

## SMS Spring 2022 Seminar Series

Friday April 1 | 2:30pm | Biodesign Auditorium

### Structure and misfolding in myocilin-associated glaucoma:

How does a protein's structure spell the difference between health and disease?

The Lieberman lab uses biophysical, structural, cell, and chemical biology approaches to characterize proteins involved in conformational disorders and ameliorate the misfolding phenotype. A major research effort in the lab has been investigations of the myocilin, which is implicated in familial cases of the prevalent ocular disorder glaucoma. I will present our efforts toward a detailed molecular understanding of myocilin structure, function, and disease pathogenesis, including striking similarities with amyloid diseases, as well as new directions for glaucoma therapeutics.

### Raquel Lieberman, PhD

*Professor, Georgia Tech University*

Dr. Lieberman is the Sepcic-Pfeil Professor in the School of Chemistry & Biochemistry at Georgia Institute of Technology in Atlanta, GA. Dr. Lieberman is a protein biochemist and structural biologist interested broadly in atomic level details of misfolding, particularly near or within the membrane.

A native of New York City, Dr. Lieberman received her BSc in Chemistry from MIT in 1994 and PhD in Chemistry from Northwestern University in 2005. She has been recognized with numerous awards, including an NSF Career Award (2009) and Pew Scholar Award in Biomedical Sciences (2010).

