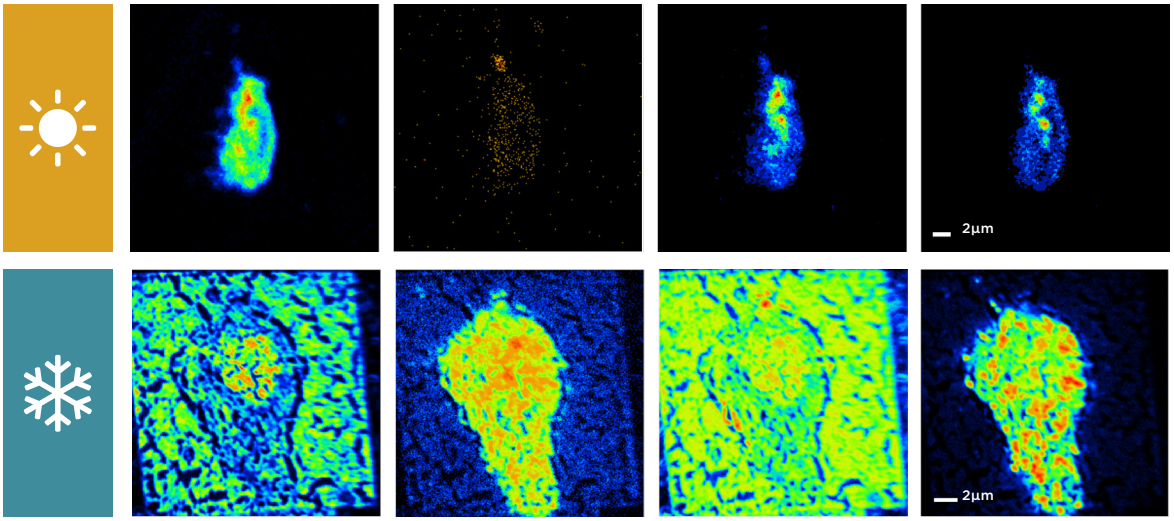
NanoSIMS Cryo

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BIOCHEMISTRY BREAKTHROUGH

True-to-life Mapping of Signaling Ions in Neurons

Cryo-prepared neurons reveal strong subcellular compartmentalization and heterogeneous distributions of Na, K, Mg and Ca. In contrast, resin-embedded samples exhibit reduced contrast and evidence of elemental redistribution or precipitation.



Silvio Rizzoli
Full Professor, Chair of Neuro & Sensory Physiology Department, University Medical Center Göttingen, Germany



Katharina Grewe
NanoSIMS Facility Manager, University Medical Center Göttingen, Germany

The next frontier in Nanoanalysis

- Unprecedented lateral resolution: ≤ 30 nm
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- High throughput: x2.5 faster image acquisition
- Cryogenic compatibility



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