# SNMMI Annual Grants & Awards Recognition

## 2021 Recipients

SNMMI Value Initiative

SOCIETY OF NUCLEAR MEDICINE & MOLECULAR IMAGING

SNMMI provides more than $400,000 annually to advance nuclear medicine, molecular imaging and therapy, fund professional development efforts, and promote the next generation of researchers. The SNMMI Grants and Awards Program provides the opportunity for international recognition, highlighting groundbreaking accomplishments within our specialty as well as contributions to the Society at large.

We are proud to present the SNMMI and SNMMI-TS Grants and Awards Recognition for 2021. We invite you to learn more about these recipients through this comprehensive guide of SNMMI honors, including:



Distribution of SNMMI and SNMMI-TS grants, awards, and scholarships is contingent upon available funding. Thank you to our donors who represent the Society's commitment to advancing nuclear medicine, molecular imaging, and therapy.

ERF
The Education and Research Foundation for Nuclear Medicine and Molecular Imaging

## Education and Research Foundation for Nuclear Medicine and Molecular Imaging

The Education and Research Foundation for Nuclear Medicine and Molecular Imaging (ERF) is the largest contributor to the SNMMI Grants and Awards Program, providing more than $200,000 in support.

## 2021 Sponsor Acknowledgement:

Additional supporters of the 2020-2021 SNMMI and SNMMI-TS grants, awards, and scholarships include:

- SNMMI-TS Professional Development and Education Fund (PDEF)
- American Registry of Radiologic Technologists (ARRT)
- Nihon Medi-Physics Co., Ltd.
- The Henry Wagner Family

# 2021 HIGHLIGHTS

## Henry N. Wagner, Jr., MD, Lectureship

The Wagner Lectureship honors Henry N. Wagner, Jr., MD, who during his long and illustrious career was both an educator and leader in the practice of nuclear medicine and for more than 30 years presented the Highlights Lecture at the SNMMI Annual Meeting. Each year, a luminary in the field of nuclear medicine is invited to give this important lecture in his memory.

**2021 Henry N. Wagner, Jr., MD, Lectureship: "From Molecules to the Universe: Brain PET and SPECT"**

***Satoshi Minoshima, MD, PhD, FSNMMI*** *– Professor and Chairman, University of Utah, Salt Lake City, UT*

## Hal Anger Memorial Lectureship

The Anger Lectureship was established in 2006 to memorialize the groundbreaking work of Hal Anger who introduced the Anger Camera over sixty years ago. The lectureship celebrates the advances in instrumentation and the application of that technology in the advancement of patient care.

**2021 Hal Anger Lectureship: "The Transformative Power of Artificial Intelligence in the Practice of Nuclear Medicine"**

***Irène Buvat, PhD*** *– Head of the "Laboratory of Translational Imaging in Oncology" Research Lab, Institut Curie Research Center, Orsay, France*

## Georg Charles de Hevesy Nuclear Medicine Pioneer Award

SNMMI has given the Georg Charles de Hevesy Nuclear Medicine Pioneer Award every year since 1960 to honor groundbreaking work in the field of nuclear medicine. De Hevesy received the 1943 Nobel Prize in chemistry for his work in determining the absorption, distribution, metabolism, and elimination of radioactive compounds in the human body. His work led to the foundation of nuclear medicine as a tool for diagnosis and therapy, and he is considered the father of nuclear medicine.

**2021 Recipient**

***Thomas J. Ruth, PhD*** *– Emeritus Senior Research Scientist, TRIUMF Nuclear Medicine Division, Vancouver, BC, Canada*

## Paul C. Aebersold, PhD, Award

First presented in 1973, The Aebersold Award is named for Paul C. Aebersold—a pioneer in the biologic and medical application of radioactive materials and the first director of the Atomic Energy Commission's Division of Isotope Development. It recognizes outstanding achievement in basic science applied to nuclear medicine.

**2021 Recipient**

***Steven M. Larson, MD, FACNM*** *– Chief, Nuclear Medicine Service, Memorial Sloan-Kettering Cancer Center, New York, NY*

# SNMMI-TS SPOTLIGHT

## SNMMI-TS Lifetime Achievement Award

Reserved for individuals who have made significant contributions to the field of Nuclear Medicine, our chapters, and the Technologist Section.

### 2021 Recipient

***Frances L. Neagley, BA, CNMT, FSNMMI-TS*** *– Fran has been a staple within the SNMMI-TS and has served on the NCOR for decades in a variety of positions. She also served as Editor to the Journal of Nuclear Medicine Technology where she successfully embarked on several improvements to the journal, including reducing article turnaround time from submission to publication, publishing procedure guidelines, adding case studies and invited commentaries, and encouraging submissions from chapter presidents.*

## SNMMI-TS Advocate(s) of the Year

Awarded to an individual who has made significant contributions to advancing advocacy efforts at the state and federal level.

### 2021 Recipients

***Tricia L. Peters, BS, CNMT, PET, RT(CT)*** *– Director, Nuclear Medicine, Ridley-Tree Cancer Center at Sansum Clinic, Santa Barbara, CA*

***Dmitry D. Beyder, MPA, CNMT*** *– Nuclear Medicine Clinical Supervisor, Barnes-Jewish Hospital, St. Louis, MO*

***Ensured that technologists were recognized as front-line workers and advocated on behalf of the SNMMI for the FIND Act in Congress.***

## SNMMI-TS Outstanding Technologist

Recognizes SNMMI-TS members who have demonstrated outstanding service and dedication to the field of nuclear medicine technology.

### 2021 Recipient

***Sarah R. Gibbons, MBA, CNMT, NMTCB(CT)*** *– Nuclear Medicine Technologist, Indiana University Health Bedford, Bedford, IN*

***Worked effortlessly over the last several years at the chapter and national level to encourage students and technologists to join the Technologist Section and to get involved.***

## SNMMI-TS Kathy E. Thompson-Hunt Outstanding Educator

Presented to members who have exhibited commitment to advancing the field in their workplace and through their involvement with the Society. *In 2020, the SNMMI-TS changed the name of this award to recognize the late Kathy E. Thompson Hunt, President of the Technologist Section from 2010-2011.

### 2021 Recipient

***Jennifer L. Prekeges, MS, CNMT, FSNMMI-TS*** *– Program Chair, Nuclear Medicine Technology, Bellevue College, Bellevue, WA*

***Converted Educators Forum and Student Review Course to virtual programming in 2020.***

# Service Awards

SNMMI Fellowship is one of the most prestigious formal recognitions available to long-time SNMMI members and symbolizes distinguished service to SNMMI, as well as exceptional achievement in the field of nuclear medicine and molecular imaging.

### SNMMI Fellows Class of 2021

Anca Avram, MD, FACNM, FSNMMI
*Central Chapter*
*Member Since 2003*

Twyla Bartel, DO, MBA, FACNM, FSNMMI
*Southwestern Chapter*
*Member Since 2002*

Wengen Chen, MD, PhD, FSNMMI
*Mid-Eastern Chapter*
*Member Since 2009*

Cathy Sue Cutler, PhD, FSNMMI
*Greater New York Chapter*
*Member Since 1998*

Eric Frey, PhD, FSNMMI
*Mid-Eastern Chapter*
*Member Since 1993*

Roger Howell, PhD, FSNMMI
*Greater New York Chapter*
*Member Since 1985*

Robert Mach, PhD, FSNMMI
*Greater New York Chapter*
*Member Since 1985*

David Mankoff, MD, PhD, FSNMMI
*Greater New York Chapter*
*Member Since 1986*

Darlene Metter, MD, FACR, FACNM, FSNMMI
*Southwestern Chapter*
*Member Since 1992*

Helen Nadel, MD, FRCPC, FSNMMI
*Northern California Chapter*
*Member Since 1983*

Alan Packard, PhD, FSNMMI
*New England Chapter*
*Member Since 1985*

Julie Price, PhD, FSNMMI
*New England Chapter*
*Member Since 1989*

Buck Rogers, PhD, FSNMMI
*Missouri Valley Chapter*
*Member Since 1996*

Heiko Schöder, MD, MBA, FSNMMI
*Greater New York Chapter*
*Member Since 2006*

# Service Awards

## SNMMI Fellows Class of 2021

Peter Scott, PhD, FSNMMI
*Central Chapter*
*Member Since 2007*

Neil Vasdev, PhD, FSNMMI
*Eastern Great Lakes Chapter*
*Member Since 2006*

Jian Yu, MD, FRCPC, FACNM, FSNMMI
*Greater New York Chapter*
*Member Since 2001*

## SNMMI President Distinguished Educator

Recognizes SNMMI members who have demonstrated outstanding service and dedication to the field of nuclear medicine through their educational efforts.

### 2021 Recipient

***Hyewon Hyun, MD***

***For innovation in nuclear medicine education and outreach to medical students, residents and early career professionals and excellence in leadership as the Chair of the SNMMI Diversity, Equity, and Inclusion Task Force.***

## SNMMI Presidential Distinguished Service Award

The SNMMI Presidential Distinguished Service Award is given to individuals who made a significant impact within SNMMI during the presidential tenure of Alan B. Packard, PhD, FSNMMI. The individuals being recognized this year have been instrumental to SNMMI's virtual education efforts.

### 2021 Recipients

***SNMMI Scientific Program Committee Cabinet:***

***For significant contributions to the field of nuclear medicine and molecular imaging and extraordinary leadership in the planning and execution of the 2020 and 2021 SNMMI Virtual Annual Meetings.***

***Umar Mahmood, MD, PhD, FSNMMI***

***Giuseppe Esposito, MD, MBA***

***Heather Jacene, MD***

***David M. Schuster, MD, FACR***

***Donna J. Cross, PhD***

***Kathleen M. Krisak, BS, CNMT, FSNMMI-TS***

## SNMMI Presidential Distinguished Service Award

The SNMMI Presidential Distinguished Service Award is given to individuals who made a significant impact within SNMMI during the presidential tenure of Alan B. Packard, PhD, FSNMMI. The individuals being recognized this year have been instrumental to SNMMI's virtual education efforts.

### 2021 Recipients

***SNMMI Annual Meeting Staff:***

***For contributions to the SNMMI and extraordinary efforts in the planning and execution of the 2020 and 2021 SNMMI Virtual Annual Meetings.***

*Ann Latham*

*Delicia Hurdle*

*Amy Schull*

*Jane Kamm*

*Lisa Dickinson*

*Brandi Eden*

*Caroline Krystek*

*Catherine Lamb*

## SNMMI-TS Fellowship recognizes members of the Technologist Section who have demonstrated leadership and have made a significant contribution to the profession of Nuclear Medicine Technology.

### SNMMI-TS Fellows Class of 2021

***Barbara J. Grabher, BS, CNMT, RT(N), NCT, FSNMMI-TS***
*Greater New York Chapter*
*Member Since 1986*

***Leesa Ann Ross, MA, CNMT, PET, RT(N), RT(CT), FSNMMI-TS***
*Southeastern Chapter*
*Member Since 1995*

***Cheryl Rickley, CNMT, FSNMMI-TS***
*Greater New York Chapter*
*Member Since 1989*

## SNMMI-TS Presidential Distinguished Service Award

The 2021 Presidential Distinguished Service Award winners are given to individuals who made a significant impact during the presidential tenure of Tina Buehner, PhD, CNMT, FSNMMI-TS. The individuals being recognized this year have shown exceptional leadership and have provided strategic guidance in the areas of education and research.

### 2021 Recipients

***For their outstanding contributions on the SNMMI-TS Educators Committee and, more specifically, for the development of the career pathways document and revisions to the entry level curriculum.***

*Norman E. Bolus, MSPH, CNMT, FSNMMI-TS*

*C. David Gilmore, EdD, CNMT, FSNMMI-TS*

*Crystal Botkin, PhD, MPH, CNMT, PET, FSNMMI-TS*

*Cybil J. Nielsen, MBA, CNMT, FSNMMI-TS*

*Bital Savir-Baruch, MD*

***For her research mentorship as I worked through my PhD thesis and for her friendship and guidance over the past year as I served as President.***

*Mark H. Crosthwaite, MEd, CNMT, PET, FSNMMI-TS*

***For his leadership as SNMMI-TS President last year as we transitioned 100% virtual, and his leadership as chair of the SNMMI-TS COVID-19 Task Force which worked tirelessly to provide additional resources for our members to ensure that they were protected front line workers in all aspects of their jobs.***

# Research, Grants, and Scholarships

### Mitzi & William Blahd, MD, Pilot Research Grant
Supports a basic or clinical scientist in the early stages of their career conducting research that may lead to further funding.
*Min-Jeong Kim, MD, PhD*

### SNMMI-TS Career Advancement Grant
Supports nuclear medicine technologists pursuing additional educational opportunities to advance their professional career.
*Nickie Beaulieu, CNMT; Samar El Khatib, CNMT; Sarah Frye, MBA, CNMT, PET, CCRP; Derrick Gillan, ARRT(N)(MR)(CT), PET; Jeremy Heinrich, CNMT, NMTCB(CT), RT; Clifford Liguori, CNMT; Marcy McCarty, MBA, RT(R)(N); Patricia O'Neal, CNMT, NMT; Alexandria Pleshek, CNMT; Diane Soulek, CNMT, NCT, PET, RT(N); Sara Vandehey, MBA CNMT RT(N)(CT); Cheyenne Waters, CNMT*

### Medical & Science Student Research Grant
Supports the participation of high-achieving students in a molecular imaging/therapy research project, introducing them to molecular imaging and targeted radiotherapy as a potential career path.
*Yesh Datar, Shadab Ahamed, Bryan Fraser, Vishnu Murthy, Temitope Agabalogun, Kevin Cheng, Kevin Leung, David Gao, Abhijit Bhattaru, Nathan Wright*

### 2021-2023 ERF SNMMI Postdoctoral Molecular Imaging Scholar Grant
Supports a two-year research endeavor that promotes integration of molecular imaging into the career of the trainee.
*Ashwin Parihar, MBBS, MD*

### 2021 Cancer Cooperative Group Junior Faculty Mentorship Award
Supports nuclear medicine and molecular imaging physician participation in two in-person cooperative cancer group meetings (ACRIN-ECOG, SWOG, NRG, COG, and Alliance).
*Elizabeth Dibble, MD; Amir Iravani, MD, FRACP; Courtney Lawhn-Heath, MD; Charles Marcus, MD; Erik Mittra, MD, PhD; Daniel Lee, MD*

### 2021-2023 ERF SNMMI Molecular Imaging Research Grant for Junior Academic Faculty Award
Supports one junior faculty member in an academic/research setting, and to enable them to engage in molecular imaging research related to diagnostic or therapeutic applications.
*Courtney Lawhn-Heath, MD*

## 2021 Scholarships Awarded

### Susan C. Weiss Clinical Advancement Scholarship
In honor of Susan C. Weiss, SNMMI-TS past president and former executive director of the Education and Research Foundation for SNMMI, this scholarship serves to support a certified nuclear medicine technologist member who is pursuing clinical advancement through a didactic educational program.
*Sarah Frye, MBA,CNMT, PET, CCRP*
*Nicholas Heath, CNMT*

### PDEF Mickey Williams Minority Scholarship
This scholarship honors the memory of Mickey Williams, a past SNMMI-TS president who immigrated to the United States from Jamaica, and supports minority students pursuing a two- or four-year degree in nuclear medicine.
*Ann Apo; Ricky Huang*

### PDEF Professional Development Scholarship
Serves to support a student who is employed as a technologist and is actively pursuing an advanced degree related to their nuclear medicine career.
*Mary Beth Farrell, MS, CNMT, NCT, FSNMMI-TS*

### ERF SNMMI-TS Bachelor's or Entry Level Master's Degree Completion Scholarship
Serves to support current nuclear medicine student technologists in a BS or MS nuclear medicine technology training program or nuclear medicine technologists who are pursuing a BS or MS degree related to their nuclear medicine careers.
*Derrick Gillan, ARRT(N)(MR)(CT), PET*

### ERF SNMMI-TS Advanced Degree Scholarship
Serves to support a student who is pursuing an advanced program to advance their career in nuclear medicine.
*Sarah Gibbons, MBA, CNMT, NMTCB(CT)*

### Paul Cole Technologist Scholarship
Named in memory of Paul Cole, CNMT, SNMMI-TS president in 1986 and known champion of education for technologists, this scholarship supports a student in training (or accepted) at an accredited nuclear medicine technology program.
*Fatimah Almuallim*
*Bridgette Asuquo*
*Anna Beam*
*Brandon Nielson*
*Harmun Sehmby*
*Lori Smith*
*Jackie Stevens*
*Eileen Tang*
*Khalil Webb*
*Madelyn Zimmer*

# Specialty Councils & Centers of Excellence Recognition

SNMMI Councils and Centers of Excellence provide additional professional networking and educational programs for members, including opportunities for specialty lectures, awards, and grants recognizing work in specific areas of practice within nuclear medicine.

## Academic Council

### Tom Miller Memorial Lecture

Created to recognize the late Tom Miller, MD, PhD. This Annual Meeting lecture has a theme related to education as Dr. Miller served as one of SNMMI's Scientific Program Committee Chairs for many years.

*Paige Bennett, MD*

### Academic Council Distinguished Service Award

Recognizes individuals within nuclear medicine who have distinguished themselves through a career dedicated to the advancement of patient care through academic achievement and education. This individual has also demonstrated extraordinary leadership and dedication to the council.

*Twyla Bartel, DO, MBA, FACNM*

## Brain Imaging Council

### Kuhl Lassen Award

The highest award of SNMMI's Brain Imaging Council was created to honor two founding pioneers in functional brain imaging: SNMMI member David E. Kuhl, MD and Nils Lassen. The Kuhl-Lassen Award is given annually to recognize a scientist who has made outstanding contributions and whose research in and service to the discipline of functional brain imaging is of the highest caliber.

*Julie Price, PhD, FSNMMI*

## Cardiovascular Council

### Hermann Blumgart Award

The highest award and honor bestowed by the Cardiovascular Council, based on scientific contributions to the field of cardiovascular nuclear medicine and service to the Council.

*Robert DeKemp, PhD*

### Cardiovascular Council Outstanding Educator Award Lecture

Recognizes a current CVC member who has made extraordinary and consistent educational contributions to the nuclear cardiology community and to SNMMI.

*Panithaya Chareonthaitawee, MD*

## General Clinical Nuclear Medicine Council

### General Clinical Nuclear Medicine Council Lecture Award

Recognizes a speaker who will present insights on the value of general clinical nuclear medicine in clinical practice as procedures, which remain bread-&-butter studies in many departments, paved the way for today's targeted imaging and therapy and many of today's nuclear medicine practitioners owe their careers to these procedures.

*Philip Wells, MD, FRCPC, MSc*

# Specialty Councils & Centers of Excellence Recognition

## General Clinical Nuclear Medicine Council Lifetime Achievement Award

Recognizes those physicians and scientists who have distinguished themselves through a career dedicated to the advancement of patient care through the field of Nuclear Medicine. These individuals will have provided outstanding contributions to the general nuclear medicine subspecialties including urogenital, pulmonary, musculoskeletal, endocrine and gastrointestinal imaging that have advanced the field to allow improved clinical diagnosis and patient care.

*Harvey Ziessman, MD, FSNMMI*

## Pediatric Imaging Council

### Conway-Treves Senior Investigator Award

Given to senior scientists and physician-scientists who have contributed greatly to our subspecialty of pediatric nuclear medicine as a scientist, teacher, mentor and leader, or who have contributed substantially to the work of the Society of Nuclear Medicine and Molecular Imaging or the Pediatric Imaging Council.

*Helen Nadel, MD, FRCPC*

## Correlative Imaging Council

### Barry Siegel Lecture

Honors an individual who has made groundbreaking and consistent educational contributions to correlative imaging and to SNMMI and the Physics, Instrumentation, and Data Sciences Council. Dr. Barry Siegel made outstanding contributions to correlative imaging, namely, regarding the National Oncologic PET Registry (NOPR) and its tremendous impact on PET/CT imaging and reimbursement.

*Ora Israel, Sr., MD, FSNMMI*

## Physics, Instrumentation, and Data Sciences Council

### Hoffman Lecture Award

The highest award of SNMMI's Physics, Instrumentation, and Data Sciences Council was created to honor the memory of Professor Edward J. Hoffman. It recognizes scientists in the field of nuclear medicine for their service and devotion to research and development of nuclear medicine instrumentation and to educating and training the next generation of scientists.

*Ramsey Badawi, PhD*

### Tracey Lynn Faber Award

Given each year to support advancement of women in medical imaging sciences. The award is given either to an individual who has significantly promoted the advancement of women in medical imaging sciences, or to a woman in early- or mid-career who has made significant contributions to medical imaging sciences.

*Shiva Abbaszadeh, PhD*

## Radiopharmaceutical Sciences Council

### Berson-Yalow Award

Celebrates the contributions of Solomon A. Berson, MD, and Rosalyn S. Yalow, PhD (Nobel Laureate 1977), who pioneered the principle of the competitive binding assay and used it to develop the field of radioimmunoassay, which became a mainstay of early nuclear medicine. Since radioimmunoassay is no longer used extensively, this award will continue to recognize outstanding original work in the field of nuclear medicine and recognize the use of competitive receptor-binding assays in vitro and/or in vivo.

*Ashley Cherie Knight, M.Sc*

# Specialty Councils & Centers of Excellence Recognition

## Radiopharmaceutical Sciences Council

### Michael J. Welch Award

Recognizes individuals who have made an outstanding contribution to the field of radiopharmaceutical sciences, have been involved in mentoring students, postdoctoral fellows and junior faculty, and have been involved in community service to the field of radiopharmaceutical chemistry and molecular imaging.

*Victor William Pike, PhD*

### Michael J. Welch Postdoctoral Grant

Awarded to a post-doctoral individual who has demonstrated a novel approach to radiochemistry.

*Jimmy Jakobsson, MD*

## Therapy Center of Excellence

### Saul Hertz Award

Established in honor of the professional achievements of Dr. Hertz as the pioneer of radioiodine therapy, this award recognizes individuals who have made outstanding contributions to radionuclide therapy.

*Eric Krenning, MD, PhD, FRCP*

## Center for Molecular Imaging Innovation and Translation

### ERF SNMMI CMIIT Laboratory Professional Recognition Award for Contributions to Molecular Imaging

Recognizes innovative/novel and high-impact tools, techniques, and practices in molecular imaging laboratory professionals. Its purpose is to promote the innovative efforts and exemplary accomplishments by individuals in the lab who may not have the opportunity to receive recognition in other arenas.

*Carmen Azevedo*

*Anna Fisher, BS, CNMT, NMTCB(CT), PET*

## PET Center of Excellence

### Peter E. Valk, MD, Memorial Lectureship

Created to honor the memory of Dr. Valk, a pioneer in the establishment of PET as an important clinical study, this award recognizes individuals who have made significant contributions to the advancement of PET, including PET/CT, PET/MRI, and other emerging technologies, as well as those individuals who are dedicated to the PET Center of Excellence.

*Rodney J. Hicks, MD*

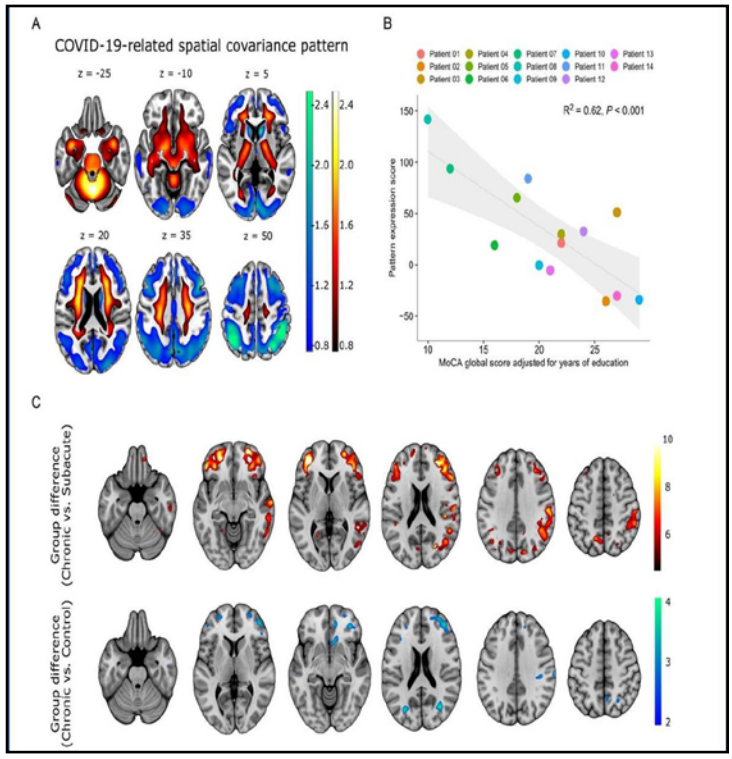
# Publication Awards

## 2021 Image of the Year

Each year, SNMMI chooses an image that best exemplifies the most promising advances in the field of nuclear medicine and molecular imaging. The state-of-the-art technologies captured in these images demonstrate the capacity to improve patient care by detecting disease, aiding diagnosis, improving clinical confidence, and providing a means of selecting appropriate treatments. This year, the SNMMI Henry N. Wagner, Jr., MD, Image of the Year was chosen from all the abstracts submitted to the SNMMI Annual Meeting and voted on by both the reviewers and the society leadership.

**Altered Regional Cerebral Function and Its Association With Cognitive Impairment In COVID-19: A Prospective FDG PET Study**

*First Author: Ganna Blazhenets, M. Sc.*




## The Journal of Nuclear Medicine Best Papers

### EDITORS' CHOICE AWARD — FOR THE BEST CLINICAL ARTICLE IN 2020

***PRESENTED TO:*** *Clemens Kratochwil, Frederik L. Giesel, Claus-Peter Heussel, Daniel Kazdal, Volker Endris, Cathleen Nientiedt, Frank Bruchertseifer, Maximilian Kippenberger, Hendrik Rathke, Jonas Leichsenring, Markus Hohenfellner, Alfred Morgenstern, Uwe Haberkorn, Stefan Duensing, and Albrecht Stenzinger*

*Department of Nuclear Medicine, Heidelberg University Hospital, Heidelberg, Germany*

***FOR:*** **Patients Resistant Against PSMA-Targeting $\alpha$-Radiation Therapy Often Harbor Mutations in DNA Damage-Repair–Associated Genes**

*J Nucl Med. 2020; 61:683–688*

### EDITORS' CHOICE AWARD — FOR THE BEST BASIC SCIENCE ARTICLE IN 2020

***PRESENTED TO:*** *Eric Berg, Herman Gill, Jan Marik, Annie Ogasawara, Simon Williams, Guus van Dongen, Daniëlle Vugts, Simon R. Cherry, and Alice F. Tarantal*

*Department of Biomedical Engineering, University of California–Davis, Davis, California*

***FOR:*** **Total-Body PET and Highly Stable Chelators Together Enable Meaningful $^{89}$Zr-Antibody PET Studies up to 30 Days After Injection**

*J Nucl Med. 2020; 61:453–460*

### EDITORS' CHOICE AWARD — FOR THE OVERALL BEST ARTICLE IN 2020

***PRESENTED TO:*** *Eric Berg, Herman Gill, Jan Marik, Annie Ogasawara, Simon Williams, Guus van Dongen, Daniëlle Vugts, Simon R. Cherry, and Alice F. Tarantal*

*Department of Biomedical Engineering, University of California–Davis, Davis, California*

***FOR:*** **Total-Body PET and Highly Stable Chelators Together Enable Meaningful $^{89}$Zr-Antibody PET Studies up to 30 Days After Injection**

*J Nucl Med. 2020; 61:453–460*

# Journal of Nuclear Medicine Technology Best Papers

## EDITORS' CHOICE AWARD — FOR 1ST PLACE ARTICLE IN 2020

***PRESENTED TO:*** ***Paul E. Christian, Simon-Peter Williams, Lance Burrell, Paulo Castaneda, Justin Albiani, Nicholas Sandella, Andrei Iagaru, John M. Hoffman, Alex de Crespigny, and Sandra Sanabria Bohorquez***
*Genentech, Inc., South San Francisco, California*

***FOR:*** **Optimization of $^{89}$Zr PET Imaging for Improved Multisite Quantification and Lesion Detection Using an Anthropomorphic Phantom**
*J. Nucl. Med. Technol. 2020; 48:54–57*

## EDITORS' CHOICE AWARD — FOR 2ND PLACE ARTICLE IN 2020

***PRESENTED TO:*** ***Shirin Hatami, Sarah Frye, Anna McMunn, Crystal Botkin, Razi Muzaffar, Kara Christopher, and Medhat Osman***
*Doisy College of Health Sciences, Saint Louis University, St. Louis, Missouri*

***FOR:*** **Added Value of Digital over Analog PET/CT: More Significant as Image Field of View and Body Mass Index Increase**
*J. Nucl. Med. Technol. 2020; 48:354–360*

## EDITORS' CHOICE AWARD — FOR 3RD PLACE ARTICLE IN 2020

***PRESENTED TO:*** ***Krista Wolfe, Jonathan Baldwin, Vesper Grantham, and Wendy Galbraith***
*College of Allied Health, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma*

***FOR:*** **$^{90}$Y-Labeled Resin Microsphere Spills: A Pilot Study to Determine Efficient Cleanup Practices**
*J. Nucl. Med. Technol. 2020; 48:274–277*

## EDITORS' CHOICE AWARD — FOR BEST CONTINUING EDUCATION ARTICLE IN 2020

***PRESENTED TO:*** ***Barbara J. Grabher***
*Grabher Consulting and Specialty Services, Forest Hill, Maryland*

***FOR:*** **Breast Cancer: Evaluating Tumor Estrogen Receptor Status with Molecular Imaging to Increase Response to Therapy and Improve Patient Outcomes**
*J. Nucl. Med. Technol. 2020; 48:191–201*

## EDITORS' CHOICE AWARD — FOR BEST EDUCATORS' FORUM ARTICLE IN 2020

***PRESENTED TO:*** ***Gail A. McFarland, Richard G. Hoylman, Jennifer L. Prekeges, and Vanessa R. Bennett***
*Nuclear Medicine Technology Program, Bellevue College, Bellevue, Washington*

***FOR:*** **Teaching Professional Behavior**
*J. Nucl. Med. Technol. 2020; 48:317–325*

# 2021 Alavi–Mandell Awards
## FOR JNM ARTICLES PUBLISHED IN 2020

**The Impact of Radiobiologically Informed Dose Prescription on the Clinical Benefit of $^{90}$Y SIRT in Colorectal Cancer Patients**

*Elliot M. Abbott*, Nadia Falzone*, Boon Q. Lee, Christiana Kartsonaki, Helen Winter, Tessa A. Greenhalgh, Daniel R. McGowan, Nigar Syed, Ana M. Denis-Bacelar, Philip Boardman, Ricky A. Sharma, and Katherine A. Vallis*

**Quantitative 3D Assessment of $^{68}$Ga-DOTATOC PET/MRI with Diffusion-Weighted Imaging to Assess Imaging Markers for Gastroenteropancreatic Neuroendocrine Tumors: Preliminary Results**

*Lisa C. Adams*, Keno K. Bressem*, Julia Brangsch, Carolin Reimann, Kristin Nowak, Winfried Brenner, and Marcus R. Makowski*

**Cerenkov Luminescence Imaging for Surgical Margins in Radical Prostatectomy: A Surgical Perspective**

*Dominic Bagguley, Marcus Cumberbatch, Nathan Lawrentschuk, and Declan G. Murphy*

**Differential Expression of Glucose Transporters and Hexokinases in Prostate Cancer with a Neuroendocrine Gene Signature: A Mechanistic Perspective for $^{18}$F-FDG Imaging of PSMA-Suppressed Tumors**

*Martin K. Bakht, Jessica M. Lovnicki, Janice Tubman, Keith F. Stringer, Jonathan Chiaramonte, Michael R. Reynolds, Iulian Derecichei, Rosa-Maria Ferraiuolo, Bre-Anne Fifield, Dorota Lubanska, So Won Oh, Gi Jeong Cheon, Cheol Kwak, Chang Wook Jeong, Keon Wook Kang, John F. Trant, Colm Morrissey, Ilsa M. Coleman, Yuzhuo Wang, Hojjat Ahmadzadehfar, Xuesen Dong, and Lisa A. Porter*

**Imaging the Distribution of Gastrin-Releasing Peptide Receptors in Cancer**

*Lucia Baratto, Heying Duan, Helmut Mäcke, and Andrei Iagaru*

**$^{11}$C-Methionine PET Identifies Astroglia Involvement in Heart–Brain Inflammation Networking After Acute Myocardial Infarction**

*Pablo Bascuñana, Annika Hess, Tobias Borchert, Yong Wang, Kai C. Wollert, Frank M. Bengel, and James T. Thackeray*

**First Evidence for a Dose–Response Relationship in Patients Treated with $^{166}$Ho Radioembolization: A Prospective Study**

*Remco Bastiaannet, Caren van Roekel, Maarten L.J. Smits, Sjoerd G. Elias, Wouter A.C. van Amsterdam, Dan Doan, Jip F. Prince, Rutger C.G. Bruijnen, Hugo W.A.M. de Jong, and Marnix G.E.H. Lam*

**Predictive Value of $^{18}$F-Florbetapir and $^{18}$F-FDG PET for Conversion from Mild Cognitive Impairment to Alzheimer Dementia**

*Ganna Blazhenets, Yilong Ma, Arnd Sörensen, Florian Schiller, Gerta Rücker, David Eidelberg, Lars Frings, and Philipp T. Meyer for the Alzheimer Disease Neuroimaging Initiative*

**Targeted Optical Imaging of the Glucagonlike Peptide 1 Receptor Using Exendin-4-IRDye 800CW**

*Marti Boss, Desiree Bos, Cathelijne Frielink, Gerwin Sandker, Selen Ekim, Camille Marciniak, Francois Pattou, Go van Dam, Sanne van Lith, Maarten Brom, Martin Gotthardt, and Mijke Buitinga*

**Receptor-Targeted Photodynamic Therapy of Glucagon-Like Peptide 1 Receptor–Positive Lesions**

*Marti Boss, Desiree Bos, Cathelijne Frielink, Gerwin Sandker, Patricia Bronkhorst, Sanne A.M. van Lith, Maarten Brom, Mijke Buitinga, and Martin Gotthardt*

**Evaluation of an Automated Module Synthesis and a Sterile Cold Kit–Based Preparation of 68Ga-PSMA-11 in Patients with Prostate Cancer**

*Letizia Calderoni, Andrea Farolfi, Davide Pianori, Elisa Maietti, Veronica Cabitza, Alessandro Lambertini, Giacomo Ricci, Silvi Telo, Filippo Lodi, Paolo Castellucci, and Stefano Fanti*

**$^{64}$Cu-DOTATATE PET/CT and Prediction of Overall and Progression-Free Survival in Patients with Neuroendocrine Neoplasms**

*Esben Andreas Carlsen, Camilla Bardram Johnbeck, Tina Binderup, Mathias Loft, Andreas Pfeifer, Jann Mortensen, Peter Oturai, Annika Loft, Anne Kiil Berthelsen, Seppo W. Langer, Ulrich Knigge, and Andreas Kjaer*

**3D-Printable Platform for High-Throughout Small-Animal Imaging**

*Lukas M. Carter, Kelly E. Henry, Andre Platzman, and Jason S. Lewis*

**Combination Strategies to Improve Targeted Radionuclide Therapy**

*Tiffany G. Chan, Edward O'Neill, Christine Habjan, and Bart Cornelissen*

**$^{18}$F-FAC PET Visualizes Brain-Infiltrating Leukocytes in a Mouse Model of Multiple Sclerosis**

*Bao Ying Chen, Chiara Ghezzi, Brendon Villegas, Andrew Quon, Caius G. Radu, Owen N. Witte, and Peter M. Clark*

**Factors Predicting Metastatic Disease in $^{68}$Ga-PSMA-11 PET–Positive Osseous Lesions in Prostate Cancer**

*Le Wen Chiu, Courtney Lawhn-Heath, Spencer C. Behr, Roxanna Juarez, Paola M. Perez, Iryna Lobach, Matthew D. Bucknor, Thomas A. Hope, and Robert R. Flavell*

**PET Imaging Quantifying $^{68}$Ga-PSMA-11 Uptake in Metastatic Colorectal Cancer**

*Tahleesa J. Cuda, Andrew D. Riddell, Cheng Liu, Vicki L. Whitehall, Jennifer Borowsky, David K. Wyld, Matthew E. Burge, Elizabeth Ahern, Alison Griffin, Nicholas J.R. Lyons, Stephen E. Rose, David A. Clark, Andrew R.L. Stevenson, John D. Hooper, Simon Puttick, and Paul A. Thomas*



*(*contributed equally)*

# 2021 Alavi–Mandell Awards
## FOR JNM ARTICLES PUBLISHED IN 2020

**Intraoperative $^{68}$Ga-PSMA Cerenkov Luminescence Imaging for Surgical Margins in Radical Prostatectomy: A Feasibility Study**

*Christopher Darr*, Nina N. Harke*, Jan Philipp Radtke, Leubet Yirga, Claudia Kesch, Maarten R. Grootendorst, Wolfgang P. Fendler, Pedro Fragoso Costa, Christoph Rischpler, Christine Praus, Johannes Haubold, Henning Reis, Thomas Hager, Ken Herrmann, Ina Binse*, and Boris Hadaschik**

**68Ga-PSMA–Guided Bone Biopsies for Molecular Diagnostics in Patients with Metastatic Prostate Cancer**

*Anouk C. de Jong*, Minke Smits*, Job van Riet, Jurgen J. Fütterer, Tessa Brabander, Paul Hamberg, Inge M. van Oort, Ronald de Wit, Martijn P. Lolkema, Niven Mehra, Marcel Segbers†, and Astrid A.M. van der Veldt†*

**Back-Table Fluorescence-Guided Imaging for Circumferential Resection Margin Evaluation Using Bevacizumab-800CW in Patients with Locally Advanced Rectal Cancer**

*Steven J. de Jongh*, Jolien J.J. Tjalma*, Marjory Koller, Matthijs D. Linssen, Jasper Vonk, Michael Dobosz, Annelies Jorritsma-Smit, Jan H. Kleibeuker, Geke A.P. Hospers, Klaas Havenga, Patrick H.J. Hemmer, Arend Karrenbeld, Gooitzen M. van Dam, Boudewijn van Etten, and Wouter B. Nagengast*

**Diagnostic Accuracy of PET Tracers for the Differentiation of Tumor Progression from Treatment-Related Changes in High-Grade Glioma: A Systematic Review and Metaanalysis**

*Paul L. de Zwart, Bart R.J. van Dijken, Gea A. Holtman, Gilles N. Stormezand, Rudi A.J.O. Dierckx, Peter Jan van Laar, and Anouk van der Hoorn*

**The Spatial-Temporal Ordering of Amyloid Pathology and Opportunities for PET Imaging**

*Enrico Fantoni*, Lyduine Collij*, Isadora Lopes Alves, Christopher Buckley, and Gill Farrar on behalf of the AMYPAD consortium*

**Mapping Prostate Cancer Lesions Before and After Unsuccessful Salvage Lymph Node Dissection Using Repeat PSMA PET**

*Andrea Farolfi, Harun Ilhan, Andrei Gafita, Jeremie Calais, Francesco Barbato, Manuel Weber, Ali Afshar-Oromieh, Fabian Spohn, Axel Wetter, Christoph Rischpler, Boris Hadaschik, Davide Pianori, Stefano Fanti, Uwe Haberkorn, Matthias Eiber, Ken Herrmann*, and Wolfgang Peter Fendler**

**Clinical Translation of a $^{68}$Ga-Labeled Integrin αvβ6–Targeting Cyclic Radiotracer for PET Imaging of Pancreatic Cancer**

*Xun Feng, Yanpu Wang, Dehua Lu, Xiaoxia Xu, Xin Zhou, Huiyuan Zhang, Ting Zhang, Hua Zhu, Zhi Yang, Fan Wang, Nan Li, and Zhaofei Liu*

**Alteration of Cellular Reduction Potential Will Change $^{64}$Cu-ATSM Signal With or Without Hypoxia**

*John M. Floberg, Lingjue Wang, Nilantha Bandara, Ramachandran Rashmi, Cedric Mpoy, Joel R. Garbow, Buck E. Rogers, Gary J. Patti, and Julie K. Schwarz*

**Early Prostate-Specific Antigen Changes and Clinical Outcome After $^{177}$Lu-PSMA Radionuclide Treatment in Patients with Metastatic Castration-Resistant Prostate Cancer**

*Andrei Gafita, Matthias M. Heck, Isabel Rauscher, Robert Tauber, Lisena Cala, Charlott Franz, Calogero D'Alessandria, Margitta Retz, Wolfgang A. Weber, and Matthias Eiber*

**Multimodality Imaging of Inflammation and Ventricular Remodeling in Pressure-Overload Heart Failure**

*Aylina Glasenapp, Katja Derlin, Yong Wang, Marion Bankstahl, Martin Meier, Kai C. Wollert, Frank M. Bengel, and James T. Thackeray*

**High-Throughput PET/CT Imaging Using a Multiple-Mouse Imaging System**

*Hannah E. Greenwood, Zoltan Nyitrai, Gabor Mocsai, Sandor Hobor, and Timothy H. Witney*

**Pharmacokinetic Assessment of $^{18}$F-(2S,*4R*)-4-Fluoroglutamine in Patients with Cancer**

*Milan Grkovski, Reema Goel, Simone Krebs, Kevin D. Staton, James J. Harding, Ingo K. Mellinghoff, John L. Humm, and Mark P.S. Dunphy*

**Demarcation of Sepsis-Induced Peripheral and Central Acidosis with pH (Low) Insertion Cycle Peptide**

*Kelly E. Henry, Aisling M. Chaney, Veronica L. Nagle, Haley C. Cropper, Saghar Mozaffari, Gregory Slaybaugh, Keykavous Parang, Oleg A. Andreev, Yana K. Reshetnyak, Michelle L. James, and Jason S. Lewis*

**Hybrid Tracers Based on Cyanine Backbones Targeting Prostate-Specific Membrane Antigen: Tuning Pharmacokinetic Properties and Exploring Dye–Protein Interaction**

*Albertus W. Hensbergen, Tessa Buckle, Danny M. van Willigen, Margret Schottelius, Mick M. Welling, Felicia A. van der Wijk, Tobias Maurer, Henk G. van der Poel, Gabri van der Pluijm, Wytske M. van Weerden, Hans-Jürgen Wester, and Fijs W.B. van Leeuwen*

**$^{177}$Lu-NM600 Targeted Radionuclide Therapy Extends Survival in Syngeneic Murine Models of Triple-Negative Breast Cancer**

*Reinier Hernandez, Joseph J. Grudzinski, Eduardo Aluicio-Sarduy, Christopher F. Massey, Anatoly N. Pinchuk, Ariana N. Bitton, Ravi Patel, Ray Zhang, Aakarsha V. Rao, Gopal Iyer, Jonathan W. Engle, and Jamey P. Weichert*

*(*contributed equally)*

# 2021 Alavi–Mandell Awards
## FOR JNM ARTICLES PUBLISHED IN 2020

**Tumor-to-Blood Ratio for Assessment of Somatostatin Receptor Density in Neuroendocrine Tumors Using $^{68}$Ga-DOTATOC and $^{68}$Ga-DOTATATE**

*Ezgi Ilan, Irina Velikyan, Mattias Sandström, Anders Sundin*, and Mark Lubberink**

**Folate Receptor β–Targeted PET Imaging of Macrophages in Autoimmune Myocarditis**

*Arghavan Jahandideh, Sauli Uotila, Mia Ståhle, Jenni Virta, Xiang-Guo Li, Ville Kytö, Päivi Marjamäki, Heidi Liljenbäck, Pekka Taimen, Vesa Oikonen, Jukka Lehtonen, Mikko I. Mäyränpää, Qingshou Chen, Philip S. Low, Juhani Knuuti, Anne Roivainen, and Antti Saraste*

**Neuroinflammation PET Imaging: Current Opinion and Future Directions**

*Poorva Jain, Aisling M. Chaney, Mackenzie L. Carlson, Isaac M. Jackson, Anoushka Rao, and Michelle L. James*

**Lesion Detection and Interobserver Agreement with Advanced Image Reconstruction for $^{18}$F-DCFPyL PET/CT in Patients with Biochemically Recurrent Prostate Cancer**

*Bernard H.E. Jansen, Robin W. Jansen, Maurits Wondergem, Sandra Srbljin, John M.H. de Klerk, Birgit I. Lissenberg-Witte, André N. Vis, Reindert J.A. van Moorselaar, Ronald Boellaard, Otto S. Hoekstra, and Daniela E. Oprea-Lager*

**Repeatability of Quantitative $^{18}$F-DCFPyL PET/CT Measurements in Metastatic Prostate Cancer**

*Bernard H.E. Jansen, Matthijs C.F. Cysouw, André N. Vis, Reindert J.A. van Moorselaar, Jens Voortman, Yves J.L. Bodar, Patrick R. Schober, N. Harry Hendrikse, Otto S. Hoekstra, Ronald Boellaard, and D.E. Oprea-Lager*

**Pulmonary Lymphangitic Carcinomatosis: Diagnostic Performance of High-Resolution CT and $^{18}$F-FDG PET/CT in Correlation with Clinical Pathologic Outcome**

*Mario Jreige*, Vincent Dunet*, Igor Letovanec, John O. Prior, Reto A. Meuli, Catherine Beigelman-Aubry, and Niklaus Schaefer*

**Imaging Inflammation in Atherosclerosis with CXCR4-Directed $^{68}$Ga-Pentixafor PET/CT: Correlation with $^{18}$F-FDG PET/CT**

*Malte Kircher, Johannes Tran-Gia, Luisa Kemmer, Xiaoli Zhang, Andreas Schirbel, Rudolf A. Werner, Andreas K. Buck, Hans-Jürgen Wester, Marcus Hacker, Constantin Lapa*, and Xiang Li**

**Light-Induced Radiosynthesis of $^{89}$Zr-DFO-Azepin-Onartuzumab for Imaging the Hepatocyte Growth Factor Receptor**

*Simon Klingler, Rachael Fay, and Jason P. Holland*

**Performance of Digital PET Compared with High-Resolution Conventional PET in Patients with Cancer**

*Daniëlle Koopman, Jorn. A. van Dalen, Henk Stevens, Cornelis H. Slump, Siert Knollema, and Pieter L. Jager*

**Histologically Confirmed Diagnostic Efficacy of $^{18}$F-rhPSMA-7 PET for N-Staging of Patients with Primary High-Risk Prostate Cancer**

*Markus Kroenke, Alexander Wurzer, Kristina Schwamborn, Lena Ulbrich, Lena Jooß, Tobias Maurer, Thomas Horn, Isabel Rauscher, Bernhard Haller, Michael Herz, Hans-Jürgen Wester, Wolfgang A. Weber, and Matthias Eiber*

**Detection Rate and Localization of Prostate Cancer Recurrence Using 68Ga-PSMA-11 PET/MRI in Patients with Low PSA Values ≤0.5 ng/mL**

*Benedikt Kranzbühler, Julian Müller, Anton S. Becker, Helena I. Garcia Schüler, Urs Muehlematter, Christian D. Fankhauser, Sarah Kedzia, Matthias Guckenberger, Philipp A. Kaufmann, Daniel Eberli, and Irene A. Burger*

**Recent Advances in Imaging Steroid Hormone Receptors in Breast Cancer**

*Manoj Kumar, Kelley Salem, Amye J. Tevaarwerk, Roberta M. Strigel, and Amy M. Fowler*

**Head-to-Head Comparison of $^{68}$Ga-PSMA-11 with $^{18}$F-PSMA-1007 PET/CT in Staging Prostate Cancer Using Histopathology and Immunohistochemical Analysis as a Reference Standard**

*Jonathan Kuten, Ibrahim Fahoum, Ziv Savin, Ofer Shamni, Gilad Gitstein, Dov Hershkovitz, Nicola J. Mabjeesh, Ofer Yossepowitch, Eyal Mishani, and Einat Even-Sapir*

**Immune Checkpoint Imaging in Oncology: A Game Changer Toward Personalized Immunotherapy?**

*Susanne Lütje, Georg Feldmann, Markus Essler, Peter Brossart, and Ralph A. Bundschuh*

**High-Resolution Depth-Encoding PET Detector Module with Prismatoid Light-Guide Array**

*Andy LaBella, Xinjie Cao, Eric Petersen, Rick Lubinsky, Anat Biegon, Wei Zhao, and Amir H. Goldan*

**PARP-1–Targeted Auger Emitters Display High-LET Cytotoxic Properties In Vitro but Show Limited Therapeutic Utility in Solid Tumor Models of Human Neuroblastoma**

*Hwan Lee, Aladdin Riad, Paul Martorano, Adam Mansfield, Minu Samanta, Vandana Batra, Robert H. Mach, John M. Maris, Daniel A. Pryma, and Mehran Makvandi*



*(*contributed equally)*

# 2021 Alavi–Mandell Awards
## FOR JNM ARTICLES PUBLISHED IN 2020

**Multiparametric $^{18}$F-FDG PET/MRI of the Breast: Are There Differences in Imaging Biomarkers of Contralateral Healthy Tissue Between Patients With and Without Breast Cancer?**

*Doris Leithner, Thomas H. Helbich, Blanca Bernard-Davila, Maria Adele Marino, Daly Avendano, Danny F. Martinez, Maxine S. Jochelson, Panagiotis Kapetas, Pascal A.T. Baltzer, Alexander Haug, Marcus Hacker, Yasemin Tanyildizi, Elizabeth A. Morris, and Katja Pinker*

**$^{18}$F-FDG PET/CT Identifies Predictors of Survival in Patients with Locally Advanced Cervical Carcinoma and Paraaortic Lymph Node Involvement to Allow Intensification of Treatment**

*Hélène Leray, Erwan Gabiache, Frédéric Courbon, Isabelle Brenot-Rossi, Hélène Colineaux, Benoît Lepage, Eric Lambaudie, Alejandra Martinez, Marie Voglimacci, Ariane Weyl, Marion Deslandres, Anne Ducassou, Stéphanie Motton, Charlotte Vaysse, and Elodie Chantalat*

**Dose-Dependent Growth Delay of Breast Cancer Xenografts in the Bone Marrow of Mice Treated with $^{223}$Ra: The Role of Bystander Effects and Their Potential for Therapy**

*Calvin N. Leung, Brian S. Canter, Didier Rajon, Tom A. Bäck, J. Christopher Fritton, Edouard I. Azzam, and Roger W. Howell*

**The Roach Equation: Value of Old Clinical Tools in the Era of New Molecular Imaging**

*Yun Rose Li and Mack Roach*

**The Genetic Duet of BRAF V600E and TERT Promoter Mutations Robustly Predicts Loss of Radioiodine Avidity in Recurrent Papillary Thyroid Cancer**

*Jiajun Liu*, Rengyun Liu*, Xiaopei Shen, Guangwu Zhu, Biao Li, and Mingzhao Xing*

**$^{68}$Ga-PSMA PET/CT Combined with PET/Ultrasound-Guided Prostate Biopsy Can Diagnose Clinically Significant Prostate Cancer in Men with Previous Negative Biopsy Results**

*Chen Liu*, Teli Liu*, Zhongyi Zhang*, Ning Zhang, Peng Du, Yong Yang, Yiqiang Liu, Wei Yu, Nan Li, Michael A. Gorin, Steven P. Rowe, Hua Zhu, Kun Yan, and Zhi Yang*

**A Clinical Feasibility Study to Image Angiogenesis in Patients with Arteriovenous Malformations Using $^{68}$Ga-RGD PET/CT**

*Daphne Lobeek, Frédérique C.M. Bouwman, Erik H.J.G. Aarntzen, Janneke D.M. Molkenboer-Kuenen, Uta E. Flucke, Ha-Long Nguyen, Miikka Vikkula, Laurence M. Boon, Willemijn Klein, Peter Laverman, Wim J.G. Oyen, Otto C. Boerman, Samantha Y.A. Terry, Leo J. Schultze Kool, and Mark Rijpkema*

**$^{177}$Lu-Lilotomab Satetraxetan Has the Potential to Counteract Resistance to Rituximab in Non-Hodgkin Lymphoma**

*Marion M. Malenge, Sebastian Patzke, Anne H. Ree, Trond Stokke, Peter Ceuppens, Brian Middleton, Jostein Dahle, and Ada H.V. Repetto-Llamazares*

**Confirmation of $^{123}$I-FP-CIT SPECT Quantification Methods in Dementia with Lewy Bodies and Other Neurodegenerative Disorders**

*Daniela D. Maltais, Lennon G. Jordan, Hoon-Ki Min, Toji Miyagawa, Scott A. Przybelski, Timothy G. Lesnick, Robert R. Reichard, Dennis W. Dickson, Melissa E. Murray, Kejal Kantarci, Bradley F. Boeve, and Val J. Lowe*

**Characterization of 3 PET Tracers for Quantification of Mitochondrial and Synaptic Function in Healthy Human Brain: $^{18}$F-BCPP-EF, $^{11}$C-SA-4503, and $^{11}$C-UCB-J**

*Ayla Mansur, Eugenii A. Rabiner, Robert A. Comley, Yvonne Lewis, Lefkos T. Middleton, Mickael Huiban, Jan Passchier, Hideo Tsukada, and Roger N. Gunn for the MIND-MAPS Consortium*

**PET/MRI Versus PET/CT for Whole-Body Staging: Results from a Single-Center Observational Study on 1,003 Sequential Examinations**

*Ole Martin*, Benedikt M. Schaarschmidt*, Julian Kirchner, Saravanabavaan Suntharalingam, Johannes Grueneisen, Aydin Demircioglu, Philipp Heusch, Harald H. Quick, Michael Forsting, Gerald Antoch, Ken Herrmann, and Lale Umutlu*

**An $^{89}$Zr-HDL PET Tracer Monitors Response to a CSF1R Inhibitor**

*Christian A. Mason, Susanne Kossatz, Lukas M. Carter, Giacomo Pirovano, Christian Brand, Navjot Guru, Carlos Pérez-Medina, Jason S. Lewis, Willem J.M. Mulder, and Thomas Reiner*

**Standardization of Preclinical PET/CT Imaging to Improve Quantitative Accuracy, Precision, and Reproducibility: A Multicenter Study**

*Wendy McDougald, Christian Vanhove, Adrienne Lehnert, Barbara Lewellen, John Wright, Marco Mingarelli, Carlos Alcaide Corral, Jurgen E. Schneider, Sven Plein, David E. Newby, Andy Welch, Robert Miyaoka, Stefaan Vandenberghe, and Adriana Alexandre S. Tavares*

**Can Intraoperative Fluorescence Imaging Identify All Lesions While the Road Map Created by Preoperative Nuclear Imaging Is Masked?**

*Phillipa Meershoek, Tessa Buckle, Matthias N. van Oosterom, Gijs H. KleinJan, Henk G. van der Poel, and Fijs W.B. van Leeuwen*

*(*contributed equally)*

# 2021 Alavi–Mandell Awards
## FOR JNM ARTICLES PUBLISHED IN 2020

**Radiation Dosimetry and Biodistribution of $^{68}$Ga-FAPI-46 PET Imaging in Cancer Patients**
*Catherine Meyer, Magnus Dahlbom, Thomas Lindner, Sebastien Vauclin, Christine Mona, Roger Slavik, Johannes Czernin, Uwe Haberkorn, and Jeremie Calais*

**$^{11}$C-Choline PET/CT in Recurrent Prostate Cancer: Retrospective Analysis in a Large U.S. Patient Series**
*Laure Michaud, Karim A. Touijer, Audrey Mauguen, Michael J. Zelefsky, Michael J. Morris, Serge K. Lyashschenko, Jeremy C. Durack, John L. Humm, Wolfgang A. Weber, and Heiko Schöder*

**Comparative Prognostic and Diagnostic Value of Myocardial Blood Flow and Myocardial Flow Reserve After Cardiac Transplantation**
*Robert J.H. Miller*, Osamu Manabe*, Balaji Tamarappoo, Sean Hayes, John D. Friedman, Piotr J. Slomka, Jignesh Patel, Jon A. Kobashigawa, and Daniel S. Berman*

**Repurposing Molecular Imaging and Sensing for Cancer Image–Guided Surgery**
*Suman B. Mondal*, Christine M. O'Brien*, Kevin Bishop, Ryan C. Fields, Julie A. Margenthaler, and Samuel Achilefu*

**$^{18}$F-FDG PET/CT in the Diagnostic and Treatment Evaluation of Pediatric Posttransplant Lymphoproliferative Disorders**
*Filipe M. Montes de Jesus, Andor W.J.M. Glaudemans, Wim J. Tissing, Rudi A.J.O. Dierckx, Stefano Rosati, Arjan Diepstra, Walter Noordzij, and Thomas C. Kwee*

**Imaging Responses to Immunotherapy with Novel PET Tracers**
*Anna-Larissa Niemeijer, Otto S. Hoekstra, Egbert F. Smit, and Adrianus J. de Langen*

**Quantitative and Qualitative Analyses of Biodistribution and PET Image Quality of a Novel Radiohybrid PSMA, $^{18}$F-rhPSMA-7, in Patients with Prostate Cancer**
*So Won Oh, Alexander Wurzer, Eugene J. Teoh, Sohee Oh, Thomas Langbein, Markus Krönke, Michael Herz, Saskia Kropf, Hans-Jürgen Wester, Wolfgang A. Weber, and Matthias Eiber*

**$^{18}$F-DCFPyL PET/CT in Patients with Subclinical Recurrence of Prostate Cancer: Effect of Lesion Size, Smoothing Filter, and Partial-Volume Correction on PROMISE Criteria**
*Claudia Ortega*, Josh Schaefferkoetter*, Patrick Veit-Haibach, Reut Anconina, Alejandro Berlin, Nathan Perlis, and Ur Metser*

**Inflammation-Based Index and $^{68}$Ga-DOTATOC PET–Derived Uptake and Volumetric Parameters Predict Outcome in Neuroendocrine Tumor Patients Treated with $^{90}$Y-DOTATOC**
*Elin Pauwels, Sofie Van Binnebeek, Vincent Vandecaveye, Kristof Baete, Hubert Vanbilloen, Michel Koole, Felix M. Mottaghy, Karin Haustermans, Paul M. Clement, Kristiaan Nackaerts, Eric Van Cutsem, Chris Verslype, and Christophe M. Deroose*

**PET/CT Imaging with an $^{18}$F-Labeled Galactodendritic Unit in a Galectin-1–Overexpressing Orthotopic Bladder Cancer Model**
*Patricia M.R. Pereira*, Sheryl Roberts*, Flávio Figueira, João P.C. Tomé, Thomas Reiner, and Jason S. Lewis*

**Experimental Multicenter and Multivendor Evaluation of the Performance of PET Radiomic Features Using 3-Dimensionally Printed Phantom Inserts**
*Elisabeth Pfaehler, Joyce van Sluis, Bram B.J. Merema, Peter van Ooijen, Ralph C.M. Berendsen, Floris H.P. van Velden, and Ronald Boellaard*

**Optical Imaging Modalities: Principles and Applications in Preclinical Research and Clinical Settings**
*Giacomo Pirovano, Sheryl Roberts, Susanne Kossatz, and Thomas Reiner*

**Nuclear Imaging of Bacterial Infection: The State of the Art and Future Directions**
*Ilona Polvoy, Robert R. Flavell, Oren S. Rosenberg, Michael A. Ohliger, and David M. Wilson*

**Total-Body $^{68}$Ga-PSMA-11 PET/CT for Bone Metastasis Detection in Prostate Cancer Patients: Potential Impact on Bone Scan Guidelines**
*Kelsey L. Pomykala, Johannes Czernin, Tristan R. Grogan, Wesley R. Armstrong, John Williams, and Jeremie Calais*

**First-Line Selective Internal Radiation Therapy in Patients with Uveal Melanoma Metastatic to the Liver**
*Alexandre Ponti, Alban Denys, Antonia Digklia, Niklaus Schaefer, Arnaud Hocquelet, Jean-François Knebel, Olivier Michielin, Clarisse Dromain, and Rafael Duran*

**Synthesis of the PET Tracer $^{124}$I-Trametinib for MAPK/ERK Kinase Distribution and Resistance Monitoring**
*Edwin C. Pratt, Elizabeth Isaac, Evan P. Stater, Guangbin Yang, Ouathek Ouerfelli, Nagavarakishore Pillarsetty, and Jan Grimm*


*(*contributed equally)*

# 2021 Alavi–Mandell Awards
## FOR JNM ARTICLES PUBLISHED IN 2020

**Response Prediction of $^{177}$Lu-PSMA-617 Radioligand Therapy Using Prostate-Specific Antigen, Chromogranin A, and Lactate Dehydrogenase**

*Hendrik Rathke, Tim Holland-Letz, Walter Mier, Paul Flechsig, Eleni Mavriopoulou, Manuel Röhrich, Klaus Kopka, Markus Hohenfellner, Frederik Lars Giesel, Uwe Haberkorn, and Clemens Kratochwil*

**Matched-Pair Comparison of $^{68}$Ga-PSMA-11 and $^{18}$F-PSMA-1007 PET/CT: Frequency of Pitfalls and Detection Efficacy in Biochemical Recurrence After Radical Prostatectomy**

*Isabel Rauscher, Markus Krönke, Michael König, Andrei Gafita, Tobias Maurer, Thomas Horn, Kilian Schiller, Wolfgang Weber, and Matthias Eiber*

**Can the Injected Dose Be Reduced in $^{68}$Ga-PSMA-11 PET/CT While Maintaining High Image Quality for Lesion Detection?**

*Isabel Rauscher, Wolfgang P. Fendler, Thomas A. Hope, Andrew Quon, Stephan G. Nekolla, Jeremie Calais, Antonia Richter, Bernhard Haller, Ken Herrmann, Wolfgang A. Weber, Johannes Czernin, and Matthias Eiber*

**Integrity of Neurocognitive Networks in Dementing Disorders as Measured with Simultaneous PET/Functional MRI**

*Isabelle Ripp, Thomas Stadhouders, Alexandre Savio, Oliver Goldhardt, Jorge Cabello, Vince Calhoun, Valentin Riedl, Dennis Hedderich, Janine Diehl-Schmid, Timo Grimmer, and Igor Yakushev*

**Total-Body PET Imaging for up to 30 Days After Injection of $^{89}$Zr-Labeled Antibodies**

*Zachary T. Rosenkrans and Weibo Cai*

**Comparison Between $^{18}$F-FDG PET–Based and CT-Based Criteria in Non–Small Cell Lung Cancer Patients Treated with Nivolumab**

*Giovanni Rossi, Matteo Bauckneht, Carlo Genova, Erika Rijavec, Federica Biello, Simone Mennella, Maria Giovanna Dal Bello, Giuseppe Cittadini, Paolo Bruzzi, Roberta Piva, Valentina Ceriani, Gianmario Sambuceti, Egesta Lopci, Silvia Morbelli, and Francesco Grossi*

**Asymmetry of Fibrillar Plaque Burden in Amyloid Mouse Models**

*Christian Sacher, Tanja Blume, Leonie Beyer, Gloria Biechele, Julia Sauerbeck, Florian Eckenweber, Maximilian Deussing, Carola Focke, Samira Parhizkar, Simon Lindner, Franz-Josef Gildehaus, Barbara von Ungern-Sternberg, Karlheinz Baumann, Sabina Tahirovic, Gernot Kleinberger, Michael Willem, Christian Haass, Peter Bartenstein, Paul Cumming, Axel Rominger, Jochen Herms, and Matthias Brendel*

**Projection Space Implementation of Deep Learning–Guided Low-Dose Brain PET Imaging Improves Performance over Implementation in Image Space**

*Amirhossein Sanaat, Hossein Arabi, Ismini Mainta, Valentina Garibotto, and Habib Zaidi*

**Preclinical PERCIST and 25% of SUVmax Threshold: Precision Imaging of Response to Therapy in Co-clinical $^{18}$F-FDG PET Imaging of Triple-Negative Breast Cancer Patient–Derived Tumor Xenografts**

*Madhusudan A. Savaikar, Timothy Whitehead, Sudipta Roy, Lori Strong, Nicole Fettig, Tina Prmeau, Jingqin Luo, Shunqiang Li, Richard L. Wahl, and Kooresh I. Shoghi*

**Additional Local Therapy for Liver Metastases in Patients with Metastatic Castration-Resistant Prostate Cancer Receiving Systemic PSMA-Targeted Therapy**

*Robert Seifert, Katharina Kessel, Martin Boegemann, Michael Köhler, Wolfgang Roll, Lars Stegger, Matthias Weckesser, and Kambiz Rahbar*

**Semiautomatically Quantified Tumor Volume Using $^{68}$Ga-PSMA-11 PET as a Biomarker for Survival in Patients with Advanced Prostate Cancer**

*Robert Seifert, Ken Herrmann, Jens Kleesiek, Michael Schäfers, Vijay Shah, Zhoubing Xu, Guillaume Chabin, Sasa Grbic, Bruce Spottiswoode, and Kambiz Rahbar*

**PET Imaging of the Natural Killer Cell Activation Receptor NKp30**

*Travis M. Shaffer, Amin Aalipour, Christian M. Schürch, and Sanjiv S. Gambhir*

**Promise of Fully Integrated PET/MRI: Noninvasive Clinical Quantification of Cerebral Glucose Metabolism**

*Lalith Kumar Shiyam Sundar, Otto Muzik, Lucas Rischka, Andreas Hahn, Rupert Lanzenberger, Marius Hienert, Eva-Maria Klebermass, Martin Bauer, Ivo Rausch, Ekaterina Pataraia, Tatjana Traub-Weidinger, and Thomas Beyer*

**$^{18}$F-FDG PET/CT in Left-Ventricular Assist Device Infection: Initial Results Supporting the Usefulness of Image-Guided Therapy**

*Jan M. Sommerlath Sohns*, Hannah Kröhn*, Alexandra Schöde, Thorsten Derlin, Axel Haverich, Jan D. Schmitto*, and Frank M. Bengel**

*(*contributed equally)*

# 2021 Alavi–Mandell Awards
## FOR JNM ARTICLES PUBLISHED IN 2020

**Prospective Evaluation of $^{18}$F-DCFPyL PET/CT in Biochemically Recurrent Prostate Cancer in an Academic Center: A Focus on Disease Localization and Changes in Management**

*Hong Song, Caitlyn Harrison, Heying Duan, Kip Guja, Negin Hatami, Benjamin L. Franc, Farshad Moradi, Carina Mari Aparici, Guido A. Davidzon, and Andrei Iagaru*

**$^{18}$F-FDG PET Imaging of the Inferior Colliculus in Asymmetric Hearing Loss**

*Iva Speck, Susan Arndt, Johannes Thurow, Ganna Blazhenets, Antje Aschendorff, Philipp T. Meyer, and Lars Frings*

**Molecular Imaging of PD-L1 Expression and Dynamics with the Adnectin-Based PET Tracer $^{18}$F-BMS-986192**

*Thijs S. Stutvoet*, Elly L. van der Veen*, Arjan Kol, Inês F. Antunes, Erik F.J. de Vries, Geke A.P. Hospers, Elisabeth G.E. de Vries, Steven de Jong, and Marjolijn N. Lub-de Hooge*

**The Biodistribution of a CD3 and EpCAM Bispecific T-Cell Engager Is Driven by the CD3 Arm**

*Frans V. Suurs, Grit Lorenczewski, Sabine Stienen, Matthias Friedrich, Elisabeth G.E. de Vries, Derk Jan A. de Groot, and Marjolijn N. Lub-de Hooge*

**Targeting Fibroblast Activation Protein: Radiosynthesis and Preclinical Evaluation of an $^{18}$F-Labeled FAP Inhibitor**

*Johannes Toms, Jürgen Kogler, Simone Maschauer, Christoph Daniel, Christian Schmidkonz, Torsten Kuwert, and Olaf Prante*

**ABCG2- and ABCB1 Inhibition Using Supratherapeutic Doses of Erlotinib: Clinical Implications in the Treatment of Central Nervous System Metastases**

*Eveline A. van de Stradt, Maqsood Yaqub, Idris Bahce, and N.H. Hendrikse*

**Development and Evaluation of Interleukin-2–Derived Radiotracers for PET Imaging of T Cells in Mice**

*Elly L. van der Veen, Frans V. Suurs, Frederik Cleeren, Guy Bormans, Philip H. Elsinga, Geke A.P. Hospers, Marjolijn N. Lub-de Hooge, Elisabeth G.E. de Vries, Erik F.J. de Vries, and Inês F. Antunes*

**Image Quality and Semiquantitative Measurements on the Biograph Vision PET/CT System: Initial Experiences and Comparison with the Biograph mCT**

*Joyce van Sluis, Ronald Boellaard, Ananthi Somasundaram, Paul H. van Snick, Ronald J.H. Borra, Rudi A.J.O. Dierckx, Gilles N. Stormezand, Andor W.J.M. Glaudemans, and Walter Noordzij*

**Image Quality and Activity Optimization in Oncologic $^{18}$F-FDG PET Using the Digital Biograph Vision PET/CT System**

*Joyce van Sluis, Ronald Boellaard, Rudi A.J.O. Dierckx, Gilles N. Stormezand, Andor W.J.M. Glaudemans, and Walter Noordzij*

**TSPO Versus P2X7 as a Target for Neuroinflammation: An In Vitro and In Vivo Study**

*Donatienne Van Weehaeghe, Evelien Van Schoor, Joke De Vocht, Michel Koole, Bala Attili, Sofie Celen, Lieven Declercq, Dietmar R. Thal, Philip Van Damme, Guy Bormans, and Koen Van Laere*

**Moving Toward Multicenter Therapeutic Trials in Amyotrophic Lateral Sclerosis: Feasibility of Data Pooling Using Different Translocator Protein PET Radioligands**

*Donatienne Van Weehaeghe*, Suma Babu*, Joke De Vocht, Nicole R. Zürcher, Sheena Chew, Chieh-En J. Tseng, Marco L. Loggia, Michel Koole, Ahmadreza Rezaei, Georg Schramm, Philip Van Damme, Jacob M. Hooker, Koen Van Laere*, and Nazem Atassi**

**Management of Patients with Renal Failure Undergoing Dialysis During $^{131}$I Therapy for Thyroid Cancer**

*Maximilien Vermandel*, Pauline Debruyne*, Amandine Beron, Laura Devos, Antoine Talbot, Jean-François Legrand, François Provôt, and Georges Lion*

**Diagnostic Value of $^{68}$Ga-PSMA PET/CT for Detection of Phosphatase and Tensin Homolog Expression in Prostate Cancer: A Pilot Study**

*BaoJun Wang*, Jie Gao*, Qing Zhang*, Yao Fu, Guangxiang Liu, Jiong Shi, Danyan Li, Feng Wang*, and Hongqian Guo*

**A Prospective, Comparative Study of Ventilation–Perfusion Planar Imaging and Ventilation–Perfusion SPECT for Chronic Thromboembolic Pulmonary Hypertension**

*Lei Wang, Meng Wang, Tao Yang, Dayong Wu, Changming Xiong*, and Wei Fang**

**The Changing Face of Nuclear Cardiology: Guiding Cardiovascular Care Toward Molecular Medicine**

*Rudolf A. Werner, James T. Thackeray, Johanna Diekmann, Desiree Weiberg, Johann Bauersachs, and Frank M. Bengel*

**Nationwide Survey on Implementation of 2011 Nuclear Regulatory Commission Policy on Release of Patients After $^{131}$I Therapy for Thyroid Cancer**

*Di Wu, Cristiane J. Gomes Lima, Gary Bloom, Kenneth D. Burman, Leonard Wartofsky, and Douglas Van Nostrand*



*(*contributed equally)*

# 2021 Alavi–Mandell Awards
## FOR JNM ARTICLES PUBLISHED IN 2020

**Radiohybrid Ligands: A Novel Tracer Concept Exemplified by $^{18}$F- or 68Ga-Labeled rhPSMA Inhibitors**
*Alexander Wurzer, Daniel Di Carlo, Alexander Schmidt, Roswitha Beck, Matthias Eiber, Markus Schwaiger, and Hans-Jürgen Wester*

**Predictive Role of Temporal Changes in Intratumoral Metabolic Heterogeneity During Palliative Chemotherapy in Patients with Advanced Pancreatic Cancer: A Prospective Cohort Study**
*Shin Hye Yoo*, Seo Young Kang*, Gi Jeong Cheon, Do-Youn Oh, and Yung-Jue Bang*

**Label-Free Visualization of Early Cancer Hepatic Micrometastasis and Intraoperative Image-Guided Surgery by Photoacoustic Imaging**
*Qian Yu*, Shanshan Huang*, Zhiyou Wu, Jiadi Zheng, Xiaoyuan Chen, and Liming Nie*

**$^{177}$Lu-EB-PSMA Radioligand Therapy with Escalating Doses in Patients with Metastatic Castration-Resistant Prostate Cancer**
*Jie Zang*, Qingxing Liu*, Huimin Sui, Rongxi Wang, Orit Jacobson, Xinrong Fan, Zhaohui Zhu, and Xiaoyuan Chen*

**Imaging P-Glycoprotein Induction at the Blood–Brain Barrier of a β-Amyloidosis Mouse Model with $^{11}$C-Metoclopramide PET**
*Viktoria Zoufal, Severin Mairinger, Mirjam Brackhan, Markus Krohn, Thomas Filip, Michael Sauberer, Johann Stanek, Thomas Wanek, Nicolas Tournier, Martin Bauer, Jens Pahnke, and Oliver Langer*



*(*contributed equally)*

# SNMMI Annual Meeting Awards

The SNMMI Annual Meeting provides the opportunity to present and publish innovative scientific investigations to a global audience of medical imaging professionals. These awards recognize the top research presented at the SNMMI 2021 Virtual Annual Meeting.

## Henry N. Wagner, Jr., MD, Best Paper of the Year Award

For research presenting results that not only emphasized the promise and success of targeted α therapies but also reflected growing global interest in these life-extending treatments:

**Long-term outcome of 225Ac-DOTATATE Targeted Alpha Therapy in Patients with Metastatic Gastroenteropancreatic Neuroendocrine Tumors**

*Journal of Nuclear Medicine* **May 2021, 62 (Supplement 1)**

*Chandrasekhar Bal[1], Sanjana Ballal[1], and Madhav Yadav, All India Institute of Medical Sciences, New Delhi, India*

## ERF/SNMMI Best COVID-19 Abstract (Physician/Scientist) Award

**Quantitative Dynamic $^{18}$F-FDG-PET/CT Imaging Revealed Residual Lesions in Discharged COVID-19 Patients**

*Presenting Author: Jijin Yao, Fifth Affiliated Hospital, Sun Yat-sen University, Zhuhai, China*

## ERF/SNMMI-TS Best COVID-19 Abstract (Technologist)

**Comparison of Four Infusion Methods for Lutathera Peptide Radionuclide Receptor Therapy**

*Presenting Author: Anne Ellis, Michigan Medicine, Ann Arbor, MI*

## Posters

1st, 2nd and 3rd place winners are determined from the top 10 candidates from each scientific track based on the visual appearance/quality of their poster, quality of content and the original scientific contribution of their poster or ePoster:

### Oncology, Clinical Diagnosis, and Therapy Poster Award Winners

#### 1st Place

**[18F]fluoro-hydroxyphenethylguanidine ([18F]pHPG): A Novel PET Radiotracer for Imaging of Metastatic Paraganglioma in Humans**

*Presenting Author: Ka Kit Wong, MBBS, University of Michigan Hospital, Ann Arbor, MI*

#### 2nd Place

**Whole-body dynamic multiparametric PET/CT: temporal stability of standardized uptake values vs. metabolic rates in an oncologic population**

*Presenting Author: Paul-Robert Derenoncourt, MD, Washington University School of Medicine, St. Louis, MO*

#### 3rd Place

**$^{177}$Lu-PSMA-617 versus Cabazitaxel in Metastatic Castration-Resistant Prostate Cancer: a randomised, open-label, phase 2 trial (TheraP)**

*Presenting Author: Michael S. Hofman, MBBS, Peter MacCallum Cancer and University of Melbourne, Melbourne, Australia*

### Oncology, Basic Science Poster Award Winners

#### 1st Place

**Preoperative PET/CT and fluorescence-guided surgery of prostate cancer with the PSMA-11-derived hybrid molecule PSMA-914: First clinical proof-of-concept**

*Presenting Author: Ann-Christin Eder, PhD, Department of Nuclear Medicine, University Medical Center Freiburg, Freiburg, Germany*

#### 2nd Place

**Validation of FAPi PET biodistribution by immunohistochemistry in patients with solid cancers: a prospective exploratory imaging study**

*Presenting Author: Christine Mona, PhD, UCLA Los Angeles, CA*

#### 3rd Place

**A radiotheranostic study for strategic treatment of ovarian cancer peritoneal metastases using the all-in-one multimeric radiopeptide $^{64}$Cu-cyclam-RAFT-c(-RGDfK)**

*Presenting Author: Zhao-Hui Jin, Department of Molecular Imaging and Theranostics, National Institutes for Quantum and Radiological Science and Technology, Chiba, Japan*

### Cardiovascular Poster Award Winners

#### 1st Place

**Regional versus global PET function and perfusion computations for detecting cardiac ischemia**

*Presenting Author: Kenneth J. Nichols, PhD, St. Francis Hospital, Roslyn, NY*

#### 2nd Place

**Predictive value of the proportion of hibernating myocardium in total perfusion defect on reversing remodeling in patients with ischemic cardiomyopathy and treated by revascularization**

*Presenting Author: Xiaoli Zhang, MD, PhD, Beijing Anzhen Hospital Capital Medical University, Beijing, China*

#### 3rd Place

**Two-year change in 18F-sodium fluoride uptake in the carotid arteries of healthy subjects and angina pectoris patients**

*Presenting Author: Reza Piri, MD, Odense University Hospital, Department of Nuclear Medicine, Odense, Denmark*

### Molecular Imaging Probes Poster Award Winners

#### 1st Place

**Utility of D-[5-$^{11}$C]-Glutamine for bacteria targeted PET imaging of infections**

*Presenting Author: Aditi Mulgaonkar, PhD, University of Texas Southwestern, Dallas, TX*

#### 2nd Place

**Investigation of Vape Devices as Novel Drug Delivery Systems Using Fluorine-18 Radiolabelling**

*Presenting Author: George Herbert, MChem, The Department of Biomedical Sciences, University of Hull, Hull, UK*

#### 3rd Place

**ImmunoPET of CD146 in breast cancer metastatic models**

*Presenting Author: Lei Kang, MD, PhD, Peking University First Hospital, Beijing, China*

## Physics, Instrumentation, and Data Science Poster Award Winners

### 1st Place
**The personalized remote radiation tracking (PRRT) vest: experimental results**
*Presenting Author: Robert Miyaoka, PhD; University of Washington, Seattle, WA*

### 2nd Place
**MRI Compatibility Measurements of SIAT aPET**
*Presenting Author: Ziru Sang; Shenzhen Institutes of Advanced Technology, Shenzhen, China*

### 3rd Place
**Using LSO background radiation for CT-less attenuation correction of PET data in long axial FOV PET scanners**
*Presenting Author: Mohammadreza Teimoorisichani; Siemens Medical Solutions USA Inc., Knoxville, TN*

## General Clinical Specialties Poster Award Winners

### 1st Place
**Perfusion Only Scans with and without SPECT/CT in the Era of COVID-19**
*Presenting Author: Ray Rui Zhang; Stanford Hospital and Clinics, Stanford, CA*

### 2nd Place
**Clinical Utility of PET/CT Imaging with Peptide Imaging Agent 124I-p5+14 (AT-01) in Patients with Systemic Amyloidosis**
*Presenting Author: Jonathan Wall, PhD; University of Tennessee Graduate School of Medicine, Knoxville, TN*

### 3rd Place
**Chemokine receptor 2 targeted PET imaging in pulmonary fibrosis**
*Presenting Author: Debbie Sultan; Washington University School of Medicine, Radiological Sciences, St. Louis, MO*

## Neurosciences Poster Award Winners

### 1st Place
**Monkey, rat, and first in human evaluation of [$^{18}$F]PF-06445974, a PET radioligand that preferentially labels phosphodiesterase 4B**
*Presenting Author: Yuichi Wakabayashi, MD, PhD; National Institute of Mental Health, Molecular Imaging Branch, Bethesda, MD*

### 2nd Place
**Exploratory multimodal fusion analysis of resting-state activity and mGlu5 receptor availability in alcohol use disorder**
*Presenting Author: Kelly Smart, PhD; Yale PET Center, Yale University School of Medicine, New Haven, CT*

### 3rd Place
**Influence of Aβ and neurofibrillary tau deposition on cognition in Down syndrome across the Alzheimer's disease continuum**
*Presenting Author: Matthew Zammit; University of Wisconsin-Madison, Madison, WI*

## Educational Exhibits Poster Award Winners

### 1st Place
**Diverse spectrum of uncommon tissue involvement in IgG4-related diseases on $^{18}$F-FDG PET/CT**
*Presenting Author: Ashwin S. Parihar, MBBS, MD; Nuclear Medicine, Postgraduate Institute of Medical Education and Research, Chandigarh, India*

### 2nd Place
**A Review of Common Thoracic Surgical Procedures For The Nuclear Medicine Physician Utilizing Simple Unique Clay Models**
*Presenting Author: Perry Gerard, MD, MBA; Westchester Medical Center, Valhalla, NY*

### 3rd Place
**Clinical Value of PET/CT and PET/MRI for the Assessment of Rheumatic Diseases**
*Presenting Author: Siavash Mehdizadeh Seraj, MD; Radiology and Biomedical Imaging, Yale University, New Haven, CT*

# Young Investigator Awards

Each year the SNMMI sponsors the Young Investigator Award symposium and competition in association with several SNMMI Councils and Centers of Excellence for the best scientific abstracts in various specialties within the field of nuclear medicine. The following winners were selected for their excellence in oral presentations:

## Brain Imaging Council Young Investigator Awards

### 1st Place
**In-vivo tau pathology is associated with synaptic loss and altered synaptic function**
*Presenting Author: Emma M. Coomans; Department of Radiology & Nuclear Medicine, Amsterdam Neuroscience, Vrije Universiteit Amsterdam, Amsterdam UMC, Amsterdam, Netherlands*

### 2nd Place
**Neurofibrillary tau emerges in adults with Down syndrome during the earliest stages of Aβ accumulation**
*Presenting Author: Matthew Zammit; University of Wisconsin, Madison, WI*

### 3rd Place
**Altered regional cerebral function and its association with cognitive impairment in COVID 19: A prospective FDG PET study**
*Presenting Author: Ganna Blazhenets, M. Sc.; Department of Nuclear Medicine, Medical Center – University of Freiburg, Faculty of Medicine, University of Freiburg, Freiburg, Germany*

## Cardiovascular Council Young Investigator Award Winners

**BASIC SCIENCE/PRECLINICAL:**

### 1st Place
**Imaging of mitochondrial function in doxorubicin-induced cardiotoxicity**
*Presenting Author: Felicitas J. Detmer, PhD; Gordon Center for Medical Imaging, Massachusetts General Hospital, Harvard Medical School, Boston, MA*

### 2nd Place
**Myocardial glucose suppression interferes with the detection of inflammatory cells with FDG- PET in a canine model of myocardial infarction**
*Presenting Author: Benjamin Wilk; Western University, London, Ontario, Canada*

### 3rd Place
**Assessment of lower extremities flow using dynamic Rb-82 PET: Acquisition protocols and quantification methods**
*Presenting Author: Zhao Liu, PhD; Yale University, New Haven, CT*

# SNMMI Annual Meeting Awards

## Cardiovascular Council Young Investigator Award Winners

**CLINICAL:**

### 1st Place

**Improved risk assessment of myocardial SPECT using deep learning: report from REFINE SPECT registry**

*Presenting Author: Ananya Singh, MS; Department of Imaging Cedars-Sinai Medical Center, Los Angeles, CA*

### 2nd Place

**$^{68}$Ga-DOTATOC PET/CT to detect immune checkpoint inhibitor-related myocarditis**

*Presenting Author: Sarah Boughdad, MD, PhD; CHUV, Lausanne, Switzerland*

### 3rd Place

**Dynamic analysis of $^{11}$C-PIB PET/CT in amyloid light-chain cardiac amyloidosis**

*Presenting Author: Xuezhu Wang; Department of Nuclear Medicine, State Key Laboratory of Complex Severe and Rare Diseases, Peking Union Medical College Hospital, Chinese Academy of Medical Science and Peking Union Medical College, Beijing, China*

## Physics, Instrumentation, and Data Sciences Council Young Investigator Awards

### 1st Place

**Design study of a high-resolution and ultrahigh-sensitivity brain SPECT system for imaging medically intractable epilepsy**

*Presenting Author: Elena Maria Zannoni; Bioengineering, University of Illinois, Urbana Champaign, Champaign, IL*

### 2nd Place

**Data-driven motion compensation using cGAN for total-body [18F] FDG-PET imaging**

*Presenting Author: Lalith K. Shiyam Sundar; QIMP team, Medical University of Vienna, Vienna, Austria*

### 3rd Place

**36-to-1 Multiplexing with Prism-PET for High Resolution TOF-DOI PET**

*Presenting Author: Andy LaBella; Stony Brook University, Stony Brook, NY*

### Honorable Mention

**Super-resolution in brain PET Using a Real Time Motion Capture System**

*First author: Yanis Chemli; Gordon Center for Medical Imaging, Boston, MA and LTCI, Telecom Paris, Institut Polytechnique de Paris, Paris, France*

**Unsupervised background removal by dual-modality PET/CT guidance: application to PSMA imaging of metastases**

*First author: Ivan S. Klyuzhin; BC Cancer Research Institute, Vancouver, BC Canada, Microsoft, Redmond, WA and University of British Columbia; Vancouver, BC, Canada*

**Pre-selecting radiomic features based on their robustness to changes in imaging properties of multicentre data: impact on predictive modelling performance compared to ComBat harmonization of all available features**

*First author: Da-ano Ronrick; LatiM UMR-1101 INSERM, Brest, France*

**Self-supervised Bone Scan Denoising**

*First author: Si Young Yie; Interdisciplinary Program in Bioengineering Seoul National University; Seoul, Korea, Republic of*

## Radiopharmaceutical Sciences Council Young Investigator Awards

### 1st Place

**Radiosynthesis and evaluation of (R)- and (S)-18F-OF-NB1 for imaging the GluN2B subunits of the NMDA receptor in non-human primates**

*Presenting Author: Ahmed Haider; Department of Radiology, Division of Nuclear Medicine and Molecular Imaging, Massachusetts General Hospital and Harvard Medical School, Boston, MA*

### 2nd Place

**Evaluation of CB2 PET Radioligand $^{18}$F RoSMA-18-d6 in Non-Human Primates and Experimental Autoimmune Encephalomyelitis**

*Presenting Author: Lalith K. Shiyam Sundar; QIMP team, Medical University of Vienna, Vienna, Austria*

### 3rd Place

**Synthesis and preclinical characterization of a metabolically stable SV2A PET imaging probe: [$^{18}$F]SDM-16**

*Presenting Author: Chao Zheng; Yale School of Medicine, New Haven, CT*

## CIC Walter Wolf Young Investigator Award

This award recognizes a young investigator for originality, scientific methodology, and overall contribution to molecular imaging or therapy through original research showing the importance and value of correlative imaging in all fields of medicine. The SNMMI Correlative Imaging Council established the Walter Wolf Young Investigator Award in 2006 in honor of Walter Wolf, PhD, past president of the Correlative Imaging Council and leader in the field of pharmacokinetic imaging and drug development.

**Abstract: Response monitoring in metastatic breast cancer: a comparison of survival times between FDG-PET/CT and CE-CT**

*Mohammad Naghavi-Behzad, MD, MPH*

## PIC Majd-Gilday Young Investigator Award

This award is given to young scientists for outstanding research contributions to the field of pediatric nuclear medicine. The PIC Majd-Gilday YIA award was developed to recognize two pioneers in the pediatric imaging field who have made enormous scientific contributions to our subspecialty of pediatric nuclear medicine: Dr. Massoud Majd and Dr. David Gilday.

**Abstract: Clinical evaluation of block sequential regularized expectation maximization reconstruction algorithm in pediatric total-body $^{18}$F-FDG PET/CT**

*Yu-Mo Zhao*

## Center for Molecular Imaging Innovation and Translation Young Investigator Awards

### 1st Place

**Optimal [18]F-Misonidazole PET threshold to locate SCC7 tumor hypoxia using EPR pO2 as ground truth**

*Presenting Author: Inna H. Gertsenshteyn; Radiology, University of Chicago, Chicago, IL*

2nd Place

Synthesis and characterization of [$^{18}$F]mG2P026 as a high contrast PET imaging ligand for metabotropic glutamate receptor 2

*Presenting Author: Gengyang Yuan; Gordon Center for Medical Imaging, Massachusetts General Hospital and Harvard Medical School, Boston, MA*

3rd Place

Bispecific INV721 antibody improves specific targeting in neuroblastoma to limit neuropathic pain

*Presenting Author: Zachary Rosenkrans; University of Wisconsin-Madison, Madison, WI*

## Therapy Center of Excellence Young Investigator Awards

1st Place

Progression and toxicity following liver Y90 radioembolization: impact of dose metrics, clinical factors, and biomarkers

*Presenting Author: Theresa P. Devasia; University of Michigan, Ann Arbor, MI United States*

2nd Place

Metastatic Disease Response and Patterns of Recurrence in Men with High-Risk Prostate Cancer after Neo-Adjuvant Chemohormonal Therapy and Radical Prostatectomy utilizing PSMA-Targeted $^{18}$F-DCFPyL PET/CT

*Presenting Author: Petra Lovrec, MD; Department of Radiology University of Wisconsin-Madison, Madison, WI*

3rd Place

Safety and efficacy of radioligand therapy with 177lutetium-PSMA-617 within 3 months after 223Radium-dichloride

*Presenting Author: Justus Baumgarten, MD; Nuclear Medicine University Hospital Frankfurt, Frankfurt, Germany*

## Early Career Professionals Abstract Award Winners

### BASIC SCIENCE:

1st Place

Validation of FAPi PET biodistribution by immunohistochemistry in patients with solid cancers: a prospective exploratory imaging study

*Presenting Author: Christine Mona, PhD; UCLA, Los Angeles, CA*

2nd Place

Rapid and mild synthesis of unsymmetrical [$^{11}$C]ureas from [$^{11}$C] carbonyl difluoride and amines

*Presenting Author: Jimmy E. Jakobsson, PhD; National Institutes of Mental Health, Bethesda, MD*

3rd Place

Photodynamic therapy induced by a combination of scintillating liposome &radiolabeled antibody

*Presenting Author: Wooseung Lee; Applied Bioengineering Graduate School of Convergence Science and Technology, Seoul National University; Seoul, Korea, Republic of*

## Early Career Professionals Abstract Award Winners

### CLINICAL:

1st Place

Role of $^{68}$G-fibroblast activation protein inhibitor (API) PET/CT in the evaluation of peritoneal carcinomatosis and comparison with $^{18}$F-FDG PET/CT

*Presenting Author: Haojun Chen, MD; Department of Nuclear Medicine, The First Affiliated Hospital of Xiamen University, Xiamen, China*

2nd Place

A Head-to-Head Comparison of $^{68}$Ga-DOTA-FAPI-04 and $^{18}$F-FDG PET/MR in Patients with Nasopharyngeal Carcinoma: A Prospective Study

*Presenting Author: Chunxia Qin, MD, PhD; Department of Nuclear Medicine, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China*

3rd Place

Metastatic Disease Response and Patterns of Recurrence in Men with High-Risk Prostate Cancer after Neo-Adjuvant Chemohormonal Therapy and Radical Prostatectomy utilizing PSMA-Targeted $^{18}$F-DCFPyL PET/CT

*Presenting Author: Petra Lovrec, MD; Department of Radiology, University of Wisconsin-Madison, Madison, WI*

# Technologist Abstract and Poster Awards

## Technologist Best Abstract Award Winners

1st Place

Blanching defects at the pressure points: a potential pitfall in dynamic Total-Body PET/CT studies

*Presenting Author: Kristin McBride; Radiology, University of California, Davis, Sacramento, CA*

2nd Place

Comparison of Four Infusion Methods for Lutathera Peptide Radionuclide Receptor Therapy

*Presenting Author: Anne Ellis; Michigan Medicine, Ann Arbor, MI*

3rd Place

Advanced PET imaging simultaneously improves image noise and patient throughput in $^{68}$Ga DOTATATE cans

*Presenting Author: Katie Moses; Radiology, University of Colorado Hospital, UCHealth, Aurora, CO*

## SNMMI-TS/PET CoE Technologist Best PET Abstract Award

Blanching defects at the pressure points: a potential pitfall in dynamic Total-Body PET/CT studies

*Presenting Author: Kristin McBride; Radiology, University of California Davis, Sacramento, CA*

## SNMMI-TS/Therapy CoE Technologist Best Therapy Abstract Award

Comparison of Four Infusion Methods for Lutathera Peptide Radionuclide Receptor Therapy

*Presenting Author: Anne Ellis; Michigan Medicine, Ann Arbor, MI*

# SNMMI Annual Meeting Awards

## SNMMI-TS Technologist Poster Awards

### 1st Place

**Effects of image matrix on quantitative metrics in $^{68}$Ga DOTATATE studies: Changes in SUV and signal-to-noise ratio in modern digital PET detectors**

*Presenting Author: Amer Pierret; Radiology, University of Colorado Hospital, UCHealth, Aurora, CO*

### 2nd Place

**Tranquilty Scoring to Optimize Pediatric Imaging and Reduce Radiation on Total-Body PET Scanners**

*Presenting Author: Heather Hunt; UC Davis Medical Center; Sacramento, CA*

### 3rd Place

**Co-Teaching in Nuclear Medicine Technology**

*Presenting Author: C. David Gilmore; Massachusetts College of Pharmacy & Health Sciences University, Boston, MA*

## SNMMI-TS/Cardiovascular Council Best Poster Awards

### 1st Place

**Synthesis of $^{99m}$Tc-labeled Peptide p5+14 for Detection of Cardiac Amyloidosis - Preclinical Studies in a Mouse Model**

*Presenting Author: Alan Stuckey; University of Tennessee Graduate School of Medicine, Knoxville, TN*

### 2nd Place

**Seeing the big picture: The importance of reviewing the entire field of view in Myocardial Perfusion Imaging and the role of the Nuclear Medicine Technologist**

*Presenting Author: Sarah Frye; Saint Louis University, Saint Louis, MO*

### 3rd Place

**Optimization of Injected Dose for Myocardial Flow Quantification in $^{13}$N ammonia PET with Time of Flight Scanner. Noise Equivalent Count Rate analysis**

*Presenting Author: Yoko Kaimoto; Tokyo Women's Medical University, Tokyo, Japan*

## ANZSNM/SNMMI-TS Best Abstract Award 2021

**16 vs 8 Bin Evaluation of Left Ventricle Ejection Fraction in Myocardial Perfusion Imaging**

*Presenting Author: Brylee Thomson; Austin Health, Australia*

## ANZSNM/SNMMI-TS Best Abstract Award 2020

**Interobserver variability in interpretation of Ventilation-Perfusion lung scans (VQ scans)**

*Presenting Author: Sarah Thomas; Department of Molecular Imaging and Therapy, Austin Health, Australia*

## Technologist Student Abstract Award Winners

### 1st Place

**Simulating reduced dose PET imaging to determine impacts on diagnostic image quality**

*Presenting Author: Robin L. Schroeder; Northwestern Memorial Hospital, Chicago, IL*

### 2nd Place

**$^{177}$ Lu-Dotatate therapy for inoperable or metastasized gastroenteropancreatic neuroendocrine tumors: How often do patients discontinue treatment early and why?**

*Presenting Author: Gabriela Feliciano; Rhode Island Hospital, North Providence, RI*

### 3rd Place

**The Effects of Temperature Change on Tc-99m MAA Radiochemical Purity**

*Presenting Author: Fatimah Almuallim; Indiana University School of Medicine, Indianapolis, IN*

## International Best Abstract Award Winners

The International Best Abstract Award is given to the highest scoring accepted abstract from each country:

### Australia

**$^{177}$Lu-PSMA-617 Versus Cabazitaxel in Metastatic Castration-Resistant Prostate Cancer: A Randomised, Open-Label, Phase 2 Trial (TheraP)**

*Michael Hofman*

### Austria

**Data-Driven Motion Compensation Using cGAN For Total-Body [$^{18}$F] FDG-PET Imaging**

*Lalith K. Shiyam Sundar*

### Belgium

**$^{68}$Ga-PSMA PET/CT for Response Assessment and Outcome Prediction in Metastatic Prostate Cancer Undergoing Taxane-based Chemotherapy**

*Qaid Shagera*

### Brazil

**Pre-operative Evaluation of Prostate Cancer by Positron Emission Tomography / Computed Tomography (PET-CT) With PSMA-68GA: Correlation with Prostate Magnetic Resonance And Histopathological Findings**

*Camila Stasiak*

### Canada

**Hybrid Machine Learning Methods and Ensemble Voting for Identification of Parkinson's Disease Subtypes**

*Arman Rahmim*

### Chile

**Image Quality with Low Dose $^{18}$F-FDG Digital PET/CT: Preliminary Results in 3 Healthy Volunteers**

*Ana Hurtado*

### China

**Role of $^{68}$Ga-fibroblast activation protein inhibitor (FAPI) PET/CT in the evaluation of peritoneal carcinomatosis and comparison with $^{18}$F FDG PET/CT**

*Haojun Chen*

## Denmark
**Response monitoring in metastatic breast cancer: a comparison of survival times between FDG-PET/CT and CE-CT**
*Mohammad Naghavi-Behzad*

## Egypt
**Association of robust radiomic features from staging $^{18}$F-FDG PET/CT in lung cancer with EGFR expression and overall survival**
*Rehab Mostafa*

## France
**Comparison of stress myocardial Flow Response using regadenoson and dipyridamole in SPECT**
*Matthieu Bailly*

## Germany
**Test-Retest Reproducibility of Conventional Quantitative Parameters on PSMA-targeted $^{18}$F-DCFPyL PET/CT in Patients with Metastatic Prostate Cancer**
*Rudolf Werner*

## Greece
**Increased metabolic activity of the adrenal glands assessed by $^{18}$F-FDG PET/CT in patients with Erdheim-Chester disease associated with the BRAF V600E disease causing variant**
*Georgios Papadakis*

## Hong Kong
**[$^{18}$F]FDG-PET/MR Imaging of Brown and Beige Adipose Tissues in Preclinical Model**
*Kel Tan*

## India
**Long-term outcome of $^{225}$Ac-DOTATATE Targeted Alpha Therapy in Patients with Metastatic Gastroenteropancreatic Neuroendocrine Tumors**
*Chandrasekhar Bal*

## Indonesia
**Model Selection Based on Population Fitting at an Example of $^{177}$Lu-PSMA Kinetics in Kidneys with a Low Number of Data**
*Deni Hardiansyah*

## Iran, Islamic Republic of
**Prediction of human papillomavirus associated oropharyngeal cancer using multiple machine learning algorithms and PET/CT image radiomics features**
*Atlas Haddadi Avval*

## Ireland
**A Simple Adaptive Bandwidth Scheme that Improves Image Quality and Kinetic Quantitation in Dynamic PET Scans**
*Fengyun Gu*

## Israel
**Can absorbed radiation doses by organs and tumors after PRRT be estimated from a single SPECT/CT study?**
*Chicheportiche Alexandre*

## Italy
**Prediction of Lymph Node Metastasis From $^{18}$F-Fdg Pet/Ct Radiomics of Cervical Cancer**
*Lavinia Monaco*

## Japan
**Predictive Factors of the Therapeutic Effect of I-131 Therapy for Hyperthyroidism**
*Haruna Ikeda*

## Korea, Republic of
**Photodynamic therapy induced by a combination of scintillating liposome & radiolabeled antibody**
*Wooseung Lee*

## Kuwait
**Variation in Delivery Methods of 18F-FDG for Patients: A Single Institution Observation**
*Sulaiman Alraish*

## Macao
**Personalized Voxel-S-Value Methods for Monte-Carlo-like Quantitative Y-90 PET Dosimetry**
*Gefei Chen*

## Mexico
**Comparative evaluation of castrate resistant metastatic Prostate Cancer with $^{68}$Ga DOTA RGD PET/CT and $^{68}$Ga PSMA: Pilot study**
*Francisco Garcia Perez*

## Morocco
**The usefulness of normalized residual activity (NORA) in the analysis of Tc-99m DTPA diuresis renography**
*Yassir Benameur*

## Netherlands
**In-vivo tau pathology is associated with synaptic loss and altered synaptic function**
*Emma Coomans*

## New Zealand
**Lutetium-177: a flexible radionuclide therapeutic options**
*Madhusudan Vyas*

## Norway
**Development of the first CDK7 specific PET imaging probe based on a carbon-11 labeled pyrazolotriazine derivative for visualization of glioblastoma**
*Mathias Kranz*

## Philippines
**Comparison of Gallium-68 Prostate-Specific Membrane Antigen (Ga-68 PSMA) Normal Tissue Uptake across Tumor Burden Groups among Patients with Prostate Cancer**
*Mary Stephanie Jo Estrada*

## Romania
**Preclinical assessment of nanoparticles conjugated with $^{64}$Cu-DOTA-PEG-BBN targeting gastrin-releasing peptide receptors**
*Dana Niculae*

# SNMMI Annual Meeting Awards

### South Africa
**PET imaging of arterial inflammation in people living with HIV infection: A comparison between 68Ga-Pentixafor and $^{18}$F-FDG**
*Ismaheel Lawal*

### Spain
**Long-term evaluation of amyloid deposition in basal ganglia in patients with mild cognitive impairment by $^{11}$C-PIB PET/CT. Correlation with cortical brain amyloid load and clinical evolution**
*Julio Jimenez-Bonilla*

### Sweden
**AI-based quantification of PET/CT lesions is associated with survival in lung cancer patients**
*Pablo Borrelli*

### Switzerland
**$^{68}$Ga-DOTATOC PET/CT to detect immune checkpoint inhibitor-related myocarditis**
*Sarah Boughdad*

### Taiwan
**Artificial Intelligence in Nuclear Medicine for Brain Imaging**
*Shih-Wei Lo*

### Thailand
**Brain amyloid PET scan in Alzheimers disease, mild cognitive impairment and normal aging: The first prospective longitudinal study in Thailand**
*Tanyaluck Thientunyakit*

### Turkey
**Evaluation of myocardial perfusion scintigraphy SPECT and CT images in patients with a history of COVID-19**
*Aysegul Aksu*

### Ukraine
**The clinical use of three-phase bone scintigraphy in identifying complications after hip replacement in liquidators of accident at the Chernobyl Nuclear Power Plant with septic and aseptic osteoarthrosis**
*Pavlo Korol*

### United Kingdom
**Investigation of Vape Devices as Novel Drug Delivery Systems Using Fluorine-18 Radiolabelling**
*George Herbert*

### Uruguay
**Intraindividual Comparison of novel $^{18}$F-PSMA-1007 and AI $^{18}$F-PSMA-HBED-CC PET/CT in the Prospective Evaluation of Prostate Cancer Patients with Biochemical Relapse: First experience in Uruguay**
*Gerardo Dos Santos*

### Vietnam
**BIUx2x2**
*Bui Cong*

### Yemen
**Tonsil is the most frequent primary source of the cancer of unknown primary in the neck by the FDG PET CT**
*Galal Alobthani*

# 2021 ERF SNMMI-TS Technologist & Student Professional Development Grant Awards

Supports the travel and/or registration expenses for nuclear medicine technologists or students presenting abstracts at onsite or virtual SNMMI Annual Meetings.

**Blanching Defects at the Pressure Points: A Potential Pitfall in Dynamic Total-Body PET/CT Studies**
*Yasser Abdelhafez*

**Assessment of $^{99m}$Tc-bicisate (Neurolite®) Sterility When Used for Ictal Studies**
*Jenna Allen*

**The Effects of Temperature Change on Tc-99m MAA Radiochemical Purity**
*Fatimah Almuallim*

**$^{18}$F-FDG PET/CT Evaluation of Desmoid Fibromatosis**
*Nicole Winiarczyk*

**Evaluating the Necessity of Ventilation Lung Imaging, Based on Perfusion Only Imaging During the COVID-19 Pandemic**
*Lauren Brickley*

**Promising $^{177}$Lu-PSMA-617 Therapy Results in Patients with Metastatic Castration-Resistant Prostate Cancer**
*Antonio Brnjic*

**Evaluation of the Stability of Various $^{99m}$Tc-Filtered Sulfur Colloid Unit Dose Configurations Used for Lymphoscintigraphy**
*Joanna Cala*

**Effects of Oxygen Exposure on Tc-99m PYP Stability**
*Nicole Dau*

# 2021 ERF-SNMMI-TS and Student Professional Development Grant Awards

Comparison of Fatty Meal Interventional Agents to CCK for GBEF Studies
*Amanda DeBruin*

A Case Study Confirming the Reliability of Gated N13 Ammonia PET/CT Over Tc-99m Sestamibi D-SPECT in Diagnosing Cardiovascular Disease
*Samar El Khatib*

Comparison of Four Infusion Methods for Lutathera Peptide Radionuclide Receptor Therapy
*Anne Ellis*

The Effects of MRI on RF-Based Contactless Smart Cards
*Andrew Bulla*

Cerium Oxide Nanoparticles Modulate Cellular Health and Oxidative Stress in Breast Carcinoma Cells
*Remo George*

Co-Teaching in Nuclear Medicine Technology
*C. David Gilmore*

Tranquility Scoring to Optimize Pediatric Imaging and Reduce Radiation Exposure on Total-Body PET Scanners
*Heather Hunt*

Predictive Factors of the Therapeutic Effect of I-131 Therapy for Hyperthyroidism
*Haruna Ikeda*

Development of High Resolution Modular Four Side Buttable Small Field of View Detectors for Three Dimensional Gamma Imaging
*Pushkar Jha*

How PET/CT Image Reconstruction Zoom Effects SUV Max and SUV Mean Measurements in Head and Neck Cancers
*Natalia Koniecka*

The Possibility of the Continuous Bed Motion Method Replacing the Traditional Step-and-Shoot Method by Using a SiPM-PET/CT Scanner
*Kodai Kumamoto*

Evaluation of Manufacture Specific Reconstruction Algorithms Available PET/CT Imaging of Y-90 Glass Microspheres
*Kaye Lesure*

Training for Clinical Instructors of Nuclear Medicine
*Jessica Long*

Importance of Injection Site Image in DaTscans
*Ashley Meyer*

Comparison of Two Skeletal Segmentation Methods for Measuring BSI in Bone Scan
*Kazuki Motegi*

Temporal and Axial Quantitative Uniformity Measurements of Total-body PET Systems
*Mike Nguyen*

Continued evaluation of a complete μ-map generation in PET/MR Breast imaging
*Kaylynn Pinder*

A Prototype Ultra-High-Resolution Small-Animal PET System
*Jiguo Liu*

A Student Technologist's Perspective Regarding the Increase in Pharmacological Stress Testing Due to the SARS-CoV-2pandemic in a Large Urban Area
*Austin Ritchie*

Impacts of Improved TOF Timing Resolutions on Cold Contrast of PET Images
*Hideaki Sato*

Simulating Reduced Dose PET Imaging to Determine Impacts on Diagnostic Image Quality
*Robin Schroeder*

Impact of SwiftScan Technique on Quantitative Bone Single Photon Emission Computed Tomography
*Takuro Shiiba*

Effects of Image Matrix on Quantitative Metrics in $^{68}$Ga DOTATATE studies: Changes in SUV and Signal-to-Noise Ratio in Modern Digital PET Detectors
*Amber Pierret*

Impact of Metastatic Disease on Transit Time in Sentinel Node Lymphoscintigraphy
*Gabrielle Smith*

Effects of Thyroid Uptake Probe Placement on $^{123}$I Capsule Counts
*Rebecca Sondrol*

Synthesis of $^{99m}$Tc-labeled Peptide p5+14 for Detection of Cardiac Amyloidosis - Preclinical Studies in a Mouse Model
*Alan Stuckey*

Technologist Based Implementation of Total Metabolic Tumor Volume into Clinical Practice
*Jaiden Sullivan*

Impact of Implanted Chest Port Utilization for the Administration of F18-FDG in PET/CT Imaging
*Jessica Swenson*

PET/CT Annual AAPM Quality Control: Practical Implications for Technologists
*Douglass Vines*

Lutetium-177: A Flexible Radionuclide Therapeutic Options
*Madhusudan Vyas*

Phase II, Open Label, Multi-Dose Study of 89-Zr-Df-IAB22M2C (CD8 Immuno-PET Tracer): Technical Handling and Injection Instructions for Optimal Tracer Administration
*Quinten Sanders*

SPECT/CT Pulmonary Perfusion Studies: Searching for a Solution During a Pandemic
*Jacob Whipple*

A More Clinically Relevant Assessment of PET Spatial Resolution
*Madelyn Zimmer*

# Professional Development Awards

SNMMI provides various opportunities for early career professionals to get more engaged with the Society through fellowships, an internship program, leadership academies, and our annual "Ones to Watch" selection. These programs are designed to nurture future leaders of the SNMMI and recognize the new wave of talent within this exciting specialty.

## Bradley-Alavi Student Fellowships

Designed to stimulate students' interest in molecular imaging/nuclear medicine by supporting their full-time participation in clinical and basic research activities for three months (or less). The Bradley-Alavi Fellowships are named by the donors - Drs. Jane and Abass Alavi - in honor of Dr. Stanley E. Bradley, a professor of Medicine at Columbia University College of Physicians and Surgeons until 1978 and a prominent researcher in the fields of renal physiology and liver disease.

### 2021 Recipients

***Yesh Datar***
*Boston University*

***Shanmukha Srinivas***
*University of California San Diego*

***Servando Hernandez Vargas***
*University of Texas Health Science Center at Houston (UTHealth)*

## Wagner-Torizuka Fellowship Program

A one or two-year fellowship in the United States and Canada for Japanese physicians in the early stages of their careers, designed to advance research and clinical expertise and equip them to make significant contributions to the field of nuclear medicine and molecular imaging in Japan. The purpose of the program is to provide experience and training in nuclear medicine/molecular imaging modalities in the areas of cardiology, neurology, and oncology.

### 2021 Recipient

***Yoshito Kadoya, MD***

**Funded by**

nihon medi+physics

# SNMMI Interns

The SNMMI Council/Center Internship Program provides early career professionals the opportunity to get involved with the Society at the Council and Center level. Each Council/Center, along with the Clinical Trials Network, select an intern for a two-year term as a non-voting member of its Board of Directors. The 2021-2023 SNMMI Interns are:

- *Academic Council Intern:* ***Andrezza Dambroz, MS***
- *Brain Imaging Council Intern:* ***Saeed Elojeimy, MD, PhD***
- *Cardiovascular Council Intern(s):* ***Attila Feher, MD and Krishna Patel, MD, MSc***
- *Center for Molecular Imaging Innovation & Translation Intern:* ***Soheil Kooraki, MD***
- *Clinical Trials Network Intern:* ***Patricia Edem, PhD***
- *Correlative Imaging Council Intern:* ***Charles Marcus, MD***
- *General Clinical Nuclear Medicine Council Intern:* ***Ashlee Thomas, CNMT, NMTCB(CT)***
- *Pediatric Imaging Council Intern:* ***Jennifer Gillman, MD, MSCI***
- *PET Center of Excellence Intern(s):* ***Hyesun Park, MD and Andrea Rapp, BS, CNMT, NMTCB (RS), RT (N)(CT)(ARRT)***
- *Physics, Instrumentation and Data Sciences Council Intern:* ***Benjamin Auer, PhD***
- *Radiopharmaceutical Sciences Council Intern:* ***Alexandra Dumond, PhD***
- *Therapy Center of Excellence Intern:* ***Jaleelat Momodu, MBBS, MPH, FCNP, MMED***

# SNMMI Ones to Watch 2021

SNMMI is pleased to announce our annual list of 30 early career professionals selected as "Ones to Watch" in 2021. Launched in 2018, SNMMI's Ones to Watch campaign aims to recognize those with the potential to shape the future of precision medicine across all spectrums of the field. Members can nominate themselves or someone they know whose actions, work, or studies have set them apart as a future thought leader in nuclear medicine and molecular imaging. Recipients are selected with the help of the SNMMI Committee on Councils and Centers and the SNMMI-TS Professional Development Committee. We are proud to showcase rising talent in the field, offering a platform to increase recognition for early career professionals within our specialty. Congratulations to the following honorees!

Olayinka Abiodun-Ojo, MD, MPH
*Research Scientist*
*Emory University School of Medicine*

Eduardo Aluicio-Sarduy
*Assistant Scientist*
*University of Wisconsin, Madison-Department of Medical Physics*

Benjamin Auer, PhD
*Medical Physicist*
*University of Massachusetts Medical School / Department of Radiology*

Eric Berg, PhD
*Research Project Scientist*
*Biomedical Engineering-University of California, Davis*

Jessica J. Comstock, PharmD, BCNP
*Nuclear Pharmacist / Director Quality and Regulatory, PharmaLogic Holdings*

Matthew F. Covington, MD
*Assistant Professor of Radiology, Nuclear Medicine and Breast Imaging Sections, University of Utah and Huntsman Cancer Institute*

Carolina de Aguiar Ferreira, PhD
*Research Associate*
*University of Wisconsin-Madison*

Shreya Goel, PhD
*Postdoctoral Fellow/Research Investigator, University of Texas MD Anderson Cancer Center, Department of Cancer Systems Imaging*

Junior Gonzales
*Research Associate*
*Department of Radiology, Memorial Sloan Kettering Cancer Center*

Javier Hernández-Gil
*Research Fellow*
*Memorial Sloan Kettering Cancer Center*

Hyung-Jun Im, MD, PhD
*Assistant Professor*
*Seoul National University, Korea*

Amir Iravani, MD
*Physician attending*
*Washington University in St. Louis*

Simone Susanne Krebs, MD, MS
*Nuclear Medicine Physician, Assistant Attending, Memorial Sloan Kettering Cancer Center*

Courtney Lawhn-Heath, MD
*Physician*
*University of California, San Francisco*

# SNMMI Ones to Watch 2021

**Zhibo Liu, PhD**
*Tenure Track Assistant Professor*
*Beijing University*

**Domnique S. Newallo**
*Nuclear Medicine Resident*
*Emory University*

**Thomas Ng, MD, PhD**
*Resident physician, Assistant professor, Attending Radiologist, Harvard Medical School, Division of Nuclear Medicine and Molecular Imaging, Department of Radiology, Massachusetts General Hospital*

**Negar Omidvari, PhD**
*Postdoctoral Scholar*
*EXPLORER Molecular Imaging Center, UC Davis*

**Alejandro D. Arroyo Pacheco, PhD**
*Research Scholar*
*Memorial Sloan Kettering Cancer Center*

**Austin Pantel, MD, MSTR**
*Assistant Professor of Radiology*
*University of Pennsylvania*

**Sonya Youngju Park, MD**
*Physician (Nuclear medicine)*
*St. Mary's Hospital, Department of Nuclear Medicine Seoul, South Korea*

**Giacomo Pirovano, PhD**
*Research Associate*
*Department of Radiology, Memorial Sloan Kettering Cancer Center*

**Chaitanya Rojulpote, MD**
*Resident*
*The Wright Center for Graduate Medical Education*

**Brian Horacio Santich, PhD**
*Director of Pretargeted Radioimmunotherapy Research*
*Y-mAbs Therapeutics, Inc*

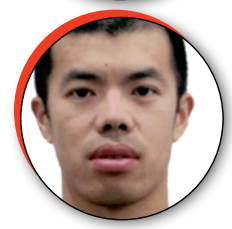
**Lino M. Sawicki, MD, PhD**
*Radiologist, Hybrid Imaging Specialist, Heinrich-Heine University, Düsseldorf, Germany*

**Jennifer Anne Schroeder, MD**
*Assistant Professor of Nuclear Medicine/Radiology*
*Wake Forest University/Baptist Medical Center*

**Mark A. Sellmyer, MD, PhD**
*Resident*
*Assistant Professor*
*Perelman School of Medicine at the University of Pennsylvania*

**Senthil Selvaraj, MD**
*Senior Cardiology Fellow*
*University of Pennsylvania*

**Hong Song, MD,PhD**
*Dual Path NM/DR Resident*
*Stanford Health Care, Stanford University*



**Ning Zhao, PhD**
*Postdoctoral Fellow*
*University of California San Francisco*

JUST ANNOUNCED!

# Sam Gambhir Trailblazer Award

The new Sam Gambhir Trailblazer Award honors outstanding achievement and excellence in transformative research (either basic science, translational science, or clinical science) and exceptional mentorship for mid-career professionals. Award recipients will be acknowledged at the SNMMI Annual Meeting during the Wagner Highlights Lecture. This new award is named after Sanjiv "Sam" Gambhir, MD, PhD, an internationally recognized pioneer in molecular imaging. Gambhir dedicated his career to developing methods of early disease detection, ushering in a new era of molecular imaging to flag signals of disease in its nascent stages.

## Applications Open October 1, 2021.

Sign up to be contacted: **www.snmmi.org/GambhirAward**