



Lenses Beyond Limits

Jen Dionne, Stanford University



Event Horizon Telescope, 2019



Earthrise, William Anders, NASA



Co Rentmeester, 1984

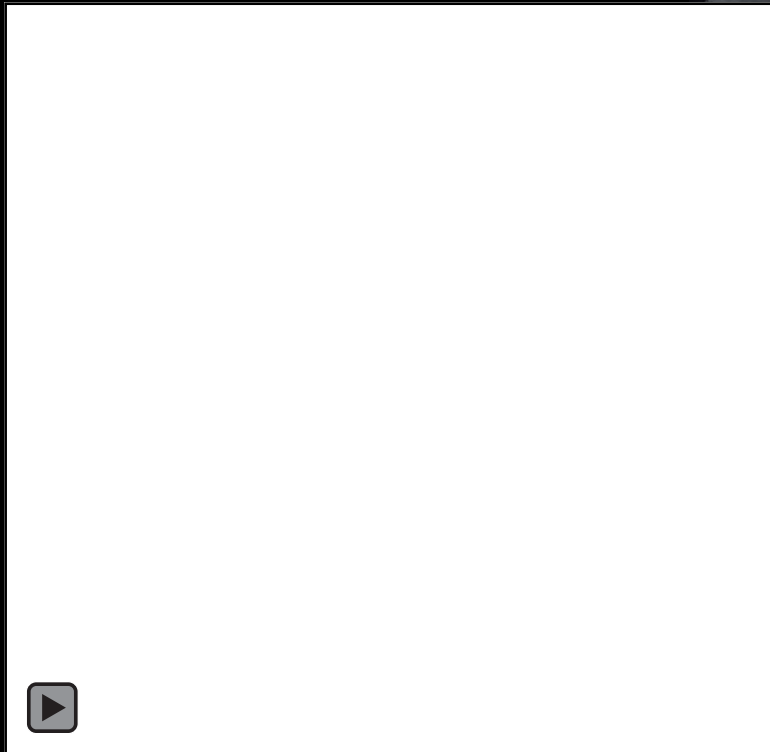


Wilhelm Röntgen, 1895





Narayan, Andrea Baldi, and Fariah Hayee

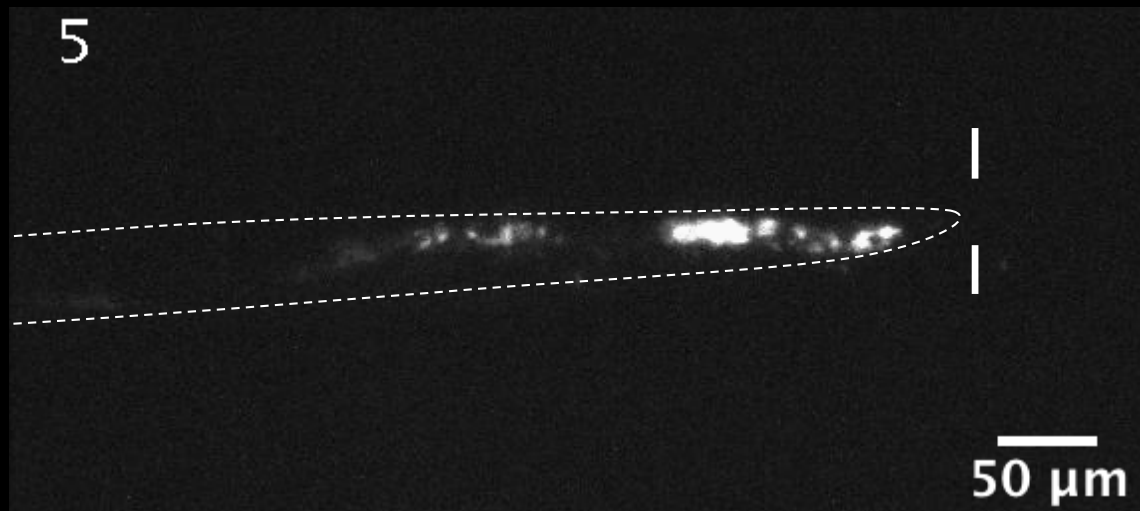
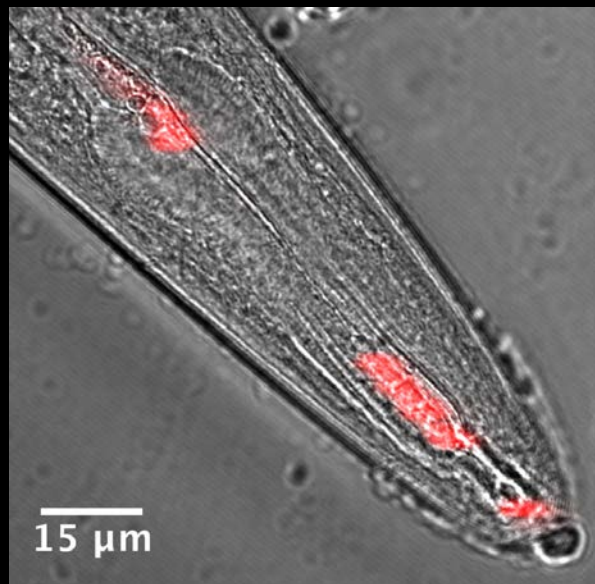




in Atre



Atre, Brenny, Coener



1

Force (μN)

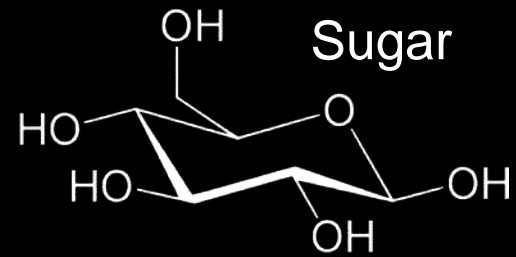
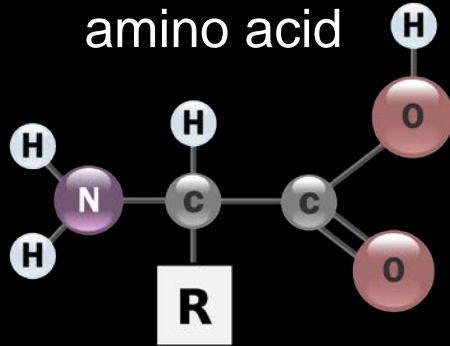
10



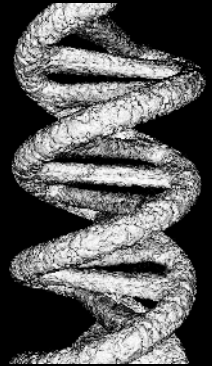
mirror plane



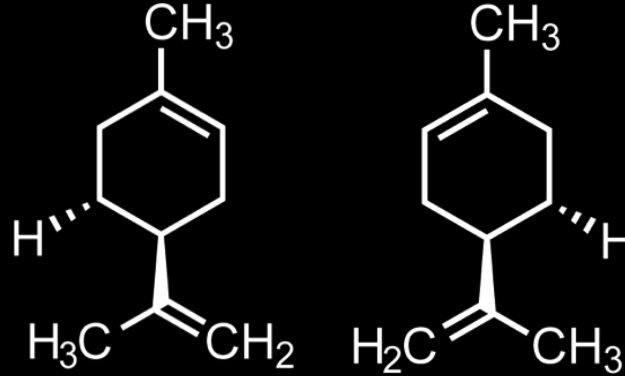
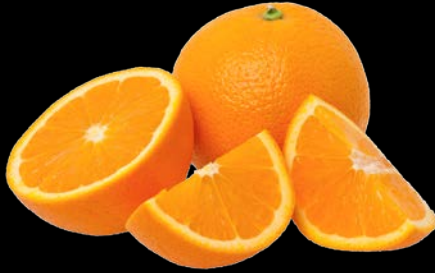
amino acid



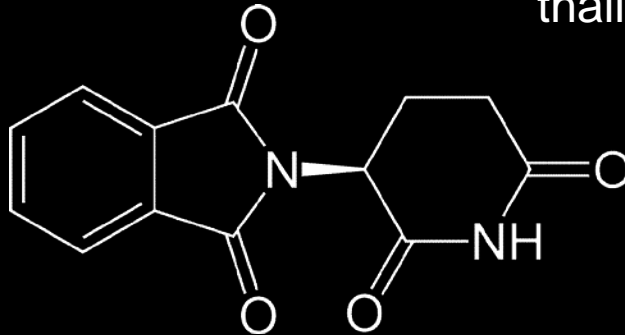
DNA



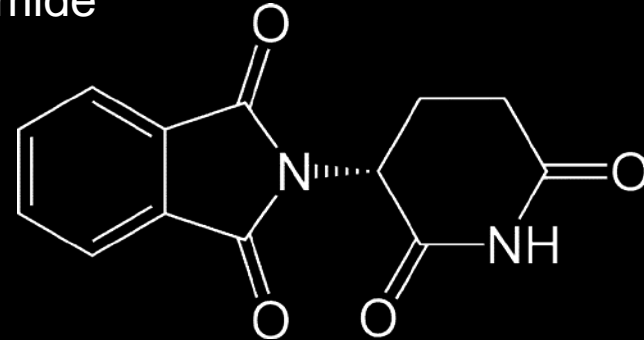
limonene



thalidomide



Treats morning nausea



Induces birth defects



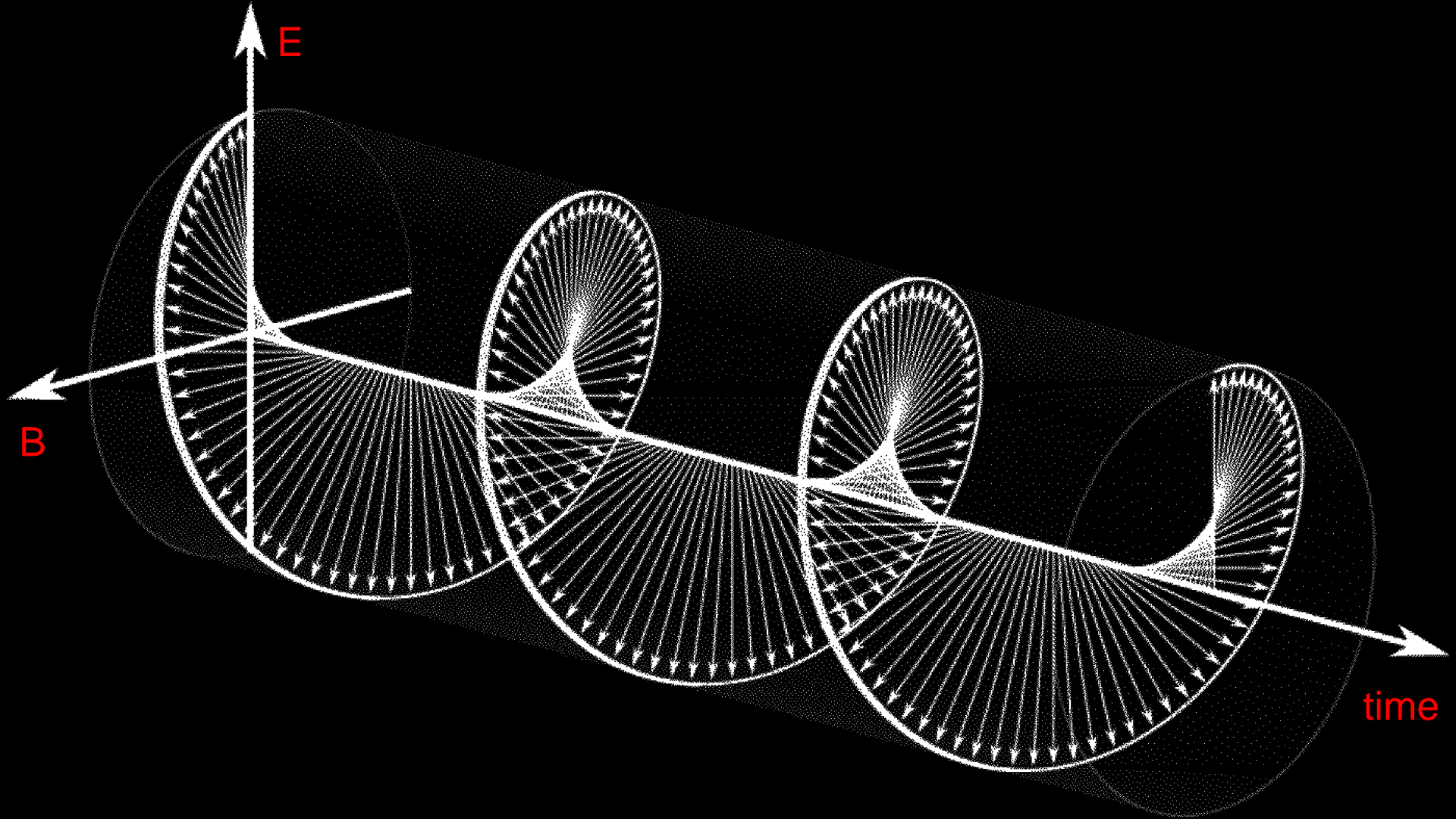
Approximately 50% of drugs and 40% of agrochemicals are chiral

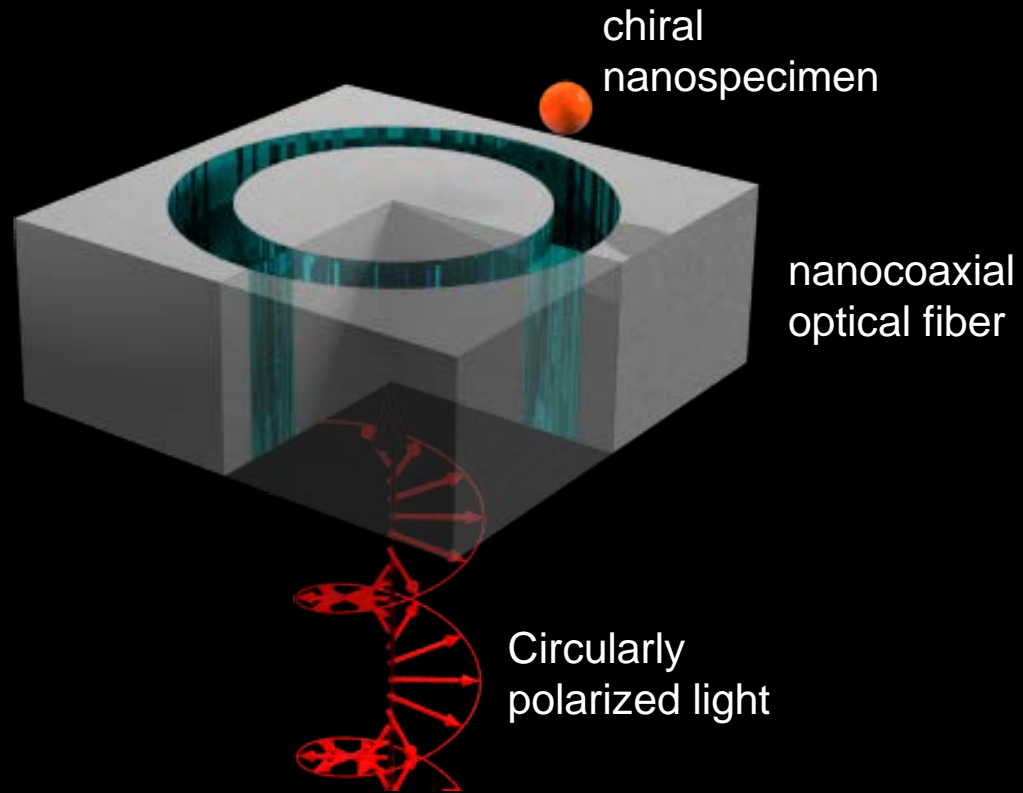
Of these, more than 90% are sold as mixtures of both enantiomers

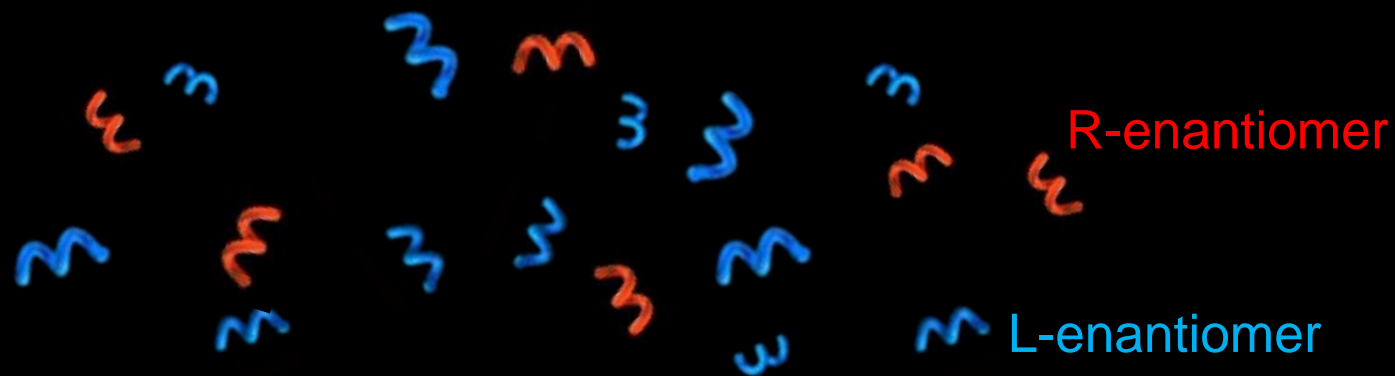


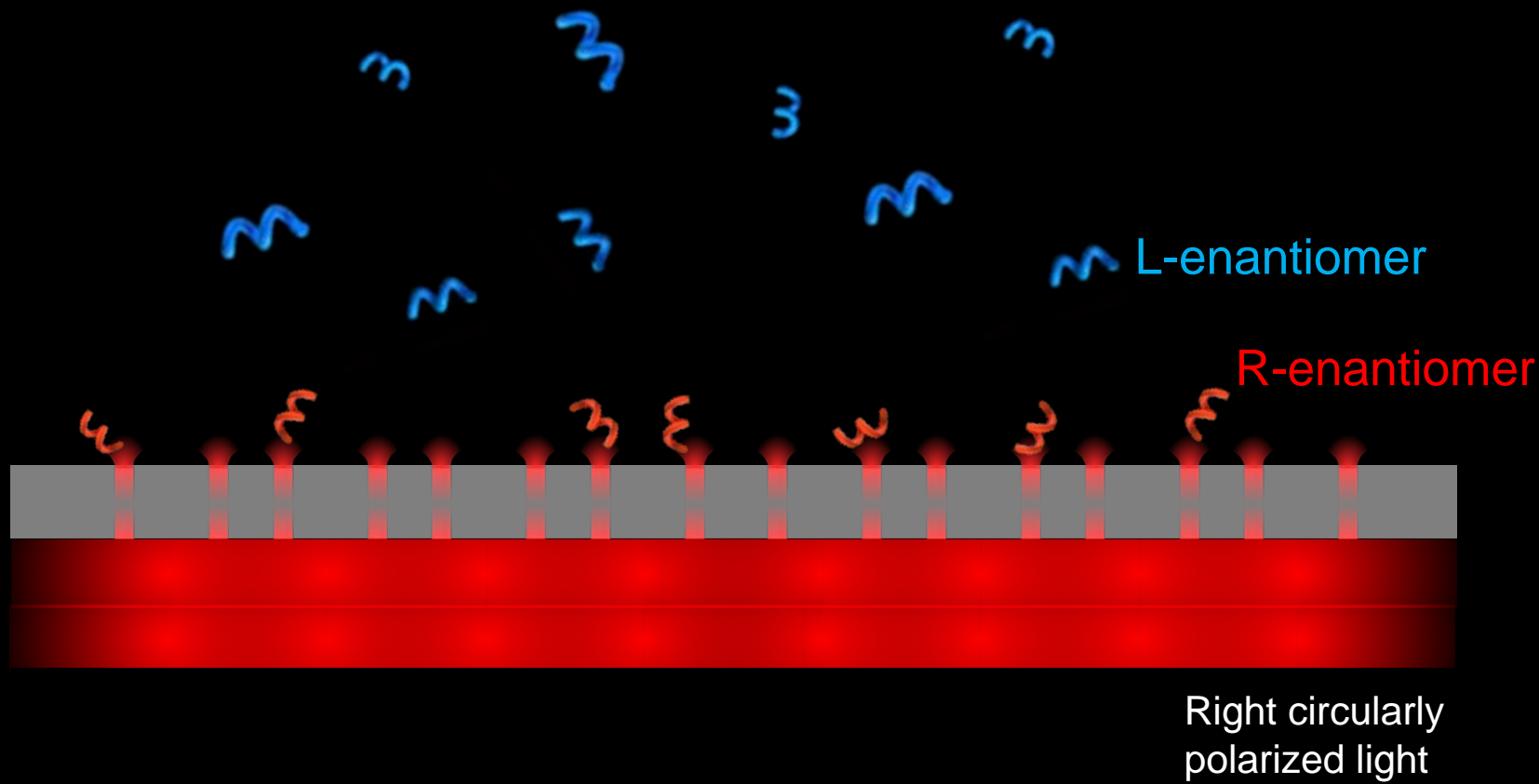


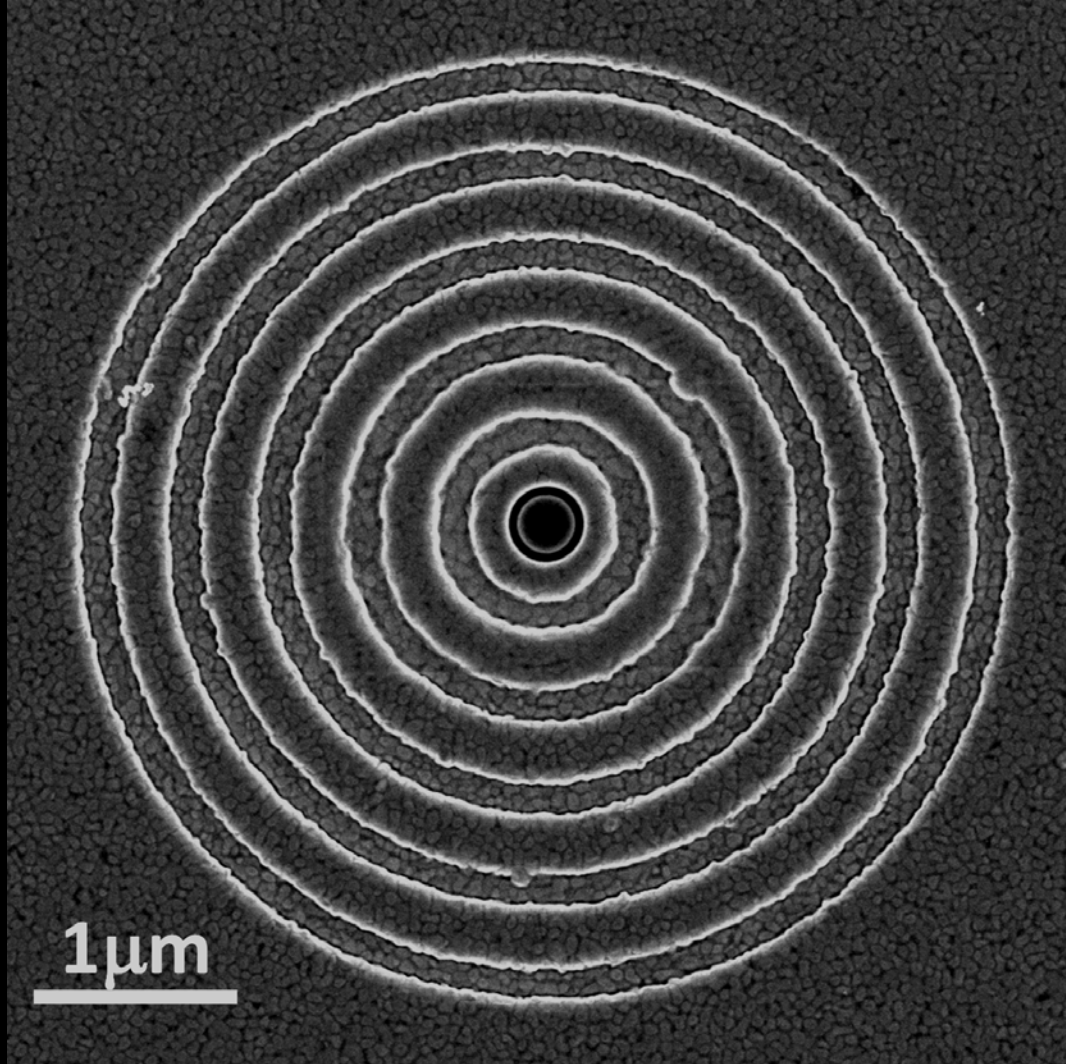
Can we use **light** to separate enantiomers?



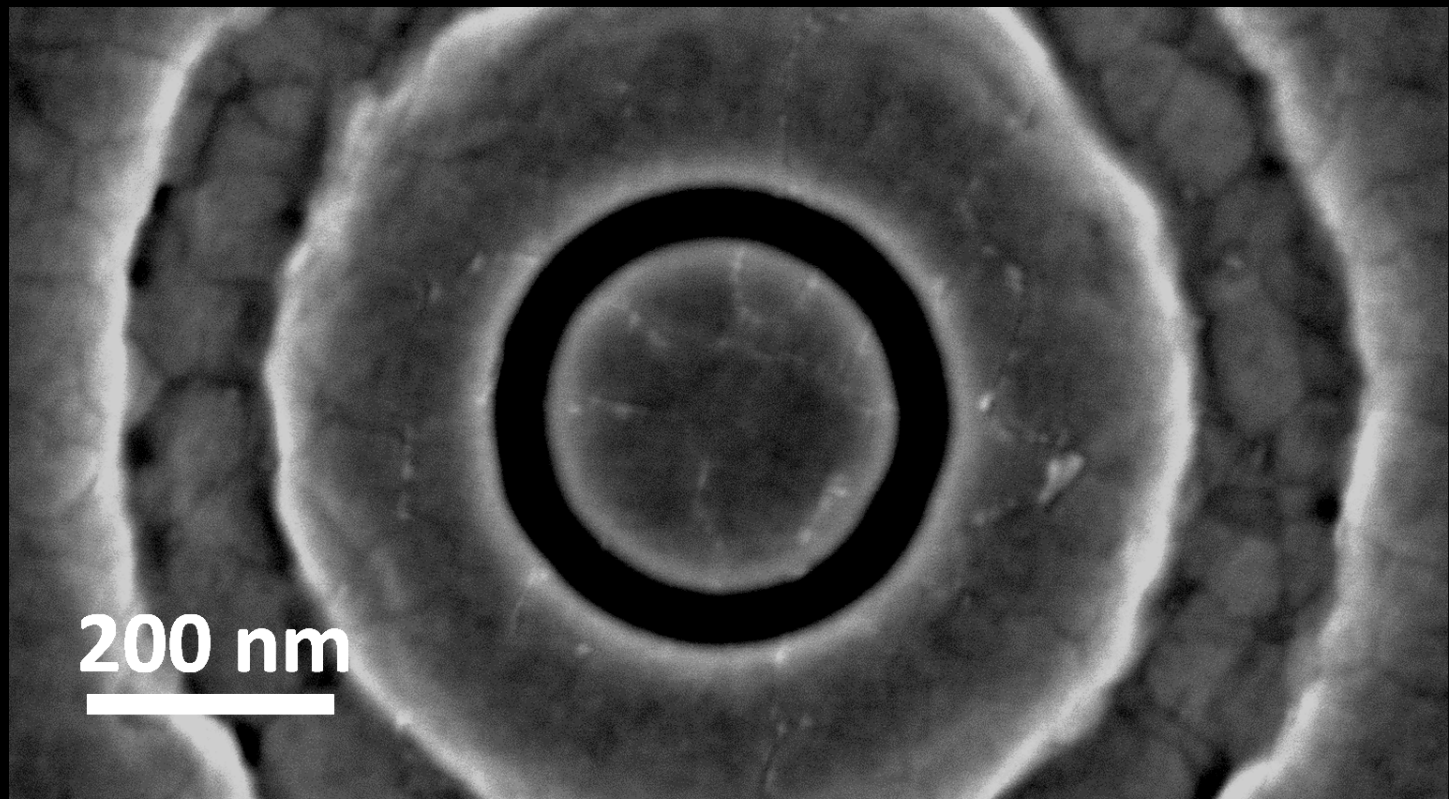


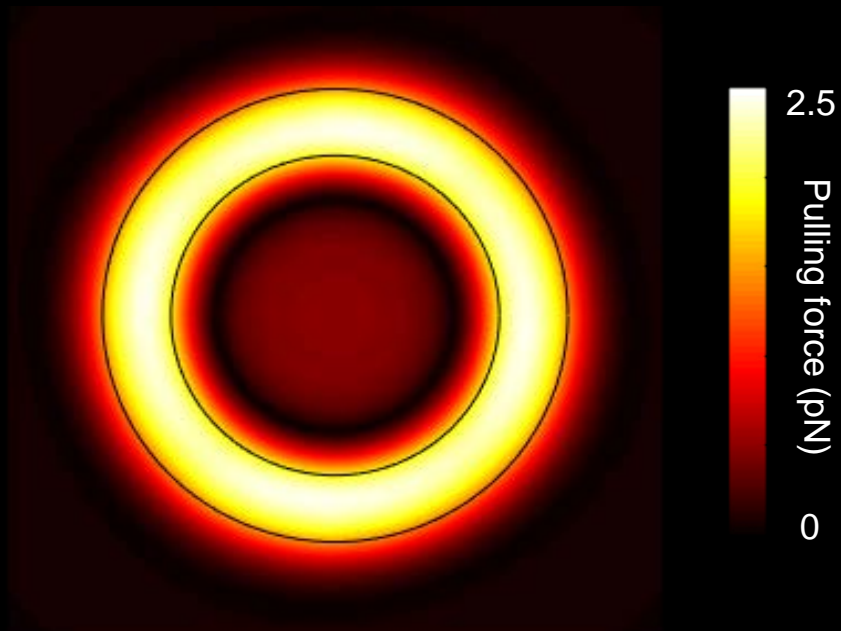




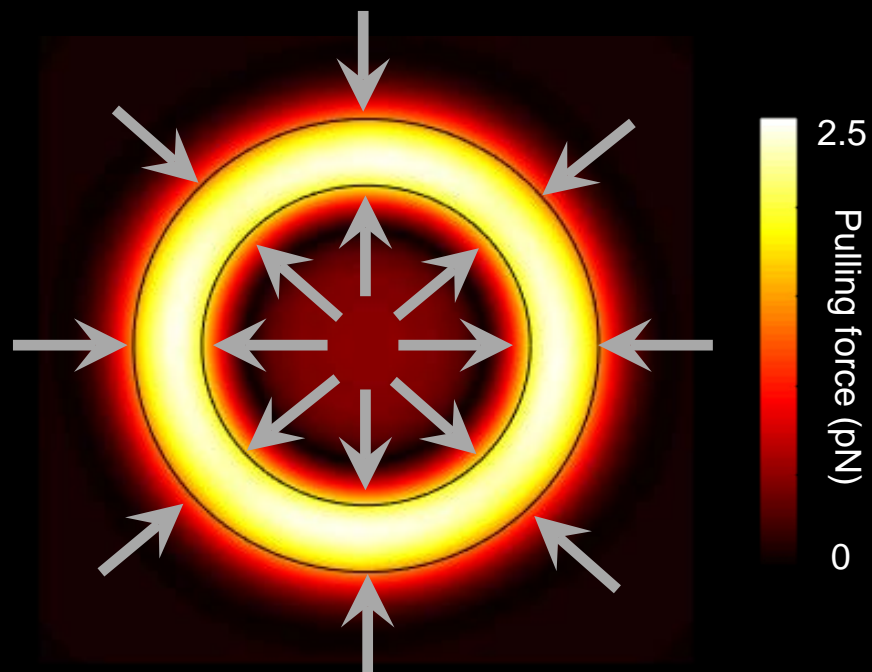


Yang Zhao and Amr Saleh

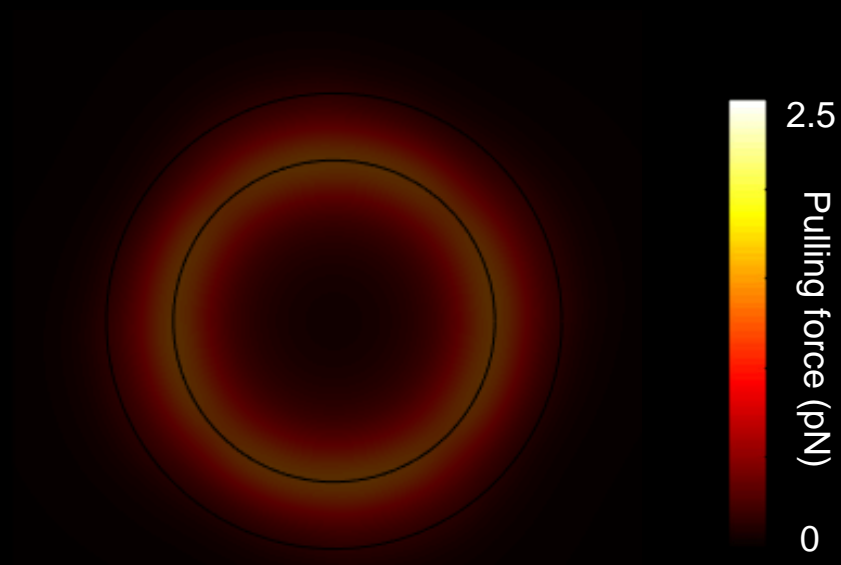




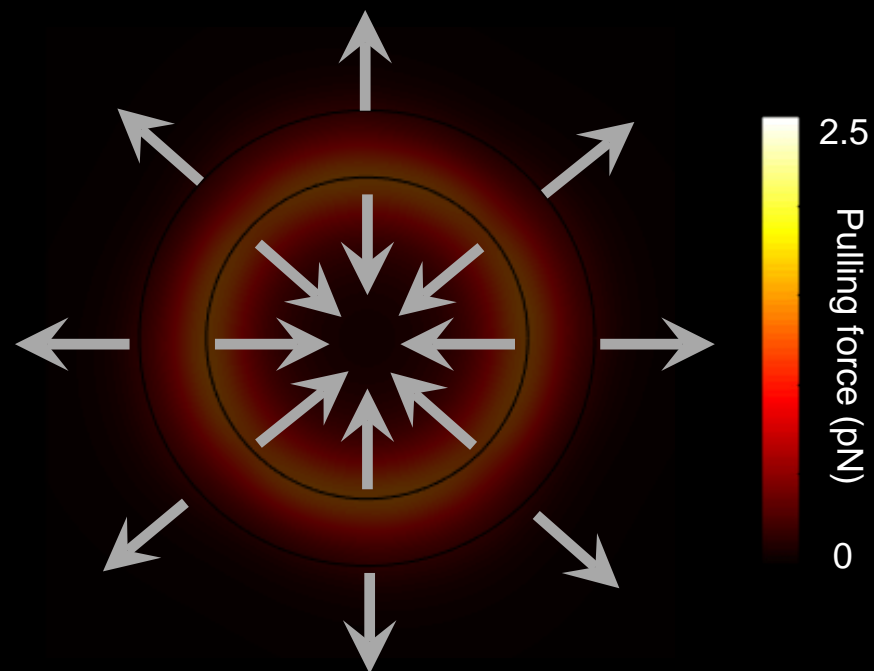
Right circularly polarized light, 5 nanometer R-enantiomer



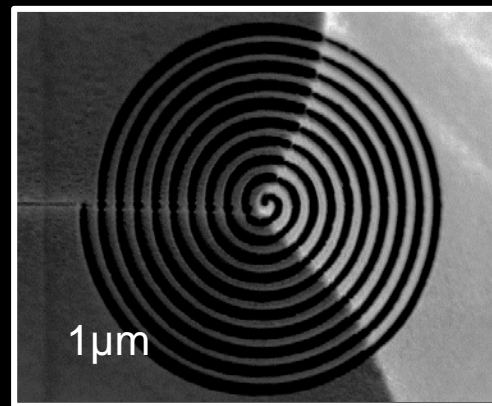
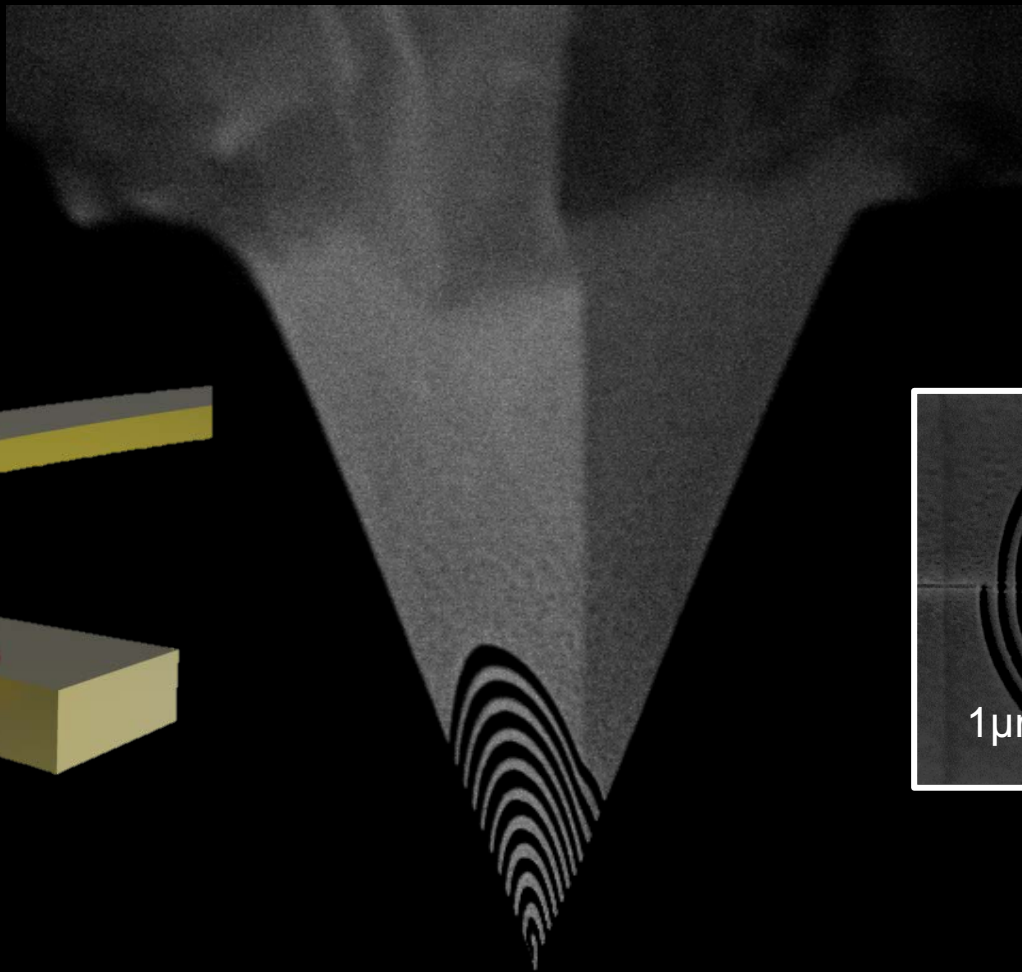
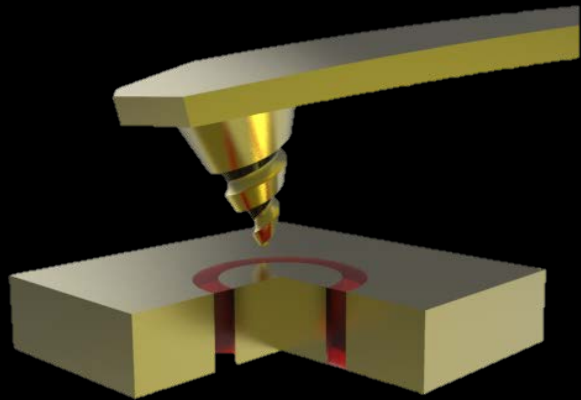
Right circularly polarized light, 5 nanometer R-enantiomer



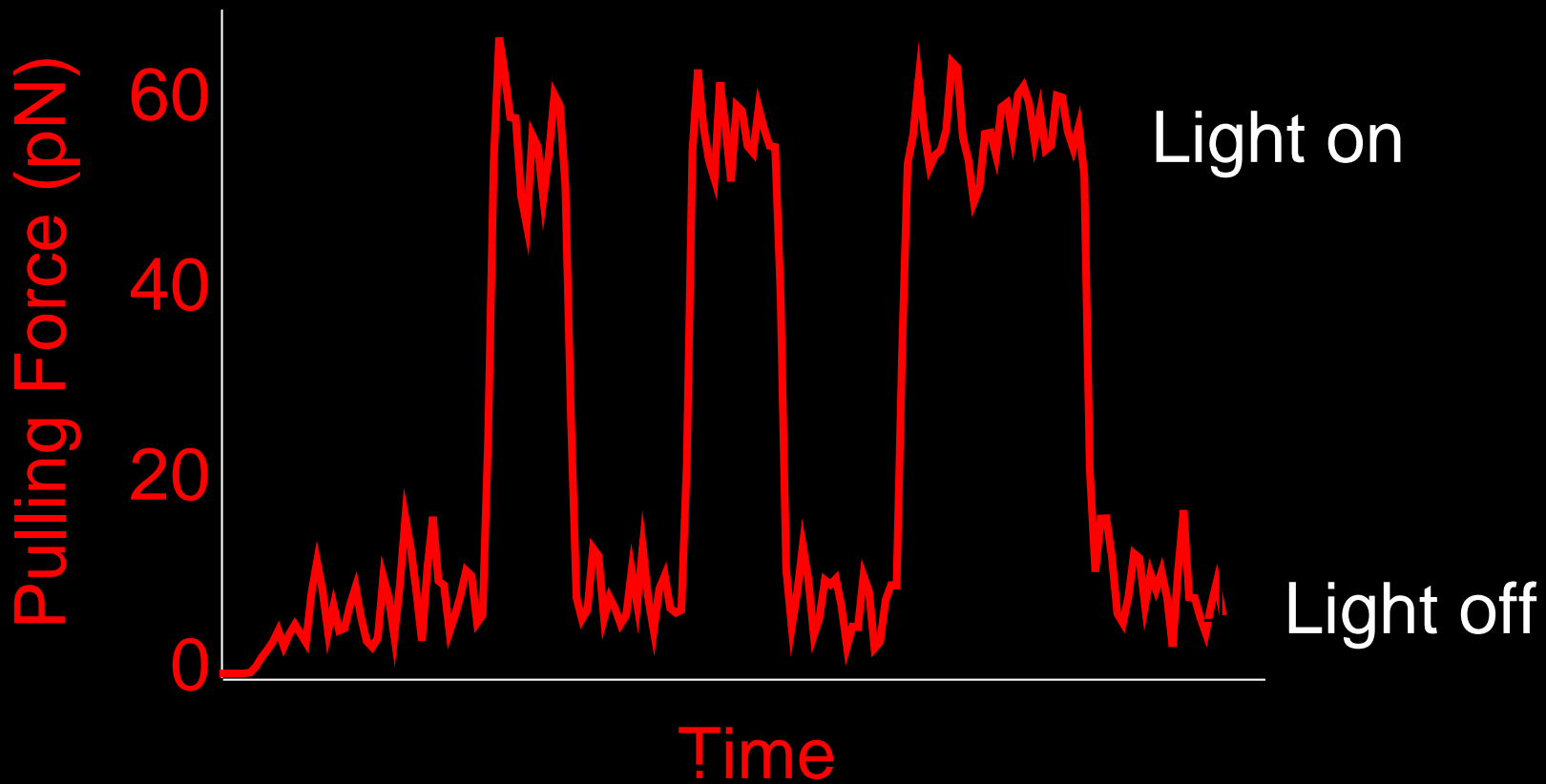
Left circularly polarized light, 5 nanometer R-enantiomer

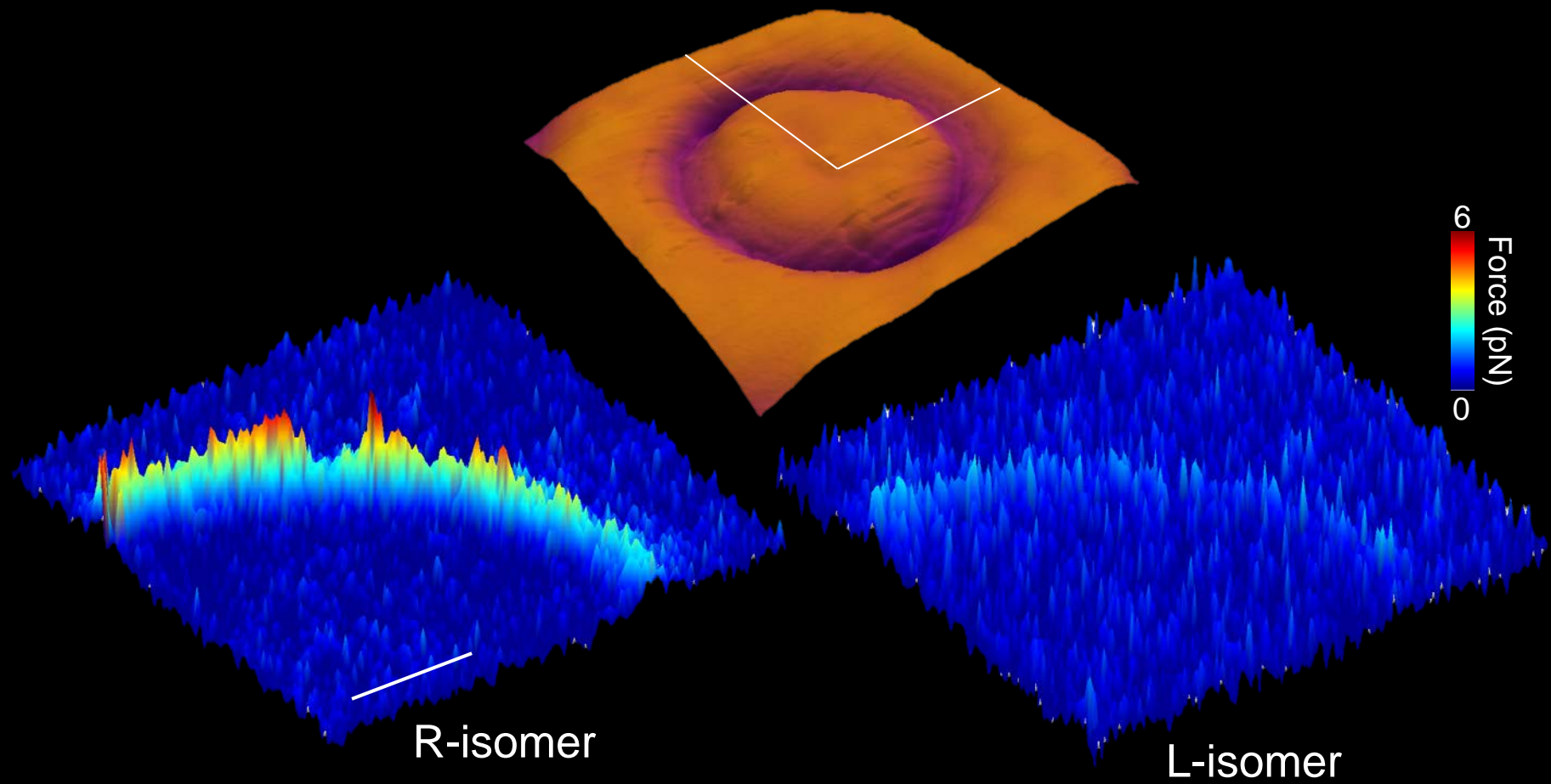


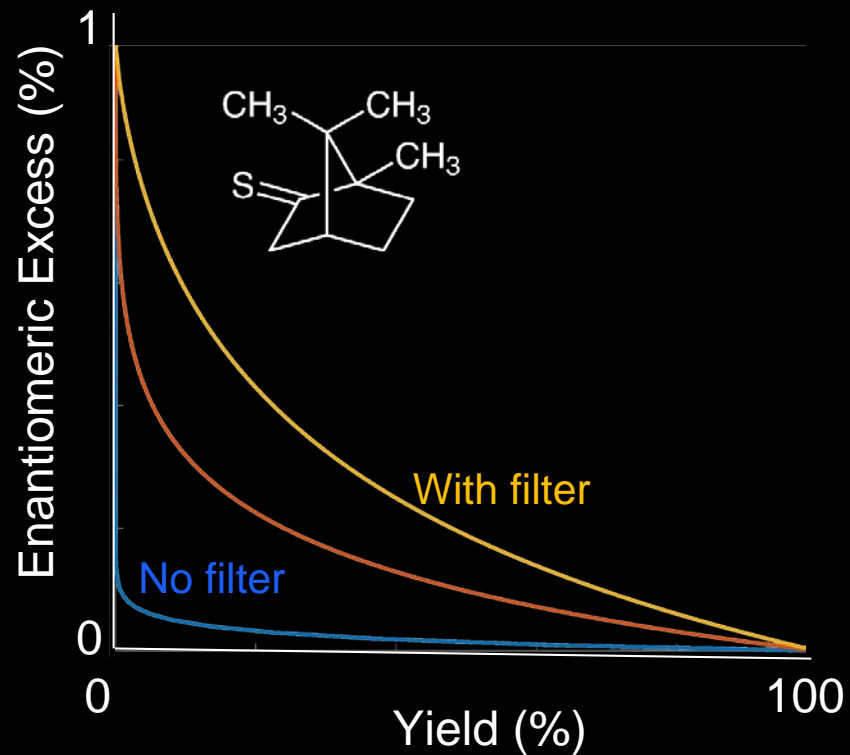
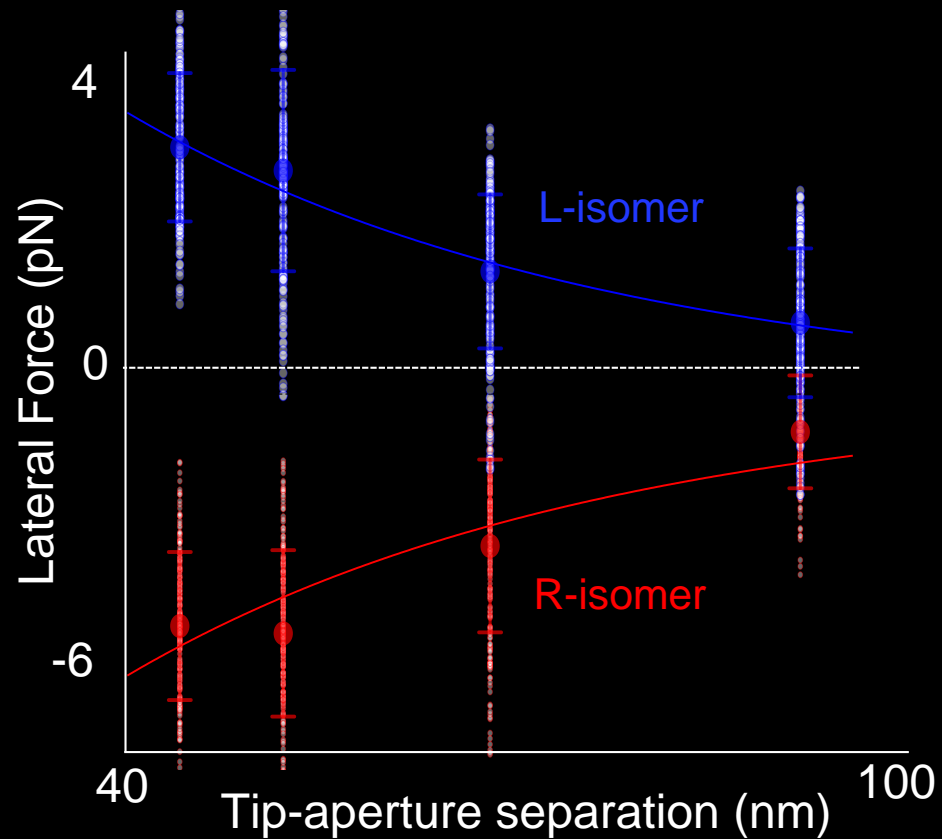
Left circularly polarized light, 5 nanometer R-enantiomer



5 μm









GORDON AND BETTY
MOORE
FOUNDATION