CURRICULUM VITAE

George Tabatadze, Ph.D.

U.S. Transuranium and Uranium Registries
College of Pharmacy, Washington State University
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EDUCATION

2007 – 2012, PhD in Applied Physics (Health Physics)

Idaho State University, Department of Physics (Pocatello, ID): "USTUR Case 0102 Voxel Phantom for External Gamma-Ray Detector Response Simulation"

2004 – 2007, MS in Health Physics (Medical Physics)

University of Nevada Las Vegas, Department of Health Physics and Diagnostic Sciences (Las Vegas, NV): "Alpha Particle Transport in Trabecular Bone Images"

1999 – 2003, BS in Physics and Computer Science

Tbilisi State University, Department of Physics (Tbilisi, Rep. of Georgia)

PROFESSIONAL EXPERIENCE

04/2017 – Present, Assistant Research Professor

United States Transuranium and Uranium Registries, College of Pharmacy, Washington State University (Richland, WA)

08/2014 – 03/2017, Research Associate

United States Transuranium and Uranium Registries, College of Pharmacy, Washington State University (Richland, WA)

08/2012 – 05/2014, Visiting Assistant Professor

Department of Nuclear Engineering and Health Physics, Idaho State University (Pocatello, ID)

07/2013 – 08/2013, Consulting

Center for Advanced Energy Studies, (Idaho Falls, ID)

05/2008 – 08/2012, Research Assistant

Environmental Assessment Laboratory, Idaho State University (Pocatello, ID)

08/2007 – 05/2008, Teaching Assistant

Department of Physics, Idaho State University (Pocatello, ID)

08/2004 – 06/2007, Graduate Assistant

Department of Health Physics and Diagnostic Sciences, University of Nevada Las Vegas (Las Vegas, NV)

TEACHING PORTFOLIO

Lectures and Course Development (WSU)

- ENVR_SCI 520/520L - Radiation Instrumentation: "Solid-state charged particle detectors", Fall 2015, Graduate Certificate Program in Radiation Protection at Washington State University, Tri Cities.

Lectures and Course Development (ISU)

- Quantitative Methods in Physics, 1-semester graduate level course, Department of Nuclear Engineering and Health Physics, Idaho State University, Pocatello, ID
- Radiation Physics, 1 semester graduate and upper-level undergraduate course (teaching methods: on campus, televised to extended campus, online), Department of Nuclear Engineering and Health Physics, Idaho State University, Pocatello, ID
- External Dosimetry, 1-semester graduate and upper-level undergraduate course (on campus, televised, online), Department of Nuclear Engineering and Health Physics, Idaho State University, Pocatello, ID
- Radiation Regulations, 1-semester graduate level course (on campus, televised, online), Department of Nuclear Engineering and Health Physics, Idaho State University, Pocatello, ID
- Topics in Health Physics, 2-semester graduate and upper-level undergraduate course (on campus, televised, online), Department of Nuclear Engineering and Health Physics, Idaho State University, Pocatello, ID
- ABHP Review, 1 semester graduate level course (on campus, televised, online), Department of Nuclear Engineering and Health Physics, Idaho State University, Pocatello, ID
- Medical Applications in Engineering and Physics – Medical Imaging Physics (on campus, televised, online). 1 semester graduate level course, Department of Nuclear Engineering and Health Physics, Idaho State University, Pocatello, ID

PROFESSIONAL AFFILIATIONS

- Columbia Chapter of Health Physics Society, 2014 – present
- Georgian Health Physics Association, 2007 – present
- Health Physics Society, 2005 – present

INSTITUTIONAL SERVICE

Advisory Board

- Graduate Certificate Program in Radiation Protection, Washington State University, 2016 – present

PROFESSIONAL SERVICE

National and International Professional Organizations

- President-elect – Columbia Chapter of Health Physics Society, 2017 – Present
- Program Chair – Columbia Chapter of Health Physics Society, 2017 – Present
- Member – Health Physics Society, International Collaboration Committee, 2015 – present
- Website Editor – Georgian Health Physics Association, 2007 – present

HONORS AND AWARDS

Scholarships

- Health Physics Society Fellowship, Richard J. Burk, Jr. Fellowship award, 2010

Affiliations

- Center for Advanced Energy Studies Affiliate, 2013 – 2014

Travel Grants

- Travel grant, 57th Health Physics Society Annual Meeting, Sacramento, CA, 22 – 26 July, 2012
- Travel grant, 56th Health Physics Society Annual Meeting, Palm Beach, FL, 26 – 30 June, 2011
- Travel grant, 54th Health Physics Society Annual Meeting, Minneapolis, MN, 12 – 16 July, 2009
- Travel grant, 51st Health Physics Society Annual Meeting, Providence, RI, 25 – 29 June, 2006

PEER-REVIEWED PUBLICATIONS

Papers

2. Khalaf M, Brey RR, Harris JT, Derryberry D, **Tabatadze G.** Monte Carlo Simulation of In-Vivo Measurement of the Most Suitable Knee Position for the Optimal Measurement of Activity. *Paper*, Health Physics, 104(4):405-412, 2013.

1. **Tabatadze G.**, Brey RR, Kramer GH, Capello K, Meldrum DJ. Re-evaluation of ^{241}Am Content in the USTUR Case 0102 Leg Phantom. *Paper*, Health Physics, 104(1):1-8, 2013.

Abstracts

8. **Tabatadze G.**, Avtandilashvili M., Tolmacxhev S. Plutonium in Tissues of Occupationally Exposed Individuals. *Abstract*, Health Physics, Vol. 113(Suppl. 1):S94 2017.
7. **Tabatadze G.**, Miller B., Tolmachev S. Digital Autoradiography of ^{241}Am Spatial Distribution within Trabecular Bone Regions; *Abstract*, Health Physics, Vol. 111(Suppl. 1):S41 2016.
6. Miller B., **Tabatadze G.**, Dion M., Frost S., Orozco J., Press O., Sandmaier B., Miederer M., Brochhausen C., Tolmachev S. Quantitative Single-Particle Digital Autoradiography With Ionizing-Radiation Quantum Imaging Detector; *Abstract*, Health Physics, Vol. 109(Suppl. 1):S9, 2015.
5. **Tabatadze G.**, Miller B., Tolmachev S. Radionuclide Distribution Measurement Within Anatomical Bone Structures Using Digital Autoradiography; *Abstract*, Health Physics, Vol. 109(Suppl. 1):S9, 2015.
4. **Tabatadze G.**, Brey RR. ^{241}Am Whole Body Counting Efficiency Dependence on Bone Density Variation. *Abstract*, Health Physics, Vol. 103(Suppl. 1):S16, 2012.
3. **Tabatadze, G.**, Brey, R., James, T; Modeling Am-241 Distribution in Bones of the USTUR Case 0102 Human Leg Phantom; *Abstract*, Health Physics, Vol. 101(Suppl. 1):S14, 2011.
2. **Tabatadze, G.**, Brey, R., James, T., Theel, D., Todd, S; USTUR Case 0102 CT Image Processing Techniques for Voxel Phantom Development; *Abstract*, Health Physics, Vol. 97(Suppl. 1): S11, 2009.
1. **Tabatadze, G.**, Brey, R.R., James, A.C., Neba, N.R; USTUR Case 0102 Voxel Phantom for External Radiation Detector Response Simulation; *Abstract*, Health Physics, Vol. 95(Suppl. 1):S10, 2008.

CONFERENCE PRESENTATIONS

Podium Presentations

6. Digital Autoradiography of Bone-Seeking Radionuclides in Human. 6th Asia-Pacific Symposium on Radiochemistry, ICC Jeju, Jeju Island, Korea, 17-22 September, 2017.
5. Plutonium in Tissues of Occupationally Exposed Individuals. 62nd Annual Health Physics Society Meeting, Raleigh, NC, 9-13 July, 2017.

4. Digital Autoradiography of ^{241}Am Spatial Distribution within Trabecular Bone Regions. 61st Annual Health Physics Society Meeting, Spokane, WA, 17-21 July, 2016.

3. Analysis of High-Fired Plutonium Oxide and Other Actinides in MAPEP Soil Samples; *Podium Presentation*, 61st Annual Radiobioassay and Radiochemical Measurements Conference, Iowa City, IA, 25-30 October, 2015.

2. Radionuclide Distribution Measurement Within Anatomical Bone Structures Using Digital Autoradiography. 60th Annual Health Physics Society Meeting, Indianapolis, IN, 12-16 July, 2015.

1. USTUR Case 0102 Voxel Phantom for External Radiation Detector Response Simulation. Health Physics Society's 12th Annual John Horan Symposium, Salt Lake City, UT, 25 April, 2008.

Poster Presentations

5. Americium-241 Whole Body Counting Efficiency Dependence on Bone Density Variation. 57th Annual Health Physics Society Meeting, Sacramento, CA, 22-26 July, 2012.

4. Modeling Am-241 Distribution in Bones of the USTUR Case 0102 Human Leg Phantom. 56th Annual Health Physics Society Meeting, Palm Beach, FL, 26-30 June, 2011.

3. USTUR Case 0102 CT Image Processing Techniques for Voxel Phantom Development. 54th Annual Health Physics Society Meeting, Minneapolis, MN, 12-16 July, 2009.

2. USTUR Case 0102 Voxel Phantom for External Radiation Detector Response Simulation. 53rd Annual Health Physics Society Meeting, Pittsburgh, PA, 13-17 July, 2008.

1. Alpha Particle Transport in Voxelized Trabecular Bone Images. 51st Annual Health Physics Society Meeting, Providence, RI, 25-29 June, 2006.