

Development of a custom laser ablation microscope

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Abstract

We will present a UV laser ablation system developed to probe mechanical properties in tissue and cells, or selectively ablate structures at the cellular or subcellular level. We will highlight our optical and opto-mechanical hardware choices and their influence on the hardware control processes. In particular, we will describe how the hardware is interlinked and directly controlled in Nikon NIS via a complex code ecosystem with tools from NIS macro language, NIS macro libraries, C++, and C#.