An Historic Past,
An Innovative Future
At the reception following a symposium held in his honor on June 1, Carlos Perez, MD, director of the Institute’s Radiation Oncology Center, was presented with a magnificent sculpture of Don Quixote and Sancho Panza. Perez is a long-time admirer and collector of art depicting themes from *Don Quixote de la Mancha*, a romantic novel by Miguel de Cervantes Saavedra that has inspired artisans and dreamers for more than four centuries. In the novel, Don Quixote, accompanied by his loyal sidekick and squire Sancho Panza, becomes a knight errant on a seemingly impossible quest to perform chivalrous deeds.

The sculpture, currently housed in the radiation oncology reception area at the north campus, will be permanently installed in the Department of Radiation Oncology’s new facility in the Siteman Cancer Center. The inscription on the stand holding the figurine reads:

*This limited edition (72/285) ceramic sculpture by the Italian artist, Cortese, of the Don Quixote theme, is dedicated to Carlos A. Perez, MD, by his colleagues and friends.*

Carlos A. Perez, MD, was Director of the Radiation Oncology Center for 25 years and believed strongly in the work ethic and seeking the dreams that everyone deserves. He toiled steadfastly so that others may seek their dreams.

It is placed in the Radiation Oncology Center as a symbol to the past, present, and future patients who fight against their cancer, to live their lives to the fullest, and to seek all of their dreams.
AN HISTORIC PAST—AN INNOVATIVE FUTURE, PART 1
As Mallinckrodt Institute’s fifth director, Gilbert Jost, MD, will guide the Institute through the challenges of changing to an all-digital radiology department. In an exclusive interview, Jost discusses his goals for improving patient care, expanding research initiatives, and strengthening an already excellent training program.

AN HISTORIC PAST—AN INNOVATIVE FUTURE, PART 2
For the past 25 years, Carlos Perez, MD, has lobbied for the Institute’s Radiation Oncology Center to become a separate department. Ironically, in the throes of planning his retirement, Perez was asked to remain as chairman of the recently created Department of Radiation Oncology. In a candid interview, Perez shares his expectations for the new department.

CURRENT TOPICS IN CANCER TREATMENT
Although cancer is the second leading cause of death in the United States, following heart disease, more than 60 percent of patients now survive five-plus years after their initial diagnosis. The improvement in survival rates is attributed not only to behavioral and lifestyle changes but, in large part, to advances in cancer research. In honor of Carlos Perez’s outstanding contributions to radiation oncology, national and international cancer experts shared research results and treatment outcomes at The Perez Symposium.
Picus heads diagnostic division

Daniel Picus, MD, professor of radiology and of surgery, was named director of the Division of Diagnostic Radiology at Mallinckrodt Institute of Radiology (MIR). The position was previously held by Gilbert Jost, MD, who was recently named head of the Department of Radiology and director of the Institute.

Picus has been chief of vascular and interventional radiology since 1987 when MIR opened the most comprehensive vascular and interventional radiology facility available in the St. Louis area. "We are indeed fortunate to have someone as talented as Dan Picus to provide leadership for the Diagnostic Radiology Division," said Jost. "His outstanding management skills in the field of interventional radiology are well documented, and I am pleased that he is ready to take on a broader assignment."

Picus is the author of more than 135 scientific publications and is a popular lecturer on both vascular and nonvascular diagnosis and intervention. He was a member of the Editorial Board of the scientific journal Radiology from 1990 to 2000 and has served on the Editorial Board of the Journal of Endourology since 1989. Picus was editor of the Journal of Vascular and Interventional Radiology from 1995 to 2000.

He is a fellow of the American College of Radiology, the Society of Cardiovascular and Interventional Radiology, and the American Heart Association Council on Cardiovascular Radiology.

Picus has been affiliated with Mallinckrodt Institute since 1981 when he began a diagnostic radiology residency. He was the 1984-1986 chief resident and completed a fellowship in abdominal radiology, with special emphasis on interventional procedures. He joined the MIR faculty in 1986 as assistant professor of radiology.

Complex data analysis technology patented

William Reinus, MD, associate professor of radiology, is one of three Washington University faculty who received a patent for the development of Neural Network Based Methods and Systems for Analyzing Complex Data. The patent was issued in July by the United States Patent and Trademark Office.

Reinus, and Barry Kalman, PhD, and Stan Kwasny, PhD, of the Department of Computer Science, initially set out to develop a system based on neural networks and wavelet transformations that could detect masses on digitized mammograms. Because neural networks are trained, not programmed, the researchers use a data set of questions and associated correct answers (known positives and negatives) that enables the system to learn the problem and generalize from the information. Armed with this capability, the system could then analyze the data and find specific targets, such as benign or cancerous masses in breast tissue. "We have been successful to the point that our system can perform as well as a trained radiologist for mass detection," says Reinus.

The researchers realized that if the technology could be trained on any digitized data, its uses could extend well beyond the medical field. To date, they have worked with the United States Navy to find signals in radio frequency samples and with an industrial firm to fine-tune a method of detecting cracks in prestressed concrete pipes. The investigators are currently considering the technology's application for insurance claims review and real-time cardiac telemetric analysis.
Monsees named Teacher of the Year

Barbara Monsees, MD, professor of radiology, was selected by the diagnostic radiology senior residents as the 2001 Diagnostic Radiology Teacher of the Year. Now in its sixteenth year, the award annually honors the MIR faculty member who has made outstanding contributions to resident education through course study, conferences, and clinical activities.

After completing a diagnostic radiology residency at MIR, Monsees joined the musculoskeletal radiology faculty in 1980 and was named the first chief of breast imaging in 1983. She is a nationally known advocate of the early detection of breast cancer through mammography. From 1997 to 2001, she chaired the Food and Drug Administration’s National Mammography Quality Assurance Advisory Committee for the National Mammography Quality Standards Act.

She is a fellow of the ACR and of the Society of Breast Imaging, and is the Society’s current president. Washington University named a 1995-1999 Distinguished Alumni Scholarship Award in honor of Monsees and, in 2000, presented her with the Alumni Faculty Achievement Award.

RSNA awards grants

Each year the Radiological Society of North America (RSNA) Research and Education Foundation acknowledges the outstanding work of investigators in the radiological sciences. The following Department of Radiology and Department of Radiation Oncology physicians and scientists are the recipients of RSNA grants in 2001.

- Daniel Brown, MD, assistant professor of radiology—FUJI Film/RSNA Seed Grant for “Endovascular isolated lung perfusion using high-dose cisplatin: uptake and DNA adduct formation in an animal model.”

- Steven Don, MD, assistant professor of radiology—RSNA Seed Grant for “Exposure reduction in neonatal chest radiography using computed radiography.”

- James Duncan, MD, PhD, assistant professor of radiology—RSNA Seed Grant for “Optical imaging of peripheral vascular disease.”

- Christine Menias, MD, instructor in radiology—Philips Medical Systems/RSNA Seed Grant for “Correlation of magnetization transfer contrast and Gd-DTPA first pass MRI in the heart.”

- Shervin Karimpour, MD, assistant in radiation oncology—RSNA Research Fellow Award for “Indomethacin-induced activation of p38 and its inhibition of NF-kB activation in response to ionizing radiation.”

- Jacob Locke, MD, instructor in radiation oncology—RSNA Research Fellow Award for “The cellular and cytotoxic effect of heat shock, indomethacin, and the regulation of AP-1.”

- Pratik Mukherjee, MD, clinical fellow in neuroradiology—RSNA Research Fellow Award for “Mapping function and connectivity in the human brain using fMRI combined with diffusion tensor MR tractography.”

- Dmitriy Yablonskiy, PhD, assistant professor of radiology—RSNA Scholar Award for “Diffusion lung imaging with hyperpolarized He gas: a new imaging modality to reveal the structure and functioning of alveoli in human lung.” Michelle Lee, Washington University School of Medicine student working with Yablonskiy on this project, received the Shimadzu Medical Systems/RSNA Medical Student Scholar Assistant Award.

- Jie Zheng, PhD, instructor in radiology—RSNA Seed Grant for “Diagnosis of pulmonary emboli with MR perfusion and angiography: validation in a porcine model.”
McKnight retires

Closing a clinical and academic radiology career that spanned more than three decades, Robert McKnight, MD, associate professor of radiology, retired on June 30, 2001. A lifelong admirer of trains (especially steam-powered locomotives), McKnight plans a quiet retirement in Hannibal, Missouri, in a house built high on the cliffs where he can sit on the veranda and watch the trains below.

For the past nine years, McKnight was a valued member of the Mallinckrodt Institute diagnostic radiology staff at Barnes-Jewish West County Hospital (BJWCH). “Bob McKnight was the best partner I could have asked for. He thrived on work, always had the correct answer to difficult cases, shared interesting cases with others, was always willing to go the extra mile for patients or staff, and shared his wisdom with me over the years. If we had jerseys at Barnes West, we would have retired his number when Bob left for Hannibal,” says Robert Levitt, MD, director of diagnostic radiology at BJWCH.

McKnight was born in Virginia and attended Florida State University, but he has spent nearly 40 years in St. Louis. He earned his medical degree from Washington University School of Medicine and left St. Louis briefly to complete an internship at University Hospital in Birmingham, Alabama. He returned to St. Louis in the 1960s to complete a fellowship in the University’s Department of Pharmacology. He went on to complete a diagnostic radiology residency, with special emphasis on cardiac radiology, at Mallinckrodt Institute and joined the MIR faculty in 1970 as an associate radiologist.

In 1974 McKnight was named director of the Institute’s cardiovascular radiology group, which was housed on the ninth floor of Washington University Medical Center’s West Pavilion. Staffed by McKnight and Fernando Gutierrez, MD, associate professor of radiology, the MIR Cardiac Cath Lab (as it was known) was one of the most modern and well-equipped facilities for cardiac procedures in the St. Louis area. McKnight and Gutierrez worked closely with doctors Philip Ludbrook of the Department of Cardiology and Alex Hartmann of the Department of Pediatrics until 1992 when the lab was transferred to Barnes Hospital.

Wilson Award presented

Daniel Cohen received the 33rd Annual Hugh M. Wilson Award for Meritorious Work in Radiology at Washington University’s commencement exercises on May 18. The award, a tribute to the Institute’s second director Hugh Wilson, MD, is presented annually to a fourth-year medical student for outstanding work in basic or clinical radiological sciences.

Under the guidance of David Hovsepian, MD, associate professor of radiology, Cohen worked on several research electives in vascular and interventional radiology. According to Hovsepian, Cohen’s collaboration resulted in the submission of two manuscripts for publication and the presentation of two projects at a national scientific meeting.
Klein elected AAPM fellow

In recognition of his distinguished achievements in medical physics, Eric Klein, MS, associate professor of radiation oncology, was elected a fellow of the American Association of Physicists in Medicine (AAPM). The induction ceremony was held in July during the AAPM’s 43rd Annual Meeting in Salt Lake City, Utah.

Comprised of more than 4,500 medical physicists, AAPM promotes the application of physics to medicine and biology. Through education and leadership, AAPM encourages interest and training in medical physics and related fields, such as medical electronics, bioengineering, and health physics.

A radiation oncology faculty member since 1989, Klein is involved in clinical and investigative research in external beam therapy. He is a prolific author, with more than 115 published manuscripts and abstracts, and serves as associate editor of *Medical Physics* and *International Journal of Radiation Oncology, Biology, Physics*.

Klein is a member of AAPM’s Board of Directors. In 1999, he was appointed to the American Board of Medical Physics and, in 2000, to the American Society for Therapeutic Radiology and Oncology Physics Committee. Klein served as therapy track chair for the 2000 World Congress Meeting and scientific director for the 2000 AAPM Annual Meeting.

Darcy is VIR chief

Michael Darcy, MD, professor of radiology and of surgery, was appointed chief of vascular and interventional radiology (VIR) at Mallinckrodt Institute. An important clinical service, VIR offers minimally invasive procedures as an adjunct to or in lieu of surgery. Darcy assumes the leadership position recently vacated by Daniel Picus, MD, who was named director of the Institute’s Division of Diagnostic Radiology.

An active participant in radiology education, Darcy has directed the Institute’s VIR fellowship program since 1988 and was awarded the 1987-1988 Faculty Teaching Award from the University of South Carolina. He is a productive author, with nearly 170 manuscripts, book chapters, and presentations to his credit. He is coeditor of the textbook *Peripheral Vascular Interventions*, now in its second edition, and has been on the editorial board of the *Journal of Vascular and Interventional Radiology* since 1992.

He is a fellow of the American College of Radiology and of the Society of Cardiovascular and Interventional Radiology (SCVIR). Darcy was named president-elect of SCVIR in 2001 and also serves on the society’s Executive Council and the Education Materials Committee.

Darcy initially did several years of a surgery residency and then completed a radiology residency and a cardiovascular and interventional fellowship at the University of Minnesota. He came to Mallinckrodt Institute in 1989 from the Medical University of South Carolina, where he served as director of vascular and interventional radiology.
IN THE FALL OF 1999, Ronald Evens, MD, chair of the Washington University School of Medicine (WUSM) Department of Radiology and director of Mallinckrodt Institute of Radiology (MIR), was named president of Barnes-Jewish Hospital in St. Louis. Gilbert Jost, MD, professor of radiology and chief of MIR's Division of Diagnostic Radiology, was appointed interim chair and director.

After an extensive national search, William Peck, MD, executive vice chair for medical affairs and dean of WUSM, announced in mid-June, 2001, that Jost had been selected to head the world renowned Mallinckrodt Institute.

Here, Jost discusses his goals for the Institute, particularly in the areas of technology, patient care, research, and education.
In the past decade, there has been tremendous growth in radiology technology, especially in computer-based systems. What advances in radiology technology do you foresee in the next decade? What role will MIR play in the development of new technology?

DR. JOST (GJ): Certainly computers will dramatically change the way our specialty is practiced. We are near the final stages of the installation of our all-digital department, but that is just the beginning. Over the next decade we will need to learn to use this technology to significantly change our practice patterns, to become far more efficient, and to improve the quality of care we provide to our patients and our referring physicians. The next decade also will lead to dramatic changes in our imaging modalities. Digital acquisition with flat-panel detectors will become commonplace. We anticipate stunning changes in the technology for cross-sectional imaging. Entirely new technologies, such as optical imaging, will begin to find clinical applications. And we will move from imaging gross anatomy to imaging the human body at the microscopic and molecular level. It is an exciting time, and, as always, it is our goal to see that MIR is at the leading edge of these technological developments.

FS: As a result of these technology improvements, the radiologist is now a more central member of the team of physicians responsible for patient care. What impact have these increased responsibilities had on radiology departments, MIR in particular?

GJ: Actually there is a danger that digital technology could detract from the radiologist’s central role in the healthcare team. Previously, physicians came to the reading room to view their patient’s images and to discuss a difficult case with the radiologist. The radiology reading room served as a central location where physicians from various disciplines came together and where many key clinical decisions were made. Now physicians can view their patient’s images at their office desk or at home, and we find that visits to the reading rooms at Mallinckrodt Institute are far less frequent. I believe we need to develop technologies for electronic consultation at a distance, with video teleconferencing built into our workstations, for example.

MIR has an excellent and broad-based research program, with studies ranging from basic science to technology assessment. And MIR’s researchers collaborate with a wide range of WUSM departments, other universities, and corporations. Are there plans for even more research expansion?

GJ: We are in the process of laying plans for a dramatic expansion of our research program. The space devoted to research at Mallinckrodt Institute is already substantial,
but we are making plans to build more. We intend to strengthen our existing programs, but we also intend to identify new research initiatives that will be pivotal to imaging research a decade from now. And we will recruit faculty and invest in infrastructure to build these new programs. We intend to establish better communication between our clinicians and our basic scientists, and we will emphasize the importance of translational research. Increased communication and collaboration with our research colleagues in other departments seems inevitable. As radiology moves down the path toward imaging the human cell and its building blocks, we will have the opportunity to stand shoulder-to-shoulder with our colleagues in the basic sciences as together we unlock the secrets of cellular function and the function of the human genome.

FS: What effect will the increased competition for research dollars have on MIR's research programs?  
GJ: Actually this is a wonderful time to expand our research initiatives. A few years ago Congress inaugurated a plan to double NIH [National Institutes of Health] funding within five years. The plan to double the budget is on track, and there are indications that further increases are possible at the end of five years. This year a new institute has been established at the NIH—The National Institute of Biomedical Imaging and Bioengineering—to promote additional funding for imaging research. Because of imaging's increasing role in clinical trials for drug development, the opportunities for industrial funding are substantial. Our challenge is to be certain that Mallinckrodt Institute has the best possible programs in order to be assured of continued funding for an expanding research enterprise.

FS: Radiology now encompasses numerous subspecialties, such as neuroradiology, and sub-specialties, such as interventional neuroradiology. How will the interest in and need for specifically focused disciplines affect MIR's top-rated residency and fellowship training programs?  
GJ: Mallinckrodt Institute has been organized into specialties and subspecialties for as long as I can remember. It is one of our great strengths. And the fact that we are a large, subspecialized department contributes to the strength of our training program. A resident or a fellow will not learn what he or she needs to know about neuroradiology from a general radiologist. Nor is a program with only one or two neuroradiologists adequate for proper training. Trainees need exposure to general neuroradiologists, as well as to pediatric neuroradiologists and interventional neuroradiologists. And it isn't enough to have a single interventional neuroradiologist. A program cannot survive with only one interventional neuroradiologist. And so a large group of highly trained specialists and subspecialists is what we strive for in each of our sections. That forms the basis for a strong training program, as well as a strong clinical department.

FS: The current focus at most medical centers is on cost control. How can MIR continue to drive progress while reducing cost?  
GJ: Technology is the key. Our investment in digital imaging is paying important dividends. There are opportunities not only to reduce film costs and certain support personnel, but we also find we are far more efficient reading films
digitally. I believe we have only scratched the surface in uncovering opportunities to improve our efficiency. We need to use our digital infrastructure to see that studies are interpreted by our very best specialists regardless of where the study was performed, and we need to reengineer our workflow so that our radiologists are able to comfortably take on more work. This is one of those delightful situations where we have an opportunity to significantly improve our quality of care while simultaneously reducing our costs.

FS: Dean Peck recently announced the establishment of the Department of Radiation Oncology. Clinically and academically, what is the significance of radiation oncology being separate from radiology? Significance for MIR?
GJ: I have been strongly in favor of the creation of a new Department of Radiation Oncology. Our goal has to be to develop the strongest radiation oncology program that we possibly can, particularly in light of the emergence of the Siteman Cancer Center. Most radiation oncology programs throughout the country are not part of a general radiology department but have separate department status. To attract the best possible candidate to lead a world-class radiation oncology program, we are far better off, I believe, with a separate department at Washington University. Carlos Perez has done a superb job of leading our radiation oncology program as a Division of Mallinckrodt Institute for over twenty-five years. It is a nice touch that Carlos now has a chance to serve as the first head of the new Department of Radiation Oncology while we begin the search for his successor.

FS: What are your overall long-range goals for MIR?
GJ: As always, our goal is to be the best. And I don’t mean this because I want to be boastful, but because, as I have said before, I believe that aspiring to an ambitious goal is what puts wind in our sails. Our goal is to establish what is unquestionably the finest imaging research facility in the world. We should push the technology envelope to continue the digital revolution in our department, and we need to continue to recruit the best possible faculty in order to sustain the reputation of Mallinckrodt Institute as one of the finest radiology facilities in the world. No question, there are many challenges ahead, but I am enthusiastically looking forward to an exciting journey.

FS: Short-range?
GJ: Our short-range goal is to begin the journey.

FS: Anything you would like to add?
GJ: Only that this is a terribly exciting time to be a radiologist. Some have said that the best days of radiology are behind us, but I don’t believe that for a minute. I am convinced that the next decade will bring the most exciting developments in the history of our specialty. And I can’t envision a better place to experience those developments than at Mallinckrodt Institute of Radiology.

FS: Thank you, Doctor Jost.
DOCTOR CARLOS PEREZ, director of the Radiation Oncology Center, may possibly have had the shortest retirement on record in the history of Mallinckrodt Institute (MIR) and Washington University School of Medicine (WUSM). He was slated to retire on June 30, 2001, after 41 years at the Institute. For 25 years, the Radiation Oncology Center was one of four divisions at Mallinckrodt Institute, which serves as the medical school’s Department of Radiology. On June 6 the WUSM Executive Faculty unanimously approved the creation of the Department of Radiation Oncology, effective July 1, 2001. At Dean William Peck’s request, Perez agreed to remain on faculty for the academic year 2001-2002 as professor and chair of the new department until a national search for a permanent chair is completed. In this interview, Perez shares his reminiscences of the early MIR radiation oncology group and his expectations for the new department.
Clinically and academically, what do you believe is the significance of the medical school having a separate Department of Radiation Oncology?

DR. PEREZ (CP): I think a very important impact of radiation oncology as a specialty is the visibility we [radiation oncology] will have as a well-established clinical specialty with strong biology and physics foundations. Second is the enhancement of the professional standing and profile we will have among the other departments in the Washington University Medical Center and the other oncology specialties.

Also important, I think, is the differentiation from diagnostic radiology, which is more focused on imaging and diagnostic procedures. Radiation oncology is primarily concerned with the treatment of patients. I think the creation of the new department validates the decision made in 1975 by the American Board of Radiology and the Residency Review Committee to separate the training and the certification of the two specialties of radiology and radiation oncology.

FS: What significance does this new department have for you personally?

CP: This is the culmination of a long quest for radiation oncology to become a separate department, which began in 1976 when I accepted the position as director of MIR’s Division of Radiation Oncology.

FS: So, prior to 1976, there was no Division of Radiation Oncology at Mallinckrodt Institute.

CP: Radiation oncology was a division, but no one had really pushed for this concept of having a separate department. When I accepted my position as director, I knew the radiation oncology group had everything that was needed to become a department. It just took some time to accomplish.

FS: This is an important year for the Institute with a new leader and now a new Department of Radiation Oncology.

CP: It is a milestone in the evolution of the Institute because as I have said for many years, it would be, and is, wonderful to have two departments in Mallinckrodt Institute.

FS: If you’re a purist, 2001 is actually the true beginning of the new millennium. So this is a real millennium change.

CP: I agree. I agree.

FS: While you were completing your MIR residency, one of the first 24MeV Betatrons used for radiation treatment was installed here in 1962. During your tenure as director of MIR’s Radiation Oncology Center, a prototype Clinac 35 linear accelerator was developed and tested at MIR in 1972. You spearheaded the establishment of the first Cancer Information Center in July 1977. Your staff developed one of the first radiation oncology data-information systems in 1974. A first-of-its-kind hyperthermia treatment center was initiated in the late 1970s, and in 1991 the first three-dimensional treatment-planning center for cancer was opened. That is quite a list of accomplishments—and it just touches on some of the highlights. What is your vision for the new department?

CP: The key is innovation and excellence in our programs. In our biology program, we look forward to having a greater emphasis on some of the fundamental molecular biology and genetics concepts that will help us develop more translational research. In physics, we hope to continue the research and development that Doctor Purdy and his group have been doing. And we will collaborate with manufacturers to advance technology in treatment planning and delivery.

All of this will improve our patients’ quality of care at a competitive cost. We will work closely with medical imaging and nuclear medicine to promote earlier diagnosis and more accurate staging of patients with cancer. We will collaborate with other oncologists and the faculty of Siteman Cancer Center to promote multidisciplinary integrated cancer care in this medical center. There are unique opportunities to use new knowledge in molecular biology, genetics, immunology, and other
basic sciences, which have very strong representation in the medical center, to develop innovative approaches to cancer diagnosis and treatment of patients with cancer. So, I think, we have an incredible scope of different initiatives and opportunities to advance not only oncology but radiation oncology as well.

**FS:** Although there is already a strong foundation in place, what are some of the challenges you anticipate in setting up a new department?

**CP:** Well, a very important challenge is going to be the transition to the new facility that will allow radiation oncology to be more efficient and to provide patients with a more pleasant and friendly environment. I think that in terms of administrative procedures, radiation oncology is in very good shape because we had a great deal of autonomy under the Institute’s aegis. We really are at a point where with a little effort we will be able to establish all of the procedures necessary for setting up a separate department. To me, the administrative transition is a relatively minor challenge.

More important is the integration of radiation oncology with the other Medical School departments and with the Siteman Cancer Center. I think we need to play a more active role in the integrated cancer program at the new cancer center. To me, that is key.

Another challenge will be to increase the technical and professional revenues so that Barnes-Jewish Hospital can afford sophisticated, more expensive technology. Cutting-edge technology enables radiation oncology to attract and retain highly qualified faculty (for us) and staff (for Barnes-Jewish) so that we can support not only the highest possible level of clinical service but also research and education.

Another high priority will be the recruitment of a competent new chair for the department, someone with a broad vision and excellent scientific, clinical, and administrative skills to lead the department to higher levels of excellence.

**FS:** What do you hope to accomplish in the twelve months or so that you will chair the Department of Radiation Oncology?

**CP:** The main thing I’m looking forward to is maintaining our momentum and providing stability to the department. We must retain our faculty and staff. I think there is a limited need, but we may do some recruitment. Our standing as a leader in radiation oncology, not only in the bistate area but also in the country, must constantly and consistently be improved. New procedures must be implemented and some existing procedures for the new clinical facility should be updated. Radiation oncology activities must continue to be integrated within the Siteman Cancer Center.

One of our highest priorities is to acquire adequate academic space for radiation oncology. While the clinical needs are being addressed with the new cancer center, good space for academic activities is still not available.

I would like to initiate the planning and the implementation of a proposed Innovative Technology Research Center that will be housed on the ground floor of the Institute in the rooms previously used for the linear accelerators and other radiation oncology equipment. Another important goal is acquiring industry support, working with industry to develop technology that, in turn, will help to fund some of the initiatives we envision. Last, but not least, the editing of the new editions of the radiation oncology textbooks must be completed. So we have a pretty full schedule.

**FS:** Which radiation oncology division would be involved in this industry support of new technology—physics?

**CP:** Yes, physicists, but also the physicians and probably even some of the computer and biology groups.

**FS:** There is such a sense of excitement and anticipation among the radiation oncology faculty and staff.

**CP:** Yes, that is the most wonderful thing! It is incredible how well the faculty and the staff, including the hospital staff, have embraced the concept of the new department and how it is going to be organized. This is a very meaningful change for everyone, and I think it will be very good for the Institute as well.
FS: The multidisciplinary, state-of-the-art Alvin J. Siteman Cancer Center, sponsored by Washington University School of Medicine and Barnes-Jewish Hospital, is scheduled to open in the fall of 2001. What do you believe the Department of Radiation Oncology will contribute to the dynamics of the Siteman Cancer Center?

CP: Well, I believe that radiation oncology is a cornerstone in the treatment of patients with cancer, and we play an integral part in the integrated, multidisciplinary care of patients with cancer. As a department, radiation oncology will integrate more fully with other specialties and develop more intramural clinical protocols. We plan to move some of our basic scientists and physicists into the mainstream of the Siteman Cancer Center programs, thus enabling radiation oncology to add to the overall strength of the cancer center.

FS: With the Innovative Technology Research Center you mentioned, will radiation oncology still have some staff and space in the MIR building?

CP: Hopefully, if we can work that out with Doctor Jost. Basically, it will be research faculty and staff from the various divisions.

FS: No clinical?

CP: No clinical activities per se.

FS: Mallinckrodt Institute opened its doors in August of 1931, and high-energy radiation therapy was initiated in 1948 with the installation of an orthovoltage X-ray deep therapy unit, followed in the '50s by a Cobalt 60 unit. When the new radiation oncology department became official on July 1, a half-century of MIR history went along with it. What ties will the new radiation oncology department maintain with Mallinckrodt Institute?

CP: Radiation oncology has a long-standing history, since the 1940s, of being an integral part of the Institute. Even though medical imaging and radiation oncology have a very different mission and different operational procedures, the current emphasis in radiation oncology is the use of image-based staging, treatment planning, and daily treatment delivery for our patients with cancer.

FS: This involves moving not only personnel but also equipment—

CP: A lot of things. There will be some new equipment, and some of the equipment from the south campus will be transferred to the new facility. We will need furnishings for several new areas, areas that do not exist at the present time. So, it will be very exciting.

FS: Anything you would like to add?

CP: Yes. It has been a privilege to be associated with Mallinckrodt Institute of Radiology and with Washington University Medical Center for over forty-one years. I am very honored to have been asked by Dean Peck and by Doctor Jost to be the chair of the new department for this academic year, until a new chair is recruited. I am very grateful to our new division chiefs (Doctor Seymour Fox, Doctor James Purdy, Doctor Joseph Roti Roti, and Doctor Todd Wasserman), and our Executive Director Beverly Kobeissi, and the faculty and staff at both Washington University and Barnes-Jewish Hospital for their support and their exceptional dedication and hard work in achieving our goals.

FS: Will you be a full-time interim director?

CP: I will not be full-time because, as you may know, I now live in Springfield, Missouri, but I will be at the medical center at least three days a week and then work other days from Springfield via fax, computer, and telephone. A lot of commuting but we will get it all done!
A symposium honoring Dr. Carlos Perez
for his outstanding contributions as a radiation oncology clinician, educator, and researcher was held on June 1, 2001, in the Eric P. Newman Education Center (EPNEC) on the Washington University School of Medicine campus. Cancer experts from the United States, Israel, and Italy presented cancer treatment information gained not only from their own clinical activities and research but from other highly regarded studies as well. Topics ranged from the clinical uses of chemotherapy and radiotherapy to multidisciplinary therapies used to treat breast cancer, from the use of radiation therapy for benign disease to cardiovascular radiation.

In 1959, Bernard Fisher, MD, published “Experimental evidence in support of dormant tumor cells” which was the first demonstration that dormant tumor cells existed. Fisher prefaced his talk on “Multidisciplinary treatment of breast cancer” with a photo of him and Carlos Perez at the 1982 Julia Freund Memorial Lecture, sponsored by MIR’s Radiation Oncology Center.

More than 250 symposium attendees gathered in EPNEC’s state-of-the-art auditorium to hear William Powers, MD, speak on “Metastatic bone cancer.” Powers, former director of the Institute’s Radiation Oncology Center (1959 to 1975), emphasized that “Studies have shown patients having a long survival have a higher frequency of response to radiation therapy in bone metastases.”

Symposium registration was in the capable hands of the Radiation Oncology Center’s (left to right, seated) Sonja Stinger, Terri Jackson, and Alice Becker; and (left to right, standing) Elaine Pickey and Karen Coleman.
During the morning break, MIR's Fred Hodges, MD, emeritus professor of radiology, visited with symposium speaker Luther Brady, MD. Brady and Carlos Perez are coauthors of *Principles and Practices of Radiation Oncology*, a textbook that has been hailed as the gold standard for radiation oncology in the United States.

Philip Rubin, MD, bestowed Carlos Perez with the title of "The Olympian Radiation Oncologist" for his more than 25 years of treating patients. Rubin spoke on "Cardiovascular radiation: the new frontier."
...my past years at Mallinckrodt Institute of Radiology...

SYMPOSIUM FACULTY continued

William Powers, MD
Radiation Oncology Professor Emeritus
Sarasota, Florida

Philip Rubin, MD
Chairman Emeritus
Department of Radiation Oncology
University of Rochester
Rochester, New York

Herman Suit, MD
Chairman Emeritus
Harvard University
Cambridge, Massachusetts

Vincenzo Valentini, MD
Professor
Department of Radiotherapy
Catholic University
Rome, Italy

Teresa Vietti, MD
Pediatric Oncology Professor Emeritus
Washington University
St. Louis, Missouri

Robert Young, MD
President
Fox Chase Cancer Center
Philadelphia, Pennsylvania

Jack Fowler, DSc, PhD, categorized himself as a translational biologist in his presentation on “Alpha/Beta really is small for prostate tumors.”

Symposium Committee Member Joseph Reit Roti, PhD, professor of radiation oncology and chief of cancer biology, visited with Della Garcia, MD; and Gilbert Nussbaum, PhD, emeritus professor of radiation oncology, Washington University.

In her presentation on “Multidisciplinary therapy of pediatric cancer,” Teresa Vietti, MD, opined that “We have made many advances in childhood cancers, but we have a long way to go.” According to Vietti, when she first came to St. Louis Children’s Hospital as a pediatric hematologist, doctors William Powers and Carlos Perez (shown with Vietti in this photo) served as her mentors in the area of radiation oncology.

“There is a need for more controlled studies involving surgeries, especially laser surgery,” said Bahman Emami, MD, former MIR radiation oncology faculty, in his talk on “Combined modality therapy for head and neck cancer.”

(left to right) Gilbert Jost, MD, director of Mallinckrodt Institute; Carlos Perez, MD; and Todd Wasserman, MD.
A reception following the symposium was held in the new Radiation Oncology Center, which, on June 1, was still in the early stages of construction. Although there were only bare concrete walls and floors, no ceilings, and plenty of metal pipes, reception attendees sampled a tasty buffet, were lulled by the soothing sounds of classical music, and enjoyed visiting with friends and colleagues. Elekta Oncology Systems, Inc. and Varian Medical Systems generously sponsored the reception in honor of Carlos Perez.

The new radiation oncology clinical facilities are in the lower level of the new complex on Parkview Place that houses the Center for Advanced Medicine and the Alvin J. Siteman Cancer Center.
ENDOWED LECTURESHIP IN ONCOLOGY

Through the generosity of Dr. and Mrs. William Mills, Jr., a lectureship recognizing the career accomplishments of Carlos Perez has been established. The first Carlos A. Perez Endowed Lecture-ship in Oncology will be held December 7, 2001, at 5:30 p.m. in the Steinberg Auditorium at the Barnes-Jewish Hospital north campus. Norman Coleman, MD, associate director of the National Cancer Institute/National Institutes of Health’s Radiation Research Program, will speak on “Radiation oncology and the NCT’s extraordinary opportunities: molecular imaging, signatures, and therapeutics.”

Ronald Evens, MD, president of Barnes-Jewish Hospital, congratulated Carlos Perez, MD, on the Perez Oncology Lectureship.
An aficionado of Quixote-inspired art, Perez was thrilled with the sculpture of Don Quixote and Sancha Pansa. [See the inside front cover of this issue of Focal Spot magazine for a close-up photo of the sculpture and the plaque inscription.]

Perez gives a heartfelt embrace to Todd Wassermann, MD, who spearheaded the Perez Symposium and personally selected the sculpture. In the background is Perez’s wife, Susie.
DINNER AND AN EXTRA HELPING OF ACCOLADES

Following a day filled with important scientific insights into present and future cancer treatments, guests headed to the Ritz-Carlton St. Louis for the finale of the outstanding program honoring Carlos Perez.

After an introduction by Al Wiman, the popular St. Louis television medical reporter who emceed the evening event (shown seated in the lower right-hand corner), William Fock, MD, executive vice chancellor for medical affairs and dean of the School of Medicine, presented a musical interlude in tribute to Carlos Perez.
“Recognizing all of Carlos Perez’s contributions is an almost impossible task,” said Jeff Michalski, MD, assistant professor of radiation oncology and a former radiation oncology resident trained by Perez. Michalski presented the Perezes with a special gift. The metal rendering of Don Quixote was created by Brother Mel Meyer, a Marianist from Vianney High School in St. Louis who is known internationally for his work.

Symposium Chairman Todd Wasserman set the scene for a video—produced and art directed by Wasserman—showing the highlights of Perez’s medical career.
“Washington University School of Medicine has advanced to one of the premier programs in the United States,” said Washington University Chancellor Mark Wrighton. “Many people have made contributions, but Carlos Perez has made innumerable contributions to the lives of many people.”

In an especially touching moment, Perez embraces his son Edward, who ended an impromptu speech by saying that “Few sons have the opportunity to see their father recognized in this way. It’s always been nice to say that my dad is a doctor and has helped many people. Tonight I am truly honored to have the name of Perez and to say that my dad is a doctor.”
Dear colleagues, friends, and family, the events of today and this evening have been overwhelming and heartwarming. It is wonderful to be surrounded by so many friends and family. I will keep my remarks short, since this has been a long day, the hour is late, and we must save some time for dancing.

My past forty-one years at MIR and Washington University Medical Center have been an incredibly challenging and fulfilling journey. It has been my privilege to work with many gifted scientists, highly competent and dedicated clinicians, surgeons, and health care professionals, who have been so intellectually stimulating and have been instrumental in providing the best quality care to our patients.

We have witnessed, and have been active participants in, an exciting explosion of basic science knowledge that has enhanced our understanding of complex tumor biology. Also cutting-edge advances in clinical oncology are reflected in more precise planning and early diagnosis of malignant tumors, and technological developments have improved staging and treatment of patients with cancer. All of these developments are contributing to a more effective, integrated, multidisciplinary care of the patient with cancer, which will be further enhanced with the opening of the Siteman Cancer Center and the new Department of Radiation Oncology.

I am very proud of the many accomplishments of our faculty over the past thirty-five years, which include innovations initiated by Doctor William Powers, former director of radiation oncology—such as the development in the late sixties of dedicated computers for radiation therapy treatment planning and the use of cerrobend blocking to protect normal tissues from unnecessary irradiation. The design and construction, in collaboration with Varian Associates, of the Clinac 35V, in which Doctor Powers played a leading role, initiated a new era of more powerful linear accelerators with photon and electron beams of multiple energies.

Starting in 1965, doctors James Purdy and Bahram Emami and our physics group, in collaboration with a few institutions in the United States, developed three-dimensional conformal radiation therapy, which was implemented in our clinic in 1991 and now is becoming the standard method for irradiation of patients with a variety of malignant tumors. This technology, with the sparing of normal tissues and decreased morbidity, is allowing more precise delivery of higher doses of irradiation, with improved tumor control and patient survival, as documented in publications by some of our [symposium] speakers today and some [members of this] audience.

In collaboration with many of our esteemed colleagues in other departments of the [Washington University] Medical Center, we have been strong proponents of combining surgery or chemotherapy or both with irradiation in a variety of cancers, with outstanding or encouraging results. We have been very fortunate to have bright and enterprising cancer biologists, under the leadership of Doctor Joseph Roti Roti, to achieve significant recognition and grant funding for their innovative investigation, including ionizing or nonionizing radiations, heat, or cytotoxic drugs.

Our faculty and staff have trained about two hundred very competent radiation oncologists, physicists, dosimetrists, and radiation therapists who today practice in our backyard and in many regions of the country, many of them are present tonight. A great deal of work and seemingly insurmountable challenges remain in oncology, but I am certain that, with the dedication, creativity, and ingenuity of our faculty and staff, we will continue to discover the answers to the insurmountable present emphasis on corporate management and the bottom line in health care and medicine, we should never lose sight of our primary mission: to provide the highest quality and empathetic care to our patients, to promote and carry out research, and to foster the education of contemporary and future generations. Nevertheless, in this competitive health care environment, while fostering technological development and academic excellence, we must underscore the importance of cost benefit and enhanced productivity.

There are no words to thank so many of you, and others not here today, who helped me so much throughout my life. I'll start with my parents, who taught me the values of hard work and integrity. Doctor William Powers who gave me the opportunity to grow professionally as a member of his faculty. When I joined him in 1965, three of us plus one physicist and a small staff were treating about one hundred patients per day with very rudimentary equipment. Contrasting, today, the faculty of the Radiation Oncology Center comprises fourteen attending radiation oncologists, fourteen physicists, six cancer biologists, and two computer scientists. Together, with our business manager, administrative support staff, and our cancer care professionals working as a team to achieve our goals, I have the highest appreciation toward g. G. Evens, who appointed me director of radiation oncology in 1976 and allowed us [radiation oncology] to grow to become one of the best radiation oncology centers in the country. My gratitude to our past chiefs (doctors James Purdy, Joe Roti Roti, Seymour Fox) and to Doctor Todd Wasserman, clinical chief at the north campus, and Mrs. Beverly Kohlesi, who, along with our past and present faculty and staff at both Washington University and Barnes-Jewish Hospital, have been invaluable and tireless contributors to our success story.

Special mention goes to our nurses, to Barbara Gill and, more recently, Melissa Karl, as well as Connie Povilat and Mary Breitenbeck. Our administrative staff, and Sonja Stinger and Terri Jackson, without whom I couldn’t have made it through all of these years of hectic schedules and innumerable tasks. I have a great deal of appreciation for Washington University and the Medical School, outstanding institutions that, with their reputation for academic excellence, nurture our growth and productivity. My special thanks to Chancellor Wrighton for his kind words and to my dear friend Dean Peck for his stellar performance. My warm thanks to Doctor Todd Wasserman, Ms. Glenda Wiman, and the Organizing Committee, and so many of you who made this special celebration possible and, for me, an unforgettable occasion. I thank you, all of you, colleagues, friends, and family, for being with us today and tonight—some having come from far corners of the world.

To my dear friends, speakers on the program, with some of whom I have had the privilege to work—among other things, coediting the radiation oncology textbooks with Doctor Luther Brady, and with doctors William Hoskins and Robert Young, coediting the gynecologic oncology textbook—my sincere appreciation. Last, but not least, my eternal gratitude and love to my precious wife Susie, who patiently, almost all of the time, has borne the brunt of my demanding schedule. But soon, life will change.

I’ll miss every one of you very much, but whom I’ll miss the most will be our patients, my patients, for whom I care dearly. Over the years, they have taught me so much about fortitude, determination, optimism—what eventuates when they are ravaged by the relentless progression of metastatic disease. Thank you very much to all of you for your friendship and support, for what you have done for me and honoring me with your presence on this special occasion.
FYI

In this section, the names of employees who are full-time faculty or staff or who have an appointment in the Department of Radiology or Department of Radiation Oncology are highlighted in boldface type.

CHANGE IN STATUS

Gilbert Nussbaum, PhD, associate professor of radiation oncology, was appointed emeritus associate professor of radiation oncology.

Carlos Perez, MD, professor of radiation oncology, was appointed emeritus professor of radiation oncology.

NEW FACULTY

Randall Olsen, MD, assistant professor of radiology, Division of Diagnostic Radiology.

Michael Ruff, MD, instructor in radiology, Division of Diagnostic Radiology.

Joshua Shimony, MD, PhD, instructor in radiology, Division of Diagnostic Radiology.

Eliza Shin, MD, instructor in radiology, Division of Diagnostic Radiology.

Theodore Vander Velde, MD, instructor in radiology, Division of Diagnostic Radiology.

First-Year Fellows

Lorin Broadbent, MD, is a clinical fellow in neuroradiology. He completed four years of training in diagnostic radiology at Mallinckrodt Institute of Radiology.

Karen Caudill, MD, is a clinical fellow in pediatric radiology. She received an undergraduate and a medical degree from the University of Missouri-Kansas City. Caudill completed a one-year internship at University Hospitals and Clinics and four years of training in diagnostic radiology at Saint Louis University.

Steven Crawford, MD, is a clinical fellow in vascular and interventional radiology. He received an undergraduate degree and a medical degree from Indiana University. Crawford completed a one-year internship at Ball Memorial and four years of training in diagnostic radiology at Duke University.

Noel Dias, MD, is a clinical fellow in musculoskeletal radiology. He received an undergraduate degree from St. Joseph's College and a medical degree from St. John's Medical School. Dias completed a one-year internal medicine internship, two years of training in diagnostic radiology, and two years of training in nuclear medicine at State University of New York, Buffalo. He completed a two-year pediatric radiology fellowship and a two-year computed tomography and ultrasound fellowship at Children's Hospital, Buffalo.

Mandip Gakhal, MD, is a clinical fellow in magnetic resonance imaging. He received an undergraduate degree and a medical degree from the University of Toronto. Gakhal completed a one-year internship at the Medical Center of Delaware and completed five years of training in diagnostic radiology at the Medical College of Ohio.

Lori Kunzelman, MD, is a clinical fellow in breast imaging. She completed four years of training in diagnostic radiology at Mallinckrodt Institute of Radiology.

Noel Dias, MD, is a clinical fellow in musculoskeletal radiology. He received an undergraduate degree from St. Joseph's College and a medical degree from St. John's Medical School. Dias completed a one-year internal medicine internship, two years of training in diagnostic radiology, and two years of training in nuclear medicine at State University of New York, Buffalo. He completed a two-year pediatric radiology fellowship and a two-year computed tomography and ultrasound fellowship at Children's Hospital, Buffalo.

Craig Hamasaki, MD, is a clinical fellow in vascular and interventional radiology. He completed four years of training in diagnostic radiology at Mallinckrodt Institute of Radiology.

Indunil Karunasekera, MD, is a clinical fellow in neuroradiology. She received an undergraduate degree from Sutton School and a medical degree from the University of London. Karunasekera completed four years of training in diagnostic radiology at the Medical College of Ohio.

Faraz Khan, MD, is a clinical fellow in vascular and interventional radiology. He completed four years of training in diagnostic radiology (chief resident 2000-2001) at Mallinckrodt Institute of Radiology.

John Leyendecker, MD, is a clinical fellow in magnetic resonance imaging. He received an undergraduate degree from West Chester University and a medical degree from the University of Pennsylvania. Leyendecker completed an internship at York Hospital, four years of training in diagnostic radiology at Emory University, and a one-year fellowship in vascular and interventional radiology at Wilford Hall USAF Medical Center.

Christine Geraghty, MD, is a clinical fellow in breast imaging. She completed four years of training in diagnostic radiology at Mallinckrodt Institute of Radiology.

Craig Hamasaki, MD, is a clinical fellow in vascular and interventional radiology. He completed four years of training in diagnostic radiology at Mallinckrodt Institute of Radiology.
Arvind Nehra, MD, is a clinical fellow in neuroradiology. He received an undergraduate degree from the University of Illinois and a medical degree from New York Medical College. Nehra completed a one-year internship at MacNeal Hospital and four years of training in diagnostic radiology at Harbor-UCLA Medical Center.

John Pappas, MD, is a clinical fellow in vascular and interventional radiology. He received an undergraduate degree from the University of California, Davis, and a medical degree from Albert Einstein College of Medicine. Pappas completed a one-year internship in surgical pathology at Cornell University and four years of training in diagnostic radiology at Duke University.

Srinivasa Prasad, MD, is a clinical fellow in abdominal radiology. He received a medical degree from Bangalore Medical College. Prasad completed three years of training in radiology at King Edward Memorial Hospital and a two-year radiology research fellowship at Massachusetts General Hospital.

Dana Sampaleanu, MD, is a clinical fellow in abdominal radiology. She received a medical degree from the University of Medicine and Pharmacy, Cluj-Napoca. Sampaleanu completed a one-year internship and four years of training in diagnostic radiology at William Beaumont Hospital.

Manu Sehgal, MD, is a clinical fellow in vascular and interventional radiology. He received an undergraduate degree from the University of Maryland and a medical degree from the Mayo Medical School. Sehgal completed one year of training in otorhinolaryngology at the Mayo Clinic and four years of training in diagnostic radiology at the University of Pennsylvania.

Vincenzo Sorano, MD, is a clinical fellow in neuroradiology. He received a medical degree from the University of Rome. Sorano completed six years of training in neurosurgery at the University of Rome’s Institute of Neurosurgery. He also completed one year of training in neurology at the University of Illinois, Chicago, and four years of training in diagnostic radiology at Cook County Hospital.

Franklin Tan, MD, is a clinical fellow in vascular and interventional radiology. He received an undergraduate and a medical degree from Northwestern University. Tan completed a one-year internship in internal medicine at the University of Chicago and four years of training in diagnostic radiology at Loyola University.

Khaled Toumeh, MD, is a clinical fellow in neuroradiology. He received a medical degree from Aleppo University. Toumeh completed two years of training in diagnostic radiology at Hacettepe University and three years of training in diagnostic radiology at Saint Louis University. He also completed a one-year cardiovascular/interventional fellowship at the University of Michigan.

Huy Tran, MD, is a clinical fellow in chest radiology. He completed four years of training in diagnostic radiology (chief resident 2000-2001) at Mallinckrodt Institute of Radiology.

Vivek Yagnik, MD, is a clinical fellow in abdominal radiology. He received an undergraduate degree from the University of Texas, Austin, and a medical degree from Baylor College of Medicine. He completed a one-year internship and four years of training in diagnostic radiology at Baylor College of Medicine.

Catherine Appleton, MD, assistant in radiology, received an undergraduate and a medical degree from the University of Florida. She completed a one-year internship at Reading Hospital.

Tammie Benzinger, MD, PhD, assistant in radiology, received an undergraduate degree from the University of Chicago and a medical degree from the University of Chicago-Pritzker School of Medicine. She completed a one-year internship at Forest Park Hospital.

Andrew Bierhals, MD, MPH, assistant in radiology, received an undergraduate degree, a Master of Public Health (epidemiology) degree, and a medical degree from the University of Pittsburgh.

Gina Bowers, MD, assistant in radiology, received an undergraduate degree from Harvard University and a medical degree from New York University. She completed a one-year internship at St. John’s Mercy Medical Center.

Ambrose Huang, MD, assistant in radiology, received an undergraduate degree from Harvard University and a medical degree from New York University. He completed a one-year internship at St. Vincent’s Hospital.
Markus Lammle, MD, PhD, assistant in radiology, received a medical degree from Universität des Saarlandes-Saarbrücken. He completed a one-year internship at Clinique Ste. Therese-Luxembourgh, four years of training in diagnostic radiology at University Hospital of Cologne, and two years of training in urology at Hospital Necker Enfantes-Malades, University of Paris.

Govind Mukundan, MD, assistant in radiology, received an undergraduate degree from the University of Maryland and a medical degree from Johns Hopkins University. He completed a one-year internship at Maryland General Hospital.

Christine Peterson, MD, assistant in radiology, received an undergraduate degree from Washington University in St. Louis and a medical degree from the University of Texas, Houston. She completed a one-year internship at CHRISTUS St. Joseph Hospital.

Kianoush Rezaei, MD, assistant in radiology, received a medical degree from Tabriz University. She completed four years of training at Rene Descartes University and a one-year internship at the State University of New York, Buffalo.

Gregory Sanders, MD, assistant in radiology, received an undergraduate degree from the University of Virginia and a medical degree from Washington University in St. Louis. He completed a one-year internship at Forest Park Hospital.

Cynthia Santillan, MD, assistant in radiology, received an undergraduate degree from Massachusetts Institute of Technology and a medical degree from Washington University in St. Louis. She completed a one-year internship at Forest Park Hospital.

Andrew Schaeckenbach, MD, assistant in radiology, received an undergraduate degree from the University of California, Los Angeles, and a medical degree from the University of Texas, San Antonio. He completed a one-year internship at Ball Memorial Hospital.

Anand Singh, MD, assistant in radiology, received an undergraduate degree from Duke University and a medical degree from the University of Alabama. He completed a one-year internship at Santa Clara Valley Medical Center.

Dallas Sorrell, MD, assistant in radiology, received an undergraduate degree from Mississippi State University and a medical degree from the University of Mississippi. She completed a one-year internship at Memorial and Community hospitals of the Carilion Health System.

Paul Staveteig, MD, assistant in radiology, received an undergraduate degree from Northwestern University and a medical degree from Washington University in St. Louis. He completed a one-year internship at St. John’s Mercy Medical Center.

Jason Wagner, MD, assistant in radiology, received an undergraduate degree from Southwest Missouri State University and a medical degree from the University of Missouri-Columbia. He completed a one-year internship at St. Mary’s Health Center.

Matthew Carpenter, MD, assistant in radiation oncology, received an undergraduate degree from Louisiana State University and a medical degree from Jefferson Medical College. He completed three years of training in internal medicine at Wright-Patterson Air Force Base.

Gregg Franklin, MD, assistant in radiation oncology, received an undergraduate degree from Kenyon College and a medical degree from Sackler School of Medicine-Tel Aviv.

Charles Hechtman, MD, assistant in radiation oncology, received undergraduate degrees from the Polytechnic Institute of Brooklyn and Stevens Institute of Technology. He received a medical degree from the University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School.

Wayne Lamoreaux, MD, assistant in radiation oncology, received an undergraduate degree from Utah State University and a medical degree from the University of Utah.
Paul Colomb, MD, assistant in radiology, received a medical degree from the University of Sydney. He completed internships in emergency medicine at Nepean District Hospital and at Royal Prince Alfred Hospital, as well as an internship in orthopedic surgery at Columbia-Presbyterian Hospital. Colomb completed three years of training in diagnostic radiology at the Hospital of St. Raphael.

Yonglin Pu, MD, PhD, received an undergraduate and a medical degree from Beijing Medical University. He completed a one-year internship and a five-year residency at the People’s Hospital of Beijing Medical University.

Tom Miller, MD, PhD, professor of radiology, as principal investigator, received a four-year grant in the amount of $776,000 from the National Institutes of Health for his research on “Positron emission tomography in cervical cancer.” He also received a pilot grant renewal of $25,000 from the Siteman Cancer Center at Washington University Medical Center for his research on “PET in prostate cancer.”

Jeffrey Gerstel, DO, assistant in radiology, completed four years of training in diagnostic radiology at the Hospital of St. Raphael.

Jason Lewis, PhD, instructor in radiology, received a 2001 Research Development Grant in the amount of $25,000 from the Alvin J. Siteman Cancer Center for “Magnetic resonance imaging characterization of brain tumor development in B9 ras-21 transgenic mice.”

Joseph Ackerman, PhD, professor of chemistry and of radiology, received a 2001 Research Development Grant in the amount of $25,000 from the Alvin J. Siteman Cancer Center for “MicroPET imaging of anti-angiogenic treatments: the use of surrogate markers to elucidate drug actions.”

Jacob Locke, MD, instructor in radiation oncology, received a 2001 Research Development Grant in the amount of $25,000 from the Alvin J. Siteman Cancer Center for “NSAIDs as a potential enhancer of hyperthermia radiosensitization.”

William Powers, MD, professor of neurology and of radiology, as principal investigator, received a $1.38 million grant from the National Institutes of Health/National Institute of Neurological Disorders and Stroke for research on “Cerebral mitochondrial metabolism in neurodegeneration.” Coinvestigators are Joel Perlmutter, MD, professor of neurology and of radiology; Tamara Hershey, NIH postdoctoral fellow, Department of Psychiatry; Tom Videen, PhD, research associate professor of neurology and of radiology; and Kevin Black, MD, assistant professor of psychiatry and of radiology.

David Reichert, PhD, research instructor in radiology, received a five-year grant in the amount of $656,335 from the National Cancer Institute for his research on “Molecular modeling in metal based imaging agent design.”

Keith Rich, MD, associate professor of neurosurgery and of radiology, as principal investigator, received a two-year grant in the amount of $30,000 from the McDonnell Center for Cellular and Molecular Neurobiology for “Cross-talk between growth factor and cytokine signaling pathways upregulate BCL-X.”

Maria Schmidt, MD, assistant professor of radiology, received a $25,000 grant from the Alvin J. Siteman Cancer Center for “Evaluating the effect of informed consent and procedure scheduling on breast biopsy patient outcomes.” Coinvestigator is Mark Walker, PhD, Department of Medicine. Consultant is Jill Bokern, RN, Barnes-Jewish Hospital.
APPOINTMENTS/ELECTIONS

Jeffrey Bradley, MD, instructor in radiology, was appointed director of the Radiation Oncology Clinical Residency Training Program.

Victor Davila-Roman, MD, associate professor of medicine, of anesthesiology, and of radiology, was appointed to a five-year term as a member of the National Institutes of Health’s Diagnostic Radiology Study Section.

Elizabeth McFarland, MD, associate professor of radiology, was appointed cochair of the symposium on “CT colonography: current and future issues-standardization issues” at the European Society of Gastrointestinal and Abdominal Radiologists, Dublin, Ireland, June 21.

Robert McKinstry, MD, PhD, assistant professor of radiology, was appointed chair of the Steering Committee for The MRI Study of Normal Brain Development, a seven-center consortium sponsored by the National Institutes of Health.

Jeff Michalski, MD, assistant professor of radiation oncology, was appointed associate director of the Clinical Division of the Department of Radiation Oncology.

Joel Perlmutter, MD, professor of neurology and of radiology, was appointed to the Board of Directors for the Jewish Center for the Aged in St. Louis, Missouri, and to the Scientific Advisory Board for the American Parkinson’s Disease Association.

William Reinus, MD, associate professor of radiology, was appointed managing editor of E Medicine Textbook of Radiology.

Joseph Roti Roti, PhD, professor of radiation oncology and chief of cancer biology, was elected to a three-year term as a board member of the Bioelectromagnetics Society.

Barry Siegel, MD, professor of radiology and of medicine, and director of the Division of Nuclear Medicine, was appointed as a council member of the Academy of Molecular Imaging, Institute of Clinical PET.

Todd Wasserman, MD, professor of radiation oncology, was appointed director of the Clinical Division of the Department of Radiation Oncology.

Franz Wippold, MD, associate professor of radiology and chief of neuroradiology, was appointed to the Public Relations Task Force, the Electronic Education Committee, the Subcommittee on Continuing Medical Education, and the Subcommittee on Curriculum of the American Society of Neuroradiology (ASNR). He also was appointed as chair of the ASNR’s Subcommittee on Webcast Selection.

HONORS/AWARDS

Jacob Locke, MD, instructor in radiation oncology, was one of 65 researchers nationwide who were invited to participate in the American Association for Cancer Research’s Education Workshop on Molecular Biology in Clinical Oncology. The workshop was held June 29 through July 6 at the University of Colorado’s Given Institute.

Ronan McDermott, MD, clinical fellow in abdominal radiology, received a $5,000 Moncada In-Training Award for “Evaluation of polyp size measurement in multiobserver prospective study of CT colonography.” The award was presented at the Society of Computed Body Tomography and Magnetic Resonance 24th Annual Course meeting in South Beach, Florida, March 19-23. Coinvestigators are Elizabeth McFarland, MD; James Brink, MD, Yale University; Jay Heiken, MD; Dennis Balfe, MD; Cynthia Santillan, MD; and Thomas Pilgram, PhD.

Clarke heads SNMTS

Mickey Clarke, CNMT, FSNMTS, administrator for Mallinckrodt Institute’s Division of Nuclear Medicine, was installed as the 2001-2002 president of the Society of Nuclear Medicine Technologist Section (SNMTS) at the Society’s annual meeting held in June, in Toronto. Clarke, wearing the ceremonial president’s lavaliere, presented a commemorative plaque to outgoing president Kristen Waterstram-Rich. The lavaliere is adorned with badges engraved with past SNMTS presidents’ names and year of office.
Jeff Michalski, MD, assistant professor of radiation oncology, earned a Masters of Business Administration degree with honors from the John Olin School of Business at Washington University in St. Louis. Michalski focused his studies on health service management.

Medhi Poustchi-Amin, MD, clinical fellow in abdominal radiology, received a Certificate of Merit for each of the scientific exhibits “MRI of the knee” and “MRI of the shoulder” presented at the 101st Annual Meeting of the American Roentgen Ray Society in Seattle, Washington, April 29-May 4.

Clifford Chao, MD, assistant professor of radiation oncology, spoke on “Radio-protection with IMRT for head and neck cancer” at the 1st Investigators’ Congress on Radioprotection, St. Croix, U.S. Virgin Islands, June 7-10. He presented “Head and neck IMRT techniques and clinical experience: Mallinckrodt experience” at the 6th International Symposium on 3D Conformal Radiation Therapy and Intensity Modulated Radiation Therapy, Williamsburg, Virginia, June 28-July 1. Chao spoke on “Hypoxic tumor imaging-guided IMRT” at Massachusetts General Hospital, Harvard Medical School, Boston, July 18.

Carolyn Anderson, PhD, associate professor of radiology, presented “Chemistry and biology of copper radiopharmaceuticals: implications for imaging and therapy” at the Molecular Imaging Seminar, St. Louis, Missouri, April 20.

Jay Heiken, MD, professor of radiology, chief of abdominal radiology, and codirector of body computed tomography, as visiting professor, presented “The aorta: approach to rupture and dissection” and “Imaging evaluation of nontraumatic emergencies of the gastrointestinal tract” at the Case Conference (Board Review), University of Virginia, Charlottesville, May 3 and 4. Heiken presented “Multislice CT: a multiphasic contrast injection method for CT angiography” at the Symposium on Multislice CT, Tokyo, Japan, May 11. He presented “Multislice CT: clinical applications in the abdomen” at the Multidetector-Row CT Symposium II, sponsored by Osaka University School of Medicine, Osaka, Japan, May 12. Heiken spoke on “Multislice CT: principles and applications,” “Hepatic masses: characterization with CT and MRI,” “Abdominal aorta: diagnosis of rupture and postoperative complications,” “Imaging approach to small bowel obstruction,” and “CT colonography: state of the art” at the Sixth Annual Abdominal Imaging Conference, sponsored by the University of Pennsylvania Medical Center, Banff, Alberta, Canada, July 23-27.
LECTURES/PRESENTATIONS

Continued from page 29

Charles Hildebolt, DDS, PhD, associate professor of radiology, presented “Alveolar, Femoral, and vertebral bone changes in postmenopausal women” at The Periodental-Systemic Connection: A State of the Science Symposium, National Institutes of Health, Bethesda, Maryland, April 19.

Anil Khosla, MD, instructor in radiology, spoke on “Diffusion weighted imaging—applications in CNS disorders,” “Cranial metastases,” and “Extramedullary cysts of spinal canal” at the First International Neuroscience Symposium of United Arab Emirates, Dubai, April 10-14. He presented “Imaging findings of vertebral cages” at the 39th Annual Meeting of the American Society of Neuroradiology, Boston, Massachusetts, April 23-27.

Saulo Klahr, MD, professor of medicine and of radiology, as invited speaker, presented “Progression of renal disease and obstructive nephropathy” at the Third Congress of Hypertension and Renal Disease, Antalya, Turkey, May 23-27. As invited speaker, he presented the John Walls Memorial Lecture at The 38th European Renal Association/European Dialysis and Transplant Association Congress, Vienna, Austria, June 24-27.

Ronan McDermott, MD, clinical fellow in abdominal radiology, spoke on “Diagnostic performance and inter-observer agreement of spiral CT colonography” and “Accuracy of helical CT in distinguishing malignant from benign pancreatic disease and in staging pancreatic adenocarcinoma: multi-reader study” at the European Society of Gastrointestinal and Abdominal Radiology meeting, Dublin, Ireland, June 21.

Robert McKinstry, MD, PhD, assistant professor of radiology, presented “Advanced MR imaging” to the Department of Radiology, University of Cincinnati Medical Center, Cincinnati, Ohio, April 5.

Jeff Michalski, MD, assistant professor of radiation oncology, presented “3D conformal radiation therapy and traditional therapy” at the Ministry of Defense and Aviation, Medical Services, Riyadh, Saudi Arabia, April 3. He presented “What is the role of radioprotection with IMRT” at the First Investigators’ Congress on Radioprotection, St. Croix, U.S. Virgin Islands, June 8. Michalski spoke on “Diagnosis and therapy of screening-detected lung cancer” at the National Health Institute, Lung Cancer State of the Science Meeting, Bethesda, Maryland, June 19. He presented “Economics of IMRT” at the 6th International Symposium on 3D Conformal Radiation Therapy and Intensity Modulated Radiation Therapy, Williamsburg, Virginia, June 29.

Joel Perlmutter, MD, professor of neurology and of radiology, spoke on “Movement disorders in the 21st century” at the Cape Girardeau Medical Society, Cape Girardeau, Missouri, May 5. As visiting professor, he spoke on “Parkinson’s disease” at the University of Arkansas, Little Rock, July 20.

Carlos Perez, MD, professor of radiation oncology and chair of the Department of Radiation Oncology, spoke on “Metastatic bone pain: innovative management” at the Robert Packer Hospital, Sayre, Pennsylvania, June 5. He spoke on “3-D IMRT, general principles and practice,” “Radiation therapy following prostatectomy,” “3-D IMRT in carcinoma of the prostate,” “Radiation therapy and hormone therapy in prostate cancer,” “Locally advanced breast cancer,” and “3-D CRT in carcinoma of the lung” at the 1st Meeting of Radiotherapy, Radiology, and Medical Physics and 6th Dosimetry Workshop, Cordoba, Argentina, June 21-23. Perez presented “Radiation therapy after radical prostatectomy: indications and outcomes” at the 1st International Prostate Cancer Congress, San Juan, Puerto Rico, June 29. He spoke on “Management of metastatic bone pain” at St. Mary’s Hospital, St. Louis, Missouri, June 12, and at Saint Louis University and Depaul Health Center, St. Louis, Missouri, July 11.

James Purdy, PhD, professor of radiation oncology and chief of radiation oncology physics, as visiting professor, presented “Innovations in radiation oncology treatment planning, dose delivery, and quality assurance” to the Interdepartmental Division of Oncology, University of Toronto, Canada, May 17 and 18. As invited lecturer, he spoke on “Defining target volumes and normal structures for 3DCRT and IMRT” and “3D Quality Assurance Center at Washington University” at the 6th International 3DCRT and IMRT Symposium, sponsored by the Medical College of Virginia, Williamsburg, June 29-July 1.

Stuart Sagel, MD, professor of radiology, chief of chest radiology, and codirector of body computed tomography, spoke on “How I do it: CT angiography for pulmonary embolism” at the Categorical Course Session of the 101st Annual Meeting of the American Roentgen Ray Society, Seattle, Washington, April 29-May 4. He presented “Digital radiography: making the transition to soft copy reading,” “Unknown cases,” and “Interactive problematic cases” at the Annual Conference on Chest Disease of the Fleischner Society, Toronto, Canada, May 13-16.


Barry Siegel, MD, professor of radiology and of medicine, and director of the Division of Nuclear Medicine, presented “FDG-PET artifacts and variants” at the Continuing Medical Education Course: Positron Emission Tomography Applications and Case Presentations, St. Louis, Missouri, April 28. He spoke on “Characterization of small pulmonary nodules with PET” at the National Cancer Institute State of the Science Meeting: Diagnosis and Therapy of Screening-Detected Lung Cancer, Bethesda, Maryland, June 19. Siegel presented “PET for detection and staging of cancer” at Grand Rounds, M.D. Anderson Cancer Center, Houston, Texas, July 13.

Marilyn Siegel, MD, professor of radiology and of pediatrics, spoke on “Sonography of neonatal intracranial hemorrhage and ischemia,” “Ultrasonography of neonatal renal disease,” and “Ultrasonography of acute abdominal pain in children” at the Oklahoma State Radiological Society, Oklahoma City, April 21 and 22. She presented “Imaging of the acute pediatric abdomen” at the 101st Annual Meeting of the American Roentgen Ray Society, Seattle, Washington, April 29-May 4.

Robert Thompson, MD, associate professor of surgery (general surgery) and of radiology, as visiting professor, presented “Molecular pathophysiology of abdominal aortic aneurysms: basic research and clinical implications” to the Department of Surgery, Beth Israel Deaconess Medical Center; the Department of Surgery, Brigham and Women’s Hospital; and the Longwood Area Vascular Biology Training Program, Boston, Massachusetts, June 5.

Todd Wasserman, MD, professor of radiation oncology, presented “Gamma Knife” at the Rambam Medical Center, Haifa, Israel, April 11 and 12. He spoke on “Lymphoma” at Cancer Care in the New Millennium, Washington University, St. Louis, Missouri, April 20. He spoke on “Reducing radiation toxicity in patients with head and neck cancer” at Videoconference: Medical Programs Incorporated, Washington, DC, April 26. Wasserman presented “Ethylol as a radioprotectant in head and neck cancer” and “Ethylol in other radiation applications” at the Novel Approaches to the Management of Radiation-Induced Toxicities, Co-Med Communications Advisory Board Meeting, Austin, Texas, April 27 and 28.

Neuroimaging work featured in PNAS

Researchers in the MIR Neuroimaging Laboratory have discovered that, due to a reserve oxygen supply not found in most other animals, the human brain can perform challenging tasks without the need for a sharp increase in blood flow. Results of the research were published in the June 5 issue of Proceedings of the National Academy of Sciences and on the PNAS website at www.pnas.org.

Principal investigator for the research is Mark Mintun, MD, professor of radiology and of psychiatry. Coinvestigators are Brian Lundstrom, laboratory assistant; Abraham Snyder, MD, PhD, research scientist of radiology; Andrei Vlassenko, MD, PhD, research associate; Gordon Shulman, PhD, research scientist of neurology; and Marcus Raichle, MD, professor of radiology and of neurology and neurobiology.
Lectures/Presentations

Continued from page 31

and “Ethylol in other radiation applications” at Co-Med Communications, Atlanta, Georgia, May 3 and 4.

Wasserman spoke on “Head and neck cancer: new strategies” at the LaSalle Gril/Alza Speakers’ Program and at the Head and Neck Tumor Board, Memorial Health System, Inc., South Bend, Michigan, June 5 and 6, respectively. He presented “Thyroid protection for RT patients with head and neck cancer or lymphoma” and “Amifostine in small cell lung cancer” at the First Investigators’ Congress on Radio-protection, St. Croix, U.S. Virgin Islands, June 8.

Jie Zheng, PhD, research assistant professor of radiology, presented “MR coronary and pulmonary imaging” to the Missouri River Valley Chapter of the American Association of Physicists in Medicine, Osage Beach, Missouri, May 4 and 5.

Symposia

In this section of FYI, only those faculty and staff who have Department of Radiology or Department of Radiology Oncology appointments are listed.

Cardiovascular MR: Hands on Experience

3rd Annual Course
The MIR Cardiovascular Imaging Laboratory
St. Louis, Missouri
February 5-7, 2001

Patient Preparation
Glenn Foster, RT; Richard Nagel, RT; Pamela Woodard, MD, “ECG lead placement/gating,” “Power injector,” “Coil placement,” “Physiologic monitoring.”

Scan Plane Localization and Anatomical Imaging
Pamela Woodard, MD; Glenn Foster, RT, “TurboFLASH,” “HASTE,” “TurboSE.”

Congenital Heart, Valvular Disease and Cardiac Anatomy
Pamela Woodard, MD, “Image acquisition: tailoring the study to the pathology,” “Hands on at the magnet (scanning congenital heart volunteer): black-blood and anatomic imaging, cine imaging, valvular flow and flow assessment.”

Congenital Heart Disease
Fernando Gutierrez, MD, “Image interpretation.”

Vamsidhar Narra, MD, “Angiography: aorta, pulmonary arteries, renal arteries and peripheral vascular imaging.”

Coronary MRA
Pamela Woodard, MD; Jie Zheng, PhD, “3D navigators (free-breathing methods),” “2D and 3D breathhold,” “Scanning volunteers,” “Post processing: MPRs, MIPs.”

Post-processing MR Angiograms
Vamsidhar Narra, MD, “Subtraction methods,” “MIPs,” “MPRs.”

Cardiac Function and Myocardial Viability
Glenn Foster, RT, “Cine imaging and tagging.”

Vamsidhar Narra, MD; Naoki Takahashi, MD, “Argus quantitative evaluation: demonstration and hands-on.”

Radiation Research Society and North American Hypothermia Society
Annual Scientific Meeting
San Juan, Puerto Rico
April 21-25, 2001

David Gius, MD, PhD, chair, Redox Regulation of Signal Transduction in Cellular Responses to Stress.

Eduardo Moros, PhD, cochair, Treatment Planning and Biothermal Modeling.

Joseph Roti Roti, PhD, chair, Fundamental Thermal Biology.

Refresher Courses
Eduardo Moros, PhD, “Devices and techniques for superficial hyperthermia progress toward truly useful clinical systems.”

Joseph Roti Roti, PhD, “Thermal effects on DNA replication and DNA replication complexes.”

Poster Sessions
Nikolai Boubnov, PhD; Andrei Laszlo, PhD, “Do heat-induced alterations in Ku activity play a role in heat-induced radiosensitization?”

Matthew Bradbury, research technician; Shih Wei, laboratory assistant; Luis Rene, research technician; Imran Zoberi, MD; David Gius, MD, PhD, “Indomethacin-induced radiosensitization and inhibition of ionizing radiation-induced NF-kB activation in Hela cells occurs via a mechanism involving p38 MAP kinase.”

Shervin Karimpour, MD; David Gius, MD, PhD, “Thioredoxin reductase regulates cell cycle progression and NF-kB activity.”

Lucio Lagunas, research technician; Christopher Bradbury, research technician; Shih Wei, laboratory assistant; David Gius, MD, PhD, “Indomethacin lowers the threshold thermal dose for heat-inhibition of ionizing radiation-induced NF-kB and enhances hyperthermic radiosensitization in Hela cells.”

David Mansur, MD, “Radiosensitivity of mammalian cell lines engineered to overexpress cytosolic glutathione peroxidase.”
Robert Myerson, PhD, MD; Heather Bigott, staff scientist, John Engelbach, medical research technician; Richard Laforest, PhD; Jason Lewis, PhD; Deborah McCarthy, PhD; Eduardo Moros, PhD; Terry Sharp, technical supervisor; William Straube, MS; Michael Welch, PhD, “Indomethacin lowers the threshold temperature for heat shock inhibition of NF-kB and hyperthermic radiosensitization.”

Shervin Karimpour, MD; David Gius, MD, PhD, “Thioredoxin reductase regulates cell cycle progression and NF-kB activity.”

Xiao Lin, MD; David Gius, MD, PhD, “Cytotoxic and radiosensitizing effects of 2-deoxy-D-glucose on Hela cells.”

Eduardo Moros, PhD, “Advances in ultrasonic power deposition modeling in heterogeneous tissues for thermotherapy treatment planning.”

Robert Myerson, PhD; Eduardo Moros, PhD; William Straube, MS; Marie Taylor, MD, “Simultaneous hyperthermia and radiation for superficial disease.”

Joseph Roti Roti, PhD, “Effects of hyperthermia on DNA replication complexes.”

Mai Xu, PhD; Robert Myerson, PhD, MD; William Straube, MS; Eduardo Moros, PhD; Joseph Roti Roti, PhD, “Moderate temperature alters the distribution of Mre11 and disturbs the formation of DNA repair complexes.”

Imran Zoberi, MD; Christopher Bradbury, research technician; David Gius, MD, PhD, “The role of thioredoxin and thioredoxin reductase in the regulation of AP-1 DNA-binding and gene expression in response to ionizing radiation.”

12th INTERNATIONAL SYMPOSIUM ON RADIOPHARMACOLOGY and 14th INTERNATIONAL SYMPOSIUM ON RADIOPHARMACEUTICAL CHEMISTRY Interlaken, Switzerland June 10-15, 2001

David Piwnica-Worms, MD, PhD, member, Scientific Committee International Symposium on Radiopharmacology.

Michael Welch, PhD, member, Founding Committee ISRC; cochair, Plenary Lecture, “Technetium and rhenium.”

Deborah McCarthy, PhD; Terry Sharp, technical supervisor; Joonyoung Kim, PhD; Michael Welch, PhD, “Evaluation of a Cu-64 labeled bombesin analogue for diagnosis of gastrin-releasing peptide receptor positive tumors by MicroPET imaging.”

Stephen Moerlein, PhD, “Synthesis and evaluation in primates of (N-[11C]methyl)benperidol as a PET tracer of cerebral D2 receptor binding.”

David Reichert, PhD; Michael Welch, PhD, “Molecular modeling studies of somatostatin analogs.”

Vijay Sharma, PhD; Julie Dahlheimer, senior medical research technician; David Piwnica-Worms, MD, PhD, “Novel gallium(III) complexes as potential PET imaging agents for probing multidrug resistance (MDR1) P-glycoprotein (PGP) transport activity.”

Stefani Violini, PhD; Julie Dahlheimer, senior medical research technician; Christina Pica, research technician; David Piwnica-Worms, MD, PhD, “Evidence for a permeability barrier to uptake and transepithelial transport of [18F]FFNP for in vivo imaging of progesterone receptors.”
**SYMPOSIA**

*Continued from page 33*

Charles Boswell, graduate research assistant; Xiankai Sun, PhD; Mu Wang, staff scientist; Carolyn Anderson, PhD, “Relationship between reduction potential and in vivo stability of copper-azamacrocyclic complexes.”

Xiaoyuan Chen, PhD; Carolyn Anderson, PhD; Timothy McCarthy, PhD; Michael Welch, PhD, “Solid phase synthesis of TETA conjugated vasoactive intestinal peptide and in vivo behavior of copper-64 radiolabeled VIP conjugate.”

Carmen Dence, MS; William Powers, MD; Michael Welch, PhD, “A simple approach to the synthesis of [C-11]-d-mannitol and [C-11]-d-glucitol (sorbitol).”

Carmen Dence, MS; Pilar Herrero, MS; Terry Sharp, technical supervisor; Timothy McCarthy, PhD; Pamela Uetrecht, research technician; Todd Perkins, senior medical research technician; Thomas Voller, senior research technician; Michael Welch, PhD, “A research resource in radionuclide research.”

Abdul Khan, PhD; Timothy McCarthy, PhD; Michael Welch, PhD, “Analysis of acidic metabolites following injections of 1-13C-d-glucose and "F-FDG in patients and dogs.”

Douglas Rowland, PhD; Richard Laforest, PhD; Timothy McCarthy, PhD; Michael Welch, PhD, “Conventional and induction furnace distillation procedures for the routine production BR-76,77 and 1-124 on disk and slanted targets.”

Sally Schwarz, MS; William Margenau, cyclotron supervisor; Timothy McCarthy, PhD; Michael Welch, PhD, “Radiopharmaceutical scheduling center with six PET scanners.”

Terry Sharp, technical supervisor; John Engelbach, medical research technician; Michael Welch, PhD, “Procedures for animal handling in MicroPET studies.”

Xiankai Sun, PhD; Carolyn Anderson, PhD, “The in vivo evaluation of copper-64 radiolabeled DO2P, DO3P, and DOTP complexes.”

Xiankai Sun, PhD; Carolyn Anderson, PhD; Michael Welch, MD, “Copper-64 radiolabeling and in vivo behaviour of 4, 11-per-64 radiolabeled bis(carboxymethyl)-1,4,8,11-tetraazaabicyclo[6.2.2]hexadecane.”

Douglas Rowland, PhD; Richard Laforest, PhD; Timothy McCarthy, PhD; Michael Welch, PhD, “Solid phase synthesis of [C-11]-d-mannitol and [C-11]-d-glucitol (sorbitol).”

Amy Vavere, graduate research assistant; Lynne Jones, senior research technician; Timothy McCarthy, PhD; Douglas Rowland, PhD; Michael Welch, PhD, “Preparation biodistribution and MicroPET imaging of Ti-transferin.”

Mu Wang, staff scientist; Robert VanderWaal, PhD Carolyn Anderson, PhD, “Subcellular fractionation of copper-64-TETA-octreotide in AR42J rat pancreatic tumor cells.”

Zheng Wang, PhD; Terry Sharp, technical supervisor; Jason Sohn, PhD; Timothy McCarthy, PhD, “Approaches toward the in vivo imaging of experimental acute autoimmune uveitis (EEAU).”

Jeongsoo Yoo, PhD; David Reichert, PhD; Michael Welch, PhD, “New N-substituted cyclens: synthesis and comparative biodistribution studies of Cu-64 complexes.”

CONTINUING EDUCATION

Michael Welch, PhD, “Pharmacological studies from animal to human, the role of small animal imaging.”

**SOCIETY OF NUCLEAR MEDICINE**

48th Annual Meeting
Toronto, Ontario, Canada
June 23-27, 2001

Mickey Clarke, CNMT, member, Technologist Section: Scientific and Teaching Committee.

Robert Gropler, MD, moderator, Cardiovascular Track: Cardiovascular—Clinical Science: SPECT methods for imaging sympathetic innervation and fatty acid metabolism.
FOCAL SPOT, SUMMER 2001

American Association of Physicists in Medicine
43rd Annual Meeting
Salt Lake City, Utah
July 22-26, 2001

José Deasy, PhD, cochair, Therapy—Monte Carlo Calculations Scientific Session.

James Dempsey, PhD, cochair, Therapy—Dosimetry Instrumentation Scientific Session.

Eric Klein, MS, director, Scientific Program; chair, AAPM Annual Business Meeting; cochair, Therapy—IMRT Verification/Validation II Scientific Session.

Zuofeng Li, DSc, cochair, Therapy—Prostate Implants Scientific Session.

Daniel Low, PhD, moderator, IMRT Verification Symposium.

Eduardo Moros, PhD, cochair, Therapy—Thermal and Other Scientific Session.

Sasa Mutic, MS, moderator, IMRT Shielding Symposium.

Jason Sohn, PhD, cochair, Therapy—Imaging Guided Therapy Scientific Session.

Young Investigator Finalist Presentation
Fritz Lerma, PhD; Jeffrey Williamson, PhD, "Accurate localization of intracavitary brachytherapy applicators from 3D CT imaging studies."

Continuing Education Course
Daniel Low, PhD, "IMRT: verification measurements for IMRT."

Poster Session
Daniel Low, PhD; Robert Drzymala, PhD; Eric Klein, MS, "Geometric aspects of intensity-modulated radiation therapy planning."

Refresher Courses
Eric Klein, MS, Scientific Director Special Lecture: "The physics and current status of X-ray technology."

Sasa Mutic, MS, "CT simulation."

Jeffrey Williamson, PhD, "Update on revised U.S. Nuclear Regulatory Commission regulating 10CFR 35 for medical use of byproduct material."

Scientific Sessions
Joseph Deasy, PhD, "Denoting of Monte Carlo dose distributions via wavelet threshold denoising."

Joseph Deasy, PhD, IMRT optimization based on stored pencil beam dose distributions: compression, denoising, and dose calculations using wavelets."

James Dempsey, PhD; Sasa Mutic, MS; Daniel Low, PhD; Melissa Backman, laboratory assistant; Jeffrey Williamson, PhD, "An ideal water-equivalent cavity theory liquid ionization chamber."

Eric Klein, MS; Daniel Low, PhD, "Evaluation of dual portal SMLC fields."

Timothy McCarthy, PhD, subchair, Scientific Program Committee.

Tom Miller, MD, PhD, chair-elect, Scientific Program Committee.

Jerold Wallis, MD, vice-chair, Instrumentation and Data Analysis Track: Data analysis and management, image generation, instrumentation.

Poster Session
Joonyoung Kim, PhD; Pilar Herrero, MS; Joanne Markham, MS; Timothy McCarthy, PhD; Daniel Schuster, MD, "In vivo measurements of pulmonary angiotensin-converting enzyme kinetics."

Categorical Seminar
Farrokh Dehdashti, MD, "PET imaging to measure tumor response—Current literature: breast."

Scientific Sessions
Helen Blake, laboratory assistant; Mary Dyszlewski, PhD; Julie Dahlheimer, senior medical research technician; David Piwnica-Worms, MD, PhD, "[\text{[mTc(III)(CO)\textsubscript{3}MIBI]}\textsubscript{3}], a novel TC-tricarbonyl complex, is transported by human MDR1 P-glycoprotein."

Julie Dahlheimer, senior medical research technologist; Vijay Sharma, PhD; David Piwnica-Worms, MD, PhD, "Evidence for stereospecific cell uptake of "Tc-TAT-peptide chelates."

Pilar Herrero, MS; Richard Kowalski, laboratory assistant; Deborah Delano, RN; Victor Davila-Roman, MD; Robert Gropler, MD, "Impact of aging on dobutamine-induced changes in myocardial substrate utilization."

Pilar Herrero, MS; Zulfiya Kisrieva-Ware, MD, PhD; Deborah Delano, RN; Robert Gropler, MD, "The impact of age and gender on resting myocardial perfusion and oxygen consumption."

Gary Luker, MD; Kathryn Luker, PhD; Christina Pica, research technician; Julie Dahlheimer, senior medical research technologist; David Piwnica-Worms, MD, PhD, "In vitro and in vivo evaluation of a dual-function green fluorescent protein-HSV1-TK reporter gene for molecular imaging."

Tom Miller, MD, PhD; Nobuyuki Oyama, MD, PhD; Farrokh Dehdashti, MD; Barry Siegel, MD; Keith Fischer, MD; Jeff Michalski, MD; Michael Welch, PhD, "Imaging of prostate cancer recurrence with PET."

Nobuyuki Oyama, MD, PhD; Lynne Jones, BA; Terry Sharp, technical supervisor; Michael Welch, PhD, "Androgenic control of glucose and acetate metabolism in rat prostate and prostate cancer tumor model."

Continuing Education Course
Henry Royal, MD, "Russian radiation studies—an overview;" "Imaging diagnosis of pulmonary embolus."

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Daniel Low, PhD, "IMRT: verification measurements for IMRT."

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Continued from page 35

Fritz Lerma, PhD; Jeffrey Williamson, PhD, “Accurate localization of intracavitary brachytherapy applicators from 3D CT imaging studies.”

Zuofeng Li, DSc, “Monte Carlo dosimetry of ProstaSeed I-125 source.”

Daniel Low, PhD; James Dempsey, PhD; Perry Grigsby, MD; Clifford Chao, MD; James Purdy, PhD, “Calibration of an optical laser CT scanner for imaging of dose distributions in polyacrylamide gels.”

Daniel Low, PhD; James Dempsey, PhD; Sasa Mutic, MS; James Purdy, PhD, "Ionization chamber response to dynamic Intensity Modulated Radiation Therapy fields."

Daniel Low, PhD; Jeffrey Bradley, MD; Joseph Deasy, PhD; Richard Laforest, PhD; James Dempsey, PhD; Farrokh Dehdashti, MD; Wade Thorstad, MD; Barry Siegel, MD; James Purdy, PhD, "Lung trajectory mapping for IMRT and diagnostic radiology."

Jerry Markman, research associate; Daniel Low, PhD; Joseph Deasy, PhD, "Beyond bixels: generalizing the optimization parameters for Intensity Modulated Radiation Therapy."

Eduardo Moros, PhD; Robert Myerson, PhD, MD; Heather Bigott, staff scientist; Terry Sharp, technical supervisor; John Engelbach, medical research technician; Jason Lewis, PhD; Richard Laforest, PhD; Deborah McCarthy, PhD; William Straube, MS; Michael Welch, PhD, "A microPET-compatible applicator for tumor bearing mice to study the effect of mild hyperthermia on tumor oxygenation using "Cu(ATSM) PET."

Sasa Mutic, MS; James Dempsey, PhD; Daniel Low, PhD; James Purdy, PhD, "Performance evaluation of an 85 Cm bore X-ray computed tomography."

Sasa Mutic, MS; James Dempsey, PhD; Daniel Low, PhD, "Dosimetry of therapeutic photon beams using EC film."

Sasa Mutic, MS; Perry Grigsby, MD; Daniel Low, PhD; James Dempsey, PhD; Tom Miller, MD, PhD, "PET guided three-dimensional treatment planning of intracavitary gynecologic implants."

Joseph O’Sullivan, PhD; Donald Snyder, PhD; David Politte, DSc; Bruce Whiting, PhD; Jeffrey Williamson, PhD, "Maximum likelihood image estimation for transmission tomography with beam hardening."

Jason Sohn, PhD; James Dempsey, PhD; Daniel Low, PhD; Eric Klein, MS; Robert Dzyniola, PhD; Fengming Kong, MD; David Mansur, MD, "IMRT to breast tissue and associated lymph nodes with consideration of breathing motion."

Milos Vicic, PhD; Jeffrey Williamson, PhD, "Measurement of plastic scintillator dosimeter response to low energy electrons by a Compton coincidence spectrometer."

Bruce Whiting, PhD; Jeffrey Williamson, PhD; Sasa Mutic, MS; Fritz Lerma, PhD, "Effect of a patient geometry on measurement of photon cross sections by dual energy CT imaging for Monte Carlo based treatment planning."

Jeffrey Williamson, PhD, "Accuracy and efficiency comparisons between three-dimensional multigroup discrete ordinates and voxel based Monte Carlo methods for dosimetric modeling of the Model 6702 125I Seed."

Jeffrey Williamson, PhD, "Monte Carlo-aided dosimetry of the TheraSeed® Model 200 103Pd interstitial brachytherapy seed: implications for dose prescription.”

Alumni News

Ronald Evens, MD, president of Barnes-Jewish Hospital, St. Louis, and former director of Mallinckrodt Institute (1971-1999), was one of three recipients of the American College of Radiology’s (ACR) Gold Medal Award. The Gold Medal is the ACR’s highest accolade, presented only to those individuals who have significantly advanced radiological science and practice.

Howard Forman, MD, vice chair of finance and administration, Department of Diagnostic Radiology, Yale University, received the Robert Wood Johnson Health Policy Fellowship. Forman was one of six physicians chosen nationwide to participate in the one-year program, which is conducted by the National Academy of Sciences’ Institute of Medicine to assist mid-career health professionals to assume leadership roles in health policy and management. Forman completed four years of training in diagnostic radiology at the Institute, 1990 to 1994.

Robert Stanley, MD, professor and chairman of the Department of Radiology at the University of Alabama since 1982, was named president of the American Roentgen Ray Society (ARRS), the oldest radiology society in the United States. Stanley was officially installed as the 2001-2002 president at the ARRS annual meeting, April 29-May 4, in Seattle, Washington. He was director of abdominal radiology at Mallinckrodt Institute from 1971 to 1982.
DIAGNOSTIC RADIOLOGY AND NUCLEAR MEDICINE FELLOWS, RESIDENTS, AND TRAINEES FOR 2000-2001

(First row, left to right) Doctors Brian Lawner, Bonnie Joe, Jennifer Gould, Juliet Fallah, Franklin Marden, Paul Licata, Francisco Rodriguez, Jeffrey Brent, Richard Heller, Hiten Mable, Joseph Konstantarakis, Jason Oliphant. (Second row) Doctors Thelma Lopes; Ningmei Hu; James Goddard; Lawrence Kotner, assistant director, Diagnostic Radiology Residency Program; Faraz Khan, diagnostic radiology chief resident; Dennis Balle, director, Diagnostic Radiology Residency Program; Gilbert Jost, director of the Institute; Christine Monias, assistant director, Diagnostic Radiology Residency Program; Huy Tran, diagnostic radiology chief resident; Sailendra Naidu; Sabrina Ward; Yungao Ding; Ronan McDermott. (Third row) Brant Ruff, Noah Appel, Michael Boerner, Edward Lee, Paul Broadbent, Daniel Fullmer, Michael Todora, Craig Hamasaki, Terry Falk, Joe Franke, Brett Grotz, Howard Harvie, Naveen Parti, Cary Shimovitz, Jason Bronfman, Adolph Hutter, Yuming Yin. (Fourth row) Doctors Mark Bakalars, Mehdi Poustchi-Amin, Scott Lee, Jennifer Lee, Rolf Holtsch, Ronald Gerstle, Lawrence Tang, Edward Wootten, David Johnston, Peter Chuang, Reginald Parejo, Robert Kadner, Robert Leibold, John Agles, Vikram Patel.
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