

Prof Rajesh's group work in the area of Gene and Genome regulation focusing on *Cis* regulatory elements. His group has made fundamental discoveries where in they showed that changing the spacer length between two ACGT cis regulatory elements can lead to differential induction (Mehrotra and Mehrotra 2010).The group is actively focusing on ATAV6D gene which is an amino acid transporter and its promoter. They showed the effect of ACGT motif in Spatio temporal regulation (Dhatterwal et al., 2022).The primary focus of the group is on ACGT ,TGACG,CCGAC motifs and their interplay which has resulted in numerous high impact research articles (Khan et al., 2022, Khan et al., 2020,Bhadouriya et al., 2021).Prof Mehrotra's group is interested in understanding the role of these cis regulatory elements in both biotic and abiotic stress tolerance.

The group also works in close collaboration with Dr Sandhya on bicarbonate transporter (*BiC-A*) and enhancing photosynthetic productivity and have many joint publications.The successful candidate can select any of the research topic to pursue his or her research.