



SCANNER

THE OFFICIAL NEWSLETTER OF THE ACNP
JANUARY/FEBRUARY 2005

President's Message



ACNP's 2005 annual meeting was held recently in San Diego, and it was a great success. In addition to the regular presentations, there were 12 presented abstracts and 19 posters. Many thanks go to the members of the Program Committee, Simin Dadparvar, M.D.; Lale Kostakoglu, M.D., ABNM.; and Hossein Jadvar, M.D., Ph.D., for assembling a great program. The minicourse on CT was excellent. Presentations on clinical topics, as well as the socioeconomics and marketing of nuclear medicine, were well received.

The meeting allowed leadership to get together and discuss strategic planning for ACNP; discussions were also held with industry representatives. We believe that ACNP is important for the field of nuclear medicine and for nuclear medicine practitioners, whether they are in academia or private practice.

We are working on goals and objectives in several key areas. One of the most exciting is the resident mentoring program, directed by Simin Dadparvar, M.D., of Philadelphia, Pa. Including residents early in their careers will help them succeed, and their success will help ACNP and the field of nuclear medicine. We also discussed ways to improve member support and outreach to other clinicians. These goals and objectives will be pursued during the coming months.

Another important strategic area that ACNP is strongly involved with is government affairs. ACNP and SNM co-sponsor the Joint Government Relations Committee. That committee's work—monitoring activities of government agencies, regulatory changes that may affect nuclear medicine and its practitioners and reimbursement for nuclear medicine studies—is vital to the health of nuclear medicine. Members of the Joint Government Relations Committee actively engage in dialogue with members of Congress and with regulators on behalf of nuclear medicine.

We look forward to continued growth and success of ACNP and to another successful annual meeting early in 2006.

*Bennett S. Greenspan, M.D., FACNP
President, ACNP*

SNM, ACNP Leadership Present Information on Radioactive Drugs at FDA Meeting

SNM and ACNP leadership contributed six presentations to the “Radioactive Drugs for Certain Research Uses” meeting of FDA’s Radioactive Drug Research Committee (RDRC) Nov. 16 in Rockville, Md. The public meeting was called by FDA’s RDRC staff to garner public input on the need to modify the conditions set forth in 21 CFR 361.1 that ensure the safe use of radioactive drugs for basic research purposes without an Investigational New Drug application. The meeting continues FDA’s outreach to the nuclear medicine community to re-energize the activities of RDRCs.

SNM President Mathew L. Thakur, Ph.D., presented SNM’s suggestions to the FDA on pharmacology issues. Henry D. Royal, M.D., SNM’s immediate past president, presented SNM’s views on radiation dose limits for adult subjects and the exclusion of pregnant women from some research studies. Michael J. Gelfand, M.D., SNM past president, presented the society’s suggestions for pediatric studies under an RDRC. Terry Beven, M.D., chair of the ACNP/SNM Joint Government Relations Committee, along with Thakur, provided FDA RDRC staff with suggestions from both ACNP and SNM on membership and administrative issues relating to RDRC.

CMS Plan Recognizes PET Technology for Benefit of Cancer Patients

The Centers for Medicare & Medicaid Services (CMS) announced a plan Jan. 28 that will lead to reimbursement for a broad range of oncology studies with positron emission tomography (PET)—increasing a cancer patient’s access to this modality and thus improving the diagnosis and treatment of cancer patients nationwide. The plan will link reimbursement to a national patient database created by CMS to track clinical management decisions of cancer patients.

“SNM applauds this move by CMS to recognize the value of PET in the co-management of the nation’s cancer patients,” said Society of Nuclear Medicine President Mathew L. Thakur, Ph.D. “This action will give thousands of cancer patients the benefit of the superior diagnosis and treatment capabilities of this exciting imaging technology,” agreed Peter S. Conti, M.D., Ph.D., SNM president-elect and chair of SNM’s PET Center of Excellence.

According to CMS, this decision reflects Medicare’s emphasis on ensuring that patients receive high-quality, medically necessary care and on developing better evidence needed by linking coverage to the collection of clinical data.

PET is a diagnostic imaging procedure that has the ability to differentiate cancer from normal tissue and may add important information beyond conventional imaging studies in diagnosing and staging cancer and monitoring a patient’s progress during treatment. The expansion in PET scan benefits makes this test available to patients when the patient and doctor participate in high-quality clinical studies or submit information to a PET database. This database will be available within the next several months.

This move will also directly impact thousands of SNM physicians and technologists. The creation of a national PET database may lead to reimbursement for the diagnosis, monitoring the effectiveness of treatment, restaging and suspected recurrence of cancers not previously covered, such as cervical, ovarian, pancreatic and testicular cancers. Previously, only a limited number of indications were covered. CMS worked with the National Cancer Institute (NCI) and the oncology community, including SNM, the American College of Nuclear Physicians, the American College of Radiology and the Academy of Molecular Imaging, to ensure that patients get the care they need and to develop the evidence needed by

doctors and patients to make informed decisions about treatment. “Ultimately, our working relationship with CMS is about improving the quality of and access to cancer care for patients everywhere,” said Andrew von Eschenach, M.D., NCI director.

NIH: New Funding Initiatives

*Excerpt from Cancer Imaging Program, National Cancer Institute, November 2004
Electronic Newsletter No. 76*

1. Cancer Nanotechnology Platform Partnerships (RFA-CA-05-026)

Letter of intent receipt date: Feb. 25, 2005

Application receipt date: March 25, 2005

The National Cancer Institute (NCI) invites applications for research project grants (RPGs) to support development of nanotechnology platforms for basic, applied and translational multi-disciplinary research that uses nanotechnology (e.g., nanoscale devices or nanomaterials less than 1000 nm in size, although the assembly, synthesis and/or fabrication of components at dimensions less than 300 nm should be demonstrated) in cancer research. Proposed projects will be eligible for consideration if they address one or more of the following thematic/programmatic areas of focus: molecular imaging and early detection; in vivo imaging; reporters of therapeutic efficacy; multifunctional therapeutics, prevention and control of cancer; and research enablers.

URL: <http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-05-026.html>

2. Quick-Trials for Novel Cancer Therapies: Exploratory Grants (R21) (NCI) (PAR-04-155)

Application receipt dates: 2004–07: Aug. 9, Dec. 9

This PA supports scientific, technological, clinical and logistical needs in novel cancer therapy development. In addition, this PA complements the Rapid Access to Intervention Development (RAID) program http://dtp.nci.nih.gov/docs/raid/raid_index.html by providing an initiative with accelerated peer review and funding to support the clinical and laboratory costs of early clinical testing to ensure the timely development of new therapeutic approaches.

URL: <http://grants.nih.gov/grants/guide/pa-files/PAR-04-155.html>

3. Activities to Promote Research Collaborations (NOT-CA-05-005)

Receipt date: Feb. 15, 2005

The Division of Cancer Biology (DCB) of the National Cancer Institute (NCI) announces its intent to provide funds to supplement existing DCB-supported research projects in FY 2005 to support and encourage scientific collaboration among DCB grantees, as well as with other members of the scientific community. This initiative, known as the Activities to Promote Research Collaborations (APRC) program, can support collaborative activities that bring together ideas and approaches from disparate scientific disciplines, including those not currently supported by DCB. Examples of collaborative activities include, but are not limited to, initiating new collaborative research projects, sharing resources and reagents, developing novel technologies and organizing cross-disciplinary meetings/workshops. It is essential, however, that proposed APRC activities be within the overall scope of the active parent award and that the collaborative activity is new.

URL: <http://grants2.nih.gov/grants/guide/notice-files/NOT-CA-05-005.html>

4. Centers for Medical Countermeasures Against Radiation (NIAAD) (RFA-AI-04-045)

Application receipt date: Feb. 22, 2005

URL: <http://grants.nih.gov/grants/guide/rfa-files/RFA-AI-04-045.html>

Public Briefing: RFA-AI-04-045 - Centers for Medical Countermeasures Against Radiation (NOT-AI-05-011) Dec. 15, 2004, 1–5 PM, 2C–13, 10401 Fernwood Drive, Bethesda, Md.

URL: <http://grants.nih.gov/grants/guide/notice-files/NOT-AI-05-011.html>

5. Pre-Application Meeting for NCI Alliance for Nanotechnology on Cancer (NOT-CA-05-006)

URL: <http://grants.nih.gov/grants/guide/notice-files/NOT-CA-05-006.html>

6. Centers of Cancer Nanotechnology Excellence (NCI) (RFA-CA-05-024)

Letter of intent receipt date: Feb. 25, 2005

Application receipt date: March 25, 2005

The NCI invites applications from investigators interested in participating in an initiative to establish up to five Centers for Cancer Nanotechnology Excellence (CCNEs). The CCNEs will be a national resource that will integrate the basic and clinical sciences with engineering to develop and apply nanotechnology to cancer research to accelerate the application of this science to the clinic.

URL: <http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-05-024.html>

7. Multidisciplinary Career Development in Cancer Nanotechnology Research (RFA-CA-05-025)

Application receipt date: March 25, 2005

This RFA supports the career development of individuals from the basic, biomedical, clinical and information sciences and engineering who are pursuing research that applies nanotechnology development and application for the prevention, detection, diagnosis or treatment of cancer. This funding opportunity will use Ruth L. Kirschstein National Research Service Awards (Kirschstein-NRSA) to support individual postdoctoral fellowships (F32) and senior fellowships (F33).

URL: <http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-05-025.html>

8. National Centers for Biomedical Computing (Roadmap) (RFA-RM-04-022)

Letters of intent due: Dec. 20, 2004

Application receipt date: Jan. 24, 2005

Participating Institutes and Centers (ICs) of the National Institutes of Health under the Roadmap Initiative invite applications for specialized centers in the area of biomedical computing. The U54 cooperative agreement mechanism will be used to create the NIH National Centers for Biomedical Computing (NCBC). These centers, in conjunction with individual investigator awards, will create a networked national effort to build the computational infrastructure for biomedical computing in the nation, the National Program of Excellence in Biomedical Computing (NPEBC).

URL: <http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-04-022.html>

9. Regional Translational Research Center Planning Grants (Roadmap) (RFA-RM-05-008)

Letters of intent due: Dec. 1, 2004

Application receipt date: Jan. 19, 2005

This RFA invites applications for planning grants submitted by self-assembled groups of institutions to conceptualize and design Regional Translational Research Centers (RTRCs) to foster more efficient and robust translational research. Once operational, RTRCs will provide a broad menu of clinical research expertise, services, and core technologies to multiple institutions within a region. The goal: to enhance the bidirectional—bench to bedside and bedside to bench—communication that characterizes translational research.

URL: <http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-05-008.html>

10. NIH Roadmap (Abbreviation RM)

The NIH Roadmap is an integrated vision to deepen our understanding of biology, stimulate interdisciplinary research teams and reshape clinical research to accelerate medical discovery and improve people's health. Most of the initiatives will begin in FY 2004. Other initiatives will start in FY 2005 and beyond, depending upon the budget and other emerging needs. The three NIH Roadmap themes are as follows: new pathways to discovery, research teams of the future and re-engineering the clinical research enterprise.

URL: <http://nihroadmap.nih.gov/>

11. Novel Preclinical Tools for Predictive ADME-Toxicology (RFA-RM-04-023) (See Addendum NOT-RM-05-002)

Letters of intent receipt date: Dec. 28, 2004

Application receipt date: Jan. 25, 2005

NIH invites grant applications to support the development, standardization and validation of novel approaches to obtain comprehensive absorption, distribution, metabolism, excretion (ADME) and toxicological (TOX) profiles that could better predict how new molecular entities will perform in humans to reduce the failure rate in clinical testing. This is an NIH Roadmap initiative. This funding opportunity will use the R21 Exploratory/Developmental Research Grants award mechanism. This RFA solicits applications that explore novel, "high-risk" and "high-impact" approaches to achieve this goal, rather than incremental technology development that is already supported by current NIH programs.

URL: <http://grants1.nih.gov/grants/guide/rfa-files/RFA-RM-04-023.html>

12. Molecular Libraries Screening Instrumentation—SBIR/STTR (NHGRI, NIMH) (PA-05-014)

Release date: Nov. 18, 2004

Application receipt dates: April 1, Aug. 1, Dec. 1

This PA invites research applications to develop innovative instrumentation to maximize the efficiency and augment the capabilities of molecular library high throughput screening systems. Applications in response to this PA should propose development of instrumentation suitable for integration into large high throughput screening operations and compatible with scalable approaches to chemical genomics research. This announcement is a NIH Roadmap-related activity and was developed by the Roadmap Molecular Libraries and Imaging Implementation Group.

URL: <http://grants.nih.gov/grants/guide/pa-files/PA-05-014.html>

13. Small Grants In Breast Cancer Detection Screening. (Announced by Friends for an Earlier Breast Cancer Test)

Application deadline: Dec. 15, 2004

Applications for pilot projects that focus on new methods to improve detection of early breast cancer are requested, especially for the development of new techniques in the areas of biological or immunologic methods to detect early stage breast cancer. Pilot projects are expected to provide preliminary data, leading to applications for more substantial peer-reviewed funding. The application should represent a new approach with the area of interest. Extensive preliminary/pilot data are not necessary. Funds will *not* be given to enhance ongoing research unless it is clear that a new line of inquiry is being explored.

URL: <http://www.earlier.org/researchers.cfm>

Outstanding Physicians Receive RSNA's Highest Award

The Radiological Society of North America's (RSNA's) highest honor, the Gold Medal Award, was presented to two nuclear medicine physicians **Alexander Gottschalk, M.D.**, and **John G. McAfee, M.D., FACNP**, during a Nov. 30, 2004, awards ceremony. Gottschalk, a pioneer researcher and author who helped shape modern medical imaging, worked with the first clinically useful prototype Anger



scintillation camera and performed with first dynamic camera studies of the brain and heart using technetium-99m. Gottschalk, an SNM past president, also made the first dynamic camera studies of the kidneys and was one of the principal investigators in the prospective investigation of pulmonary embolism diagnosis study.

Gottschalk, who is currently professor of diagnostic radiology at Michigan State University in East Lansing, began his career as a research associate at Donner Laboratory at Lawrence Radiation Lab at the University of California, Berkeley. He continued his career at the University of Chicago (where he helped form the university's first section of nuclear medicine) and Yale University School of Medicine, New Haven, Conn. (where he worked with colleagues from cardiology to establish a pioneering cardiovascular nuclear medicine operation). For a decade, Gottschalk was editor in chief of the "Yearbook of Nuclear Medicine." He served on committees for the National Heart, Lung and Blood Institute and national committees for the U.S. Food and Drug Administration, the National Institute of General Medicine Sciences and the Accreditation Council for Graduate Medical Education.

McAfee, a retired researcher and scholar in nuclear medicine, did groundbreaking work that led to significant medical advances, especially in blood cell labeling. McAfee helped develop the first technetium-99-labeled phosphate bone scanning agents. He has also found other radioactive agents with SNM President Mathew L. Thakur, Ph.D., which irreversibly labeled blood cells for imaging organ distribution. These have become among the most widely used procedures in both nuclear medicine and radiology.



The native Canadian completed internships at Victoria Hospital and Westminster Hospital, both in London, Ontario. He completed radiology residencies at Victoria Hospital and the Johns Hopkins Hospital in Baltimore, Md. McAfee remained at Johns Hopkins for more than a decade as a staff radiologist, becoming chief of diagnosis and later overseeing nuclear medicine. He then spent 25 years as chair and director of radiologic sciences at the State University of New York Health Science Center in Syracuse. During that time, he and SNM Past President Henry N. Wagner Jr., M.D., imaged the kidneys with radiomercury-labeled chlormerodrin—an event listed by the society as a historic moment in nuclear medicine. McAfee was a professor of radiology at the George Washington University Medical Center in Washington, D.C. He was a consultant to the National Institutes of Health Clinical

Center in nuclear medicine and then became a full-time staff member there in charge of radiopharmaceutical research.

Steven M. Larson Named 2004 RSNA Outstanding Researcher

Steven M. Larson, M.D., one of the world's foremost experts in targeted radiotherapy and molecular imaging, was named the 2004 RSNA Outstanding Researcher. This honor recognizes an individual who has made original and significant contributions to the field of radiology or radiologic sciences throughout a career of research.



Larson's research, which spans three decades, has resulted in many novel findings especially in understanding cancer. Using carbon-14-labeled media and a sensitive radiodetector system, Larson was able to rapidly identify bacterial and cell growth, a technology that is used widely today for detecting mycobacterium tuberculosis, including assessing drug sensitivities.

Chairman of SNM's Committee on Publications and an ex officio member of the society's board of directors, Larson has successfully tackled the problems of antibody production, radiolabeling, humanization of the antibody, minimizing host immune response and developing methodologies to quantify response. His research in detection of colorectal cancer has been successfully applied in the treatment of patients with advanced tumors.

As an expert on translational aspects of nuclear medicine, he has made significant contributions to the advancement of positron emission tomography as a clinical tool for oncology. He was recruited to the National Institutes of Health in 1983, in part to establish a state-of-the-art PET center for NIH researchers. His success in this endeavor led to an NIH Directors Medal in 1987 for him and his colleagues. While conducting cutting-edge research in targeted therapy and related molecular imaging, Larson continues to be heavily involved in teaching, administration and clinical care.

He currently serves as chief of the nuclear medicine service at Memorial Sloan-Kettering Cancer Center in New York, director of radiology research in the department of radiology and director of the PET Center at MSKCC. He is also a professor of radiology at Cornell University Medical College. Larson has authored or co-authored 430 manuscripts in major peer-reviewed journals, including Science, Nature Medicine, Nature Biotechnology, Radiology, the New England Journal of Medicine and the Journal of Nuclear Medicine. He has also served on several governmental advisory committees and study sections at NIH, the Department of Energy and the U.S. Food and Drug Administration.

Nuclear Medicine Scientist Delivers Annual Oration

RSNA selected a nuclear medicine scientist **Michael E. Phelps, Ph.D.**, to deliver the Eugene P. Pendergrass New Horizons lecture Nov. 29. The Norton Simon professor and chairman of the department of molecular and medical pharmacology at the University of California Los Angeles addressed "Molecular Imaging: From Nanotechnology to Patients." Phelps helped bring radiology into the 21st century as the co-inventor of the positron emission tomography scanner.

Phelps discussed the revolutionary changes that are occurring through the merger of physical, biological and medical sciences that focus on new approaches to molecular diagnostics and therapeutics and the benefit they will provide to molecular imaging. He described molecular and structural imaging techniques—including PET, magnetic resonance imaging, computed tomography and optical imaging—that are helping physicians and scientists to gain access to the molecular basis of disease for diagnostics and to guide the discovery and assessment of drugs. Phelps also



described the merger of multiple imaging technologies into single devices to consolidate structural and biological information for molecular imaging diagnostics.

Phelps, director of the Institute for Molecular Medicine and the Crump Institute for Molecular Imaging, has published more than 640 peer-reviewed scientific articles, books and book chapters, has been the principle investigator of more than \$225 million in grants and has been recognized through numerous national, international and presidential awards.

ACNP Residents Organization



The second meeting of ACNP's Residents Organization was held during ACNP's 31st annual meeting in January in San Diego, Calif., and it was a success! In a summary of 2004–05 activities, residents and fellows in attendance learned about the elections that were held for vice president and secretary/treasurer; the membership drive that resulted in a more than 200 percent increase from the previous year in the number of members; the new online e-mail listserv that was established; and the questionnaire survey that was conducted with representatives from about a dozen residency programs to develop ACNP's Mentorship Program. The new vice president and secretary/treasurer were introduced to the membership: Ghassan E. El-Haddad, M.D., Hospital of the University of Pennsylvania, and Daniel M. Sigg, M.D., Ph.D., VA Greater Los Angeles Healthcare System,

respectively. I was honored to be re-elected to another one-year term as president.

Participation in the scientific program experienced a more than 60 percent increase from the previous year in the number of abstract submissions. Clinical, preclinical, basic science, physics and instrumentation were all represented. Again, two \$750 travel grants and three \$500 best essay awards were given. Simin Dadparvar, M.D., chair of this annual meeting, also formally launched the Mentorship Program.

In terms of future activities of ACNP's Residents Organization, attendees suggested several new ideas for programs, and the officers are already studying ways in how to implement these suggestions. We learned that the new simplified membership application is now posted on ACNP's Web site, and that membership renewals are free to applicants, with industry again subsidizing the annual dues. Please sign up as ACNP members and help spread the word about the free ACNP membership for residents/fellows, made possible by the generous support by industry representatives, who are subsidizing the otherwise \$50 annual membership fee. These fees assist our budget for our various programs and activities.

Finally, ACNP's Residents Organization will host a meeting at SNM's 52nd Annual Meeting in Toronto, Canada. Please join us there! Many senior attendings, program directors and long-time nuclear medicine practitioners will be present and will assist with the Mentorship Program and job networking.

Please remember that ACNP's Residents Organization is what you make of it. Please contact me if you have any questions. My e-mail address is henrykimmd@yahoo.com. We welcome your participation, input and contributions.

*Henry Kim, M.D.
President, ACNP Residents Organization*

The Future of Nuclear Medicine From a Resident's Perspective

There is a dichotomy in nuclear medicine, one that is evident in essentially all medical specialties, but is especially accentuated in highly technical fields such as the radiological sciences. Innovations in our specialty arise from the work of academicians and scientists—often nonphysicians—who are involved with developing protocols in academic medicine, performing basic science research, generating new imaging technologies and creating medical breakthroughs such as radioimmunotherapy and molecular imaging. Future progress in academic nuclear medicine is extremely promising.

Outside of the hallowed halls of the ivory tower, however, the situation is less rosy. The end user of existing and emerging technology is the medical specialist, who must deal with poor job markets, turf battles with other specialties and reimbursement issues. Working diligently at the front line of patient care are residents—the workhorses of training institutions—who represent the aspirations of the specialty and in whose hands the future well-being of the field necessarily depends. It is a common perception, even within the nuclear medicine community, that the “pure nucs” resident—who lacks additional specialty training—is poorly equipped to contribute to basic science or clinical research, or even compete effectively in the workplace with radiologists and other non-ABNM certified physicians.

In Canada and most European countries, residents receive four years of comprehensive training that includes research and rotations in radiology, and nuclear medicine procedures must be performed by a board-certified nuclear medicine physician. In the United States, on the other hand, graduates in nuclear medicine are thrown out into the workplace with little job security after just two years of clinical training. Those without additional specialty training are finding stiff competition. In the United States, the two profitable arms of clinical nuclear medicine, PET and nuclear cardiology, are voraciously sought out by more aggressive specialties, most notably radiology and cardiology. The situation with PET is still fluid, but the growing popularity of PET-CT gives the radiologist—who may legally practice nuclear medicine without ABNM-certification and who is trained to read CT scans—a significant advantage over the nuclear medicine physician, who often has little CT experience.

Organizations like ACNP, SNM and ABNM will need to act quickly in order to prevent the loss of PET to other specialties in the manner by which nuclear cardiology has been hijacked by cardiology in what would appear to be a blatant violation of self-referral laws, but is in fact entirely legal. Under existing Medicare legislation—the so-called Stark law (Section 1877 of the Social Security Act)—nuclear medicine is entirely exempt from protection against self-referral. This has resulted in a significant increase in the number of myocardial perfusion studies performed by non-ABNM certified cardiologists, without the expected decrease in invasive angiography procedures that would result if perfusion stress tests were appropriately ordered and interpreted. Medical oncologists, who are among the main beneficiaries of FDG PET studies, are chomping at the bit to purchase PET and PET-CT scanners in order to reap the significant technical reimbursement they stand to gain for ordering the tests on their own patients. Without significant cooperation from other specialties, nuclear medicine specialists will continue to have to rely on income from traditional nuclear studies such as bone scans, renal studies, V/Q scans and the like, which any ABR-certified radiologist is also qualified to perform. In fact, non-ABNM-certified radiologists already perform the majority of these studies. Is it any wonder many “pure nucs” residents are nervous?

With the promise of new PET tracers in the pipeline, the clinical horizon looks far from bleak. However, a greater collective effort must be made by nuclear medicine interests to gain control over the specialty. In this, we can learn much from the American College of Cardiology, which has mastered the art of self-promotion. The influence of cardiology interests is patently evident in the published hearings of the Stark

legislation. The American Board of Nuclear Cardiologists (not recognized by ABMS) has been the driving force for maintaining competence in the field of nuclear cardiology. It has been accused in the past of pressuring insurance companies to require ABNC certification for reimbursement of myocardial perfusion studies. ACC, in cooperation with AHA, publishes position papers periodically in high-profile journals as a means of staking territory for its members. This has not escaped the notice of radiology interests that, like nuclear medicine, have been pounded from all sides by other specialties wanting to adopt imaging procedures for their own. Parenthetically, ultrasound, like nuclear medicine, was originally proposed as a “non-radiology” exemption under the Stark law, but unlike nuclear medicine, it was spared exemption due to lobbying by radiology representatives. However, there are large loopholes in the Stark law, and radiology interests are fighting ongoing battles to avoid losing imaging procedures to other specialties.

In its efforts to increase opportunity for its constituents, ACR will no doubt drive hard in attempting to carve out a significant niche in the PET-CT market. Unless nuclear medicine is content to survive on the scraps left behind by other specialties, it had better step into the fray. A first step would be to issue comprehensive, evidence-based guidelines on the use of FDG PET in a widely read, multidisciplinary publication (*not* the Journal of Nuclear Medicine). ACNP can contribute to the overall effort by expanding attendance at key legislative hearings such as the Stark rulings and by drafting position papers defending our interests in order to provide ammunition for debate in regional turf battles. Lest we repeat the significant slump that occurred in the 90s before PET became prominent in clinical practice, we must take a proactive stance in defending our interests and those of our patients, whose well-being relies on the proper interpretation of appropriately ordered nuclear studies.

Improvements must be made at the residency level in order for the specialty to sustain itself. It is a sign of the times that in the past 20 years the number of residency programs has dropped from 92 to 64, with six programs eliminated in the past four years alone. We have trouble recruiting U.S. medical students, many of whom don't know that nuclear medicine is a primary specialty independent from radiology.

A recent survey of residency programs published in JAMA (292:1032-7, 2004) by Brotherton et al. revealed that among all primary specialties, nuclear medicine is the only specialty recruiting less than 50 percent of its incoming residents from U.S. medical schools—a sign of ineffective competition for good candidates. Residents must be trained in the basic methodology of research and anatomical imaging. We must demand reciprocity in training from other departments. If outside services such as cardiology and radiology expect our department heads to sign off their trainees in nuclear medicine procedures, they must in turn instruct our residents in interpreting stress EKGs, angiograms and CT scans. There must be didactic training courses available for certification in CT interpretation per ACR guidelines, similar to courses that are available to cardiologists who wish to be certified in nuclear cardiology. The scope of nuclear medicine training must be expanded, even if an extra year of residency is required, because there is no better way to obtain respect from other specialties that constitute our referral base.

A three-year training program may scare off people who are attracted to the specialty because of its short training period, but I see this as a positive development that weeds out unmotivated candidates. Many residents, myself included, are seeking PET-CT fellowships for critical additional training. These fellowships are not recognized by ABMS and represent little more than a third year of residency training. It is apparent from the number of applicants to surgical specialties that good medical students do not shy away from demanding programs. Quite the opposite—the capable ones gravitate to specialties that command respect.

Many in our discipline are predicting a significant role played by nuclear medicine in the emerging field of molecular medicine, which will combine biotechnology, nanotechnology and tracer imaging to provide patient specific therapy in a very targeted way. By training our residents to become significant players in

this burgeoning field, we will forever banish the stigma of being labeled “unclear” medicine and significantly increase the level of respect that this specialty so richly deserves.

*Daniel M. Sigg, M.D., Ph.D.
Nuclear Medicine Resident
VAGLA West Los Angeles*

ACNP 2005 Abstract Award Winners

ACNP congratulates the winners of its travel grants and best essay awards, which were given to individuals who presented abstracts at ACNP’s 2005 annual meeting Jan. 15–19 in San Diego, Calif.

Winners of \$750 Travel Grants

Best Oral Presentation: “Dual Time Point Imaging: An Effective Method for Improving the Detection Rate of 18FDG PET Imaging in Primary Breast Cancer,” Ayse Mavi, M.D., Hospital of University of Pennsylvania, Philadelphia, Pa.

Best Poster Presentation: “The Role of 18F-FDG PET Scan in the Patients Presenting With Neck Masses With Unknown Primary Tumor,” Günsel Acikgoz, M.D., Thomas Jefferson University Hospital, Philadelphia, Pa.

Winners of \$500 Best Essay Awards

Best Basic Science Award

First: “A New Imager for Performing Dedicated Breast Positron Emission Tomography (B-PET),” Shyam M. Srinivas, M.D., Hospital of University of Pennsylvania, Philadelphia, Pa.

Second: “Transient Ischemic Dilatation May Not Be as Useful as Other Poststress to Rest Left Ventricular Volume Ratios in the Identification of Myocardial Ischemia,” Thomas F. Heston, M.D., Northwest Molecular Imaging, Kellogg, Idaho

Third: “FDG PET in Assessment of Disease Activity in Marginal Zone Lymphoma,” Sankaran M. Shrikanthan, M.D., Hospital of the University of Pennsylvania, Philadelphia, Pa.

All participants may submit their scientific manuscripts written on the criteria for the Journal of Nuclear Medicine. All papers will undergo preliminary review by ACNP’s Scientific Committee. Final review will be by members of JNM’s editorial board. Accepted papers will be published in six months from submission date.

The deadline for submission of manuscripts is April 1. Please send manuscripts to the American College of Nuclear Physicians, Attention: Jen Morse, 1850 Samuel Morse Drive, Reston, VA 20190.



Mentoring Application

Name: _____ Title: _____

Nuclear Medicine/Radiology Department: _____

Address: _____

Telephone: _____

Fax: _____

E-mail: _____

I am a (choose one):

- _____ Resident/Fellow: Learning from the junior or senior faculty the professional skills to work as a nuclear medicine physician or radiologist (1–2 year)
- _____ Junior ACNP member: Preparing the residents/fellows for passing the board examination and career development for the academic, private practice or industry position (1–2 years)
- _____ Senior ACNP member: Providing guidance for the residents/fellows in preparing for research, grant writing, consulting and guidance of how to start a new career, including exploring private practice or industry (1–2 years)

Please check the areas that you, as a junior or senior member of ACNP, can provide guidance and expertise.

- | | |
|---|--|
| <input type="checkbox"/> Role of nuclear medicine physicians as consultants | <input type="checkbox"/> Successful marketing of nuclear medicine department |
| <input type="checkbox"/> Writing curriculum vitae for academic or private practice position | <input type="checkbox"/> Radionuclide therapy: ins and out for success |
| <input type="checkbox"/> Effective job interview | <input type="checkbox"/> Job availabilities in academic, private practice and pharmaceutical companies |
| <input type="checkbox"/> Preparing for nuclear medicine board certification | <input type="checkbox"/> Basic interview skills |
| <input type="checkbox"/> Salary range for physicians in academia, private practice or industry | <input type="checkbox"/> Negotiation for salary |
| <input type="checkbox"/> Supervisory skills to technologists, medical students and residents | <input type="checkbox"/> Setting goals, establishing priorities and managing time |
| <input type="checkbox"/> Effective learning of other imaging modalities (CT, MRI, US) | <input type="checkbox"/> Designing/giving presentations |
| <input type="checkbox"/> Building a network of professional colleagues across the country | <input type="checkbox"/> Managing meetings |
| <input type="checkbox"/> Collaborating on projects with professional colleagues, basic or clinical research | <input type="checkbox"/> Writing abstracts, designing research projects |
| <input type="checkbox"/> Interpersonal skills, listening, building trust and resolving conflict | <input type="checkbox"/> Writing for peer-reviewed publications |
| <input type="checkbox"/> Balancing professional and personal life as resident/fellow | <input type="checkbox"/> How to start a private nuclear medicine venture |
| | <input type="checkbox"/> How to run a successful outpatient cardiology, bone densitometry or PET program |
| | <input type="checkbox"/> Telemedicine application in nuclear medicine |
| | <input type="checkbox"/> Operation of PET/CT, licensing for reading CT |
| | <input type="checkbox"/> Other |

Residents/Fellows

- Complete the Mentoring Application form.
- Review your objectives for the mentoring program.
- Review the mentor list from the Web site (www.acnponline.org) and identify the mentor(s) with whom you would potentially like to work.
- Contact a potential mentor to see if you share goals, objectives and interests.

***You may contact multiple mentors to find the faculty member(s) who best meets your needs. After you have asked a mentor to be your partner, complete the Mentoring Partnership Agreement.

Please return completed Mentoring Application to

American College of Nuclear Physicians
Attention: Mentorship Program, c/o Jen Morse
1850 Samuel Morse Drive
Reston, VA 20190-5316
Fax: (703) 708-9020
E-mail: jmorse@snm.org

If you have any questions, please send an e-mail to Simin Dadparvar, M.D., at sdadparvar@aol.com.



Mentoring Partnership Agreement

Mentoring Partnership involves an agreement between junior and/or senior ACNP members with the residents and fellows. The Mentoring Partnership begins at the onset of residency or fellowship and continues for 1–2 years. Having defined your goals, you may list specific actions to achieve them.

Please list your objective of the Mentorship Partnership from the application:

Specific actions to achieve the objectives:

To achieve these objectives, we agree to the following arrangements:

Mentee (Resident/Fellow): _____

Nuclear Medicine Department: _____

Address: _____

Telephone: _____ Fax: _____

E-mail: _____

Mentor (Junior or Senior Faculty): _____

Title: _____

Department (Academic or Non-Academic): _____

Address: _____

Telephone: _____ Fax: _____

E-mail: _____

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American College of Nuclear Physicians
Attention: Mentorship Program, c/o Jen Morse
1850 Samuel Morse Drive
Reston, VA 20190-5316
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If you have any questions, please send an e-mail to Simin Dadparvar, M.D., at
sdadparvar@aol.com.

Letter From the Editor

ACNP's 31st annual meeting in San Diego started with a day of CT training for the nuclear medicine physicians. Three outstanding radiologists from the University of Southern California in Los Angeles presented an excellent review of cross-sectional anatomy.

With the evolving new technology such as PET/CT and SPECT/CT, which includes anatomical imaging as an integral part of image interpretation, it is mandatory for all practicing nuclear medicine physicians to earn appropriate CT training. The interpretation of CT requires 200 CME credits and 500 case interpretations under expert supervision.

We at ACNP recognize this special need and will devote part of our future annual meetings to provide training for all nuclear medicine practitioners.

I hope to see you all at our future meetings.

*Simin Dadparvar, M.D., FACNP
Editor in Chief, Scanner*

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