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CURRICULUM VITAE – SUZANNE E. LAPI, PHD

BORN: August 9, 1977; Duncan, Canada

CITIZENSHIP: USA, Canada

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Washington University School of Medicine
510 S. Kingshighway, Campus Box 8131
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PRESENT POSITION: Assistant Professor
Mallinckrodt Institute of Radiology
Washington University School of Medicine, St. Louis, MO

EDUCATION:

Undergraduate:

Sept 1995 – May 2001
Simon Fraser University: Bachelor of Science**,**
Department of Environmental Science

Graduate:

Jan 2002 - Aug 2003
Simon Fraser University: Master of Science
Thesis Title: Development of an intense ^{15}O beam using low energy protons

Department of Chemistry
Co-supervisors: Dr. Thomas Ruth and Dr. John D'Auria

Sept 2003 – August 2007
Simon Fraser University: Doctor of Philosophy
Thesis Title: Production and evaluation of high specific activity ^{186}Re
Department of Chemistry
Co-supervisors: Dr. Thomas Ruth and Dr. Paul Percival

ACADEMIC POSITIONS / EMPLOYMENT:

Jan 1998 to August 1998
Environment Canada
Pacific Environmental Research Center
North Vancouver B.C.
Analytical Chemistry Technician

May 2000 to August 2000 and May 1999 to Dec 1999
Stanley Pharmaceuticals
North Vancouver B.C.
Analytical Chemistry Technician

Sept 2002 to Dec 2002
Simon Fraser University
8888 University Drive, Burnaby, B.C.
Teaching Assistant for Chemistry 122 (General Chemistry II)
Supervisor: Dr. Zuo-Guang Ye

April 2005 to July 2007
Accsys Technology
1177 A Quarry Lane, Pleasanton, CA
Consultant

Sept 2005 to Nov 2005
Oak Ridge National Lab: Physics Division
Oak Ridge, TN.
Ph. D. Thesis Research
Supervisor: Dr. Kenneth Carter

Sept 2003 to August 2007
TRIUMF PET Group
4004 Wesbrook Mall, Vancouver, B.C.
Ph. D. Thesis Research
Supervisor: Dr. Thomas Ruth

Sept 2007 to Dec 2008
UCSF Radiology and Biomedical Imaging
185 Berry St, San Francisco, CA
Postdoctoral Fellow
Supervisor: Dr. Henry VanBrocklin

Jan 2009-July 2014
Washington University, Radiology
510 S. Kingshighway, Saint Louis, MO
Assistant Professor

August 2012-Present
Washington University, Biomedical Engineering
510 S. Kingshighway, Saint Louis, MO
Assistant Professor

September 2012-Present
Washington University, Chemistry
510 S. Kingshighway, Saint Louis, MO
Adjunct Assistant Professor

January 2013-Present
Washington University, Division of Biology and Biomedical Sciences
510 S. Kingshighway, Saint Louis, MO
Assistant Professor

July 2014 -Present
Washington University, Radiology
510 S. Kingshighway, Saint Louis, MO
Associate Professor

UNIVERSITY APPOINTMENTS AND COMMITTEES:

Siteman Cancer Center Member 2010-Present
Institute of Clinical and Translational Sciences 2011-Present
Cyclotron Users Group 2009-Present
Positron Emitting Radionuclides Radiation Committee (PERCS) 2010-Present
Animal Studies Committee 2011-2014
Chemistry Faculty Search Committee – Fall 2011
Director, MIR Summer Research Program 2010-Present
Director of Isotope Production 2011- Present
MOOG scholarship selection committee 2010-Present
DBBS Admissions committee 2013-Present

THESIS DEFENSE COMMITEES:

Washington University Chemistry:

2009: Guorong Sun
2010: Kim Nguyen
2011: Yinyin Song
2012: Bo Bi
2013: Valentine Bumbu, Xin Peng, Shiyi Zhang
2014: Tara Mastren

HONORS AND AWARDS:

August 2010	Mario Nicolini Prize, Terachem, Italy
June 2010	Harry Gray Family Fund Award, Metals in Medicine, NH
January 2007	President's Research Stipend, Simon Fraser University.
September 2006	Student Travel Bursary, Tc Symposium, Bressanone, IT.
May 2006	2006 Chemistry Poster Competition – 1st Place, SFU.
February 2006	SNM Student Travel Bursary for Midwinter meeting, Tempe, AZ.
February 2006	Carl H. Westcott Fellowship, University of Alberta/TRIUMF.
December 2005	Student Bursary, Pacific Rim Chemistry Symposium, Honolulu, HI.
October 2005	2005 Chemistry Oral Competition – 2nd Place, SFU.
August 2005	TRIUMF Life Sciences Scholarship.
July 2005	Student Travel Bursary for 2005 International Symposium on Radiopharmaceutical Chemistry , University of Iowa.
May 2005	Student Travel Bursary for Summer School on Targets and Ion Sources for the Production of Radioactive Ion Beams, Oak Ridge, TN.
August 2005	Student Travel Bursary for the 288th American Chemical Society Meeting. Philadelphia, PA.
September 2004	Student Travel Bursary for 2004 International Symposium on Radiohalogens Whistler, BC.
November 2003	Graduate Fellowship, Simon Fraser University

PROFESSIONAL SOCIETIES, ORGANIZATIONS AND COMMITTEES:

Society of Nuclear Medicine
- Member 2008-Present

Radiopharmaceutical Sciences Council
- Member 2008-Present
- Board Member 2011-Present
- Vice President Elect 2013-present
- Continuing Education Session Organizer: 2011, 2012, 2013, 2014

Society of Radiopharmaceutical Sciences
- Member 2008-Present

American Chemical Society
- Member 2008-Present
- Board Member 2011-Present
- Session Organizer, 2013

American Nuclear Society
- Member 2010-Present
- Organizing Committee 2010, 2014 Conference on Isotopes

International Atomic Energy Agency

Chief Scientific Investigator on the International Atomic Energy Agency (IAEA) coordinated research project "Production and utilization of Copper-64 and Iodine -124" 2010-2013 (United States Representative)

Chief Scientific Investigator on the International Atomic Energy Agency (IAEA) coordinated research project "Accelerator-based Alternatives to Non-HEU production of Mo-99 / Tc99m" 2012-present (United States Representative)

Nuclear Science Advisory Committee (NSAC)

Subcommittee to assess the effectiveness of the National Nuclear Security Administration Global Threat Reduction Initiative's Domestic Molybdenum-99 Program 2013-Present

Nuclear Science Advisory Committee (NSAC)

Isotopes Subcommittee 2014-Present

Working Group on Isotope Harvesting at FRIB: 2010-Present

Organizing Committee: 2012, 2014 Workshop on Targetry and Target Chemistry
Organizing Committee: 2013 ACS Annual Meeting: Isotope Production, Past Present and Future
Organizing Committee: 2013 Radiometals Meeting
Organizing Committee: 2014 International Conference on Isotopes (8^{th} ICI)

JOURNAL AND ABSTRACT REVIEWER:

Journal Reviewer: Journal of Nuclear Medicine, Cancer Research, Molecular Imaging, Applied Radiation and Isotopes, Nuclear Medicine and Biology, Pharmaceutical Research, Current Topics in Medicinal Chemistry, Plos One, Nature Protocols, Molecules, Molecular Imaging and Biology, Chemical Communications, Future Medicinal Chemistry, Radiochimica Acta, Cancer Biology, Bioconjugate Chemistry, Molecular Pharmaceutics,

Abstract Reviewer: Society of Nuclear Medicine and Molecular Imaging, World Molecular Imaging Society, International Society of Radiopharmaceutical Chemistry, American Chemical Society, American Nuclear Society, Workshop on Targetry and Target Chemistry

INVITED LECTURES:

1. **Lapi, S.E**., (2010) Development of Zr-89, a longer lived PET radionuclide for molecular imaging. Presented at **Metals in Medicine Gordon Conference**,, Andover , NH
2. **Lapi, S.E.**, (2010) Opportunities for the production of medical isotopes with FRIB. Presented at the **American Chemical Society Annual Meeting**, Boston, MA
3. **Lapi, S.E**. (2010) From Antimatter to Disease Detection: The Use of Radioisotopes in the Life Sciences. Presented at **Oak Ridge National Laboratory**
4. **Lapi, S.E**. (2010) Sugar-free PET: New developments in radiometal imaging agents. Presented at **Memorial Sloan-Kettering Cancer Center**
5. **Lapi, S.E**. (2011) Radioactive Transition Metals: Cyclotron Production and Uses in Medical Imaging: Presented at **Chemistry Department, Washington University,** MO
6. **Lapi, S.E**. (2011) Imaging Applications of Radiometals. Presented at **Beckman Institute for Imaging,** University of Illinois, Urbana
7. **Lapi, S.E**. (2011) Ag-111: a radiotracer for silver chemistry and biochemistry. Presented at **Chemistry Department, University of Akron,** OH
8. **Lapi, S.E**. (2011) Imaging with Radiometals. Presented at **Society of Nuclear Medicine Annual meeting,** San Antonio, TX

9. **Lapi, S.E**. (2012) Diagnostic-Therapeutic Radioisotope Pairs. Presented at **Society of Nuclear Medicine Midwinter meeting,** Orlando, FL
10. **Lapi, S.E**. (2012) Copper-64 and Zirconium-89 PET Imaging Agents in Oncology Presented at **Chemistry Department, Missouri University**, Columbia, MO
11. **Lapi, S.E**. (2012) From Antimatter to Disease Detection, Presented at **Chemistry Department, Hope College**, MI,
12. **Lapi, S.E. (**2012) Imaging with Radiometals, The Nonstandard Isotopes become Standard. Presented at **Canadian Society of Chemistry Annual Meeting,** Calgary, AB
13. **Lapi, S.E**. (2012) PET Imaging with Radiometals, Presented at **MGH, Boston, MA**
14. **Lapi, S.E**. (2013) ImmunoPET Imaging: Where Antimatter Meets Antibodies, Presented at **Tgen, Phoenix, AZ**
15. **Lapi, S.E**. (2013) Radiochemistry Training at Washington University in St. Louis, Presented at **Chemistry Department, University of Iowa, IA**
16. **Lapi, S.E**. (2013) Production of PET Radiometals: ^{64}Cu and ^{89}Zr, Presented at **North American Particle Accelerator Conference, Pasadena, CA**
17. **Lapi, S.E**. (2013) Accelerator Production of Isotopes for Medical Use, Presented at **Oak Ridge National Laboratory, TN**
18. **Lapi, S.E**. (2014) Accelerator production of isotopes for medical use: A tale of two energies, Presented at **American Physics Society Annual Meeting, Savannah, GA**
19. **Lapi, S.E**. (2014) Radiometals for PET and SPECT: Data from the present and thoughts on the future Presented at **Turku PET Symposium, Turku Finland**
20. **Lapi, S.E**. (2014) Cyclotron Production and Separation of Positron Emitting Radiometals Presented at **Canadian Society of Chemistry annual meeting, Vancouver, Canada**
21. **Lapi, S.E**. (2014) Radiolabeled Antibodies (ImmunoPET) for Prediction of Response to Targeted Therapeutics Presented at **2014 Society of Nuclear Medicine and Molecular Imaging, St. Louis, MO**
22. **Lapi, S.E**. (2014) Imaging of GLP1R for Assessment of Pancreatic Beta Cell Mass Presented at **2014 Society of Nuclear Medicine and Molecular Imaging, St. Louis, MO**
23. **Lapi, S.E**. (2014) Cyclotron Production and Imaging Applications of Positron Emitting Radiometals Presented at **8th International Conference on Isotope ,** Chicago, IL
24. **Lapi, S.E**. (2014) PET imaging with radiometals: Cu-64 and Zr-89 Presented at **2014 World Federation of Nuclear Medicine and Biology ,** Cancun, MX

CONSULTING RELATIONSHIPS AND BOARD MEMBERSHIPS:

BioIsotopes LLC, Columbia, MO : Scientific Advisory Board Member (2012-Present)
The Gollman Group, Inc, : Consultant (2013-Present)

ACTIVE RESEARCH SUPPORT:

HHSN268201000046 (Gropler/Brody) 08/10-07/15
NIH $17.8M total costs (Lapi subaward - $260,000)
Integrated Nanosystems for Diagnosis and Therapy
Role: Co-Investigator
The central mission of this project is to develop a group of well-characterized and versatile nanoscale agents that can be assembled, labeled, targeted, filled, and activated as needed for the diagnosis and treatment of various diseases of relevance to the National Heart Lung and Blood Institute (NHLBI).

1R21CA182945-01 (Dehdashti) 01/14-12/15
A Feasibility PET Study of HER2 Receptors in Breast Cancer Using ^{89}Zr-Trastuzumab.
Role: Co-Investigator
The goal of this grant is to perform a pilot study with goals of demonstrating the feasibility of imaging breast cancer patients with ^{89}Zr-trastuzumab-PET, evaluating the relationship between tumor ^{89}Zr-trastuzumab uptake and in vitro status of HER2, assessing the safety of ^{89}Zr-trastuzumab and determining the human dosimetry of this radiopharmaceutical.

DESC0006435 (Lapi) 10/11-9/16
DOE $750,000 total costs
Production of ^{99m}Tc using a medical cyclotron
The goal of this project is to investigate to production capability of ^{99m}Tc using a small medical cyclotron. Production rates will be determined and targetry, separation and quality control procedures will be developed.

DESC0006862 (Lapi) 10/11-9/16
NNSA (sub from UCB) $25M total costs (Lapi subaward $900,000 total)
National Nuclear Science Consortium
Role: Principal Investigator, Washington University
The goal of this project is to provide a pipeline of nuclear educated experts to work in the fields of nuclear chemistry and physics. To this end students and postdocs will gain experience in isotope production and separation techniques which are applicable in a variety of fields.

DESC0007352 (Lapi/Peaslee at Hope College) 01/12-12/13 (currently in NCE)
DOE $840,000 total costs (Lapi subaward $229,800)
Potential for Isotope Harvesting at FRIB
Role: Co-PI
The Facility for Rare Isotope Beams (FRIB) will be a new national user facility for nuclear science, funded by the Department of Energy Office of Science (DOE-SC) Office of Nuclear Physics and operated by Michigan State University (MSU). This nuclear physics facility will generate a host of new isotopes that could be "harvested" for off-line use without affecting the users of the radioactive ion beam facility. This project is a feasibility study to harvest useful long-lived radioisotopes from the Facility for Rare Isotope Beams (FRIB) under similar conditions available now at the National Superconducting Cyclotron Lab (NSCL).

DESC0008432 (Lapi) 09/12-8/16
DOE $2,000,000 total costs
Training in Techniques and Translation: Novel Nuclear Medicine Imaging Agents for Oncology and Neurology
The goal of this proposal is to provide critical interdisciplinary research training for the next generation of radiochemists and nuclear medicine physicians. The training projects will draw upon the extensive and diverse expertise of faculty from the Department of Radiology at Washington University in St. Louis and the Department of Chemistry at the University of Illinois at Urbana-Champaign. This multidisciplinary team consists of tenured and tenure-track basic science and clinical faculty who are actively involved in the development, application, and translation of radiopharmaceuticals. The research and training plans are also supported through outstanding clinical research collaborators in neurology, immunology, oncology and neurosurgery.

DESC0012737 (Dehdashti) 10/14-9/16
DOE $1,000,000 total costs
Interdisciplinary Training in Translational Radiopharmaceutical Development
and Nuclear Medicine Research for Oncologic, Neurologic, and Cardiovascular Imaging
Role: Co-PI
The goal of this proposal is to provide outstanding, clinically relevant translational research training for the next generation of imaging scientists and clinicians to develop, translate, and apply radiopharmaceuticals for human studies

1355 (Lapi) 01/12-12/14
ACRIN $234,000 direct
ACRIN 6682 IND Agent Distribution
The goal of this project is to provide the radiopharmaceutical [^{64}Cu]ATSM for human use to support a clinical trial.

DESC0008657 (Lapi) 08/12-07/14 (currently in no cost extension)
DOE $305,592 direct
Production of Positron Emitting Radiometals: Cu-64, Y-86, Zr-89
This proposal seeks support to increase our production of yttrium-86 and zirconium-89 production while continuing to produce copper-64.

DCDC Pilot (Woodard) 11/12-11/14 (renewed in competitive renewal)
Washington University Diabetic Cardiovascular Disease Center
Role: Co-Investigator
The overall goal of this project is to investigate the use of ^{64}Cu-ATSM PET imaging for determination of hypoxia in atherosclerotic plaques.

Industry Contract (Lapi) 04/14-04/15
ImaginAb $57,754 direct
Preparation of ^{89}Zr- Df-IAB27FA for Human Use
The goal of this proposal is to prepare a diagnostic radiopharmaceutical based on this agent in preparation for clinical trials aimed to assess dosimetry and image quality.

Industry Contract (Lapi) 06/14-06/15
GSK $65,072 direct
PET imaging for assessment of the in vivo biodistribution and pharmacokinetics of GSK3052230
The goal of this project is to develop radiolabeled GSK3052230 for assessment of the biodistribution, pharmacokinetics and potential imaging attributes of this construct.

PAST RESEARCH SUPPORT:

DESC00002032 (Lapi) 09/08-8/13
DOE $1,722,268 total costs
Integrated Research Training Program of Excellence in Radiochemistry
The goal of this training grant is provide a rich and deep research experience in state-of-the-art radiochemistry and in the fundamentals of radioisotopic labeling and tracer methodology to develop researchers who will be capable of meeting the challenges of designing and preparing radiotracers of broad applicability for monitoring and imaging diverse biological systems and environmental processes.

0123820001 (Lapi) 05/12-05/13
Pfizer $48,774 direct
Preclinical Imaging of GLP-1R
The goal of this project is to obtain preclinical data in rats for a ^{64}Cu PET radioligand in preparation for first in human studies with a targeted therapeutic oral agent (Pfizer) to confirm GLP-1 receptor occupancy.

DESC0002114 (Lapi) 10/09-9/12
DOE $594,000 total costs
Novel, dually radiolabeled peptides for simultaneous monitoring of enzymatic activity and protein targets
Role: Principal Investigator

DESC0004038 (Welch) 10/10-09/12
DOE $420,000 total costs (Lapi subaward - $124,800)
Improved Production and Separation Technologies for non-standard PET Isotopes
Role: Project 1 Principal Investigator

Glaxosmithkline (Lapi) 12/10-12/11
Corporate funding $154,401
Title: ^{11}C-acetate imaging of response to therapy
Role: Principal Investigator

Midwest Stone Institute (Lapi) 03/10-03/11
(Role: Principal Investigator) $50,000
Imaging Research
Title: Preclinical Molecular Imaging of Metabolic Response to Antiangiogenic Therapy in Prostate Cancer

PATENTS:

Lapi, S. Ruth, T.J., Becker, D.W. "Method and apparatus for isolating rhenium-186 for therapeutic and/or diagnostic radiopharmaceuticals." US 2008241025

Publicover, J.G., **Lapi, S.E.,** Ruth, T.J. "Method for calibrating particle beam energy" US 2007016783

TEACHING TITLES AND RESPONSIBILITIES:

Lecturer for Contrast Agents in Biological Imaging (CABI) - Spring 2009, 2010
Course Master for Contrast Agents in Biological Imaging (CABI) - Spring 2012, 2013, 2014
Course Master for Radiochemistry for the Life Sciences – Spring 2011, 2015
Organizer and lecturer for NCI Imaging Camp – Summer 2011
Lecturer for Nuclear Medicine Residents (2-3 lectures/year) - 2010-present
Lecturer for Honorary Scholars Program - 2011-present

CURRENT TRAINEES

Nora Goscinski – Chemistry Graduate Student (2013- Present)
Stacy Queern - Chemistry Graduate Student (2014- Present)
Andrew (Lake) Wooten) Biomedical Engineering Graduate Student (2012-Present)
Xingyu Nie – Biomedical Engineering Graduate Student (2012-Present)
Bernadette Marquez – Postdoctoral Fellow (2012-Present)
Tolulope Aweda – Postdoctoral Fellow (2012-Present)
Nilantha Bandara – Postdoctoral Fellow (2012-Present)
Vernal Richards - Postdoctoral Fellow (2012-Present)
Jennifer Burkemper – Postdoctoral Fellow (2012-Present)
Brian Wright – Postdoctoral Fellow (2013-Present)

PAST TRAINEES: Undergraduate Researchers

Rachel Waller, University of Missouri-Columbia Biochemistry, 2011
Minjun Hur, Washington University Pre-Med, 2011
Caleb Edwards, Washington University Biology 2011-2013
Amrita Hari-Raj, Washington University Pre-Med, 2012-2013
Chiedza Mupanomunda, Washington University Biochemistry, 2012-2013
Shaun Loveless. Fort Lewis College, Chemistry, 2013-2014
Kaavya Cherkuri, Washington University Chemistry, 2013
Ben Lewis, Washington University Physics, 2013- 2014
Elizabeth Bollinger, Washington University Physics, 2013- 2014

PAST TRAINEES: Postdoctoral Fellows and Graduate Students

Sandeep Jain – Postdoctoral Fellow 2009-2010
Currently Staff Scientist at Sun Pharma Advanced Research Company Ltd, India
Ravindra DeSilva - Postdoctoral Fellow 2010-2011
Currently Staff Scientist at Center for Probe Development, Toronto, Canada
Mai Lin – Postdoctoral Fellow 2010-2012
Currently Staff Scientist at MD Anderson
Albert Chang – Radiation Oncology Resident 2011-2012
Currently Assistant Professor, UCSF
Efrem Mebrahtu - Postdoctoral Fellow 2009-2012
Currently Staff Scientist at Washington University
Oluwatayo Ikotun - Postdoctoral Fellow 2009-2013
Currently Scientist at Amgen, CA
Tara Mastren – Chemistry Graduate Student (2011 – 2014)
Currently Postdoctoral Fellow at UT Southwestern

TRAINEE AWARDS:

Fellowships
Oluwatayo Ikotun (Postdoctoral Fellow)
American Cancer Society Postdoctoral Fellowship 2010-2013

Andrew (Lake) Wooten (Graduate Student)
Imaging Sciences Pathway Graduate Student Fellowship 2012-2013
Bernadette Marquez (Postdoctoral Fellow)
Society of Nuclear Medicine and Molecular Imaging Postdoctoral Fellowship 2013-2015
Nora Goscinski (Graduate Student)
Imaging Sciences Pathway Graduate Student Fellowship 2014-2015

Travel Awards

Travel Awards for *Radiometals 2013*
Vernal Richards (Postdoctoral Fellow)
Oluwatayo Ikotun (Postdoctoral Fellow)
Tara Mastren (Chemistry Graduate Student)
Tolulope Aweda (Postdoctoral Fellow)

Travel Awards for *NSSC Summer School at UC-Davis 2013*
Andrew (Lake) Wooten (Biomedical Engineering Graduate Student)
Tara Mastren (Chemistry Graduate Student)

Travel Awards for *International Symposium on Radiopharmaceutical Sciences 2013*
Bernadette Marquez (Postdoctoral Fellow)
Oluwatayo Ikotun (Postdoctoral Fellow)

Travel Awards for *Workshop on Targetry and Target Chemistry 2012*
Andrew (Lake) Wooten (Biomedical Engineering Graduate Student)
Tara Mastren (Chemistry Graduate Student)

Travel Award for *5th Annual Meeting of the Center for Silver Therapeutics Research*
Tolulope Aweda (Postdoctoral Fellow)

BIBLIOGRAPHY:

Peer Reviewed Manuscripts

1. **Lapi, S**., Ruth, T.J., Zyuzin, A., D'Auria, J.M. (2003) Development of an intense ^{15}O radioactive ion beam using low energy protons. **Nuclear Instruments and Methods B** 204: 444-446

2. Britto, D.T., Ruth, T.J., **Lapi, S.**, Kronzucker. H.J. (2004) Cellular and whole-plant chloride dynamics in barley: Insights into chloride-nitrogen interactions and salinity responses **Planta** 218: 615-622

3. Sossi, V., Buckley, K., Piccioni, P., Rahmin, A., Camborde, M., **Lapi, S.**, Ruth, T.J. (2005) Printed Sources for Positron Emission Tomography. **IEEE Nuclear Science** 52: 114-118

4. Guo, B., Liu, W.P., Trinczek, M., **Lapi, S.**, Ames, F., Buckley, K.R., D'Auria, J.M., Jayamanna, K., Ruiz, C., Ruth, T.J. (2006) Production of intense radioactive beams using low energy protons. **High energy physics and nuclear physics (Chinese edition)** 30: 675-679

5. Trinczek, M., **Lapi, S**, Guo, B., Ames, F., Buckley, K.R., D'Auria, J.M., Jayamanna, K., Liu, W.P., Ruiz, C., Ruth, T.J. (2006) Production of intense radioactive beams at ISAC using low energy protons. **Canadian Journal of Physics** 84: 323-333

6. Heath, S.J., Olson, J.A., Buckley, K. R., **Lapi, S**., Ruth, T.J., Martinez, D.M. (2007) Visualization of the flow of a fiber suspension through a sudden expansion using PET. **American Institute of Chemical Engineering Journal** 53: 327-334

7. **Lapi, S.,** Ressler, J.J., Cox, M.E., Ruth, T.J., (2006) High-specific activity ^{186}Re-labeled antibodies for radioimmunotherapy. In Technetium, Rhenium and other metals in chemistry and nuclear medicine, U. Mazzi, ed, S.G. Editoriali, Padova, 2006. 593-596

8. **Lapi, S**.,Wilson, J., McQuarrie, S., Publicover, J., Schueller, M., Schyler, D., Ressler, J.J., Ruth, T.J. (2007) Measurement of production cross-sections of $^{181\text{-}186}$Re isotopes from proton bombardment of natural tungsten. **Applied Radiation and Isotopes** 65: 345-349

9. Ferreira, C.L., **Lapi. S**., Steele, J., Green, D.E., Ruth, T.J., Adam, M.J. (2007) ^{55}Cobalt Complexes with Pendant Carbohydrates as Potential PET Imaging Agents. **Applied Radiation and Isotopes** 65:1303-1308

10. Ruprecht, G., Vockenhuber, C., Buchmann, L., Woods, R., Ruiz, C., **Lapi, S.,** Bremmerer, D. (2008) Precise measurement of β-decay and EC modifications in low temperature metal hosts. **Physics Review C** 77: 065502

11. Annett, A. L., **Lapi, S.,** Ruth, T.J., Maldonado, M.T. (2008) The effects of Cu and Fe availability on the growth and Cu:C ratios of marine diatoms. **Journal of Limnology and Oceanography** 53: 2451-2461

12. Kronenberg, A., Spejewski, E.H., Carter, H.K., Mervin, B., Jost. C., Stracener, D.W., **Lapi, S.,** Bray, T. (2008) Molecular sidebands for refractory elements for ISOL. **Nuclear Instruments and Methods B** 266: 4252-4256

13. **Lapi, S.E**., Voller, T., Welch, M.J. (2009) Positron Emission Tomography Imaging of Hypoxia **PET Clinics** 4: 39-47

14. **Lapi, S.E.,** Wahhnishe, H., Pham, D., Wu., L.Y., Nedrow-Byers, J.R., Liu, T., VanBrocklin, H.F., Berkman, C.E. Jones, E.F. (2009) Assessment of a [^{18}F]-labeled phosphoramidate peptidomimetic as a new PSMA targeted imaging agent for prostate cancer. **Journal of Nuclear Medicine**, 50:2042-8

15. **Lapi, S.E.,** Ladouceur, K., Ruth, T.J., D'Auria, J.M. (2010) The MoRe project: An alternative route to the production of High Specific Activity ^{99}Mo In Technetium, Rhenium

and other metals in chemistry and nuclear medicine, U. Mazzi, ed, S.G. Editoriali, Padova, 2010. 435-436

16. Guo, J., Annett, A. L., Taylor, R. L., **Lapi, S.**, Ruth, T. J. and Maldonado, M. T. (2010), Copper-uptake kinetics of coastal and oceanic diatoms. **Journal of Phycology**, 46: 1218–1228.

17. Gagnon, K., Jensen, M., Thisgaard, H., Publicover, J., **Lapi, S.,** McQuarrie, S.A., Ruth, T.J. (2010) A new and simple calibration-independent method for measuring the beam energy of a cyclotron. **Applied Radiation and Isotopes** 69(1):247-53.

18. Ikotun, O., **Lapi, S**. (2011) The rise of metal radionuclides in medical imaging: copper-64, zirconium-89 and yttrium-86. **Future Medicinal Chemistry**, 2011 3(5), 599-621

19. Chang, A.J., DeSilva, R., Jain, S., Lears, K., Rogers, B., **Lapi, S.E.** (2012) ^{89}Zr-Radiolabled Trastuzumab Imaging in Orthotropic and Metastatic Breast Tumors. **Pharmaceuticals,** 5(1), 79-83

20. **Lapi, S.E**., Welch, M.J. (2012) A Historical Perspective on the Specific Activity of Radiopharmaceuticals: What have we learned in the 35 years of the ISRC? **Nuclear Medicine and Biology** 39(5), 601-8

21. Kume, M., Carey, P.C., Gaehle, G., Madrid, E., Voller, T., Margenau, B., Welch, M.J., **Lapi, S.E.,** (2012) A Semi-Automated System for the Routine Production of Copper-64 **Applied Radiation and Isotopes** 70(8), 1803-6

22. Lin, M., Ranganathan D., Mori, T., Hagooly, A., Rossin, R., Welch, M.J., **Lapi, S.E.** (2012) Long-term evaluation of TiO2-based ^{68}Ge/^{68}Ga generators and optimized automation of ^{68}Ga-DOTATOC radiosynthesis, **Applied Radiation and Isotopes** 70(10), 2539-44

23. Chang, A.J., DeSilva, R, **Lapi, S.E.** (2013) Development and Characterization of ^{89}Zr-labeled Panitumumab for ImmunoPET Imaging of the EGF Receptor, **Molecular Imaging,** 12(1), 17-27

24. Mebrahtu, E., Zheleznyak, A, Hur, M., **Lapi, S.E**.(2013) Initial characterization of a dually radiolabeled peptide for simultaneous monitoring of protein targets and enzymatic activity **Nuclear Medicine and Biology** 40(2), 190-6

25. D'Auria, J.M., Keller, R., Ladoucer, L., **Lapi, S.E.**, Ruth, T.J., Schmor, P. (2013) An alternate approach to the production of radioisotopes for nuclear medicine applications **Review of Scientific Instruments** 84(3), 034705

26. Chang, A.J., Sohn, R., Lu, Z. H., Arbeit, J.A., **Lapi, S.E.** (2013) Detection of rapalog-mediated therapeutic response in renal cancer xenografts using ^{64}Cu-bevacizumab ImmunoPET **PLoS One** 8(3):e58949

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