

9<sup>th</sup> World Congress on **EPIGENETICS AND CHROMOSOME**

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**Imaging of DNA and RNA in Living Eukaryotic Cells to Reveal Spatio-Temporal Dynamics of Gene Expression****Vidhi Berdia***Faculty of Biological Sciences, University of Leeds, UK*

This review focuses on imaging DNA and single RNA molecules in live cells in order to define the functional organisation and dynamic processes in eukaryotic cells.

Here, the latest advances in technologies to visualise individual DNA locus and RNAs in live eukaryotic cells in real time will be discussed. Single molecule fluorescence microscopy provides the spatial and temporal resolution to reveal mechanisms regulating fundamental cell function. Novel insights on the regulation of the nuclear architecture, transcription, post transcriptional RNA processing and RNA localisation provided by multicolour fluorescence microscopies are reviewed. A perspective on the future use of live imaging technologies will also be discussed.

**Biography**

Vidhi Berdia is a Research Assistant at UltraCare Diagnostic Centre. She is MSc Graduate in Advanced study in Infection Immunity and Human Diseases. Her research areas are Molecular and Cellular Biology, Protein engineering, Antigen antibody interaction, Immunological techniques, Tissue Culture, PCR techniques. She also awarded Deans scholarship 2018-2019 at Faculty of Biological science at University of Leeds, United Kingdom.

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