BIOGRAPHICAL SKETCH

NAME	POSITION TITLE
Aiping Ding, PhD, DSc	**Basic Life Science Research Associate, Department of Radiation Oncology, School of Medicine, Stanford University**
eRA COMMONS USER NAME DING.AIPING	

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Hebei University of Technology, TianJin, P.R. China	BS.	2003	Computer Science and Technology
Institute of Plasma Physics, Chinese Academy of Science, Hefei, P.R. China	MS.	2006	Nuclear Science and Engineering
Institute of Plasma Physics, Chinese Academy of Science, Hefei, P.R. China	DSc.	2009	Biophysics
Rensselaer Polytechnic Institute, Troy, New York, USA	PhD.	2012	Nuclear Engineering and Science
Rensselaer Polytechnic Institute, Troy, New York, USA	Post-Doc	2011-2012	Health/Medical Physics
Rensselaer Polytechnic Institute, Troy, New York, USA	Research Associate	2012-2013	Health/Medical Physics
Stanford University, Stanford, CA	Research Associate	2013-now	Radiation Therapy QA

A. Positions, Honors, and Professional Services

Positions

2007-2008 Visiting Scholar, Nuclear Engineering, Rensselaer Polytechnic Institute (RPI), Troy, NY
2011-2012 Postdoctoral Research Associate, Nuclear Engineering, RPI, Troy, NY
2012-2013 Research Associate, Nuclear Engineering, RPI, Troy, NY
2013-Present Research Associate, Department of Radiation Oncology, Stanford University, Stanford, CA

Honors

- Rensselaer Polytechnic Institute “Robert C. Block Prize" winner for Radiation Technology Research, 2012
- “The top 10 most popular paper of 2012” of *Physics in Medicine and Biology* (PMB).
- “Highlights of PMB in 2012”.

Reviews of Manuscripts (2011-Present)

- Journal Reviewer, “Radiation Doesimetry Protection”
- Journal Reviewer, “Physics in Medicine and Biology”
- Journal Reviewer, “American Journal of Roentgenolog”
- Journal Reviewer, “Journal of Radiological Protection”
- Journal Reviewer, “Health Physics”
- Journal Reviewer, “Medical Physics”
- Journal Reviewer, “Chinese Journal of Radiology”
- Journal Reviewer, “Chinese Journal of Radiological Medicine and Protection”
- Journal Reviewer, “ANS (American Nuclear Society) annual meeting”
- Journal Reviewer, “Radiology - Open Access (ROA)”

B. Selected Peer-Reviewed Publications

Most Relevant to Application

1. ***Aiping Ding***, Yiming Gao, Peter F Caracappa, Daniel J Long, Wesley E Bolch, Bob Liu, X. George Xu. VirtualDose: A New CT Dose Reporting Software for A Library of Adult and Pediatric Patients. Phys. Med. Biol. 2013 (in Press)
2. ***Aiping Ding***, Matthew Mille, Tianyu Liu, Peter F. Caracappa, X. George Xu. "Development and application of a set of BMI-adjustable phantoms for studying the effect of obesity on **CT doses** calculated using Monte Carlo simulations". Phys. Med. Biol. 57 (2012) 2441-2459 (**FEATURED ARTICLE**).
3. ***Aiping Ding***, Tianyu Liu, Wei Ji, X George Xu, FB Brown. "Evaluation Of Speedup Of Monte Carlo Calculations Of Simple Reactor Physics Problems Coded For The GPU/CUDA Environment". Proceedings of International Conference on Mathematics and Computational Methods Applied to Nuclear Science and Engineering (M&C 2011), Rio de Janeiro, RJ, Brazil, May 8-12, 2011.
4. ***Aiping Ding***, Jianwei Gu, X George Xu, Alexei V Trofimov. "Monte Carlo calculation of imaging doses from diagnostic multi-detector CT and kilovoltage cone beam CT as part of prostate cancer treatment plans." Med Phys. 37(12): 6199-6204, 2010.
5. ***Aiping Ding***, Di Zhang, X George Xu. "A Training Software Using Virtual-Reality Technology And Pre-Calculated Effective Dose Data." Health Phys. 96(5): 594-601, 2009.
6. ***Aiping Ding***, Jianwei Gu, Haikuan Liu, Peter F. Caracappa, X George Xu. "A software package for reporting multidetector CT (MDCT) doses." 2009 International Conference on Advances in Mathematics, Computational Methods. Saratoga Springs, New York, May 3-7, 2009, full paper published by American Nuclear Society: Item ID: 700346 / ISBN: 978-0-89448-069-0 CD-ROM.
7. ***Aiping Ding***, Ying Li, Lei Lu, Qin Zeng, Shanliang Zheng, Yican Wu. "Visualizing Input Files of Neutronics Model for MCNP Calculation." Nuclear Physics Review, 23(2) pp: 130-133, 2006.
8. Tianyu Liu, ***Aiping Ding***, Wei Ji, X. George Xu. "Preliminary tests of a 3D Monte Carlo neutron transport code for reactor analysis using NVIDIA C2050 GPU card and CUDA environment." PHYSOR 2012 – Advances in Reactor Physics – Linking Research, Industry, and Education. Knoxville, Tennessee, USA, April 15-20, 2012, on CD-ROM, American Nuclear Society, LaGrange Park, IL 2012.
9. Bryan Bednarz, George Chen, Bin Han, ***Aiping Ding***, X George Xu. "Comparison of Particle Tracking Features in GEANT4 and MCNPX Codes for Applications in Mapping of Proton Range Uncertainty." Nuclear Technology 175(1): 2-5, 2011.
10. Juying Zhang, Yong Hum Na, ***Aiping Ding***, X George Xu, "Deformable and Posture-changing Computational Phantoms and Dosimetry Data for Standard External-Beam Irradiations." 2009 International Conference on Advances in Mathematics, Computational Methods. Saratoga Springs, New York, May 3-7, 2009, full paper published by American Nuclear Society: Item ID: 700346 / ISBN: 978-0-89448-069-0 CD-ROM.
11. WU Yi-can, LI Ying, LU Lei, ***Aiping Ding***, HU Hai-min, ZENG Qin, LUO Yue-tong, ZHENG Shan-liang, HUANG Qun-ying, CHEN Yi-xue. "Research and development of the automatic modeling system for Monte Carlo particle transport simulation", Chinese Journal of Nuclear Science and Engineering, 2006:26(1) pp: 20-27,78 .

Experience Developing Commercial / Industrial Software Packages

1. ***Aiping Ding***, Di Zhang, X George Xu. "A Training Software Using Virtual-Reality Technology And Pre-Calculated Effective Dose Data." Health Phys. 96(5): 594-601, 2009.
2. ***Aiping Ding***, Jianwei Gu, Haikuan Liu, Peter F. Caracappa, X George Xu. "A software package for reporting multidetector CT (MDCT) doses." 2009 International Conference on Advances in Mathematics, Computational Methods. Saratoga Springs, New York, May 3-7, 2009, full paper published by American Nuclear Society: Item ID: 700346 / ISBN: 978-0-89448-069-0 CD-ROM.
3. ***Aiping Ding***, Jianwei Gu, Matt Mille, X George Xu, Bod Liu. "***VirtualDose***: a CT dose reporting software based on anatomically realistic phantoms." Society of Nuclear Medicine Annual Meeting, Salt Lake City, Utah, June 5-9, 2010.

C. Research Support

Previous

R42EB010404 (PI: Dr. X George Xu) 7/01/2010-8/30/2012 NIH/NIBIB
VirtualDose Software for Diagnostic CT Doses to Adults and Children

Current

R01 CA133474 (PI: Dr. Lei Xing): 08/15/2012- 06/30/2013 NIH/NCI
Computational Tools for Adaptive Radiation Therapy