Dr. Firestone Recounts Department’s Growth During Challenging Times

On April 30, 2001, Leonard L. Firestone, MD stepped down from the Chair of the Department, leaving a legacy of extraordinary growth and activity in one of the largest academic anesthesiology departments in the world.

The recent past has featured plummeting insurance reimbursement, including enormous pressure from the Health Care Financing Administration and Medicare; the additional documentation burden due to the Physicians at Teaching Hospitals (PATH) audit of academic faculty; declining hospital support for hospital-based departments (including layoffs of academic medical centers).

Dr. Firestone remains on the faculty and is now devoting his time to research. He met recently with Editor Ake Grenvik, MD, to reflect on his time as chairman.
Dr. Firestone Recounts Department's Growth During Challenging Times

CRNAs); and a simultaneous decline in the number of applicants to anesthesia residency programs nationwide.

Dr. Firestone became Peter & Eva Safar Professor and chairman of the Department of Anesthesiology & Critical Care Medicine in 1996. For nearly five years he held the position at the helm of the Department

Dr. Firestone began his recollections by giving full credit to the faculty of the Department for the fact that it has collectively survived these tumultuous years and maintained its academic productivity. Change and "nearly explosive" growth were the key elements of his tenure as chairman (1996-2001). He discussed these developments had a pool of such talent to match with given roles in the Department.

In the area of clinical services, beginning with the merger of Presbyterian-University, Montefiore, and Eye & Ear hospitals into UPMC, the Anesthesiology Department's activity became better integrated and more efficient.

During Dr. Firestone's chairmanship, the entire anesthesia care team came under the same administrative and fiscal roof when approximately 200 CRNAs were incorporated into the Department.

Dr. Daniel Martich (right) was appointed director of the Clinical Information System for the UPMC Health System, and our departmental merit system for evaluation of faculty members became fully computerized and automated.

Firestone had the honor of appointing nine new chiefs: Drs. John Williams at Presbyterian; Peter J. Davis at Children's; Mark Hudson at Shadyside; Paul Shay at St. Margaret; Raymond Schwartz at South Side; Jan Smith at Beaver Valley; Moyses Mandel at Braddock; Daniel Van Riper at Lee Regional; and Victor Scott at UPMC Palermo. Dr. Paul Rogers was appointed director of the Critical Care Service Line at the Veterans Affairs Medical Center. In addition, Dr. Firestone appointed Dr. Marie Baldisseri chief of CCM at Magee-Womens, Dr. Dor Cope as chief of the Pain Medicine program, and Dr. Mitch Fink as chief of the Adult Division of Critical Care Medicine.

Also during this time, the entire anesthesia care team came under the same administrative and fiscal roof when approximately 200 CRNAs were incorporated into the Department. Other clinical notes include the establishment of a Department-wide quality-assurance program; a clinical incentive pay plan for the faculty; and real-time, online computer assistance in clinical care, necessitating a complete back-up system.

The Department's education mission got a tremendous boost when Dr. Rita Patel was...
appointed director of Anesthesiology Education Programs. Dr. Patel has worked to make the Department's educational efforts a continuum, from the School of Medicine, through the Anesthesiology Residency, to the various anesthesia fellowship programs. In year 2000, the Anesthesia Residency and the subspecialty fellowships in CCM, Pediatric Anesthesia, and Pain Medicine were all accredited for five years by the Accreditation Council for Graduate Medical Education. Pediatric CCM also received a five-year ACGME accreditation. In addition, the Dean appointed Dr. Paul Rogers director of the Multidisciplinary Critical Care Training Program. Drs. Patel and Rogers subsequently initiated an annual education retreat for faculty members. Websites were designed and established for all of the Department's education programs. Lastly, the Department continued to support and make use of the Human Simulation Center established by former Chairman Dr. Peter M. Winter in 1995.

In the research arena, during Dr. Firestone's tenure the Department's receipt of federal grants more than quadrupled, from less than $1 million (direct costs) in 1995 to more than $4 million (direct costs) in 2000. Dr. Michael Pinsky obtained the first of two Department NIH T-32 fellowship training grants; Dr. Patrick Kochanek was awarded the second, making this Anesthesiology Department the only one in the nation with two such training grants. Thomas Rudy, PhD became principal investigator on a program project in the field of pain research. Numerous senior and junior investigators obtained grants from the NIH and other prestigious federal sources (see story on Page 11), and Dr. Peter Safar received a grant from the Department of Defense — one of the three largest grants in the city of Pittsburgh.

New research facilities were established and existing areas extensively renovated on the 6th and 10th floors of Scaife Hall, and in the Hill Building for the Safar Center for Resuscitation Research. The Simulation Center began negotiating for a new facility, with plans to move from its current location in the basement at Montefiore. In 2000, the Simulation Center received a large Laerdal educational research grant, with Dr. John J. Schaefer III as the principal investigator.

Dr. David Watkins, of the Department's Clinical Trials Program, went on to become director of the Pittsburgh Clinical Research Network at UPMC. The North American Malignant Hyperthermia Registry moved to Pittsburgh when Dr. Barbara Brandom became its director. Drs. Pat Kochanek, Michael Pinsky, Yan Xu, and Mitch Fink achieved faculty tenure, and Dr. Pei Tang became the first female faculty member in the tenure stream. Finally, Schertz research fellowships were awarded to young faculty members each year of Dr. Firestone's administration.

(continued on page 4)
A permanent office of Faculty Development was established with Dr. Peter Winter as its director, and the Departmental Executive Steering Committee developed a Department Mission Statement. Dr. Daniel Martich was appointed director of the Clinical Information System for the UPMC Health System, and our departmental merit system for evaluation of faculty members became fully computerized and automated. The following faculty members received academic promotion: Drs. Angus, Baldisseri, Boujoukos, Caccillo, Clark, Cope, Daniel, Greenburg, Kellum, Kochanek, Kramer, Krohner, Lebovitz, Mandell, Martich, Patel, Rogers, Rudy, Schaefer, Scott, Sirio, Soliman, Sullivan, Tisherman, Venkataraman, Williams, and Xu.

Change and growth were evident on the administrative front as well. Two clinical vice chairs were established: Dr. Richard Bjerke became vice chairman for the academic hospitals; Dr. Richard Feduska, vice chairman for the community hospitals. Dr. Firestone initiated a program for practice managers to assist each of the chiefs. The OR Informatics System, the source of OR data charts and other critical management tools, was relocated to the Anesthesiology Department under Dr. Firestone’s supervision, where it continues to reside today. Dr. Firestone also appointed Information Technology teams to focus on revenue, because brand new software for anesthesia billing had to be developed on behalf of the University of Pittsburgh Physicians. The budget grew from $20 million to $66 million and remained balanced each year until the present. Additionally, for the first time in 25 years, the Department sponsored the Annual Meeting of the Association for University Anesthesiologists in 1999. Dr. Firestone served on the search committees for the chairman of both Surgery and Emergency Medicine, and he chaired the search committee in Radiology.

Dr. Firestone’s immediate predecessor as Department chairman, Peter M. Winter, MD, paid tribute to his successor. “Dr. Firestone successfully walked the tightrope between increased external pressures and decreased funding, while continuing to build an outstanding academic department,” he said. “Upon his departure, the Department ranked high among the nation’s leaders in academic anesthesia and critical care medicine. We are indebted to Len for his leadership under such difficult circumstances.” That testimonial was echoed by Dr. Winter’s predecessor, Dr. Peter Safar, who salutes Dr. Firestone for having “resuscitated” the Department’s programs. “We are grateful to you for your valiant efforts over five years, and for your successes in keeping the ship on course and strengthening it.”

Dr. John Williams Appointed Interim Chairman

On May 1, John P. Williams, MD began serving as interim chairman of the Department of Anesthesiology & Critical Care Medicine, after School of Medicine Dean Arthur S. Levine, MD asked him to fill the vacancy left when Dr. Leonard Firestone stepped down from the chairmanship.

Dr. Williams had been chief of Anesthesiology and medical director of Surgical Scheduling at UPMC Presbyterian since July 2000 after having served in the same capacity — as acting chief and director — since September 1999. He came to UPMC in 1998 from the UCLA School of Medicine in Los Angeles, where he was director of Cardiothoracic Anesthesiology and co-director of Surgical Intensive Care Medicine. Prior to his UCLA appointment, he was director of Cardiothoracic Anesthesiology at the University of Texas Medical School in Houston.

The former director of Cardiac Anesthesiology, Joseph Quinlan, MD has been appointed interim chief at Presby, and John Caldwell, MD is now acting director of the Cardiac Anesthesiology Division.

Dr. Levine has invited Dr. Marshall Webster, vice chairman of the Department of Surgery, to lead a Search Committee to find a permanent chairman for the Department of Anesthesiology.
CCM is Key in MWH Service Expansion

Anyone who has been to the corner of Forbes Avenue and Halket Street recently can see that something big is happening at Magee-Womens Hospital. But one of the most significant changes afoot is not visible from the outside. Beginning early this year, MWH embarked on a program to broaden its capabilities in order to serve a wider circle of patients. The Hospital is expanding key medical and surgical areas and adding services that will extend its role in women’s health beyond its core programs in obstetrics, gynecology, and women’s cancers.

The more-diverse patient mix and changing levels of acuity call for expanded physician coverage, and the Division of Critical Care Medicine has risen to the task. The faculty of Critical Care Medicine at Magee has expanded its coverage to meet the demand of providing in-house patient care as attending physicians for medical and surgical patients around the clock, seven days a week.

To expand the existing CCM faculty at Magee, the Division is recruiting additional CCM staff. Specifically, it will add at least four intensivist/hospitalists for patient management on a 24-hour, in-house basis. The intensivist/hospitalist (IH) is a board-certified or board-eligible physician, surgeon, or emergency-trained physician with specialized training in critical care medicine. The IH remains in the hospital for 24 hours, providing services as needed in the role of: admitting physician for all Internal Medicine and Medical Oncology patients; on-site ICU attending physician; step-down surgical staffs at Magee are very enthusiastic about CCM’s upgraded level of in-house patient coverage.

“Our role as intensivists will not change, but it will continue to increase as we take on the challenges of acting as hospitalists.”

— Dr. Marie Baldisseri

According to Dr. Baldisseri, the members of the medical and surgical staffs at Magee are very enthusiastic about CCM’s upgraded level of in-house patient coverage.

“Our role as intensivists will not change, but it will continue to increase as we take on the challenges of acting as hospitalists,” Dr. Baldisseri says. “Not only will we continue to care for our sicker patients in the ICU, but we will be acting as hospitalists to manage patient-care problems that arise on the patient floors. This unique role of intensivist/hospitalist will set the standard of care for hospitals here in Pittsburgh and throughout the country.”

In addition to five ICU beds that we already have at Magee, we will be creating eight monitored beds. These will be (continued on page 6)
I have made a personal commitment that, as we expand clinical services, we will care for women better than anyone else.
— Irma Goertzen, Magee CEO

Expansion of services at Magee will also help the UPMC Health System to meet the demand for inpatient beds, the availability of which has been increasingly tight recently, especially at UPMC Shadyside and UPMC Presbyterian. Magee's expanded role enables it to provide care for patients currently using other UPMC hospitals.

In the midst of all of the changes, Magee will maintain its specialty position as a premier provider of women's health care. Says Irma Goertzen, chief executive officer at Magee, "I have made a personal commitment that, as we expand clinical services, we will care for women better than anyone else — whether it be gastroenterology, minimally invasive surgery, or internal medicine. The woman will remain at the center of all we do."

Mediterranean Update

Barely into its second year of clinical operation, the Istituto Mediterraneo per i Trapianti e Terapie ad alta Specializzazione (IsMeTT, or UPMC Palermo, Italy) received authorization in April to begin a liver-related liver-transplantation program. According to Victor L. Scott, MD, director of Anesthesiology/CCM and OR Services at IsMeTT, the program was undertaken in the following weeks and will be re-evaluated after a year to determine its permanent status.

The Anesthesiology Division of IsMeTT sponsored the first in a series of four symposia for the development of strategies for the management of organ donors in Sicily. The Istituto has also begun a clinical trial of the Molecular Absorbents Recirculating System (MARS) as a liver-assist device. Dr. Scott says that observations have been interesting so far, generating several abstracts, four of which were accepted for presentation at the International Liver Transplantation Society meeting this summer in Berlin.

Two new faculty members have joined the Anesthesiology Division at IsMeTT, to assist in developing the cardiovascular program: Dr. Michael Chandler, former vice chairman of the Utah Valley Regional Medical Center and director of Cardiovascular Anesthesiology; and Dr. Michael Moellenhoff, who recently completed a fellowship in cardiovascular anesthesia at the University of California, San Diego. Dr. Howard Doyle, who had been a member of IsMeTT's Critical Care Medicine faculty, has returned to Pittsburgh to join the CCM faculty at UPMC.
Residency Program Matches 100%

The University of Pittsburgh's Anesthesiology Residency program had another successful year in the National Resident Matching Program, matching all 13 positions offered for the post-graduate year-2 (PGY2) class. These residents will begin their first year of clinical anesthesiology training in July 2002. This year's result surpasses even the superior fill rate of 90% that the Department achieved in last year's Match.

Director of Anesthesiology Education Programs Rita Patel, MD attributes the successful outcome to initiatives in the clinical and didactic aspects of the Residency Program itself, the appeal of newer methods of instruction, such as case-management sessions, evidence-based medicine, and human simulation, and the participation of Department faculty members in the Medical Student program. Dr. Patel also commends faculty, residents, and the administrative staff for their organization, efficiency, and teamwork, especially during the busy interviewing season.

Six of the 13 applicants who matched with the Anesthesiology Residency Program for academic year 2002-03 are students at the University of Pittsburgh School of Medicine. The remaining are students at: The University of California at San Diego, SUNY Syracuse, SUNY Stony Brook, The Medical College of Pennsylvania-Hahnemann, Penn State University, Ohio State University, and Kyoto University, Japan.

Training Program Reaccredited

Paul L. Rogers, MD, director of the Multidisciplinary Critical Care Training Program (MCCTP), has announced that the Surgical Critical Care Training Program has been reaccredited for four years by the Accreditation Council for Graduate Medical Education (ACGME). Samuel A. Fisherman, MD is director of the Surgical Critical Care Fellowship, which is one track in the MCCTP.

2001 Graduates Step into Future

Over the past 40 years, alumni of the Anesthesiology Residency or one of the Department's fellowship programs have gone on to make outstanding contributions in their field. At the time that this issue of Anesthesiology & Critical Care News went to press, the following members of the Class of 2001 were certain of their plans for the immediate future:

From the Anesthesiology Residency Program: Meera Appaswamy, MD and Harinarayan Balasubramanian, MBBS will enter the Fellowship in Pain Medicine at UPMC; Jamuna Chalasani, MD will join the faculty at West Penn Hospital; Paul Davies, MD will enter a fellowship in Pain Management at Johns Hopkins University; Marie Manrique, MD will return to the Philippines; Andrew Davies, MDChB will begin a fellowship in Cardiothoracic Anesthesiology at UPMC; Jian Zhong Sun, MD completed the Residency Program in February and is now a member of the faculty at Thomas Jefferson University.

From the Pediatric Anesthesiology Fellowship, Jesus Apuya, MD will join the UPMC faculty, locum tenens, at Children's Hospital; as of press time, future plans are not yet decided for Gregory Cambier, MD, Peter Hatzidakos, MD, and Felice Vabnick, MD, who will complete their fellowships in September. Plans were also indefinite at press time for Athanasios Magimbi, MD of the Pain Medicine Fellowship. Doug MacLear, MD completed his fellowship in Pain Medicine last March and is now in private practice in Lake Worth, FL.

From the MCCTP, Alison Gimbel, MD has chosen to complete a year of training in Pulmonary Medicine at the University of Pittsburgh. Scott Gunn, MD and Ramesh Venkataraman, MD are joining the Critical Care Medicine faculty at UPMC; Abdul-Karim Haffar, MD has accepted a position at Toledo Clinic, Toledo, OH. Jan Kasal, MD, at Crossville Hospital, Knoxville, TN; Victor Gomez, MD has joined a pulmonary medicine practice in Georgia; Salam Rajjoub, MD, will practice pulmonary medicine at United Hospital in Clarksburg, WV. Stuart Leon, MD will be a Trauma fellow and junior faculty member at Pitt. Jan Leverta, MD is returning to Czechoslovakia to practice nephrology and critical care medicine, and Abrar Khan, MD will practice in Gary, IN. Azmat Qayyum, MD will remain at the University of Pittsburgh as an intensivist/hospitalist at Mage-Womens Hospital; Shashank Saxena, MD will enter the UPMC Pain Medicine Fellowship program. Plans are indefinite for Moustafa Hassan, MD and Ravichandran Theerthakarai, MD.

Anesthesiology/CCM
Graduation Banquet Celebrates Department's 40th Year

Graduates of the Department of Anesthesiology & Critical Care Medicine's various training programs were honored at a special Graduation Banquet June 16 at the Twentieth Century Club in Oakland. The occasion was also a celebration of the Department's 40th Anniversary. Interim Chairman John P. Williams, MD welcomed the graduates and guests, and then introduced the Department's founding chairman, Peter Safar, MD. Dr. Safar chronicled the early years of Anesthesiology at Pitt, acknowledging many who had helped to build the Department into one of the largest in the world. Those names included Drs. Jan Smith, Donald Benson, and Ake Grenvik, who each gave a brief address. Outstanding members of the Class of 2001 then received awards for their achievements, and a number of faculty members were recognized for their contributions.

Dr. Williams presented a certificate to the 2001 Charles A. Schertz Fellow, Yong 'Kato' Han, MD and formally announced Mark Hall, MD as the Schertz Fellow for 2002. Dr. Safar recognized Safar Center for Resuscitation Research fellow Wilhelm Behringer, MD; and Ann Thompson, MD, commended the fellows in Pediatric Critical Care Medicine. Multidisciplinary Critical Care Training Program Director Paul Rogers, MD presented the CCM Fellow of the Year award to Stuart Leon, MD. Director of Anesthesiology Education Programs Dr. Rita Patel presented this year's Mark H. Gilliland, MD Award for Best Clinical Resident to Andrew W. Murray, MB ChB; The residents also gave special recognition to Dr. Murray as departing chief resident. The residents chose Theresa Gelzinis, MD to receive the Dr. Leroy Harris Award for Excellence in Teaching. Other faculty members received acclaim for their dedication and excellence as educators Patrick Forte, MD and Robert Lawler, MD were honored for excellence in the
clinical teaching of medical students, and William McIvor, MD received the Peter M. Winter Award for Excellence in Medical Student Teaching. Dr. Patel acknowledged the educational contributions of faculty members:

Patricia Dalby, MD; Terry Edwards, MD; Helene Finegold, MD; James Greenberg, MD; Paul Kempen, MD, PhD; Victor Kubit, MD; Michael Mangione, MD; David Metro, MD; Jacquelyn Morillo-Delerme, MD; Steven Orebaugh, MD; Juhan Paiste; MD; and Nasser Sonbolian, MD. Dr. David J. Kramer was chosen to receive the Ake Grenvik CCM Faculty of the Year Award. However, because of his new commitments at the Mayo Clinic in Jacksonville, Florida (see story on page 18), Chief CCM Fellow Scott Gunn, MD made the presentation at Dr. Kramer's farewell party one week earlier.

Drs. Leonard Firestone and Rita Patel presented each member of the Anesthesiology Residency Class of 2001 with his or her Graduation Certificate, along with a gift. Dr. Rogers presented certificates to the graduates of the CCM Fellowship, except Moustafa Hassan, MD (the only surgeon in the graduating CCM Fellowship class), who received his certificate from Samuel Tisherman, MD; and Shashank Saxena, MD (the only anesthesiologist in the class), who received his from Nicholas Bircher, MD.

Honored guests at the celebration included Peter Winter, MD, who was Department chairman from 1979 to 1996, and the following, who were either faculty members or fellows during the Department's early years in the 1960s: Richard Bennett, DDS; Donald Benson, MD; Milton Black, MD; Bala Eross; Stephen Finestone, MD; Ake Grenvik, MD; Bulent Kirimli, MD; Herbert Kunkel Sr., MD; Stanislav Pautler, MD; Jack Quinn, MD; John Scott, MD; Jan Smith MBChB, MRCP; William Stept, MD; Ruben Tenicela, MD; and David Torpey, MD.

In Dr. Safar's closing words to the graduates: "You are now confronting new challenges. In spite of impressive new technologies, I urge you to retain your focus on patients, and to be inquisitive, collegial, dedicated, and enthusiastic... To those leaving and those remaining under the leadership of John Williams, the ghosts of the 1960s wish you a great future."
NIH Funds Sepsis Study

The Department of Anesthesiology and Critical Care Medicine has been awarded a grant from the National Institutes of Health for a multicenter study entitled Genetic and Inflammatory Markers of Sepsis. The grant funds a study that will use a large cohort of patients with community-acquired pneumonia to explore in detail the relationships among genetic polymorphisms and the inflammatory response in sepsis. The investigators will analyze allelic variations in the coding or non-coding regions of genes whose products are important in the regulation of the inflammatory response. They will also collect and evaluate clinical data. Among the study's other aims, the researchers hope that it will be valuable in designing clinical trials and in improving patient care. Derek Angus, MB ChB is principal investigator in the study; John A. Kellum, MD is co-principal investigator. Department co-investigators include Russell Delude, PhD, Mitchell P. Fink, MD, Michael R. Pinsky, MD and Alex Krichefsky DVM, PhD. Additional co-investigators represent the Departments of Medicine, Pediatrics, Human Genetics, and Biostatistics at the University of Pittsburgh; the North Shore University Hospital in Manhasset, NY; Norwalk Health System in Norwalk, CT; and Qualidigm of Middletown, CT.

Army Joins Navy in Supporting SCRR Efforts

The U.S. Army is now funding one arm of the Safar Center for Resuscitation Research projects formerly funded entirely under a U.S. Navy grant. Since 1996, the Navy has supported twin SCRR projects conducted with the aim of developing novel interventions for exsanguinating combat casualties. The studies involve outcome models of hemorrhagic shock in rats and suspended animation in dogs. The primary goals of the project are: 1) to develop optimized fluid, drug, and hypothermic therapies for management of hemorrhagic shock, to extend the “golden hour” of survivability; and 2) to develop a method of managing victims of exsanguinating cardic arrest, using suspended animation (preservation of the entire organism during pulselessness for transport and surgical repair). The U.S. Army will this year assume the support of the Suspended Animation branch of the study, with Peter Safar, MD as principal investigator and Samuel A. Tisherman, MD as co-PI. The Navy continues to fund the studies on Hemorrhagic Shock, for which Dr. Tisherman is the PI. and Dr. Safar the co-PI.

New Sponsored Projects February 2001 – July 2001 (does not include ongoing projects)

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<th>FEDERAL GRANTS</th>
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Dr. Brian Williams Receives NIH Research Award

Dr. Brian Williams has received a Mentored Patient-Oriented Research Career Development Award (K23) from the National Institutes of Health to study the effect of nerve-block pain management on outcomes following outpatient anterior cruciate ligament (ACL) reconstruction.

The hypothesis is that patients undergoing nerve-block analgesia will demonstrate better outcomes in the areas of self-reported recovery, physical function, and objective measures of neuromuscular function. Patients in the study will receive conventional spinal anesthesia for ACL reconstruction and be randomized to receive femoral nerve-block analgesia with either a single injection or a continuous infusion for two days, or saline placebo. The specific aim is to determine the quality of immediate recovery (from anesthesia) and extent of reported pain, and to determine whether the use of nerve-block analgesia is associated with impairment of quadriceps femoris torque output. Comparisons will also be made of the single-injection and continuous-infusion methods of administration, to determine the better dosing strategy. The proposed studies are expected to identify more effective methods of anesthetic management for selected orthopedic procedures.
21st Century Scientists Enrich Molecular Research at Pitt

By Ferenc Gyulai, MD

In late 1992 and early 1993, Dr. Leonard Firestone, then vice chairman for research, recruited three brilliant scientists to the Department's Research Faculty: Yan Xu, PhD from UC San Francisco, Gregg Homanics, PhD from the University of North Carolina, and Pei Tang, PhD from UC Berkeley. At the time, all three were approaching the point of becoming independent investigators. The lines of their investigations resonated with and significantly extended the Department's already ongoing research efforts.

The primary focus of Dr. Xu's and Dr. Tang's investigations was to explore the hypothesis that the state of general anesthesia is brought about by anesthetic binding to a group of preferred sites in the neuronal membrane. These sites are identified by using nuclear magnetic resonance (NMR) cross-relaxation and selective polarization transfer between nuclei in anesthetics and in membranes. Drs. Firestone and Homanics helped transgenic techniques to study the putative molecular targets of anesthetics and ethanol, testing the hypothesis that that these agents target certain gamma-aminobutyric acid receptor (GABA<sub>1</sub>-R) subunits.

Initially Dr. Xu's studies were funded by an NIH Director Shannon's award and a First Independent Research Support and Transition (FIRST) award (R29), which he successfully converted into an R01 grant, maintaining his focus on NMR studies of the mechanisms of general anesthesia. Subsequently, Dr. Homanics received an R01 award to investigate ethanol mechanisms in GABA<sub>1</sub>-R gene-targeted mice, and Dr. Tang was awarded an R01 grant to study basic, unifying characteristics of specific anesthetic interactions with channel-forming peptides using NMR.

In addition, during the last seven years, Dr. Xu has also carried out NMR investigations of cerebral protection and recovery after circulatory arrest. His second NIH R01 award focuses primarily on correlating histopathologic and neurobehavioral outcomes with regional cerebral blood flow, cerebral ion and water homeostasis, and brain-metabolism data obtained using NMR imaging.

During their tenure in Pittsburgh, Drs. Xu and Tang have published 22 peer-reviewed articles and 50 peer-reviewed abstracts. They are currently funded by three NIH R01 awards and a computing resource award from the National Science Foundation. Dr. Homanics has published 31 peer-reviewed articles and 70 peer-reviewed abstracts. He is now funded by four R01 grants and is principal investigator on a project that is part of a program project grant.
Faculty Inventors Spotlighted

To twist a phrase, the fruit of necessity is invention. Whether in the area of clinical care, education, or research, if the necessity – the missing piece – is a concept, a formula, or a device that does not yet exist, it may be that it will soon emerge from the inventive imagination of one of the members of the faculty.

Innovations developed by Department faculty members have recently caught the attention of the editorial staff of PittMed, the University of Pittsburgh School of Medicine quarterly magazine. Joseph A. Carcillo, MD and Edwin K. Jackson, PhD were highlighted in a feature story in the magazine’s January 2001 issue. Drs. Carcillo and Jackson developed a treatment that both prevents and treats sepsis-induced renal failure.

The article focused on the University of Pittsburgh’s Office of Technology Management, which is responsible for the protection and commercialization of intellectual property developed at Pitt and the UPMC. Through a peer-review process, the OTM’s Technology Transfer Committee evaluates the scientific merit and feasibility, and the patent and commercial potential of the intellectual property and then decides whether or not to apply for a patent and seek to market the invention. “Treatment of sepsis-induced acute renal failure,” which employs a phosphodiesterase-blocking agent, was granted U.S. Patent No. 5,849,774 in December 1998. Dr. Carcillo is a member of the Pediatric Critical Care Medicine faculty and an associate director of the Pediatric Intensive Care Unit at Children’s Hospital. Dr. Jackson is a professor of pharmacology at the School of Medicine.

The subsequent issue of PittMed, published in April, carried a feature story on a concept developed by John Schaefer, MD and former faculty member René Gonzales, MD. Manufactured by Laerdal, Inc., “AirMan” was conceived in answer to the need for a more portable – and more affordable – training mannequin capable of simulating clinical scenarios involving both normal and difficult-airway conditions. The training mannequins available prior to AirMan’s appearance were designed with essentially normal airway anatomy. Full-scale, computer-aided models, some of which could be made to simulate conditions of difficult airway, were too expensive and too bulky to be practical on a large scale.

Because health care professionals may encounter critical situations involving real patients with airway anomalies, the challenge for Drs. Schaefer and Gonzales was to develop a realistic and practical airway-management training tool that could be made more widely accessible to training programs. Their “Training mannequin for management of normal and abnormal airways” secured U.S. Patent No. 5,823,787 in October 1998.

On March 27, 2001, Paul Kempen, MD was issued U.S. Patent No. 6,206,858 for “Blunt tip cannula with access pin.” The main advantage of Dr. Kempen’s patented device is that it allows access into drug vials and latex ports that are not pre-pierced. The concept provides for direct access of latex or rubber membranes using a blunt cannula. The blunt cannulae that are currently on the market are limited by the drawback that they are intended for use only with pre-pierced membranes, making a sharp needle necessary in order to withdraw the drug into the syringe.

By 1995, Distinguished Professor Peter Safar, MD, along with Safar Team colleagues S. William Stezoski, and Miroslav Klain, MD, PhD, had secured two U.S. patents, one for the development of a portable, modular emergency cardiopulmonary bypass apparatus and the method of its use, and the other for an aortic balloon catheter (single- or double-balloon) that can be used for flushing or recirculating blood and fluids to specific vascular beds. The University of Pittsburgh has since licensed these patents to the Cardion Corp. of California, who has added extensions based on four additional patents secured by the Safar team. To bypass is meant for open-chest or closed-chest venoarterial pumping – via an oxygenator – for control of blood flow, pressure, temperature, and composition. The apparatus may be portable, to allow use by trained personnel responding anywhere. In addition, the device is adaptable to allow inclusion of one or more modules for “conditioning” the blood, such as a heat exchanger, plasma and blood-cell apheresis device, and others.
■ Raymond M. Planinsic, MD and his colleagues Drs. Ibtesam Hilmi, Charles Boucek, Shushma Aggarwal, Susan Milroy, John Fung, PB Schelde, and E Erhardsten were co-authors of an abstract that was selected as one of the 50 poster presentations included in the Festschrift held in honor of transplantation pioneer Dr. Thomas Starzl’s 75th birthday, which occurred on March 11. The abstract entitled “Use of Recombinant Factor VIIa May Improve Clotting Parameters in Patients Undergoing Orthotopic Liver Transplantation as Measured by Thromboelastography,” was also presented at the International Liver Transplantation Society 2001 Seventh Congress in Berlin July 11-13. In addition, Dr. Planinsic was an invited speaker at the 6th Novo Nordisk Symposium on the Treatment of Bleeding and Thrombotic Disorders, held May 3-4, 2001 in Copenhagen, Denmark, where he gave a talk based on recombinant factor VIIa use in liver transplantation patients.

■ At the annual meeting of the Association for Hospital Medical Education, Rita Patel, MD, Director of Anesthesiology Education Programs, gave a presentation entitled “Best Practices in Faculty Development: Educational Retreats.” The meeting was held this past May in Phoenix, Arizona. Dr. Patel also participated in 2001: An Education Odyssey, the annual meeting of the Society for Education in Anesthesia. She discussed “Evidence-Based Medicine” as part of a panel on Encouraging Residents to “Think Outside of the Box,” and she led a workshop on “Evidence-based Medicine in Clinical Practice and Education.” The meeting was held May 31 through June 3 in Cleveland, Ohio.

■ Mitchell P. Fink, MD, chief of the Division of Critical Care Medicine, has been elected to the Defense Scientific Review Council, the primary civilian scientific oversight body for the Defense Advanced Research Projects Agency. DARPA is a key research and development organization for the U.S. Department of Defense. Dr. Fink is principal investigator of a DARPA-funded project, Ringer’s Ethyl Pyruvate Solution as a Revolutionary Countermeasure for the Management of Septis in Septic Shock.

■ Michael Pinsky, MD and Yan Xu, PhD have been elected to the Association of University Anesthesiologists. Dr. Pinsky is director of research in the Division of Critical Care Medicine. Dr. Xu is a member of the Department’s research faculty.
Major Education Awards Go to Dr. Paul Rogers

At the medical school's ninth annual Curriculum Colloquium on May 22, **Paul L. Rogers**, MD, was one of two School of Medicine faculty members chosen by Dean Arthur S. Levine, MD to receive the prestigious Kenneth E. Schuit Award. The award is given in recognition of contributions to the medical school curriculum. Allen L. Humphrey, associate professor of neurobiology, was the other recipient of this year's Schuit Award. Dean Levine selected the recipients from among basic science and clinical faculty members who had been nominated by the School of Medicine's Curriculum Committee.

Dr. Rogers also earned the esteem of the School of Medicine's Class of 2001. The graduating class elected him to receive the Golden Apple Award for Best Clinical Teacher, and also chose him as one of three faculty members to participate in the graduation ceremony and place the graduation regalia on the students. In addition, this year's Medical Alumni Association Recognition Award was given in Dr. Rogers' name.

For his excellence as an educator, Dr. Paul L. Rogers received recognition from students, faculty, and alumni alike. He accepted four major honors at the close of Academic Year 2001, including the Golden Apple Award for Best Clinical Teacher.

PCCM Fellow Wins Clinical Research Award

Pediatric Critical Care Medicine Fellow **Hülya Bayraktar**, MD, was the recipient of the 2001 Fellow Clinical Research Award from the Society for Pediatric Research for her abstract entitled *Assessment of antioxidant reserve and oxidative stress in cerebrospinal fluid after severe traumatic brain injury in infants and children*, which she presented at the SPR meeting in Baltimore on April 30th. This comprehensive work was generated through a collaboration between the Traumatic Brain Injury Program at the Safar Center for Resuscitation Research and Dr. Valerian Kagan's expert free-radical biology group on the RIDC Park campus. The study was funded in part by a seed grant to Dr. Bayraktar from the Department of Anesthesiology/CCM, and also by grants from the Laerdal Foundation and the University of Pittsburgh Center for Injury Research and Control/CDC.

Residents Win WPSA Competition

Two of the Department's anesthesiology residents won recognition for their entries in Resident Research Competition sponsored by the Western Pennsylvania Society for Anesthesiology. The awards were conferred during the WPSA meeting held on May at the Grand Concourse, Station Square. In the Original Research category, third-year resident **Paul Davies**, MD won First Place for his study on "Oral Herpes Simplex Reactivation Following Intrathecal Morphine: A Prospective, Randomized Trial in the Obstetric Population." Second-year resident **Magdalena Anitecescu**, MD received a First Place award in the Case Report Category for her submission, "Successful Resuscitation Amniotic Fluid Embolism Complicated with DIC: A Case Report and Short Review."

Presentation Takes 3rd Place at ACGME Meeting

A poster presentation developed by Drs. **Rita Patel** and **Erin Sullivan** won third prize at "Focus on Medical Excellence," the annual meeting of the Accreditation Council for Graduate Medical Education (ACGME), held in Chicago in March of this year. The presentation was entitled "Incorporating the Core Competencies." The Core Competencies are: patient care; medical knowledge; practice-based learning; communication; professionalism; and systems-based.
practice. The ACGME has required that these be incorporated into all residency training programs as of July 2001.

**Dr. Safar Chosen for JH Scholar's Society**

Distinguished Professor of Resuscitation Medicine Peter Safar, MD has been elected to membership in the Johns Hopkins Society of Scholars. Induction of new members was held on May 23, 2001 in Baltimore. The Society honors the achievements of men and women who invested part of their careers at Johns Hopkins University. Dr. Safar came to Pittsburgh in 1961 from Baltimore, where, since the mid-1950s (at both Johns Hopkins and Baltimore City Hospital), he had devoted his efforts to the research that led to the lifesaving methods of cardiopulmonary resuscitation.

**Elaine Kasha, CRNA Earns Recognition**

The Board of Directors of the American Association of Nurse Anesthetists has selected Elaine Kasha, CRNA to receive the 9th Annual Clinical Instructor of the Year Award. The AANA established the Award in 1991 to recognize individuals who have made a significant contribution to the teaching of nurse anesthesia students in the clinical area. The Award recognizes the individual's commitment to the profession of nurse anesthesia and to the advancement of educational standards that further the art and science of anesthesia and result in high-quality patient care. The Award will be presented on Saturday, August 11, 2001 during the Opening Ceremonies of the AANA Annual Meeting in San Francisco, CA.

**Grants Awarded**

Joseph Quinlan, MD and John Gorcsan, MD have received a Department of Anesthesiology & Critical Care Medicine Seed Grant for their study entitled: *The effects of inflammatory mediators on left ventricular function in patients undergoing coronary artery bypass surgery: Off-pump versus cardiopulmonary bypass.*

James V. Snyder, MD has received a Laerdal foundation grant for his study: *An Efficient Method to Evaluate Stroke Therapy in Non-human Primates.*

**Department News**

**Lectures Honor Memory of Pediatric Intensivist**

The late Stephan Kampschulte, MD, first chief of the multidisciplinary intensive care unit at Children's Hospital of Pittsburgh, was remembered in two special Grand Rounds lectures on May 31. The morning lecture, sponsored by Children's Hospital and the Department of Pediatrics, was presented by Peter Holbrook, MD, who spoke on "Examining the Axioms." Dr. Holbrook completed his fellowship in critical care medicine at the University of Pittsburgh, under the direction of Dr. Kampschulte and Dr. Peter Safar, first chairman of the Department of Anesthesiology & CCM. He is currently a professor of anesthesia and pediatrics at the George Washington University School of Medicine, and chief medical officer at the Children's National Medical Center in Washington, D.C.

The afternoon lecture, sponsored by UPMC and the Department of Anesthesiology & Critical Care Medicine, was presented by John J. Downes, MD. Dr. Downes pioneered the development of the pediatric intensive care unit at the Children's Hospital of Philadelphia, the first pediatric ICU in the United States. (The ICU at Pittsburgh Children's Hospital was the second.) The title of his lecture was "The Origins and Development of Pediatric Anesthesiology and Critical Care." Dr. Downes is professor emeritus of anesthesia and pediatrics at the University of Pennsylvania School of Medicine; medical director of the Ventilator-Assisted Children's Home Program, Commonwealth of Pennsylvania Department of Health; and senior attending physician in the Division of Critical Care Medicine, Department of Anesthesiology and Critical Care Medicine, Children's Hospital of Philadelphia.

In 1974, Dr. Kampschulte left Pittsburgh to return to Germany, where he served as chief anesthesiologist of the large city hospital of Munich in Schwabing until his death in 1994. Dr. Kampschulte's widow, Marie-Luise Kampschulte-Lembke, MD, a former physician trainee in our Department, was present for the memorial lectures. She lives in Munich with the couple's three children.
Pitt Hosts Malignant Hyperthermia Conference

The North American Malignant Hyperthermia Biopsy Center held its 7th Conference in Pittsburgh last March featuring experts from several disciplines at the University of Pittsburgh, and presentations by researchers from around the world.

Michael Gorin, MD, PhD, director of the University of Pittsburgh Center for Human Genetics and Integrative Biology, characterized MH research as an example of the interface between genetics and public health. Betsy Gettig, director of UPMC’s Genetic Counseling Training Program, discussed the significance of medical genetics evaluation for families. Jeffrey Kant, MD, PhD, director of the UPMC Molecular Diagnostic Laboratory, discussed quality control in genetic testing. Dennis Swanson, vice-chairman of the UPMC’s Institutional Review Board, discussed federal requirements for protecting confidentiality, particularly in genetic research and in registries.

Lawyers from Children’s Hospital discussed telecommunications liability. This topic has a direct bearing on the MH Hotline, a 24-hour telephone consultation service provided by the Malignant Hyperthermia Association of the United States (MHAUS). The Hotline is also a major source of data reported to the North American MH Registry. Pittsburgh has been the home of the MH Registry since Dr. Barbara Brandom became its medical director in 1999.

Dr. Marilyn Larach, the MH Registry’s senior research advisor, moderated a session on research on the genetics of MH. Technical presentations followed, on topics ranging from cellular and biochemical investigations to genetic epidemiology and population studies.

(MHAUS) President Dr. Henry Rosenberg reviewed progress in MH research. Since the 1960s, we have learned that classic MH is one type of dysregulation of calcium control in skeletal muscle and that other abnormalities may also produce MH-like events. Both haplotype analysis and contracture testing are recommended for evaluation of MH susceptibility. Conference attendees resolved to work to develop a tissue repository to support genetic research in MH.

Association of University Anesthesiologists

The 48th Annual Meeting of the Association of University Anesthesiologists (AUA) was held in Rochester, NY this past May. A paper submitted by Drs. Pei Tang and Yan Xu was featured at the prestigious oral presentation scientific sessions. Other members of the Department, including Ferenc Gyulai, MD and Jiro Kurata, MD, PhD, were successful in the competition for scientific poster discussion and poster presentations, respectively. Dr. Doris Cope, professor and clinical director of the Department’s Multidisciplinary Pain Medicine Program, chaired the Educational Advisory Board, which presented a program on “Funding the Academic Mission – Creative Solutions.” Following a recently established AUA tradition, Bernard F. Driscoll, PhD (of the Center for Scientific Review, National Institute of General Medical Sciences) gave an overview of highly underutilized funding mechanisms available to anesthesiologists and critical care specialists competing in both basic and clinical sciences. The AUA President’s Panel (organized by Alex S. Evers, MD, professor and chairman at Washington University, St Louis, MO) focused on the implications of the human genome project for anesthesiaology and perioperative medicine. Abstracts presented by Department faculty included the following:

Tang P, Xu Y. Hypothesis: unitary mechanisms of general anesthesia based on protein dynamics.

Gyulai F, Firestone L, Mintun M. Halothane-related potentiation of GABA receptor-mediated metabolic depression in vivo by positron emission tomography (PET).

Kurata J, Thulborn KR, Desjardins B, Davis D, Firestone LL. Cerebral interactions between pain and visual stimulation by fMRI.

International Anesthesia Research Society

Two abstracts were accepted from Department faculty members for presentation at the IARS 75th Clinical and Scientific Congress, held March 16-20, 2001 in Fort Lauderdale, Florida:

Brandom BW, Rosenberg H. Rhabdomyolysis – Cases from the MH Hotline.

In the Research Award Session, Ferenc Gyulai, MD, recipient of the 2000 IARS Clinical Scholarship Award, gave an oral presentation on his findings, entitled “Isoflurane affects GABA<sub>A</sub>-receptor conformation but not density *in vitro* in humans.”

**International Trauma Anesthesia and Critical Care Society**

Two faculty members gave talks as part of panel discussions during *Trauma Care 2001*—The 14th Annual Trauma Anesthesia and Critical Care Symposium and World Exposition, held this past May in San Diego, California. John J. Schaefer III, MD spoke on “How to Train Simulation Instructors,” as part of the panel on “The Role of Simulation and Patient Safety in the New Millennium.” Ernesto Pretto, MD participated in a panel discussion on Disaster Medicine, with a presentation entitled “Information and Decision Support Systems for Trauma and Disaster Medical Care.”

**International Symposium on Intensive Care and Emergency Medicine**

Five Department faculty members participated in the 21st International Symposium on Intensive Care and Emergency Medicine held March 20-23, 2001 in Brussels, Belgium. The Symposium was sponsored by the Department of Intensive Care and Emergency Medicine of the Erasme Hospital, in association with the Belgian Society of Intensive Care and Emergency Medicine. The University of Pittsburgh participants moderated various workshops, chaired round-table discussions, presented tutorials, and led or contributed to panel discussions in their particular fields of expertise. Following is a brief sample of their symposium activities: Derek C. Angus, MB ChB moderated a workshop on ICU organization as a determinant of outcome, and co-chaired a panel on outcome measures. Joseph A. Carcillo, MD participated in panel discussions with his talks on immunoparalysis in children and hemodynamic stabilization of septic shock, and gave a tutorial on drug therapy in the pediatric ICU.

Mitchell P. Fink, MD chaired a round-table discussion on mechanisms of organ dysfunction in critical illness, and co-chaired a discussion on hepato-splanchnic circulation and function. As part of a panel discussion on pediatric intensive care, Patrick M. Kochanek, MD gave a presentation on head trauma. Michael R. Pinsky, MD was a member of the Program Committee, chaired an assembly, and delivered lectures on hemodynamic consequences of mechanical ventilation and myocardial depression in sepsis.

**American Thoracic Society**

The CCM faculty maintained a high profile in the American Thoracic Society’s annual international conference in San Francisco this May. Several faculty members and fellows attended this meeting, whose overall attendance exceeded 16,000. The Department was well represented in the scientific program. The outcomes research group, including Drs. Derek Angus, Gilles Clermont, and Scott Watson, presented five abstracts, including two by fellows Jan Kasal and Vladimir Kaplan. Dr. Angus presented a lecture on the validity of secondary data sets. The cardiopulmonary/sepsis research group led by Dr. Michael R. Pinsky presented five abstracts, including one by Drs. Scott Gunn and Peter Harrigan. In a pro-con debate, Dr. Pinsky discussed the use of CVP in management of the critically ill. Finally, Dr. Mitchell Fink chaired a session on new treatment modalities in shock.

**Shock Society**

Four abstracts from researchers in the Division of Critical Care Medicine were accepted for presentation at the 24th Annual Conference on Shock, held June 9-12 in Marco Island, Florida. In addition, Peter Safar, MD co-chaired a workshop on Resuscitative Therapies in Shock, in which Samuel A. Tisherman, MD discussed “Hypothermia in the treatment of hemorrhage.” The following abstracts were presented:

Tawadrous Z, Delude R, Fink MP. *Ringer's ethyl pyruvate solution (REPS) improves survival and ameliorates gut barrier dysfunction in a rat model of hemorrhagic shock.*

Sappington P, Yang H, Delude R, Tracey KJ, Fink MP. *Recombinant HMG-1 “B-Box” increases the permeability of Caco-2 enterocytic monolayers via a RAGE-dependent mechanism.*


Khan AU, Delude RL, Fink MP. *Pro-inflammatory cytokines decrease oxygen consumption by Caco-2 enterocytes: Role of peroxynitrite and poly-ADP-ribose polymerase (PARP).*
**Former Faculty Members to Pilot Programs at Harvard, Mayo**

Dr. W. David Watkins, former medical director of the Pittsburgh Clinical Research Network (PCRN), has become the chief operating officer of the recently organized Harvard Clinical Research Institute, where he hopes to play a leadership role in redefining the clinical research process. He has also accepted an academic appointment at the Harvard Medical School, and he maintains a clinical appointment at Brigham and Women's Hospital. While at the University of Pittsburgh, Dr. Watkins was the medical director of our Department's Clinical Trials Program (CTP), which spawned PCRN in 1998. Under his direction, CTP continued to promote and sponsor faculty participation in clinical research. Dr. Watkins' long-term goal is to create an infrastructure for clinical trials in academic health systems that can be reflected in many institutions with a commitment both to high standards for clinical research and to the discipline of business management.

Dr. Watkins' former responsibilities at PCRN have been incorporated in the newly created position of chief medical officer of PCRN, now held by S. Clifford Schold, MD. In addition to his new position at PCRN, Dr. Schold is director of the University of Pittsburgh Cancer Institute's Neuro-Oncology Program and assistant vice-chancellor for clinical research at the University of Pittsburgh.

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MCCTP alumnus and Liver Transplant ICU co-director **David J. Kramer**, MD has accepted an invitation to create a transplant ICU service at the Mayo Clinic Jacksonville, Florida. Dr. Kramer had been a faculty member in the Division of Critical Care Medicine since completing his fellowship in the Multidisciplinary Critical Care Training Program here in 1988. He served as co-director of the Liver Transplant ICU beginning in 1989. The new Mayo transplant ICU will offer intensive care services for patients before and after transplantation of liver, pancreas, and/or kidneys. Dr. Kramer also plans to extend and develop his research with liver-support devices, and he hopes to continue the collaborations nurtured with the CCM group in Pittsburgh.

Dr. Kramer's research interests at Pitt included: oxygen transport and utilization (with Dr. Robert Schlichtig); regional pressure-flow relationships in sepsis (with Drs. Michael Pinsky and George Matuschak); outcomes of liver transplantation for critically ill patients (with Dr. Derek Angus); infectious complications of liver transplant candidates and recipients (with Dr. Peter Linden); and dialytic support and acid-base problems (with Dr. John Kellum). He also worked with Dr. George Mazari egos the laboratory studying bioartificial liver support, and he conducted a series of clinical trials of liver-support devices for patients with fulminant hepatic failure.

**Moving on**

During the past five years Kramer was twice chosen to receive the CCM Outstanding Teacher award, and he was a three-time recipient of the CCM Outstanding Clinician award. Those awards are based on CCM fellows’ evaluations of the faculty. He held secondary faculty appointments in the departments of Medicine and Surgery.
Welcome, New Residents & Fellows

Best wishes for a successful residency or fellowship to the following trainees, who either began or will soon begin their designated training programs this academic year.

**Anesthesiology**

**First-Year Residents**
- Miriam Anixter, MD
- Ray Liao, MD
- Gregory Olenic, MD
- M. Shannon Peattie, MD
- Barry Ray, MD
- Carl Rest, MD
- Anna Uskova, MD
- Nasr Yazigi, MD

**Pediatric Anesthesia**
- Marco Maurota, MD
- Yuriy Medvid, MD

**Cardiac Anesthesia**
- Andrew Murray, MD

**Pain Medicine**
- Meera Appaswamy, MD
- Harinaya Balasubramanian, MD
- Shashank Saxena, MD

**Critical Care Medicine Fellowship**

- **Anesthesiology**
  - Vimaka Ramesh, MD

- **Internal Medicine**
  - Omer Bajwa, MD
  - Francisco Brun, MD
  - Ezz Fami, MD
  - Kim Goring, MD
  - Ritu Khanna, MD
  - Paul Kitsis, MD
  - Linas Mockus, MD
  - Joel Orevillo, MD
  - Ahmad Rashid, MD
  - L. Scott Wilner, MD

- **Emergency Medicine**
  - David Huang, MD

- **Internal Medicine/Emergency Medicine**
  - Kyle Gunnerson, MD

- **Surgery**
  - Louis Akecon, MD
  - Dennis Ashley, MD

**Pediatric Critical Care Medicine**
- Mandep Chadha, MD
- Yi-Chen Lai, MD
- Rod Tarrago, MD
- Christine Zawistowski, MD

**Safar Center for Resuscitation Research**
- Ala Nozari, MD, PhD

**Anesthesiology/CCM**
SU Publication Recognizes Practice Manager

Cathy Nenninger, MBA, practice manager for Anesthesiology at Children's Hospital (formerly at both Children's and Magee-Womens hospitals), was featured in the Fall 2000 issue of SU Management, a publication of her graduate alma mater, Syracuse University School of Management. In the 400-word article, Cathy discusses the challenges of maintaining a top-quality practice in an age of declining insurance reimbursement. She also talked about mastering the knack of balancing the demands of her job with the responsibilities of being a wife and the mother of two preschool-aged children (and another one on the way!).

Cathy is pictured here (center) with (from left) Anesthesiology faculty members Drs. Barbara Brandon, Richard Bjerke, and Peter Davis, and Simulation Center Coordinator/Technologist Carole Cox. (PHOTOGRAPH COURTESY OF BLAYNE BEAL)