

Georgetown  
University  
Hospital

MedStar Health

Br. 1

August 10, 2010

Licensing Assistance Team  
Division of Nuclear Materials Safety  
U.S. Nuclear Regulatory Commission, Region 1  
475 Allendale Road  
King of Prussia, PA 19406-1415

**Reference: License #08-30577-01 License Amendment**

03035409

Dear Sir/Madam:

The MedStar Georgetown Medical Center, Inc. (MGMC) requests a license amendment to name a new Radiation Safety Officer (RSO) for our radioactive material license. Due to our current staffing challenges, we also request an exemption to 10 CFR 35.24(c).

In recent years there has been significant turnover in the RSO position at MGMC. In February 2007 the position was transferred from John Glenn to Jason Dunavant. In March 2009, the position was transferred from Jason Dunavant to an Interim RSO, Auroba Al-Samarrae. Ms. Al-Samarrae served as the Interim RSO for 6 months until responsibility for the radiation safety program was transferred to Dennis Clum in September 2009. In May 2009, after serving in the role of RSO for only 8 months, Dennis Clum resigned his position with our facility.

The departure of Dennis Clum left MGMC without a RSO. MGMC took extensive measures to bring Auroba Al-Samarrae back to the U.S. to serve as the Interim RSO until a qualified individual could be hired to manage this radiation safety program. On June 16, 2010, Ms. Al-Samarrae was named the Interim RSO which was approved by the NRC for 60 days. In addition, MGMC contracted the services of Dade Moeller & Associates staff of Certified Health Physicists and Health Physicists to assist with managing this program.

MGMC has initiated another search for a qualified, experienced RSO for this facility. Rather than rush to fill the position and risk another departure, MGMC would like to name one of our physicians, Dr. Giuseppe Esposito, MD as the replacement RSO for this license. Dr. Esposito is board certified in Nuclear Medicine and has served as an Associate Professor and the Director of Nuclear Medicine, Department of Radiology at MGMC since August 2007. Dr. Esposito has also served on the MGMC Radiation Safety Committee since 2007. His resume is attached for your review.

It is our plan for Dr. Esposito to serve as the RSO with continued contract support from Dade Moeller & Associates during the search process which could take a significant amount of time.

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For this reason, we request the exemption to 10 CFR 35.24(c) which currently limits the time period for a temporary RSO to 60 days.

Due to the unexpected departure of Dennis Clum after only 8 months, Dr. Esposito is unable to obtain a signature on the Preceptor Attestation form. In addition, the Interim RSO is not deemed appropriate to sign the Preceptor Attestation form. At this time, there is no one qualified within MGMC to sign the form even though Dr. Esposito has been intimately involved in the Radiation Safety Program since 2007 as a member of the RSO, the head of Nuclear Medicine and as an active Authorized User for Nuclear Medicine and as an Authorized User for Y-90 Sirsphere Brachytherapy.

Attached is a copy of Dr. Esposito's transcript from the Society of Nuclear Medicine documenting his continuing education from 2003-2009. Dr. Esposito is scheduled to take the 40-hour Medical Radiation Safety Officer course at the Dade Moeller Radiation Safety Academy in Gaithersburg, MD. September 13-17, 2010. Copies of his Medical RSO training and DOT training certificates will be forwarded to your office once training is completed.

Dr. Esposito has previous research experience as indicated by his positions as Visiting Fellow and Visiting Associate at the National Institute on Mental Health, NIH from 1992-1998. He is currently the Principle Investigator in research protocols at MGMC.

Due to the fact that Dr. Esposito has limited experience in the HDR and Cs-137 Brachytherapy Program as well with the Blood Bank Irradiator, Dr. Esposito has received additional training from those individuals managing these programs.

Dr. Esposito met with Dalong Pang, Ph.D., Radiation Physics Department. The following was reviewed:

- Basic principles of radiation biology
- Occupational radiation dose limits
- Radiation dose limits to the adult public, embryo/fetus
- Principles of external beam radiation treatment including radiation safety, training of staff, principles of shielding design, control of access to high dose radiation areas, caution signs and postings in high radiation areas.
- Tour of Cyberknife and treatment planning suite
- Brachytherapy overview including concepts of treatment and patient admission, radiation safety, training of staff, control of access to high dose radiation areas, caution signs and posting in high radiation areas
- Concepts of High Dose Rate treatments with Iridium-92, training of staff, control of access to high dose radiation areas, caution signs and postings in high radiation areas. Toured a room for high dose rate treatment, reviewed secure storing of radiation sources and emergency procedures
- Overview of Hot Lab including policies and procedures, receiving radioactive material, logs of radioactive material in Hot Lab, disposal process of radioactive material, access control and toured the Hot Lab.

An overview of the Blood Bank was provided by Albert Langeberg including the following:

- Definition of radiation dose and radioactivity
- Dose an average person in the U.S. receives a year from nature
- Allowable dose the public may receive
- Nuclear Regulatory Commission's (NRC) occupational annual limit for worker's whole body exposure and your likely exposure working with medical radioactive materials
- Health effects and risks of ionizing radiation
- Purpose of radiation detectors monitors used to make surveys
- Three (3) major safety principles for keeping exposure As Low As Reasonably Achievable (ALARA)
- Where to use and store medical materials containing radioactive material
- Rights and responsibilities for radiation safety
- Requirements for the safe use of the blood irradiator
- Required checks for the use of the blood irradiator
- Tour of the Blood Irradiator

The orientation sessions were approximately two (2) hours in length.

Thank you for your prompt attention regarding this amendment request. Please contact me if additional information is needed. If you have any questions, I may be reached at 202-444-2903.

Sincerely,



Emma F. Hooks  
Executive Administration Representative to the Radiation Safety Committee  
Assistant Vice-President  
Safety Management & Environmental Quality

Enclosure: Board Certificate in Nuclear Medicine  
Resume of Dr. Giuseppe Esposito  
Society of Nuclear Medicine Continuing Education



Advancing Molecular Imaging and Therapy

# System Pages

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## CE History - Physicians

### CE History - Physicians

#### Select Date Range

Start Date 10/1/2003

End Date 6/21/2010

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The Society is pleased to offer physician members on-line access to their history of participation in activities approved for *AMA PRA Category 1 Credit(s)*<sup>TM</sup>. You may search for your participation in activities from October, 2003 to the

present.

Select the **View** button to see a preview on screen, or select the **Print** button for a print-ready copy.

Please direct technical questions to [sysmanager@snm.org](mailto:sysmanager@snm.org), or content-related questions to [education@snm.org](mailto:education@snm.org).

#### Preview of Transcript

Below is a preview of your transcript. To obtain a printable version, check the date range you used above, and click the **Print** button.



Advancing Molecular Imaging and Therapy

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[www.snm.org](http://www.snm.org)

June 21, 2010

Giuseppe Esposito, MD  
 Nuclear Medicine, Georgetown  
 University Hospital

#### CME TRANSCRIPT

The SNM confirms you have participated in the following continuing education activities between the dates of October 1, 2003 and June 21, 2010. The total of **342.00 *AMA PRA Category 1 Credit(s)***<sup>TM</sup> has been earned toward the AMA Physician's Recognition Award.

*Lynn Barnes*

Accreditation Statement

The SNM is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor continuing continuing medical education for physicians.

N. Lynn Barnes, MEd  
Director of Education

If you have any questions regarding this transcript, please call the SNM Education Department at (703) 708-9000 or email [education@snm.org](mailto:education@snm.org).

**AMA PRA Category 1 Credit(s)<sup>TM</sup> Participation Detail**

ID: 152445

Session Title	Date	Credit Code	Credits
PET and PET/CT Imaging: Evaluation of Patients with Urological Tumors	12/31/2009	LL-A365	2.50
Investigational and Clinical Applications of PET and SPECT Brain Imaging in Movement Disorders, Psychiatric Disorders and Traumatic Brain Injury	12/30/2009	LL-A366	2.50
Clinical Applications of SPECT and PET in the Evaluation of Dementia	12/29/2009	LL-A359	2.50
An Introduction to Nuclear Brain Imaging	12/29/2009	LL-A358	2.50
CT Case Review for Nuclear Medicine Physicians, Head & Neck (Cases 1-12)	6/16/2009	snm3460_2	1.75
CT Case Review for Nuclear Medicine Physicians, Head & Neck (Cases 13-25)	6/16/2009	snm3461_2	1.50
FDA: Clinical and Preclinical Regulatory Topics	6/15/2009	snm3062_2	1.50
GI-Colon and Liver Cancers	6/15/2009	snm3390_2	0.25
Image Guided Therapy	6/15/2009	snm3404_2	0.75
Radiopharmaceutical Therapy II	6/15/2009	snm3408_2	0.25
Dementia I: Healthy Aging/Diagnosis of Dementia	6/15/2009	snm3411_2	1.25
Dementia Brain PET/SPECT, RWE (SAM)	6/14/2009	snm3043_2	1.50
Plenary Session and Formal Opening	6/14/2009	snm3104_2	0.75
Specialties in Magnetic Resonance Imaging	6/14/2009	snm3116_2	1.25
Brain Imaging Council Young Investigator Award Symposium	6/14/2009	snm3343_2	0.50
Molecular Imaging Facilitating Development of New Cancer Therapeutic Agents - Cost-effective Solution for Clinical Trials - Morning Session	6/13/2009	snm2912_2	2.75
Thyroid Therapy in Children and Adolescents	6/13/2009	snm3021_2	1.00
Molecular Imaging of Hypoxia Biology - Afternoon Session	6/13/2009	snm3463_2	2.50
Contrast Reactions	4/19/2009	snm3264_2	1.00
Radioimmunotherapy of Non-Hodgkins Lymphoma	4/19/2009	snm3265_2	1.00

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Imaging Strategies for Neuroendocrine Tumors	4/19/2009	snm3266_2	1.00
What an Oncologist Wants from a PET/CT	4/19/2009	snm3267_2	1.00
Lymphoscintigraphy and Sentinal Node Imaging in Breast Cancer	4/18/2009	snm3255_2	1.00
How is Molecular Imaging Relevant to Your Clinical Practice?	4/18/2009	snm3257_2	1.00
Evolving Role of Imaging in Oncology Drug Development	4/18/2009	snm3258_2	1.00
The Government and You	4/18/2009	snm3260_2	1.00
Panel Discussion The Future of Nuclear Medicine: Where do you want to go?	4/18/2009	snm3261_2	0.50
Update on the National PET Database Project	4/18/2009	snm3262_2	1.00
How Low Can You Go? To Reduce the Radiation Dose of Pediatric PET/CT and SPECT/CT	4/18/2009	snm3263_2	1.00
Now that you Have It, What do you Do? PET/CT Installation, Acceptance and Getting Started	4/18/2009	snm3308_2	1.00
Cardiac Imaging in the Patient with Chest Pain	4/17/2009	snm3251_2	1.00
Cardiovascular Molecular Imaging	4/17/2009	snm3252_2	1.00
New Challenges in Heart Failure	4/17/2009	snm3253_2	1.00
Abdominal Pelvic CT/MR with PET Correlation	4/17/2009	snm3254_2	1.00
Audience Case Challenge	4/17/2009	snm3256_2	1.00
Leadership: Not Just for the Few	4/17/2009	snm3259_2	1.00
Cardiovascular Case Presentations	4/17/2009	snm3268_2	1.00
Session III: SNM Clinical Trials Network Introduction	2/9/2009	A023048	0.25
Session IV: 2009 FLT Demonstration Project: Participation, Qualification and Responsibilities	2/9/2009	A023049	2.25
Session V: Fundamentals of Clinical Trials Participation: Workshops	2/9/2009	A023050	2.50
Monitoring Cancer Therapy: Response to Toxicity - Potential for "Personalizing Patient Management" - Evaluating Cardiac Toxicity of Cancer Chemotherapy	2/8/2009	A023042	1.50
Monitoring Cancer Therapy: Response to Toxicity - Potential for "Personalizing Patient Management" - Evaluating Response to Cancer Therapy	2/8/2009	A023042-2	1.50
Keynote Address: Imaging in Clinical Trials: Choosing the Right Imaging Application for Therapy Response Assessment	2/8/2009	A023045	0.50
Session I: The Role of Imaging Biomarkers in Drug	2/8/2009	A023046	1.00

Development and Multicenter Trials			
Session II: Areas of Need for Imaging Biomarkers in Drug Development	2/8/2009	A023047	1.50
CT Review for Nuclear Medicine Physicians - CT Chest (Cases 51-63)	2/7/2009	A023031	2.00
CT Review for Nuclear Medicine Physicians - CT Abdomen (Cases 64-75)	2/7/2009	A023031-2	2.00
Cardiovascular Molecular Imaging	2/7/2009	A023032	3.00
CT Review for Nuclear Medicine Physicians: CT of the Pelvis (Cases 76-100)	2/7/2009	A023034	4.00
Current Topics in Pediatric Nuclear Medicine - Part II	2/7/2009	A023038	2.00
CT Review for Nuclear Medicine Physicians - Neuro Radiology (Cases 1-12)	2/6/2009	A023029	2.00
CT Review for Nuclear Medicine Physicians - Neuro Radiology (Cases 13-25)	2/6/2009	A023029-2	2.00
CT Review for Nuclear Medicine Physicians: CT Chest (Cases 26-37)	2/6/2009	A023030	2.00
CT Review for Nuclear Medicine Physicians: CT Abdomen (Cases 38-50)	2/6/2009	A023030-2	2.00
ACNP /ACNM Medical Practice Seminar	2/5/2009	A023028	3.50
Image Artifacts and Normal Variants in PET and PET/CT for Oncological Applications	12/30/2008	LL-A354	2.50
Melanoma-Sarcoma-Neuroendocrine Malignancies	12/30/2008	LL-A327	4.00
Oncology PET and PET/CT: Gastrointestinal Malignancies	11/14/2008	LL-A324	2.50
CT Case Review for Nuclear Medicine Physician	6/17/2008	2588CME2008AM	8.00
Nuclear Medicine in Radiation Therapy Planning • Challenges and Opportunities	6/16/2008	2390CME2008AM	0.50
CT of the Neck: A Guide for Nuclear Medicine Physicians Reading PET/CT/ Read With the Experts Session	6/16/2008	2430CME2008AM	0.50
PET/CT of the Head & Neck: Uses & Abuses Pitfalls & Problem Cases - Read With the Experts Session	6/16/2008	2431CME2008AM	1.50
Abdominal and Pelvic CT and PET/CT Anatomy for Nuclear Medicine, Read with the Experts Session - Part I	6/15/2008	2317CME2008AM	1.50
Brain PET and SPECT for Dementia, Read with the Experts Session	6/15/2008	2374CME2008AM	1.50
SNM Plenary Session and Formal Opening	6/15/2008	2405CME2008AM	0.25

Best Practices in PET/CT (SAM Session)	6/14/2008	2402CME2008AM	5.50
Decision Making in Pediatric Urinary Tract Disease	6/14/2008	2439CME2008AM	0.50
Advances in PET Instrumentation and Methodology	4/13/2008	A022837	1.00
Cardiovascular Molecular Imaging	4/13/2008	A022838	1.00
Case Presentations in PET and Nuclear Medicine	4/13/2008	A022839	1.00
Blood Volume	4/13/2008	A022840	1.00
Heart Failure and Myocardial Viability	4/12/2008	A022830	1.00
Detection of CAD and Risk Stratification	4/12/2008	A022831	1.00
Metabolic Imaging	4/12/2008	A022832	1.00
Assessment of Cardiac Pain in ER	4/12/2008	A022833	1.00
PET/CT and Monitoring Response to Therapy	4/12/2008	A022834	1.00
SPECT/CT: Clinical Applications	4/12/2008	A022835	1.00
Parathyroid Imaging - Planar, SPECT and SPECT/CT	4/11/2008	A022823	1.00
Pediatric Renal Imaging	4/11/2008	A022824	1.00
Molecular Imaging Initiatives at NCI	4/11/2008	A022825	1.00
Molecular Imaging as a Decision Making Aid in Cancer Diagnosis and Therapy	4/11/2008	A022826	0.50
Response to Radiation Terrorism in Maryland	4/11/2008	A022827	1.00
CT Neck Anatomy	4/11/2008	A022828	1.00
Thyroid Cancer Uptake	4/11/2008	A022829	1.00
Oncology PET and PET/CT: Hematologic Malignancies	12/15/2007	LL-A325	2.50
Breast and Gynecologic Cancers	12/10/2007	LL-A355	2.50
PET/CT Imaging: Evaluation of Patients with Head and Neck Cancer and Brain Tumors	12/9/2007	LL-A373	2.50
Solitary Pulmonary Nodules and Lung Cancer	11/22/2007	LL-A326	2.50
CT of the Neck, Part III (Cases 51-56)	10/7/2007	A022563	1.00
CT of the Neck, Part IV (Cases 57-62)	10/7/2007	A022564	1.00
CT of the Thorax, Part III (Cases 63-68)	10/7/2007	A022565	1.00
CT of the Thorax, Part IV (Cases 69-74)	10/7/2007	A022566	1.00
CT of the Abdomen, Part III (Cases 75-80)	10/7/2007	A022567	1.00
CT of the Abdomen, Part IV (Cases 81-86)	10/7/2007	A022568	1.00
CT of the Pelvis, Part III (Cases 87-93)	10/7/2007	A022569	1.00
CT of the Pelvis, Part IV (Cases 94-100)	10/7/2007	A022570	1.00
CT of the Neck, Part I (Cases 1-6)	10/6/2007	A022555	1.00
CT of the Neck, Part II (Cases 7-12)	10/6/2007	A022556	1.00

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CT of the Thorax, Part I (Cases 13-18)	10/6/2007	A022557	1.00
CT of the Thorax, Part II (Cases 19-24)	10/6/2007	A022558	1.00
CT of the Abdomen, Part I (Cases 25-30)	10/6/2007	A022559	1.00
CT of the Abdomen, Part II (Cases 31-36)	10/6/2007	A022560	1.00
CT of the Pelvis, Part I (Cases 37-43)	10/6/2007	A022561	1.00
CT of the Pelvis, Part II (Cases 44-50)	10/6/2007	A022562	1.00
Controversial Topics in the Management of Well-Differentiated Thyroid Cancer	6/6/2007	A022367	1.50
How to Avoid Pitfalls/Artifacts in PET/CT	6/6/2007	A022475	1.50
CT 101: The Abdomen	6/5/2007	A022368	1.50
Esophageal, Colorectal, Pancreas, Read with the Experts Session	6/5/2007	A022377	0.50
Response-adapted Therapy in Lymphoma Using PET/CT as a Biologic Marker	6/5/2007	a022411	1.50
Plenary Session and Formal Opening	6/3/2007	A022247	0.75
Updates in Head and Neck Imaging in the Post-therapy Setting: Where do We Stand?	6/3/2007	a022421	1.25
Hot Topics and Best Practices in PET/CT	6/2/2007	A022238	0.50
Molecular Imaging and Cancer Therapy: Opportunities and Challenges for Nuclear Medicine	6/2/2007	A022239	0.50
Combined Assessment of Myocardial Perfusion & CT Coronary Angiography	4/15/2007	A022231	1.00
PET in the Evaluation of Alzheimer's Disease & Related Disorders	4/15/2007	A022232	1.00
Brain PET Case Presentation: Epilepsy, Tumors & Cognitive Impairment	4/15/2007	A022233	1.00
Myocardial Perfusion PET Using Stand-alone and Hybrid Devices	4/15/2007	A022234	1.00
Transition from SPECT to SPECT/CT & PET/CT: Is it Time to Switch?	4/14/2007	A022224	1.00
Monitoring Therapeutic Intervention with PET	4/14/2007	A022225	1.00
Head & Neck PET/CT Anatomy	4/14/2007	A022226	1.00
Maintenance of Competency for Nuclear Medicine Physicians & Technologists	4/14/2007	A022227	0.50
Terrorism Using Radioactive Materials: Perceptions & Reality	4/14/2007	A022228	1.00
The Role of PET & PET/CT in Colorectal & Other GI Malignancies	4/14/2007	A022229	1.00

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PET/CT Instrumentation	4/13/2007	A022217	1.00
Gastric Emptying: Standardization and Simplification	4/13/2007	A022218	1.00
Clinical Applications of Radionuclide Renal Scintigraphy: A Case-Based Approach	4/13/2007	A022219	1.00
Medical Events & Other Radiation Safety-Related Incidents in a Nuclear Medicine Department	4/13/2007	A022220	0.50
Giving V/Q Scanning a Future in the post-PIOPED II Era	4/13/2007	A022221	1.00
Nuclear Medicine Imaging in Thyroid Cancer	4/13/2007	A022222	1.00
Myocardial Viability: Advances in Perfusion & Metabolic Imaging	4/13/2007	A022223	1.00
Radiation Planning	1/21/2007	A022095	0.50
Conventional and New Imaging Approaches to Track Cell Therapies for Cardiac Disease	1/21/2007	A022096	0.50
Molecular Therapies of Cancer	1/21/2007	A022097	0.50
Serial vs. Hybrid Imaging in CV Patients	1/21/2007	A022098	0.50
PET/CT: Literature Evidence of its Clinical Value	1/21/2007	A022099	0.50
Standardization of PET/CT Imaging Protocols for Cancer	1/20/2007	A022080	0.50
Standardization of PET/CT Imaging Protocols for Cardiology	1/20/2007	A022081	0.50
FDG Imaging of Infection/Inflammation	1/20/2007	A022082	0.50
Role of Imaging and Approaches to the Patient with Heart Failure	1/20/2007	A022083	0.50
Treatment Monitoring with PET/CT: When, How, and Why?	1/20/2007	A022084	0.50
Treatment Monitoring for CAD: Who and How?	1/20/2007	A022085	0.50
Detecting Recurrent Cancer with PET/CT	1/20/2007	A022086	0.50
Multi-modality Imaging of CAD	1/20/2007	A022087	0.50
SUV 101	1/20/2007	A022088	0.50
Advanced Image Processing Techniques for Cardiac Imaging (AC, absolute MBF)	1/20/2007	A022089	0.50
NOPR - National Oncological PET Registry Update	1/20/2007	A022090	0.50
Novel Agents for Cardiac Imaging (BMIPP, MIBG, and F-18 Flow Agent)	1/20/2007	A022091	0.50
Multi-modality Imaging of Prostate Cancer	1/20/2007	A022092	0.50
Multi-modality Approach to the Evaluation of Patients Post Myocardial Infraction	1/20/2007	A022093	0.50

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Advanced Image Processing Techniques for Oncology Imaging	1/20/2007	A022094	0.50
Monitoring the Effects of Cytostatic Cancer Treatment	1/19/2007	A022078	1.00
Imaging of Atherosclerosis: The Next Frontier	1/19/2007	A022079	1.00
Clinical Applications of PET/CT: Focus on Oncology - Esophageal	6/7/2006	A021595	1.50
Molecular Imaging in the Clinical Arena: In Vivo, Cellular and Molecular Imaging of Cancer	6/7/2006	A021628	1.50
Oncology - Clinical Diagnosis: Lung Cancer - Predicting Response to Therapy	6/6/2006	A021564	1.50
Oncology - Clinical Diagnosis: Lung Cancer - Solitary Pulmonary Nodules	6/6/2006	A021565	1.50
Oncology - Clinical Diagnosis: Lymphoma	6/6/2006	A021567	1.50
Special Plenary Session: Cassen Lectureship	6/5/2006	A021506	1.00
Endocrinology: Management of Thyroid Cancer: What's New?	6/5/2006	A021509	1.50
Musculoskeletal: Musculo-skeletal: Diseases of the Foot & Hybrid Bone and Bone Marrow Imaging	6/5/2006	A021526	1.50
Neurosciences - Neurology: Neuro-Oncology	6/5/2006	A021536	1.50
Plenary Session and Formal Opening	6/4/2006	A021505	0.75
Endocrinology: Diagnosis of Benign Endocrine Diseases	6/4/2006	A021508	1.50
Infectious Disease: Infection Imaging: FDG-PET	6/4/2006	A021519	1.50
Musculoskeletal: Spinal Disease, Marrow and Hybrid Imaging	6/4/2006	A021527	1.50
PET/CT in Oncology- Focus on the Referring Physician: What Does Your Referring Physician Want From PET/CT?	6/3/2006	A021500	7.00
New PET/CT Indications and PET Registry, Update on PET/CT Credentialing for NM Technologists	4/9/2006	A021441	0.50
PET/CT Applications & Technical Considerations for Cardiology	4/9/2006	A021442	0.50
PET and SPECT Imaging in the Diagnosis of Dementia	4/9/2006	A021443	1.00
CT Anatomy Review: Oncology PET/CT	4/9/2006	A021444	1.00
Case Studies - Read with the Experts PET/CT, Interesting Cases and Artifacts	4/9/2006	A021445	1.00
Nuclear Cardiac Basics Radiopharmaceuticals, Stressors & Protocols	4/8/2006	A021432	1.00

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Gated Cardiac SPECT: Additive Value of Detection and Prognosis	4/8/2006	A021433	1.00
Nuclear Cardiology: Transition from SPECT to PET/CT and SPECT/CT	4/8/2006	A021434	1.00
Clinical Experience with SPECT/CT Protocols and Applications	4/8/2006	A021435	1.00
FDG-PET In Imaging Primary Breast Cancer	4/8/2006	A021436	0.75
FDG-PET Imaging in Infection and Inflammation	4/8/2006	A021437	0.75
Nuclear Medicine in the Prosthetic Joint	4/8/2006	A021438	0.75
NIH Grant Process-Applications Funding Opportunities	4/8/2006	A021439	0.75
Update on ACGME Changes to NM Residency Program Content & ABNM Requirements	4/8/2006	A021440	0.50
CT for Nuclear Medicine	3/29/2006	A021373	2.00
Cancers of the GU System	3/28/2006	A021357	1.50
Neuroimaging in Evaluation of Brain Tumors	3/28/2006	A021358	1.50
Translational Research in Oncology	3/28/2006	A021359	1.50
Brain PET - Clinical Case Presentations	3/28/2006	A021360	1.50
Plenary Session: MR and Optical Molecular Imaging/Advances in Clinical Oncology and Role of Imaging	3/27/2006	A021352	1.50
Cross-Sectional Anatomy	3/27/2006	A021356	1.50
Plenary Session - March 26th	3/26/2006	A021332	1.75
Cardiac Translation/Future Direct of Cardiac Molecular Imaging	3/26/2006	A021333	1.00
Instrumentation/Quantification	3/26/2006	A021334	1.50
PET and Non-Malignant Pulmonary Diseases	3/26/2006	A021337	1.50
Neurology	3/26/2006	A021341	1.50
Administrative Track: Q/A National Oncologic PET Registry/Clinical Applications for NOPR	3/26/2006	A021377	1.25
Clinical Indications	3/25/2006	A021325	0.75
PET Physics	3/25/2006	A021326	0.75
PET Instrumentation	3/25/2006	A021327	0.75
Patient Preparation and Protocols	3/25/2006	A021329	1.75
Radiation Safety	3/25/2006	A021331	0.75
Imaging of Neuroendocrine Tumors: "Read With the Experts"	6/21/2005	A020892	1.50
Special Plenary Session: Cassen Lectureship	6/21/2005	A020943	0.75

## CE History - Physicians#Preview

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Endocrinology: Management of Thyroid Cancer II	6/21/2005	A020965	1.50
Neurosciences - Neurology: Dementia	6/21/2005	A020987	1.50
Oncology - Basic Science: Therapy Monitoring	6/21/2005	A021007	1.50
Clinical Applications of PET/CT: Focus on Oncology - Thyroid	6/20/2005	A020869	1.50
CT, MR, and PET Evaluation of Brain Tumors - "Read With the Experts"	6/20/2005	A020878	1.50
Lung and Head & Neck Cancer: Impact of PET in Radiation Therapy Planning - "Read With the Experts"	6/20/2005	A020899	1.50
Special Plenary Session	6/20/2005	A020942	1.50
Hematology: PET: Lymphoma and Multiple Myeloma	6/20/2005	A020970	1.50
Performing and Interpreting Cardiac PET and PET/CT Imaging - Interactive "Read With the Experts" Session	6/19/2005	A020905	1.50
Plenary Session and Formal Opening	6/19/2005	A020941	0.75
Oncology - Basic Science: Visualization of Tumor Hypoxia	6/19/2005	A021008	1.50
Oncology - Clinical Diagnosis: Breast Cancer	6/19/2005	A021009	1.50
Dementia Imaging: Metabolism, Blood Flow, and Beyond	6/18/2005	A020851	6.00
CT Anatomy of the Brain / H&N, Part I	5/1/2005	A020845	1.00
CT Anatomy of the Brain / H&N, Part II	5/1/2005	A020846	1.00
ATS Staging of Lymph Nodes	5/1/2005	A020847	1.00
CT of Pulmonary Nodules and Evaluating Primary Tumors	5/1/2005	A020848	1.00
Cardiac CT	4/30/2005	A020839	1.00
CT Instrumentation, Part III	4/30/2005	A020840	1.00
PET/CT Case Review	4/30/2005	A020841	1.00
CT Anatomy of the Abdomen and Pelvis	4/30/2005	A020842	1.00
CT of Abdominal Malignancies	4/30/2005	A020843	1.00
PET/CT Case Review	4/30/2005	A020844	1.00
CT Instrumentation, Part I	4/29/2005	A020832	0.75
Chest CT Basics, Part I	4/29/2005	A020833	1.00
PET/CT Case Review	4/29/2005	A020834	1.00
Chest CT Basics, Part II	4/29/2005	A020835	1.00
CT Instrumentation, Part II	4/29/2005	A020836	0.75
CT Protocols	4/29/2005	A020837	1.00
PET/CT Case Review	4/29/2005	A020838	1.00

Site Planning	3/25/2005	A021330	0.75
Oncology Therapy: General	6/22/2004	A020447	1.50
Management of Thyroid Cancer: Controversies and Advancements	6/22/2004	A020483	1.50
Neurosciences - Neurology: Parkinson's Disease and Related Disorders	6/21/2004	A020414	1.50
Functional Brain Imaging: Evidence-Based Practice	6/21/2004	A020472	1.50
Fundamentals of Cardiac PET Imaging	6/21/2004	A020474	1.50
Looking at the Future of Neuroreceptor Imaging	6/21/2004	A020530	1.50
Special Plenary Session: New Directions in Coronary Artery Disease and Cancer	6/21/2004	A020546	1.50
Plenary Session and Formal Opening	6/20/2004	A020368	0.75
Neurosciences - Neurology: Mild Cognitive Impairment and Early Diagnosis of Alzheimer's Disease	6/20/2004	A020413	1.50
Neurosciences Young Investigator Award Symposium - Brain Imaging Council	6/20/2004	A020415	1.50
Meet the Author I	6/20/2004	A020457	0.75
Metabolic PET Imaging and Radiation Therapy: Perspectives for a Fruitful Collaboration	6/20/2004	A020484	1.50
Brain Imaging: Parkinson's Disease	6/19/2004	A020355	5.25
Read With the Expert: Everyday Cases with Impact on Clinical Management	5/3/2004	A019539	1.00
PET-CT Fusion Scans-Does it Make a Difference	5/3/2004	A019540	1.00
PET: What the Oncologist Wants to Know	5/3/2004	A019541	1.00
PET Artifacts and Normal Variants	5/3/2004	A019542	1.00
Regulatory Issues Important to Our Profession	5/3/2004	A019545	1.00
Pattern of Normal Variance/Acquisition & Interpretation	4/17/2004	A020331	0.75
Neuroimaging in Epilepsy	4/17/2004	A020332	0.75
Functional and Metabolic Imaging of Brain Tumors	4/17/2004	A020333	0.75
PET in Evaluation of Alzheimer's Disease and Related Dementia	4/17/2004	A020334	0.75
Metabolic Crisis Following Traumatic Brain Injury: An Introduction to Metabolic Therapy	4/17/2004	A020335	1.00
Predicting and Preventing Stroke with PET	4/17/2004	A020336	0.75
Movement Disorders	4/17/2004	A020337	0.75
Application of PET in Psychiatric Research	4/17/2004	A020338	0.75

PET Learning Center - Physicians	2/22/2004	A018353	14.00
JNM-Dobutamine Stress Myocardial Perfusion Imaging in Coronary Artery Disease	12/15/2003	A019292	1.00
<b>Total Credits:</b>			<b>342.00</b>

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# The American Board of Nuclear Medicine

*Incorporated 1971*

*Certifies that*

## Giuseppe Esposito

*has met the requirements of this Board and is qualified during the period of 2001 through 2011 to practice as a Specialist in all aspects of Clinical and Laboratory*

## Nuclear Medicine

*including but not limited to Radiobioassay, Nuclear Imaging, In Vivo Measurements & Therapy with Unsealed Radionuclides*

*Ronald L. Van Dusen*  
Chairman

*William J. ...*  
Secretary

07218  
Number

**CURRICULUM VITAE**

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**Date of Birth:**

**Place of Birth:**

**Citizenship:**

[REDACTED]

**Licensure:**

District of Columbia  
Maryland  
New York

**Board Certification:** American Board of Nuclear Medicine

**Date of Certification:** September 2001

**Education (In Italy):**

**Undergraduate**

Liceo Scientifico (Scientific High School) T.L. Caro  
Via Manzoni 53, 80123, Naples, Italy  
1978 - 1983

**Medical School**

Medical School of the University "Federico II"  
Via Pansini 5, 80131, Naples, Italy  
1984 - 1990

**Residency/Nuclear Medicine**

Division of Nuclear Medicine  
Department of Radiology  
Medical School of the University "Federico II"  
Via Pansini 5, 80131, Naples, Italy  
1991 – 1992  
Chairman: Prof. Marco Salvatore

**Education (In USA):****Graduate**

Visiting Fellow, Post-doctoral fellowship  
National Institute on Mental Health, NIH  
Unit on PET, Clinical Brain Disorders Branch  
9000 Rockville Pike, Bethesda, MD 20892  
October 1992 – January 1998  
Chief: Dr. Karen F. Berman

Visiting Associate  
National Institute on Mental Health, NIH  
Unit on PET, Clinical Brain Disorders Branch  
9000 Rockville Pike, Bethesda, MD 20892  
February 1998 – June 1998  
Chief: Dr. Karen F. Berman

**Residency/Nuclear Medicine**

Johns Hopkins University Hospital  
Division of Nuclear Medicine  
601 North Caroline Street  
Baltimore, MD 21287  
July 1998 – June 2000  
Director: Dr. Szolt Zsabo

**Internship/Internal Medicine**

Franklin Square Hospital  
Department of Internal Medicine  
9000 Franklin Square Drive  
Baltimore, MD 21237  
July 2000 – December 2001  
Director: Dr. Daniel Hardesty

**Professional Experience:**

Staff Clinician  
Research Resources Branch,  
National Institute on Aging, NIH  
5600 N. Shock Dr., Baltimore, MD 21224  
February 2002-August 2004:

Staff Physician  
Department of Nuclear Medicine, Franklin Square Hospital  
9000 Franklin Square Dr., Baltimore, MD 21287  
March 2005-present

Staff Physician  
Department of Nuclear Medicine, Good Samaritan Hospital  
5601 Loch Raven Blvd, Baltimore, MD 21239  
March 2005-present

Staff Physician  
Division of Nuclear Medicine, Department of Medicine  
Washington Hospital Center  
110 Irving Street, NW, Washington, DC 20010  
September 2004-July 2007

Director, Nuclear Medicine (since November 1<sup>st</sup>)  
Department of Radiology  
Georgetown University Hospital  
3800 Reservoir Rd, NW  
Washington, DC 20007-2113  
August 2007 – present

**Honors and Awards**

1994: Smith Kline Beecham Award, Society of Biological Psychiatry,  
Philadelphia, PA  
2003: Staff Recognition Award, National Institute on Aging, NIH

**Professional Societies**

2007-present: European Society of Nuclear Medicine  
2005-present: Academy of Molecular Imaging  
2002-present: Society of Nuclear Medicine

**Public Service**

June 2008 – present  
Secretary/Treasurer  
Executive Committee – Mid-Eastern Chapter, Society of Nuclear  
Medicine

September 2006 – present  
Intern  
Executive Committee – Mid-Eastern Chapter, Society of Nuclear  
Medicine

Reviewer  
Neuropsychologia (Occasional)

**Invited seminars and presentations:**

Neurology Grand Rounds  
– PET Evaluation of the dementias  
Washington Hospital Center  
Washington, DC (February 2005)

Hematology/Oncology Grand Rounds  
– PET scans in Leukemia and Multiple Myeloma  
Washington Hospital Center  
Washington, DC (June, 2005)

Infectious Disease Grand Rounds  
– Nuclear Medicine Evaluation of Infection/Inflammation  
Washington Hospital Center  
Washington, DC (May, 2006)

Head and Neck Surgery Grand Rounds  
– PET in the Management of patients with Head and Neck  
Cancer  
Washington Hospital Center  
Washington, DC (April, 2007)

Multidisciplinary Management of Cancers: A Case-Based  
Approach Seminar  
– Lymphoma/Myeloma Tumor Board  
Organized by:  
Washington Cancer Institute  
Washington Hospital Center  
Washington, DC (October 27, 2007)

Tumor Board Grand Round  
– Clinical Indications of PET/CT

Union Memorial Hospital  
Baltimore, MD (April, 2008)

Neuroradiology Grand Rounds  
– PET Imaging in Head and Neck Cancers  
Department of Radiology  
Georgetown University Hospital Center  
Washington, DC (May, 2008)

**University Service:**

August 2007 – present  
Radiation Safety Committee  
Georgetown University Hospital

August 2007 – present  
Residency Education Committee  
Department of Radiology  
Georgetown University Hospital

July 2008 – present  
Leader  
Imaging Response Assessment Team of the American Association  
of Cancer Institutes  
Lombardi Cancer Center/Georgetown University Hospital  
Department of Radiology

**Teaching Activities:**

Internal Medicine Residency Program  
Washington Hospital Center  
Washington, DC

Residents lectures:

- The role of nuclear medicine in the evaluation of infectious/inflammatory processes (May, 2006)
- The role of nuclear medicine in the evaluation of infectious/inflammatory processes (May, 2006)
- Nuclear medicine evaluation of the hepatobiliary tract (November, 2006)

Daily rounds in nuclear medicine reading room for residents on elective rotation in nuclear medicine

Rounds in thyroid clinic for patients treated with radioiodine for residents on elective rotation in nuclear medicine

Cardiology Fellowship Program  
Georgetown University/Washington Hospital Center, 2004-2007  
Washington, DC

Daily rounds in nuclear medicine reading room (September, 2004-July, 2007)

Endocrinology Fellowship Program  
Georgetown University/Washington Hospital Center  
Washington, DC

Weekly thyroid cancer conferences (September, 2004-July, 2007)

Rounds in thyroid clinic for patients treated with radioiodine for thyroid cancer or hyperthyroidism (September, 2004-July, 2007)

Radiology Residency Program  
Georgetown University Hospital  
Washington, DC

Residents lectures:

- Radiopharmaceuticals commonly used in nuclear medicine (August, 2007)
- Ventilation/Perfusion scan for pulmonary embolism (September, 2007)
- Imaging of Infection in Nuclear Medicine (October, 2007)
- Evaluation of GI bleed in Nuclear Medicine (November, 2007)
- Nuclear medicine imaging of benign thyroid diseases (January 2008)
- Imaging of thyroid nodules and thyroid cancer (January, 2008)
- Radionuclide ventriculography (April 2008)
- PET/CT basics (June 2008)
- PET/CT imaging of head and neck cancer (July 2008)

Daily rounds in nuclear medicine reading room (August, 2007-present)

Ward rounds for patients with thyroid cancer treated with radioiodine (August, 2007-present)

Georgetown University Medical School  
Washington, DC

– Basics of Nuclear Medicine  
Clinical Skill Primer Course 2008 (April, 2008)

Monthly students lectures on the basics of Nuclear Medicine for  
selective rotations in Radiology (July, 2008-present)

### Scholarships:

Italian Ministry for Scientific Research  
Fellowship Award  
1991-1994

### Grants:

Charles and Mary Latham Fund  
Comparison of I-124 and I-131 Radiopharmacokinetics  
Principal Investigator  
January 2007 (\$10,000)

### Publications

#### Peer Reviewed

1. Sunderland T, Esposito G, Molchan SE, Coppola R, Jones DW, Gorey J, Little JT, Cantillon M, Bahro M, Weinberger DR. Differential Cholinergic Regulation in Alzheimer's Patients Compared to Normal Controls Following Chronic Blockade with Scopolamine: A SPECT Study. *Psychopharmacology* 121:231-241, 1995.
2. Mattay VS, Berman KF, Ostrem JL, Esposito G, Van Horn JD, Bigelow LB, Weinberger DR. Dextroamphetamine Enhances "Neural Network-Specific Physiological Signals": A Positron - Emission Tomography rCBF Study. *J Neurosci* 16:4816-4822, 1996
3. Mattay V.S., Frank J.A., Duyn J.H., Kotrla K.J., Santha A.K.S., Esposito G, Sexton R.H., Barker P., Sunderland T., Moonen C.T.W., Weinberger D.R. 3D 'BURST' fMRI: Initial Clinical Applications. *Acad Radiol* 3:S379-S383, 1996.
4. Ramsey NF, Kirkby BS, Van Gelderen P, Berman KF, Moonen CTW, Duyn JH, Frank JA, Mattay VS, Van Horn JD, Esposito G, Moonen CTW, Weinberger DR. Functional mapping of human sensorimotor cortex with 3D-BOLD fMRI correlates highly with H<sub>2</sub><sup>15</sup>O PET rCBF. *J Cereb Blood Flow Metab* 16:755-764, 1996.
5. Esposito G, Van Horn JD, Ostrem JL, Weinberger DR, Berman KF. Gender Differences in Cerebral Blood Flow as a Function of Cognitive State with PET. *J Nucl Med* 37:559-564, 1996.
6. Berman KF, Schmidt PJ, Rubinow DP, Danaceau MA, Van Horn JD, Esposito G, Ostrem JL, Weinberger DR. Modulation of Cognitive-Specific Cortical Activity

by Gonadal Steroids: a PET Study in Women. *Proc Natl Acad Sci* 94:8836-41, 1997

7. Goldberg TE, Berman KF, Fleming K, Ostrem JL, Van Horn JD, Esposito G, Mattay VS, Gold JM, Weinberger DR. Uncoupling cognitive workload and prefrontal cortical physiology: a PET rCBF study. *Neuroimage* 7:296-303, 1998
8. Van Horn JD, Ellmore TM, Esposito G, Berman KF. Mapping Voxel-Based Statistical Power on Parametric Images. *Neuroimage* 7:97-107, 1998
9. Van Horn JD, Gold J, Esposito G, Ostrem JL, Mattay VS, Weinberger DR, Berman KF. Changing Patterns of Brain Activation During Maze Learning. *Brain Res* 793:29-38, 1998.
10. Esposito G, Kirkby BS, Van Horn JD, Weinberger DR, Berman KF. Context-dependent, Neural System-specific Neurophysiological Concomitants of Aging: Mapping PET Correlates During Cognitive Activation. *Brain* 122:963-979, 1999.
11. Ye F, Berman KF, Ellmore T, Esposito G, Van Horn JD, Yang Y, Duhn J, Smith AM, Frank JA, Weinberger DR, McLaughlin AC. H215O PET Validation of Steady-State Arterial Spin Tagging Cerebral Blood Flow Measurements in Humans. *Magn Reson Med* 44:450-456, 2000.
12. Bertolino A, Esposito G, Callicott JH, Mattay VS, Van Horn JD, Frank JA, Berman KF, Weinberger DR. Specific relationship between prefrontal neuronal N-acetyl-aspartate and activation of the working memory cortical network in schizophrenia. *Am J Psychiatry* 157:26-33, 2000.
13. Gourovitch ML, Kirkby BS, Goldberg TE, Weinberger DR, Gold JM, Esposito G, Van Horn JD, Berman KF. A comparison of rCBF patterns during phonological and semantic fluency. *Neuropsychology* 14:353-360, 2000.
14. Meyer-Lindenberg A, Miletich RS, Kohn PD, Esposito G, Carson RE, Quarantelli M, Weinberger DR, Berman KF. Reduced prefrontal activity predicts exaggerated striatal dopaminergic function in schizophrenia. *Nature Neurosci.* 5:267-71, 2002.
15. Chin BB, Esposito G, Kraitchman DL. Myocardial contractile reserve and perfusion defect severity with rest and stress dobutamine (99m)Tc-sestamibi SPECT in canine stunning and subendocardial infarction. *J Nucl Med* 43:540-550, 2002
16. Beason-Held LL, Golski S, Kraut MA, Esposito G, Resnick SM. Brain activation during encoding and recognition of verbal and figural information in older adults. *Neurobiol Aging.* 26(2):237-50, 2005.
17. Garcia CA, Van Nostrand D, Atkins F, Acio E, Butler C, Esposito G, Kulkarni K, Majd M.. Reduction of Brown Fat 2-Deoxy-2-[F-18]fluoro-D-glucose Uptake by Controlling Environmental Temperature Prior to Positron Emission Tomography Scan. *Mol Imaging Biol.* 8, 24-29, 2006

18. Garcia CA, Esposito G, Acio ER, Van Nostrand D. (18)F-FDG PET hemispheric cerebral hypometabolic activity: patient motion artifact. *J Nucl Med Technol.* 34(2):86-7, 2006.
19. Esposito G, Giovacchini G, Der M, Liow JS, Ma K, Herscovitch P, Channing M, Hallett M, Bhattacharjee AK, Eckelman WC, Carson RE, Rapoport SI. Imaging signal transduction via Arachidonic Acid in the human brain during visual stimulation, by means of Positron Emission Tomography. *Neuroimage*, 34(4):1342-51, 2007
20. Walitt B, Roebuck-Spencer T, Esposito G, Atkins F, Bleiberg J, Foster G, Weinstein A. The effects of multidisciplinary therapy on positron emission tomography of the brain in fibromyalgia: a pilot study. *Rheumatol Int.* 27(11):1019-24. Epub 2007 Jul 20, 2007
21. Esposito G, Giovacchini G, Liow JS, Bhattacharjee AK, Greenstein D, Schapiro M, Hallett M, Herscovitch P, Eckelman WC, Carson RE, Rapoport SI. Imaging Neuroinflammation in Alzheimer Disease with Radiolabeled Arachidonic Acid and PET. *J Nucl Med* (in press).

#### Book Chapters

1. Van Horn JD, Ellmore TM, Holt JL, Esposito G, Berman KF (1998). Multifiltering signal detection and statistical power in brain activation studies. In: Herscovitch P, Carson RE (eds.) *Quantification of Brain Function with PET*, Academic Press, 237-240
2. Esposito G. Radionuclide Imaging of Medullary Carcinoma: Utility of Radiolabeled Somatostatin Analogs and Other Radiotracers. In: "Thyroid Cancer: A Comprehensive Guide to Clinical Management", 2/e. Edited by L. Wartofsky, M.D. and D. Van Nostrand. Humana Press Inc., Totowa, NJ. 2006.

#### Meeting Abstracts

##### *Society of Nuclear Medicine*

1. Esposito G, Van Horn JD, Weinberger DR, Berman KF (1993) "Gender Differences in Cerebral Blood Flow with PET: Is there an Effect of Cognitive State?" *J Nucl Med* 34: 67P
2. Berman KF, Schmidt PJ, Ostrem JL, Danaceau MA, Esposito G, Van Horn JD, Mattay VS, Rubinow DR, Weinberger DR (1994). Effects of gonadal steroids on cerebral blood flow: patients with menstrual-related mood disorder and controls studied with PET during medical oophorectomy and hormone replacement. *J Nucl Med* 35:53P

3. Esposito G, Kirkby BS, Van Horn JD, Ostrem JL, Weinberger DR, Berman KF (1995). Task-specific Neurophysiological Changes in Normal Aging: PET rCBF Measurements During Cognition. *Journal of Nuclear Medicine*, vol. 36, p.16
4. Esposito G, Saunders RC, Jones DW, Lee KS, Gorey JG, Coppola R, Berman KF, Iadarola MJ, DeCosta BR, Rice KC, Weinberger DR (1995). I-123-Ioxy: A Potential SPECT Imaging Agent for Opiate Receptors. *Journal of Nuclear Medicine*, vol. 36, p. 166P
5. Esposito G, Kirkby BS, Van Horn JD, Ostrem JL, Weinberger DR, Berman KF (1996). Different Pathophysiological Mechanisms of Impaired Wisconsin Card Sorting in Elderly Normal Subjects and Schizophrenics Studied with PET. *Journal of Nuclear Medicine* 37(5), p. 79P.
6. Berman KF, Austin-Lane JL, Esposito G, Van Horn JD, Weinberger DR (1996) Neurophysiological and Neuropsychological Dissection of the "Working" and the "Memory" in a PET Study of Working Memory. *Journal of Nuclear Medicine*, 37, 5, p. 284p
7. Esposito G, Chin BB, Kraitchman DL (2000). Tc-99m gated sestamibi SPECT evaluation of myocardial wall thickening correlates with tagged MRI measurements of radial strain. *J Nucl Med* 41: 755P
8. Chin BB, Esposito G, Kraitchman DL (2000). Characterization of canine myocardial contractile reserve with gated Tc-99m sestamibi SPECT in normal, stunned and subendocardial infarction. *J Nucl Med* 41: 497P
9. Chin BB, Esposito G, Kraitchman DL (2000). Detailed characterization of gated and ungated Tc-99m sestamibi defect severity in normal, stunned and subendocardial infarcted canine myocardium at rest and during low dose dobutamine infusion. *J Nucl Med* 41: 496P.
10. Esposito G, Bhattacharjee AK, Schapiro M, Herscovitch P, Eckelman WC, Carson RE, Rapoport SI (2005). PET shows increased brain incorporation of [1-<sup>11</sup>C]Arachidonic Acid, a marker of neuroinflammation, in patients with Alzheimer's Disease: *J Nucl Med*.
11. Van Nostrand D, Aiken M, Atkins F, Esposito G, Moreau S, Garcia C, Acio E, Burman K, Wartofsky, L (2007). The utility of radioiodine whole body scans prior to I-131 ablation in patients with well-differentiated thyroid cancer. *J Nucl Med* 48: 15P
12. Aiken M, Garcia C, Acio E, Suhag V, Esposito G, Moreau S, Priebe D, Van Nostrand D (2007). Doxorubicin-induced cardiac toxicity and gated cardiac blood pool imaging. *J Nucl Med* 48: 208P
13. Esposito G, Sarikaya I (2008). Integrated nuclear medicine imaging of medullary thyroid cancer. *J Nucl Med* 49: 171P

*BrainPET*

14. Esposito, G, Giovacchini, G, Der, MG, Vuong, BK, Channing, MA, Lerner, A, Hallett, M, Battacharjee, A, Herscovitch, P, Eckelman, WC, Rapoport, SI, Carson, RE: [11C]Arachidonic acid PET activation experiments in human subjects: A feasibility study using visual stimulation. *J Cereb Blood Flow Metab*, Vol 23 (Suppl 1):711 (2003)

*Radiological Society of North America*

15. Esposito G, Chin BB, Kraitchman DL. Correlation of myocardial strain measurements by 3D-tagged MR imaging with Tc-99m gated sestamibi SPECT thickening in normal stunned and infarcted myocardium. *Radiology* 1999; 213; p207.

*Society for Neuroscience*

16. Berman KF, Ostrem JL, Van Horn JD, Mattay VS, Esposito G, Weinberger DR (1993). A Comparison Between Normal Monozygotic and Dizygotic Twins Studied During Cognition with Positron Emission Tomography. *Society for Neuroscience Abstracts*, Vol. 19, Part 1, p. 792
17. Gourovitch ML, Kirkby BS, Gold JM, Esposito G, Van Horn JD, Ostrem JL, Golberg TE, Weinberger DR, Berman KF(1994). A comparison of letter and category fluency. *Cerebral Activation with Positron Emission Tomography*. *Society for Neuroscience Abstracts*, Volume 20, Part 1, p. 6
18. Weinberger DR, Ramsey NF, Kirkby BS, Van Gelderen P, Berman KF, Mattay VS, Frank JA, Van Horn JD, Esposito G, Moonen CTW (1995). Three-Dimensional BOLD fMRI and O-15 water PET neuroactivation maps are highly correlated. *Society for Neuroscience Abstracts*, Vol. 21, Part 1, p. 273
19. Esposito G, Kirkby BS, Van Horn JD, Weinberger DR, Berman KF (1995). Different pathophysiological mechanisms of altered Wisconsin Card Sort performance in schizophrenics and elderly normal subjects. *Society for Neuroscience Abstracts*, Vol. 21, Part 1, p. 747
20. Kirkby BS, Van Horn JD, Esposito G, Golberg TE Weinberger DR, Berman KF (1995). Long term changes in rCBF during cognition following severe closed head injury: a PET study. *Society for Neuroscience Abstracts*, Vol. 21, Part 3, p. 1924
21. Van Horn JD, Esposito G, Kirkby BS, Weinberger DR, Berman KF (1995). Appraisal of univariate and multivariate analysis techniques for PET brain image quantification. *Society for Neuroscience Abstracts*, Vol. 21, Part 2, p. 1208.
22. Esposito G, Kirkby BS, Van Horn JD, Weinberger DR, Berman KF (1996). PET Evaluation of cognitively related neurophysiological sequelae accompanying

incidental findings of microvascular ischemic disease in the elderly: preliminary results. Society for Neuroscience Abstracts, Vol. 22, Part 1, p. 676

23. Weinberger DR, Santha A, Mattay VS, Frank J, Kirkby BS, Van Horn JD, Esposito G, Berman KF (1996). Within subject neuroactivation mapping with whole brain isotropic EPI and 3-D PET: a direct comparison. Society for Neuroscience Abstracts, Vol. 22, Part 1, p. 7
24. Golberg TE, Fleming K, Berman KF, Van Horn JD, Esposito G, Ostrem JL, Gold JM, Weinberger DR (1996). Neurophysiology of dual task performance: a PET O15 study. Society for Neuroscience Abstracts, Vol. 22, Part 2, p. 967
25. Van Horn JD, Austin-Lane JL, Kirkby BS, Esposito G, Weinberger DR, Berman KF (1996). Characterizing rCBF response in a PET study of graded working memory load. Society for Neuroscience Abstracts, Vol. 22, Part 2, p. 1113
26. Ellmore TM, Van Horn JD, Esposito G, Kirkby BS, Austin-Lane JL, Weinberger DR, Berman KF (1996). Signal averaging in cognitive and motor PET paradigms. Society for Neuroscience Abstracts, Vol. 22, Part 3, p. 1858
27. Berman KF, Schmidt PJ, Rubinow DR, Esposito G, Van Horn JD, Austin-Lane JL, Danaceau MA, Weinberger DR (1996). Modulation of cognitively related cortical activity by gonadal steroid hormones directly demonstrated with PET. Society for Neuroscience Abstracts, Vol. 22, Part 3, p. 1861
28. Berman KF, Holt J, Callicott J, Esposito G, Van Horn JD, Egan M, Weinberger DR (1997). Relations among rCBF, Clinical, and Cognitive Changes over Time in Medication-Free Patients with Schizophrenia: Individual PET Activation Maps. Society for Neuroscience Abstracts, Vol. 23, Part 2, p. 1406

*American Psychiatric Association*

29. Van Horn JD, Berman KF, Esposito G, Ostrem JL, Weinberger DR (1993) Is There Frontal Lobe Lateralization? A PET Study. Abstracts of the 146th Meeting of the American Psychiatric Association (New Research) p 68
30. Ostrem JL, Kirkby BS, Van Horn JD, Esposito G, Gold J, Weinberger DR, Berman KF (1994). Effects of cohort size on PET activation studies. Abstracts of the Annual Meeting of the American Psychiatric Association (Symposium 118), p. 153

*American Academy of Neurology*

31. Berman KF, Ostrem JL, Mattay VS, Esposito G, Van Horn JD, Torrey EF, Weinberger DR (1993). The role of the dorsolateral prefrontal cortex and the hippocampus in working memory: PET studies of normal and abnormal states. Abstracts of the 46th Annual Meeting of the American Academy of Neurology

*Biological Psychiatry*

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This is to acknowledge the receipt of your letter/application dated

8/10/2010, and to inform you that the initial processing which includes an administrative review has been performed.

Amendment (08-30577-01) There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

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