

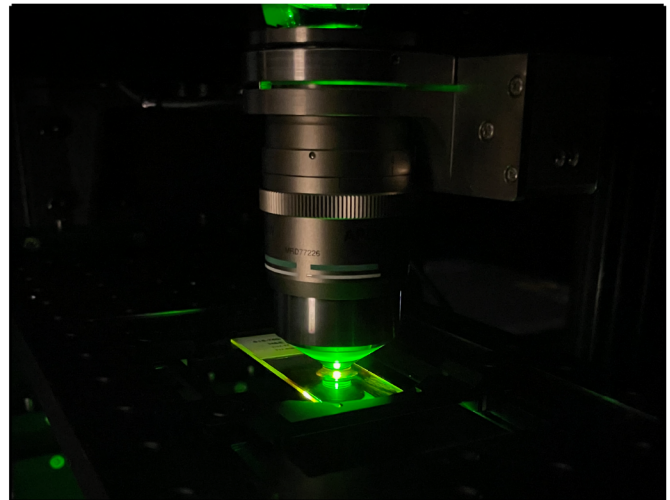
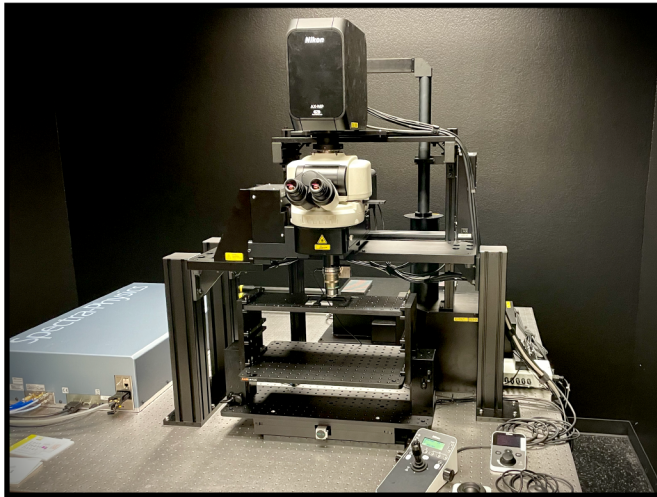
Nikon **AX R** Multiphoton Microscope



THE UNIVERSITY OF ARIZONA
Cancer Center



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Instrument Description

The Nikon “AX R MP” microscope is an upright multiphoton system ideal for intravital imaging and imaging thick (>200 μ m) samples. The AX R MP is equipped with **dual IR lasers** (1 tunable and 1 fixed) for fast, multichannel MP imaging and a **high-speed Resonant scanner** with up to 2K X 2K resolution. The AX R MP has the ability to acquire **second harmonics generation** for label-free imaging of collagen matrix. This system has a wide selection of objective lenses specific for multiphoton imaging, including a two water-dipping objectives (10x 0.5NA and 20x 1.0NA) and a multi-immersion 20x 1.0NA objective lens with a 8.2mm working distance. Due to the advanced nature of multiphoton imaging, the MSR offers an **Assisted Multiphoton Imaging Service** to assist users with no background in MP imaging.

Instrument Features

- High-speed imaging with Resonant scanner
- Dual IF lasers (1 tunable and 1 fixed) for fast multichannel MP imaging
- Second harmonics generation for label-free imaging of collagen matrix
- Piezo stage with 800 μ m travel for precise, high-speed zstack imaging
- Prior motorized XYZ desk with metric breadboard to accommodate custom intravital setups

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Instrument Details

<p>Available Lasers</p>	<p>InSight X3+ Tunable Ti:S Laser: 820nm - 1300nm InSight X3+ Fixed Laser: 1045nm</p>
<p>Available Objective Lenses</p>	<p>10x Glyc Plan Apo (NA = 0.5; WD = 5.5mm) 20x Plan Apo (NA = 0.75; WD = 1.0mm) 20x W Apo (NA = 1.0; WD = 2.8mm) 20x Glyc (NA = 1.0; WD = 8.2mm)</p>
<p>Available Detectors</p>	<p>GaAsP PMT (with fixed 405nm Dichroic Mirror) GaAsP PMT (with fixed 488nm Dichroic Mirror) GaAsP PMT (with fixed 594nm Dichroic Mirror) GaAsP PMT (with fixed 685nm Dichroic Mirror)</p>
<p>Emission Filters</p>	<p>DAPI/SHG - 450nm / 50nm GFP - 525nm / 50nm RFP/Far Red - 600nm / 50nm and 650nm Long Pass</p>
<p>Supported Samples</p>	<p>Slides (1 x 3 and 2 x 3) Dishes (60mm only) Custom intravital imaging setups Prior H189 motorized stage desk; metric breadboard</p>