### **BIOGRAPHICAL SKETCH**

NAME: Kenneth H. Wong

### POSITION TITLE: Associate Dean

EDUCATION/TRAINING

| INSTITUTION AND LOCATION                                   | DEGREE<br>(if applicable) | Completion<br>YEAR<br>YYYY | FIELD OF STUDY                           |
|--|---------------------------|----------------------------|--|
| Brandeis University, Waltham, MA                           | BA                        | 1991                       | Physics                                  |
| University of California, Berkley, CA and San Francisco CA | PhD                       | 2002                       | Bioengineering                           |
| Georgetown University, Washington DC                       | Post Doc                  | 2002-2005                  | Imaging Science &<br>Information Systems |

### A. Positions

| 2012 - Present | Associate Dean of the Graduate School in the National Capital Region (NCR); Director of the    |
|----------------|--|
|                | Northern Virginia Center, Virginia Tech-NCR, Falls Church, VA                                  |
| 2010-2016      | Director, Biomedical Technology Development & Management (BTDM) M.S., Virginia Tech-           |
|                | NCR, Arlington, VA   |
| 2009-Present   | Research Assistant Professor, Physics, Virginia Tech-NCR, Arlington, VA                        |
| 2007-2009      | Physics Director, Preclinical Imaging Research Laboratory (PIRL) Georgetown University,        |
|                | Washington, DC   |
| 2005-2009      | Assistant Professor, Imaging Science and Information Systems Center, Georgetown University,    |
|                | Washington, DC   |
| 2002-2005      | Postdoctoral Research Fellow, Imaging Science and Information Systems Center, Georgetown       |
|                | University, Washington, DC   |
| 1994-2002      | Graduate Student Research Assistant, Physics Research Laboratory, University of California San |
|                | Francisco, San Francisco, CA   |
| 2001           | Consultant, Amira Medical, Scotts Valley, CA   |

#### **B.** Publications and Presentations Book Chapters:

1. **Kenneth H. Wong**, "Imaging Modalities", in *Image-Guided Interventions* (Terry Peters and Kevin Cleary, editors), Springer Science + Business Media, LLC, 2008.

## **Peer-Reviewed Journal Publications:**

- Tammie L. Benzinger, David Brody, Sylvain Cardin, Kenneth C. Curley, Mark A. Mintun, Seong K. Mun, Kenneth H. Wong, and Jean R. Wrathall, "Blast-related brain injury: imaging for clinical and research applications: report of the 2008 St. Louis workshop" *Journal of Neurotrauma* 2009 Dec; 26(12):2127-44.
- 2. Leigh W. Jerome, **Kenneth H. Wong**, "Industry roundtable for interoperability and business process," *Military Medicine* 2009 May; 174(5 Suppl): 51-5.
- 3. Sonja Dieterich, Kevin Cleary, Warren D'Souza, Martin Murphy, **Kenneth H. Wong**, and Paul Keall, "Locating and targeting moving tumors with radiation beams," *Medical Physics* 2008 Dec; 35(12):5684-94.
- 4. Kenneth H. Wong, Sonja Dieterich, Jonathan Tang, and Kevin Cleary, "Quantitative Measurement of CyberKnife Robotic Arm Steering," *Technology in Cancer Research and Treatment* 6(6):589-594, 2007.
- Youngho Seo, Kenneth H. Wong, Mingshan Sun, Benjamin L. Franc, Randall A. Hawkins, and Bruce H. Hasegawa, "Correction of photon attenuation and collimator response for a body-contouring SPECT/CT imaging system," *Journal of Nuclear Medicine* 46(5):868-77, 2005.
- 6. Youngho Seo, **Kenneth H. Wong**, Bruce H. Hasegawa, "Calculation and validation of the use of effective attenuation coefficient for attenuation correction in In-111 SPECT," *Medical Physics* 32(12):3628-35, 2005.
- 7. Bruce H. Hasegawa, **Kenneth H. Wong**, Koji Iwata, William Barber, Andrew Hwang, Anne Sakdinawat, Mohan Ramaswamy, David C. Price, Randall A. Hawkins, "Dual-modality imaging of cancer with SPECT/CT," *Technology in Cancer Research & Treatment* 1(6):449-58, 2002.
- 8. Bruce H. Hasegawa, H. Roger Tang, Angela J. Da Silva, **Kenneth H. Wong**, Koji Iwata, and Max C. Wu, "Dual modality imaging," *Nuclear Instruments & Methods in Physics Research A* 471:140-4, 2001.

 Angela J. Da Silva, H. Roger Tang, Kenneth H. Wong, Max C. Wu, Michael W. Dae, and Bruce H. Hasegawa, "Absolute Quantification of Regional Myocardial Uptake of Technetium-99m-labeled Sestamibi with SPECT: Experimental Validation in a Porcine Model," *Journal of Nuclear Medicine* 42(5):772-9, 2001.

# Peer-Reviewed Conference Presentations/Papers (Excerpt):

- 1. Kenneth H. Wong, "Open Source Development of Mobile Health Platforms for Combat Casualty Care." OSEHRA Open Source Summit, Bethesda, MD, June 13-14, 2017.
- 2. Kenneth H. Wong. "Development of a Medic Smartphone Platform using Open Source Software." Open Source EHR Summit and Workshop, National Harbor, MD, October 18, 2012.
- Jeryl C. Jones, Kenneth H. Wong, John Rossmeisl, Karen Inzana, Daniel Geiger, and Richard Sherry. "Measurement of spinal cord stretch injury using positional computed tomography and finite element analysis in a dog with cranio-cervical malformation/malarticulation." American Society of Spine Radiology Annual Symposium. Las Vegas, NV. Feb. 19, 2010. <u>http://theassr.org/resourcelibrary/meeting-abstracts/</u>
- 4. Emmanuel Wilson, Chris Chiodo, **Kenneth H. Wong**, Stanley Fricke, Mira Jung, and Kevin Cleary. "Robotically assisted small animal MRI-guided mouse biopsy." Conference Record of the SPIE Medical Imaging Symposium, San Diego, CA, February 2010.
- 5. **Kenneth H. Wong**, Ben S.C. Lo, Ching-Fang Lin, Bob Lasser, and Seong K. Mun. "Imaging components for a robotic casualty evaluation system." Conference Proceedings of the IEEE Engineering in Medicine and Biology Society 1:467-70, September 2009.
- Kenneth H. Wong, Mira Jung, Anatoly Dritschilo, G. Larry Maxwell. "Dosimetric Optimization of Interstitial Gene Therapy Delivery Systems." Oak Ridge National Laboratory Biomedical Science and Engineering Conference, March 18-19, 2009.
- Kenneth H. Wong, "Wearable Sensor Arrays for Blast and Acceleration-Induced Injury," 4<sup>th</sup> Annual World Congress of the International Brain Mapping and Intraoperative Surgical Planning Society (IBMISPS), Washington, DC, September 2007.
- 8. **Kenneth H. Wong**, Mira Jung, G. Larry Maxwell, Anatoly Dritschilo, "Dosimetry Studies of GeneSeed Therapy," American Association of Physicists in Medicine, Minneapolis, MN, July 2007.
- Kenneth Wong, Sara Petrillo, Filip Banovac, Joseph Rahill, Elliot Levy, Raj Shekhar, David Earl-Graef, Kevin Cleary, "PET/CT-guided interventional procedures: rationale, justification, initial study, and research plan," Int J CARS (2007) 2 (Suppl 1).
- 10. **Kenneth H. Wong**, Lucian G. Gruionu, Patrick Cheng, Pamela Abshire, Valeri Saveliev, Seong K. Mun, Kevin Cleary, and Irving N. Weinberg, "PETglove<sup>™</sup>: A new technology for portable molecular imaging," SPIE Medical Imaging, San Diego, CA, February 2007.
- 11. Ziv Yaniv, **Kenneth H. Wong**, Filip Banovac, Elliot Levy, and Kevin Cleary, "The influence of CT based attenuation correction on PET/CT registration: an evaluation study," SPIE Medical Imaging, San Diego, CA, February 2007.
- 12. Ralph Lin, Sonja Dieterich, Kevin Cleary, and **Kenneth H. Wong**, "Simulation of Life-Like Breathing Patterns for a Respiratory Phantom," CyberKnife Users' Meeting, Palm Springs, CA, January 2007.
- 13. Kenneth H. Wong, Sonja Dieterich, Jonathan Tang, and Kevin Cleary, "Patient-Derived Breathing Patterns for a Hardware Respiratory Motion Simulator," ASTRO, Philadelphia, PA, November 2006.
- 14. **Kenneth H. Wong**, Elliot Levy, Ziv Yaniv, Filip Banovac, David Earl-Graef, and Kevin Cleary, "Integrated PET/CT Guidance System for Oncologic Interventional Radiology," IEEE Nuclear Science Symposium/Medical Imaging Conference, San Diego, CA, October 2006.
- 15. Kenneth H. Wong, Luis Ibanez, Teo Popa, and Kevin Cleary, "Creation of 4D imaging data using open source image registration software," SPIE Medical Imaging, San Diego, CA, February 2006.
- 16. Teo Popa, Luis Ibanez, Kevin Cleary, and **Kenneth H. Wong**, "ITK implementation of deformable registration methods for time-varying (4D) imaging data," SPIE Medical Imaging, San Diego, CA, February 2006.
- 17. Kenneth H. Wong, Sonja Dieterich, Jonathan Tang, and Kevin Cleary, "Evaluation of CyberKnife Synchrony Accuracy Using Optical Tracking," CyberKnife Users' Meeting, Carlsbad, CA, January 2006.
- 18. Youngho Seo, Benjamin Franc, Randall A. Hawkins, **Kenneth H. Wong**, and Bruce H. Hasegawa, "Progress in SPECT/CT Imaging of Prostate Cancer," RSNA Scientific Assembly and Annual Meeting, Chicago, IL, 2005.
- Kenneth H. Wong, Sonja Dieterich, Jonathan Tang, Dan Stoianovici, and Kevin Cleary, "Evaluation of Respiratory Motion Compensation Methods for Stereotactic Radiosurgery," in *Proceedings of the International Conference of Medical Physics (ICMP 2005) and the German Society for Biomedical Engineering (BMT 2005)*, pp832-3, Nuremberg, Germany, September 2005.