

# CSIR-NCL Skill Development Course in Oxford Nanopore Technology DNA sequencing and CRISPR/Cas genome editing

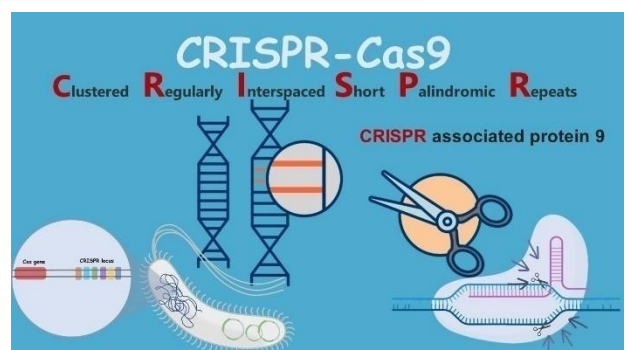
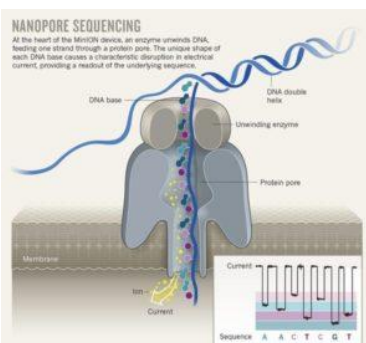


**About the Program:** DNA sequencing by NGS methods and genome editing technologies using CRISPR/Cas systems are increasingly impacting various areas of biomedical and biotechnology applications. The Oxford Nanopore Technology based DNA sequencing has made it extremely easy and economical to generate sequence data from whole genomes to multiplexed PCR amplicons to transcriptome profiles. This has resulted in the development of numerous applications for this technology. The CRISPR/Cas systems have revolutionized genome editing as a tool for genetic studies as well for biotechnological applications. ***This course will introduce the participants to these two technologies in theory and hands-on training.***

**Course content:** Introduction to Oxford Nanopore Technology based DNA sequencing, hands on training in nanopore sequencing and data analysis. Demonstration and training will be done for 16S amplicon sequencing for the identification of bacterial species. Introduction to CRISPR/Cas systems with specific reference to the Cas9 system. Demonstration of loss of gene function by CRISPR/Cas9 based genome editing in cell culture.

**Course Instructors:** **Dr. Dhanasekaran Shanmugam and Dr. Narendra Kadoo**

For more details, kindly visit : <https://nclsdp.ncl.res.in/Default.aspx>



**Eligibility:** The participant should be either pursuing or completed Masters degree or above in Life Sciences with working knowledge in molecular biology.

**Course Fee:** Student - 5000 + 900(18% GST); Faculty - 25000 + 4500(18% GST)  
Industry Sponsored - 50000 + 9000(18% GST)