



STIMULATE

STIMULATE Colloquium

We are honored to welcome **Nicole Varble, PhD**, Senior Research Scientist at the **National Institutes of Health, Center for Interventional Oncology**, Bethesda, MD, USA, as an invited speaker.

Title: Spectral CT Imaging for Ablation Guidance and Quantitative

Abstract: With advances in minimally invasive therapy, procedures such as thermal ablation and cryoablation require reliable intraprocedural feedback on whether lethal temperatures or adequate treatment margins have been achieved for local tumor control. Dual-layer spectral CT has the potential to address this challenge by providing material-specific quantitative imaging for intraprocedural ablation guidance and tumor characterization and targeting. This talk will cover spectral CT and cone-beam CT (CBCT) for intraprocedural monitoring of heat- and cold-based ablation, and the use of spectral CT imaging biomarkers to characterize tumor heterogeneity and guide treatment. In preclinical models, electron-density mapping enabled noninvasive temperature monitoring during microwave ablation and prediction of clinically relevant isotherms during renal cryoablation, providing a more direct assessment of treatment margins than conventional CT and better estimations compared to manufacturer-predicted treatment zones. The Colloquium will take place at

**If you are unable to attend in person,
please find the Zoom link below.**

<https://ovgu.zoom-x.de/j/66463879762>

Meeting-ID: 664 6387 9762

Kenncode: 620553

**19.10.2026
03:30 p.m.**

**STIMULATE
G 82, room 120**