SSF Awards 2016-2017 Research Grants

The Sjögren's Syndrome Foundation is excited to announce that the 2016-2017 research grant recipients have been selected. For 2016, the research review committee sought grants which focused their proposed efforts on novel diagnostics and biomarkers but considered all high-caliber, innovative projects. The inspiration for this focus on novel diagnostics and biomarkers is to compliment the efforts of the SSF 5-Year Breakthrough Goal, which seeks to reduce the time to diagnosis by 50% in five years.

After careful consideration of this year's outstanding pool of applications, the research review committee awarded three new research grants and renewed three excellent research grants from the 2015-2016 awardees.

2016-2017 research award recipients:

Stergios Katsiougiani, PhD
Assistant Project Scientist, UCLA School of Dentistry, Center for Oral/Head & Neck Oncology Research, Los Angeles, California

Research Project
System Analysis of Mouse Models for Sjögren's Pathogenesis

Abstract
Primary Sjögren's is a chronic, autoimmune disease affecting 4 million patients in the U.S. Previous studies utilizing human and mouse models have highlighted several components of the immune systems as well as non-immunologic factors. However, the intersections between humans and mouse models in terms of pathways and key targets remain elusive. The scientific goal of this proposal is to address the crucial question, "can a mouse model predict the outcome of a clinical intervention for Sjögren's?" Therefore, our goal is to use a systems biology approach to develop models for the initiation, pathogenesis and resolution of Sjögren's. The data for the different stages of the disease will be analyzed by Weighted-Gene Co-Expression Network Analysis (WGCNA). The identified molecular pathways and targets will then be validated on mouse models of Sjögren's development and resolution to generate a validated Sjögren's model based on human disease modeling and mouse model validation.

Nancy McNamara, OD, PhD & Jes Kristen Klarlund, PhD
Associate Professor, The Regents of the University of California School of Optometry, Berkeley, California

Research Project
A New Generation of Eye Drops to Treat the Ocular Manifestations of Sjögren's

Abstract
Dry eye is an onerous manifestation of Sjögren's, and there is a great unmet need to develop effective therapies. The short residence time on the ocular surface greatly limits the efficacy of most potential topical ophthalmic therapeutics. We propose to develop a novel drug delivery system that allows proteins to be administered as eye drops and preliminary data show that proteins can remain active at the ocular surface for at least 16 hours. We have previously documented that the knock-