**Workshop on Techniques in Molecular Diagnostics**

**Date: 12-Aug-2015 to 14-Aug-2015**

**Venue: Day 1 – SIES College of Arts, Science and Commerce**

 **Day 2 - Tata Memorial Hospital and NIRRH, Parel**

 **Day 3 - SIES College of Arts, Science and Commerce**

**Report**

Registration for the workshop commenced on 12th August 2015 at 9am. 24 participants registered for the workshop. The participants included Associate professors, Assistant professors and a few PhD students from all disciplines of Biological Sciences (Biotechnology, Botany, Chemistry, Life Sciences, Microbiology and Zoology).

The workshop was inaugurated at 9.30am with an invocation song rendered by our students. The welcome address was delivered by our **Vice Principal, Dr George Abraham**. The theme of the workshop was introduced to the participants by **Dr Tara Menon, Co-ordinator, Department of Biotechnology**.

The key note address was delivered by **Dr B.R. Das, President-Research & Innovation, Super Religare Laboratories Ltd.** He took the participants on a journey through the field of Molecular Diagnostics-Past, present and the future.

The next speaker for the morning session was **Dr Rajiv Sarin, Professor, Radiation Oncology and Officer In Charge, Cancer Genetics Unit, ACTREC**. He presented the ethical, legal, and social implications of Molecular Diagnostics.

 The lunch break was followed by technical sessions. The audience was introduced to the various types of PCR based diagnostics and the advantages, disadvantages and trouble shooting of these methods by **Dr Pradnya Kowtal, Scientific Officer E, Sarin Lab, ACTREC**.

**Dr Manoj Mahimkar Assistant Professor and Principal Investigator, ACTREC** spoke on the emergence of the field of Cytogenetics, its advancement followed by its current status. The principle and applications of techniques such as FISH, M-FISH, CGH and Microarray were discussed.

**Day 2** of the workshop opened at the **Dept of Cytogenetics, Tata Memorial Hospital, Parel**. **Dr Pratibha Amare, Head Dept of Cytogenetics** and her team demonstrated the procedures involved in karyotyping, FISH, chromosome painting and SKY. Rated by the participants as the best amongst the sessions, they also got an opportunity to visualise chromosomal abnormalities on the fluorescent microscope.

The post lunch session was at **NIRRH, Parel. Dr Parag Tamhankar, Assistant Director and Scientist D, NIRRH** delivered a talk on Genetic counselling and application of cytogenetic techniques to this field. He also organized a visit to lab for Genetic testing. The participants got to observe the automated sequencer, NGS and Microarray.

**Day 3** of the work shop had **Mr Abhijit Gade and Mr AnupKumar from Hi Media Laboratories Pvt Ltd** demonstrate PCR and RT PCR. The participants were given a ‘hands on’ demonstration of the above techniques.

 The valedictory session was chaired by our Principal. Our Management representative, Mr Vishvanathan also graced the occasion. The valedictory address was delivered by the chief guest, **Dr Rajas Warke, Director, Molecular Diagnostics Hi** **Media Laboratories Pvt Ltd**. He introduced the audience to the latest model of the palm top PCR- Its advantage to molecular diagnostics. The certificates were distributed by **Mr Vishvanathan, Secretary, Academics SIES**. The workshop concluded with the rendition of the National Anthem.