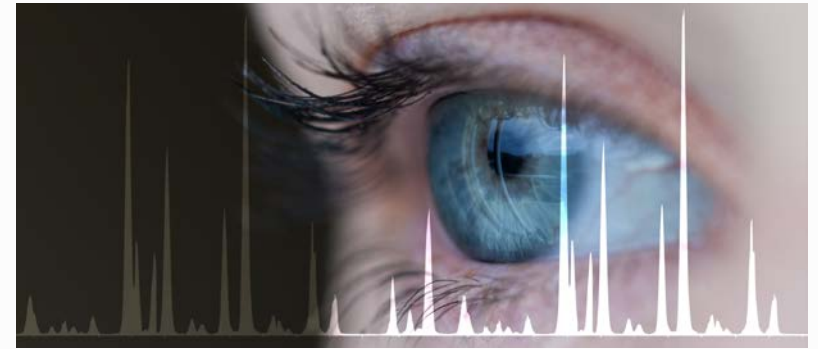


# Ocular Surface Precision Panel

TEAR PROTEIN-BASED MULTI-MARKER PANEL FOR DETAILED EVALUATION OF OCULAR SURFACE CONDITION



Ocular surface problems are the most common reason for visiting an ophthalmologist and due varying etiologies very difficult to treat individually. We have developed a biomarker panel for targeted treatment of ocular surface. Our mass spectrometry-based analysis enables absolute quantification of **60 protein biomarkers** from a single 2  $\mu$ l tear sample. Our invention is distinguished from the current methods by generating a **comprehensive individual data** about the state of ocular surface, instead of a single measurement result. The panel can be utilized for diagnosis, treatment selection, monitoring of therapeutic efficacy and drug development. Currently, we are developing a result algorithm for the analysis service.

## SPARK VALUE

SPARK has helped us to refine our business idea and to consider different aspects of product development and regulations.

**Ulla Aapola, PhD**, EXECUTIVE MANAGER OF SILK - RESEARCH AND DEVELOPMENT CENTER FOR OPHTHALMIC INNOVATIONS, UNIVERSITY OF TAMPERE

**Antti Jylhä, MSc**, MASS SPECTROMETRY SPECIALIST, UNIVERSITY OF TAMPERE

**Janika Nättinen, MSc**, BIOINFORMATICIAN, UNIVERSITY OF TAMPERE

**Hannu Uusitalo, Professor**, DIRECTOR OF SILK, UNIVERSITY OF TAMPERE, CHIEF PHYSICIAN, TAYS EYE CENTER

Our focus is on personalized eye health. We established The Center for Proteomics and Personalized Medicine PPM at the beginning of 2013. Our areas of expertise are mass spectrometry-based proteomics, bioinformatics, clinical study design and implementation. We were the first in the world to use SWATH-MS method for tear analytics.