

UVM Anesthesia News

A Newsletter From The University of Vermont Department of Anesthesiology

Volume 7 Issue 2

Summer/Fall 2012

Chairman's Letter

Drs. Kristensen, Abajian, & Black, and our 75th anniversary party.

Page 2



New Anesthesiologists, CRNAs, Residents, And Pain Fellows At UVM & FAHC In 2012

Page 2



Research: Dr. Mathews

Using advanced technologies to improve anesthetic care.

Page 3



Dr. J. Christian Abajian

The father of infant spinal anesthesia talks about the beginning.

Page 3



1946 to 1956: Big John Returns To Burlington

Education, research, blood, and cable TV?

Page 3



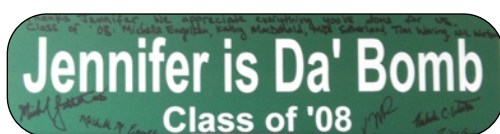
In Memorium, Events

Silfer, Fisher, Davis, the 18th Annual Stowe Conference & Lectures.

Page 4



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Residency & Fellowship Coordinator. Advisor. Substitute Mom. BFF. All of these, and more, describe Jennifer Poland's important role in UVM's Department of Anesthesiology. To the graduating class she remembers most fondly though, the class of 2008, she was simply "Da' Bomb." "They were seniors when I started here (in October 2007)," says Jennifer. "I knew nothing about the job and had to learn it on the fly, but I tried to make the transition as seamless as possible for them." Apparently she succeeded. Over the ensuing years, she has managed to keep in touch with most of our graduates, including the class of 2012: Troy Finlayson (South Denver Anesthesiologists, Denver CO), Erin Flaherty (Regional Anesthesia / Acute Pain Fellow, Vanderbilt University), Thor Hallingbye (UVM Pain Medicine Fellow), Abel Luksan (Regional West Physicians Clinic Specialty Medical Group, Scottsbluff NE), Steve Silvonek (Wake Forest Baptist Medical Center, Winston-Salem NC), Emily Stebbins (Pediatric Anesthesiology Fellow, Children's Hospital of Philadelphia), Michael Brown (Front Range Pain Medicine, Fort Collins CO) and Abdul Khan (starting his own pain practice in Brooklyn NY). Jennifer has recently started using Facebook to keep track of her "kids" and, working with Associate Anesthesia Program Director Pat Bender, hopes to have the department's first Facebook page up and running soon. Look for details in the next issue.



Jennifer with the Class of 2012 Residents

CHAIRMAN'S LETTER



Welcome to this edition of the UVM Anesthesia News as we settle into November in Vermont. We

were incredibly fortunate to miss the devastation of Hurricane Sandy and our thoughts go out to those whose lives were so affected by the storm.

The department continues to be incredibly busy:

- Yesterday, we had the first of seven interview days for resident recruitment. We have received 475 applications and plan to interview seventy-five candidates for six NRMP residency positions.

- 2014 is the department's 75th anniversary and we are planning a celebration to commemorate this event. Dr. Mitchell Tsai will be sending out a survey to gather your ideas and suggestions for this gala affair. Of course, all current and former residents are invited.

- I want to note the retirement of Dr. Heidi Kristensen in early November. Heidi was a mentor of mine who dedicated her career to raising the quality of anesthesia care for the pregnant patient. She was a dedicated teacher and clinician and will be missed. We wish her well in her travels to winter in Florida.



- Dr. Chris Abajian has been selected as the 2013 Robert M. Smith Award winner. This award is given annually by the AAP Section on Anesthesiology to a deserving physician who has contributed distinguished service to our specialty. Please join me in congratulating Chris for this prestigious award, which will be presented March 15th at the SPA/AAP Winter Meeting in Las Vegas.

- Last night we gathered to wish Dr. (Major) Ian Black Godspeed as he gets ready to leave for a tour in Afghanistan. We will miss him, but we are proud of his commitment to the care of our troops and are already looking forward to his safe return.

Please enjoy reading this issue. Spend a moment reading about the lives of Dr. Cynthia Silfer, Dr. John Davis, and Mrs. Pauline Fisher. Our sincere sympathies go out to their families.

We continue to enjoy hearing from the readers. Please forward your comments to

Dr. Kreutz or myself. Suggestions for future articles are always welcome.

Howard Schapiro MD

Welcoming New Members to the UVM Anesthesia Family

The UVM Anesthesia Department has welcomed four new colleagues in 2012:

Eric Simmons MD is returning to Vermont after sixteen years away. He is a graduate of Kettering College of Medical Arts (Nursing) and 1978 graduate of Ohio State University (Nurse Anesthesiology). After a twelve year CRNA career, Eric enrolled in medical school at Wright State University, graduating in 1994, then completed an internal medicine internship and CA1 year at UVM. After he finished his anesthesia residency at the University of Washington, Eric worked for Anesthesia Associates of Colorado Springs for fourteen years before returning to Burlington this July. Eric's wife, Theresa Krainz, was a UVM CRNA from 1994 to 1996 - they enjoy cooking, hiking, and biking (Eric owns twelve bikes).

Dr. Greg Manske is a 1996 graduate of UVM (B.S. Microbiology & Molecular Genetics) and was a research assistant in UVM's Department of Neurosurgery from 1997 to 2003, investigating inhibition of GBM and medulloblastoma invasion. He attended UVM College of Medicine from 2004 to 2008, then completed an anesthesia residency at Dartmouth-Hitchcock Medical Center. Greg has an interest in neuroanesthesia and third-world medicine (which has taken him to India and Ecuador).

Joe Coyne MD, born and raised in Montana, is a 2001 graduate of Montana State University (B.A. Economics). He attended the University of Washington School of Medicine and did an internal medicine internship there. After an anesthesia residency at the University of Massachusetts, Joe completed a Cleveland Clinic fellowship in cardiac anesthesiology.

LisaMarie Paul CRNA is a graduate of Northern Arizona University (Zoology) and the University at Albany SUNY (M.S. in Educational Psychology). After graduation, she worked as a Research Associate/Nurse in a stem cell transplant program at Boston Medical Center for three years, while attending Bunker Hill Community College (Nursing). After stints as a med-surg nurse in California and Florida, and an ICU nurse in Texas, LisaMarie enrolled at Albany Medical College, earning her M.S. in Nurse Anesthesiology in November 2011.

New Residents & Fellows

CA1 Residents

Borzoo Farhang DO

Portland State University - B.S. Molecular Biology
Georgetown Univ - M.S. Physiology & Biophysics
College of Osteopathic Medicine of the Pacific - D.O.
Mayo Clinic - General Surgery Internship
Mercy Medical Center, Des Moines - PGY 2 Surgery

Bobby Hieronimus MD

University of Toledo - B.S. Biology
University of Toledo - M.D.

UVM - Internal Medicine Internship

William Hart MD

Bucknell University - B.S. Biology
University of Toledo - M.S. Biomedical Science
University of Toledo - M.D.

UVM - Internal Medicine Internship

Veena Kalapatapu MD

Purdue Univ - B.S. Health Sciences & M.S. Biology
Indiana University - M.D.

UVM - Internal Medicine Internship

Amy Odefey MD

Williams College - B.S. Biology
UVM College of Medicine - M.D.

UVM - Internal Medicine Internship

Kathryn Richard MD

UVM School of Nursing - B.S.N.
UVM College of Medicine - M.D.

UVM - Internal Medicine Internship

Nathan Sneed MD

Abilene Christian University - B.S. Biology
Texas Tech College of Medicine - M.D.

UVM - General Surgery Internship

Pain Fellows

Thor Hallingbye MD

University of Wyoming - B.S. Bioengineering & M.S. Electrical Engineering
University of Washington - M.D.

Virginia Mason - General Surgery Internship

UVM - Anesthesia Residency

Kevin Lien MD

Cornell University - B.S. Biology
University of Michigan - M.D.

University of Washington - Internship & PGY 2-3 Anesthesia

University of California Irvine - PGY 4 Anesthesia

Categoricals for July 2013 CA-1 Start

Thomas Pace MD

UVM - B.S. Biology

UVM College of Medicine - M.D.

UVM - Internal Medicine Internship

James Wolf MD

Emory University - B.A. English

SUNY Downstate Medical Center - M.D.

UVM - Internal Medicine Internship

Amanda Yap MD

St Bartholomew's and the Royal London School of Medicine and Dentistry - M.D.

UVM - General Surgery Internship

Research: Dr. Don Mathews

UVM Anesthesia Program Director Dr. Don Mathews discusses his current research:

My primary interest is the development of technologies that improve the anesthetic care of patients. One aspect of this is tailoring the dosing of hypnotic and anti-nociceptive medications to specific patient requirements. For over ten years, I've worked with processed EEG monitors (including three currently FDA-approved, BIS, M-entropy, and Sedline) which improve our ability to titrate the hypnotic component of an anesthetic. Demonstrating the utility of incorporating measures of patient facial EMG in dosing decisions, I've been able to show that the difference between response entropy and state entropy (a surrogate EMG measure) can guide an advisory system delivering opioids as well.¹ This concept was incorporated into the RUGLOOP platform, a program developed by Belgians Michel Struys (anesthesiologist) and Tom DeSmet (computer programmer) that collects data from OR monitors and drives two target-controlled infusion pumps. We created a feedback loop device that delivers anti-nociceptive medications automatically, described in an abstract I published while at St. Vincent's Hospital. I'm working on an FDA Investigational Device Exemption (IDE) to develop this concept further at UVM.

I've also been the principal investigator of a multi-center study evaluating a different EMG-based technology called the Combined Variability Index (CVI™, Covidien, Denver CO).² This index combines the variability of the BIS index with the variability of a patient's facial EMG (both of these increase in the setting of inadequate anti-nociception). I'm currently conducting a followup study to evaluate the effect of muscle relaxants on the CVI, with 70 of 80 patients already enrolled, and should be done by the end of this year.

Finally, I've gotten interested in post-operative monitoring and am working with Masimo to see how their new Halo Index behaves during PACU care. Patient deterioration often occurs over time, with subtle changes that are appreciated only through trend analysis. Masimo's Halo Index is calculated through an amalgamation of monitoring parameters and provides global trend information about the patient's overall physiologic status, which might improve patient care compared with care based on periodic human assessment and routine monitoring. Our study will enroll 200 patients and is awaiting IRB approval.

1. A feasibility study for the administration of remifentanyl based on the gradient between response entropy and state entropy. *Br J Anaesth* 2007; 98: 785-791

2. Increases in EEG and EMG variability are associated with an increased incidence of intraoperative somatic response. *Anesth Analg* 2012;114:759-7

1984



Chris Abajian Talks Spinals

Chris Abajian MD retired in January after an illustrious thirty-eight year UVM Anesthesia career. In a recent interview, he talks about the beginning of his infant spinal research in 1977:

I was standing near the OR changing room when (pediatric surgeon) Dr. Paul Mellish came downstairs and told me that he had a NICU baby who needed his hernias fixed. But they were giant hernias, and he didn't think he could do them under local, and the babies lungs were so terrible with RDS that he wouldn't tolerate a general anesthetic. I must have had a pretty dumb look on my face, because Mellish asked, "Why don't you give him a spinal?" A spinal? And then he said the words that every kid wants to hear, "Your father has done it." So I talked with my dad about it, and it was was true. He and Gino (Dente) had done some spinals in the 1950s on kids who were pretty sick. And when I looked at the literature going back further, there was a report of spinals in kids under a year of age in 1909. My father was in Puerto Rico at the time, so I asked Gino, "How much tetracaine would you give these kids?" and he said, "Well, as a rough rule of thumb, we used about a milligram per year of age." So armed with that, but never having done an LP on an infant, I asked the head NICU nurse to come down and talk me through it.

Well, it worked, and it was beautiful. I just stood there and looked at the baby, and he was happy, and we fixed both hernias. I was in awe, really. You had to be there. We then did a few more over the next year. You know, everyone wants to tell their teacher what a great discovery they've made, so I couldn't wait to go back to Toronto and let Dr. Stewart (Chief at Toronto Sick Kids Hospital) know that, hey, this works. So I told him, and he turned to me and said, "Well, come to me when you've done five hundred cases."

I have to credit Paul Mellish for a lot of this. We've been blessed here, with surgeons like Dr. Mellish, Dr. Browne, Dr. Vane, Dr. Wald, Dr. Sartorelli, et al who were skeptical at first, but they trusted me, and I trusted them to do their surgery in a timely fashion. And now we've done more than 2000 cases.

1946: Big John Returns To UVM

Part eleven in a series on UVM anesthesia history.

In early 1946, John Abajian's Army career was winding down and he wished to return to his post of Chair of UVM's Anesthesia Division. He was a war hero, having saved countless lives in Patton's Third Army with his use of regional anesthesia instead of GA. Despite this, Abajian's potential return to Vermont was controversial, at best. He had butted heads with too many UVM medical staff members pre-war, and several complained to Al Mackay, UVM's Surgery Chief, that "such a loudmouthed, bombastic individual, so disruptive of faculty affairs, must not be allowed to return to Burlington to work." Mackay welcomed Abajian back anyway, promising a review after six months if the complaints recurred. They did not.

The next decade was arguably the most productive of John Abajian's career. One of his first moves, in July 1946, was to establish an anesthesia residency program at UVM, with WWII veterans Tony Bayuk (at DeGoesbriand Hospital) and Ernie Mills (at Mary Fletcher Hospital) his first residents. Abajian set up a research lab to study topics of interest to him, including ox-



imetry, curare, hypothermia, blood volume and preservation, and cardiac physiology and monitoring. With the blood supply in Burlington a chronic problem, in 1950 he organized the Vermont-New Hampshire Red Cross Blood Bank, the second of its kind in the country. Abajian even found the time to start Vermont's first cable TV company, Green Mountain Cable, in 1953.



In later years, Abajian considered his wartime service, the residency, and the blood bank the three great achievements of his career. But looking back with the benefit of 2012 hindsight, an argument can be made that his greatest accomplishment was, in fact, the UVM Anesthesia Division team he built in the late '40s to mid '50s, piece-by-careful-piece. CRNA Betty Wells (the lone holdover from the war years) and anesthesiologists Ernie Mills (1948), Gino Dente (1950), and Ed Brazell (1956) joined Abajian to form the nucleus of a team that would stumble across a new experimental anesthetic agent in November 1956, and their research on that agent would make the division, and Abajian, famous. *Next Issue: Wells, Mills, Dente, and Brazell.*

In Memorium

Dr. Cynthia Grillot Silfer, a resident in anesthesiology at Fletcher Allen Health Care from 1994 to 1997, passed away July 1st, 2012 after a courageous battle with breast cancer. Cindy was a graduate of the University of Notre Dame and University of Oklahoma School of Medicine. After her residency at UVM, she joined Sunset Anesthesia Associates, LLP of Utica, NY, becoming a partner and active group member. Cindy's work was an important part of her identity, and despite the ravages of her disease and its treatment, she never complained. Cindy worked full-time until her final days. In



fact, she worked a full day on a Friday, became critically ill on Saturday, and passed away Sunday morning, just the way she would have wanted it. Besides her husband Jeff, Cindy leaves behind two college-age sons, Matthew and Daniel, at least one of whom plans to follow in his mother's footsteps. In keeping with her wishes, there were no calling hours, but on a beautiful Friday afternoon in August an informal gathering of friends and family took place in a neighbor's yard under a white tent, just a stone's throw from her home in Clinton. Cindy will certainly be missed by everyone who knew her.

*Michael Cuda MD
New Hartford, NY*

Pauline Larivee Fisher RN died after an extended illness August 23rd, 2012. Polly was a 1948 graduate of the Bishop DeGoesbriand Hospital School of Nursing and worked as a nurse anesthetist at DeGoesbriand Hospital in the early 1950s. Her son, J. Matthew Fisher, has been a UVM attending anesthesiologist since 1989.

John Davis MD, Professor of Surgery Emeritus and Chair of the UVM Department of Surgery from 1969 to 1989, died on January 19th, 2012. Dr. Davis was a graduate of Allegheny College and Western Reserve University School of Medicine, from which he received his MD degree in 1948. He worked as a Mobile Army Surgical Hospital (MASH) surgeon during the Korean War and was part of a research team that introduced new approaches to the treatment of burn and trauma patients, many of which are still used today. Dr. Davis is also rumored to have been one of the models for the fictional character Hawkeye Pierce, from Richard Hooker's novel, *M*A*S*H**. After the war, he completed his surgical training at the University Hospitals of Cleveland, where he remained on the staff for nearly two decades. During his twenty-year tenure as UVM's Surgery Chief, Dr. Davis was nominal head of UVM Anesthesia, a division of the Department of Surgery at that time. He was greatly respected by members of the



Anesthesia Division, not only for his surgical skill, but also for his graciousness and hands-off approach to the affairs of the division, which had much greater autonomy than most academic anesthesia departments around the country. The UVM Department of Anesthesiology has lost an extraordinary friend and colleague.

Upcoming Events

18th Annual Vermont Perspectives In Anesthesia

March 6 - 10, 2013

Stowe Mountain Lodge, Stowe, VT

Olga Torbin Memorial Lecture

Saturday March 9, 2013, 4:30PM

The Olga Torbin Memorial Lecture is held in honor of Olga Torbin, UVM anesthesiologist from 2001 to 2007.

Johns' Fund Lectureship

Saturday March 9, 2013, 5:15PM

The Johns' Fund Lecture is held in honor of John Abajian, Jr. MD and John Mazuzan, Jr. MD, distinguished former chairmen of the department from 1939 to 1995.

Registration for the conference is not required to attend the two lectures and following cocktail reception. More information is available at: <http://cme.uvm.edu>

Tax-deductible contributions to The Johns' Fund and the UVM Anesthesia Research & Development Fund are welcome and should be directed to Howard Schapiro MD, Chair - UVM Dept. of Anesthesiology, Fletcher Allen Health Care, 111 Colchester Avenue, Burlington, VT 05401.

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