



High Impact Research Grant:

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Project Title: Comprehensive profiling of Sjögren's autoantibodies identified from a novel whole peptidome array

Abstract

Sjögren's is a common autoimmune disease that affects the glands responsible for saliva and tear production, as well as many other organ systems, and ultimately leads to noticeable reduction in quality of life. Despite the frequency and severity of Sjögren's, diagnosis and treatment is hindered by the lack of highly sensitive and specific diagnostic testing and a paucity of novel therapeutic targets. We have identified hundreds of new autoantibodies by using cutting-edge whole peptidome array technology, which studies over 5.9 million peptides from every human protein. With this project, we will confirm these candidate autoantibodies, providing innumerable targets to both improve Sjögren's diagnosis and deepen our understanding of the causes of Sjögren's, ultimately driving development of new therapies. The results of this study have the potential to improve the lives of Sjögren's patients through advancements in diagnosis and treatment, current unmet needs in Sjögren's.