Research Experience

1. **Genetics Laboratory Training**

   Location: Sarin Cancer Genetics Lab, ACTREC, Navi Mumbai, India

   - **Techniques Acquired:** DNA Extraction, Polymerase Chain Reaction (PCR), Agarose Gel Electrophoresis, and Restriction Fragment Length Polymorphism.
   - Hands-on experience with genetic techniques applied to oncology research.

2. **Protocol Development and Clinical Research Leadership**
   - Selected for the **CREDO** Workshop (a protocol development workshop) after submitting an independent research concept.
   - Faculty in Training for **FARO** (Federation of Asian Organizations for Radiation Oncology) Protocol development workshop
   - **Principal Investigator (PI)** for IEC-approved study: A Phase III Randomized Controlled Trial Evaluating Toxicity and Quality of Life between a Short Course of Hypofractionated versus Conventionally fractionated Chemoradiation for Locally Advanced Unresectable Oral Cancers.
   - Initiating another study as PI on Photobiomodulation Therapy for reducing oral mucositis in patients undergoing radiation therapy in head and neck cancers.

3. **Quality Improvement Program**
   - Team Leader for **EQuIP** (Quality Improvement Program), a collaborative initiative from Stanford University and the National Cancer Grid (NCG), India.

4. **International Training**
   - Virtual Regional Training Course on Basic Science and Clinical Applications of Hypofractionated Radiotherapy conducted by the International Atomic Energy Agency, Vienna, Austria (October 2022).

5. **Ongoing and Published Research Topics:** Focuses on various aspects of radiation oncology aimed at improving clinical outcomes. Key areas of study include patterns of failure, reirradiation, dosimetric comparisons of advanced radiotherapy techniques, and the application of artificial intelligence in head and neck cancers. Published work also emphasises adaptive radiotherapy for reducing toxicity, audits on treatment compliance, and studies on the mental health impacts of healthcare workers.