



2024 Pilot Grant

Jennifer King, MD, PhD

Associate Clinical Professor in Medicine

University of California, Los Angeles

Project Title: Molecular Phenotyping of Treatment Responsive Sjögren's Patients

There are no FDA-approved treatments for Sjögren's disease (SjD). The reasons for failures of immune modulating medications are multi-factorial, including diversity of clinical disease and challenges of selecting primary endpoints to define treatment response. This proposal will examine SjD patients considered treatment responsive (defined here as changes in 1 or more validated Sjögren's outcome measures) to define objective cellular and molecular markers of change. We will compare these patients to treatment non-responsive and no treatment. We will use single-cell sequencing to examine individual's pre- and post-treatment samples, looking at global signatures in all immune cells, but also specifically in monocyte subsets. We hypothesize that treatment responsive SjD patients have distinct cellular and molecular characteristics that correlate with changes in disease activity. The goal is to define objective signatures that may be used in conjunction with current disease outcome measures to assess treatment response.