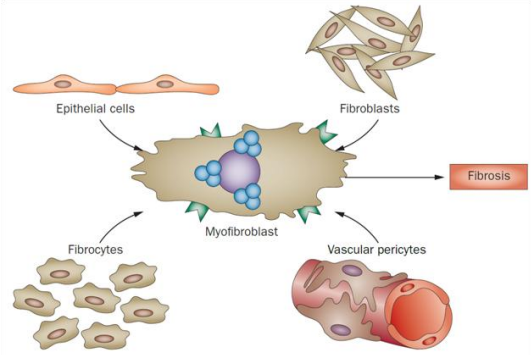
# EXPERIMENTAL RHEUMATOLOGY

**Title** IDentifying the culprit in Systemic Scleroderma.

**Clinical Relevance**
Systemic scleroderma (SSc) is a chronic autoimmune disease that is characterized by immune dysregulation, vascular abnormalities and extensive fibrosis of the skin and internal organs.
In severe cases, SSc can rapidly lead to organ failure and death. Unfortunately, the etiology of SSc is only poorly understood, greatly hampering the development of a treatment. Therefore, there is great need for a better understanding of what drives the excessive fibrosis in this devastating disease.

**Background**
SSc fibrosis is characterized by dysregulated (myo)fibroblast differentiation and proliferation. However, why these processes occur is unknown. Recently, we observed that in cells of SSc patients expression of ID proteins is upregulated. In cancer cells, ID proteins are master regulators of gene expression and suggested to regulate both proliferation and differentiation. Therefore, we want to investigate in this project if ID proteins are also responsible for dysregulated (myo)fibroblast proliferation and differentiation in SSc pathophysiology.




**Goals**
The goal of this project is to identify the role of ID proteins in excessive fibrosis in SSc

**We Offer**
We are working in a state of the art laboratory that is internationally renowned for its research that combines therapeutic strategies with diagnostics in rheumatic diseases. You will participate in a project that includes a broad spectrum of techniques including, amongst others, work with patient material, histology, immunohistochemistry, cell culture, Western blot, FACS and qPCR. You will be able to improve your laboratory skills, develop your scientific thinking and expand your knowledge on molecular processes and immunology.

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