

SNMMI NEWSLINE

- 9N** **Integrated Residency in Radiology and Nuclear Medicine in The Netherlands**
Jan P.J. van Schaik and Roelof J. Bennink
- 12N** **Fowler Receives de Hevesy Nuclear Pioneer Award**
- 13N** **Pomper Recognized with 2017 Aebersold Award**
- 14N** **In Memoriam: Ronald E. Weiner, PhD 1944–2017**
Gary Levine
- 15N** **SNMMI-TS Leadership Update: Demonstrating the Crucial Role of NMTs and Strengthening the Profession**
Kathleen Krisak
- 16N** **SNMMI Leadership Update: SNMMI's New Value Initiative and Strategic Plan**
Bennett S. Greenspan
- 17N** **From the Literature**

HOT TOPICS

- 1017** **The Future of Radioligand Therapy: α , β , or Both?**
Uwe Haberkorn, Frederik Giesel, Alfred Morgenstern, and Clemens Kratochwil

THE STATE OF THE ART

- 1019** **Forward to the Past: The Case for Quantitative PET Imaging**
Adriaan A. Lammertsma

FOCUS ON MOLECULAR IMAGING

- 1025** **Molecular Imaging of PARP**
Brandon Carney, Susanne Kossatz, and Thomas Reiner

ONCOLOGY

Clinical

- 1031** **Whole-Body ^{18}F -FDG PET and ^{18}F -FDG PET/CT in Patients with Suspected Paraneoplastic Syndrome: A Systematic Review and Meta-Analysis of Diagnostic Accuracy**
Sara Sheikhabaei, Charles V. Marcus, Roberto S. Fragomeni, Steven P. Rowe, Mehrbod S. Javadi, and Lilja B. Solnes
- 1037** **Prospective Clinical Trial of ^{18}F -Fluciclovine PET/CT for Determining the Response to Neoadjuvant Therapy in Invasive Ductal and Invasive Lobular Breast Cancers**
Gary A. Ulaner, Debra A. Goldman, Adriana Corben, Serge K. Lyashchenko, Mithat Gönen, Jason S. Lewis, and Maura Dickler

- 1043** ■ **INVITED PERSPECTIVE. Learning from Failure; Hypoxia Is an Evil Foe**
Rodney J. Hicks
- 1045** ■ **FEATURED CLINICAL INVESTIGATION ARTICLE. Phase II Study of a Radiotherapy Total Dose Increase in Hypoxic Lesions Identified by ^{18}F -Misonidazole PET/CT in Patients with Non-Small Cell Lung Carcinoma (RTEP5 Study)**
Pierre Vera, Sébastien Thureau, Philippe Chaumet-Riffaud, Romain Modzelewski, Pierre Bohn, Maximilien Vermandel, Sébastien Hapdey, Amandine Pallardy, Marc-André Mahé, Marie Lacombe, et al.
- 1054** ■ **BRIEF COMMUNICATION. Localization of Unknown Primary Site with ^{68}Ga -DOTATOC PET/CT in Patients with Metastatic Neuroendocrine Tumor**
Yusuf Menda, Thomas M. O'Dorisio, James R. Howe, Michael Schultz, Joseph S. Dillon, David Dick, G. Leonard Watkins, Timothy Ginader, David L. Bushnell, John J. Sunderland, et al.
- 1058** **Whole-Body ^{18}F -FDG PET/CT Is Superior to CT as First-Line Diagnostic Imaging in Patients Referred with Serious Nonspecific Symptoms or Signs of Cancer: A Randomized Prospective Study of 200 Patients**
Anne-Mette Lebech, Anne Gaardsting, Annika Loft, Jesper Graff, Elena Markova, Anne Kiil Bertelsen, Jan Lysgård Madsen, Kim Francis Andersen, Eric von Benzon, Morten Helms, et al.
- 1065** **Qualification of National Cancer Institute–Designated Cancer Centers for Quantitative PET/CT Imaging in Clinical Trials**
Joshua S. Scheuermann, Janet S. Reddin, Adam Opanowski, Paul E. Kinahan, Barry A. Siegel, Lalitha K. Shankar, and Joel S. Karp

Translational

- 1072** **Multiparametric Imaging of Tumor Hypoxia and Perfusion with ^{18}F -Fluoromisonidazole Dynamic PET in Head and Neck Cancer**
Milan Grkovski, Heiko Schöder, Nancy Y. Lee, Sean D. Carlin, Bradley J. Beattie, Nadeem Riaz, Jonathan E. Leeman, Joseph A. O'Donoghue, and John L. Humm

THERANOSTICS

Clinical

- 1081** **Detection Efficacy of Hybrid ^{68}Ga -PSMA Ligand PET/CT in Prostate Cancer Patients with Biochemical Recurrence After Primary Radiation Therapy Defined by Phoenix Criteria**
Ingo Einspieler, Isabel Rauscher, Charlotte Düwel, Markus Krönke, Christoph Rischpler, Gregor Habl, Sabrina Dewes, Armin Ott, Hans-Jürgen Wester, Markus Schwaiger, et al.

CARDIOLOGY

Basic

- 1088** **Evaluation of Antiatherogenic Properties of Ezetimibe Using ^3H -Labeled Low-Density-Lipoprotein Cholesterol and $^{99\text{m}}\text{Tc}$ -cAbVCAM1–5 SPECT in ApoE $^{-/-}$ Mice Fed the Paigen Diet**
Laurent S. Dumas, François Briand, Romain Clerc, Emmanuel Brousseau, Christopher Montemagno, Mitra Ahmadi, Sandrine Bacot, Audrey Soubies, Pascale Perret, Laurent M. Riou, et al.

- 1094 ■ FEATURED ARTICLE OF THE MONTH.** ¹⁸F-GP1, a Novel PET Tracer Designed for High-Sensitivity, Low-Background Detection of Thrombi
Jessica Lohrke, Holger Siebeneicher, Markus Berger, Michael Reinhardt, Mathias Berndt, Andre Mueller, Marion Zerna, Norman Koglin, Felix Oden, Marcus Bauser, et al.

ENDOCRINOLOGY

Basic

- 1100 ■ BRIEF COMMUNICATION.** Dissociation Between Brown Adipose Tissue ¹⁸F-FDG Uptake and Thermogenesis in Uncoupling Protein 1-Deficient Mice
Mohammed K. Hankir, Mathias Kranz, Susanne Keipert, Juliane Weiner, Sille G. Andreasen, Matthias Kern, Marianne Patt, Nora Klötting, John T. Heiker, Peter Brust, et al.

Clinical

- 1104** Active Brown Fat During ¹⁸F-FDG PET/CT Imaging Defines a Patient Group with Characteristic Traits and an Increased Probability of Brown Fat Redetection
Carlos Gerngroß, Johanna Schretter, Martin Klingenspor, Markus Schwaiger, and Tobias Fromme

NEUROLOGY

Basic

- 1111** Effect of MPTP on Serotonergic Neuronal Systems and Mitochondrial Complex I Activity in the Living Brain: A PET Study on Conscious Rhesus Monkeys
Masakatsu Kanazawa, Hiroyuki Ohba, Shingo Nishiyama, Takeharu Kakiuchi, and Hideo Tsukada

Clinical

- 1117** Analysis of Extrastriatal ¹²³I-FP-CIT Binding Contributes to the Differential Diagnosis of Parkinsonian Diseases
Merijn Joling, Chris Vriend, Odile A. van den Heuvel, Pieter G.H.M. Rajmakers, Paul A. Jones, Henk W. Berendse, and Jan Booij
- 1124** Kinetic Modeling of the Tau PET Tracer ¹⁸F-AV-1451 in Human Healthy Volunteers and Alzheimer Disease Subjects
Olivier Barret, David Alagille, Sandra Sanabria, Robert A. Comley, Robby M. Weimer, Edilio Borroni, Mark Mintun, Nicholas Seneca, Caroline Papin, Thomas Morley, et al.
- 1132** Progressive Disintegration of Brain Networking from Normal Aging to Alzheimer Disease: Analysis of Independent Components of ¹⁸F-FDG PET Data
Marco Pagani, Alessandro Giuliani, Johanna Öberg, Fabrizio De Carli, Silvia Morbelli, Nicola Girtler, Dario Arnaldi, Jennifer Accardo, Matteo Bauckneht, Francesca Bongioanni, et al.

- 1140** PET Quantification of the Norepinephrine Transporter in Human Brain with (S,S)-¹⁸F-FMeNER-D₂
Sho Moriguchi, Yasuyuki Kimura, Masanori Ichise, Ryosuke Arakawa, Harumasa Takano, Chie Seki, Yoko Ikoma, Keisuke Takahata, Tomohisa Nagashima, Makiko Yamada, et al.

RADIATION BIOLOGY

Clinical

- 1146** Recombinant Human Thyroid-Stimulating Hormone Versus Thyroid Hormone Withdrawal in ¹²⁴I PET/CT-Based Dosimetry for ¹³¹I Therapy of Metastatic Differentiated Thyroid Cancer
Donika Plyku, Robert F. Hobbs, Kevin Huang, Frank Atkins, Carlos Garcia, George Sgouros, and Douglas Van Nostrand

PHYSICS AND INSTRUMENTATION

- 1155** Performance Characteristics of the Whole-Body Discovery IQ PET/CT System
Gabriel Reynés-Llompart, Cristina Gámez-Cenzano, Inmaculada Romero-Zayas, Laura Rodríguez-Bel, José L. Vercher-Conejero, and Josep M. Martí-Climent
- 1162 ■ BRIEF COMMUNICATION.** Influence of Animal Heating on PET Imaging Quantification and Kinetics: Biodistribution of ¹⁸F-Tetrafluoroborate and ¹⁸F-FDG in Mice
Christian Goetz, Matthias Podein, Friederike Braun, Wolfgang A. Weber, Philippe Choquet, André Constantinesco, and Michael Mix
- 1167** The Effect of Susceptibility Artifacts Related to Metallic Implants on Adjacent-Lesion Assessment in Simultaneous TOF PET/MR
Hanna Svirydenka, Gaspar Delso, Felipe De Galiza Barbosa, Martin Huellner, Helen Davison, Stefano Fanti, Patrick Veit-Haibach, and Edwin E.G.W. ter Voert

SPECIAL CONTRIBUTION

- 1174** ACR and SNMMI Joint Credentialing Statement for PET/MRI of the Body
Rathan M. Subramaniam, Hossein Jadvar, Patrick M. Colletti, Alexander Guimaraes, Rao Gullapali, Andrei H. Iagaru, Jonathan McConathy, Carolyn C. Meltzer, Helen Nadel, Richard B. Noto, et al.

DEPARTMENTS

8A This Month in JNM

22A Information for Authors

1177 Book Reviews

1178 Letters to the Editor