

**Speaker:** Jesil Kasamkattil

**Title:** "Nasal Chondrocytes for Intervertebral Disc Regeneration"

**Abstract:**

"A new generation of therapeutics is needed to combat degenerative disc disease (DDD) in an aging population. Cell-based therapies for disc regeneration have been developed, but clinical trials revealed critical issues related to harsh microenvironment typical for degenerated intervertebral disc (IVD). Nasal chondrocytes (NCs) recently emerged as a potentially suitable cell source for cartilage and IVD tissue engineering and regeneration. NCs are neural crest derived cells isolated from adult hyaline cartilage of the nasal septum. In recent studies, NCs demonstrated superior ability over mesenchymal stromal cells and articular chondrocytes to survive and function in harsh microenvironments, such as the IVD. During my PhD I investigate whether NCs have the potential to be used for the treatment of DDD."