

Anesthesiology & Critical Care News

Published by
The Department of Anesthesiology
and Critical Care Medicine
University of Pittsburgh

Spring 1998

EDITOR'S NOTE

It is an exciting task to be editor of our departmental newsletter. You are likely to find this issue to be more informative and better than ever before. Contributions by our departmental faculty members and physician trainees at national and

international meetings have reached new peaks. Furthermore, the expansion of UPMCHS to surrounding hospitals in the Pittsburgh area is described in the lead story of this newsletter, with each chief anesthesiologist contributing a brief report on the activities at his outlying hospital.

Input by editorial committee members is greatly appreciated. In addition, Lisa Goetz, PhD, recruited last year as our publishing editor, has demonstrated such excellent talents, she is now the main reason for the success of our newsletter.

As you read this Spring edition of our newsletter, you may consider new ideas for a future publication, find areas or activities which should be described in a later edition, perhaps in the Fall of this year, or you may notice unintentionally omitted information which should have been included and can be published in an upcoming issue later on. If so, by all means bring this to our attention at your convenience, by phone, fax, or e-mail.

As the days are becoming longer and warmer at this time of year, we wish you all a pleasant closing of this newsletter and an excellent Pittsburgh summer.

By Ake Grenvik, MD, PhD

Department In Step With UPMC Health System Expansion

As the UPMCHS establishes itself as the premier provider of health services in Western Pennsylvania, the Department of Anesthesiology and Critical Care Medicine assumes a leadership role at the expansion sites.

The Fall 1997 newsletter featured my reflections on The UPMC Health System's strategy of clinical expansion. In this current issue, members of our department's new generation of clinical directors were invited to share their own perceptions of the problems and opportunities created by the growing integrated delivery system. Three of the new clinical sites (UPMC South Side, Beaver Valley, and Braddock) are modest-sized community hospitals; another (UPMC Shadyside) is a tertiary care center; and, the fifth (UPMC South Surgery Center) is the first of several free-standing surgicenter facilities to be directed by members of our faculty.

As medicine in Western Pennsylvania evolves, our faculty continues to partner with, and problem solve on behalf of, our Health System. The role to be played by these new UPMC sites in our educational and research missions will surely evolve, as well. Some of these remark-

able transitions are described below; future issues of this newsletter will no doubt describe others.

— Leonard Firestone, MD, *Safar Professor and Chairman*

UPMC South Side

by Raymond Schwartz, MD

Since the purchase of the South Side Hospital by UPMC in 1996, our department assumed responsibility for the anesthesia service. Ray Schwartz, MD, was named Chief of the UPMC South Side Department of Anesthesiology

that same year. The staff, which besides Dr. Schwartz presently includes Drs. Steven Orebaugh and Yogini Mehta, strives to provide the highest quality of patient care for the South Side community. With this goal in mind, a few recent changes implemented include simplification of the preoperative testing guidelines; an improved epidural service for the management of postoperative pain; and development of guidelines for invasive monitoring in the intensive care unit. Members of the anesthesia staff participate in key hospital committees, and



active involvement with other members of the medical staff has helped to promote trust between the community physicians and the incoming UPMC faculty.

UPMC South Side also became a teaching site for the University of Pittsburgh School of Nurse Anesthesia program in 1997. Thus far, feedback from both students and our CRNA staff suggests that the program is off to a strong start.

From 1993 through 1995 there was a steadily decreasing surgical case load at South Side; fortunately, that trend is now reversed as indicated by an approximately 20% case load increase over the past two years. None of the surgeons who practiced at South Side prior to the UPMC takeover have left, and the addition of several University surgeons has now made a significant contribution to the case load.

UPMC Beaver Valley

by Jan Smith, MD

The Department of Anesthesiology at the University of Pittsburgh assumed full responsibility for anesthesia services at UPMC Beaver Valley (formerly Aliquippa Hospital) during the academic



year 1996-1997. Initially begun with the collaboration of an anesthesiologist previously associated with Aliquippa Hospital, the staff has now evolved into an entirely University faculty, with a solo daily staffing plan. Dr. Jan Smith is the Chief Anesthesiologist, and the following anesthesiologists have practiced at Beaver Valley at various times this year: Carol Rose, Brian Williams, Tom Boerner, David Wilks, Rob Krohner, Ray Leanza, and Kathy Crivell. All of these University physicians have contributed substantially to establishing the highest standard of anesthesia care. The anesthesia care team approach is very prevalent at UPMC Beaver Valley and is driven by mutual respect and collaboration among the team's doctors.

Patient volume has slowly increased, and it is anticipated that this trend will continue during the coming year. For example, changes have been seen in the increase in vascular surgical care, largely due to the efforts of UPMC surgeons. The establishment of a Behavioral Health Unit will create the possibility of anesthesiologists' involvement in ECT treatments. In addition, the appointment of a new CEO and President, Thomas Timcho, has been warmly received, and Dr. Smith has been named hospital Medical Director.

There are formidable challenges in the year ahead, yet the future remains exciting and bright. The establishment of an Ambulatory Surgery Center in Moon Township may impact on patient volume. The creation of a UPMC Beaver Valley PHO with an emphasis on quality patient care within the Tri-State Network could change practice patterns among some physicians. The leadership provided by the new CEO is infectious in its positivity. Many of us are pleased to be part of the change and the rebuilding of a hospital that has played such an important part in the lives of so many citizens of Aliquippa.

UPMC South Surgery Center (Bethel Park)

By Brian Melnick, MD

The UPMC South Surgery Center held its "grand opening" on January 18, 1998. Although initially conceived as a physically and economically free-standing ambulatory surgical center, it is officially designated a hospital-based facility due to reimbursement technicalities. Nonetheless, this change does not affect the types of surgical procedures performed at the Center. Our department's presence includes one anesthesiologist who is also the Medical Director of the ORs, and two full-time CRNAs. The facility can potentially accommodate four simultaneous surgical procedures. One of the goals of the Center is to inspire community surgeons to practice within the UPMC Health System. To date, approximately forty surgeons have, or are in the process of applying for, privileges.



UPMC Shadyside

By Richard Feduska, MD

On January 1, 1998, the physicians of Aiken Anesthesia Associates became members of the University Anesthesiology and Critical Care Medicine Foundation. This move was significant, because it represented the first integration among departments and specialists between UPMC Presbyterian and UPMC Shadyside. The department currently comprises 11 anesthesiologists and 21 nurse anesthetists, providing anesthesia care in UPMC Shadyside's main operating room suite, ambulatory OR suite, and obstetrical suite. The department performed 12,800 surgical anesthetics during the past year, which included 1,300 for cardiac surgical procedures. In addition, the department supervises 800 obstetrical deliveries per year.

Members of the department include Drs. Richard Feduska (Chief), James Acuff, David Cambier, Cynthia Duarte, John Galdun, Stephen Karpinski, Christopher Larson, Marc Metcalfe, Raymond Seifert, Jack Scott, and Mark Storey. Susan Niemi, CRNA, is the Chief Nurse Anesthetist.



During the upcoming year, the department is preparing to meet the expanding caseload resulting from movement of various services to UPMC Shadyside from other areas of the UPMC Health System. Four renovated operating rooms will be opening in the spring of 1998 to accommodate these anticipated increases in surgical case load.

UPMC Braddock

By Moyses Mandel, MD

UPMC Braddock is a 250-bed hospital that serves 200,000 people in the Monongahela Valley. The economies of the Mon Valley and Turtle Creek areas have been hit hard by the closure of many industries in the recent past. However, UPMC Braddock continues as a constant presence in this region, both as a provider of

health care and a leading employer. The recent merger with the UPMC Health System has improved the access for local residents to many sophisticated medical specialties and services.

The Department of Anesthesiology at UPMC Braddock provides services to most surgical specialties. It is

staffed by five full-time CRNAs and two full-time anesthesiologists. The average yearly case load is about 2,500. The new surgical suite, scheduled to open in June 1998, was designed in collaboration with our department, and it will contain state-of-the-art equipment and completely new monitoring tools (e.g., TEE) for our anesthesiologists. The case load and complexity are varied, but the population is predominantly geriatric, with the panoply of diseases common to that subset of patients. It is not unusual to have ASA IV and V patients in need of acute or scheduled care.

The postoperative care is of excellent quality, boasting a newly renovated critical care area and community outreach programs to help patients in need of continued home nursing care.

UPMC Braddock is by nature a very cost-effective institution. This may prove to be a tremendous edge in the managed care environment. As such, the future looks bright and promising, both for the population of the Mon Valley and the staff of UPMC Braddock.



Eliminating the Guesswork: Bloom's BIS Monitor

Anesthesiologist Marc Bloom, MD, PhD, has generated his share of media attention lately. Courted recently by the *Pittsburgh Post-Gazette*, KDKA-TV, and WPXI-TV, among others, Dr. Bloom has been touting the bispectral index (BIS) monitor. As co-developer of the BIS monitor (or what he often calls "the box"), Bloom explains, "It's a new device of measurement in a field that never before had such a yardstick."

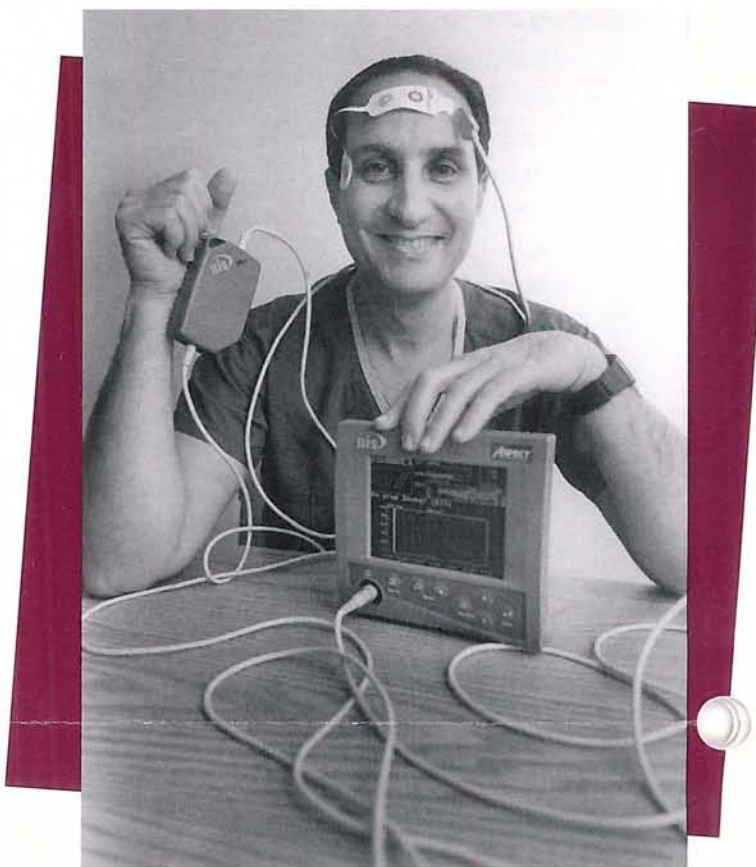
When Bloom, who has long been interested in experimenting with statistical analysis of electroencephalograms (EEGs) and their usefulness in the practice of anesthesiology, shifted his focus from the detection of ischemia to EEG wave patterns, phases, and frequencies of people under different levels of sedation, his research began to offer promising results. Eventually, Bloom joined Aspect Medical Systems of Natick, MA, a company then developing their own monitor, and convinced them that the function of the monitor should be to measure levels of consciousness, rather than total level of anesthesia.

Bloom, who holds a doctorate in bio-engineering, notes, "It has always been my view that anesthesiology suffers from too much qualitative description and not enough quantita-

tive objectivity to measure what we're doing."

The BIS monitor analyzes brain wave activity in order to allow anesthesiologists and nurse anesthetists to measure a patient's degree of consciousness in the OR. The BIS monitor presents its readings as numbers between 100 (fully awake state) and 0 (brain death). The ideal BIS reading during surgery is around 50. According to Bloom, the BIS aids the anesthesiologist in two ways. First, there is the application which has been getting much sensationalized attention in the press: the ability of the BIS to detect intra-operative awareness. As Bloom notes, no one has ever reported awareness with a BIS reading under 80. The monitor's more practical use is to avoid the common practice of an approximate 40% systematic overdose that is given to avoid OR awareness.

In addition, the use of the BIS monitor promises other potential benefits, such as a faster wake-up time after surgery, shorter stay in the PACU, and faster discharge from same-day surgery. Moreover, the BIS could reduce the consumption of anesthetic agents by 40%, allow anesthesiologists to administer expensive agents more economically, and simplify the use of rapid-acting



agents. However, Bloom notes, none of these gains can occur unless anesthesiologists use the box consistently.

And there's the rub. Despite the positive press and the subsequent requests of several patients per day for the use of the BIS monitor, some administrators and colleagues have been reluctant to commit to the device.

Critics of the monitor claim that it is not consistent, that it takes too long to set up, and that it is no substitution for the anesthesiologist's keenly trained instinct. But according to Bloom, "The box isn't going

to replace anesthesiologists; it's just going to make them better."

He further defends the monitor by noting that it provides information about brain response that previously has been unavailable. To the naysayers, he offers the argument that use of the device is similar to the way a twitch-monitor is used to measure the effect of muscle relaxants. Bloom concedes the box is not perfect, but he contends that neither is other monitoring equipment in the OR. Thus, the anesthesiologist's critical eye and power of observation remain important components

in using the BIS. In addition, he claims that the device takes only about 30 seconds to set up. As for the cost, Bloom argues that if the monitor saves a doctor and/or the hospital from one lawsuit, it is worth all of the money spent on electrodes for years.

Furthermore, Bloom notes that the greatest misinterpretation of critics is that the monitor is designed to predict the future. According to Bloom, the device is not a predictor of even one minute into the future. Instead, it demonstrates the patient's reaction to what the anesthesiologist has done moments ago.

"If you use the box in every general anesthesia case for one week, you will be surprised by what it tells you. You'll find out something you would not have known otherwise," Bloom contends.

The BIS monitor has been in regular use since February in the UPMC Presbyterian surgical center, where anesthesiologists are supposed to use it for every general anesthetic. Enticing the critics to try the device, Bloom challenges them to find conditions in which the machine will not work, "There are dozens of studies waiting to happen, and I welcome them."

Validated by multi-center trials, the BIS monitor is appearing

in OR suites across the country. UPMC has 26 monitors and is expected to have 39 by June. At last count, Massachusetts General Hospital has 27 devices; Cedars Sinai Medical Center has 25; and many small hospitals have one in every OR.

The future for the BIS monitor includes identifying its best uses and failure modes and using it to better define what is considered the standard proper dosage for various agents. Today, the device suggests how much of an agent to give; ten years from now Bloom hopes the machine can itself drive the drug to the patient, with the anesthesiologist's approval. Bloom also predicts that the machine will get smaller and become integrated into other OR monitoring equipment. Though the device now can measure sedative effect, Bloom says that work is under way to determine analgesic effect either via BIS or a new monitor index.

As for urging widespread use of the BIS monitor, Bloom says, "I have to be optimistic because I know how this technology was developed. It will stand up to critical scrutiny, and it's a valuable tool if people are willing to use it properly and consistently."

To learn more about the BIS monitor visit www.asnm.org/bis.

MCCTP Web Site — Revised and Better Than Ever

By Jim Rieker, PhD, Curriculum Coordinator, MCCTP

The Multidisciplinary Critical Care Training Program (MCCTP) has launched a revised web site. The address remains the same (www.anes.upmc.edu/mcctp), but the site now sports a new design in order to give the user a more efficient experience. In addition, the site now has more pages in operation and includes more links.

The site was designed to provide easy access to relevant, up-to-date information about critical care medicine and the MCCTP and will serve a variety of needs: Fellows, faculty members, and alumni may keep abreast of developments in the program; healthcare professionals new to critical care medicine may find relevant links; potential future fellows will learn about the educational opportunities available within Critical Care Medicine at the University of Pittsburgh.

At the MCCTP web site a user can apply on-line for an MCCTP fellowship; find out about current events in CCM; and explore links to online critical care resources.

Furthermore, the web site will host the MCCTP Journal Club—an online publication with critiques of recent research papers of interest to the critical care practitioner. During a regularly scheduled Journal Club meeting in the department, the MCCTP fellows present their synopses of recent works, basing their critique on principles put forth in the practice of evidence-based medicine. The editor, John Kellum, MD, is extremely excited about the educational opportunities for the MCCTP fellows in the presentations for the Journal Club and the benefit scholars receive through access to these online reviews.

In the future, the site will host other pertinent information, such as daily lecture schedules, a Critical Care Medicine Grand Rounds section, access to curricular materials for the MCCTP fellows, and, possibly, CME in critical care medicine.

Because the site is sure to evolve, check back often. Please submit items of interest to Jim Rieker at riecker@smtp.anes.upmc.edu.



FROM LEFT:
Winter
Angus
Smith
Lebowitz

Dr. Winter Returns to Department

by Peter Winter, MD

Following discussion with and encouragement from our chairman, I have decided to reenter the department on a part-time basis, with a specific purpose. My new role is to further career development with and for individual faculty.

Successful pursuit of an academic career requires careful thought, detailed and repetitive planning, identifiable goals, a methodology for getting there, and ongoing self-assessment. There are many ways to achieve success in academic medicine, including teaching, research, and clinical leadership.

The department has the assets and resources to help faculty members (and senior trainees) to fulfill their own goals. One of my jobs will be to help in the allocation and rational use of those resources. I plan to make focused material, guidelines, and information available to all faculty. Most importantly, however, I offer to meet with faculty members individually to initiate and/or facilitate such matters for their own career achievement. Such discussions will be held in confidence. Please take advantage of the offer.

You may call my secretary, Ms. Kathleen Prunte, at 692-4500. She will get us together at a mutually convenient time.

Winter Honored

The Pennsylvania Society of Anesthesiologists honored Peter Winter, MD, with its Distinguished Service Award on March 31 at the annual meeting held this year in Bermuda.

Faculty Promotions

Derek C. Angus, MD, has been promoted to Associate Professor of Anesthesiology and Critical Care Medicine, effective July 1, 1998.

Ethelyn Daniel, MD, has been promoted to Associate Professor of Clinical Anesthesiology, effective July 1, 1998.

Julie A. Tome, MD, has been promoted to Associate Professor of Anesthesiology, effective July 1, 1998.

Faculty Appointments

Doris Cope, MD, has been appointed Professor of Clinical Anesthesiology, effective July 1, 1998.

Philip Lebowitz, MD, MBA, has been appointed Professor of Anesthesiology, effective June 1, 1998.

Smith Named Medical Director

Jan Smith, MD, has been named Medical Director, UPMC Beaver Valley effective January 2. Dr. Smith will serve as the liaison between hospital administration and the medical staff. In addition, he is the Chief of Anesthesiology for UPMC Beaver Valley.

Lebowitz Appointment

Philip Lebowitz, MD, MBA, has been appointed Medical Director of OR Scheduling at UPMC Presbyterian effective March 1, 1998. In addition, Dr. Lebowitz is Chief Anesthesiologist for UPMC Presbyterian.

Powner Named FCCS Chair

David Powner, MD, is the National Committee Chair of the Fundamental Critical Care Support (FCCS) program of the Society of Critical Care Medicine. The FCCS program sponsors worldwide continuing education courses in critical care medicine.

CCM Faculty Honors

Ann Thompson, MD, Director, Pediatric ICU, and Director, Pediatric Critical Care Training Program, was appointed Secretary of the Society of Critical Care Medicine.

Safar Honored

Peter Safar, MD, was named an Honorary Member of the National Academy of Medicine and also of the College of Physicians and Surgeons of Costa Rica at the Pan American Congress on Emergency and Disaster Medicine held by the World Association for Disaster and Emergency Medicine on March 2-6. Dr. Safar was honored for his work on behalf of Latin American countries since the 1950s and for the co-initiation of modern disaster medicine research.



Pittsburgh delegation to the Pan American Congress of Disaster and Emergency Medicine (l to r): Dr. Nicholas Bircher; Dr. Patrick Kochanek; Dr. Daniel Rodriguez; Dr. Peter Safar; Dr. Ernesto Pretto.



Michael Pinsky, MD, was named 1998 Chair of the SSCM's International Liaison Committee.

Dan Thompson, MD, was elected Chairman of the Board of Regents of the American College of Critical Care Medicine.

Derek Angus, MD, and **Carl Sirio, MD**, were inducted as Fellows in the American College of Critical Care Medicine.

Michael DeVita, MD, was the SSCM recipient of the 1997 Ake Grenvik Memorial Award for Critical Care Ethics.

Dr. Elisabet Nystrom Visiting Assistant Professor

By Ake Grenvik, MD, PhD

Three and a half years ago the Nystrom physician couple were recruited to UPMC. Dr. Ake Nystrom is a visiting associate professor in plastic surgery and serves as director of hand surgery. Dr. Elisabet Nystrom was appointed visiting assistant professor in our Department of Anesthesiology on December 1, 1994, where she served both clinically and in research. With Dr. Charles Buffington as her eminently qualified mentor, Dr. Nystrom completed clinical and experimental studies on epidural anesthesia with emphasis on anatomical

factors and cardiorespiratory effects of different local anesthetics, especially bupivacaine. She anticipates presentation and publication of the results in academic year 98/99 as a medical thesis in Sweden providing her with the equivalent of a PhD. This will be at the University of Umea in Northern Sweden from where the two Nystroms were recruited to Pittsburgh.

Last Fall, Dr. Elisabet Nystrom returned to Sweden to serve as chief of OR anesthesiology at the Central Hospital of Karlskrona in Southern Sweden from December 1, 1997. However, heavy clinical duties did not permit her to finalize her manuscripts and publications of the research done in Pittsburgh. Because her husband was reappointed for a second period in the Surgical Department, Dr. Nystrom decided to return to Pittsburgh in March this year to finalize her medical thesis, collaborating again with Dr. Buffington, whom she praises for his excellent leadership as her research mentor. The two Nystroms have decided to remain in the US for the foreseeable future. We greet Elisabet welcome back to Pittsburgh and wish her good luck with the defense of her medical thesis in the near future.



Koerner

1998-1999 Chief Anesthesiology Resident

Ken Koerner, MD, has been named Chief Resident of Anesthesiology for academic year 1998-1999.

Congratulations To 1998 Graduates

Anesthesiology Residents

Neeti Chandra, MD
Gregory Stewart Chang, MD
Barbara Michel Fried, MD
Victor Francis Kubit, MD
Alexander Jung-Hwan Lim, MD
Henry F. Malarkey, IV, MD
David G. Metro, Jr., MD
Todd Matthew Oravitz, MD
George Joseph Ranier, MD
Rafael Rico, MD
Joy Lederman Roth, MD
Denise Ann Scaringe, MD
Regis T. Switala, MD
Kenichi Tanaka, MD

Anesthesiology Fellows

Roberto A. Atilas, MD
PEDIATRIC ANESTHESIOLOGY
James Robert Diesfeld, MD
PAIN MANAGEMENT
Susan Drelich, MD
PEDIATRIC ANESTHESIOLOGY
Gavin F. Fine, MB, ChB
PEDIATRIC ANESTHESIOLOGY
Theresa Anne Gelzinis, MD
CARDIAC ANESTHESIOLOGY
Kenneth R. Goldschneider, MD
PEDIATRIC ANESTHESIOLOGY
William Jones, MD
PEDIATRIC ANESTHESIOLOGY
Lubna C. Khan, MD
PEDIATRIC ANESTHESIOLOGY
Arun Lall, MD
PAIN MANAGEMENT

Jeremy Samuel Lee, MD
PEDIATRIC ANESTHESIOLOGY

Kevin Charles Matrosic, MD
PEDIATRIC ANESTHESIOLOGY

Juhan Paiste, MD
PAIN MANAGEMENT

Ann Elizabeth Ruscher, MD
PEDIATRIC ANESTHESIOLOGY

CCM Fellows

Jewel Alleyne, MD
ANESTHESIOLOGY
Eyad Abu-Hamda, MD
INTERNAL MEDICINE
Marilyn Borst, MD
SURGERY
Jenee Bowman, MD
INTERNAL MEDICINE
Anthony Carlese, MD
INTERNAL MEDICINE
Todd Davis, MD
ANESTHESIOLOGY
Michael Dishart, MD
ANESTHESIOLOGY
Paul Freeswick, MD
SURGERY
Terry Gilbert, MD
INTERNAL MEDICINE
Amitabh Goel, MD
SURGERY
David Kam, MD
SURGERY
Danny M. Kofos, MD
PEDIATRICS
Ahmed Rashwan, MD
INTERNAL MEDICINE
Natesa Shanmugam, MD
INTERNAL MEDICINE
Neal J. Thomas, MD
PEDIATRICS
Len Trapani, MD
ANESTHESIOLOGY
Bryan Veynovich, MD
INTERNAL MEDICINE



FROM LEFT:
Bell
Clark
Venkataraman
Carcillo

Critical Care Medicine Division Dominates Annual SCCM Meeting

At the annual meeting of the Society for Critical Care Medicine (SCCM), held this year in San Antonio, Texas, the department's Critical Care Medicine Division commanded an impressive presence.

The combined forces of the Safar Center for Resuscitation Research (SCRR) and Pediatric Critical Care Medicine (PCCM) presented 16 original scientific papers. In addition, Michael Bell, PCCM Fellow, 1996-1997, won the SCCM in-training award for best paper by a fellow for his work performed at the SCRR entitled, "Interstitial Brain Adenosine During Jugular Venous Oxygen Desaturations in Humans After Traumatic Brain Injury: Evidence for Energy Failure." Robert Clark, PCCM Faculty and Safar Center investigator, won the award for best paper in neuroscience for his work entitled, "Apoptosis in the Human Brain in Patients with Head Injury." Moreover, Shekhar Venkataraman, MD, PCCM faculty, won the scientific award for one of the three papers that he presented at the SCCM conference. The SCRR and PCCM groups also controlled several oral scientific sessions, especially the meeting on brain apoptosis in which SCRR and PCCM

members moderated the session and presented three of the six oral papers on the panel.

Our CCM division was particularly impressive in two domains: neurointensive care (both adult and pediatric) and pediatric CCM research. For the last three years, the division has contributed extraordinarily to the scientific content of the SCCM. Plenary and panel lectures by the SCRR and PCCM included the participation of Patrick Kochanek, MD, who gave a Pediatric Board Review Course lecture on "Traumatic Brain Injury in Children — Mechanisms, Pathophysiology and Management." Dr. Kochanek also presented a panel lecture on "Cell Injury and Response: Neurons." Dr. Ann Thompson gave a panel lecture entitled, "Noninvasive Ventilatory Support—Role in the Critically Ill Pediatric Patient." Furthermore, Leslie Doughty, MD, presented her work performed as a fellow under Joseph Carcillo's mentorship on multiple organ failure in children. Dr. Venkataraman presented a panel lecture on "Weaning of Ventilation in Children." Dr. Carcillo presented a panel lecture on "Genetic Polymorphism, Drug Metabolism and Coagulation." Of note, the Schertz Fellows from 1996 and 1997, Elizabeth

Sinz, MD, and Michael Whalen, MD, respectively, also presented papers.

In addition, we must congratulate Dr. Carcillo, a member of the SCCM program committee, for helping to orchestrate an outstanding meeting. He is next year's Co-Program Chair.

Adult CCM participation at the SCCM conference was just as impressive as that of the SCRR and PCCM. Derek Angus, MD, gave three faculty lectures, presented at the ICU Fellowship Directors' Luncheon, and displayed two posters featuring his research work. Moreover, he moderated a scientific paper session entitled "Severity Scoring Systems" and a poster section entitled "Computers and Technology in the ICU." Michael DeVita, MD, gave two faculty presentations: one on "Ethical Issues in Organ Donation" and another on "Assisted Suicide—The Supreme Court and the Critical Care Physician." Ake Grenvik, MD, PhD, gave a faculty lecture on "The Organ Crisis in Transplantation." Drs. Paul Rogers and Samuel Tisherman each presented an educational workshop. Peter Linden, MD, served as a moderator and presenter for the Daybreak Symposium and presented his work "Avoiding Complications in CCM." Joseph Darby, MD,

presented "Clinical Utility of Jugular Venous Oximetry," and Dr. Michael Pinsky gave several lectures on subjects such as ICU administration, clinical research, and cardiopulmonary interactions.

Notable Contributions to the Society for Pediatric Anesthesia Annual Meeting

by Barbara W. Brandom, MD

The fourth annual winter meeting of the Society for Pediatric Anesthesia and the Anesthesiology Section of the American Academy of Pediatrics was held from February 13 through February 15 in Phoenix, Arizona. Fellows faculty from Children's Hospital of Pittsburgh made noteworthy contributions to this meeting. The J.J. Downs research prize for the best abstract produced by a fellow-in-training was awarded to Gavin Fine, MD, for "Work of Breathing during Spontaneous Ventilation in Anesthetized Children: A Comparative Study Between the Face Mask, Laryngeal Mask Airway and Endotracheal Tube," which he worked on with Ilan Keidan, MD, and Tetsuro Kagawa, MD, under the supervision of Etsuro K. Motoyama, MD. The abstract by Drs. Kenneth Goldschneider and Barbara Brandom, "Behavioral Aspects of Recovery from General Anesthesia in a Pediatric Post-Anesthesia Care Unit," was



Williams

one of a handful of the 57 posters at the meeting which were selected for discussion in front of an audience of almost 200 participants. Dr. Brandom also presented three abstracts reporting effects of neuromuscular blockers in pediatric patients, two as posters and one as a slide presentation. Ira Landsman, MD, was an instructor in the Advanced Pediatric Airway Management workshop. Peter Davis, MD, was moderator of the popular interactive session, "Pediatric Anesthesia Jeopardy." D. Ryan Cook, MD, was invited by Dr. Tom Vetter, who was a fellow at Children's Hospital ten years ago, to contribute his expertise to Vetter's workshop, "Investigating Alternative Careers." All enjoyed visiting with colleagues, especially those who were our fellows in the past.

IARS Meeting

The International Anesthesia Research Society (IARS) 72nd Clinical and Scientific Congress was held in Orlando, Florida, from March 7-11. Contributing to the proceedings was Brian Williams, MD, who presented three posters entitled, "Turn-over Time Effects Of Regional Anesthesia Clinical Pathways For Anterior Cruciate Ligament Reconstruction"; "Regional Anesthesia Clinical Pathways For Anterior Cruciate Ligament Reconstruction Decrease Unexpected Admission Rates

Due To Anesthesia Complications"; and "Anesthesia Clinical Pathways For Same-Day Anterior Cruciate Ligament Reconstruction Decrease Times To Discharge Home."

Other IARS presentations included poster discussions by Susan Woelfel, MD, "Do The Effects Of Cisatracurium Vary With Age In Infants And Children?" and by Jacquelyn Morillo-Delerme, MD, "Cisatracurium or Rocuronium?"

Representing the department from Magee Womens Hospital at a poster discussion session was Gordon Mandell, MD, who presented an abstract written by Dr. Sivam Ramanathan entitled, "Patient Controlled Epidural Analgesia Versus Continuous Infusion For Labor Pain Relief." In addition, Dr. Ramanathan presented Dr. Deepa Karambelkar's abstract entitled "Speed Of Labor Influences Maternal Temperature Rise During Epidural Analgesia" at a poster discussion session.

ATS Meeting

The American Thoracic Society conducted its annual meeting in Chicago, April 24 - 29. Departmental program participation included Dr. John Kellum's lecture on "Mediator Clearance During Continuous Veno-Venous Hemodialysis."

Faculty and Residents Face Off at the Lanes

By Todd Oravitz, MD

On Friday, January 9, the 3rd Annual UACCMF Bowling Night was held at the Pittsburgh Athletic Association. Over 75 faculty, residents, staff, and family members attended the event. Much fun was had by all, as faculty and residents waged a friendly competition. With the memory of a glorious softball comeback fresh in their minds, the residents got off to a hot start in game one. Their six team members built a 59-pin lead, thanks in large part to the 183-point effort by Henry Malarkey, along with a 143-point showing by Rege Switala. The VAMC faculty representatives inspired the attendings in game one, as Rick Bjerke posted a 155, and Ernie Pretto chipped in with 135. Despite their efforts, the attendings knew they had some work to do in game two. Brian Williams, Brian Melnick, and Rick Bjerke were up to the task, posting 146, 142, and 140, respectively. However, the residents were not to be outdone. With incredible consistency, four teammates scored in the 130s - Henry Malarkey with 139, Rege Switala with 137, and Ryan Romeo and Todd Oravitz with 131 each. After 12 games and 12 bowlers, the residents came away with a 61-pin win. The competition was quite even, and everyone involved had a great time.

Accepted for poster presentation was "Granulocyte-Monocyte Colony Stimulating Factor for Sepsis Syndrome," based on an abstract by Peter Linden, MD, Alan Rosenbloom, MD, Herbert Jacob, MD, and Ellen McCormick, BSN.

Events

The annual graduation dinner for anesthesiology residents and fellows will be held at the Pittsburgh Golf Club near Schenley Park on June 12, 1998.



Safar Center on ABC News

On April 28 *ABC World News Tonight* with Peter Jennings featured the Safar Center for Resuscitation Research (SCCR) in a segment called "Medicine on the Outer Edge." The piece featured the current research of Drs. Peter Safar and Samuel Tisherman on hypothermia in shock and the future potential for suspended animation strategies for both battlefield casualties and pedestrian trauma victims.

Pittsburgh Clinical Research Network

W. David Watkins, MS, PhD, MD, Professor of Anesthesiology and Critical Care Medicine, has recently accepted the appointment of Medical Director of Pittsburgh Clinical Research Network (PCRN). By July 1, 1998, PCRN will function as the clinical research site management organization of the UPMC Health System. Dr. Watkins has successfully directed the Clinical Trials Program (CTP) for our department over the past five years. In addition, Lisa Cohn, MPH, who has worked with Dr. Watkins in developing the CTP as its administrative director, will assume a managerial role at PCRN.

New NIH Grants

Armando Rotondi, PhD (PI)

"Supporting Traumatic Brain Injury Caregivers"
9/15/97-8/31/99, \$585,983

Yan Xu, PhD (PI)

"Mechanisms of Cell Death and Injury in Neurodegenerative Disorders"
2/1/98-3/31/03, \$1,567,788

Pei Tang, PhD (PI)

"Anesthetic Sites in Transmembrane Peptides by NMR"
4/1/98-3/31/03, \$840,188

NIH Grant Competitive Renewal

Leonard Firestone, MD (PI)

(Gregg Homanics, PhD, Co-I)
"Anesthetic Mechanisms in GABAA-R Gene Targeted Mice"
9/1/98 - 8/31/03, \$2,220,845

Grant from Commonwealth of PA

Ernesto A. Pretto, MD, has received a two-year \$200,000 grant to develop the Mass Casualty Plan for the Commonwealth of PA. Dr. Pretto, along with other Safar Center researchers, will design a plan that has the potential to affect the lives of the citizens of Pennsylvania in the event of large-scale natural or man-made disaster.

Laerdal Grants

The following have been awarded grants from the Laerdal Foundation for academic year 1997-1998:

Lakshmi Chelluri, MD,

\$10,000 "Long-Term Outcome and Functional Status of Patients Surviving CPR in the Hospital"

John Kellum, MD, \$10,000

"Hemofiltration in Acute Lung Injury"

Patrick Kochanek, MD,

\$6,000 "Quinolinic Acid, A Novel Mediator of Neurotoxicity after Brain Injury"

Courtney Robertson, MD,

\$10,000 "Augmenting Adenosine to Improve Outcome after Severe Head Injury"

Alan Rosenbloom, MD,

\$5,000 "Immunosuppression and Inflammation in Sepsis: Time Course and Patient Dependency"

PETI Research Grants

NATIONAL INSTITUTE OF DENTAL RESEARCH GRANT.

CLASSIFICATION OF TMDS: VALIDITY & UTILITY OF RDC AXIS I.

1995-2000, \$1,412,712

Thomas E. Rudy, PhD, PI; Hussein S. Zaki, DDS, MS; Harvey Henteloff, DMD, J. Robert Boston, PhD, Jane L. Weissman, MD, and Carol M. Greco, PhD, Co-Investigators

NATIONAL HEADACHE

FOUNDATION. A DOUBLE-BLIND PLACEBO-CONTROLLED EVALUATION OF ESTROGEN REPLACEMENT THERAPY IN CHRONIC HEADACHE. 1996, \$10,000

Dawn A. Marcus, MD, PI; Lisa Scharff, PhD, Thomas E. Rudy, PhD, Dennis C. Turk, PhD, and Sarah Berga, MD, Co-Investigators

RAYMOND AND ELIZABETH BLOCH

EDUCATIONAL AND CHARITABLE FOUNDATION GRANT. GENERAL GRANT TO PURSUE MIGRAINE RESEARCH. 1996-1997, \$94,000
Dawn A. Marcus, MD and Lisa Scharff, PhD, PIs; Thomas E. Rudy, PhD, Co-Principal Investigator

U.S. DEPARTMENT OF VETERANS AFFAIRS MERIT REVIEW.

MANUAL WHEELCHAIR USER UPPER EXTREMITY PAIN 1996-1999, \$503,300

Rory A. Cooper, PhD, Michael L. Boninger, MD, and Richard N. Robertson, PhD, PIs; Thomas E. Rudy, PhD, Biostatistician

CENTER FOR MEDICAL REHABILITATION RESEARCH, NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT. SCI & AMPUTATION: PAIN PREVENTION AND TREATMENT

1996-2001, \$3,567,784

Thomas E. Rudy, PhD, PI; Dennis C. Turk, PhD, Rory A. Cooper, PhD, Michael Munin, MD, and Michael L. Boninger, MD, Co-Investigators

FOUNDATION FOR PHYSICAL THERAPY, CLINICAL RESEARCH CENTER. PSYCHOMETRIC INNOVATIONS IN OUTCOME MEASUREMENT. 1997-2000, \$159,340

Thomas E. Rudy, PhD, PI; Deborah Lechner, PT, MS, Co-Principal Investigator
James J. Irrgang, MS, PT, ATC and Susan J. Lieber, MS, OTR/L, Co-Investigators

FROM LEFT:
Rotondi; Xu; Tang; Firestone;
Homanics; Pretto; Chelluri; Robertson

PETI Research Achievements

Under the leadership of Thomas E. Rudy, PhD, Research Director, faculty members at the Pain Evaluation and Treatment Institute (PETI) are conducting numerous research studies in the treatment and management of chronic pain, supported by over \$6 million in external funding.

In a project sponsored by the National Institute of Dental Research of NIH, PETI investigators, in collaboration with researchers from the Dental School and the Department of Radiology, are evaluating the clinical utility of conservative treatments of temporomandibular disorders (TMDs), such as EMG biofeedback, physical therapy, and flurbiprofen.

Furthermore, in a study funded by the U.S. Department of Veterans Affairs, PETI researchers, with investigators at the University of Pittsburgh Human Engineering Research Labora-

tory, are developing the necessary tools for assessing upper extremity pain in manual wheelchair users (MWUs).

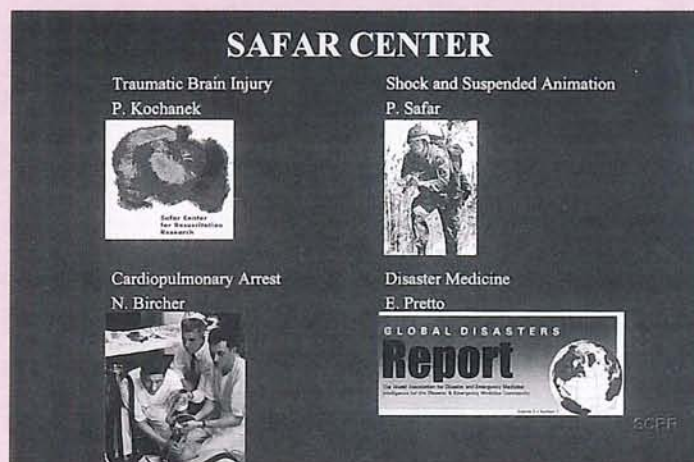
In addition, PETI investigators are collaborating with other university researchers to develop a Center for the Study of Work-Related Low Back Pain. This research is supported by the Foundation for Physical Therapy. Sponsored by the Center for Medical Rehabilitation Research of NIH, PETI researchers are also studying the impact of chronic pain on the functioning of people with spinal cord injuries and amputations.

Supported by the Raymond and Elizabeth Bloch Educational and Charitable Foundation, PETI investigators are conducting numerous clinical trials for headache patients, including systematically examining the role of specific triggers (e.g., chocolate, alcohol, cheese) for specific headache types.



Thomas Rudy (foreground); Lisa Gourley; Susan Lieber; Caner Kuzkaya (l to r)

The Safar Center for Resuscitation Research Web Site



The Safar Center for Resuscitation Research (SCRR) web site project was launched on February 10, 1998, as the result of a conference between representatives of the SCRR and the Epidemiology Data Center of the University of Pittsburgh's Graduate School of Public Health. The web site, designed by Stephen Wisniewski, Elliott Levenson, and Jeff Martin, displays interactive, graphic, audio, and video features. The site went live on May 1, 1998 at www.safar.pitt.edu.

The site allows visitors to view SCRR's mission statement; information about Director Patrick Kochanek, MD; descriptions of SCRR programs and current developments; and the SCRR annual report. In addition, the site includes a unique history page, which displays both photographs of events and short audio-video subjects, accessible at a mouse click. To view the short subjects users may download the multimedia "Quicktime" video display program.

Interactive features include "Related Sites and Links," providing visitors links to on-line resources; the search page, furnishing access to four major on-line search engines or browsers; the SCRR calendar; an electronic bulletin board; and a moderated, on-line web conferencing page.

The site features publications and abstracts of the SCRR physicians and resuscitation professionals. The research page allows users to stay current with ongoing research projects, goals, and capabilities.

The SCRR web site is expected to grow, adding and editing features as new information and technology become available.



Herbert E. Jacob

Robert Hingson, MD

by Peter Safar, MD

Dr. Robert Hingson died on October 9, 1996, at the age of 83. He served as Professor of Anesthesiology at the University of Pittsburgh from 1968 through 1973 and as Chief Anesthesiologist at Magee Womens Hospital. Major technical developments that Dr. Hingson pioneered include continuous caudal anesthesia for deliveries and the perfection and promotion of lumbar epidural anesthesia. His primary technical contribution to public health was co-developing the use of jet injection for various indications, particularly vaccinations of masses of people by fewer medical personnel. In 1958 he

founded the Brother's Brother Foundation for mass immunizations and disaster relief worldwide.

Herbert E. Jacob, MD

by Marie Baldisseri, MD

Dr. Herbert E. Jacob, Director of Critical Care Services at Magee Womens Hospital from 1994 to 1997, died on January 17, 1998, at the age of 52 after a short battle with renal cell carcinoma. Dr. Jacob began his career specializing in Medical Oncology. Twenty-six years later he made an unusual and dramatic mid-life change to incorporate his two interests—oncology and critical care medicine. Dr. Jacob completed a fellowship in our CCM division in 1991. In July 1997,

he was named Director of the Clinical Research Comprehensive Breast Program at Magee Women's Hospital. Dr. Jacob brought together critical care and oncology through multidisciplinary lectures and joint research projects on bone marrow stimulation in patients with sepsis, with Dr. Peter Linden. A mark of Dr. Jacob's integrative efforts was his membership in the American Society of Head and Neck Surgery and his designation as the first non-surgeon with an appointment in otolaryngology. An endowed memorial lectureship has been created to honor the memory of Dr. Jacob. In conjunction with Magee-Womens Hospital and the University of Pittsburgh

Cancer Institute, an annual lecture series has been established, in which oncology and critical care medicine topics will alternate annually. The first Herb Jacob Memorial Lecture was held on April 23. The program included a tribute to Dr. Jacob by Joseph Kelley, MD, and a lecture entitled "Current and Future Trends in the Treatment of Breast Cancer" by guest speaker Gabriel N. Hortobagyi MD, FACP, Professor of Medicine, University of Texas, M. D. Anderson Cancer Center

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