MESSAGE FROM THE CHAIR

Our Anesthesiology Workforce in 2017 and Beyond

Like many practices nationwide, UF Health has experienced a large growth in the number of cases requiring anesthesia services both inside and outside of the operating room. In the state of Florida, delivery of anesthesia requires an anesthesiologist; this is the same in all other states in the country unless a governor has signed an “opt out” provision. At the University of Florida in Gainesville, our department has had gradual, fiscal year-over-year growth in anesthesiologists dedicated to operative anesthesia (not including critical care medicine or pain) with the following FTE: FY14, 48; FY15, 51; FY16, 55; and FY17, 61. Additional anesthesiologist growth at UF is expected in FY18 with the occupancy of a new hospital tower with 15 new operating rooms, 5 catheterization suites, and 2 MRI locations. To achieve additional surgical growth obviously requires additional anesthesiologists.

In 2013, the American Society of Anesthesiologists sponsored a research report entitled, “The Anesthesiologists Workforce in 2013: A Final Briefing to the American Society of Anesthesiologists.” The authors referenced an earlier report of 2007 wherein there was observed to be a shortage of approximately 2,023 anesthesiologists, although significant regional variation was noted. The estimate in 2013 turned around to a surplus of 308 anesthesiologists. In 2017, RAND Corporation states
that the total anesthesiologist work force will peak nationally at almost 46,000 physicians. Thereafter, they forecast a year-over-year decline in the total number of anesthesiologists as the number of retirees exceeds the number of new anesthesiologists joining the supply. More starkly, the demand for anesthesiologists will exceed the supply. This view does not even account for increased demand due to surgical growth, new non-OR anesthesia locations, or other impactful changes due to changes in our national healthcare policy (e.g., Affordable Care Act repeal and replace). The situation of more anesthesiologist demand than supply will lead to pressures on employers and hospitals with respect to compensation and employee benefits, pressure to do more cases per time block, and a more earnest look by various hospital executives and governors for non-anesthesiology providers to meet their patient’s needs for anesthesia.

How did we get here and what do we do now? Residency positions are mainly funded through the U.S. Centers for Medicare & Medicaid Services, an operating division of the U.S. Department of Health and Human Services. Overall, the growth in new residency positions, including for anesthesiology, has not kept pace with the growth in medical school student graduation or the upcoming demand for anesthesiologists. The Association of American Medical Colleges has made a short, informative video on just this topic that you might enjoy, with an overall summary, leading to a disappointed cohort of 3.7% of U.S. fourth-year medical students (Class of 2017) who will be unable to obtain a residency because there are simply not enough positions available. The graduated medical students will want to work and study in a residency (and repay their student loans) and our universities have the capacity to train them, but insufficient positions are available for appointment. To fix this, the United States simply needs more residency positions to train medical students and supply the market for anesthesiologists and other specialties. Previous fixes by Congress (e.g., H.R. 1201, H.R. 1180, S. 577) were never passed to address this issue. I hope that we can count on our professional societies and residency alumni to help move similar legislation forward in the future. There are many fourth-year medical students who will be very grateful, as will your colleagues trying to find new anesthesiologists for their own practices.

Here in the department, we would like to hear more from you and your success over the years since your graduation to practice. If you email webmaster@anest.ufl.edu, we would be very glad to learn about your adventures and add more information to an alumni section in future newsletters.

Thank you for taking the time to read this newsletter and learn about what is happening in anesthesiology at the University of Florida. You can keep up with us by Facebooking us at facebook.com/ufanesthesia or on our webpage at http://anest.ufl.edu/.

– Timothy E. Morey, MD

Anesthesiologists have long sought a “blood substitute.” This year, research took a big step in that direction.

In February, Dr. Bruce Speiss (pictured, left) led a meeting for the Combat Casualty Care Research Program in which all units of the Department of Defense (DOD) came together to meet with the National Institutes of Health, the U.S. Food and Drug Administration (FDA), the Biomedical Advanced Research and Development Authority, and the leading authorities in this research, as well as corporate entities, journal editors, and reporters.

At the meeting, called the “Oxygen Carrier State of the Science Meeting,” Dr. Spiess was one of two medical directors in charge of the information presented to the DOD. The goal was to brief the government on the state of the world, giving doctors an opportunity to shape the government’s visions of what the country could have and where it could be in the next 10 or so years.

The Biomedical Advanced Research and Development Authority expressed a need to produce a compound, available for both military and civilian use, that could supply tissues with oxygen in the event of major trauma when blood supply is scarce. This substance would not be a true replacement for blood but could be used to keep a person alive in an emergency situation. This compound could save thousands of lives in the event of a mass casualty in an austere environment, one in which standard medicine is not available, but the meeting made it clear that much work still needs to be done to prepare for such an event.

Dr. Spiess gave four lectures, ran the perfluorocarbons meeting, and personally invited the presenters, he said. As an organizer of the meeting, he was also one of two civilians permitted to sit in on government policymaking sessions and speak on behalf of researchers about future plans of action.

“I think they get it,” Dr. Spiess said. “I think they understand what needs to be done.”

In the end, there was an agreement of cooperation between the government and the research community. Previously, he said, FDA regulations had impeded this type of research; at the meeting, the FDA offered help planning future research studies to ensure they aren’t rejected for failing to follow regulations. One problem researchers faced was in the approach they had been taking: They were trying to prove that their products were better than blood. The FDA’s suggested path is to instead show that although a product doesn’t compete with blood, it can be used when no blood is available.

The outcome of the meeting is that research on this topic will explode. Major journals will put out supplements with content from the meeting’s presentations. The DOD will publish white papers stating the need for an intravenous pharmaceutical that can supply oxygen to tissues in the battlefield and requesting its production, and researchers will respond. The University of
BLOOD SUBSTITUTES (continued)

Florida will launch pilot projects seeking major funding for this research as early as mid-April. Government agencies will fund research, build programs, and obtain patents. Millions of dollars will be earmarked to support this research.

But the most important outcome is intangible: Government support will restore faith in this type of research. In the past, the research industry was cast in a negative light after a series of failures to produce profitable results from its research, and funders withdrew much of their support. Dr. Spiess said. Now, he said, the government and the FDA have agreed to refocus efforts and cooperate with industry for the good of the country's citizens.

“I think this conference will inject hope, enthusiasm, and a positive attitude, which should imbue industry with a new desire to see it through to the end. And I said it to the government over and over again: If you lead the way with a positive attitude, the rest of your country will follow,” Dr. Spiess said.

There are several possible ways that the need for this blood substitute may be satisfied in the near future. In fact, the compound that the government is seeking has already been created.

Perftoran, a substance that transports oxygen and other compounds throughout the body, has been used in Russia for approximately 30 years and in at least 30,000 people. However, the literature on the subject had long been inaccessible for most American researchers for a simple reason: It was written in Russian.

Maria Irwin, MD, PhD, is an Assistant Professor of Anesthesiology at the UF College of Medicine. With help from Dr. Spiess and others, the Russian native obtained and translated several publications about Perftoran and delivered a report to the U.S. military and the FDA at the meeting.

In discussion with Dr. Spiess, the FDA has said it is willing to look at Dr. Irwin’s findings and consider what steps need to be taken to replicate Russia’s research on Perftoran in the United States in order to meet U.S. standards.

“Maybe we’re gonna make chicken cacciatore,” he said, “but we’re gonna make it in our kitchen over here, so we’re gonna make it to our standards.”

Perftoran is not the only possible answer to the government’s call; a few other companies are working on building similar substances that could make it to the market first, he said.

But Dr. Irwin’s report could have huge implications for the country. “She may have just opened the gates to the U.S. to something the Russian military has,” he said. “There’s a whole career for someone here, in our faculty, who could lead us to having a whole new compound in the U.S. because she went and did that.”

No matter how the end goal is achieved, UF faculty will have a big role in it; this will spin off into research and recognition for the university and the department, Dr. Spiess said.

“You know, I’ve got 7 or 10 years left of my career. Seeing these compounds available not only for the military and homeland security but for use in civilian medicine to save lives is my single, number one goal in life. And now the government’s gotten behind it, so that’s huge.”

QUIET LEADERSHIP

By: Gordon Gibby, MD
Associate Professor of Anesthesiology
Affiliate Associate Professor, Department of Medicine

I’d like to point out a moment of true, quiet leadership I witnessed recently. I happened to see Dr. Nik Gravenstein walking through the postanesthesia care unit and I watched him suddenly pivot into a glass-enclosed room, where an elderly woman was miserably cold, her IV was beeping incessantly, and her husband was standing there, unsure what to do. I followed, curious to see what had attracted his attention so visibly.

Nik was busy working on the pump and simultaneously asking her about her warmth, then asking a nurse who arrived if they had an air-warming blanket; he was fishing out a Bair Hugger air blower while I was searching the room. I finally found the thermostat... and it’s no wonder she was so cold.

Well, I wandered back by to check on this frail, thin, elderly woman, and you should have seen the smile on her face! Her husband looked very relieved, the room was toasty warm, and she was going on and on about how wonderful that hot air blanket was!

It is amazing how much of a difference you can make in people's lives.

Editor's Note: We would like to thank Nik Gravenstein, MD, and Gordon Gibby, MD, for their generous contributions to patient care at UF Health.

MAINTENANCE OF CERTIFICATION IN ANESTHESIA (MOCA) UPDATE

Today, UF is one of about 50 locations that offers a MOCA simulation course. This course, typically taught at our center by Drs. Nik Gravenstein and Sem Lampotang, must be taken every 10 years as part of the requirements to maintain board certification.

The UF simulation center, the Center for Safety, Simulation & Advanced Learning Technologies (CSSALT), schedules about one course every month, depending on demand, said Faith Hawks, MA, an Administrative Support Assistant II at the center.

The course takes place on Saturdays beginning at 7:30 am and ending at about 2:30 pm. Participants earn six CME credits.

There are eight people and eight scenarios per session. Though MOCA 2.0 offers alternatives to the SIM course, it is still a popular
option and enrollment is strong. The MOCA organizers plan to increase the number of sessions from 8 to 10 in the next year. Drs. Nik Gravenstein, Sem Lampotang, Chris Giordano, Steve Robicsek, Laurie Davies, and Ajay Antony have served as instructors for the course.

The specifics of the course are “double-top secret,” Dr. Gravenstein said, but each session involves short clinical exercises focused on teamwork, desaturation and hypoxemia, crisis management, and hemodynamic and respiratory instability, based on the ABA learning objectives for the MOCA Simulation Course.

The course is held at the Harrell Medical Education Building, which opened July 2015 and features state-of-the-art technology for simulations. The simulator used for the course was invented at UF in 1987, and the simulation room has all the technology you would find in a modern clinical environment.

“It’s a big production,” said Dr. Gravenstein. For each session, there are two to three faculty, a simulator engineer, three embedded simulated persons, and eight participants. For each scenario, one participant manages the situation while the rest watch from another room. The participants and faculty then come together for a debriefing while the next scenario is set up. The debriefing lasts longer than the scenario and is where the real learning is done.

The sessions operate on a “Las Vegas principle,” said Dr. Lampotang (pictured, left). “Whatever happens in the sim room stays in the sim room.” The faculty who run the course have taken the Harvard Comprehensive Simulation Instructor Course, where they learned tactics for debriefing that lend the UF course its “non-threatening” reputation. Dr. Lampotang has also taken the Advanced Instructor Course.

The course provides a “safe container,” he said. Debriefers are open and non-judgmental; they avoid accusatory and demeaning language and tone, instead offering observations and suggestions. This approach encourages discussion and learning.

The beauty of the course, Dr. Lampotang said, is the diversity of participants, who include doctors from private practice, academia, and HMOs; from urban and rural settings; from far-away cities and states. This diversity of experiences and perspectives can be very stimulating, he said.

“We want them to leave with something they didn’t have before,” Dr. Gravenstein said. “What we’re most proud of is that when we’re done, despite being on a Saturday, everyone has felt it’s a worthwhile experience.”

Dr. Adam Wendling, Associate Professor of Anesthesiology, took the course in August 2016. He said he felt it was “time well spent.” He teaches the Harvard Medical Simulation course, which Dr. Gravenstein had just participated in a week before Dr. Wendling took the MOCA course.

Dr. Wendling said he could see where Dr. Gravenstein’s course had incorporated lessons from the Harvard course into his MOCA simulation. He said the simulation was intellectually stimulating and reasonably challenging. The embedded simulated persons who act in the simulations are typically residents or others familiar with the role, he said, so they play their parts convincingly.

“These guys know what they’re doing,” he said.

Each year, the course receives positive feedback, and Dr. Gravenstein’s (pictured, right) non-threatening approach makes participants comfortable and willing to ask questions, Faith Hawks said. “Nik is an experienced educator,” she said. “Everyone loves him.”

“They make it clear that you’ll get more out of this if you participate,” Dr. Wendling said.

Despite the fact that these participants are performing in front of strangers, the UF course attempts to make participants feel at home, he said.

There is no passing or failing the simulation, which mitigates the pressure participants might otherwise feel to perform. What matters, he said, is that participants learn something that they can take back and apply to their institution.

The next course is offered Saturday, April 29th, and all scheduled courses are almost fully booked until June.

The American Board of Anesthesiology (ABA) examinations exist to certify candidates to become practicing anesthesiologists. The traditional exam previously contained only Parts 1 and 2. Beginning this year, the exam now consists of four components that assess specific skill areas. The new exam format is designed to better test physician competency.

First, there is a Basic exam, which residents take at the end of their CA-1 year. This exam focuses on the scientific basis of clinical anesthetic practice and will concentrate on content areas such as pharmacology, physiology, anatomy, and anesthesia equipment and monitoring,” said Dr. Deborah J. Culley, Secretary at the ABA.
After residents complete their residency training, they take the ADVANCED exam; which tests more specialized knowledge and skill in clinical practice while also covering basic knowledge. The BASIC and ADVANCED exams previously comprised Part 1 of the exam and now stand alone as individual portions.

Finally, the APPLIED exam allows candidates to become board certified. It has two components: The Standardized Oral Examination (SOE) and the Objective Structured Clinical Examination (OSCE), Dr. Culley said.

During the SOE, the candidate receives an example patient history and the candidate is evaluated based on competency in assessing the patient's condition and risks as well as treatment plans.

The OSCEs are a new addition to the exam. Beginning in March 2018, this exam will assess a candidate's professionalism, communication, and technical skills, Dr. Culley said.

“The oral exams allow candidates to tell us what they would do in various clinical scenarios,” she said. “The OSCEs allow them to show us what they would do.”

The OSCEs comprise a series of scenarios simulating real-life encounters, either clinical or physician-to-physician. There are nine possible skills that can be tested in the OSCEs: obtaining informed consent; formulating treatment options; evaluating peri-procedural complications; confronting ethical issues; communicating with other professionals; applying practice-based learning and improvement skills; interpreting monitors; interpreting echocardiograms; and applying ultrasonography.

However, only seven of these skills will be tested in the exams.

The change in the exams was implemented in response to the Board’s efforts to move toward competency-based training, as well as to encourage more sustained study during residency, Dr. Culley said. The new additions to the exam will help the Board make better-informed decisions regarding certifications, she said.

“The OSCEs create an opportunity for candidates to demonstrate that they have the communication, professionalism, and technical skills they need to safely treat patients,” she said. “These are skills they are using in practice every day, so we do not expect this new component or the exam structure to be a barrier to certification for most anesthesiologists.”

The OSCEs are also involved in the certification process in the UK and Israel, and several training programs in the United States incorporate simulation, she said.

“We hope the staged examinations encourage residents to engage in more focused studying throughout their training,” she said.

“We are encouraged by what we’ve seen so far,” remarked Dr. Culley. Research has shown that the new staged exams have improved residents’ performance on In-Training Examinations. The Board will hold meetings this year to familiarize board directors with the changes so that they can better prepare residents, according to Dr. Culley. More information will be released as it becomes available, she said.

“Our goal is to be as transparent as possible about this new component so that candidates know what they can expect,” she said.

The ABA will also have a booth at the Florida Society of Anesthesiologists meeting in June. An ABA representative will be available to answer questions regarding primary certification and Maintenance of Certification.

A timeline for each exam is available [here](#). Candidates eligible to take the OSCEs will receive emails when registration opens. For more information, please click on the following links: OSCE FAQs; OSCE Content Outline; OSCE video

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**GETTING A HEAD START: SIMULATION FOR HIGH SCHOOL STUDENTS**

Standing before a group of 9th graders from North Marion High School, Tony DeStephens, Simulator Engineer, asked:

“Who here is interested in a healthcare career?”

More than half of the students raised their hands.

The students were visiting through the North Central Florida School, Tony DeStephens, Simulator Engineer, asked:

“Who here is interested in a healthcare career?”

Standing before a group of 9th graders from North Marion High School, Tony DeStephens, Simulator Engineer, asked:

“Who here is interested in a healthcare career?”

More than half of the students raised their hands.
In the time remaining, the students were taught how to intubate a patient and were allowed to practice the procedure hands-on at four stations.

“It was a cool experience,” said Travis Cottrell, one of the students who participated in the trip. The 15-year-old said he plans to attend a 2-year college and then a 4-year college, and the program is helping him find a path to achieve these goals. He said he hopes to become a veterinarian and could see himself working in the operating room setting one day, perhaps even doing procedures like those they practiced that day.

SOUTHEASTERN UNIVERSITIES DEPARTMENT OF ANESTHESIOLOGY CHAIRS

By: Karen Horowitz, MHA, and Corey Astrom

The Southeastern Universities Department of Anesthesiology Chairs, formerly known as the Society for University Academic Department Chairs (SUDAC), was formed by J.S. Gravenstein, MD (pictured, left), for anesthesiology academic department chairs to come together once a year to collaborate and share ideas. The first meeting took place on March 24th, 1964, in Atlanta, to “expressly to discuss the topic of teaching anesthesiology in medical school centers.” The second meeting, convened by J.S. Gravenstein, took place in Gainesville in March 1965. Unlike most other academic societies, SUDAC began with no bylaws or officers, with the exception being the Chairperson convening the meeting.

As the organization grew, however, the necessity for more structure became clear, and at the end of 1967, the Constitution of the Society of Academic Anesthesia Chairmen (SAAC) was put in place. Various other societies have sprung out of this initial need to discuss the issues pertinent to anesthesiology departments nationwide, including the Association of Anesthesiology Program Directors (AAPD), the Society of Academic Anesthesiology Associations (SAAA), the Association of Academic Anesthesiology Chairs (AAAC), the Association of Anesthesiology Core Program Directors (AACP), and the Association of Anesthesiology Subspecialty Program Directors (AASPD).

SUDAC itself evolved to include administrators from each of the academic departments. Originally, the conference was 4 to 5 days long, but is now a 2-day conference that typically begins on a Friday night and ends by noon on Sunday. The host of the conference is a different institution each year, thus the conference changes location annually.

This year, the University of Florida at Gainesville hosted the SUDAC conference from March 31st to April 2nd at The Ritz Carlton on Amelia Island, Florida. The average conference attendance is approximately 35, which is rather small for a national conference of such importance. Karen Horowitz, BS, MHA, was the organizer for this year’s conference, which included organizing site visits, creating contracts, planning meals and agendas, marketing to all the other academic institutions, and much more.

The UF Department of Anesthesiology was proud to host this year’s conference and to help create the pathway toward innovative change and forward thinking for all members of SUDAC.

References:
2017 ANESTHESIOLOGY CONFERENCES

Accreditation Council for Graduate Medical Education (ACGME)

The 2017 ACGME Annual Education Conference was held March 9th to 12th at the Rosen Shingle Creek Resort in Orlando. The theme of this conference, one of the world’s largest meetings of graduate medical educators, was “Igniting Innovation.” Sessions included feedback techniques, quality improvement in residency education, physician well-being, and other topics focused on improvement and innovation in graduate education programs.

Gulf Atlantic Anesthesia Residents’ Research Conference (GAARRC)

The 43rd Annual GAARRC had an unprecedented number of abstract submissions. The following were accepted to participate:

- Wesley Glick
- Claudia Sotillo
- Angie Fugate
- Zachary Greene
- Alberto Bursian
- Stefanie Vallancourt
- Cliff Cutchins
- Brendan Inouye
- Mohamed Osman
- Andrew Redfern
- Spencer Hyde
- Dalya Elhady
- Scott Wasilko
- Rhae Battles
- Jordan Miller
- Kevin Olsen
- Michael Kaminsky
- Carl Berasi
- Sindhu Nimma
- Aneel Deshmukh
- Joseph Siebenaler
- Tiffany Kuo
- Eric Brown
- Leon Anijar
- Tyler Kabes
- Wazef Muzzafar

The conference was held April 7–9 in Atlantic Beach, Florida. GAARRC is an annual meeting in that provides a forum for anesthesia residents to discuss their research and activities with peers. Approximately 100 presentations are given each year. The goal of the conference is to develop participants’ confidence in presenting research, discussing patient care, demonstrating knowledge of a subject, answering questions, learning and incorporating new information and techniques, and networking.

This year, our residents and fellows were an outstanding presence at the conference, taking home several prizes and earning compliments from several faculty from other institutions. There were several winners from our department:

**Case Presentations:**
1st place: Sindhuja Nimma
2nd place: Scott Wasilko
3rd place: Rhae Battles

**Original Research:**
1st place: Claudia Sotillo ($600)
Honorable Mention: Rob Stoker ($200)

**Congratulations to all those who attended and presented! Your efforts are much appreciated.**

Florida Society of Anesthesiologists (FSA)

The 2017 FSA annual meeting will be held June 9th to 11th at The Breakers, West Palm Beach, Florida. The meeting, titled “Enhanced Recovery in The Surgical Home, a Pathway Towards Patient Safety,” will offer CME credits and feature the latest topics in anesthesia.

Department of Anesthesiology Annual Celebration of Research

The 2017 Anesthesiology Annual Celebration of Research Day will take place Wednesday, May 3rd, from 3 pm to 6 pm in the Shands North Tower, Room 2147. This event offers residents, faculty, and other members of the Department of Anesthesiology the opportunity to present research and offer ideas for future projects. Those...
CONFERENCES (continued)

Department of Anesthesiology Annual Celebration of Research

The 2017 Anesthesiology Annual Celebration of Research Day will take place Wednesday, May 3rd, from 3 pm to 6 pm in the Shands North Tower, Room 2147. This event offers residents, faculty, and other members of the Department of Anesthesiology the opportunity to present research and offer ideas for future projects. Those who attend are encouraged to interact and form collaborations with other attendees.

Prizes will be awarded: $1000 to the first prize for oral presentation; $500 to the first prize for poster presentation; $250 to the second prize for poster presentation; and $100 to the third prize poster presentation.

Participants will earn 3 CME credits for attending oral presentations, which begin in Room 2147 at 4:15 pm. The Keynote Speaker will be Kevin R. Ward, MD, a Professor from the University of Michigan Department of Emergency Medicine. Food and refreshments will be served.

For more information, contact Judith Wishin at jwishin@anest.ufl.edu.

SAVE THE DATE: American Society of Anesthesiologists (ASA)

The ASA annual meeting will be held in Boston from October 21st to 25th. A reception for University of Florida alumni will be held Sunday, October 22nd from 6:30 to 9:30 pm at Legal Seafood Harborside, 270 Northern Avenue, Boston, MA 02210.

OXYGEN: THE VITAL TOXIN

Bruce Spiess, MD, FAHA, Professor and Associate Chair for Research in the Department of Anesthesiology (pictured, right), presented a talk Monday, January 30, 2017, as part of the Department of Physiology and Functional Genomics Spring 2017 Seminar Series.

In his talk, “Oxygen: The Vital Toxin,” Dr. Spiess suggested that our understanding of oxygen as a predominantly life-sustaining element is backward.

Dr. Spiess’s more than 30 years of research have focused on the physiology of oxygen. He dedicated the lecture to his father, a World War II B-17 bomber pilot, who inspired his research on oxygen because of an incident in which his oxygen mask froze at 18,000 feet in the air. If a fellow pilot hadn’t been there to clear his mask, his father would have died, he said.

“I think oxygen is one of the most toxic substances on earth,” Dr. Spiess said. He provided several examples, pointing to the conclusions:

• Exposure to pure oxygen leads to several negative outcomes such as blindness, seizures, and eventually, death.
• Flooding tissues with oxygen during heart procedures impairs recovery by leading to the constriction of blood vessels and the production of free radicals.
• Cells tightly regulate tissue oxygenation; too little or too much oxygen results in adverse effects.
• Several attempts have failed to produce a pharmaceutical from hemoglobin.

Dr. Spiess posed the question: What if hemoglobin existed to detoxify and regulate oxygen? Billions of years ago, he explained, the earth’s oxygen was almost entirely tied up in water, creating oxygen sinks, and there was very little present in the atmosphere.

Eventually, when such oxygen sinks became saturated, free oxygen began to outgas from the oceans. The atmosphere was quickly flooded with oxygen; previously making up only 0.02% of the atmosphere, oxygen now comprised 21%. The only organisms that survived were those that developed a sort of proto-hemoglobin to detoxify the air.

Dr. Spiess explained that hemoglobin’s evolutionary path suggests that it evolved as a way for early life forms to survive the toxic effects of oxygen — yet research has focused on hemoglobin as the way to supply, not regulate, oxygen.

He said that even the most fundamental medical school teachings might be misinformed, suggesting that our limited understanding and backward assumptions about oxygen may be harmful to the advancement of medical research.

For more of Dr. Spiess’s oxygen research, please see:


The 2017 College of Medicine Celebration of Research took place on the evening of Monday, February 27th, at the Stephen C. O’Connell Center. More than 500 posters were presented, and it was a successful day of research collaboration. The ever-growing number of posters at this annual event is truly reflective of the growth, power, and diversity of the research operation of the College of Medicine.

Nearly 100 representatives of the Department of Anesthesiology were authors on posters at the event. Arelys Zamora, one of these authors, received honorable mention for her poster, titled “The temporospatial role of microcirculatory dysfunction in the prediction of ischemia or infarction in patients with aneurysmal subarachnoid hemorrhages.”
Dr. Ajay Antony’s Abstract Among Top 10 at 2017 North American Neuromodulation Society (NANS) Annual Meeting

Ajay Antony, MD, presented his abstract, “Barriers to Referral for Spinal Cord Stimulator Implementation,” at the NANS 20th Annual Meeting in January, the largest neuromodulation meeting in the country, and was among the top 10 presented. Dr. Antony presented on Sunday, January 22, to an audience he estimated to be around 500. Congratulations, Dr. Antony!

Dr. Rene Przkora Becomes Multidisciplinary Pain Medicine Fellowship Director

Rene Przkora, MD, PhD, was elected Board Member-at-Large of the Association of Pain Program Directors (APPD) in November. The APPD is committed to promoting pain medicine education and career development for pain specialists and fellows. As pain medicine has developed into a multidisciplinary specialty, fellowship training is more important than ever, and the curriculum has become more rigorous and complex. The number of ACGME-accredited pain medicine training programs in the United States has increased to over 90, and the APPD will continue to play a pivotal role in transforming pain medicine to meet the growing needs of patients in pain. Congratulations, Dr. Przkora!

WE CONGRATULATE OUR AMAZING TEACHERS!

Exemplary Teacher Awards

The department awarded several of our professors with Exemplary Teacher Awards at the January 23rd, 2017, faculty meeting. The recipients were:

- Dr. Barys Ihnatsenka
- Dr. Olga “Kiki” Nin
- Dr. Terrie Vasilopoulos
- Dr. Jeffrey White
- Dr. Peggy White
- Dr. David Corda
- Dr. Laurie Davies
- Dr. Chris Giordano
- Dr. Nik Gravenstein
- Dr. Sandra Gonzalez-Rodriguez

Also recognized was Dr. Brenda Fahy, who received unanimous approval for her 6-year appointment as an appeal panel member on the Anesthesiology for Accreditation Council for Graduate Medical Education.
AWARDS (continued)

**Dr. Kiki Nin Appointed Medical Director of UF Health Florida Surgical Center**

Kiki (Olga) Nin, MD, has accepted an appointment as Medical Director of the UF Health Florida Surgical Center (FSC). This fully equipped, vibrant ambulatory center serves the outpatient surgical needs of patients cared for at UF Health. They offer high-quality, patient-centered care with excellent physical and emotional support to their patients and families at every point of their stay — before, during, and after surgery. The goal of the FSC is to offer a safe, convenient, comfortable, and less costly alternative to the traditional hospital stay.

Dr. Nin will be primarily located at the center and will supervise activities at that site. **Congratulations, Dr. Nin!**

**Jessica Lee Wins Superior Accomplishment Award**

Jessica Lee, Administrative Assistant II for the Neuroanesthesia Division, received the Superior Accomplishment Award for 2017. Jessica was nominated by her faculty and peers for consistent outstanding service and her willingness to perform at a level that is above and beyond normal job requirements. This award is a demonstration of Jessica's commitment to the mission and core values of our department and the university. **Congratulations to Jessica on a job well done!**

**New Appointment for Dr. Enneking**

F. Kayser Enneking, MD, was appointed interim chair for the Department of Dermatology in August while the department conducts a nationwide search for a new chair. Dr. Enneking will return to the Department of Anesthesiology when that position is filled. “Meanwhile,” she said, “I am applying a lot more sunscreen and enjoying interacting with a whole new phenotype of doctor and a whole new set of clinical operational problems.” **We wish her and the Department of Dermatology much success and look forward to her return!**

**Great Catch Award**

In December, Department of Anesthesiology Chair Dr. Timothy E. Morey and Anesthesiology Resident Zachary Greene were given the Great Catch Award for ensuring that a hemophiliac patient received the correct clotting medication prior to surgery. The Great Catch Award recognizes staff members who discover a potential mistake in patient care and, in doing so, prevent serious medical errors. **Thank you, doctors, for your foresight and diligence!**

Some of the conditions treated and services offered at the FSC include:
- Cutting-edge regional anesthesia for orthopedic surgeries
- Ear, nose, and, throat
- General orthopedics
- General surgery
- Gynecology
- Ophthalmology
- Pediatric orthopedics
- Sports orthopedics
- State-of-the-art image-guided techniques

For more information or to schedule an appointment, please call 352-733-0600 or visit their website at: [UFHealth.org/florida-surgical-center](http://UFHealth.org/florida-surgical-center)
Cynthia Garvan, PhD
Dr. Cynthia Garvan joined us in January 2017 as a Research Associate Professor. She previously worked as a Biostatistician and Research Associate Professor in the Office of Research Support in the College of Nursing. She has over 120 publications in over 50 journals. In addition to biostatistical collaboration, her research interests include statistics education for professionals and team science.

Travis Parsons, PhD
Dr. Travis Parsons joined us last year as an Assistant Professor of Research and came to us from Virginia Commonwealth University School of Medicine, where he worked as an Assistant Professor in the Department of Neurosurgery. Dr. Parsons earned his PhD in Biochemistry from Virginia Commonwealth and completed two post-doctoral studies, the first in neurology and the second in anesthesiology. His current research interests include the incidence and mechanisms of epileptogenesis in post-traumatic epilepsy associated with repetitive blast exposure, and retinal angiography as a tool for assessing outcomes related to retinal artery bubble load and for disabled submarine scenario triage. In his spare time, Travis likes mountain biking, skiing, live music, college football, and spending time with friends and family.

Arturo Torres, MD
Please join us (again!) in welcoming Dr. Arturo Torres to the Department of Anesthesiology. Dr. Torres, a Naval board-certified anesthesiologist, joined us on March 1, 2017, as an Assistant Professor of Anesthesiology. He has been with us since April 2016 as an OPS anesthesiologist and fellow, and originally came to us from the Naval Hospital in Jacksonville, Florida. Dr. Torres earned his BA from the University of South Florida and his MD from the University of Pittsburgh Medical School. He completed a general surgery internship at the Naval Medical Center in San Diego before moving onto his anesthesia residency, with his last year as Chief Resident. In 2006, he earned a scholarship to spend three months in Italy on a transplant rotation.

Victor Zhang, MD
Dr. Victor Zhang joined us as an Associate Professor and came to us from the Anesthesia Consultants of CA Medical Group in San Diego, California, where he was a staff physician and partner. He is a Diplomate for the American Board of Anesthesiology and the National Board of Medical Examiners. Dr. Zhang earned his medical degree at Nanjing Medical University in China and his PhD in Physiology at the University of Missouri — Columbia School of Medicine. He came to the “Gator Nation” to complete his internship in Internal Medicine at the University Medical Center in Jacksonville. He then came to UF’s Gainesville campus to complete his residency following a 6-month cardiovascular anesthesia fellowship. Dr. Zhang is a member of many professional societies and has received several patents throughout his career.

Jiepei Zhu, PhD
Dr. Jiepei Zhu joined us as a Research Assistant Professor and came to us from Virginia Commonwealth University School of Medicine in Richmond, where he worked as an Assistant Professor in the Department of Anesthesiology and as a fellow at the Johnson Center for Critical Care and Pulmonary Research. Dr. Zhu earned his medical degree from Hengyang Medical College in Hunan, China; his Master of Science from Jinan University in Guangzhou, China; and his PhD from Virginia Commonwealth University. Dr. Zhu has managed research laboratories, research projects, and mentored and trained laboratory research technicians, fellows, residents, and medical students.

Adriana Barbat
Adriana Barbat joined us on November 28, 2016, as an Editorial Assistant. She attended the University of Florida, graduating in May 2016 with a Bachelor’s in Journalism. During her time at UF, she also wrote and copy edited for The Fine Print and The Independent Florida Alligator. She previously worked as a copy editor for the Department of Emergency Medicine.

Tim Hillmann
Tim Hillmann joined us on January 3, 2017, as a Fiscal Assistant. He attended the University of Florida, graduating with a Bachelor’s from the College of Health and Human Performance. After graduating, he enlisted in the U.S. Army and served as an infantryman for 5 years in the 82nd Airborne Division. He is currently pursuing his MBA at the University of Florida, and is happily married with one daughter.

Breaunna Sweet
Breaunna Sweet joined us as the Clerkship Coordinator and Residency Program Assistant in the Education Office. She was born and raised in Sanford, Florida, and attended Seminole High School in their International Baccalaureate program. Ms. Sweet attended the University of Florida as the recipient of a Presidential scholarship, graduating in May 2015 with a Bachelor’s in English. In her first year post-graduation, she worked with Environmental Health and Safety while beginning her graduate studies in Public Health. Breaunna is now pursuing a second Bachelor’s in Health Administration, graduate studies in Public Health, and she will also begin assisting in research in the project #Peace4Tarpon. In addition, she is also a certified nursing assistant.

Nettie Van Wyen
Nettie Van Wyen joined the Department of Anesthesiology on November 14, 2016, as an Administrative Assistant II. She has worked at UF for 10 years, initially as Assistant to the Chair in the Department of Clinical and Health Psychology and most recently as an Administrative Assistant with the Clinical and Translational Research Center (CTSI). She is a native of Cali, Colombia, and enjoys dancing, particularly salsa and cumbia. In her spare time, she enjoys cooking, gardening, and camping, and she has recently started paper crafting.
People (continued)

Casey White, MD
9/19/52-12/12/16
Charlottesville, VA

Dr. Casey B. White (Barbara-Ann Kirchoff) formerly of Ann Arbor, MI, passed away December 12, 2016, after a brief illness with close family by her side. Casey (Barbara) will be remembered by her family and friends as a vivacious lover of life, loving mother, sister, cousin, aunt and devoted friend. She was the keeper of endless family memories, with a wonderful sense of humor and doting family unifier. Her devotion to family was unparalleled. She was a person of great warmth and enthusiasm who made everyone else’s life richer by knowing her. Casey loved traveling and was an accomplished amateur photographer, capturing the essence of the cities and people she met as she traveled worldwide. She was also an avid runner and rower as a member of the Ann Arbor Rowing Club, where she taught “Learn to Row” for many years.

Casey was born in Queens, NY, in 1952, the middle of three children of Peter and Kitty (Ducey) Kirchoff. The family lived across the United States and foreign countries before settling in Plainview, NY, where she graduated from Holy Trinity DHS in Hicksville. After spending three years at the University of Miami, Casey moved to Ann Arbor, where she and Thomas Ogle had their only child, Thomas (Toby) Ogle. In Ann Arbor, she began a 30-year career with the University of Michigan, working in the medical school library, Department of Medical Education, and Medical School Dean’s Office, supporting the medical education programs. While working full time, she received a Bachelor’s of Arts degree in Journalism from Eastern Michigan University and a Doctor of Philosophy degree in Education from the University of Michigan. During this time, she married Stewart White and together they shared many close friends in Ann Arbor and an enthusiasm for University of Michigan sports.

At the time of her death, Casey was a Distinguished Harrison Associate Professor of Medical Education and Associate Dean for Medical Education Research and Instruction at the University of Virginia in Charlottesville, VA. Previously, Casey had been Assistant Dean for Medical Education and faculty in the Department of Medical Education at the University of Michigan until she retired in 2011. At Michigan, she played prominent roles in three major revisions of the medical curriculum as well as multiple highly successful accreditation reviews of the medical school. Professionally, she will be remembered as a creative scholar who authored over 50 peer-reviewed research articles related to medical education. She was well known for her dynamic and engaging faculty development workshops and innovative educational programs, as she was passionate about shifting the landscape of medical education to ultimately improve the quality of care provided to patients.

After retiring from the University of Michigan, Casey spent a brief time as faculty at the University of Florida College of Medicine where she collaborated with others in the use of virtual reality and simulation training to improve the quality of patient care. She was subsequently pursued vigorously by the University of Virginia Medical School to join their faculty as they revamped their medical education program. Many will remember Casey as a passionate mentor who would encourage all faculty and staff members regardless of their positions to challenge themselves, reach higher, and dream bigger, and she assisted them in doing just that. Her work with faculty on the medical curriculum will continue to have a major impact on the educational programs and training of future physicians. Casey is being mourned by her son, Thomas (Toby) Ogle (partner Randi), her brothers, Peter Kirchoff (wife Monique) and Jahn Kirchoff (wife Christie), her cousins, Virginia Pitts (her children Ray & Kimberley) and Maureen Terry (her children, Rob, Jeffrey & Kristina), and many close friends and colleagues. Her zest for life, caring for others, and spirit will be with us always.

People (continued)

Bon Voyage, Friends

Here are a few of our good friends, dedicated physicians and staff, that we’ve said goodbye to recently. We sent them on their journeys to new places and exciting adventures with our warmest wishes for success and the hopes that they won’t forget us as they forge ahead and carry on the great name of UF Anesthesiology. If you would like to keep up with anyone who has moved on, here’s where you can find them:

Allie Haller, MD
The Orthopaedic Institute, Gainesville

Oscar Hernandez, MS
Department of Infectious Diseases & Pathology, College of Veterinary Medicine, University of Florida, Gainesville

Brit Smith, MD
North Florida Regional Medical Center, Gainesville

Amanda Lowe
Dean’s Office, College of Medicine, University of Florida, Gainesville

In Memoriam

Casey White, MD
9/19/52-12/12/16
Charlottesville, VA

Oscar Hernandez, MS
Department of Infectious Diseases & Pathology, College of Veterinary Medicine, University of Florida, Gainesville

Amanda Lowe
Dean’s Office, College of Medicine, University of Florida, Gainesville
During his time at the University of Florida, his accomplishments were vast; some of his more poignant accolades were his dedication to improvement in patient safety and resident education. Dr. Gravenstein was the co-founder and an original member of the Board of Trustees of the Anesthesia Patient Safety Foundation (APSF) and he also led a team of scientists and engineers in the creation of “Stan” the Human Patient Simulator and the Virtual Anesthesia Machine. These inventions, created and maintained here at UF, remain some of the most widely used medical simulation devices both nationally and internationally. In 2009, Dr. J.S. Gravenstein died at the age of 83, but up until 4 weeks prior to his passing, he was still actively involved in the department and could be found teaching residents and medical students in the simulator lab.

In 1969, Jerome H. Modell, MD, DSc (Hon), took over the fledgling department, which at the time comprised 11 people: one administrator, six faculty, and four residents. He served 23 years as chair, holding several administrative positions in addition to Chair and overseeing the establishment of a visiting professor program that has brought more than 200 professors to the department. The Chairs following Dr. Modell were Roy Cucchiara, MD, who played a large role in establishing the Jerome H. Modell, MD, Endowed Professorship; Nikolaus Gravenstein, MD, who oversaw the department’s development of a cardiac anesthesia fellowship that flourishes to this day; Kayser Enneking, MD, who led the department through a period of enormous growth and major systematic and organizational improvements despite major challenges; and present Chair, Timothy E. Morey, MD, who has overseen the introduction of cutting-edge technology focused on further improving patient care and safety.

Around 2008, the department went through a tumultuous time resulting from the Great Recession; the College of Medicine cut funding in several areas, while patients putting off medical care to avoid out-of-pocket costs were coming to the hospital sicker than ever. The hospital was at peak capacity during this time, a situation that was exacerbated by several staff departures. An abrupt need for anesthesia staff at Alachua General Hospital stretched the hospital’s resources even further, and clinicians during this time were working harder for no extra pay. This period was a test of the department’s resilience and commitment to patient care as well as continuing academic improvement, and it resulted in several systematic improvements.

The opening of the south tower alleviated many of the challenges the department had been facing, as well as created opportunities for new leadership roles and organizational changes in the department.

Simultaneously, the hospital began introducing new technology in the operating rooms. Quality and safety became a major focus. The hospital and the department continued to make small changes over time, leading to vast improvements to the hospital’s environment. Within two years of introducing these systematic changes, the hospital had sprung to the top quartile among UHC peer hospitals in the areas of patient safety and mortality.

In 2009, the department developed the Gravenstein Scholars Program to attract and support promising residents in developing their academic portfolio during residency. The program has produced three Gravenstein Scholars who have all successfully embarked on academic anesthesiology careers.

The department has continued to grow year after year and is today one of the larger programs in the country, achieving national and international distinction. The hospital’s operating rooms are completely full with high utilization, and the upcoming opening of the UF Health Heart & Vascular Hospital and UF Health Neuromedicine Hospital promises even more growth in the future.
WHO IS THIS MYSTERY VISITING PROFESSOR (and, for extra points, the Anesthesiology faculty with him)?

Hint: He visited the Gator Nation in the Spring of 1987 from California.

Email web@anest.ufl.edu if you know who it is and get BRAGGING RIGHTS 'til the next issue!

Last issue’s winner was Steve Lucas, who correctly identified the Mystery Professor as Paul G. Barash, MD, who visited us in December 1988 when he was Chairman of the Department of Anesthesiology at Yale University School of Medicine … Congrats, Steve!!

FUN IN ANESTHESIA!
Find the anesthesia-related terms!

Hint: Words can be backwards and diagonal!

propofol
roc
sux
trachea
xray
stretcher
sevo
spinal
tidal
temperature
pacu
pneumo
central
bis
oxygen
peripheral
vascular
icu
trauma
anesthesia
cefazolin
antibiotic
carbon dioxide
intubate
residency

Anesthesiology Baby Timeline

Joseph Robert Siebenaler
August 14, 2016
Father: Joseph Siebenaler, MD

Christina Adhiambo Arauz-Ojode
August 17, 2016
Mother: Teresa Ojode, MD

Reid Scott Wasilko
December 22, 2016
Father: Scott Wasilko, MD

Eli (left) & Gavlin (right) Culpepper
February 17, 2017
Grandmother: Mary Brown, Office Assistant

Pierce Taylor Goodman
August 13, 2016
Father: Joel Goodman, DO

Aria Ajay Mehta
December 21, 2016
Mother: Sonia Deshmukh-Mehta, MD

Lov Amara-Paige Villamil
February 24, 2017
Great Grandmother: Susan Ford, Quality Officer

Answers to crossword:

(Over, Down, Direction): anesthesia (11,2,SW); antibiotic (12,11,W); bis (13,11,SE); carbon (3,4,S); cefazolin (2,9,N); central (8,13,W); dioxide (9,9,NW); icu (1,1,SW); intubate (15,1,SE); oxygen (4,10,E); pacu (13,4,N); peripheral (1,6,S); pneumo (10,15,NE); propofol (4,12,E); residency (6,9,NE); roc (11,8,NE); sevo (12,4,NW); spinal (14,7,NE); stretcher (15,9,SW); sux (10,6,SE); temperature (5,1,SE); tidal (8,1,SW); trachea (10,1,SW); trauma (10,7,SW); vascular (3,1,SE); xray (5,14,W)
How Does Phishing Affect You?
Despite the ever-increasing spam filters the University of Florida has in place, the more-sophisticated email scams occasionally slip through. Our servers are constantly inundated with emails, fake and legitimate, and these filters can't catch everything. Some in our department have had their paychecks stolen by phishers; everyone is a target.

How Can I Tell If an Email Is a Phishing Attempt?
Phishing attempts can appear very convincing, and learning to protect yourself from these attacks may seem intimidating. But educating yourself about these scams can help you from becoming a victim.

It helps to identify what isn’t phishing. For example, emails from UF will typically:
• Come from the UF domain, meaning they will end with ufl.edu.
• Be specific rather than generic.
• Contain UF logos and lengthy signatures identifying the sender.

An email may be a phishing attempt if it:
• Asks or tells you to do something immediately (urgency and a call to action).
• Is written in poor English.
• Requests usernames, passwords, or other personal information.
• Is generic and does not include information identifying you or the sender.
• Contains low-quality graphics.
• Comes from an address that is not an organization’s official domain; for example, emails from senders posing as UF entities will often come from email addresses that do not end with ufl.edu.

Example 1:

From: University of Florida [mailto:itews@ufl.edu]
Sent: Friday, February 24, 2017 8:44 AM
Subject: Meeting Notification

UF Alert
Please be informed that there would be an urgent meeting which will be scheduled to hold today.
Kindly click on our website below for details of meeting.
http://www.ufl.edu

Thank you.
University of Florida.

Warning Signs (continued)
2. The email is written in poor English.
3. When you hover your cursor over the link for a few seconds, it leads to a link other than what it claims:
   (Clicking on this link and logging into this website would divert your direct deposit to an account in Malaysia.)

   Please be informed that there would be an urgent meeting.
   Kindly click on the link below:

   Click or tap to follow link.
   http://www.ufl.edu

4. The email contains urgency and a call to action, both signs of phishing attempts.

Example 2:

From: Keerline, Kate [mailto:kke040213@ohio.edu]
Sent: Friday, June 17, 2016 11:22 AM
Subject: Completed Transfer

Good day,
Here is a confirmation of transfer.
Thank you.
Kind regard,
Keerline Kate

Attachment - 1 View | Download
Attachment: Scan000161706.doc

Warning Signs
1. The sender’s email is from ohio.edu (not ufl.edu).
2. It uses a generic salutation — “Good day,” not “Good day, ___”
3. The email is not specific; a confirmation of transfer of what?
4. It is written in poor English: subject ends with a period; “Kind regard” instead of “Kind regards”; the signature is in last name, first name format, as in the “From” line.

In general, always err on the side of caution when things seem out of place. If in doubt, call customer support or, in the case of UF email, call the UF Computing Helpdesk at 392-HELP to validate the message.

If you think your account has been compromised by a phishing attempt, contact the UF Helpdesk at 392-HELP immediately.
Support the Gravenstein Scholars Program

Join the Department of Anesthesiology faculty and alumni in supporting medical education and research. At this time, our philanthropic focus is on completing the Gravenstein Scholars Program endowment. The Gravenstein Scholars Program, named in honor of the Gravenstein family members who have contributed so significantly to anesthesiology at the University of Florida, was established to accomplish the following:

1. To increase the number of anesthesiology residents at the University of Florida who choose academic careers.
2. To increase the research productivity and contributions of anesthesiology residents.
3. To prepare anesthesiology residents to conduct productive, independent research.

To contribute, you can donate online at goo.gl/REUsok

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SEVENTH ANNUAL PERIOPERATIVE GOLF TOURNAMENT

The 7th annual Perioperative Golf Tournament, held at Haile Plantation Golf & Country Club on April 8th, raised $15,000 this year for the local Ronald McDonald House.

The Department of Anesthesiology hosts the tournament each year to raise money for the house. Last year, the $8,000 raised at the tournament went toward painting rooms and purchasing light fixtures and appliances.

The department thanks the 88 golfers who participated, as well as Drs. Morey, Martin, Janelle, Arnold, Tighe, and Przkora, who sponsored the resident teams.

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Mail to:
AAAF, Inc.
c/o Joyce Myers
P.O. Box 13417
Gainesville, FL 32604-1417