

Anesthesiology & Critical Care News

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The Department of Anesthesiology
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EDITOR'S NOTE

With congratulations to Drs. John Williams and Mitchell Fink for successfully establishing a separate Department of Critical Care Medicine, this newsletter marks the last one for the combined Department of Anesthesiology and Critical Care Medicine.

Beginning in 2002, there will be two separate newsletters, with the first editions likely to be published in the spring.

The 1990s was a decade of changes, which continue with increasing frequency during the first decade of our new century. Unfortunately, many of these changes result from horrific terror activities. Two

these events resulted in casualties, and we have seen the introduction of bioterrorism spreading anthrax among civilians. Although our medical center has not yet experienced these problems, we must be properly informed and remain alert. It is hoped that international terrorism can be halted, but this may take years. In the meantime, the departments of Anesthesiology and Critical Care Medicine are both likely to become involved. To what extent only the future can tell.

Despite such serious international conditions, we hope that all faculty and staff members will have a most rewarding second year of the new millennium.

I also wish to thank all contributors to this newsletter, particularly our untiring publishing editor Patricia and our newsletter secretary Joanne Woodson.

Thus,
Ake Grenvik, MD, Editor

Critical Care Medicine Comes of Age

With a final stroke of Chancellor Mark Nordenberg's pen, on December 5, 2001, the former "Division" of Critical Care Medicine fittingly achieved the status of an independent department in its own right and under its own name.

According to **Mitchell P. Fink**, MD, chief of the former Division and founding chairman of the new Department of Critical Care Medicine, the Department is the first freestanding academic department of Critical Care Medicine at a U.S. school of medicine. To those who know the history of critical care medicine at the University of

Pittsburgh – and worldwide – the announcement comes as no surprise.

"The whole concept of critical care medicine as a specialty owes a great deal to the vision of Dr. **Peter Safar**," Dr. Fink says, referring to the first chairman of the Department of Anesthesiology and Critical

Care Medicine, "and the critical care training program here – by far the largest, as well as the oldest in the world – owes its success to the efforts of Dr. **Ake Grenvik**."

At Presbyterian Hospital (as it was known in the 1960s), Dr. Safar not only established one of the first ICUs in the U.S.,



Mitchell P. Fink, MD, Founding Chariman of the Department of Critical Care Medicine.



Arthur Boujoukos MD
Ann E. Thompson MD
Paul L. Rogers MD
Derek C. Angus MD, MPH

but also founded the first truly multidisciplinary fellowship training program in critical care medicine, into which he recruited qualified trainees from medicine, surgery, and anesthesiology. One of these was Ake Grenvik, MD, PhD, of Sweden, whom Dr. Safar recruited in 1968 and later appointed director of the CCM program at Presby. In 1970, when a small group of physicians met in Los Angeles and founded the Society of Critical Care Medicine, Drs. Safar and Grenvik were among them, as was former Department Chairman Dr. **Peter Winter**.

Dr. Fink believes that both divisions of the former Department of Anesthesiology and Critical Care Medicine will benefit from the new order. The divisions had each become so large that administration of the combined organization "would have been a daunting task, for anyone." Dr. Fink also points out that establishing two separate departments allows the faculty of Anesthesiology to concentrate on its core responsibilities – clinical services and training in the OR environment – while Critical Care Medicine maintains its focus on clinical care and training in the ICU setting.

"The separation [from Anesthesiology] was amicable," Dr.

Fink reports. "Faculty members of both departments maintain close, collegial relationships. We share resources, and we continue to collaborate with respect to education and research."

Among the most valuable of the two departments' shared resources are the Safar Center for Resuscitation Research (SCRR) and the newly established Peter M. Winter Institute for Simulation Education and Research (WISER). Both the Safar Center and WISER have roots in the collective ingenuity of the former Department of Anesthesiology and Critical Care Medicine. On the new organizational map, the Safar Center is situated in the Department of Critical Care Medicine, and WISER is in the Department of Anesthesiology.

"Faculty members of both departments maintain close, collegial relationships. We share resources, and we continue to collaborate with respect to education and research."

— Mitchell P. Fink, MD,
Founding Chariman
Department of Critical
Care Medicine

In 1995, Dr. Peter Winter, who was then chairman of the Department, founded the Human Simulation Center, which in 2001 was renamed in his honor.

"The Safar Center's research interests (such as traumatic brain injury and hemorrhagic shock) are related primarily to critical care medicine," explains Dr. Fink. "The main focus is outside of the OR, and the Center's director, Dr.

Patrick Kochanek, is an intensivist and a pediatrician, rather than an anesthesiologist.

"The Winter Institute – although it will be a resource for many departments, including Critical Care Medicine, Emergency Medicine, Surgery, and others – is primarily the brainchild of an anesthesiologist, Dr. **John Schaefer**, who is the Institute's director. The Pain Medicine Program remains under the Anesthesiology umbrella."

The new Department of Critical Care Medicine consists of four divisions: two clinical and two non-clinical. **Arthur Boujoukos**, MD has been appointed vice-chairman of Clinical Operations for adult CCM; **Ann Thompson**, MD is vice-chairman of Clinical Operations for pediatric CCM; **Paul Rogers**, MD is the new Department's vice-chairman of



Evidence now shows that critically ill patients have a better chance of survival when an intensivist manages their care.

Education; and **Derek Angus**, MD, MPH is vice-chairman of Research.

On the list of new designs for clinical services will be a pediatric cardiac intensive care unit (PCICU), which will reside within the Pediatric Division of the Department of CCM at Children's Hospital.

"Our plans at the moment are that it will be a Section of the Division of Pediatric Critical Care Medicine, a subset of my group," says Pediatric Division Vice Chairman Dr. Ann Thompson. "Because of space limitations in the current physical plant, for now the PCICU will be located with the current ICU. Hospital administration has committed

to furnishing a separate ICU for cardiac patients when the new building is complete."

The PCICU in the new Children's Hospital will be designed with a flexible capacity of six to 12 beds, to accommodate fluctuations in census and patient profiles. Groundbreaking for the new Hospital is scheduled for early 2002 with completion anticipated in 2006.

For adult patient care, as the trend continues to treat the less-complex cases at the outlying, community-hospital sites, the Oakland-campus hospitals – as a regional trauma center and world-renowned transplant center – are evolving into large ICUs. Critical Care Medicine holds a position of growing importance in patient care, and it

must be adequately represented at the "Council of Chairs," with direct access to the leadership of the medical school and the hospital.

The UPMC could not continue to function as a major Level I Trauma Center, as one of the world's busiest transplantation centers, or as a major referral center for patients with end-stage organ failure, without the services of CCM faculty members and their trainees.

Trainees of the Multidisciplinary Critical Care Training Program (MCCTP) provide much of the direct care and on-call coverage for patients in the specialized ICUs at UPMC Presbyterian, Magee-Womens Hospital, and the Veterans Affairs Medical Center. The University of Pittsburgh remains the leading institution

worldwide for training intensivists. The MCCTP has trained more than 500 specialists since its founding, and many of its alumni are now internationally renowned in critical care medicine.

Because of the high clinical demand, the first recruitment efforts of the new Department are focusing on attending-physician faculty. However, within the next few years, CCM also plans to attract additional scientists to its already highly successful research program. Sophistication in the field of critical care research has increased, leading to increased recognition and support. Pitt's Critical Care Medicine program now receives more than \$4 million in extramural grant funding, which is more than any other similar program in the country.

On the list of new designs for clinical services will be a pediatric cardiac intensive care unit (PCICU), which will reside within the Pediatric Division of the Department of CCM at Children's Hospital.

Seven CCM faculty members are principal investigators on grants from the National Institutes of Health (NIH), and several others are co-investigators. The Department hopes to add to their number by recruiting two PhD-level scientists over the next few

(continued on page 4)



Dr. Thompson, director of the Pediatric Critical Care Medicine Fellowship program, discusses a case in the Pediatric ICU at Children's Hospital with Schertz Fellow Mark Hall, MD.



Russell Delude, PhD, is principal investigator of the NIH-funded study of "Molecular Mechanisms of Gut-Barrier Dysfunction." Over the next few years, the new Department of Critical Care Medicine plans to recruit two more PhD-level scientists.

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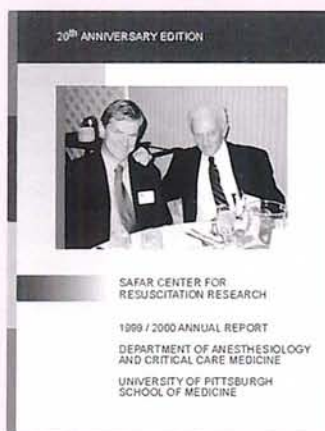
years. The Department is the recipient of *two* NIH T32 National Research Service Awards (NRSA): "Experimental Therapeutics in Critical Illness" (Principal Investigator **Michael Pinsky**, MD) and "Training in Pediatric Neurointensive Care and Resuscitation Research" (Principal Investigator **Patrick Kochanek**, MD).

Critical Care Medicine achieved success as a Division, and is well prepared to stand on its own. As a Division, it was financially stable, and it flourished both clinically and academically, according to **John Williams**, MD, interim chairman of the Department of Anesthesiology. "In the last 10 years, the specialty of critical care medicine has developed into a distinct and separate field from anesthesiology," he acknowledged.

In the early years of CCM, its association with anesthesiology was almost intuitive. "Every competent anesthesiologist is a reanimatologist and intensivist, even the one whose practice outside the OR is minimal," writes Dr. Peter Safar, on page 334 of his memoirs. "In terms of risk, there is no 'minor' general anesthesia." Hospital ICUs developed from specialized units that were created for the care of certain classes of high-risk post-operative patients. Originally, the domain of intensive-care medicine seemed to overlap most naturally with that of anesthesiology.

But now, "Critical care medicine has come of age as a specialty," says Dr. Fink. "The public is aware of the importance of good ICU-type medical care and is beginning to understand the concept of the intensivist. A growing body of evidence confirms the belief that care by a unit-based team, led by a specially trained intensivist, improves outcome for the patient – and also reduces the use of resources and, therefore, reduces costs.

Dr. Thompson agrees. "This really is a special part of medicine. It takes special training, special expertise, and special knowledge of the organization of a system of care.



The Winter Institute for Simulation Education and Research is organizationally situated in the Department of Anesthesiology; the Safar Center for Resuscitation Research is in the new Department of Critical Care Medicine.

"This ICU [at Children's Hospital] was one of the first in the country. It was one of the first settings where critically ill patients were cared for in an organized way, and with the clear expectation that you could get them through the illness and return them to good health.

"The Department of Critical Care Medicine will be well focused on the needs of intensivists and their patients. The University of Pittsburgh can be very proud. It has always been a leader in critical care. Ever since Peter Safar and Ake Grenvik got it started, it has been a world leader, and this is taking that leadership to the obvious next step."

Information Services Group Leverages Web Technology to Showcase Department

By Bob Petrick

Information Services Manager

In consultation with Interim Chairman Dr. **John Williams** and Executive Administrator **Steve Brown**, the Information Services group has begun to create "Web Spaces" to aid the Department's recruiting efforts. The idea is to develop a portable website, accessible via our Internet site, that can also be burned to a CD for distribution at recruitment events, as a take-home video for faculty, residency, or fellowship candidates who may be interested in joining our Department.

The program consists of five- to 10-minute digital videos, in which division chiefs and directors of the education and research programs present overviews of their area, with an eye towards attracting talented clinicians and researchers to the Department. Included in the package are additional digital videos and literature promoting the Pittsburgh region and the UPMC Health System. This project was made possible by the efforts of a number of the Information Services team, especially **Brad Stezoski**, **John Lutz**, and **Christopher Edwards**. Special thanks to all of the division chiefs and



The Department's recruiting and communications initiatives draw on the artistic talents and technical expertise of the Information Services group, including (from left) Christopher Edwards, Brad Stezoski, Bob Petrick, and John Lutz.

program directors for contributing their time to make this effort possible. The video is accessible at: <http://www.anes.upmc.edu/recruit/>

The Information Services group is also working on a project for the Winter Institute for Simulation Education and Research (WISER). At the request of WISER Director Dr. **John Schaefer**, we have undertaken to create a website that heavily leverages digital video and the digital online courses that Dr. Schaefer has used for the past year for Department faculty members, trainees, and others at the Institute. Other faculty members, including Drs. **Michael DeVita** and **William McIvor**, are working with Information Services to implement web-based instructional programs

that they have developed. The goal is to create a website that will become a favorite stopping place for any clinician interested in medical simulation. Visit the site at: www.wiser.pitt.edu

The Information Services group is also working with the Pain Medicine program, directed by Dr. **Doris Cope**, to produce a website providing information on a large number of topics, especially the wide array of services available from the Pain Medicine group at UPMC St. Margaret. This site will have information for UPMC clinicians, allied health care professionals, and patients, and will be launched sometime in the first quarter of 2002.

Last, but far from least, the group is redesigning the Department's main Internet page, to provide a more appealing and easier-to-use site to serve the needs of Department faculty and staff, as well as the Internet community. Many of the pages that had not been updated over the past two years now have fresh information. A process has been put in place to post updated information on the site as it becomes available. Special thanks to the Department's publications editor, **Patti Boyle**, for her invaluable assistance in updating this site.

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The Department's Inter- and Intranet sites are ever-evolving resources. The Information Services group welcomes any ideas or comments you may have to improve the sites' form or function. Please email your comments to our group at: INFOSERV@ANES.UPMC.EDU

Spotlight on... the Division of Pain Medicine

*"Pain is as diverse as man.
One suffers as one can."*

— Victor Hugo, French poet, novelist,
playwright, essayist.

On paper, pain is a pretty good idea. What more compelling way for a body to speak to its owner? Whimpering, nagging, or screaming, pain demands to be heard. *You're long overdue at the dentist. You know you can't drink like that without feeling like this. Hot stove – act fast! Slow down – you're not a kid anymore. Call an ambulance – this is serious!* Ideally, pain prompts corrective action, which removes the cause, thereby extinguishing the pain.

But sometimes pain outlives its usefulness, entrenching itself in a person's daily life, where it may begin to take command. Once an underlying condition has been treated, or any treatable condition has been ruled out, the still-suffering patient may be told, "You'll just have to live with it." Or they may hear variations on the *it's-all-in-your-head* theme. Pain is no less real because it is subjective. The constellation of physiological, psychological, and psychosocial factors that contribute to pain is as unique and complex as the individual sufferer.

The UPMC Pain Medicine Program was designed with this understanding in mind.



Doris K. Cope, MD
Clinical Director, Pain Medicine

UPMC Pain Medicine is an interdisciplinary clinical, teaching, and research program. In addition to inpatient

clinical consultations, the Program offers outpatient services at two clinic locations, a fully accredited fellowship program, and a well-funded research section. UPMC Pain Medicine also collaborates with the University of Pittsburgh Cancer Institute to offer specialty care for patients suffering from cancer pain.

At its clinic sites, the Pain Medicine Program's interdisciplinary team approach draws on the expertise of professionals in anesthesiology, internal medicine, physiatry, psychiatry, neurology, nursing, occupational therapy, physical

therapy, psychology, and other disciplines. The team tailors a treatment program to meet the patient's specific needs. A treatment plan may include any of a number of components, such as pharmacologic or invasive methods (e.g., neural blockade or intrathecal pump placement), education in strategies for coping with any residual discomfort, physical rehabilitation, psychological or family counseling, or training in stress management and relaxation techniques.

Outpatient pain-management services primarily focus on pain rehabilitation at the F



The Pain Medicine Center at UPMC St. Margaret: The new suite features (clockwise from upper right): Reception area; patient treatment rooms; patient rooms are visible from the nurses station (next photo); fluoroscopy room. Fluoroscopy helps to guide placement of certain invasive pain interventions.

The constellation of physiological, psychological, and psychosocial factors that contribute to pain is as unique and complex as the individual sufferer.

Evaluation and Treatment Institute (PETI), near the UPMC Oakland campus, and interventional pain medicine at UPMC St. Margaret. **Doris K. Cope**, MD, chief of the Pain Medicine Program and director of UPMC Pain Medicine clinical services, works out of the UPMC St. Margaret Pain Medicine Center, which recently moved into a new suite in the 200 Medical Arts Building adjacent to the hospital. **Ronald Glick**, MD, is clinical director of Pain Rehabilitation Services at PETI. Beginning January 1, 2002, PETI will be adding a full line of interventional services to complement the rehabilitation services.

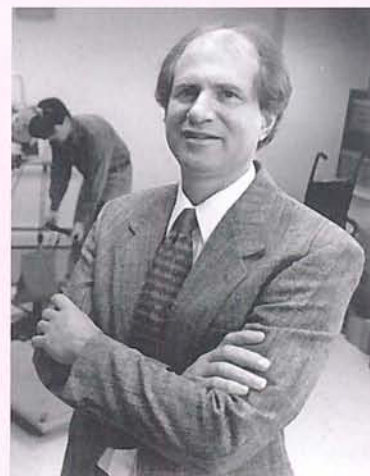
The diversity of pain syndromes that bring patients to the UPMC Division of Pain Medicine offers a world of learning experience to Pain Management Fellowship trainees. Fellows in the Program evaluate patients, under the supervision of physicians specializing in pain

medicine, geriatrics, psychiatry, and neurology, and confer with other professionals. Trainees have an opportunity to observe and assist faculty members in performing various interventional pain-management procedures. Along with the University of Pittsburgh's core Anesthesiology Residency Program and the subspecialty fellowships in Pediatric Anesthesia and Critical Care Medicine, the Pain Management Fellowship program received five-year reaccreditation from the Accreditation Council for Graduate Medical Education following the Residency Review site visit in the spring of 2000.

Research is the other leg of a tripod academic program in pain medicine. Researchers in the Division of Pain Medicine have studied (among other topics): the impact of chronic pain on persons with spinal cord injuries and amputations; the clinical utility of conservative measures in temporomandibular disorders; the efficacy of restrictive diets as a treatment for migraine; the impact of pain as one of the factors influencing quality of life in patients with systemic lupus erythematosus; and the impact of chronic pain on older adults. **Thomas Rudy**, PhD, is director of research for the Pain Medicine Program.

Dr. Rudy Evaluates Impact of Chronic Pain in Older Adults

The National Institute on Aging has awarded a grant to **Thomas L. Rudy**, PhD to study the comprehensive functional effects of chronic pain in community-dwelling older adults, a population that may be most threatened by the risk of functional decline. Chronic pain has a high prevalence in this age group, and



Thomas L. Rudy, PhD

yet its effects are not well investigated. The purpose of the investigation is to broaden understanding of disability in the older adult with chronic pain.

The investigation is using chronic low back pain (CLBP) as a model because reliable measures have been developed for this type of pain. The study will compare 200 CLBP sufferers age 65 or older with 200 pain-free controls. It will assess the effect of CLBP on physical, psychosocial, and cognitive functioning, as well as the impact on physical function of CLBP-associated psychosocial and neuropsychological dysfunction. Investigators will employ laboratory-based tests of physical capacity, self-reports of well-being, and other multidimensional assessment tools, including measurement of pain intensity, physical performance, disability, sleep, mood, self-efficacy, and detailed measures of neuropsychological function.

For more information on the UPMC Pain Medicine Program, visit: <http://www.upmc.edu/healthmed/services/Painmanagement/UPMCPainprog/default.htm>

Faculty News Briefs

Richard Bjerke, MD recently attained board certification in Adult Transesophageal Echocardiography by the National Board of Echocardiography.

Michael DeVita, MD represented the Society of Critical Care Medicine at a meeting of a critical care committee of the United Network for Organ Sharing (UNOS). The committee was formed to facilitate cooperation among UNOS, regional organ procurement organizations (OPOs), and critical care physicians, particularly with respect to organ procurement. Committee members worked on drafting "critical pathway" directives for non-heartbeating organ donation. The recommendations could become a template for all OPOs. Dr. DeVita was also invited to participate in a collaborative effort of the American Medical Association and the U.S. Department of Health and Human Services Division of Transplantation to discuss the role of physicians in the organ-donation process and to define guidelines for physicians. Dr. DeVita, along with Dr. **James V. Snyder**, co-chaired the UPMC Medical Ethics Committee that wrote the nation's first formal policy on non-heartbeating organ donation, which was published in 1992.



Richard Bjerke MD



Michael DeVita MD



Carol M. Greco PhD



Ronald Glick MD



William McIvor MD



Juan Ochoa MD



Rita Patel MD



Carl A. Sirio MD



Pei Tang PhD



Ann Thompson MD

Carol M. Greco, PhD presented a lecture entitled "Biofeedback Treatment for Pain and Fatigue in Systemic Lupus Erythematosus" at the Fall Educational Seminar of the Lupus Society of Western Pennsylvania on September 29. **Ronald Glick, MD** also presented that day. His talk was on "Acupuncture."

William McIvor, MD was the guest speaker at the Western Pennsylvania Society for Anesthesiology (WPSA) Annual Lecture Series in Pittsburgh on November 15. Dr. McIvor addressed the WPSA members on the topic of "Human Simulation in Anesthesiology Education." The Lecture Series was established to present and evaluate new developments in anesthesiology, and to raise awareness of innovations in anesthesia equipment and techniques.

Juan Ochoa, MD was inducted as a Fellow of the American College of Surgeons this past October during the 2001 Annual Meeting of the American College of Surgeons in New Orleans.

Rita Patel, MD was named assistant dean for Graduate Medical Education Faculty Development in our School of Medicine. Dr. Patel was also elected to serve a one-year term as adjunct member of the American Society of Anesthesiologists 2002 Committee on Residents and Students.

Carl Sirio, MD has been elected to serve on the Council on Medical Education of the American Medical Association. He was also asked to serve on the Internal Medicine Residency Review Council of the Accreditation Council for Graduate Medical Education.

Pei Tang, PhD was invited to become a member of a University of Pittsburgh committee to evaluate a proposal for a university-wide doctoral program in molecular biophysics. John Rosenberg, PhD, of the Department of Biological Sciences, who submitted the proposal, is chairman of the Program Development Committee. Other departments represented on the committee include the School of Medicine's Department of Molecular Genetics and Biochemistry and the Faculty of Arts and Sciences' Department of Chemistry.

Pediatric Critical Care Medicine Vice Chairman Ann Thompson, MD has been named associate dean for Faculty Affairs in Pitt's School of Medicine. The appointment was effective July 1, 2001.

Department Presents Annual Safar and Grenvik Lectures

PCCM Grads Join Faculty

All four members of the Pediatric Critical Care Medicine Fellowship's graduating class of 2001 have elected to remain at the University of Pittsburgh, and all have embarked on their careers by becoming junior faculty members in Critical Care Medicine at Children's Hospital of Pittsburgh. Members of the PCCM Class of 2001 include **Yong Yun Han, MD**; **Margaret A. Satchell, MD**; **Kimberly Statler, MD**; and **Mark Hall, MD**, who is the Charles A. Schertz Fellow for 2001-02.

Faculty Promotions

The following faculty members have been promoted:



Paul L. Rogers MD—
promoted to professor



Ryan Romeo MD—
promoted to assistant professor



Randolph Wood MD—
promoted to assistant professor

Neurobiologist Addresses Safar Audience

The 22nd Peter and Eva Safar Annual Lectureship in Medical Sciences and Humanities was held Thursday, December 6, 2001 in Scaife Hall. This year's guest speaker was Professor Michal Schwartz of the Department of Neurobiology at the Weizmann Institute of Science in Rehovot, Israel. The title of Dr. Schwartz' lecture was *Protective Autoimmunity after CNS Trauma and in Chronic Neurodegenerative Disorders: A Paradigm Shift*.



Dr. Schwartz

Dr. Schwartz pioneered the concept of "protective autoimmunity" and its role in neuroprotection, maintenance, and repair of the injured central nervous system. Her publications, numbering more than 130 peer-reviewed articles, include an extensive body of recent work on this novel concept, which bridges the disciplines of neuroscience, neuroimmunology, ophthalmology, and neurotrauma. She has received a number of prestigious awards for her research, particularly in the field of ophthalmology. She is the recipient of the 2002 Friedenwald Award from the Association for Research in Vision and Ophthalmology and in 2000 was named Career Woman of the Year in Israel. Dr. Schwartz is the first woman to be invited to deliver the Peter and Eva Safar Lecture.



Drs. Pat Kochanek, Michal Schwartz, Peter Safar, and John Williams.

'Novel Treatments for Sepsis' is Topic of Grenvik Lecture

The Seventh Annual Ake and Inger Grenvik Critical Care Lecture was held on Tuesday, December 11, 2001 in Scaife Hall. The honored guest lecturer this year was Gordon Bernard, MD, professor of medicine and associate director of the Division of Allergy, Pulmonary and Critical Care Medicine at Vanderbilt University School of Medicine, Nashville, Tennessee. The topic of Dr. Bernard's lecture was *Novel Treatments in Severe Sepsis*.



Dr. Bernard

Dr. Bernard was a laboratory-based researcher early in his career. His laboratory studies focused on the role of oxidant stress in the pathogenesis of adult respiratory distress syndrome (ARDS). During the past decade, he has concentrated his efforts on clinical investigation, and has been the principal investigator in a number of federally funded trials related to critical illness, ARDS, and sepsis. Dr. Bernard was instrumental in the formation of the ARDS Clinical Investigation Network (ARDSnet). Funded by the National Heart, Lung, and Blood Institute, ARDSnet is a network of university medical centers that follow carefully designed protocols for multi-center clinical trials in critical care medicine. Dr. Bernard is chairman of the NHLBI-ARDS Clinical Investigation Network.



Dr. Mitch Fink, Dr. Gordon Bernard, Inger and Dr. Ake Grenvik, and Dr. John Williams.



John A. Kellum MD

Acute Dialysis Quality Initiative Reports Now Available On Line

Although guidelines have been developed for the management of *end-stage renal disease*, the same is not true of *acute renal failure*. The Acute Dialysis Quality Initiative (ADQI) is an effort undertaken by intensivists and nephrologists to address concerns about the absence of evidence-based practice guidelines in the medical management of acute renal failure. The initiative was organized by the Division of Critical Care Medicine at the University of Pittsburgh, the

Department of Nephrology at St. Bartolo Hospital in Vicenza, Italy, and the Department of Nephrology at the University of California at San Diego.

John A. Kellum, MD was one of three co-directors of the first ADQI conference, which was held in New York City in August 2000.

The task of the ADQI is to combine expert opinion and "evidence appraisal" to arrive at a consensus on best practice, and to define areas where future research efforts should be directed. The first conference focused on the application of continuous renal replacement therapy

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(CRRT) in the critically ill patient with acute renal failure. The other co-directors were Dr. Claudio Ronco, director of the Dialysis and Renal Transplantation pro-

grams of St. Bartolo Hospital in Vicenza, Italy; and Dr. Ravindra Mehta of the Department of Nephrology at the University of California at San Diego. Dr. **Derek Angus** also participated.

More information on ADQI, including reports of the conference workgroups, is now available on line at www.adqi.net. The ADQI Conference was sponsored by the Renal Research Institute of New York and officially endorsed by the American Society of Nephrology and the Society of Critical Care Medicine.

New Sponsored Projects August 2001 – October 2001 (does not include ongoing projects)

FEDERAL GRANTS				
Faculty Member	Role on the Project	Agency Name/Agency Grant Number	Project Title	Project Period
Dev Chandra (student) Gregg Homanics (mentor)	Principal Investigator	NIH 1K08 DE14184-01	Targeted Mutations to Study Anesthetic Mechanisms	8/15/01 - 7/31/06
Thomas Rudy	Principal Investigator	NIH 1R01 AG18299-01	Chronic Pain in the +65: Evaluating Functional Impacts	9/15/01 - 8/31/05
Peter Safar	Principal Investigator	U. S. Army DAMD17-01-2-0038	Novel Resuscitation from Lethal Hemorrhage. Suspended animation for Delayed Resuscitation.	8/15/01 - 9/14/02

FOUNDATION GRANTS				
Faculty Member	Role on the Project	Agency Name	Project Title	Project Period
Armando Rotondi	Principal Investigator	Commonwealth of Pennsylvania	Improving Access to Service for Individuals with Traumatic Brain Injury	6/28/01 - 5/31/02
John Schaefer	Principal Investigator	Asmund S. Laerdal Foundation	The Peter M. Winter Institute for Simulation Education and Research	7/1/01 - 6/30/02

Pediatric CCM Research Fellows Begin NRSA Training

Drs. Yong 'Kato' Han and Trung Nguyen have begun their programs as the second research-fellowship class funded by the National Institutes of Health T32 program: **Training in Pediatric Neurointensive Care and Resuscitation Research.** Dr. Han is researching *Mitochondrial mechanisms of excitotoxic neuronal injury*; Dr. Nguyen is studying *Coagulation disturbances in traumatic brain injury*.

T32 is an institutional training grant that supports research in the areas of neurotrauma and novel approaches to resuscitation in cerebral ischemia for fellows training in pediatric critical care medicine, child neurology, or pediatric neurological surgery. **Patrick Kochanek, MD**, is principal investigator for the grant; **Peter Safar, MD**, is co-investigator.

Seed Grants Awarded

The following investigators have received seed grants from the Department of Anesthesiology & Critical Care Medicine:

Mark Hall, MD, for his *Evaluation of the capacity of cyclosporine A to promote dendritic cell tolerogenicity in experimental heart transplantation*;

John Kellum, MD, for his study on *Regulation of inflammatory cytokine expression by metabolic acidosis in rat alveolar macrophages*;

Manuel Vallejo, MD, to investigate *The biological relationship between periodontal disease and low birth weight*;

Ramesh Venkataraman, MD, for his study entitled *Effect of pyruvate on nuclear factor $\kappa\beta$ activation and mRNA synthesis in a rat endotoxemic model*;

Scott Watson, MD, for a study entitled *Gene expression in children with infection and critical illness*.

Welcome, New Faculty Members

The departments of Anesthesiology and Critical Care Medicine welcome the following physicians to the faculty:

Gregory S. Cambier, MD
Children's Hospital Anesthesiology

Victor A. Georgescu, MD
UPMC St. Margaret Pain Medicine

Gregory J. Godla, MD
UPMC South Surgery Center Anesthesiology

Laura Hastings, MD
Children's Hospital Anesthesiology

Frank A. Kunkel, MD
UPMC Presbyterian Anesthesiology

Thomas E. Lace, MD
Magee-Womens Hospital Anesthesiology

Joseph H. Luther, MD
UPMC Presbyterian Anesthesiology

Stanley Dale MacMurdo, MD
UPMC Presbyterian Anesthesiology

Brian M. Melnick, MD
UPMC St. Margaret Anesthesiology

Peter A. Mynn, MD
Magee-Womens Hospital Critical Care Medicine

Juan Carlos Puyana, MD
UPMC Presbyterian Critical Care Medicine

Azmat Qayyum, MD
Magee-Womens Hospital Critical Care Medicine

Neera Sah, MD
Magee-Womens Hospital Anesthesiology

Eliahu Simhi, MD
Children's Hospital Anesthesiology

Joseph Talarico, DO
UPMC Presbyterian Anesthesiology

Darrin A. Taormina, MD
UPMC St. Margaret/UPMC Shadyside Anesthesiology

Tracey M. Vogel, MD
Magee-Womens Hospital Anesthesiology

Members of the Department of Anesthesiology & Critical Care Medicine were active participants in the annual scientific meetings of several societies. The following is representative of recent Department conference activity.

American Association of Nurse Anesthetists Annual Meeting

August 11-15
San Francisco

John O'Donnell, CRNA gave a lecture involving two case presentations on "Issues in Patient Safety: What they don't Tell You Can Hurt." His talk focused on the importance of a thorough preoperative evaluation to disclose the key elements of a medical history. **Joseph Goode**, CRNA delivered two lectures. The first, "Carinal Resection and Reconstruction: A Case Report," involved a discussion on pathologies, surgical approaches for repair and ventilatory concerns, and potential approaches in the management of cases involving resection and reconstruction of the tracheobronchial tree. Joe also gave a talk entitled "High-Frequency Jet Ventilation: Introductory Concepts, Intraoperative Application, and Future Directions." **Bettina Dixon**, CRNA participated in a workshop on "Difficult Airway Management."

American Society of Anesthesiologists

October 2001
New Orleans, LA

As part of a panel discussion, **Barbara Brandom**, MD gave a talk entitled "How Can this Child be Relaxed? Choice of Muscle Relaxant: Which one, and Why?"

Dr. Brandom also moderated a poster session on "Neuromuscular Transmission and Neuromuscular Blockers: Monitoring and Effects of disease." **Doris Cope**, MD moderated a poster discussion session on "Local Anesthesia and Pain." She also presented a talk on "The Historical Resources Available at the Wood Library-Museum of Anesthesiology."

Robert Krohner, DO and **John Schaefer**, MD led a workshop on "Adult Fiberoptic Laryngoscopy," and **Rita Patel**, MD moderated a problem-based learning discussion entitled, "Plastic Surgeon: 'She's into herbs.'"

The following abstracts were accepted for poster presentation:

Gavin Fine MBChB, Peter Davis MD, Kathleen Fertal BSN, Rebecca Mutich, Etsuro Motoyama MD. Increases in Airway Resistance in Children: Comparison between Rapacuronium and Mivacurium.

Helene Finegold MD, Sivam Ramanathan MD. Is There a Relationship between Epidural Fever and Body Habitus in the Parturient?

Peter Goldstein MD, Frank Elsen PhD, Carolyn Ferguson BS, Gregg Homanics PhD. Zolpidem Modulation of Inhibitory Synaptic Transmission in the CA1 Region of the Hippocampus in GABA_A Receptor $\alpha 1$ -Subunit Knockout Mice.



Some of the UPMC delegation to the ASA meeting pause for a group photo. From left, John Lutz and Bob Petrick of Information Services, Dr. Nassar Sonbolian, Interim Chairman Dr. John Williams, Dr. Erin Sullivan, and Dr. Mark Hudson.

Ferenc Gyulai MD, Leonard Firestone MD, Mark Mintun MD. Halothane-Related Potentiation of GABA_A Receptor-Mediated Metabolic Depression in vivo by Positron Emission Tomography (PET).

Bupesh Kaul MD, Sivam Ramanathan MD, Manuel Vallejo MD, Gordon Mandell MD. Improving Anesthesia Outcomes: Role of National CQI Data.

Bupesh Kaul MD, Sivam Ramanathan MD. Outcomes in Augmented and Induced Labor with Epidural Analgesia.

Rainer Kentner MD, Xianren Wu MD, Peter Safar MD, Jeremy Henchir BS, Carlton Hsia PhD. Doubling the "Golden Hour" of Traumatic Hemorrhagic Shock Tolerance with Mild Hypothermia and an Anti-Oxidant.

Etsuro Motoyama MD, Gavin Fine MBChB, Kenneth Jacobson MD, Kathleen Fertal BSN, Hideki Miyao MD. Accelerated Increases in End-tidal CO₂ (PETCO₂) in Anesthetized Infants and Children During Rebreathing.

Society for Education in Anesthesia

Annual Fall Meeting & Workshop
October 2001
New Orleans, LA

Dr. **Rita Patel** participated in a panel discussion, giving a talk on "Good Communication – How do you Know it Really Happened?"

American College of Surgeons

October 2001
New Orleans, LA

Mitchell P. Fink, MD spoke on "Lung Protective Strategies in ARDS," as part of the session *Issues in the Intensive Care Unit* and on "Pathophysiology of ICU-Acquired Anemia," in the session *Perioperative Care of the Anemic Patient*. At the same meeting, Raymond Planinsic, MD participated in a symposium entitled *Hemostasis in Surgery* with a presentation on "Blood Safety Issues."



**European Society of
Intensive Care Medicine
14th Annual Congress**

September 30-October 3, 2001
Geneva, Switzerland

The European Society of Intensive Care Medicine held its 14th Annual Congress Sept. 30 – Oct. 3 in Geneva, Switzerland. **Michael R. Pinsky**, MD gave an invited lecture entitled: "Should we limit ICU admission for patients with respiratory failure?" Multidisciplinary Critical Care Training Program alumnus *Jacques-André Romand*, MD, of Geneva, was one of three co-chairmen of the Scientific Committee for this year's ESICM Congress.

CT 2001 – Annual Meeting of the American College of Chest Physicians
November 2001
Philadelphia, PA

Mitchell P. Fink, MD delivered the Presidential Citation Honor Lecture. The title of his talk was "Cytopathic Hypoxia: A Potential Mechanism Responsible for Organ Failure in Critical Illness."

Peter K. Linden, MD gave an invited lecture entitled, "New Therapeutic Agents for Nosocomial Gram Positive Infection."

Penny Sappington, MD presented the results of her group's study entitled "HMG-1 'B-box' Increases the Permeability of Caco-2 Enterocytic Monolayers and Decreases O₂ Consumption by Caco-2 Cells," (Sappington P, K¹, A, Wang H, Delude RL, T¹, Jy KJ, Fink MP).

**American College of
Rheumatology/Association
of Rheumatology Health
Professionals**

November 2001
San Francisco, CA

*The following abstract was
accepted for presentation:*

Carol M. Greco, PhD, Thomas E. Rudy, PhD, and Susan Manzi, MD, MPH. "Stress reduction improves lupus disease activity."

**American Heart Association
Scientific Sessions**

November 2001
Anaheim, CA

*The following abstract was
accepted for presentation:*

Barbara M. Fried, MD. "Intraoperative preload adjusted maximal power: a load independent method to assess left ventricular performance in patients undergoing cardiac surgery."

**Congress of Intensive and
Critical Care Medicine**

October 28-November 1, 2001
Sydney, Australia

John A. Kellum, MD and **Derek C. Angus**, MD, MPH participated in a workshop on *Evidence-Based Medicine*. Dr. Kellum also participated in a workshop on *Continuous Renal Replacement Therapy*; Dr. Angus chaired a session examining the definition and incidence of ARDS; and he participated in two discussions: *ICU staffing: Better ways to use doctors and nurses*; and *Quality and Outcomes of ICU Medical Practice: Performance assessment for intensivists*. **Michael R. Pinsky**, MD participated in a

clinical-update discussion on *Renal Failure: Pathophysiology*. Dr. Pinsky was a member of the Panel of Experts at the Congress' Grand Finale: *So what do the Experts Really Know?*

The Congress spawned two satellite meetings, in which Department faculty members also participated. The first, held prior to the main Congress, was **Ventilation and Oxygenation – Rainforest to Reef**, held October 24-26 in Cairns, Australia, at which Dr. Kellum was an invited speaker. Dr. Kellum also took part in a debate on the topic, *Time to abandon regional CO₂* and co-moderated a discussion on *Assessing Tissue Well-being*, in which he presented a talk entitled "Acidosis: Good, bad, or doesn't matter?"

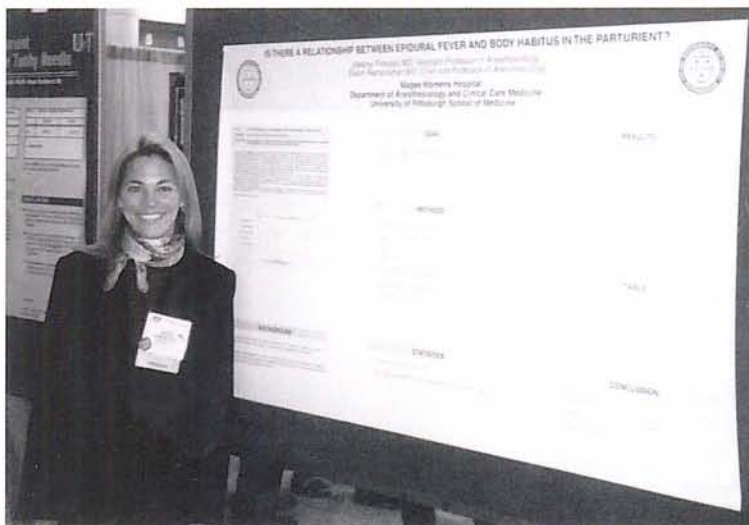
The second satellite meeting was the **International Symposium on Critical Care Nephrology**, held November 1-3 in Melbourne, Australia. Drs. Angus, Kellum, and Pinsky were keynote speakers. Convener was *Rinaldo Bellomo*, an alumnus of our Multidisciplinary

Critical Care Training Program. Dr. Pinsky co-chaired a debate on acid-base physiology and a panel discussion on acute renal replacement therapy (ARRT); he also participated in a debate on fluid replacement therapy in the ICU. Dr. Kellum participated in the ARRT panel, with a talk entitled "Convection or diffusion: the evidence;" he also took part in a debate on *Acid-Base Physiology* and in another debate (versus Dr. Bellomo) on *Loop Diuretics in ARF*, and he chaired a panel discussion on *Blood Purification in Sepsis*.

**Society for Neuroscience
National Neurotrauma Society**

November 2001
San Diego, CA

Department faculty members presented a total of 21 abstracts at two neuroscience annual meetings: the **Society for Neuroscience** Annual Meeting and the **National Neurotrauma Society** Symposium, co-situated in San Diego in 2001.



Helene Feingold, MD displays her abstract at the ASA meeting.

Society for Neuroscience 31st Annual Meeting

The following abstracts were accepted for presentation:

Bayir H, Kochanek PM, Janesko KL, Adelson PD, Graham SH, Kagan VE: S-nitrosothiols increase after traumatic brain injury in humans.

Du L, Burke N, Zhang X, Watkins SC, Kochanek PM, Graham SH, Nathaniel PD, Szabo C, Clark RSB: Reduction in mitochondrial respiration and transmembrane potential and release of mitochondrial apoptogenic factors in neurons exposed to peroxynitrite.

Kline AE, Bolinger BD, Kochanek PM, Marion DW, Dixon CE: Effects of interleukin-10 (IL-10) in normo- and-hypothermic rats following traumatic brain injury.

Kochanek PM, Hendrich KS, Jackson EK, Melick JA, Williams DS, Wisniewski SR, Ho C: Adenosine receptor agonists produce enduring increases in cerebral blood flow in rat brain: Assessment by spin-labeled magnetic resonance imaging.

Zhang X, Chen J, Graham SH, Kochanek PM, Draviam R, Nathaniel PD, Watkins SC, Clark RSB: Mitochondrial to nuclear translocation of apoptosis-inducing factor and large scale DNA fragmentation after traumatic brain injury in rats.

19th National Neurotrauma Society Symposium

Patrick Kochanek, MD was one of only three researchers chosen to present their papers at a

plenary session on brain injury. Dr. Kochanek's talk was entitled "Adenosine Receptor Agonists Attenuate Posttraumatic Cerebral Hypoperfusion in Rats: Perfusion MRI Assessment."

The following abstracts were accepted for poster presentation:

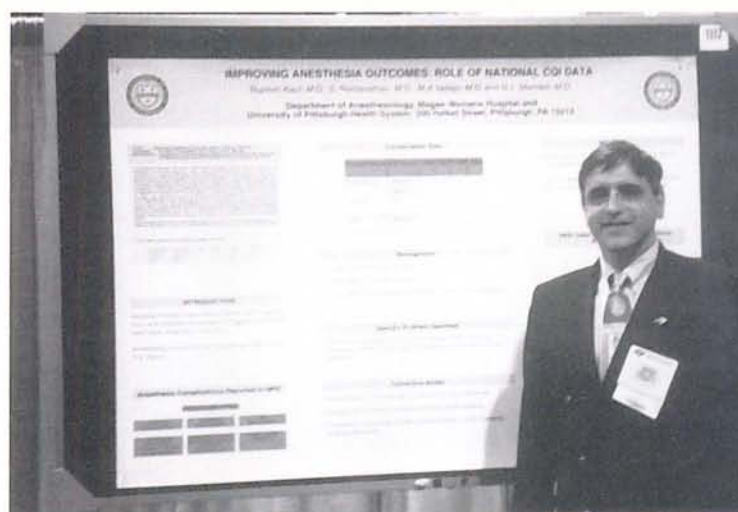
Adelson PD, Dixon CE, Davis DS, Rodriguez AG, Tran MP, Jenkins LW, Kochanek PM: Differential age-at-injury effect of NMDA blockade on outcome following controlled cortical impact in immature rats.

Bayir H, Marion DW, Kagan VE, Puccio AM, Janesko KL, Wisniewski SR, Clark RSB, Graham SH, DeKosky ST, Kochanek PM: Effect of hypothermia on oxidative stress after traumatic brain injury in humans: A preliminary report.

Davis DS, Tran MP, Dixon CE, Kochanek PM, Stevenson KL, Jenkins LW, Adelson PD: Isoflurane neuroprotection masks the beneficial effect of hypothermia following controlled cortical impact in immature rats.

DeKosky ST, Ikonomic MD, Paljug WR, Wilbur Y, Clark RSB, Kochanek PM, Kerr ME, Marion DW: Rapid increase in 42/40 ratio of amyloid proteins relates to plaque formation after brain trauma.

Gao WM, Stevenson KL, Dixon CE, Peters GW, Davis DS, Kochanek PM, Adelson PD, Jenkins LW: CCI alters phosphorylated protein kinase B (PKB) and eukaryotic initiation factor levels in 17 postnatal day (PND) rats.



Bupesh Kaul, MD displays one of his abstracts at the ASA meeting.

Jenkins LW, Peters GW, Dixon CE, Zhang X, Skinner JC, Clark RS, Adelson PD, Kochanek PM: Proteomic changes using large format 2D gel electrophoresis and pH 3-10 IPG strips 24 hours after CCI in 17 postnatal day (PND) rats.

Kline AE, Bolinger BD, Kochanek PM, Marion DW, Dixon CE: Interleukin-10 exacerbates motor and cognitive impairment following traumatic brain injury in normothermic rats.

Kochanek PM, Hendrich KS, Melick JA, Wisniewski SR, Ho C, Williams DS, Marion DW, Jackson EK: Adenosine-receptor agonists attenuate posttraumatic cerebral hypoperfusion in rats: Perfusion MRI assessment.

Satchell MA, Zhang X, Jenkins LW, Kochanek PM, Marion DW, Nathaniel PD, Graham SH, Clark RSB: Increase in phospho-BAD via protein kinase B (PKB) after human head injury.

Shore PM, Jackson EK, Janesko KL, Wisniewski SR, Adelson PD, Clark RSB, Jenkins LW, Kochanek

PM: Vascular endothelial growth factor is increased in CSF after traumatic brain injury in children

Statler KD, Alexander H, Clark RSB, Vagni V, Jenkins LW, Dixon CE, Marion DW, Safar P, Kochanek PM: Hypothermia expands contusion volume after controlled cortical impact in fentanyl-anesthetized rats.

Stevenson KL, Skinner JC, Davis DS, Tran MP, Dixon CE, Kochanek PM, Jenkins LW, Adelson PD: Moderate hypothermia improves functional outcome, but not cell death, after controlled cortical impact in immature rats.

Tran MP, Rodriguez AG, Dixon CE, Kochanek PM, Davis DS, Stevenson KL, Jenkins LW, Adelson PD: Histologic effects of acute NMDA blockade following controlled cortical impact in immature rats.

Zhang X, Clark RSB, Nathaniel PD, Kochanek PM, Satchell MA, Graham SH, Marion DW, Jenkins LW: Increase in phosphorylated protein kinase B (PKB) substrate after human head injury.



Peter K. Linden MD

Grant Supports Study of ALI/ARDS Treatment

As the recipient of a grant from the National Heart, Lung, and Blood Institute (NHLBI), the UPMC is one of only a few designated clinical centers in the United States to participate in the Clinical Network for the Treatment of the Adult Respiratory Distress Syndrome (ARDS). The project was devised to assess novel treatment methods for patients with adult respiratory distress syndrome and acute lung injury (ALI) and preventive measures for those at risk of developing ARDS. To accomplish this objective, NHLBI has established a network of Critical Care Treatment Groups that can support the stringent standards of the protocols.

According to **Peter K. Linden**, MD, co-principal investigator under the grant, ARDSnet is one of the longest-running federally funded networks of investigators studying ALI/ARDS. The network originally consisted of 10 medical centers. It now includes 20 centers nationwide, including the UPMC, which began enrolling patients in February 2001. Michael P. Donahoe, MD, of the Division of Pulmonary Allergy and CCM, is the other co-principal investigator, and **Mitchell P. Fink**, MD is a co-investigator.

The UPMC is currently participating in a 2 x 2 factorial-design study involving two trials: Prospective, Randomized, Multi-Center Trial of Pulmonary Artery Catheter (PAC) vs. Central Venous Catheter (CVC) for Management of Acute Lung Injury (ALI) and Acute Respiratory Distress Syndrome (ARDS); and Prospective, Randomized, Multi-Center Trial of "Fluid Conservative" vs. "Fluid Liberal" Management of Acute Lung Injury (ALI) and Acute Respiratory Distress Syndrome (ARDS). The study name is abbreviated "FACTT," for "Fluid And Catheter Treatment Trial."

The aims of the study are to investigate the safety and efficacy of PAC vs. CVC management, and "fluid conservative" vs. "fluid liberal" management in reducing mortality and morbidity in patients with ALI and ARDS. According to Dr. Linden, no strategy has yet been documented to be the best method of hemodynamic monitoring or fluid resuscitation for ALI/ARDS patients. There have been retrospective studies, but these are not ideal, according to Dr. Linden.

Research Fellow Enlists in SCRR Effort

Ala Nozari, MD, PhD, from the Department of Anesthesiology and Intensive Care at Uppsala University Hospital, Uppsala, Sweden, has joined the team at the Safar Center for Resuscitation Research for a research fellowship, to be followed by clinical training in critical care medicine at UPMC. As a research fellow, Dr. Nozari is working with Principal Investigator **Peter Safar**, MD on the suspended animation project funded by the United States Army.



Ala Nozari, MD, PhD

Dr. Nozari's previous research has focused on cerebral perfusion during circulatory arrest with pharmacological and mechanical techniques. His medical thesis was entitled *Cardiopulmonary cerebral resuscitation: A study of cerebral perfusion with special reference to the postresuscitation disturbances*.

Study Examines Economics of Pulmonary Artery Catheter Use

In a related investigation, Drs. **Derek Angus** and **Gilles Clermont** are performing an "Economic Analysis of Pulmonary Artery Catheter Use" (EA-PAC), a study that will complement FACTT by investigating the impact of the different strategies on long-term survival, quality of life, and quality-adjusted survival. The investigators will also calculate the cost-efficacy of PAC use

under the controlled circumstances of FACTT, and estimate the cost-effectiveness in more "real-world" conditions. The results of the EA-PAC will enlarge on the data collected in FACTT, and the investigators hope that it will provide useful information on the economic effects of the widespread use of the pulmonary artery catheter. Dr. Angus is principal investigator on EA-PAC; Dr. Clermont is co-investigator.

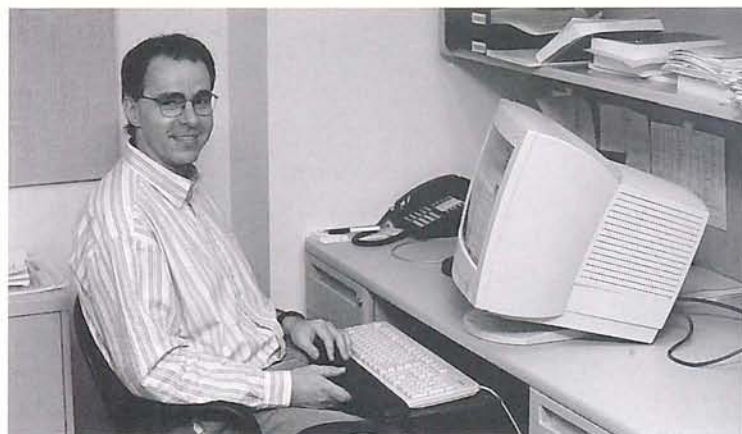
Visiting Researcher Returns to Switzerland

After two years as a visiting research fellow in the Division of Critical Care Medicine, Dr. *Vladimir Kaplan* leaves Pittsburgh to return to his home in Zurich, Switzerland. In Switzerland, Dr. Kaplan is certified in internal medicine, pulmonary medicine, and critical care medicine. He holds a position corresponding to that of associate professor in the Department of Medicine at the University of Zurich, where he divides his clinical effort equally between critical care and general internal medicine.

Dr. Kaplan's special interests are epidemiology and clinical outcome research. While at the University of Pittsburgh, he worked with Dr. **Derek Angus** on research in critical care medicine, and he also earned the degree of Master of Public Health from Pitt's Graduate School of Public Health. His masters degree thesis builds on his research in critical care medicine, which

produced two completed papers of which he is first author ("Hospitalized community-acquired pneumonia in the elderly: Age- and gender-related patterns of care and outcome in the US;" and "Pneumonia – still the old man's friend?"), and a third paper for which he is second author ("Dynamic microsimulation: a validated model to predict organ dysfunction, mortality, and length of stay in critical illness"). The papers have been submitted for publication.

Dr. Kaplan's wife Zuzana, who is also a physician, used her time in Pittsburgh to engage in research on peridural labor anesthesia with Dr. **Helene Finegold** at Magee-Womens Hospital. In Zurich, she is an anesthesiologist who also holds a position at the University of Zurich. The couple planned to resume their previously held positions at the University upon their return to Switzerland in mid-December.



During his two-year stay in Pittsburgh, Dr. Vladimir Kaplan of Zurich, Switzerland, researched clinical outcome in critical care and earned an MPH degree from the Graduate School of Public Health.

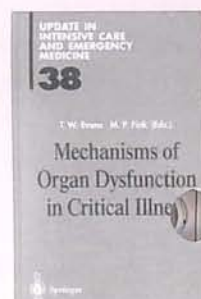
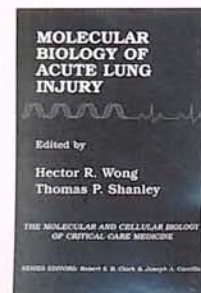
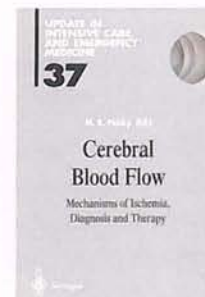
New Titles In Print

Cerebral Blood Flow: Mechanisms of Ischemia, Diagnosis and Therapy,

Michael R. Pinsky (Editor) Volume 37 in the series *Update in Intensive Care and Emergency Medicine* (to be published in January 2002).

Molecular Biology of Acute Lung Injury, Hector R. Wong (Editor), Thomas P. Shanley (Editor) (*Molecular and Cellular Biology of Critical Care Medicine* series; **Robert S.B. Clark** and **Joseph A. Carcillo** are Series Editors.)

Mechanisms of Organ Dysfunction in Critical Illness, T.W. Evans and **M.P. Fink**, (Editors) Volume 38 of *Update in Intensive Care and Emergency Medicine* (to be published in 2002).



Dr. Satchell Receives Laerdal Grant

Dr. Margaret Satchell has been awarded a Laerdal Grant for her study entitled "Effect of intracerebroventricular injection of liposomal NAD⁺ after experimental TBI in rats."



Class of 2001 Makes the Grade

Congratulations to the following members of the Anesthesiology Residency Class of 2001, who passed the American Board of Anesthesiology written exam this past July: Meera Appaswamy, MD; Harinarayan Balasubramanian, MBBS; Jamuna Chalasani, MD; Marievic Manrique, MD; Andrew Murray, MBChB; Jian-Zhong Sun, MD; and Li Ming Zhang, MD. Paul Davies, MD, who also completed the Residency Program in 2001, will take the exam next year.

Erratum

The photo below shows **Juan Canabal**, MD, Critical Care Medicine Fellow of the Year for Academic Year 2000-01, accepting congratulations from Drs. Bircher and Tisherman at graduation festivities last June. Dr. Canabal is currently Chief Fellow of Critical Care Medicine at the Medical Center. The winner of the 2001 CCM Fellow of the Year Award was misidentified in the Summer 2001 issue of *Anesthesiology & Critical Care News*, both in the article text on page 8 and in the photo caption on page 9. Our sincere apology to Dr. Canabal for the error.



Around the World

Alumnus Figures Highly in Indian CCM Society

In India, one of the major forces for the development of critical care medicine as a sub-specialty has been **Ram Rajagopalan**, MD, an alumnus of the Multidisciplinary Critical Care Training Program. Dr. Rajagopalan returned to India after completing his MCCTP fellowship here in 1991. During the past decade, he has been instrumental in establishing the Indian Society for Critical Care Medicine (ISCCM) and has served it in multiple capacities since its origin in 1994. He was elected president of the ISCCM for the 2002-2004 term and serves as vice-president this year. He is also actively involved in creating the Indian Resuscitation Council. His current areas of research include ventilation of ARDS patients and cardiopulmonary resuscitation.

Dr. Rajagopalan visited our Department for two weeks recently, observing the latest nuances of treatment in the neurosurgical,

trauma, and surgical ICUs. He also toured the Safar Center for Resuscitation Research, where he met with **Dr. Nick Bircher** to discuss CPR in India, and ways to improve its outcome. He also presented a guest lecture titled: "CPCR in India: Attitudes, education & outcomes." The main purpose of Dr. Rajagopalan's trip to the US was to take his re-certification exams in critical care medicine, for which he chose the Pittsburgh examination site.

MCCTP Alumnus is Youngest Prof

The youngest professor at Hiroshima University School of Medicine is an alumnus of the University of Pittsburgh's Multidisciplinary Critical Care Training Program. **Koichi Tanigawa**, MD, 45, was recently appointed professor and chairman of the Department of Emergency and Critical Care Medicine at Hiroshima University School of Medicine. He will begin to serve in his new position in April 2002.

Department Hosts International Observers, Researchers

The Department of Anesthesiology and Critical Care Medicine recently welcomed guest observers and researchers from points as far separated as Scandinavia, the Far East, North Africa, and South America. Some of the visitors remained for only a few weeks; others are here for more than a year.

Jian-Xiong An, MD is at the University of Pittsburgh for two years to examine risk assessments for neuraxial hematoma formation, either during or following thoracic epidural catheter insertion combined with heparinization. Dr. An is from **Beijing, China**, where he is an assistant professor in the Department of Anesthesiology at the Chinese Academy of Medical Sciences, Fu Wai Hospital and Institute of Cardiovascular Diseases, and Peking Union Medical College Hospital. Dr. **John P. Williams**, interim chairman of the Department of Anesthesiology, is Dr. An's mentor on the project.

The Hepatic Transplantation Anesthesiology (HTA) Service, under the direction of **Raymond Planinsic**, MD recently welcomed two visiting anesthesiologists from the

University of **Uppsala, Sweden**. **Lennart Jonsson**, MD, and **Rainer Dorenberger**, MD arrived in Pittsburgh September 1 and remained for three weeks to observe liver transplantation anesthesiology at UPMC Presbyterian. The University Hospital in Uppsala resumed liver transplantation activities this year after a three-year recess.

Resumption of the liver transplantation program at Uppsala also inspired a visit to the Division of Critical Care Medicine by **Sten Rubertsson**, MD, PhD, associate professor of anesthesiology and intensive care at the University of Uppsala. An alumnus of the Multidisciplinary Critical Care Training Program (1994-96), Dr. Rubertsson visited the CCM Division June 9 through July 12, 2001 to study new aspects in perioperative care of liver transplantation patients.

Several other physicians came from around the world to observe clinical care in the UPMC's intensive care units. **Alejandro Mesa**, MD, senior medical resident at the San Ignacio University Hospital in **Bogota, Colombia**, who is entering a fellowship in critical care medicine at Valle del Lili Foundation in Cale, Colombia, visited the Division of Critical Care Medicine during October and November 2001 as an

observer in selected ICUs at UPMC and the VAMC. Anesthesiologist **David Yepes**, MD and internist **Ricardo Garcia**, MD, of **Caracas, Venezuela**, visited October 16 through November 15 as observers in selected ICUs at UPMC. Dr. Yepes and Dr. Garcia are fellows in critical care medicine at Centro Medico in Caracas. **Sheila Nainan**, MD, senior registrar in anesthesiology at Tata Memorial Hospital in **Mumbai, India**, visited the Multidisciplinary Critical Care Training Program June 1-21, 2001. Dr. Nainan has a special interest in critical care medicine.

The global status of the University of Pittsburgh is apparent in Dr. **Mitchell P. Fink**'s research laboratories, which have welcomed both short- and long-term researchers in critical care medicine. **Runkuan Yang**, MD, PhD, an attending gastroenterologist and endoscopist from Beijing Medical University in **Beijing, China**, arrived in Pittsburgh in July 2000 and has since been working on a research project entitled *Change of transcription factors and pro-inflammatory genes in a murine model of hemorrhagic shock and resuscitation*. Other researchers visiting or working with Dr. Fink include **Xiaonan Han**, PhD; **Marion Scharte**, MD; **Zakaria S. Tawadrous**,

MBBS; and **Arino Yaguchi**, MD. Dr. Han, who also arrived in July 2000, is studying *Cellular and molecular mechanisms underlying alterations in intestinal epithelial permeability induced by NO and/or reactive nitrogen intermediates (RNI)s*; Dr. Scharte, of the Klinik und Poliklinik für Anesthesiologie und Operative Intensivmedizin, Westfälische Wilhelms-Universität in **Münster, Germany**, spent the last three months of 2001 studying *The effect of cytokine and hypoxia on HIF-1 dependent gene expression in IEC-6 cells*; Dr. Tawadrous, of Cairo University, **Cairo, Egypt**, is studying hemorrhagic and septic shock in small animals. Dr. Yaguchi, of the Tokyo Women's Medical University, in **Tokyo, Japan**, began working in Dr. Fink's laboratory in June 2001; she is studying NAD effects in inflammatory conditions; she is also investigating intracellular calcium concentrations and developing primary epithelial cell cultures.

Faculty Members, CRNAs Win Recognition

First prize in the Informatics session of the University of Pittsburgh Science 2001 research fair was awarded to Dr. **Gilles Clermont** and associates. Dr. Clermont has presented original research on mathematical modeling of the acute inflammatory response. This work was done collaboratively with Rukmani Kumar from the Department of Physics and Astronomy, Yoram Vodovotz from the Department of Surgery, and Carson Chow from the Department of Mathematics. Dr. Clermont and his collaborators explored innovative approaches to the description and understanding of complex processes.

Dr. Mitchell P. Fink received the Presidential Citation Honor Lecture Award at the American College of Chest Physicians meeting in Philadelphia, PA on November 4, 2001. This award was first presented in 1970 and is the only award conferred by the current ACCP president.

Three CRNAs from UPMC Presbyterian won awards at the State Meeting of the



*Gilles Clermont MD
First Place, Informatics
session, University of
Pittsburgh Science
2001*



*Mitchell P. Fink MD
Presidential Citation
Honor Lecture Award
American College of
Chest Physicians*



*Ake Grenvik MD, PhD
Lifetime Achievement
Award, American
Society of Critical Care
Anesthesiologists*



Sandra Sell, CRNA (Best Clinician), left, and Helen DeFranco, CRNA (Best Clinical Instructor), display the awards they won at the State Meeting of the PA Association of Nurse Anesthetists (PANA).



John O'Donnell, CRNA accepts the PANA award for Best Didactic Instructor. He also received the Hilda Solomon Memorial Award.

Pennsylvania Association of Nurse Anesthetists, held Oct. 19-21 in State College, Pa. **Helen DeFranco**, CRNA won the award for Best Clinical Instructor; **Sandy Sell**, CRNA was the winner of the Best Clinician award; and **John O'Donnell**, CRNA received the award for Best Didactic Instructor (of students in a nurse anesthesia program), and the Hilda Solomon Memorial Award, given to the individual contributing most substantially to the education of all other CRNAs in Pennsylvania in 2001.

Distinguished Service Professor of Critical Care Medicine Ake Grenvik, MD, PhD was awarded the Lifetime Achievement Award of the American Society of Critical Care Anesthesiologists at the ASCCA's annual meeting October 12, 2001 in New Orleans, La. The honor was given "in recognition of a lifetime of distinguished service and outstanding contributions in critical care medicine."

Tom Wash Moves UPP Corporate Ladder

Tom Wash, former assistant controller for the Department of Anesthesiology and Critical Care Medicine, has left the Department to accept a position at the University of Pittsburgh Physicians Corporate Offices. Tom, who joined the Department in September 1998, is now assistant to the controller and is a member of the staff of UPP Corporate Controller Ann McElroy.

Dr. John Williams expressed his gratitude for Tom's work

in the Department. "Over the years, Tom has worked tirelessly for all of us, with little praise and even less recognition," he said. "Many are quick to choose a career that puts them in the limelight, but leaves the true work undone – Tom Wash is a shining example of the exact opposite."

Executive Administrator Steve Brown echoed that sentiment, "Tom is an exceptional individual, and I feel very fortunate to have worked with him during my first year here. I will miss his

proficiency, his professionalism, and his great sense of humor. It is good to know that he will be nearby and in a position to work with us."

Tom's new workplace is in UPP Finance on the ninth floor of Forbes Tower.

"Although we are sad to see Tom leave, this is an outstanding opportunity," said Department Controller Mark Witmer. "He will do an excellent job for UPP Corporate staff, as he has always done for our Department."



Tom Wash, now assistant to the controller at UPP Corporate.

DEPARTMENT OF ANESTHESIOLOGY/CCM
www.anes.upmc.edu

MULTIDISCIPLINARY CRITICAL CARE TRAINING PROGRAM
www.anes.upmc.edu/mcctp

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