Chronic joint destruction is the main challenge for researchers of new treatment strategies in rheumatology. To meet this challenge, models are required that mirror, in particular, the destructive aspects of human disease. At Fraunhofer IZI, two in vitro models have been developed on the basis of isolated destructive fibroblasts. These models allow the targeted exploration of questions about cartilage destruction. To this end, destructive fibroblasts of human or murine origin are used.

Unique Feature
This in vitro joint destruction model is unique and exclusively available at Fraunhofer IZI.

Methods
- fibroblast induced arthritis
- serological multiplex analyses
- gene expression analysis
- automated microscopy

Selected Applications
- testing new therapeutic processes
- demonstrate efficacy of medicaments for arthritis therapy
- illustration of the effect mechanism of novel therapeutic principles
- examination of innovative combination therapies

Reference Project
Examination of antibodies in arthritis therapy