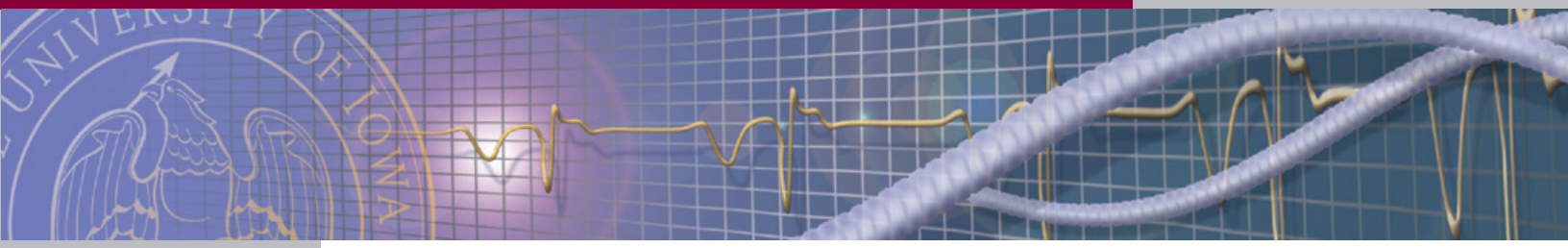
University of Iowa Hospitals & Clinics
University of Iowa Health Care

Department of
ANESTHESIA
The University of Iowa



Fall 2010

Inside This Issue

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Notes from the Chair

In the last newsletter issue, I introduced some of those individuals whose administrative efforts are so critical to making an organization as large and complex as ours work well. Over the next few newsletters, I'm going to ask many of them to author articles that will appear "From the Chief." The first of these is from Brad Hindman, Vice Chair for Faculty Development. In days gone by, new faculty were largely left to "fend for themselves" in trying to navigate the waters of academia. Some succeeded, but too many did not. This approach has changed; bright young academic physicians are too valuable to take for granted. Over the last few years, **Brad has developed some truly novel programs** (and the Carver College of Medicine thinks so, too). I think you'll find his review of these efforts to be very interesting.

Michael M. Todd, M.D.
Professor and Head

Faculty Development

Bradley Hindman

There is an ever-changing stream of new knowledge, new techniques, new regulatory requirements, and new technology that the academic anesthesiologist must rapidly assimilate into practice. For example, five years ago, ultrasound was rarely (if ever) used for central venous cannulation and a total electronic medical record didn't exist. Now, both are indispensible elements of practice. Now, in academic anesthesia, it is almost as important to understand the meaning of a pre-study power analysis or to create an educational "wiki" as it is to be able to use a GlideScope®. To address this need, in February 2005, Dr. Todd asked Dr. Hindman to serve as Vice Chair for Faculty Development to organize the ongoing professional growth of our faculty as clinicians, educators, and scholars.

An early faculty development initiative was the institution of the Faculty Seminar Series in the summer of 2006. The goal of this series is to provide information that is of special interest and/or practical value to our faculty. Faculty seminars are held approximately every two weeks during reserved time (Tuesday mornings, 7:00 - 7:45 a.m., prior to the start of the operating rooms). About half of the speakers are anesthesia faculty with the other half being speakers from other departments and visiting professors. Attendance is voluntary, but continuing medical education credit is awarded to those who attend. The series is currently finishing its fourth year, for a total of 98 seminars with no repeats. Topics this year have included anesthesia history, new instructional technologies (e.g., audience response systems, wikis and blogs), and a series of lectures and a live animal workshop regarding transesophageal echocardiography for noncardiac surgery. Both attendance and seminar evaluations continue to be very good, so the series will continue.

The intricacies of the academic review and promotion process are not familiar to most clinicians

Michael Todd and Bradley Hindman

Interesting Facts
about Bradley J. Hindman, M.D.

He completed his medical school education at Oregon Health Sciences University in 1982.

His postgraduate education took place in Portland, Oregon and Boston, Massachusetts.

He joined the faculty at Iowa in 1988 as an associate, and was full professor by 2002.

He was selected by residents as Teacher of the Year in 1991, 1997, 2005, and was nominated an additional 7 times.

In 2005, he was the recipient of the Leonard Tow Humanism in Medicine Award through the Arnold P. Gold Foundation.

He has supervised 6 cardiovascular anesthesia postdoctoral fellows.

His area of research interest is perioperative central nervous system injury.

He has been awarded multiple research grants throughout his career, including NIH funding.

He contributed as co-investigator in the NIH-funded Intraoperative Hypothermia for Aneurysm Surgery Trial.

He has over 60 publications, his most recent in *Anesthesiology* in the August 2010 issue, and has contributed nine textbook chapters.

He has presented at numerous meetings throughout the world.

He is married to Joni Hindman, and together they have one daughter, Emily.

and, frankly, are often of little inherent interest. Nevertheless, promotion does not just "automatically" happen and failing to prepare for these reviews can substantively delay advancement. To meet this need of the faculty, the department has improved the organization of the faculty academic review processes and has greatly improved the quality of these reviews. First introduced in the fall of 2005, a key element in this improvement was the creation of a web-based academic review system called the Faculty Reviews web page. Each faculty member has protected access to their individual web page that contains folders into which they

The web page provides links to key collegiate and university resources regarding academic rank and promotion...

can upload and archive materials related to their professional development (e.g., C.V., personal statements, teaching materials, teaching evaluations, publications, etc.); in essence, creating an online dossier. The web page is specifically designed to aid and educate faculty about the collegiate and university academic review processes, and to clearly identify materials required for these reviews. The web page provides links to key collegiate and university resources regarding academic rank and promotion and to departmentally-based materials also used in the review and evaluation processes, such as medical student-, resident-, and peer- evaluations of teaching. When a faculty member is reviewed (e.g., for promotion), reviewers are granted temporary access to the materials posted on the Faculty Reviews web page. The system allows reviewers to submit their evaluations and recommendations online and, when appropriate, to anonymously cast votes. This structured source of information and documentation has significantly increased the faculty's understanding of departmental, collegiate, and university requirements for academic rank and promotion. At the same time, increased completeness and accessibility of faculty dossiers has allowed reviewers to provide much more thorough and timely assessments of faculty development. To provide a sense of scale, this last academic year a total 42 faculty underwent formal academic reviews—3 for promotion, 11 for reappointment, and 28 for 1- or 2-year continuing reviews.

The other new element in the academic review process was the implementation of a standardized academic review document in the fall of 2008. For each faculty being reviewed, the department creates an individualized standard review document that is prepopulated with quantitative information regarding each faculty's individual activities and performance over the preceding academic year (e.g., all teaching activities and scores, clinical activity, publications, grants, etc.). The document also includes measures of faculty performance in newly established departmental metrics such as timeliness of billing and record documentation, clinical case conference attendance, etc. This document allows reviewers to spend less time on data gathering and more time considering each faculty's accomplishments and areas for future development. This document also clearly shows faculty the performance measures that are being considered in their evaluation and where

they stand relative to their peers. This standardized review document results in a more complete, objective, and consistent evaluation of each faculty member's accomplishments and progress.

The most recent faculty development initiative, the New Faculty Program, began in the summer of 2009. Residency and fellowship prepares us to be clinicians. It does not, however, prepare us to be *faculty*—to be a teacher at the bedside or in the classroom, to be a scholar creating new knowledge, how to write a grant, how to speak in public, or how to conduct a clinical study, and so on. The aim of the New Faculty Program is to fill that gap and to support academic growth and development of our newest faculty, primarily associates and assistant professors. Elements of the new 2-year program include: 1) designation of two senior advisors for each new faculty member, 2) availability of start-up funds to support scholarly projects, 3) a seminar series devoted to the specific needs of new/junior faculty, 4) predefined (but flexible) program goals by which to measure progress, and 5) periodic written assessments by both the new faculty and their advisors. The program started big by including all associates and assistant professors who had been at rank for two years or less as of July 1, 2009; this resulted in the inclusion of 22 new faculty participants. During this first year of the program, a total of eight topics were presented in the New Faculty Program Seminar Series, including workshops on presentation skills, writing, and clinical teaching. This new program absolutely relies upon the participation of the senior faculty, 22 of whom served as program advisors this last year. To be sure, this program is "a work in progress," and both the structure and content of this program will change as we gain experience and receive feedback from all involved. One of the real positive effects of this program has been a much greater opportunity for senior faculty to work with our new faculty as consultants and advisors (e.g., as mentors). Our aim is to establish a culture of support and shared values regarding what it is to be an academic anesthesiologist at The University of Iowa.

Bradley J. Hindman, M.D.
Professor and Vice Chair
Faculty Development

Education, Research, and Service

Our Three Missions

The Department of Anesthesia supports the Roy J. and Lucille A. Carver College of Medicine's three inextricably linked missions: education, research, and service.

Several educational support funds currently exist within the Department of Anesthesia, established through The University of Iowa Foundation. The energy and ingenuity shown by our faculty are deeply linked to the enthusiasm of our medical students, residents, and fellows. It is our intent to reach out and attract the brightest and most enthusiastic students to the field of anesthesiology. Your contributions give our students and trainees the opportunities they should and must have to develop their growing interests in careers in clinical care, education, and research. By supporting them, we support ourselves for generations to come. Contributions to these funds can be targeted for important department needs such as curriculum and teaching support, student financial aid, student travel to academic conferences, guest lecturers, etc.

Many patients receive benefit from the direct application of research conducted by our investigators. It is by their skills as scientists and mentors that we continue to attract promising new investigators. To achieve these positive results, we are assisted by the support of alumni, grateful patients, colleagues, and others whose contributions help us as we pursue this essential mission. Together with contributors, we can continue to make a difference in the lives of our patients.

As the preferred provider of tertiary care to patients in Iowa and beyond, our physicians have developed a national and international reputation for being leaders in anesthesiology. Providing additional funding for the vital endeavors of early-career faculty, programs and services that are not entirely financed by other support, is crucial. Support for faculty recruitment and development is made possible in part by the support of donors through charitable giving.

The importance of these funds cannot be overemphasized and your continued generosity in supporting these efforts is deeply appreciated. Become a partner with us in all these undertakings and share with us the immense satisfaction and pride for the physicians and researchers who receive their training here.

We invite you to contact us for additional information or to discuss our philanthropic priorities.

John Stark and Jim Lane

ADMINISTRATOR'S Corner

For this issue of our department newsletter, I asked Jim Lane, our Human Resources Administrator, to discuss a personnel classification that he was instrumental at reinstituting within the Department of Anesthesia - the Fellow Associate.

John Stark, M.B.A., Department Administrator

What is a Fellow Associate?

Within the last several years, the Department of Anesthesia began taking advantage of a classification that offers the advantage of allowing an individual to participate in a fellowship program while concurrently serving as a staffing anesthesiologist. The fellow associate classification may be utilized only when the individual is participating in an unaccredited fellowship program. To date, the department has extended this appointment to fellows in the Cardiothoracic Anesthesia and the Regional Anesthesia programs. This arrangement is a win-win situation for the fellow and the department. The department reaps the benefit of an additional anesthesiologist to enhance our ability to staff surgical cases, and we also benefit economically from the charges that are derived from this work. The fellow associate is paid a salary greater than that of an individual participating in one of our department's accredited fellowship programs, acquires practical experience as a faculty member in an operating room environment, and thus obtains a feel for what that responsibility actually entails. The fellow associate is obligated to provide 20% effort toward staffing surgical cases. This typically translates to one day per week; however, they may be scheduled as needed to fill in any unforeseen gaps in the operating room schedule up to a maximum of 52 clinical days per the year of their fellowship. In most instances, the fellow associate will staff his or her own room. As they acclimate to the system, they find themselves actively teaching and instructing the residents. This past academic year, our department employed two fellow associates, both in the Regional Anesthesia Program. Enyinnaya Nwaneri, M.D., M.P.H., and Melissa Koshel, D.O., both joined us in 2009, fresh out of their anesthesia residency. Dr. Nwaneri, or Enyi as she likes to be called, has high praise for the unique opportunity to work as a faculty physician and complete a fellowship at the same time.

Enyinnaya Nwaneri

"Overall, my experience as a fellow associate was a very good, eye-opening one. As someone who was fresh out of residency, I was a little apprehensive about the prospect of having to run two or three operating rooms and staffing my own blocks. Although I looked forward to the challenge of caring for my own patients, I wasn't sure if I was ready to assume such an enormous responsibility. On my first day as a full-fledged attending came upon me, I realized that I would never feel 100% 'ready' - I just had to dive in and do it! And that I did! Since that first day, I took care of over 550 patients as a fellow associate, and both my patients and I have survived. I cannot say enough about the support I received from the clinical staff at University of Iowa Hospitals and Clinics. They created an environment where I was encouraged to ask questions about perioperative patient management or call for help if I needed assistance with a procedure or an unstable patient in the operating room. The same is true for the residents, CRNAs, and SRNAs. The learning has definitely been reciprocal. I've learned from them as much or even more than they have learned from me. This, combined with the helpfulness of the perioperative nurses and the various department administrators, really helped to make my fellow associate experience a more manageable, less overwhelming one. Although my name ultimately went on the top of the patient's chart, I never truly felt alone. Instead, I felt like I had an entire department backing me. With a year of specialized clinical experience under my belt as a fellow associate, I feel even more confident about providing safe perioperative anesthesia care to my patients as I begin practice in my home state of Maryland."

We welcomed two new fellow associates to our department for the 2010-11 academic year. **Roberto Blanco,** M.D., and **Janel Nielsen**, D.O., are just beginning to experience what it's like to be both the student and the instructor as they check the main operating room schedule and find their names assigned to staff a surgical case. We have every confidence Drs. Blanco and Nielsen also will have the support of our more experienced anesthesiologists and additional clinical caretakers, being able to call upon them for support and guidance when needed. The fellow associate classification is a real winner for all and something we plan to continue to offer into the future.

James Lane, B.L.S.
Human Resources Administrator

Pierce Cornelius and granddaughter, Mackenzie, with a patient in Guatemala

Resident Mission Trips

The Good News Just Keeps Getting Better!

As reported in previous newsletters, one of the commitments shared by the current department leadership is to continue to enhance the opportunities available for our senior residents to participate in international medical mission trips. This experience cannot be compared to any other opportunity. Physician intentions when requesting approval to participate in a mission trip are entirely good. Why else would these professionals venture beyond the security of their training medical center? Participants hope to take their knowledge and skills into some of the poorest nations of the world. While enormous wealth and knowledge benefit the world's affluent, some two billion persons still lack basic nutrition, housing, safe water, and health care. In fact, tragically, health in many poorer nations is actually on the decline. Our department brings the opportunity to senior residents to join our faculty members traveling to such nations, serving the forgotten and needy with their skills and experience. Low-resource communities welcome these healthcare providers, and our residents are challenged with "making do" in clinical situations offering far less than they have come to expect within Iowa's physical structure, often including less modern equipment. Beyond any doubt, it is a win-win experience.

As few as three years ago, our department was able to offer financial support to only a small number of select senior residents who requested to accompany our faculty on international medical mission trips. Our faculty set an admirable example by taking personal time and funding their own expenses for these trips. Previously, our residents participating in medical mission trips had to arrange to make up for the hours of resident education they missed while serving abroad. Currently, the American College of Graduate Medical Education recognizes the time our residents spend on mission trips as a valid elective within their training program. In early spring 2010, our department supported six senior residents (more than previously reported!) on missions to Venezuela, Columbia, Guatemala, Haiti, and the Dominican Republic, with each resident accompanied by a faculty anesthesiologist. There are a variety of organizations that function as the organizing entity for these trips, and our department acknowledges each as available

continued on page 6

We invite you to donate to The Cornelius International Mission Resident Fund

Help the department build this account to a fully funded status. You may do so by making your check out to "The State University of Iowa Foundation," and indicating in the notes field ATTN: Anesthesia - "The Cornelius International Mission Resident Fund." Send your contributions to:

The University of Iowa Foundation
Levitt Center for University Advancement
One West Park Road
P.O. Box 4550
Iowa City, IA 52244-4550

ATTN: Anesthesia - "The Cornelius International Mission Resident Fund"

Should you have questions regarding alternative methods of donating to this special account, please feel free to contact our department administrator, John Stark. He can be reached via e-mail at **john-stark@uiowa.edu** or by telephone at **319-384-8367**.

Left: Lee Kimball [far right] poses with colleagues in the Dominican Republic
Middle: Dr. Jim Bates enjoys speaking to Haitian children
Right: A group of children play outside of a clinic in Haiti

for consideration by our faculty and residents. Here are just a few quotes from our most recent graduated residents who participated this year.

Dr. **Matthew Sundblad,** Barquisimeto, Venezuela: "They knew our group of 25-30 volunteers was coming and all the patients were sitting around waiting. When we arrived at the hospital and walked in, they all stood up and start giving us a standing ovation before we ever did anything. It was good. The kids had to wait outside in the heat for hours to wait their turn to see us. We evaluated between 150-200 patients on the first clinic day."

Dr. **Lee Kimball,** Dominican Republic: "They had never seen an ultrasound machine within an operating room setting. They owned only one blood pressure and pulse oximetry machine. None of their machines ventilated; it was all done by hand. The case we were just beginning was a 6-hour prone case for a spinal fusion. They taped a stethoscope to the patient's chest and the physicians listened throughout the case, checking blood pressure every 15 minutes."

Dr. **Riley Stringham,** Quetzeltenango, Guatemala: "Walking in and what I saw was a humbling experience for me. Literally, we walked through the doors on the side of the building entering where all the clinics were set up and families were just waiting everywhere. Walking through the families on both sides of the hallway was humbling, each clutching each other, each not knowing what services could be provided, and each not knowing whether their loved one would get selected. We screened over 70 people during the day of screening, with each surgical candidate/patient evaluated by four different specialty teams."

Resident
Mission Trips
The Good News Just Keeps Getting Better!
continued

Our department offering this opportunity to our senior residents does not come without great planning and cost. Our residency program director, Dr. Debb Szeluga, considers each request from a department faculty and resident duo (and sometimes multiple faculty and residents request consideration for the same trip). Our operating room coverage schedule must be considered, as well as attention given to any residents scheduled to be on vacation, what residents might be on a research rotation, and what residents might be participating in an elective rotation off-site. Chief residents are involved in the planning process, fielding offers from fellow residents to help cover for those individuals requesting time away for mission trips. Our department administrator, John Stark, is also involved in the process. John assists with the necessary steps to ensure the residents' financial obligations for travel are managed in an appropriate and timely manner. In 2010, in response to department faculty and staff inquiries about how we could help, John arranged for a special account to be set up through the UI Foundation, an account department members can contribute to in an effort to help fund our residents on these trips. The expectations for both our faculty and residents participating in medical mission trips are that they continue to behave in a professional manner, representing our department and university in a way that brings pride to all. Upon the return of the faculty and resident groups, follow-up reports are compiled into a presentation that is offered to all members of our department. For those reading this who have experienced the challenges of being involved on international medical trips, the overall benefit is known. As stated in previous articles, the value of this clinical training is inescapable and serves to further sharpen the skills of these young anesthesiologists approaching the end of their residencies. In addition, to the best of our knowledge, our residency program is among only a few with either the

logistical ability or the educational commitment to send such a high percentage of the senior residents abroad, each typically for two weeks of overlapping time.

The Carver College of Medicine boasts a large number of physician graduates who select to donate their time to provide medical care to those areas of the world most in need. Many of these alumni are anesthesiologists, most who were not afforded the opportunity during their residencies to have this experience. Only a handful of our alumni have shared their own experiences with our newsletter staff. We invite many more of you to send us your stories and photographs. Just a few alumni we are aware of who did participate, many who still do, are: **Gary Boeke, Dennis Coombs, Pierce Cornelius, Eric Crabtree, Ray Defalque, Tara Hata, Dale Morgan, Cindy Regan, Sonia Saceda, Dick Schlobohm, Jim Schuh, Gaylynn Speas,** and **Sarah Titler.** And, this list doesn't even include those recent anesthesia resident graduates who participated during their residency program here at Iowa. Also, we know the list is much longer than even we can imagine. Thank you to each of you who has chosen to give your time and skills through participation in international medical mission trips.

When we indicated the good news just keeps getting better, it does! One anesthesia alumnus, **Dr. Pierce Cornelius** (BS '53, MD '57, R '60), and his wife, **Wilene Cooper Cornelius** (BSN '58), sum up their joint experiences of serving over two decades on medical mission trips with this comment, "Our only regret is that we didn't begin traveling abroad on mission trips earlier. Had we have been offered this experience during our healthcare training years, we are certain we would have continued donating our time and talents throughout our careers and not waited until retirement." Dr. and Mrs. Cornelius are taking steps to offer the opportunity to family members and to Iowa anesthesia trainees. On one trip to Guatemala, they sponsored their granddaughter, Mackenzie, to join them. She was a high school sophomore at the time, and she helped with children who were waiting for an operation. Per Dr. Cornelius, "Mackenzie would read to them, play games with them, and keep them entertained before going into the operating room. She was a great help. I hope that the patients are as happy receiving their care as we are giving to them." The Corneliuses have donated generous sums of money to our department throughout the years, and did so again in 2010, with an accompanying request for Dr. Todd to use the money as he best see fit within the department. Recently, the Cornelius pair agreed to Dr. Todd's request to earmark their donation to the sole purpose of helping fund Iowa's senior anesthesia residents who apply, are screened, and are approved to participate in medical mission trips wherein they are accompanied by a faculty member. Thus, we have named their gift fund "The Cornelius International Mission Resident Fund." With the help of other alumni who choose to contribute to this specific fund, we will better be able to secure our goal of providing our senior residents the opportunity to experience at an early stage in their careers the benefits of serving as healthcare providers in some of the poorest countries in the world.

This department's commitment to offering our senior residents the opportunity to participate in international medical mission trips, coupled with the generous gift from Dr. and Mrs. Cornelius, allows us to state that this program will remain an important and positive part of our resident trainee experience. We are also now able to announce with confidence to all individuals who apply to our residency program that we regularly participate in delivering healthcare to those in need of such around the world.

SPOTLIGHT ON A CLINICAL DIVISION

ESTABLISHMENT OF AN ANESTHESIA SUPERVISED NURSE SEDATION TEAM

L-R: Joss Thomas, Merete Ibsen, Roger Roeder, Ruth McKeever, Cindy Funk, Holly Anderson, Wendy Thornburg

Background

Historically, there was a need to provide sedation services at University of Iowa Hospitals and Clinics (UIHC), particularly for the pediatric population. In response to this growing concern, the Children's Hospital of Iowa Quality and Safety Committee set up a survey in September of 2006 to assess the sedation practices of the Department of Pediatrics. The conclusions of the committee indicated that at least 12% of cases appeared to be under sedated and 5% were over sedated. In fact, 36% of cases that intended to have deep sedation did not achieve that target. A 10% adverse event rate was also reported, which included respiratory and cardiovascular compromise. It was also concluded that 49% of pediatric providers would use a sedation team if such services were provided.

However, there was a lack of a well-trained sedation team to provide sedation services which would allow physician providers time to carry out procedures efficiently. It also appeared that the sedation medications used by these providers did not always provide an environment conducive to completing procedures effectively and safely.

The Anesthesia Supervised Nurse Sedation Program was established in response to this need. Based on the requests of various physicians, it was recognized that certain specialties such as radiology and the pediatric gastroenterology group required the services of a sedation group rather urgently. The bulk of sedation needs, especially in children, occur in these two areas.

Training Program

Training occurred in two phases. Phase one included didactic sessions with senior anesthesia staff covering various aspects of procedural sedation such as level of sedation, concept of rescue, sedation drugs, and emergency airway and circulatory management. A unique aspect of the nurses' training involved learning skills in an operating room setting with patients. The training included skills in bag mask technique on adults and children, the use of an oral airway, and placement of a laryngeal mask airway in adults as well as children. The nurses also spent time in the Anesthesia Pre-Evaluation Clinic learning how to perform an airway evaluation using the Mallampati system, as well as how to complete a pre-sedation evaluation. Each nurse went through a session using the department's patient simulator and each was exposed to scenarios depicting sedation encounters.

Phase two of training included one-on-one supervision by an anesthesiologist for several sedation sessions using different medications, both in adults and in children. Key competencies were identified and assessed during this period. Following this training, the nurses were performing sedations with a certain level of independence.

Monitoring Standards

We adapted American Society of Anesthesiologists (ASA) standards for monitoring which included the use of end-tidal CO_2 monitoring for all of our patients. While this is currently not a Joint Commission on Accreditation of Healthcare Organizations requirement, we believe end-tidal CO_2 monitoring provides

an added level of safety to identify possible obstruction of airway earlier than a change in O_2 saturation. Monitors with end-tidal monitoring capability were procured for the sedation team.

Implementation

Five registered nurses were trained to provide sedation under the supervision of an anesthesiologist. As the experience and confidence of the sedation team increased, we started to expand our services to other areas of the hospital, such as the Pediatric Specialty Clinics, to include biopsies, lumbar punctures, bronchoscopy lab, orthopaedics for cast changes and tenotomy. In addition, we were able to sedate children for multiple procedures such as magnetic resonance imaging followed by a nuclear medicine scan and computed tomography. We also provided sedation for imaging procedures that need oral contrast.

Primary specialties that want to use our services are informed that we strictly adhere to anesthesia nothing by mouth (NPO) guidelines. This allows us to consider converting a sedation case to a general anesthesia case seamlessly in instances where sedation was found to be inadequate or unsafe for the procedure to be completed. In such instances, the anesthesiologist would take over the case.

Sedation Process

All of our patients have a complete pre-sedation assessment independently carried out by the sedation nurse and then confirmed by an anesthesiologist. A nurse cannot start administration of sedating agents without the acknowledgment of an anesthesiologist. The anesthesiologist is immediately available, but not necessarily in continuous attendance of a sedation event. Logistically, this allows the anesthesiologist to supervise up to three sedation events concurrently. Once the sedation is complete, the patient is handed over to a recovery nurse, at which time the sedation nurse gives a full report of the case to the recovery nurse. The sedation nurse proceeds to do the next case. As the sedation team gained further experience and skills, the anesthesiologists became comfortable supervising sedations at different and sometimes non-contiguous locations.

*http://www.asahq.org/news/propofolstatement.htm. Accessed August 1, 2010.

The Sedation Process

Our sedation process is protocol driven, which mandates the approval by an anesthesiologist for any medications given beyond the doses provided by the protocol. Physicians performing a procedure are not allowed to give orders to the nurses regarding sedation medication dosages. Maximum doses for any medication are provided in the protocol to improve safety and minimize drug overdose-related errors. Only supervising anesthesiologists are allowed to administer or order medications outside the protocol. We initially used pentobarbital for sedations involving imaging studies and ketamine for pediatric gastrointestinal procedures. These medications were used based on protocols that were developed, and tested at Boston Children's Hospital.[1,2] These drugs had a long safety record in children. However, the prolonged duration of action of pentobarbital, and the nausea and vomiting with ketamine, were side effects that affected the satisfaction of patients and parents. Nevertheless, procedures were completed without serious ventilatory or cardiovascular compromise. Meanwhile, we submitted a proposal to the UIHC Pharmacy and Therapeutics Committee for the use of dexmedetomidine as a sedation drug for imaging studies. The protocols used for dexmedetomidine were adapted from protocols developed in Boston.[3,4] We also realized the need to explore the use of propofol as a sedation drug for procedures such as pediatric endoscopies (where other drugs used did not provide the added advantages of a short duration of action, quick recovery, and decreased nausea and vomiting).

The use of propofol by nonanesthesiologists has been mired in controversy since the release of the position statement by the Joint American Association of Nurse Anesthetists and the ASA on propofol.* We believed that with appropriate training and supervision, a registered nurse could safely administer the drug for sedation. Despite the support from the UIHC Department of Anesthesia, we could not start the use of this drug until the Iowa Board of Nursing responded to our request to allow registered nurses, under the supervision of a physician, to administer the drug. On September 11, 2008, in a landmark decision, the Iowa Board of Nursing voted to rescind an initial position statement (which had restricted administration of propofol by registered nurses to the intensive care unit, on intubated patients only). Immediately thereafter, we trained the nurses and initiated sedation for gastrointestinal procedures using propofol or a propofol-ketamine protocol developed by us.[5,6]

Since the advent of both dexmedetomidine and propofol, the quality and success of our sedation program grew exponentially. In fact, our incidence of nausea and vomiting has considerably decreased. We currently use dexmedetomidine exclusively for imaging studies, and we use propofol for pediatric endoscopies, bronchoscopies, spinal taps and biopsies. Pentobarbital and ketamine are now used on patients who either have a contraindication to dexmedetomidine or propofol, or in patients who have had significant side effects or allergies with these drugs. All protocols are modified and updated based on analyzing the quality assurance data collected, and based on a consensus among the anesthesiologists supervising the sedation nurses. Deviations from protocols are documented, and reasons for deviation from protocol are provided for each sedation event.

The nurses also make a post-sedation phone call on the next business day to learn from the parents or the patient about the sedation experience, as well as find out if there were any sedation-related events or other adverse events within the first 24 hours of the sedation.

Quality Assurance Assessment of the Program

We have maintained a database of all our sedations for assessment of the quality of sedation we provide and to monitor adverse events associated with procedural sedation cases supervised by our team. Our primary goal is to provide sedation with the highest level of safety, while maintaining a high degree of satisfaction to both the provider and the parents and patient. Our sedation-related adverse events monitoring not only covers serious problems such as cardiac and respiratory instability, but also a wide spectrum of events that can affect the quality and satisfaction of sedation for the child and

parents, such as difficult intravenous (IV) placement, side effects of medications, and time to return to baseline activity. As mentioned earlier, all sedation cases are followed up with a phone call within one business day; therefore, all events that may have occurred in the home within the first 24 hours are recorded. Serious adverse events such as unplanned admissions to the intensive care unit, unplanned intubation, etc., are discussed in a conference session with the anesthesiologist involved. These cases are also discussed in the departmental clinical case conferences.

Quality Assurance Data

We have maintained a database that records every sedation-related event, and the nurses were given guidelines on what was considered necessary to report. These quality assurance guidelines were adapted from Boston Children's Hospital's quality assurance parameters. This collected data allows us to monitor the quality of sedation that we provide. For example, patients who are difficult IV sticks (more than three sticks) are identified, and if these patients repeatedly come for procedures, other measures are instituted to make their IV experience better (using a nurse highly skilled at placing IVs, getting help from the Pediatric Specialty Clinic, or using an inhalation induction method to gain IV access). Side effects of medications such as nausea and vomiting and prolonged sedation are also recorded.

Over the course of the past three years, we have completed over 3,600 sedations. Approximately 90% of our patients are below 18 years of age, and most of them are in the 1-5 year range. While most of our cases are ASA physical status I and II, we do perform sedations on ASA status III patients as well.

Our sedation-related event rate since the start of our program is about 7%, decreasing from 17% in our first quarter of service (January through March 2007) to 1.7% in the quarter of January through March 2010. Most of our sedation-associated events are linked to IV sticks and nausea and vomiting. Our nausea and vomiting rates in the first quarter were about 9%. This has decreased to 1.4%, and we attribute this to the increased use of propofol in procedures other than just the pediatric endoscopies, procedures such as bone marrow aspiration, biopsies, dressing changes, and bronchoscopies. However, our overall adverse event rate that we have classified as admissions secondary to respiratory or hemodynamic compromise, is less than 2%.

Conclusion

The establishment of an Anesthesia Supervised Nurse Sedation Team received immeasurable support from the Department of Anesthesia. The level of safety that the sedation program provides with regard to the skill, medications, and monitoring is a definite improvement to what existed prior to the sedation program. As each specialty becomes aware of our services, the forthcoming challenge is to accommodate all the needs of different specialties. This is especially significant since many of the sedation needs are increasingly required the very same day. The validity of our data also depends on the consistency of practice within the framework of the protocol. The Pediatric Anesthesia Team, who supervises the group, does have variations in practice; however, consensus has been reached to minimize changes unless it is absolutely required. The reasons for deviating from the protocol are recorded in our database. Currently, when changes in protocols are needed, those changes are discussed and are based on consensus among the pediatric anesthesia group.

Propofol administration by a registered nurse under the supervision and training of an anesthesiologist is possible and safe. The program has been successful enough that other hospitals are beginning to look at our sedation model. Our physicians and nurses have been invited to speak at other institutions, as well as at a national sedation conference later this year, to present our experiences in running an anesthesia supervised nurse sedation service. We shall also present our experience with the use of propofol.

Joss J. Thomas, M.D., M.P.H., F.C.C.P.
Clinical Assistant Professor
Director, Anesthesia Supervised Nurse Sedation Program

The author acknowledges and thanks the following individuals, without whom the success of the Anesthesia Supervised Nurse Sedation Program, and the reporting of such in this document, would not have been possible. Thanks to Michael Todd, M.D., Professor, Chair, Department of Anesthesia, The University of Iowa, for his dedication to giving this program the support it needed. ***Merete Ibsen****, M.D., assistant director of the nurse sedation team, is invaluable to our success. She contributes to the development of our protocols with great skill and knowledge; she also is instrumental in caring for our patients. Thanks to the anesthesia faculty physicians who assist patients and staff within the program: David Swanson, M.D., Yasser Karim, M.B., B.Ch., Yasser El-Hattab, M.B., Ch.B., Chiedozie Udeh, M.B.B.S., Jeanette Harrington, M.D., and also our colleague in Pediatrics, Sameer Kamath. M.D. The staff who supervise the overall team are the following pediatric anesthesiologists, and their attention to our program is noted: James Choi, M.D., Robert Forbes, M.D., Tara Hata, M.D. Denisa Haret, M.D., Paul Meyer, M.D., Martin Mueller, M.D., Sarah Titler, M.D., and Danai Udomtecha, M.D.*

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MARC 2010

Midwest Anesthesia Residents Conference 2010

The 2010 Midwest Anesthesia Residents Conference (MARC) took place February 19-21, 2010, in Cincinnati, OH. Once again, The University of Iowa Department of Anesthesia residents participated in a manner bringing pride to our department. With a total of nine presentations, and one first place winner, the outstanding job done amidst the competition was apparent. Dr. Jens Strand received a first place award for outstanding achievement for his case report presentation entitled, "The Fiberoptic Bronchoscope as a Diagnostic Tool and Therapeutic Aid in Resolving a Rapidly Deteriorating Airway Obstruction." Six of our faculty accompanied our resident group to Cincinnati: Drs. **Esther Benedetti, Jim Choi, Brent Hadder, Mazen Maktabi, Michael Todd,** and **Danai Udomtecha**. As director of the resident research program, Dr. Maktabi serves as the MARC faculty coordinator for Iowa.

Upper Right Photo: Drs. Danai Udomtecha, Brent Hadder, Geoff Kredich, John Klein, and Nick Pauly

Dr. Jens Strand

Drs. Major Boateng and Danai Udomtecha

MARC 2010 Presentations

Measurement of Tissue Oxygen Tension in Rat Incisions
Theusch, Brett*; Kang, Sinyoung; Brennan, Timothy

Neuropeptide Expression in Skin, Muscle and Doral Root Ganglion after Plantar Incision
Yalamuri Suraj*; Brennan, Timothy; Spofford, Christina

Chance Ultrasonographic Observation of a Possible Intrafascicular Injection with Supporting Injection Pressure Measurement Evidence
Anderson, Corey*; Boateng, Major; Alalami, Achir; Raw, Robert

How the Military and Warfare Influenced the Evolution and Development of Anesthesia as a Medical Specialty
Boateng, Major*; Scamman, Franklin

Anesthetic Management of a Patient with Spinal Muscular Atrophy
Klein, John*; Mueller, Martin

Hypothermia and Neuromuscular Blockade for Cardiogenic Shock
Kredich, Geoffrey*; Hata, J. Steven

High Spinal Anesthesia in Cardiac Surgery
Pauly, Cletus*; Togashi, Kei; Ueda, Ken-ichi

The Fiberoptic Bronchoscope as a Diagnostic Tool and Therapeutic Aid in Resolving a Rapidly Deteriorating Airway Obstruction
Strand, Jens*; Maktabi, Mazen

Is Time on Cardiopulmonary Bypass during Cardiac Surgery Related to Postoperative Acute Kidney Injury and Outcomes?
Tarasi, Michele*; Kumar, Avinash; Bayman, Emine

* Represents resident involved in research project

Save the Date!

MARC 2011

Midwest Anesthesia Residents Conference 2011

On April 1-3, 2011, The University of Iowa will host the Annual Midwest Anesthesia Residents Conference (MARC) in Chicago, IL. Check out the Web site for this 2011 meeting at **www.regonline.com/2011_MARC.**

MARC was founded at The University of Iowa by Dr. William (Bill) Hamilton in 1961. In fact, Iowa hosted the first five of these meetings. I believe it was the first organized multi-departmental residents conference in the nation. It was a small meeting with only 11 resident presentations and attendees from only six institutions. Today, it's hard to believe that the meeting started from such humble beginnings. In the last several years, attendance has been around 700, with residents and faculty from as many as 32 different departments (including some in Canada and as far away as Rochester, NY and Stanford, CA). MARC is easily the largest resident meeting and also the fourth or fifth largest anesthesia conference in the United States.

Early in its history, it was decided that the MARC meetings would rotate among host departments. As a result, our department hasn't hosted the meeting since 1983. But in the intervening years, the extraordinary growth of MARC has created a problem. When the meeting involved perhaps 50 or 100 individuals, it was easy to host in even the smallest of Midwestern university towns - like Iowa City. But with 700 attendees, hotel and convention space becomes a real issue, and Iowa City simply doesn't have enough room (at least not without splitting attendees across multiple hotels). And so, in 2011, MARC will be, for the first time, hosted in a city other than the home of its sponsoring university. We picked Chicago because of its central location, its readily available convention hotels (we'll be at the Marriott on Michigan Avenue), and because it's a place people love to visit!

Over the last 12 months, we've also learned just what a challenge something this large can be. As you know, we've hosted lots of meetings: our annual meeting in Cabo San Lucas, Mexico, the annual Iowa Symposium, and many others. But none of these have been on the scale of MARC. Organizing hotel rooms for 700 people, receiving and publishing submissions from 600 residents, arranging for 100 faculty participants to serve as judges at 10-12 concurrent sessions over the course of the entire day, finding corporate sponsors, arranging for food, selecting an entertainment venue for Saturday evening - and much, much more.

There is no way this can succeed without the dedicated work of a team of people. So I've asked Dr. **Mazen Maktabi** to be our "MARC-boss." He has engaged two other members of our faculty to help, Drs. Esther Benedetti and Brent Hadder. They have been hard at work for many months now and things are beginning to come together. The program is set. Our keynote speaker will be Iowa's own Dan Gable. ASA First Vice President (who will be ASA President in 2012), Dr. Jerry Cohen, will speak. We've visited the hotel, and with a little luck we'll be hosting our guests at the Hard Rock Café on Saturday night. We're also doing a few things differently and introducing a few new things. On Friday, April 1st, we will host the first "Chief Residents" meeting in the Midwest. I'm personally looking forward to the great ideas that will flow from that get together, and we plan on a huge turnout from our own residents and faculty.

Stay tuned. In next fall's newsletter issue, we'll give you a detailed report on the meeting.

Michael M. Todd, M.D.
Professor and Chair

Certified Registered Nurse Anesthetists

News and Highlights

Ann Smith

The anesthesia department at the University of Iowa Hospitals and Clinics (UIHC) prides itself on its diverse teams of nurse anesthetists and anesthesiologists working together to consistently provide exceptional anesthesia care. Several studies have shown this collaborative physician/certified registered nurse anesthetist (CRNA) approach to have all-around beneficial effects in healthcare settings; yet, regardless of what has proven successful elsewhere, there is always the question, "What about us?" Do our patients, anesthetists, and other healthcare providers here at The University of Iowa truly receive these alleged benefits from cooperation?

The answer to that question is yes, we absolutely do. Past analyses have claimed better patient outcomes and satisfaction, lower hospital costs, and a greatly improved, lower-stress work environment for clinical situations where nurse anesthetists and anesthesiologists work together in harmony; the anesthesia personnel at UIHC experience such benefits of collaborative care every day. Granted, they sometimes slip by unnoticed among the typical hubbub of day-to-day practice, but the positive effects of this synergy are certainly tangible whenever we stop to consider them.

When a nurse anesthetist and anesthesiologist have mutual understanding of and respect for each other's roles, not only do they maintain a healthier professional relationship, but also encourage that same respect from other healthcare providers (surgeons, other physicians, technicians, and nursing staff, for instance). This leads to an altogether safer and more positive healthcare practice environment. Without unnecessary and detrimental clashing between CRNAs and anesthesiologists, everyone involved can concentrate on the tasks at hand, leading to minimal stress in the workplace, and optimum outcomes for patients.

But at UIHC, these are not just hypothetical ideas. They are realities. Proactive CRNA/physician collaboration has undoubtedly contributed to the clinical greatness that brings nationally ranked status to several of our hospital's service areas. As chief CRNA, I can personally attest that this spirit of cooperation is also a major factor in attracting outstanding CRNAs from all across the nation. I know that our excellent physician anesthesiologists, anesthesia residents, and student nurse anesthetists are drawn here for the same reason. We are fortunate at this university to have such a successful team approach between anesthesia personnel. Many thanks to everyone who has helped us get here, and let's make sure to keep our collaboration going strong into the future.

Ann Smith, M.S.N.A., CRNA
Chief Certified Registered Nurse Anesthetist

Alumni Profile

Marvin Shapiro, M.D.

"I had very little experience in anesthesia before coming to Iowa, so everything was new."

I began my residency in anesthesia at The University of Iowa in July of 1982. My prior education was an undergraduate degree from the University of Tennessee in Knoxville (1972-1976) and medical school at the University of Tennessee in Memphis (1977-1981). My wife, Martha, and I moved to Iowa City after completing a flexible internship at the University of Tennessee in Memphis. Our two years there were fantastic. We loved the town, and I greatly appreciated my residency. When I interviewed for the residency, Dr. **Wendell Stevens** was the chairman of the department. He was not, however, the chairman when I arrived in Iowa. Dr. Stevens moved to Portland and Dr. **Peter Jebson** was the interim chairman. Several of the staff at that time were Drs. **Marty Sokoll, Sam Gergis, Jack and John Moyers, Shiro Shimosato, Mike Ghoneim, Frank Scamman, Won Choi, Mahesh Mehta, Peter Jebson, Judy Dillman,** and **Jim Carter**. We also had many visiting staff from foreign countries. Two I remember well were **Colin Tredrea** from Australia and **Gerald Davies** from Wales. Dr. **John Tinker** became the chairman of the department in the spring of 1983.

Being a resident in those two years was fun. I had very little experience in anesthesia before coming to Iowa, so everything was new. I remember the extremely diverse staff taught us various methods of solving problems. Thursday nights were M&M conference nights, followed by fluid and electrolyte rounds, usually at the Sanctuary pizza restaurant. I did better at the fluid and electrolyte rounds than the M&M conferences! At that time, most of the anesthesia machines used copper kettles or vernitrols. Anesthesia for heart surgery was highly emphasized since Dr. Tinker was the chairman and it was also Dr. John Moyers' interest. In addition to the staff, I remember several of my fellow residents: Drs. **John Pank, Steve Winston, Steve Gunderson, Bob From,** and **Dave S. Warner** were one year ahead of me. I have seen Dr. Warner's name on a number of papers related to neuroanesthesia. My graduating year class included Drs. **Jim Karn, Jim Bates, Tim Cross, Walt Jones, Gary Neuweiler, Mark Laughlin, Kent Pearson, Jeff Hull, Clarence Johnson,** and **Sandra Roberts**. One year behind my group were Drs. **Fred Fleming, Dave Crumley, Craig Carlson, Dennis Madrid, Bruce Bollen,** and **Chuck Anderson**. We all worked well together and I cannot remember any major disputes. The CRNAs I remember working with were **Lori** and **Taff Olsen, as well as Jack Grucza**.

After leaving The University of Iowa, I returned to Memphis, began my career with the Medical Anesthesia Group, and I am with this group to this day. Our group does most forms of anesthesia except neonates, heart transplants, and intensive care unit work. My interests are postoperative pain management and obstetric anesthesia. A number of years ago, I helped start epidurals for postoperative pain, and recently, we have been doing nerve blocks, both single shot and continuous catheters for orthopedic cases. Since the University of Tennessee closed its anesthesia program, I do very little teaching. Most of my time is spent supervising cases for nerve blocks and obstetrics.

My life is fairly simple - one wife, one daughter, one son, one car, one home, one dog at a time, and one career with one anesthesia group. My daughter recently graduated from the University of Florida and is working in Philadelphia with a teacher's union. My son is at the University of Tennessee studying premedicine. My wife plays bridge, but I have other interests. I enjoy golf, exercising, reading, and going to sporting events. I was recently in Omaha, NE, to watch the NCAA wrestling championships. Some team from Iowa won easily!

I have a few suggestions for the department's current residents, a few pieces of advice.
1) Enjoy what you are doing because you are going to do it for the next 30-35 years.
2) Find one special area of anesthesia that really interests you and become good at it.
3) Don't complain about your life in anesthesia because you picked it.
4) Maintain a good balance between career, family, and your hobbies.

Marvin L. Shapiro, M.D.
Anesthesia Resident Class of 1984

Looking for group photos!

Editor's Note: The resident class years that Dr. Shapiro mentions in his article are years in which group graduation photos were not taken. If any physicians from these classes have group photos that include all or most of your class, please consider sharing these with the department. If your photograph is print-only, we promise to return it to you as soon as we scan it as a digital file and print it to post on our resident history wall. Thank you. -Barb B.

The Marvin Shapiro family, taken during a 2007 trip to Alaska.

Alumni Profile

Edmond I (Ted) Eger, M.D.

"The faculty let us do crazy things, and we sometimes paid for it with embarrassment."

I was born in Chicago, IL, receiving my education there from pre-kindergarten through medical school. I graduated from the University of Illinois (Phi Beta Kappa, Phi Kappa Phi, Bronze Tablet) and Northwestern University Medical School. I completed my anesthesia residency in

1958 at The University of Iowa. I arrived for my first day of residency prepared for a wonderful two years. I was often surprised, but never disappointed. My first day, I found I was on call. Surprise! The good wife brought appropriate toiletries and a change of clothes, and I was given my first case, a farmer's wife with an empyematous gallbladder. The faculty had left for the day so I turned to my consultant, a newly minted second year resident. "What should I do?" "Well, I'd use a 1-shot epidural." "OK, how do I do that?" All of us survived.

I remember my parents coming to visit, staying with us in our apartment on Summit Avenue where it met U.S. Highway 30. We made duck for them the night they arrived. The duck took twice as long as the directions said it would, and we ate at 11:00 in the evening. We were famished and it was the best duck I've ever eaten. At midnight, we pulled down the Murphy bed for them to sleep in. We'd forgotten about the trucks driving by on the highway, shifting gears at the Summit Avenue corner, and this kept the parents awake until the wee hours. We'd gotten used to the noise. The parents never visited Iowa City again.

It was a different time. One faculty might cover four or even five rooms, and faculty took call from home. We rarely saw them at night, but when we did it was memorable. One night I was assigned the care of a baby with a tracheoesophageal fistula. I'd not had such a case and called my attending, Dr. **Stuart Cullen**. He advised me of this and that, and I proceeded. Early on in the anesthetic he materialized at my side, staying until the case ended. He said little, but his presence comforted enormously. Similarly, I called Dr. **Bill Hamilton**, having been asked to help a young otherwise healthy woman who had developed an encephalitis that ruined her brain. I had no idea how one might treat this disaster and was taken with sadness. Bill came in and held my hand. Although he, too, was at a loss to help the patient, his presence comforted me.

We often learned by trial of fire. Early on, I was sent to the cystoscopy suite to care for a slate of transurethral resections of prostates (TURPs) using the Iowa anesthetic, a procaine spinal. The Chief of Urology, Dr. Rubin Flocks, was a terror to us, but more so to his staff. A visitor heard him shouting at some miscreant resident and commented that Dr. Flocks seemed loud. "No, sir," he was told, "If he were loud, you would have heard him before the elevator doors opened." So unshepherded, I went to a cystoscopy procedure room, kept a low profile, and gave the requisite 75 mg of procaine. My first spinal. And the blood pressure went down. I knew I was supposed to do something about that, so looking in my tackle box I found an ampule of phenylephrine. With great caution, I gave a quarter of a mL. It cured the hypotension, the pressure rising to something over 300 mm Hg. The poor Iowa farmer in my charge looked up and said "Doc, I've got a headache." I had the wisdom to do nothing further, and all turned out just fine. I've never since forgotten the appropriate dose of phenylephrine.

I wasn't the only one who did silly things. My fellow resident, Dr. **Andy Devine** (yes, he was) forgot to check the oxygen cylinders at the back of the machine. There was no wall source of oxygen (imagine!). So in went the thiopental and the succinylcholine and Andy reached for the mask. Nothing. Well, not quite nothing. Dr. Cullen was his attending and happened to be in the room. "What'll I do??!!," wailed Andy. "No problem," said Dr. Cullen. "Take the reservoir bag from the circuit, blow into it, re-attach it, ventilate the patient, and keep repeating the procedure." This went on for a time until Carl, the denier, poked his head through the door and asked if there were anything we needed. "Yes," said Dr. Cullen. "When you have time, would you please bring a fresh oxygen cylinder?" "WHEN HE HAS TIME??," squeaked Andy!

Residents were teachers as well as students. Each of us presented a lecture on some topic of our choosing. One resident, Dr. **John Severinghaus**, lectured on inhaled anesthetic uptake and distribution. I was fascinated, but I thought John was wrong. I spent an hour after the lecture telling him that if an anesthetic were more soluble, then more of it would be taken into the body (correct) and thereby produce anesthesia more rapidly (wrong). It took me ages to appreciate that John knew what he was talking about. More importantly, it hooked me on uptake and distribution.

My gods of the time, **Cullen and Hamilton, Leo Debacker and Charles Pittinger, Jack Moyers** and **F. Duncan**

Alexander, tolerated my curiosity, indeed encouraged it and supplied me with time and wherewithal to pursue that curiosity. I devised a new system of ventilation that, if applied broadly surely would have caused pulmonary edema.[1] With the cooperation of my fellow residents and the tolerance of hundreds of patients, I learned a bit about premedication.[2] And I sort of proved how the antihypertensive drug reserpine might impair the action of various vasopressors.[3] But the best experiment was never published. I thought of a cheaper way of removing carbon dioxide from anesthetic circuits. All we had to do was run the gases through a thin rubber tube that would allow the carbon dioxide to escape, differentially leaving behind the good gases like oxygen. So, Bill Hamilton persuaded me to connect what seemed like a hundred Penrose drains end-to-end, and we introduced 5% carbon dioxide into one end and measured what came out the other end. Alas, 5% came out the other end.

I had another wild idea concerning how inhaled anesthetics might act. It had to do with the Krebs cycle and the notion that anesthetics might block one particular step in the cycle. The implication was that picrotoxin's capacity to produce convulsions would be influenced. At this point, I can't remember the details. What I do recall is that I was allowed to give picrotoxin and anesthetics to some poor mice, and the results bore out my hypothesis with a P value of just barely 0.05. Wanting to be sure I was correct, I repeated the experiment, and then repeated it again and again and again, each time finding that the significance got less and less, finally disappearing like a will-o'-the-wisp. That's another one that didn't get published.

By now you must have a picture of a pretty supportive and benevolent department. My attempts at research had me pushing a heavy anesthetic machine over to the pharmacology laboratories in a different building. The architects hadn't given the buildings exactly the same height, so I had to push the anesthetic machine up a grade, finding that I couldn't quite make the top. So I backed off and made a running go at the grade. Of course, the machine toppled over and broke. I never was billed for the repair, and the statute of limitations has run out by now.

Department of Anesthesia 1958
Back Row: Walker, Saito, Guy, Garrison, Clark, Eger
Next Row: Dawson, ____, Hyde, Goldberg, Martin, ____, Hoyt
Next Row: Williams, Doxsee, Calise, Reddin, Bailey, ____, Kienzle, Miller, Davis
Front Row: DeBacker, Pittinger, Cullen, Hamilton, Moyers

Then as now, the department at The University of Iowa was one of the best in the country/world. In 1957, we had one ventilator, one electrocardiogram device, one oxygen analyzer. Most departments had none. We were encouraged to take a week off and travel to other Midwest departments and make comparisons. I went to the University of Wisconsin, the University of Minnesota, and the Mayo Clinic. Everyone was kind and welcoming at these distant Meccas. I remember going into Dr. Albert Faulconer's office at the Mayo Clinic. Faulconer was one of the gods of anesthesia, and I remember that he had a wall of framed testaments honoring him for his many accomplishments. A small certificate had pride of place at the center of these, an award for perfect attendance in his 4th year of Sunday School.

We were one of the first departments to get halothane. What a wonder! We didn't know much about it, and treated it with caution, especially since we were used to the increases in blood pressure produced by cyclopropane and diethyl ether. I remember sniffing from one bottle and thinking this was a particularly weak lot of halothane. And the more I sniffed, the weaker it seemed to be. My fellow residents agreed. Weak halothane. We poured the contents of the bottle down the sink. Indeed, all the bottles in that lot seemed weak. Years later, I learned that repeated sniffs of halothane or other potent anesthetics dimmed the sense of smell. No matter; the halothane was free.

I remember so many pleasant things and a few unpleasant ones. The winters were cold, sometimes bitterly cold (I remember an episode of bronchospasm from breathing sub zero air), and I was glad for all the tunnels that connected the hospitals. I loved the coming of spring and the fact that all the operating rooms had windows that allowed me to see the green haze that spring brought. And our firstborn arrived in 1957 and we were allowed to occupy University housing, half of a Quonset hut where one night my wife served me pie that tasted like apple pie but was made with crackers and cinnamon and water and sugar, and she laughed when I said it was delicious apple pie.

That Quonset house (actually just half of a Quonset house) was a wonder. It measured 20X24 feet and contained two bedrooms, a storage closet, a bathroom and a kitchen-living room. Luxury! Another resident family lived in the other half of the hut. I remember that we would spray our side with insecticide and our cockroaches would migrate to

the apartment next door – and vice versa. The roaches never seemed to die and I understand that they can't be anesthetized.

I remember the 20X20 lot that the University allowed us to rent each summer to grow vegetables (right; the bugs ate well), and the buying of half a slaughtered cow at bargain prices, and dinners at Amana and the Lark Restaurant where the steaks were enormous but eating them didn't make me stronger. I remember seeing amazing things at the Hancher Auditorium, including *Waiting for Godot*.

I remember that the residents and faculty joined together, that we felt like family. We worked together and played together, made friends and raised families. We studied and argued and made our presentations and mea culpas at the Saturday morning meetings, meetings in the library that were filled with the smoke of cigars and cigarettes (it was a different time). The faculty let us do crazy things, and we sometimes paid for it with embarrassment. I remember giving intramuscular succinylcholine to a series of patients to facilitate intubation. One was an infant with a cleft palate. I'd induced anesthesia with ether, given the succinylcholine, and found that I could neither ventilate the patient nor intubate the trachea. Terrified, I screamed for help, and Jack Moyers arrived. With great effort he finally passed a tube into the trachea, and then quite rightly – and loudly - accused me of idiocy.

It went both ways. One of my attending heroes suggested I learn to accomplish a nasal intubation blindly. To do that required a deep level of ether anesthesia in this patient who was scheduled to have an exploratory laparotomy for a suspected cancer of the stomach. I got to somewhere in Stage III, plane III, and asked my hero if we should attempt intubation. "No, go deeper," and I did. "Should we pass the tube now?" "No, go deeper." The pupils were widely dilated and the breathing uneven. "Now?" "No, go deeper." Remember the old Isuzu television advertisements, the ones that said, "Go further with Isuzu?" They'd show the car in the desert or on some mountain peak. One had the car on a raft floating down a river. The voiceover repeatedly said: "Go farther with Isuzu." Then the camera panned back and you saw that the raft was headed for a waterfall and the voiceover said "Oops, too far." Returning to the operating room, I now couldn't feel a pulse and the blood pressure was absent and we knew we had a patient with a cardiac arrest. Terrified and thinking that the surgeon had taken all this in, I asked him if he would go into the chest (to directly compress the heart, the only then known method of resuscitation)? "No," he said! "No? But the patient's had a cardiac arrest!" "Oh," said the surgeon, "I thought you were asking about the operation!" Quickly into the chest and back to life.

And we helped others. Someone from the Department of Pharmacology (with which we had particularly close ties) called and said they'd made a mistake. They'd intended to give medical students 0.1 mg scopolamine to illustrate its drying effect but they slipped a decimal point and gave 1.0 mg, and now they had a lot of loony students and could we help, please? I think the students stayed in the recovery room for a few hours. They all got As.

And I remember in 1958 that Dr. Cullen called us into the library and told us that he was going to go to the University of California to start a new department of anesthesia. He said he'd had so much fun doing it at Iowa that he wanted to do it again while he was still young enough to enjoy it. He said he wanted to organize a small department at the University of California, San Francisco. The rest is history except that it isn't a small department.

Edmond I (Ted) Eger, M.D.
Anesthesia Resident Class of 1958

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Dr. Eger's recent visits to the UI campus

Upon invitation in 1996, Dr. Eger traveled to Iowa City to deliver the Ida Cordelius Beam Lecture on the campus of The University of Iowa. As 1996 was the 150th anniversary of anesthesia, he selected as his title, "150 Years On: We Still Do Not Know How Anesthesia Works." In addition, he delivered another talk entitled, "Ethics in Anesthesia." Dr. John Tinker stated, during his introduction, "Dr. Eger is the father of MAC (minimum alveolar concentration). I truly believe that the work of Dr. Eger and his colleagues pioneered the concept and utility of MAC. If Nobel Prizes were awarded to individuals that open up a whole new field of investigation, I believe one would have been awarded to Ted Eger." Dr. Eger also participated in the celebration of transitioning the chief editorship of the journal *Anesthesiology* from Dr. Lawrence Saidman to Dr. Michael Todd. Again in 2007, our department was honored to welcome Dr. Eger as an alumnus visitor. He continues to share historical facts and memories related to our department with us, contributing to our goal of "filling in the blanks" in many areas.

...If Nobel Prizes were awarded to individuals that open up a whole new field of investigation, I believe one would have been awarded to Ted Eger."

Left: Mohamed Ghoneim and Tim Koritz

Alumni Update

Dr. **Gilbert Kinyon** (1921-2010, see page 29) was a special friend to Iowa's Department of Anesthesia, and his wife, Mary, continues to hold a special place in our hearts. Throughout his life, he always spoke highly of his anesthesia training at The University of Iowa. While his career goals and life took him to California, he kept in touch with us, and we with him. In 2008, Dr. and Mrs. Kinyon together gifted the department by setting up a remarkable charitable donation establishing our second endowed professorship, the Gilbert E. Kinyon Professorship. This generosity, however, is not the primary reason those in Iowa's anesthesia community hold a unique relationship with Gil and Mary Kinyon. Together, and individually, the couple has shown their interest in our programs and they have listened to our ideas for developing new programs; they have shown us they genuinely care. They have welcomed us into their home. They have shared with us stories of their travels and their involvement in both professional and personal associations. Many of you probably aren't aware that Mary Kinyon practiced as a nurse anesthetist prior to changing careers to become a financial planner. We will miss Gil this year at our alumni reunion in San Diego. We very much look forward to seeing Mary at this event.

Our department continues to keep busy with our visits to alumni groups in nearby locations. Our most recent trip took four of us to the Rockford, IL area. Drs. **Michael Todd, Jeanette Harrington,** and **Marty Sokoll** joined Barb Bewyer on this road trip. We hosted a small gathering of alumni and friends and we had a delightful time. We heard stories based on memories from residency days. We received updates on families, hobbies, and careers. We learned that life for a retired anesthesiologist is just as busy and active as is that for those still employed! We are really glad we made this trip to reconnect with those able to attend. We are working on scheduling additional small group visits to destinations within easy driving distance of Iowa City. Our next trip will be a drive to the Peoria, IL area where we hope to arrange a gathering of alumni and friends. Stay tuned – your community may be next after Peoria!

We also enjoyed recent visits to Iowa City from a few of our alumni. We were SO thrilled that they included the department in their plans. We love to welcome our alumni and friends, and we do our best to show each whatever interests them within the department, the hospital, the campus, and the community. Dr. **Timothy Koritz** (R 1994) and wife, Julie, quite literally made the trip to Iowa City in their airplane! They were headed to Pella, IA to a special gathering of physician pilots, and chose to stop here on their way. We had a marvelous few hours together, much too brief a time. We drove them past the house they lived in while here, and their memories of children born in Iowa City were such fun to hear. We had time for quick tours of the department's history wall, the Jebson Hyperbaric Medicine and Wound Care Clinic, the Surgical Intensive Care Unit, the hospital's medical museum, and of course, one of the cafeterias! In addition to lunch, we also enjoyed a beverage from the Rooftop Café, managed by the hospital volunteer services, while sitting outside on the eighth floor patio.

Tim Koritz, Jeanette Harrington, Julie Koritz

Seated: Shirley Carter and Mary Scamman
Standing: Jim Carter and Frank Scamman

Dr. **Frank Scamman** (Professor), and wife Mary, visited several alumni during a recent family trip to Colorado. They were able to spend some memorable moments with Dr. **James Carter** (BA 1948, MD 1952, R 1956, long-time faculty member) and his wife, Shirley Carter. The Carters are doing well, living in Loveland, CO. Watch in a future newsletter issue for more information and updates regarding these lovely people. The Scammans were also able to spend some local telephone time with Dr. **Mingming Hao** (R 2000), Dr. **Dan Fidler** (R 1991), and Dr. **Russell Gabriel** (MD 1978, R

Hal, Jeanne, and Linda talk the same language when it involves plants and flowers. What a fun time we had!

Right: Flowers from the Todd's garden

1981). Each now live in the Colorado Springs, CO area. Dr. Hao is doing well; Dr. Fidler has been in Colorado for five years now, moving there from Medford, OR; Dr. Gabriel is now retired. Dr. Scamman left messages with several additional alumni in the area, but was unable to connect with them. We are grateful to both Frank and Mary Scamman for their time spent representing our department to several alumni in Colorado. Hmmmmm – Colorado – now that's a state Barb Bewyer would like to travel to for personal visits with our alumni!

Hal Jaffe, Linda Todd, Jeanne Jaggard

Another ever-so-special alumni couple made their way to Iowa City recently. Drs. **Jeanne Jaggard** (MD 1960) and **Harold [Hal] Jaffe** (MD 1956, Urology R 1960) spent a few days in Iowa, visiting family as well as friends at The University of Iowa. Their trip was planned around Dr. Jaffe attending his medical school reunion. As soon as we learned they were to be in Iowa City, we immediately asked to spend time with them, any time they might have available! Dr. **Michael Todd** and wife, Linda, enjoyed joining them for a wonderful dinner event. Everyone in the department who saw them during their visit to the hospital enjoyed visiting with them. Our Patient Simulator Center is beginning to feel like a "second home" to Jeanne and Hal (as they have asked us to refer to them), and everyone in that second home goes all out to welcome them during their visits. Another journey we took them on was a visit to tour the prairie land and gardens of Linda Todd. Definitely, Hal, Jeanne, and Linda talk the same language when it involves plants and flowers. What a fun time we had!

Homecoming 2010 draws closer, with activities beginning on Thursday, September 30, through Sunday, October 2. The Carver College of Medicine is hosting a reunion for the medical school graduating classes from 1975, 1980, 1985, 1990, and 2000. If you are a member of any of those classes, please consider making the trip. Please also contact Barb to let her know you'll be attending. She'll arrange some special fun for you, if you'll allow her the opportunity! There's the department to show you, anywhere else in the hospital you might want to visit, and she'll be happy to arrange a community tour for you as well. Watching the Friday afternoon homecoming parade together as anesthesia alumni has become a tradition. Send Barb an e-mail at barbara-bewyer@uiowa.edu or call her office at 319-353-7559.

We will just recover from homecoming when it's time to travel to San Diego, CA for the annual meeting of the American Society of Anesthesiologists. Again a tradition, our department will host a reception for alumni and friends on Saturday, October 16, 2010, 7:00 – 9:30 p.m., San Diego Marriott Hotel, Columbia Rooms 1 and 2. This event is a favorite of ours. It's such fun to reconnect with alumni we haven't seen for at least a year or longer. We hope everyone reading this issue of our newsletter knows how much we welcome you to join us. Plan to meet up with those from your resident or fellow graduating class. Plan to meet with our current faculty, fellows, residents, and researchers who will be in San Diego. Plan to bring your memories and your old photos, as you can count on Barb to be asking each of you for such!

Write us.
Call us.
E-mail us.

Send us new contact information when you move. Share your suggestions for ways to improve our newsletter. Send us YOUR news to include in our newsletter. **We want to keep in touch** with each of you, and we hope you feel the same.

(L-R) Burke O'Neil, John Klein

MEET THE 2010 – 2011

Chief Residents

John and Burke, selected for the position by their peers, are well aware that along with the honor of this selection comes great responsibility.

Drs. John Klein and Burke O'Neal began their transition to the role of chief residents prior to their official July 1st appointment. They met with the outgoing chief residents, the resident program director, and the department chair, just to name a few. John and Burke, selected for the position by their peers, are well aware that along with the honor of this selection comes great responsibility.

John Klein was born in Burlington, IA but moved to Sioux City, IA soon after he turned a year old. He graduated from Bishop Heelan Catholic High School in Sioux City in 1997 and then went to Creighton University in Omaha, NE. He was a member (mostly bench-warmer) of the basketball team at Creighton and participated in three NCAA tournaments. He graduated with a degree in biology in 2001 and then stayed at Creighton for medical school. John continued to study at the undergraduate library and it worked out well for him because he met his beautiful future wife, Kathleen, there during his first year of medical school and her senior year of undergrad. John became interested in anesthesia after doing an elective rotation during his fourth year, but served some time in the United States Air Force prior to starting residency. He served for two years as a flight surgeon at Luke Air Force Base in Phoenix, AZ and described the medicine he practiced as "boring" but the remainder of the job "thrilling." For example, he was fortunate enough to fly in the back seat of an F-16 at least once a week, occasionally at 500 mph and 500 feet above ground. John and Kathleen were married on July 1, 2006 and they have had two amazing children (Kaylie, 2 years old, and Kennedy, 3 months old) since being at Iowa. His favorite activities include playing, running, biking and reading with his children, hanging out with family, and traveling. John is planning a critical care fellowship after residency and then he will serve at least two more years in the Air Force as part of a Critical Care Air Transport Team.

Kathleen and John with daughters Kennedy and Kaylie

Burke O'Neal was born in American Fork, UT, and his childhood was spent in a small mountain town in Colorado named Woodland Park. His family then moved to Utah when he was 13, and he graduated from high school in Brigham City in 1996. Burke describes his upbringing as fairly "blue collar," having worked as an auto mechanic, an assembly-line worker in a treadmill factory, and a line foreman at an electroplating company prior to attending medical school. Following high school, he attended Brigham Young University, obtaining a degree in botany. He admits that while he found plant physiology fascinating, his mind was more dedicated to his unofficial minor in desert motorcycle racing. He also took time off between his freshman and sophomore years to serve as a missionary in and around Seoul, South Korea. Shortly before leaving for medical school, he met his future wife, Rivka, while working as an anesthesia technician. After a year of intense long-distance courting, they were married just after he completed his first year of medical school at the University of Virginia. Burke still feels that convincing her to marry him was the biggest miracle of his life, and one from which he continues to benefit daily. Through each of his former jobs, Burke remembers constantly searching for the

reasons behind the way things worked, and trying to find more efficient ways to accomplish processes. Perhaps it is this curiosity and interest in efficiency that makes anesthesia so enthralling to him. Burke enjoys every aspect of providing operating room anesthesia, and often notes that he never would have believed he'd be working a job that is this much fun. When he leaves work, he enthusiastically embraces family time with his wife and their two children, Jack (5 years old), and Kate (2½ years old). He still enjoys riding motorcycles, and despite others often questioning his sanity, commutes to work on one year-round through the best and worst weather Iowa has to offer.

While both John and Burke feel they have a tough act to follow from last year's chiefs, they are excited for the opportunity to continue that legacy. They look forward to meeting with applicants and having the chance to recruit more outstanding residents. They also hope to continue the role of liaison between staff and residents. Specific goals include standardizing the rotation schedules to provide balanced clinical and education time, and continuing the push to broaden resident access to additional learning environments. They

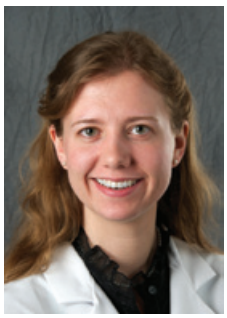
Burke and Rivka with children Kate and Jack

are both humbled to be serving their fellow residents and grateful for the chance to work closely with the resident program director, Dr. Debb Szeluga, in continuing the tradition of excellence that is The University of Iowa anesthesia.

ANESTHESIA
Resident Highlights

With bittersweet emotions, the department experienced another resident graduation celebration in late June. We wish only the best to our 14 graduates and their loved ones, and we remind them to keep in touch with us and visit often. Overlapping one class's graduation, we welcomed ten new interns and four new CA-1 residents (pg. 23).

Row 1 (L-R): Stephanie Wieman, Jennifer Smith Gordon, Karen Dean, Lakshmi Kantamneni, Megan Miller
Row 2 (L-R): Matthew Sundblad, Jens Strand, Michael Franklin, Jr., J. Riley Stringham, Christopher Johnson
Row 3 (L-R): Phillip Brenchley, Nick Pauly, Jamie Johnson, Major Boateng



Jennifer Moyer

Tyler Kerr

Joseph Wickard

Medical Student Anesthesia Extern

Highlights

2010 Graduating Medical Student Anesthesia Extern Awards

In previous newsletter issues, we have reported the history of two significant honors awarded to select anesthesia externs - The **Stuart Cullen Award** and the **Margaret Lunsford Award**. The anesthesia residents decide upon the recipient of the Stuart Cullen Award, while the Margaret Lunsford Award is determined via application and recommendation, and a committee vote. Each of the awards is accompanied by a monetary gift or scholarship. In April 2010, the 2009-10 academic year graduating externs were honored at a department ceremony, along with the recipients of the two awards. **Jennifer Moyer** received the Cullen award, as well as being selected for the Lunsford award along with fellow externs **Tyler Kerr** and **Joseph Wickard**. Both Drs. Moyer and Kerr remain in the department at Iowa for their internship year. Dr. Wickard has joined the McGaw Medical Center of Northwestern University in Chicago, IL.

2010-2011 Medical Student Anesthesia Externs

Our department welcomed 13 University of Iowa Carver College of Medicine M4 students to our team in late spring. Upon completion of their extensive orientation period, these students work evenings and weekends, providing assistance and gaining experience. An application and selection process determines those offered to participate in this program, with each applicant having expressed a special interest in the specialty of anesthesiology.

2010 - 2011 Anesthesia Externs

ANESTHESIA FELLOWSHIP

Highlights

Our graduating fellow trainees were also celebrated in June. As this group of 12 scatters across the world to officially begin their careers as physicians practicing in the specialties of anesthesiology, we bid farewell and wish them well. Overlapping their departures, we experienced the welcoming of 13 new physicians who begin their fellowships within our department.

Department of Anesthesia Fellows 2010 – 2011


Roberto Blanco
Regional Anesthesia


Daniel Callahan
Pain Medicine


Stephen Foster
Critical Care Medicine


Satoshi Hanada
Cardiothoracic


James Harley
Critical Care Medicine


Sinyoung Kang
Regional Anesthesia


Azra Khan Salahuddin
Pain Medicine


Bradley Low
Pain Medicine


Megan Miller
Critical Care Medicine


Janel Nielsen
Regional Anesthesia


Eliel Ntakirutimana
Pain Medicine


Andrew Philip
Critical Care Medicine


Jens Strand
Critical Care Medicine

2010 – 2011 Anesthesia Interns

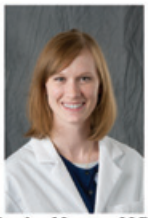

Grant Bleeker, M.D.


Benjamin Ellis, M.D.


Shuchita Garg, M.B.B.S.

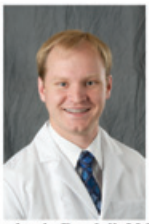

Tyler Kerr, M.D.


Mark Krohe, M.D.


Jocelyn Mattson, M.D.


Melissa Meiners, M.D.


Jennifer Moyer, M.D.


Benjamin Randall, M.D.

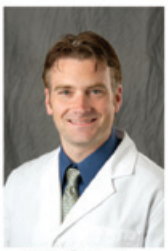

Ted Van Der Horst, D.O.

2010 – 2011 Anesthesia CA-1s


Brent Carter


Brenton Freeman


Juan Ruiz

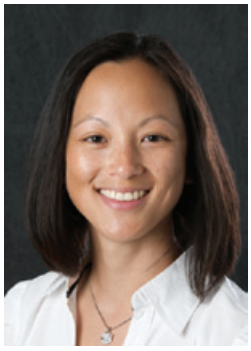

John Stimmler

ACHIEVEMENTS & Awards

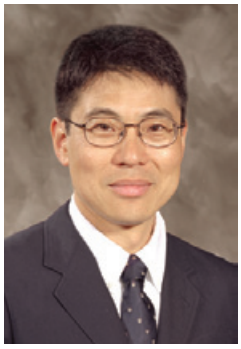
Faculty Promotions

The Iowa Board of Regents recently approved the promotion of several of our faculty. Each of these individuals works hard, has demonstrated his or her commitment to enhancing our department's programs, and we are pleased to share with you the news of their promotions.

Ellen King, M.D., Assistant Clinical Professor
Toshihiro Kitamoto, Ph.D., Associate Professor
Avinash Kumar, M.B.B.S., F.C.C.P., Associate Clinical Professor
Chiedozie Udeh, M.B.B.S., Associate Clinical Professor



Ellen King



Toshihiro Kitamoto

Avinash Kumar

Chiedozie Udeh

Graduating Residents Honor Faculty

The "Resident Teacher of the Year Award" and the "Resident Excellence in Teaching Awards" were established to pay tribute to those faculty members who excel in resident education. The residents vote on these awards based on teaching inside and outside of the operating room. The winners of these honors do a wonderful job of combining multiple realms of education. These include hands-on technical training, intraoperative teaching related to the cases they oversee on a daily basis, and organized didactic lectures. The awards were presented at the resident graduation dinner on June 21, 2010. Congratulations to Sundar Krishnan, M.D., who received the Resident Teacher of the Year award for the 2009-2010 academic year. The Resident Excellence in Teaching awards were given to **Richard Cano**, M.D., **Peter Foldes,** MD., **Martin Mueller**, M.D., **Rashmi Mueller**, M.D., and **Ken-ichi Ueda**, M.D.

L-R: Peter Foldes, Rashmi Mueller, Richard Cano, Sundar Krishnan, Jens Strand (chief resident standing in for absent recipient, Martin Mueller), and Ken-ichi Ueda.

Faculty Recognized by the American Pain Society

Timothy Brennan

Timothy Brennan, M.D., Ph.D., Samir Gergis Professor of Anesthesia, Vice Chair for Research, received the Frederick W. L. Kerr Basic Science Research Award from the American Pain Society (APS) during the group's annual meeting held May 6-8, 2010. This award was established in 1987 in honor of Frederick W. L. Kerr, an APS founder, to recognize individual excellence and achievement in pain scholarship. Dr. Brennan is the first anesthesiologist to receive the basic science award.

Richard Rosenquist

Richard Rosenquist, M.D., Professor, Director of the Center for Pain Medicine and Regional Anesthesia, received the Distinguished Service Award from the APS. The Distinguished Service Award recognizes outstanding and dedicated service to the APS. Dr. Rosenquist has served on several committees that generated practice guidelines for pain management.

Bernard H. Eliasberg Medal Awarded

Michael Todd

The Department of Anesthesiology at Mount Sinai School of Medicine, New York, NY, honored **Michael Todd**, M.D., Professor and Chair, with the Bernard H. Eliasberg Medal, presented at the 47th Annual Bernard H. Eliasberg Memorial Lecture at Mount Sinai School of Medicine's Department of Anesthesiology, New York, NY. On May 5, 2010, Dr. Todd delivered a lecture entitled, "One Simple Experiment and Fifteen Years of Work: The IHAST Trial."

Dr. Bernard H. Eliasberg was an integral member of Mount Sinai Hospital for over 50 years. Through the generosity of his family and medical industry, his memory has been perpetuated through the establishment of the Bernard H. Eliasberg Lecture first delivered in 1963. The Bernard H. Eliasberg Medal has been awarded annually since 1977 to a distinguished individual who has made significant contributions that have advanced the field of anesthesia, critical care, and pain management.

SRNA Teacher of the Year

Magboul Magboul

The University of Iowa Nurse Anesthesia Class of 2010 selected **Magboul M. Ali Magboul**, M.D., Clinical Assistant Professor, as the recipient of their Teacher of the Year award.

Teaching Scholars Program

Mazen Maktabi

Mazen Maktabi, M.D., Associate Professor, was selected as a faculty member for The Teaching Scholars Program, based in The University of Iowa Carver College of Medicine's Office of Consultation and Research in Medical Education. The 2010-11 academic year marks the 11th year of this unique program that helps develop outstanding medical education faculty. The program promotes the development of a core group of faculty with advanced skills in medical school teaching who, in turn, share this knowledge with colleagues in their respective academic departments, and the college as a whole, through seminars and workshops. A new group of faculty begins the Teaching Scholars Program every other year. Dr. Maktabi has been selected for the Teaching Scholars Program for the time period to include the academic years of 2010-11 and 2011-12.

International Certification Awarded

Esther Benedetti

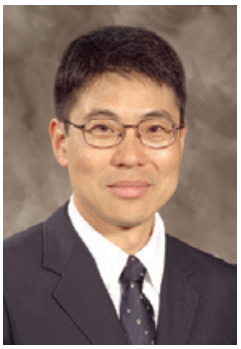
The World Institute of Pain, Section of Pain Practice, is dedicated to promoting pain medicine and the practice of pain medicine interventional techniques. **Esther Benedetti**, M.D., F.I.P.P., Clinical Assistant Professor, has successfully completed the required examination to receive the status of "Fellow of Interventional Pain Practice." As interventional techniques continue to grow and more physicians consider them in their daily practices, certification becomes essential for qualified physicians.

continued on page 26

Research Grants Awarded

Max Baker

Max Baker, Ph.D., Associate Professor, was awarded a $35,000 grant from the Grow Iowa Values Fund (GIVF) for his grant "Stereoisomerism in the Anticonvulsant Effects of a Novel Anticonvulsant: 2,6-diisopropyl-4-(1-hydroxy-2,2,2-trifluoroethyl)-phenol." The GIVF is a program that provides seed grants to support the development of innovations with commercial potential, with the result that more University of Iowa technology reaches the marketplace as the foundation for new Iowa companies and/or growth of existing Iowa companies. Dr. Baker's award will allow him to synthesize and evaluate enantiomeric forms of novel compounds found to have anticonvulsant effects. The goal of this research is to develop new therapeutics for refractory epilepsy.



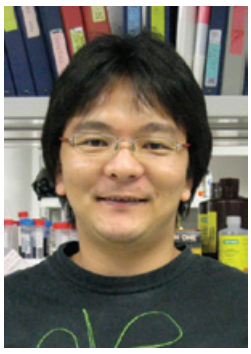
Toshihiro Kitamoto

Toshihiro Kitamoto, Ph.D., Associate Professor, was selected by the Iowa Center for Research by Undergraduates (ICRU) Research Fellows program for funding of $2,500. This fund is being used to help support **Shaw Akutsu**, who is employed as an undergraduate assistant in Dr. Kitamoto's laboratory. The specific project which Mr. Akutsu is working on with Dr. Kitamoto is entitled, "Effects of Nongenomic Actions of Steroids on Drosophila Development." The ICRU Research Fellows program allows mentors to hire one ICRU student as an assistant to work on a specific project for up to one academic year and/or summer. Approximately 160 students are appointed each semester.

Research-related Honors

Timothy Brennan

The National Institutes of Health (NIH) has invited **Timothy Brennan,** M.D., Ph.D., Samir D. Gergis Professor of Anesthesia, Vice Chair for Research, to serve as a member of the Surgery, Anesthesiology and Trauma Study Section, Center for Scientific Review. Dr. Brennan will serve in this capacity from July 1, 2010 through June 30, 2014. Members are selected to serve on the basis of their demonstrated competence and achievement in their scientific discipline as evidenced by the quality of research accomplishments, publications in scientific journals, and other significant scientific activities, achievements and honors.



Hiroshi Ishimoto

Hiroshi Ishimoto, Ph.D, postdoctoral research scholar, was awarded second prize in the postdoctoral fellow poster category at the 51st Genetic Society of America Drosophila Research Conference in Washington, D.C. Dr. Ishimoto presented the poster entitled "Neuronal and Behavioral Plasticity Regulated by Nongenomic Actions of the Steroid Hormone Ecdysone in Adult Drosophila" (Hiroshi Ishimoto, Zhe Wang, Chun-Fang Wu, Toshi Kitamoto) at the conference, which was held April 7-11, 2010. Dr. Ishimoto's poster was one of nine out of approximately 800 posters to win an award. Awards were based on scientific merit and clarity of presentation.

Check out our

Online Photo Gallery

We are improving our skills of photographically capturing people and events our department sponsors – so much so that it has become increasingly difficult to select just a few representative pictures to share with you in our print newsletters. Thus, we are trying something new in this issue. We invite you to view a more expansive Photo Gallery stored with the electronic version of this newsletter issue.

Please spend a few minutes enjoying these photos: **www.anesth.uiowa.edu/portal/?tabid=1251**

Tyrone Whitter, Dan Mitchell, Javier Campos
International Anesthesia Symposium, Los Cabos, Mexico, 2010

Mark your calendars!

Upcoming Iowa Anesthesia Department CME Conferences

Each conference offered through our department is approved for allowance of CME credits to the participating professional. Detail regarding the upcoming conferences can be found on the department's web site at http://www.anesth.uiowa.edu. Should you have specific questions regarding a conference, you may e-mail or call the College of Medicine CME office contact, Lori Bailey Raw. She can be reached via e-mail at **lori-bailey@uiowa.edu** or by telephone at **319-335-8599**.

Regional Anesthesia Study Center of Iowa (RASCI)
October 9 – 10, 2010
December 4 – 5, 2010

Iowa International Anesthesia Symposium, 5th Annual
March 5 – 8, 2011

Iowa Anesthesia Symposium XI
May 21 – 22, 2011

**Other Upcoming Events

The following special events are being planned. Mark the dates on your calendars, as we welcome you to join us. Contact Barb Bewyer via e-mail at **barbara-bewyer@uiowa.edu** or by telephone at **319-353-7559**.

University of Iowa Homecoming Weekend
September 30 - October 2, 2010

Thursday:
College of Medicine's two-day Continuing Medical Education Program

Friday:
College of Medicine CME Program

Anesthesia Department Welcomes Alumni Visitors, All Day

Homecoming Parade/Pep Rally, 5:45 p.m.

MD Alumni Social, 7:30-9:00 p.m., P. Susan Beckwith, M.D., Boathouse

Saturday:
College of Medicine MD Program and Reunion Luncheon, 10:30 a.m.-1:00 p.m., Medical Education and Research Facility (MERF)

UI Gross Anatomy Kids Program, 10:30 a.m.-1:00 p.m., Medical Education and Research Facility (MERF)

College of Medicine All Alumni Pre-game Tailgate, 4:30-6:30 p.m., Medical Education and Research Facility (MERF)

Iowa vs. Penn State Football Game, Kickoff time 7:05 p.m.

Alumni Reception during Annual ASA Meeting
Saturday, October 16, 2010
7:00 - 9:30 p.m., San Diego Marriott Hotel, Columbia Rooms 1 & 2

Resident Graduation Luncheon
Sunday, June 26, 2011

of *Special* interest.....

Celebrating with Perky

In early spring, **Javier Campos** M.D., Professor, Vice Chair for Clinical Activities, Executive Medical Director of Operating Rooms, organized an event to celebrate the grand opening of the pre- and post- pediatric recovery area. Perky, the Iowa Children's Hospital mascot, was on hand to participate. During the party, Perky was joined by his daughter, Emily, as well as Dr. Campos and Joel Shilyansky, M.D. Associate Professor, Robert and Hélène Soper Chair of Pediatric Surgery, Surgeon-in-Chief, University of Iowa Children's Hospital.

Revival/Restoration/Return of the Photo Contest

All Department of Anesthesia newsletter readers: Consider this your official notification! We've had a considerable number of inquiries and even complaints related to our silent retirement of the semi-annual photo contest. In our defense, we let it experience a quiet withdrawal, and the reason is because we thought we had simply introduced a lemon, a challenge of little interest to all but a small handful of loyal individuals. We're introducing a comeback and now challenge you to prove this decision a good one. We're even expanding the criteria. Whereas previously we only accepted photographs that were "unquestionably Iowa," limiting submissions to Iowa-defining photographs, ones taken recently, and ones relating to the season we specified with each round, we now welcome any photograph taken by you. Period. We want to introduce more competition into the contest. We want more of you to submit photographs! Select the best of your best and send your submissions on CD or via e-mail. Please provide a text description that includes your name, when and where the picture was taken, and provide it a title (ex: Golden Maple, Family Reunion, View From My Office, View Inside My Office). ***The deadline for receipt of all photos is January 10, 2011.*** Winners will be announced in the Spring 2011 issue of the newsletter. If the contest renewal is a success, we have some ideas for how to "up the challenge." So, check your camera batteries, get out there and take some photographs, and submit them to Barb Bewyer.

E-mail: barbara-bewyer@uiowa.edu
CD: Barb Bewyer; Department of Anesthesia, 6617 JCP; The University of Iowa;
200 Hawkins Drive; Iowa City, IA 52242-1009

Anesthesia Faculty and Staff Receive Thanks

Recently, a faculty member in our department, Dr. **James Choi**, received an e-mail prepared by a physician intern who had just completed his rotation in our department. Because it pays tribute to our efforts, and because it demonstrates how seriously our department members feel about the element of this institution's mission, that of educating young trainees, Dr. Choi shared the message with his colleagues. Permission is also given by the trainee allowing us to publish this in our newsletter.

"I wanted to write you a quick note to say thank you to you and all of the anesthesia faculty and staff for making this a fantastic rotation for me. As an off-service resident, I was made to feel incredibly welcome, and given opportunities and education like a categorical anesthesia resident. The extra time taken to make sure I learned information pertinent to orthopaedic anesthesia is especially noted. As an entire department, you have a great group of people, and I look forward to continue working with you for the next week on my rotation, as well as on "the other side" of the curtain for the next 5 years!

Christopher M. Graves, M.D.
House Staff 1
Department of Orthopaedics and Rehabilitation

"Dr. Kinyon's incredible memory for people, places and events served well to build lasting relationships with his colleagues and he became well respected in medical circles both here and abroad."

of *Special* mention.....

Gilbert E. Kinyon, M.D., of La Jolla, California, passed away February 18, 2010, at Scripps Mercy Hospital, San Diego, CA. He was born in Tipton, Iowa, on June 4, 1921. After two and a half years in the Army during WWII, he returned to The University of Iowa to complete his studies, including his medical degree in 1950. Dr. Kinyon interned at Methodist Hospital, Indianapolis, IN, and served his residency in anesthesia at The University of Iowa, Iowa City, IA. He began his private practice in anesthesiology at Scripps Memorial Hospital in La Jolla in 1953.

He served in the European Theatre during WWII with the 94th Infantry Division where he fought in the Battle of the Bulge under General Patton. During one particular encounter, he captured 45 German soldiers. His buddies called him the "Audie Murphy" of WWII. He was medically discharged for wounds received in combat. He was awarded 2 Bronze Stars with V (for Valor) for action during combat and 3 Purple Hearts.

During his professional career, he served as Chief of Staff in the Anesthesiology Department at San Diego University Hospital, as well as Director of the Anesthesiology Training Program at Mercy Hospital and Medical Center, where he trained over 40 men and women in the specialty of anesthesiology. He was a Diplomat and Fellow in the American Board and American College of Anesthesiology, respectively. He served as Vice President and President of the California Society of Anesthesiology, Editor for their societal journal, Secretary of the American Society of Anesthesiology, and served in many other positions and many other committees in the field of anesthesiology.

Dr. Kinyon's incredible memory for people, places and events served well to build lasting relationships with his colleagues and he became well respected in medical circles both here and abroad. He was a Delegate to the World Federation and a wonderful ambassador to the profession wherever he went. He published numerous articles during his long medical career. He was a member of the American Academy of Anesthesiology, the La Jolla Academy of Medicine, Professional Men's Club, Thorn in the Flesh Men's Group, the La Jolla Presbyterian Church, and an enthusiastic and dedicated member of the 94th Division where he served 25 years as their Medical Officer. He and his wife, Mary, established the Far West Chapter of the 94th Infantry Division. He was an avid stamp collector, gardener, world traveler and bridge player and was known for his annual Christmas letter and his voluminous memory bank of jokes. He was a giving person helping many less fortunate.

He is survived by his wife of 35 years, Mary Johnston Kinyon; his daughters, Michele (Stephen) Caiola of San Diego, California, and Leslie (Deane) Minor of Everett, Washington; grandchildren, Matthew and Alice Minor; and nieces, nephews, and many friends. He was preceded in death by his first wife, Jessie Morris; daughters, Denise and Joy; and son, Kurt.

University of Iowa Hospitals and Clinics
Department of Anesthesia
200 Hawkins Drive
Iowa City, IA 52242

Change Service Requested

5th Annual Iowa International Anesthesia Symposium

March 5-8, 2011

Program Director: Javier H. Campos, MD

Sponsored by: The Department of Anesthesia, University of Iowa Roy J. and Lucille A. Carver College of Medicine

The University of Iowa Roy J. and Lucille A. Carver College of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

This activity has been approved for *AMA PRA Category 1 Credit*™.

Los Cabos, Mexico
Hola Grand Faro Hotel
San Jose del Cabo

Highlights:

Airway Management Updates
- Fiberoptic bronchoscopy guidelines
- Mishaps during awake intubation
- Upper respiratory tract infection and anesthesia in the pediatric patient

Regional Anesthesia Updates
- Managing failed epidural blocks for thoracic or abdominal surgery
- Spinal anesthesia for the ambulatory patient
- Caudal and epidural blocks in the pediatric patient
- The obese patient and regional anesthesia
- Complications of regional anesthesia

Cardiothoracic Anesthesia Updates
- An update on the use of beta blockers
- Anesthetic implications of coronary stents
- Challenging cases in thoracic anesthesia
- Common problems with double-lumen tubes

Neuroanesthesia Updates
- Neurosurgical emergencies
- Brain protection in neurosurgery
- The trauma patient with uncleared cervical spine
- An update on neurointerventional radiology cases

Workshops:

Regional Anesthesia
- Live demonstrations - upper and lower extremity blocks

Problem Based Learning Discussion (PBLD) "NEW"
- What can go wrong with awake intubation
- Common problems in the prone position
- Common pitfalls during lung separation techniques