

## **CURRENT RESEARCH PROJECTS (2018)**

- Impact of maternal diabetes on pre-implantation embryo development: Non-invasive approach to assess embryo quality using oxygen consumption (collaboration with NITK, Surathkal)
- Understanding the impact of sperm genetic and epigenetic abnormalities on the ART derived human embryos: metabolomic and morphokinetic approach
- Fertility preservation in cancer affected prepubertal boys: an experimental approach using testicular tissue cryopreservation
- Development of procedures for restoration of fertility in cancer affected boys, post chemotherapy
- Innovations to preserve fertility in cancer affected prepubertal boys: from experimental approaches to clinical applications
- Development of human embryo viability biomarker diagnostics for elective embryo transfer to improve pregnancy outcome potential application in ART clinic (IMPRINT Grant)(Collaboration with IISC Bangalore)
- Fast NMR Spectroscopy with High Sensitivity and Resolution for Metabolomics (Collaboration with NMR Research Centre, IISc Bangalore)