Day 1 | 7th February 2017 | Weblink |
| :---: | :---: | :---: |
| 09:00-09:30 | Registration |  |
| 09:30-09:40 | Welcome by Dr. Rakesh K. Mishra, Director, CCMB |  |
| 09:40-09:45 | About SMRM and Workshop by Dr. K. Thangaraj |  |
| 09:45-09:50 | Comments by Dr. Erich Gnaiger, OROBOROS Instruments, Austria |  |
| 09:50-10:00 | Introduction of participants and their research interests |  |
| 10:00-11:00 | Get started with the O2k: Overview with video clips. | O2k-Manual |
| 11:00-11:30 | Coffee/tea break |  |
| 11:30-13:00 | Principles of high-resolution respirometry: From switching on the O2k to the experimental result - oxygen sensor calibration and quality control. | $\begin{aligned} & \text { POS-calibration- } \\ & \text { SOP } \end{aligned}$ |
| 13:00-14:00 | Lunch |  |
| 14:00-15:30 | Comprehensive OXPHOS analysis: substrate-uncoupler-inhibitor titration (SUIT) protocols for respiratory control by coupling and mitochondrial pathways, SUIT reference assay. | The Blue Book* <br> SUIT reference protocol |
| 15:30-16:00 | Coffee/tea break |  |
| 16:00-17:00 | Lecture by Dr. Robert Pitceathly, UCL, London |  |
| 17:00-19:00 | Demo-Experiment: High-resolution respirometry with freeze-dried yeast. | Yeast: HRR <br> Reference Assay |
| Day 2 | 8th February 2017 | Weblink |
| 08:30-11:00 | Demo-Experiment |  |
| 11:00-11:30 | Coffee break |  |
| 11:30-13:00 | HRR experiments - discussion of conceptual and technical details and Hands-on data analysis |  |
| 13:00-14:00 | Lunch |  |
| 14:00-15:30 | Technical support and open innovation | Technical support |
| 15:30-16:00 | Coffee break |  |
| 16:00-17:00 | Q\&A session on HRR and OXPHOS analysis: Design of experimental protocols | SUIT protocols |
| 17:00-17:30 | The Bioblast wiki, O2k-Network and MITOEAGLE <br> - feedback \& conclusions | MITOEAGLE |
| 17:30-19:30 | Concluding session |  |

*printed in workshop materials

Limited to 20 participants
Registration Fee: Rs. 4500 (including accommodation)

