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Ehsan Samei
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6913 2A **Tomosynthesis with source positions distributed over a surface** [6913-81]
D. Xia, S. Cho, J. Bian, E. Y. Sidky, C. A. Pelizzari, X. Pan, The Univ. of Chicago (USA)

6913 2B **Iterative scatter correction based on artifact assessment** [6913-82]
J. Wiegert, S. Hohmann, M. Bertram, Philips Research Europe (Germany)

POSTER SESSION: RECONSTRUCTION

6913 2C **A preliminary investigation of using prior information for potentially improving image reconstruction in few-view CT** [6913-83]
S. Cho, E. Y. Sidky, J. Bian, C. A. Pelizzari, X. Pan, Univ. of Chicago (USA)

6913 2D **Tomosynthesis via total variation minimization reconstruction and prior image constrained compressed sensing (PICCS) on a C-arm system (Honorable Mention Poster Award)** [6913-84]
B. Nett, J. Tang, S. Leng, G. Chen, Univ. of Wisconsin (USA)

6913 2E **Efficient extended field of view (eFOV) reconstruction techniques for multi-slice helical CT** [6913-85]
H. Bruder, C. Suess, K. Stierstorfer, Siemens AG (Germany)

6913 2F **Expectation maximization SPECT reconstruction with a content-adaptive singularity-based mesh-domain image model** [6913-86]
Y. Lu, H. Ye, Y. Xu, X. Hu, L. Vogelsang, L. Shen, Syracuse Univ. (USA); D. Feiglin, SUNY Upstate Medical Univ. (USA) and Syracuse Univ. (USA); E. Lipson, Syracuse Univ. (USA) and SUNY Upstate Medical Univ. (USA); A. Krol, SUNY Upstate Medical Univ. (USA) and Syracuse Univ. (USA)

6913 2G **Chord-based image reconstruction from clinical projection data** [6913-87]
M. King, D. Xia, X. Pan, M. Vannier, The Univ. of Chicago (USA); T. Köhler, Philips Research Europe (Germany); P. La Riviére, E. Sidky, M. Giger, The Univ. of Chicago (USA)

6913 2H **Electronic noise compensation in iterative x-ray CT reconstruction** [6913-88]
J. Xu, B. M. W. Tsui, Johns Hopkins Univ. (USA)

6913 2I **A preliminary investigation of ROI-image reconstruction with the rebinned BPF algorithm** [6913-89]
J. Bian, D. Xia, The Univ. of Chicago (USA); L. Yu, Mayo Clinic (USA); E. Y. Sidky, X. Pan, The Univ. of Chicago (USA)

6913 2J **An FBP image reconstruction algorithm for x-ray differential phase contrast CT** [6913-90]
Z. Qi, G.-H. Chen, Univ. of Wisconsin, Madison (USA)

6913 2K **Development of a fully 3D system model in iterative expectation-maximization reconstruction for cone-beam SPECT** [6913-91]
H. Ye, L. Vogelsang, Syracuse Univ. (USA); D. H. Feiglin, SUNY Upstate Medical Univ. (USA); E. D. Lipson, Syracuse Univ. (USA) and SUNY Upstate Medical Univ. (USA); A. Krol, SUNY Upstate Medical Univ. (USA) and Syracuse Univ. (USA)

6913 2L **Mesh model 2D reconstruction operator for SPECT** [6913-92]
R. D. Gonzalo, J. G. Brankov, Illinois Institute of Technology (USA)

6913 2M **Generic iterative reconstruction of multi-pinhole SPECT** [6913-93]
W. J. Ryder, M. P. Brennan, A. J. Sinusas, Y.-H. Liu, Yale Univ. School of Medicine (USA)

6913 2N **A blob-based tomographic reconstruction of 3D coronary trees from rotational x-ray angiography** [6913-94]
J. Zhou, A. Bousse, G. Yang, Southeast Univ. (China) and INSERM (France) and Univ. de Rennes 1 (France) and Ctr. de Recherche en Information Biomédicale Sino-francais (France); J.-J. Bellanger, INSERM (France) and Univ. de Rennes 1 (France) and Ctr. de Recherche en Information Biomédicale Sino-francais (France); L. Luo, Southeast Univ. (China) and Ctr. de Recherche en Information Biomédicale Sino-francais (France); C. Toumoulin, J.-L. Coatrieux, INSERM (France) and Univ. de Rennes 1 (France) and Ctr. de Recherche en Information Biomédicale Sino-francais (France)

6913 2O **A hardware projector/backprojector pair for 3D PET reconstruction** [6913-95]
N. Gac, S. Mancini, M. Desvignes, F. Deboissieu, Gipsa-lab, INPG (France); A. Reilhac, CERMEP (France)

6913 2P **Automatic local thresholding of tomographic reconstructions based on the projection data** [6913-96]
K. J. Batenburg, J. Sijbers, Univ. of Antwerp (Belgium)

6913 2Q **Cone-beam reconstruction using retrieved phase projections of in-line holography for breast imaging** [6913-97]
W. Cai, R. Ning, Univ. of Rochester (USA)

6913 2R **SPECT reconstruction on the GPU** [6913-98]
C. Vetter, Siemens Corporate Research (USA); R. Westermann, Technische Univ. München (Germany)

6913 2S **Applying Mojette discrete radon transforms to classical tomographic data** [6913-99]
H. Fayad, LATIM, INSERM, CHU Morvan (France) and IRCCyN, Ecole Polytechnique Univ. of Nantes (France); J. P. Guédon, IRCCyN, Ecole Polytechnique Univ. of Nantes (France); I. Svalbe, Monash Univ. (Australia); Y. Bizais, LATIM, INSERM, CHU Morvan (France); N. Normand, IRCCyN, Ecole Polytechnique Univ. of Nantes (France)

6913 2T **Accelerate helical cone-beam CT with graphics hardware** [6913-100]
W. Bi, Z. Chen, L. Zhang, Y. Xing, Tsinghua Univ. (China)

6913 2U **A projection-driven pre-correction technique for iterative reconstruction of helical cone-beam cardiac CT images** [6913-101]
S. Do, Massachusetts General Hospital (USA); Z. Liang, W. C. Karl, Boston Univ. (USA); T. Brady, H. Pien, Massachusetts General Hospital (USA)

6913 2V **Hardware accelerated C-arm CT and fluoroscopy: a pilot study** [6913-102]
D. Riabkov, T. Brown, A. Cheryauka, A. Tokhtuev, GE Healthcare-Surgery (USA)

6913 2W **A study on projection distribution of few-view reconstruction with total variation constraint** [6913-103]
L. Zhang, X. Duan, Y. Xing, Z. Chen, J. Cheng, Tsinghua Univ. (China)

6913 2X **PDE regularization for Bayesian reconstruction of emission tomography** [6913-104]
Z. Wang, L. Zhang, Y. Xing, Z. Zhao, Tsinghua Univ. (China)

6913 2Y **Truncation artifact and boundary artifact reduction in breast tomosynthesis reconstruction** [6913-105]
Y. Zhang, H.-P. Chan, Y.-T. Wu, B. Sahiner, C. Zhou, J. Wei, J. Ge, L. M. Hadjiiski, J. Shi, Univ. of Michigan (USA)

6913 2Z **A new reconstruction method to improve SNR for an inverse geometry CT system** [6913-106]
J. Baek, N. J. Pelc, Stanford Univ. (USA)

6913 30 **Tomographic reconstruction of band-limited hermite expansions** [6913-107]
W. Park, G. S. Chirikjian, Johns Hopkins Univ. (USA)

6913 31 **MLSD-OSEM reconstruction algorithm for cosmic ray muon radiography** [6913-108]
Y. Liu, Z. Zhao, Z. Chen, L. Zhang, Y. Xing, Tsinghua Univ. (China)

POSTER SESSION: ALGORITHMS

6913 32 **Lossy raw data compression in computed tomography with noise shaping to control image effects** [6913-109]
Y. Xie, A. S. Wang, N. J. Pelc, Stanford Univ. (USA)

6913 33 **Beam hardening correction based on HL consistency in polychromatic transmission tomography** [6913-110]
X. Mou, S. Tang, T. Luo, Y. Zhang, Xi'an Jiaotong Univ. (China); H. Yu, Virginia Tech (USA)

6913 34 **Effect of the frequency content and spatial location of raw data errors on CT images** [6913-111]
A. S. Wang, Y. Xie, N. J. Pelc, Stanford Univ. (USA)

6913 35 **A 3D metal artifact correction method in cone-beam CT bone imaging by using an implant image library** [6913-112]
Y. Zhang, R. Ning, D. Conover, Univ. of Rochester (USA)

6913 36 **Accurate measurement of respiratory airway wall thickness in CT images using a signal restoration technique** [6913-113]
S. J. Park, Seoul National Univ. College of Medicine (South Korea); T. J. Kim, Seoul National Univ. Bundang Hospital (South Korea); K. G. Kim, National Cancer Ctr. (South Korea); S. H. Lee, J. M. Goo, J. H. Kim, Seoul National Univ. College of Medicine (South Korea)

6913 37 **Reconstruction artifacts in VRX CT scanner images** [6913-114]
D. A. Rendon, F. A. DiBianca, G. S. Keyes, Univ. of Tennessee Health Science Ctr. (USA)

6913 38 **Quantification and elimination of windmill artifacts in multi slice CT** [6913-115]
S. J. Utrup, K. M. Brown, Philips Healthcare (USA)

6913 3A **Effects of scanning orbit wobbling and detector tilting on cone-beam tomography** [6913-117]
Y. Ding, Z. Chen, P. Geng, Northeastern Univ. (China)

6913 3B **Quantitative comparison of weighted Feldkamp FBP full-scan and half-scan algorithms for contrast-enhanced CT breast imaging** [6913-118]
C. Didier, Univ. of Massachusetts, Lowell (USA) and Univ. of Massachusetts Medical School (USA); Y. Chen, Univ. of Massachusetts Medical School (USA); J. M. O'Connor, Univ. of Massachusetts, Lowell (USA) and Univ. of Massachusetts Medical School (USA); M. Mah'D, Univ. of Massachusetts, Lowell (USA); S. J. Glick, Univ. of Massachusetts Medical School (USA)

6913 3C **Landmark based compensation of patient motion artifacts in computed tomography** [6913-119]
Y. Pauchard, S. K. Boyd, Univ. of Calgary (Canada)

POSTER SESSION: MEASUREMENT, SIMULATION, AND MODELING

6913 3D **Temporal-noise measurements of a CMOS camera used for image quality measurements** [6913-121]
H. Roehrig, W. J. Dallas, Univ. of Arizona (USA); G. R. Redford, Optic Valley Photonics (USA)

6913 3E **New automatic quality control methods for geometrical treatment planning system tools in external conformal radiotherapy** [6913-122]
E. Denis, IRCCyN/IVC (France); S. Beaumont, QualiFormeD SARL (France); J. Guédon, T. Torfeh, N. Normand, IRCCyN/IVC (France); N. Ailleres, Ctr. Régional de Lutte Contre le Cancer (France)

6913 3F **Digital phantoms for the evaluation of a software used for an automatic analysis of the Winston-Lutz test in image guided radiation therapy** [6913-123]
T. Torfeh, IRCCyN/IVC, École Polytechnique de l'Univ. de Nantes (France) and QualiFormeD SARL (France); S. Beaumont, D. Bonnet, QualiFormeD SARL (France); Y. Barbotteau, Ctr. Régional de Lutte Contre le Cancer (France); J. Guédon, N. Normand, IRCCyN/IVC, École Polytechnique de l'Univ. de Nantes (France); E. Denis, IRCCyN/IVC, École Polytechnique de l'Univ. de Nantes (France) and QualiFormeD SARL (France); P. Fenoglietto, N. Ailleres, Ctr. Régional de Lutte Contre le Cancer (France)

6913 3G **A simulation framework for pre-clinical studies on dose and image quality: concept and first validation** [6913-124]
K. Smans, Univ. Hospitals Leuven (Belgium) and SCK•CEN (Belgium); H. Pauwels, Univ. Hospitals Leuven (Belgium); F. Rogge, AIB-Vincotte Controlatom (Belgium); L. Struelens, SCK•CEN (Belgium); O. Dragusin, Univ. Hospitals Leuven (Belgium); F. Vanhavere, SCK•CEN (Belgium); H. Bosmans, Univ. Hospitals Leuven (Belgium)

Part Three

6913 3H **Validation of a GEANT4 simulation of neutron stimulated emission computed tomography** [6913-125]
A. J. Kapadia, B. P. Harrawood, Duke Univ. Medical Ctr. (USA); G. D. Tourassi, Duke Univ. Medical Ctr. (USA) and Duke Univ. (USA)

6913 3I **Use of the detective quantum efficiency in a quality assurance program** [6913-126]
I. A. Cunningham, Robarts Research Institute (Canada) and London Health Sciences Ctr. (Canada)

6913 3J **Radiation dose measurement for various parameters in MDCT** [6913-127]
C.-L. Lee, H.-J. Kim, Yonsei Univ. (South Korea); S. S. Jeon, Wonju Christian Hospital (South Korea); H.-M. Cho, S. R. Nam, J.-Y. Jung, Yonsei Univ. (South Korea)

6913 3K **Dosimetric measurements and comparison studies in digital imaging system** [6913-128]
J.-Y. Jung, H.-J. Kim, C.-L. Lee, H.-M. Cho, S. Nam, Yonsei Univ. (South Korea)

6913 3L **Estimation of x-ray parameters in digital coronary angiography for compensation of myocardial perfusion measurements** [6913-129]
C. J. Storm, Hospital Walcheren (Netherlands); C. H. Slump, Univ. of Twente (Netherlands)

6913 3M **Computational method for automatic determination of radiographic equipment anode angle** [6913-130]
M. A. C. Vieira, P. D. de Oliveira, Jr., H. Schiabel, Univ. de São Paulo (Brazil)

6913 3N **Performance assessment of a simple and accurate grid alignment aid for portable chest imaging** [6913-131]
X. Wang, W. Huang, D. H. Foos, M. K. Rogers, Carestream Health, Inc. (USA)

6913 3O **Comparison of MTFs in x-ray CT images between measured by current method and considered linearity in low contrast** [6913-133]
N. Fujita, Nagoya Univ. (Japan); K. Ichikawa, Kanazawa Univ. (Japan); T. Hara, Nakatsugawa Municipal General Hospital (Japan); Y. Kodera, Nagoya Univ. (Japan)

6913 3P **An analysis of Field II simulation** [6913-134]
L. Candemir, The Scientific and Technological Research Council of Turkey (TÜBİTAK) (Turkey); I. Cilesiz, Istanbul Technical Univ. (ITU) (Turkey)

6913 3Q **Experimental validation of a Monte Carlo-based kV x-ray projection model for the Varian linac-mounted cone-beam CT imaging system** [6913-135]
D. Lazos, D. Pokhrel, Z. Su, J. Lu, J. F. Williamson, Virginia Commonwealth Univ. (USA)

POSTER SESSION: DETECTOR TECHNOLOGY

6913 3R **High resolution amplified pixel sensor architectures for large area digital mammography tomosynthesis (Honorable Mention Poster Award)** [6913-136]
F. Taghibakhsh, K. S. Karim, Univ. of Waterloo (Canada)

6913 3S **Photodiode forward bias to reduce temporal effects in a-Si based flat panel detectors** [6913-137]
I. Mollov, C. Tognina, R. Colbeth, Varian Medical Systems (USA)

6913 3T **Distortion, orientation, and translation corrections of tiled EMCCD detectors for the new solid state x-ray image intensifier (SSXII)** [6913-138]
H. Hamwi, J. W. Lee, K. R. Hoffmann, S. Rudin, A. Verevkin, Univ. at Buffalo, SUNY (USA)

6913 3U **Modeling of dark current and ghosting in multilayer amorphous selenium x-ray detectors** [6913-139]
M. Z. Kabir, F. Manouchehri, S. A. Mahmood, V. K. Devabhaktuni, Concordia Univ. (Canada); O. Tousignant, H. Mani, J. Greenspan, P. Botka, Anrad Corp. (Canada)

POSTER SESSION: SMALL ANIMAL AND NON X-RAY IMAGING

6913 3Z **Soft tissue small avascular tumor imaging with x-ray phase-contrast micro-CT in-line holography** [6913-144]
Y. Nesterets, T. Gureyev, A. Stevenson, A. Pogany, S. Wilkins, CSIRO Manufacturing and Materials Technology (Australia); R. Kincaid, H. Ye, L. Vogelsang, Syracuse Univ. (USA); E. Lipson, Syracuse Univ. (USA) and SUNY Upstate Medical Univ. (USA); I. Coman, SUNY Upstate Medical Univ. (USA); S. Fourmaux, J.-C. Kieffer, Univ. du Québec (Canada); A. Krol, SUNY Upstate Medical Univ. (USA) and Syracuse Univ. (USA)

6913 40 **A predictive software tool for optimal timing in contrast enhanced carotid MR angiography** [6913-145]
A. N. Moghaddam, David Geffen School of Medicine at UCLA (USA) and California Institute of Technology (USA); T. Balawi, R. Habibi, David Geffen School of Medicine at UCLA (USA); C. Panknin, G. Laub, Siemens Medical Solutions (USA); S. Ruehm, J. P. Finn, David Geffen School of Medicine at UCLA (USA)

6913 41 **A feasibility study of the 3D fluorescent image reconstruction for the simultaneous PET and fluorescent CT imaging system using depth of interaction PET detector** [6913-146]
H. Tashima, T. Obi, Tokyo Institute of Technology (Japan); T. Yamaya, H. Murayama, National Institute of Radiological Sciences (Japan); K. Kitamura, I. Oda, Shimadzu Corp. (Japan); M. Yamaguchi, N. Ohyama, Tokyo Institute of Technology (Japan)

6913 42 **A dual micro-CT system for small animal imaging** [6913-147]
C. T. Badea, S. Johnston, B. Johnson, M. Lin, L. W. Hedlund, G. A. Johnson, Duke Univ. Medical Ctr. (USA)

6913 43 **CT number variations in micro CT imaging systems** [6913-148]
S.-J. Tu, H.-L. Hsieh, T.-C. Chao, Chang Gung Univ. (Taiwan)

6913 44 **Contrast imaging with a monochromatic x-ray scanner** [6913-149]
D. J. Pole, K. Popovic, M. B. Williams, Univ. of Virginia (USA)

6913 46 **Ordered k-space acquisition in contrast enhanced magnetic resonance angiography (CE-MRA)** [6913-152]
B. Wu, J. R. Maclaren, R. P. Millane, R. Watts, P. J. Bones, Univ. of Canterbury (New Zealand)

6913 47 **Development of an MR compatible rotating anode x-ray tube** [6913-153]
P. Lillaney, Stanford Univ. School of Medicine (USA); J. Bracken, Univ. of Toronto (Canada) and Sunnybrook Health Sciences Ctr. (Canada); A. Ganguly, Stanford Univ. School of Medicine (USA); J. Rowlands, Univ. of Toronto (Canada) and Sunnybrook Health Sciences Ctr. (Canada); R. Fahrig, Stanford Univ. School of Medicine (USA)

6913 48 **Parameter optimization for a grating-based phase contrast x-ray system** [6913-154]
B. Koo, Virginia Polytechnic Institute and State Univ. (USA); M. Jiang, Peking Univ. (China) and Virginia Polytechnic Institute and State Univ. (USA); C. L. Wyatt, G. Wang, Virginia Polytechnic Institute and State Univ. (USA)

6913 49 **A numerical analysis of the Born approximation for image formation modeling of differential interference contrast microscopy for human embryos** [6913-155]
S. Trattner, M. Feigin, H. Greenspan, N. Sochen, Tel Aviv Univ. (Israel)

6913 4A **The effects of respiration motion in PET/CT studies** [6913-156]
L. Wan, Huazhong Univ. of Science and Technology (China) and Hubei Province Key Lab. of Molecular Imaging (China); Z. Wu, Hubei Province Key Lab. of Molecular Imaging (China) and Huazhong Univ. of Science and Technology (China); F. Zhou, Huazhong Univ. of Science and Technology (China) and Hubei Province Key Lab. of Molecular Imaging (China); S. Ye, S. Zeng, Huazhong Univ. of Science and Technology (China); C.-M. Kao, C.-T. Chen, The Univ. of Chicago (USA); Y. Zhang, Hubei Province Key Lab. of Molecular Imaging (China) and Huazhong Univ. of Science and Technology (China); Q. Xie, Huazhong Univ. of Science and Technology (China) and Hubei Province Key Lab. of Molecular Imaging (China) and The Univ. of Chicago (USA)

6913 4B **An investigation of digital signal processing for shaped pulses for all-digital PET** [6913-157]
Q. Xie, Huazhong Univ. of Science and Technology (China) and The Univ. of Chicago (USA); J. Zhu, X. Wang, B. Zhang, C. Zhu, N. Guo, Z. Zhang, Huazhong Univ. of Science and Technology (China); C.-T. Chen, Y. W. Wah, M. Bogdan, C.-M. Kao, The Univ. of Chicago (USA)

6913 4C **Evaluation of the partial flip angle spin echo method to improve non-uniformity in T1-weighted imaging with the 3-tesla MRI** [6913-158]
Y. Watanabe, M. Tsuzaka, Nagoya Univ. (Japan); K. Ishibashi, Y. Sakurai, Nagoya Univ. Hospital (Japan)

6913 4D **Motion gated small animal imaging with a flat-panel CT** [6913-159]
M. Grasruck, Siemens Healthcare (Germany); S. Bartling, J. Dinkel, F. Kiessling, W. Semmler, German Cancer Research Ctr. (Germany); K. Stierstorfer, B. Schmidt, Siemens Healthcare (Germany)

POSTER SESSION: BREAST IMAGING

6913 4E **Frequency diversity in breast ultrasound tomography (Honorable Mention Poster Award)** [6913-160]
F. Simonetti, Imperial College London (United Kingdom) and Los Alamos National Lab. (USA); L. Huang, Los Alamos National Lab. (USA); N. Duric, Wayne State Univ. (USA)

6913 4F **Screen optics effects on DQE in digital radiography: spatial frequency effects** [6913-161]
A. R. Lubinsky, W. Zhao, SUNY (USA); K. Suzuki, Hamamatsu Photonics K.K. (Japan)

6913 4G **Non-circular scans and image reconstruction for breast CT** [6913-162]
J. Bian, The Univ. of Chicago (USA); N. J. Packard, K. Yang, Univ. of California, Davis Medical Ctr. (USA); D. Xia, The Univ. of Chicago (USA); J. M. Boone, Univ. of California, Davis Medical Ctr. (USA); X. Pan, The Univ. of Chicago (USA)

6913 4H **Design of a multiple component geometric breast phantom** [6913-163]
K. G. Baum, Rochester Institute of Technology (USA); K. McNamara, Honeoye Falls-Lima High School (USA); M. Helguera, Rochester Institute of Technology (USA)

6913 4I **Impact of heel effect and ROI size on the determination of contrast-to-noise ratio for digital mammography systems** [6913-164]
A. Alsager, K. C. Young, Royal Surrey County Hospital (United Kingdom) and Univ. of Surrey (United Kingdom); J. M. Oduko, Royal Surrey County Hospital (United Kingdom)

6913 4J **Impact of dose on observer performance in breast tomosynthesis using breast specimens** [6913-165]
P. Timberg, Lund Univ., Malmö Univ. Hospital (Sweden); M. Båth, Sahlgrenska Univ. Hospital (Sweden); I. Andersson, T. Svahn, M. Ruschin, B. Hemdal, S. Mattsson, A. Tingberg, Lund Univ., Malmö Univ. Hospital (Sweden)

6913 4K **Optimizing the anode-filter combination in the sense of image quality and average glandular dose in digital mammography** [6913-166]
M. Varjonen, P. Strömmer, Planmed Oy (Finland)

6913 4L **Microcalcification detectability in tomosynthesis (Cum Laude Poster Award)** [6913-167]
B. A. Lau, I. S. Reiser, R. M. Nishikawa, The Univ. of Chicago (USA)

6913 4M **Improvement in image quality of computed radiography systems for mammography** [6913-169]
C.-Y. J. Yang, W. Huang, Carestream Health, Inc. (USA)

6913 4N **Toward quantification of breast tomosynthesis imaging** [6913-170]
C. M. Shafer, Duke Univ. Medical Ctr. (USA) and Duke Univ. (USA); E. Samei, R. S. Saunders, Duke Univ. Medical Ctr. (USA); M. Zerhouni, Computerized Imaging Reference Systems, Inc. (USA); J. Y. Lo, Duke Univ. Medical Ctr. (USA) and Duke Univ. (USA)

6913 4O **Digital tomosynthesis mammography: improvement of artifact reduction method for high-attenuation objects on reconstructed slices** [6913-171]
J. Ge, H.-P. Chan, B. Sahiner, Y. Zhang, J. Wei, L. M. Hadjiiski, C. Zhou, Y.-T. Wu, J. Shi, Univ. of Michigan (USA)

POSTER SESSION: X-RAY RADIOGRAPHY AND CT

6913 4P **On the angular dependence of Bremsstrahlung x-ray emission (Honorable Mention Poster Award)** [6913-172]
A. Ganguly, N. J. Pelc, Stanford Univ. (USA)

6913 4Q **Separation of bone from iodine- and gadolinium-based contrast agents using dual energy CT (Honorable Mention Poster Award)** [6913-173]
D. Y. Chong, E. Angel, H. J. Kim, G. B. Cole, L. Boyadzhyan, Univ. of California, Los Angeles (USA); C. Panknin, Siemens AG, Medical Solutions (USA); A. M. Gomez, J. G. Goldin, M. S. Brown, M. F. McNitt-Gray, Univ. of California, Los Angeles (USA)

6913 4R **Evaluation of the contrast-detail response of a cardiovascular angiography system and the influence of equipment variables on image quality** [6913-174]
O. Dragusin, K. Smans, J. Jacobs, Univ. Hospitals Leuven (Belgium); T. Inal, Ankara Univ. (Turkey); H. Bosmans, Univ. Hospitals Leuven (Belgium)

6913 4S **Evaluation of exposure dose reduction in multislice CT coronary angiography (MS-CTA) with prospective ECG-gated helical scan** [6913-175]
T. Ota, Toshiba Information Systems Corp. (Japan); M. Tsuyuki, M. Okumura, Toshiba Medical Systems Corp. (Japan); T. Sano, T. Kondo, S. Takase, Takase Clinic (Japan)

6913 4T **Comparison of the performances between anti-scatter grid and slot scanning technique for digital chest radiography: effect of anatomical background** [6913-176]
C.-J. Lai, C. C. Shaw, X. Liu, L. Chen, T. Han, T. Wang, The Univ. of Texas M.D. Anderson Cancer Ctr. (USA)

6913 4U **C-arm based cone-beam CT using a two-concentric-arc source trajectory: system evaluation** [6913-177]
J. Zambelli, T. Zhuang, B. E. Nett, Univ. of Wisconsin, Madison (USA); C. Riddell, GE Healthcare (France); B. Belanger, GE Healthcare (USA); G.-H. Chen, Univ. of Wisconsin, Madison (USA)

6913 4V **Dose saving and scatter reduction in volume-of-interest (VOI) cone beam CT: work in progress** [6913-178]
C.-J. Lai, C. C. Shaw, L. Chen, X. Liu, T. Han, T. Wang, The Univ. of Texas M.D. Anderson Cancer Ctr. (USA)

6913 4W **BRAGA: an easy to use and accurate grid alignment system to control scatter and improve image quality in bedside radiography** [6913-179]
D. M. Gauntt, X-Ray Imaging Innovations (USA); G. T. Barnes, X-Ray Imaging Innovations (USA) and Univ. of Alabama at Birmingham Health Systems (USA)

6913 4X **Effect of spatial direction and acquisition techniques on noise power spectra in x-ray CT** [6913-180]
K. Boedeker, Toshiba America Medical Systems, Inc. (USA); A. A. Zamyatin, Toshiba Medical Research Institute USA (USA); X. Wang, Northern Illinois Univ. (USA)

6913 4Y **Analysis of axial spatial resolution in a variable resolution x-ray cone beam CT (VRX-CBCT) system** [6913-181]
B. Dahi, G. S. Keyes, D. A. Rendon, F. A. DiBianca, The Univ. of Tennessee Health Science Ctr. (USA)

6913 4Z **Quantitative imaging of chemical composition using dual-energy, dual-source CT** [6913-182]
X. Liu, A. N. Primak, L. Yu, C. H. McCollough, R. L. Morin, Mayo Clinic (USA)

6913 50 **Effects of digital geometry and phantom size on cone-beam CT point spread function measurement** [6913-183]
Z. Chen, Northeastern Univ. (China); Y. Tao, Univ. of Maryland, College Park (USA)

6913 51 **A comparison of three CT voltage optimization strategies** [6913-184]
K. M. Ogden, W. Huda, M. R. Khorasani, E. M. Scalzetti, SUNY Upstate Medical Univ. (USA)

6913 52 **The built-in capacity of CT D'Or's static ring for scatter correction** [6913-185]
H. Schlattl, C. Hoeschen, Helmholtz Zentrum München, German Research Ctr. for Environmental Health (Germany)

6913 53 **Analysis of in-plane signal-to-noise ratio in computed tomography** [6913-186]
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In Memoriam

Sam Dwyer

1932–2008

Inspirational planner for SPIE Medical Imaging symposia and chair of 15 conferences from 1983 to 1996

Sam Dwyer was a leading light in the swift growth of the field of medical imaging. At this 2008 Medical Imaging symposium, several colleagues expressed their appreciation of his professional achievements and the legacy of his contributions.

Andre Duerinckx recalls Sam's first big step into the limelight. "Sam chaired the Second International PACS meeting sponsored by SPIE in 1983. He stepped in when my professional direction shifted and I could not continue. Over the following years Sam became a leading force in the development of this new science and technology as the conferences developed and grew."

"He had an ability to predict important technology trends in medical imaging," says Steven Horii, a long-time SPIE Medical Imaging contributor and past conference chair.

Another past Medical Imaging conference chair with years of experience, Roger Schneider elaborates, "The growth of the initial conferences was phenomenal. They quickly expanded and outgrew several facilities. Topic areas increased. For example, we had been dealing with perception in sessions on image statistics. Sam first suggested that the field of perception theory and experiment was expanding so rapidly that it deserved its own conference. We also added conferences on image processing hardware, display, functional imaging, and special topics in ultrasound transducers."

"Sam was a true pioneer in our field," continues Schneider. "He was one of the first to envision the impact of digital technology on the storage, retrieval, communication, and

display of medical images, and one of the most active early explorers of the possibilities. He led the PACS conference into the merger with SPIE's image science conference to form the current Medical Imaging Symposium which many consider to be the premiere technical program on medical imaging in the world."

Murray Loew, another past conference chair, adds his observation, "Sam's academic, industrial, and clinical experience provided the perspective that enabled him to set priorities and give advice that helped many of us to make our own contributions. We all benefited greatly from his insights and his practical approach."

Schneider agrees. "Through all, Sam was an excellent partner and leader, calm, gentle yet persuasive, always congenially nudging everyone toward a better future. His ambitions were not for himself, but for the mutual enterprise. He was a very enthusiastic mentor and supporter of students and researchers new to the field without any concern for the possibility that their work might compete with his and was himself a superbly competent contributor."

An example of this is illustrated by John Strauss." Already well accomplished at the time of our first meeting, Sam made the time to take an eager but inexperienced student under his wing. I was not an 'assigned' grad student or research assistant from the University to which he had an obligation. I was a product manager from a vendor-partner. Over the years, from answering technical questions in an understandable way, to providing unassuming career guidance, as well as a sympathetic ear to the challenges of fatherhood or life's many challenges and struggles, Sam was always there for me."

"There are many things about Sam Dwyer that I recall with great fondness, like his always friendly and enthusiastic manner. His advice led me to my years of satisfying work on the ACR-NEMA Committee," adds Horii.

All agree that Sam had many other admirable traits. His wit and sense of humor were legendary, as one of Schneider's favorite memories illustrates. "At the opening of one conference Sam announced, from the podium, that it was the birthday of an important attendee. He said SPIE had requested that the Blue Angels do a flyover—but they already had something scheduled. As a substitute birthday recognition, Sam suggested we take our morning coffee break out on the terrace and watch the landscaping crew circle the flagpole on their riding lawnmowers."

Strauss describes the footprint left by Sam, "While Sam left a legacy through his professional accomplishments, perhaps more lasting is the heritage of leadership he has left behind. He felt it his obligation to pass on his knowledge and wisdom to the next generation, and I was blessed as a recipient. I have and will continue to honor Sam by sharing with those that come after me."

Sam Dwyer was a person of rare quality who will be sorely missed. His name has a permanent place in the annals of medical imaging, and his contributions continue in the flourishing growth of knowledge presented and discussed in the annual Medical Imaging conferences.