John M. Boone, Ph.D.

Clinical Interests Dr. Boone is a medical physicist in the Department of Radiology, and he is board-certified by the

American Board of Radiology and diagnostic radiological physics.

He has research interests in the development of medical imaging technology, and has developed four breast CT scanners under NIH funding, and has evaluated the performance of breast CT on over 600 patients. He is also interested in radiation dosimetry, and has published extensively on

this topic in mammography and computed tomography.

Title Professor

Vice Chair of Research, Radiology

Specialty Cancer, Radiology, Radiology Physics

Department Radiology

Division Radiology Physics

Center/Program Affiliation <u>UC Davis Comprehensive Cancer Center</u>

Address/Phone Lawrence J. Ellison Ambulatory Care Center, Radiology, 4860 Y St. Suite 3100 Sacramento, CA

95817

Phone: 916-734-0655

Additional Phone Physician Referrals: 800-4-UCDAVIS (800-482-3284)

Education M.S., UC Irvine, Irvine CA 1981

Ph.D., UC Irvine, Irvine CA 1985 B.A., UC Berkeley, Berkeley CA 1979

Fellowships Health Care Affiliates, Inc., Laguna Hills CA 1983-1985

Board Certifications American Board of Radiology, Diagnostic Radiological Physics, 1988

Professional Memberships American Association of Physicists in Medicine (Fellow)

American College of Radiology (Fellow)

American Institute for Medical and Biological Engineering (AIMBE)

Society of Breast Imaging (Fellow)

The International Society for Optical Engineering (SPIE)



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Select Recent Publications

Aminololama-Shakeri S, Abbey CK, Gazi P, Prionas ND, Nosratieh A, Li CS, Boone JM, Lindfors KK. Differentiation of ductal carcinoma in-situ from benign micro-calcifications by dedicated breast computed tomography. Eur J Radiol. 2016 Jan;85(1):297-303.

Corwin MT, Seibert JA, Fananapazir G, Lamba R, Boone JM. JOURNAL CLUB: Quantification of Fetal Dose Reduction if Abdominal CT Is Limited to the Top of the Iliac Crests in Pregnant Patients With Trauma. AJR Am J Roentgenol. 2016 Apr;206(4):705-12.

Hernandez AM, Seibert JA, Boone JM. Breast dose in mammography is about 30% lower when realistic heterogeneous glandular distributions are considered. Med Phys. 2015 Nov;42(11):6337-48.

Nosratieh A, Hernandez A, Shen SZ, Yaffe MJ, Seibert JA, Boone JM. Mean glandular dose coefficients (D(g)N) for x-ray spectra used in contemporary breast imaging systems. Phys Med Biol. 2015 Sep 21;60(18):7179-90.

Sechopoulos I, Ali ES, Badal A, Badano A, Boone JM, Kyprianou IS, Mainegra-Hing E, McMillan KL, McNitt-Gray MF, Rogers DW, Samei E, Turner AC. Monte Carlo reference data sets for imaging research: Executive summary of the report of AAPM Research Committee Task Group 195. Med Phys. 2015 Oct;42(10):5679-91.

Smith-Bindman R, Moghadassi M, Wilson N, Nelson TR, Boone JM, Cagnon CH, Gould R, Hall DJ, Krishnam M, Lamba R, McNitt-Gray M, Seibert A, Miglioretti DL. Radiation Doses in Consecutive CT Examinations from Five University of California Medical Centers. Radiology. 2015 Oct;277(1): 134-41.

Lee J, Nishikawa RM, Reiser I, Boone JM, Lindfors KK. Local curvature analysis for classifying breast tumors: Preliminary analysis in dedicated breast CT. Med Phys. 2015 Sep;42(9):5479-89.



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Dixon RL, Boone JM, Kraft RA. Dose equations for shift-variant CT acquisition modes using variable pitch, tube current, and aperture, and the meaning of their associated CTDI(vol). Med Phys. 2014 Nov;41(11):111906.

Lamba R, McGahan JP, Corwin MT, Li CS, Tran T, Seibert JA, Boone JM. CT Hounsfield numbers of soft tissues on unenhanced abdominal CT scans: variability between two different manufacturers' MDCT scanners. AJR Am J Roentgenol. 2014 Nov;203(5):1013-20.

Morin RL, Seibert JA, Boone JM. Radiation dose and safety: informatics standards and tools. J Am Coll Radiol. 2014 Dec;11(12 Pt B):1286-97.

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