



Sonja Dieterich, Ph.D.

Clinical Interests	<p>I specialize in the medical physics of complex treatments and small-field dosimetry, with vast experience in frameless stereotactic radiosurgery and stereotactic body radiotherapy and an interest in image-guided high-dose-rate (HDR) brachytherapy.</p> <p>My clinical research interests include improving image-guidance in HDR brachytherapy and in-vivo dosimetry to validate new dose calculation algorithms. As a medical physicist, I collaborate closely with physicians to determine the best use of advanced technology for each individual situation and contribute my technical expertise to support our patients' fight against cancer.</p>
Title	Associate Professor Medical Physicist
Specialty	Cancer , Medical Physics, Radiation Oncology
Department	Radiation Oncology
Division	Radiation Oncology
Center/Program Affiliation	UC Davis Comprehensive Cancer Center
Languages	German
Education	Ph.D., Rutgers, The State University of New Jersey, Piscataway NJ 2002 M.S., Technical University Darmstadt, Darmstadt, Germany 1998
Fellowships	Radiation Medicine, Georgetown University, Washington D.C. 2002 Radiation Oncology, Georgetown University Hospital, Washington D.C. 2002-2003
Board Certifications	American Board of Radiology, Therapeutic Radiological Physics, 2006
Professional Memberships	American Association of Physicists in Medicine (AAPM) American Physical Society (APS) American Society of Therapeutic Radiation Oncology (ASTRO)
Honors and Awards	Fellow of the American Association of Physicists in Medicine, 2015
Select Recent Publications	Dieterich S, Zwingenberger A, Hansen K, Pfeiffer I, Théon A, Kent MS. INTER-AND INTRAFRACTION MOTION FOR STEREOTACTIC RADIOSURGERY IN DOGS AND CATS USING A MODIFIED BRAINLAB FRAMELESS STEREOTACTIC MASK SYSTEM. Vet Radiol Ultrasound. 2015 Sep-Oct;56(5):563-9.



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