

Seminar

Collagen-Receptor Concert at the Cell-Matrix Interface

Gunjan Agarwal

OSU, Columbus

Collagen type 1 is the most abundant extracellular matrix protein in adult tissues. The interaction of cells with collagen occurs via specific receptors and regulates not only the quantity and quality of collagen but also a multitude of cellular processes. We describe here a two-way cross-talk between collagen and discoidin domain receptors (DDR1 and DDR2). DDRs are receptor tyrosine kinases expressed in a variety of mammalian cells. On one hand, the DDR receptor function is sensitive to the fibrillar state of collagen while on the other hand DDRs also regulate the collagen fibril structure. An altered collagen fibril structure in turn can affect matrix mechanics and cell-matrix interactions, which have multiple manifestations in health and disease.

Friday, Apr 24th 2026

16:00 Hrs (Tea / Coffee 15:45 Hrs)

Auditorium, TIFRH