Judith Su is currently an Assistant Research Professor in the College of Optical Sciences at the University of Arizona. She has a joint appointment in Chemistry & Biochemistry and is an Associate Member of the University of Arizona Cancer Center. Judith received her B.S. and M.S. from MIT in Mechanical Engineering and her Ph.D. from Caltech in Biochemistry & Molecular Biophysics. Her background is in imaging, microfabrication, and optical instrument building for biological and medical applications. In general, her research interests are to develop new imaging, sensing, and rheological techniques to reveal basic biological functions at the molecular, cellular, and tissue levels. Recently her work has centered on label-free single molecule detection using microtoroid optical resonators with a focus on basic research, and translational medicine through the development of miniature field portable devices.