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Project Title: *Immune-phenotyping and iPSC-related disease modeling in Sjögren's Syndrome*

Abstract: Sjögren's syndrome (SS) is an autoimmune exocrinopathy affecting the lacrimal and salivary glands. Although the etiology is unknown a genetic component is implicated. Vascular manifestations are common and correlate with higher morbidity and mortality. The pathogenesis and the molecular signaling pathways affected in vascular cells are unknown. The goal of this proposal is a comprehensive immune-cell and cytokine/chemokinephenotyping in a well clinical characterized, homogeneous Sjögren's Syndrome population. In addition, we will generate induced pluripotent stem cell (iPSC) technology to study interactions between the immune-system and patient-specific vascular cells. This proposal will provide an in depth characterization of the immune status and will identify molecular signaling alterations in vascular cells of SS patients in response to the immune system. This could lead to new therapeutic strategies in SS patients. The cell lines generated through this study will be made available to the research community to further advance the understanding of the disease.