

## Medical Physics Seminar Monday, September 17th, 2018 1345 HSLC ~ 4:00 P.M.



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## Tools for Multiscale Imaging of Collagen in Cancer

The organization of collagen fibers plays an important role in many types of cancer, from microscale fiber structure affecting cellular processes such as metastasis, to macroscale density in organs being a component of cancer risk. However, there is a lack of accessible tools that can study collagen across multiple spatial scales, making it difficult to fully understand the effects of collagen organization on cancer. This talk introduces hardware and software tools to perform multiscale imaging of collagen. This includes a platform that combines ultrasound and second-harmonic-generation microscopy, alongside software that can register and analyze collagen across large volumes.

1345 Health Sciences Learning Center (HSLC) 4:00 - 5:00 P.M.