



## Sonja Dieterich, Ph.D.

<b>Clinical Interests</b>	<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>
<b>Title</b>	Associate Professor Medical Physicist
<b>Specialty</b>	<a href="#">Cancer</a> , Medical Physics, <a href="#">Radiation Oncology</a>
<b>Department</b>	<a href="#">Radiation Oncology</a>
<b>Division</b>	Radiation Oncology
<b>Center/Program Affiliation</b>	<a href="#">UC Davis Comprehensive Cancer Center</a>
<b>Languages</b>	German
<b>Education</b>	Ph.D., Rutgers, The State University of New Jersey, Piscataway NJ 2002 M.S., Technical University Darmstadt, Darmstadt, Germany 1998
<b>Fellowships</b>	Radiation Medicine, Georgetown University, Washington D.C. 2002 Radiation Oncology, Georgetown University Hospital, Washington D.C. 2002-2003
<b>Board Certifications</b>	American Board of Radiology, Therapeutic Radiological Physics, 2006
<b>Professional Memberships</b>	American Association of Physicists in Medicine (AAPM) American Physical Society (APS) American Society of Therapeutic Radiation Oncology (ASTRO)
<b>Honors and Awards</b>	Fellow of the American Association of Physicists in Medicine, 2015
<b>Select Recent Publications</b>	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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A. Schlaefer and S. Dieterich, 'Feasibility of case-based beam generation for robotic radiosurgery,' *Artif Intell Med*. 2011; 52(2):67-75.

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J Burmeister, PhD, Z Chen, PhD, Indrin J. Chetty, PhD, S Dieterich, PhD, A Doemer, MS, M M. Dominello, DO, R M. Howell, PhD, P McDermott, PhD, A Nalichowski, MS, J Prisciandaro, PhD, T Ritter, PhD, C Smith, PhD, E Schreiber, PhD, T Shafman, MD, S Sutlief, PhD, Y Xiao, PhD. The American Society for Radiation Oncology's 2015 Core Physics Curriculum for Radiation Oncology Residents. *Intern J of Rad Onc. Biology, Physics.* 2016

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