Quantitative Stimulated Raman Scattering Microscopy: From Molecules to Animals
Tuesday, February 14, 2023 1:00 PM - 2:00 PM EST

About This Webinar
Stimulated Raman scattering (SRS) microscopy has become a powerful chemical imaging tool that shows significant promise in numerous biological and biomedical applications. In typical Raman microscopy, two randomly offset beams are overlapped in space and time to (virtually) excite molecules at the microscope objective focus with sufficient efficiency. The energy difference of in-focus photons corresponds to the vibrational energy of the molecules. SRS microscopy's strength is directly proportional to molecular concentration. This allows for a site-specific quantitative analysis of the chemical composition of heterogeneous samples with submicron spatial and submicron temporal resolution.

Drs. Dan, PhD, and Karen from the University of Washington highlight the capability of SRS microscopy in imaging various molecules in heterogeneous samples such as intact musculature, living cells, and tissues. They share the challenges in quantitative analyses versus getting results to scintillate in various protein solutions in leveraging water as an internal standard. With continuous improvement in imaging resolution, versatility, and specificity, SRS microscopy plays an important role in biomedical imaging.

Mark Your Calendar
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SYSTEM REQUIREMENTS
Operating System
Windows 7 or later, Mac OS X 10.9 or later, Linux, Google Chrome™, Firefox™, or Internet Explorer™
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Google Chrome™ (must have recent version)
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