

## Citation for the award

Dr. Dutt's pioneering research explores the biology of occult lymph-node metastases, revealing new genetic insights into early-stage tongue cancer. Notably, a recurrent fusion transcript, *UBE3C-LRP5*, holds promise for head and neck cancer therapy. Their work also uncovers pathways behind the EMT phenotype and identifies *MMP10* as a prognostic biomarker, potentially sparing oral cancer patients from unnecessary surgery. Ongoing clinical trials validate these findings. Dr. Dutt's genome-wide studies highlight unique *TP53* mutations in smokeless tobacco-related oral cancer. Investigating pathogens across cancers reveals the exclusive co-occurrence of *Fusobacterium nucleatum* and HPV in tongue tumors, shaping treatment approaches. This innovative research defines distinct head and neck cancer subgroups, guiding personalized intervention. Overall, Dr. Dutt's work seamlessly blends basic and translational genomics, illuminating oral and epithelial cancer pathobiology.