

Comprehensive Seminar

Deciphering the role of DNA Repair Pathways in Estrogen-induced Transcription

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Estrogen Receptor (ER) expressing cells in Hormone Positive Breast Cancer have become a well-studied model system for understanding the complex mechanisms involved in hormone induced transcriptional activation. Somewhat surprisingly, recent evidence shows an intimate crosstalk between the transcriptional activation of Estrogen Responsive Genes and DNA damage responses (DDR). Regulatory roles for DNA lesions like oxidative marks and strand breaks in ER-mediated transcription have been suggested; whereas other studies have regarded these lesions as an epiphenomenon of transcription. I will summarise some of these studies in my talk. Going forward, as a part of my thesis proposal, I aim to uncover how various genetic or epigenetic mechanisms can govern the involvement of DNA damage machinery during Estrogen-dependent transcription.

Thursday, Apr 16th 2026

11:30 Hrs (Tea / Coffee 11:15 Hrs)

Auditorium, TIFRH