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MARTIN P TORNAI, ASSOCIATE PROFESSOR OF RADIOLOGY, MEDICAL PHYSICS PROGRAM (PRIMARY APPT.) AND BIOMEDICAL ENGINEERING

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Education:

PhD, UCLA School of Medicine, 1997
Ph.D., University of California at Los Angeles, 1997

Specialties:

Medical Imaging

Areas of Interest:

Medical Imaging

Duties:

Duke IRB Committee Member
Medical Physics Admissions Committee
Medical Physics Internship Coordinator

Representative Publications (More Publications)

DJ Crotty, RL McKinley, MP Tornai, *Experimental spectral measurements of heavy K-edge filtered beams for x-ray computed mamotomography.*, Physics in medicine and biology, England, vol. 52 no. 3 (February, 2007), pp. 603-16 [abs].

CN Brzymialkiewicz, MP Tornai, RL McKinley, SJ Cutler, JE Bowsher, *Performance of dedicated emission mamotomography for various breast shapes and sizes.*, Physics in medicine and biology, England, vol. 51 no. 19 (October, 2006), pp. 5051-64 [abs].

CN Brzymialkiewicz, MP Tornai, RL McKinley, JE Bowsher, *Evaluation of fully 3-D emission mamotomography with a compact cadmium zinc telluride detector.*, IEEE transactions on medical imaging, United States, vol. 24 no. 7 (July, 2005), pp. 868-77 [abs].

E Samei, JT Dobbins, JY Lo, MP Tornai, *A framework for optimising the radiographic technique in digital X-ray imaging.*, Radiation protection dosimetry, England, vol. 114 no. 1-3 (2005), pp. 220-9 [abs].

RL McKinley, MP Tornai, E Samei, ML Bradshaw, *Simulation study of a quasi-monochromatic beam for x-ray computed mamotomography.*, Medical physics, United States, vol. 31 no. 4 (April, 2004), pp. 800-13 [abs].

MP Tornai, JE Bowsher, RJ Jaszczak, BC Pieper, KL Greer, PH Hardenbergh, RE Coleman, *Mamotomography with pinhole incomplete circular orbit SPECT.*, Journal of nuclear medicine : official publication, Society of Nuclear Medicine, United States, vol. 44 no. 4 (April, 2003), pp. 583-93 [abs].

MP Tornai, BE Patt, JS Iwanczyk, CR Tull, LR MacDonald, EJ Hoffman, *A novel silicon array designed for intraoperative charged particle imaging.*, Medical physics, United States, vol. 29 no. 11 (November, 2002), pp. 2529-40 [abs].



JE Bowsher, MP Tornai, J Peter, DE González Trotter, A Krol, DR Gilland, RJ Jaszczak, *Modeling the axial extension of a transmission line source within iterative reconstruction via multiple transmission sources.*, IEEE transactions on medical imaging, United States, vol. 21 no. 3 (March, 2002), pp. 200-15 [abs].

A Krol, JE Bowsher, SH Manglos, DH Feiglin, MP Tornai, FD Thomas, *An EM algorithm for estimating SPECT emission and transmission parameters from emissions data only.*, IEEE transactions on medical imaging, United States, vol. 20 no. 3 (March, 2001), pp. 218-32 [abs].

J Peter, MP Tornai, RJ Jaszczek, *Analytical versus voxelized phantom representation for Monte Carlo simulation in radiological imaging.*, IEEE transactions on medical imaging, UNITED STATES, vol. 19 no. 5 (May, 2000), pp. 556-64 [abs].

EJ Hoffman, MP Tornai, M Janecek, BE Patt, JS Iwanczyk, *Intraoperative probes and imaging probes.*, European journal of nuclear medicine, GERMANY, vol. 26 no. 8 (August, 1999), pp. 913-35 [abs].

MP Tornai, RJ Jaszczak, TG Turkington, RE Coleman, *Small-animal PET: advent of a new era of PET research.*, Journal of nuclear medicine : official publication, Society of Nuclear Medicine, UNITED STATES, vol. 40 no. 7 (July, 1999), pp. 1176-9 .

MP Tornai, CS Levin, LR MacDonald, CH Holdsworth, EJ Hoffman. 1998. "A Miniature Phoswich Detector for Gamma-Ray Localization and Beta Imaging." *IEEE Trans. Nucl. Sci. NS-45(3):1166-1173.* .

MP Tornai, BE Patt, JS Iwanczyk, CS Levin, EJ Hoffman. 1997. "Discrete Scintillator Coupled Mercuric Iodide Photodetector Arrays for Breast Imaging." *IEEE Trans. Nucl. Sci. NS-44(3): 1127-1133.* .

MP Tornai, LR MacDonald, CS Levin, S Siegel, EJ Hoffman. 1996. "Design Considerations and Initial Performance of a 1.2 cm² Beta Imaging Intra-Operative Probe." *IEEE Trans. Nucl. Sci. NS-43(4):2326-2335.* .

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