Department of Anesthesiology
2014 Annual Report

July 1, 2013 – June 30, 2014
Department of Anesthesiology
The Ohio State University College of Medicine
Columbus, Ohio
# TABLE OF CONTENTS

## Contents

### TABLE OF CONTENTS

- Overview ...................................................................................... 5
- University Hospital Anesthesiology Administration................................. 4
- Faculty & Staff.................................................................................. 13
- Residents.......................................................................................... 19
- Clinical & Technical Support Staff.......................................................... 21
- Certified Registered Nurse Anesthetists................................................... 22
- Anesthesia Technicians......................................................................... 25
- Research Faculty, Fellows & Staff............................................................ 26
- Administrative Staff............................................................................. 27
- Education............................................................................................. 28
- Research............................................................................................... 42
- Clinical Operations University Hospitals.................................................. 52
- Cardiothoracic and Vascular Anesthesia – Ross Heart Hospital..................... 59
- Transplant Anesthesiology................................................................... 62
- Obstetric Anesthesiology....................................................................... 64
Ohio State University Hospital East.............................................................65
Acute Pain Medicine Services.................................................................67
Post Anesthesia Care Unit......................................................................71
Ohio State University Preoperative Assessment Center (OPAC)..............73
The OSUWMC Eye & Ear Institute...........................................................76
James Cancer Institute Anesthesia Services............................................80
CRNAs....................................................................................................82
Critical Care ..........................................................................................84
Neuroanesthesia ...................................................................................93
Pain Medicine Services..........................................................................96
Overview

For the Department of Anesthesiology at The Ohio State University Wexner Medical Center, 2013 continued our Department’s movement along a positive trajectory, as we establish ourselves as a leading academic department of anesthesiology.

Overview

2014 was another outstanding year of the Department of Anesthesiology at The Ohio State University Wexner Medical Center. It is a pleasure to provide you with an overview of some of the more significant accomplishments in our Department over the past year.

Research

Fedias L. Christofi, PhD, AGAF continues to provide excellent leadership and guidance of our research initiatives. Please refer to his detailed and extensive report of our department’s many significant contributions this year. Per the 2014 report of the Blue Ridge Institute for Medical Research, our department ranked 38th in the nation last year (48 in 2011, 37 in 2012, 36 in 2013). In addition to Dr. Christofi’s R-01, AJ Cardounel, PhD concluded his R01 funded research. Dr. Cardounel graduated from the OSUCOM in May, and will be pursuing residency in cardiothoracic surgery at the University of Pittsburgh Medical Center in the years ahead. We wish him continued success in his endeavors.

Our total external research funding in the Department continued to grow, surpassing $1 million for the fifth consecutive year. Another milestone was reached relative to our peer academic anesthesiology departments, as our total external research
funding of $1.7 million surpassed the 75th percentile mark among academic
anesthesiology departments per the 2013 Society for Academic Anesthesiology
Associations’ (SAAA) survey.

As further noted in this report, we had a number of our faculty publish scholarly
publications, totaling 56 journal manuscripts, 46 abstracts, and 4 chapters. It is
exciting to note the growing number of faculty who are actively engaged in
scholarly activity, and is a testimony to the expanding culture of scientific inquiry
present in our department.

**Education**

Late in calendar year 2013, we learned that the ACGME had approved our request
to expand our residency from 12 residents per class to 14 residents per class. This
approval underscores the outstanding leadership of **Dr. Ken Moran** as our
Residency Program Director. We filled not only our 14 PGY-1 positions, but the
two new additional CA-1(PGY-2) spots through the NRMP as well.

We are in the fairly exclusive company of just 20 anesthesiology programs in the
nation to offer all five of the ACGME-accredited anesthesiology fellowships: Pain
Medicine; Critical Care, Pediatric Anesthesiology (through Nationwide Children’s
Hospital); Cardiothoracic Anesthesiology; and Obstetric Anesthesiology. All five
are scheduled to have outstanding fellows next year, as will our non-ACGME
accredited fellowships in Neuroanesthesiology and Regional and Acute Pain
Anesthesiology.

**Dr. Lori Meyers** provides excellent and dedicated leadership of our Medical
Student clerkship rotation. We are excited to be providing the first required Med 3
rotations in anesthesiology in the coming year, as the first Med 3 class under the
Lead/Serve/Inspire curriculum enter their clinical rotations.

**Faculty Development**

We continue to have faculty who establish national reputations, thus earning
promotion in rank. This year, **Dr. Sergio Bergese** was promoted to the rank of
Professor on the Regular Clinical Track—Clinical Scholar pathway, and **Dr. Steve
Severyn** was promoted to the rank of Associate Professor-Clinical Excellence
pathway. **Dr. Fedias Christofi** deserves many thanks for his efforts and expertise
chairing our departmental promotion and tenure committee, as we continue to steadily and surely facilitate our faculty members’ pursuit of promotion in rank.

**Clinical Service**

In 2014, we began preparing to meet the increased demand of the long-awaited opening of the New James Cancer Hospital and Solove Research Institute in December of 2014. We have been aggressively recruiting clinical anesthesiologists as well as intensivists in order to meet the increased demand for those services.

Our ambulatory anesthesia leadership received a tremendous in early calendar year 2013, with the return of Michael Guertin, MD. Dr. Guertin trained at OSU, and served as a member of our faculty before moving into the ambulatory anesthesia setting for the past few years. Dr. Guertin returns to OSU to serve as the Medical Director of the Outpatient Surgery Center at the Eye and Ear Institute. Alec Lawrence, MD, Jonathan Lipps, MD, and Kyle Macaluso, MD join our faculty upon completion of their residency training with us. Goran Ristev, MD joins our Obstetric Anesthesia team upon completion of his OB Anesthesiology fellowship with us—notably, Dr. Ristev is the first ACGME-accredited fellow to complete our OB fellowship. Eric Lipscomb, MD will join us in the fall. Dr. Lipscomb trained at the University of Cincinnati, and comes to us from private practice. Our intensivist ranks will be augmented by the addition of Jonathan Houser, MD upon completion of his critical care fellowship with us, and David Stahl, MD joins us following completion of his residency and critical care fellowship at Massachusetts General Hospital. Veena Satyapriya, M.D. will join us mid-year, upon completion of her residency and critical care fellowship at the Cleveland Clinic. As our neurosurgical program continues to expand, we will add two neuroanesthesiologists mid-year, as they complete their neuroanesthesiology fellowships with us: Brian Dishong, M.D., who completed his anesthesia residency at the University of Alabama-Birmingham, and David Yehsakul, M.D., who completed his residency at Case Western University/Metro Health.

In summary, 2014 has been another outstanding year for the Department of Anesthesiology at OSUWMC. I urge you to read the remainder of this report to gain a fuller appreciation of the numerous accomplishments of this department in the last year.
Report from Administrative Manager

Another successful year of supporting the administrative needs of the department across all three mission areas: Patient Care, Education and Research. Although these mission areas have seen growth in the past year the departments support staff numbers have remained the same. The most significant growth has been in the needs of supporting the education office. During this past year the integration of using the HR service center seems to have worked out all the previous issues, brought about by an upgrade to the system as well as the assignment of a strong HRP, Miriam Benstein who has become a true partner with supporting the department needs. Within our own department I do want to recognize the continued strong service provided by Ryan Powel and Jill Moore. They are examples of two staff that have directly been impacted by the department growth. Because of our growth there are obviously more providers to be scheduled but also the addition and changes that have been made over the past year to our staffing models, Ryan provided quality work support to our schedule management. With clinical growth came new providers as well as the standard business of our new trainees. Jill works efficiently in getting all of these providers up and running. Additionally this year we finally made headway in getting the NCH Anesthesia attending’s up and working clinically to provide pediatric services for radiation procedures as needed. In total and not wanting to overlook any area I do want to recognize that the administrative staff moves thru the same cycles each year supporting the recruitment, onboarding, scheduling, credentialing, education/training, social events, CME processing, faculty office support and much more. These are contributions that the department can be proud of.
The department was the benefactor of Dr. Funai realizing there was an immediate need for faculty office space. We are now the poster department for the “Faculty Hotel” office model, to be shared space for those that don’t need a permanent Doan office and to provide a space for those faculty that are less than fifty-percent. Taking an underutilized space Dr. Funai designated it as the “Hotel” to be used between our department and two maternal fetal medicine fellows. Along with this came the funding for the renovation and furniture. The department also benefited from the Colleges program to share funding to re-purpose space to accommodate additional users by moving from the large scale furniture models to the Kit of Parts products. In doing so we “swapped” the resident call room and a faculty office so that we could accommodate a total of 5 offices from a previous 4. Next year we will be reporting on the move of Atwell Hall faculty back to Doan as well as growth in other space. The College continues to recognize our need for space as well as the need to have it within Doan Hall and proximity to good foot traffic to the various clinical sites.

Looking forward to what FY15 brings to the department, what we know will happen is the continued growth in the education office as the new LSI COM Curriculum will be well underway in addition to Winter 2014 Atwell Hall Office space is scheduled to move. Obviously next year we will be reporting on the opening of the New James as well.
Faculty & Staff

Administration

Ronald L. Harter, MD, Jay J. Jacoby, MD, PhD, Professor and Chair

Fedias L. Christofi, PhD, AGAG
Vice Chair of Research

Robert H. Small, MD Vice Chair
Administrative Affairs

Thomas J. Papadimos, MD
Vice Chairman for Academic Affairs
Directorships

Michael J. Andritsos, MD
Cardiothoracic and Vascular Anesthesia

Fernando L. Arbona, MD
Ohio State University Hospital East

Sergio D. Bergese, MD
Neuroanesthesia

Charles E. Martin, CRNA
Chief CRNA

Luis A. Lopez, MD
Director of Clinical Operations

Thomas J. Papadimos, MD
Critical Care Medicine
Barbara M. Rogers, MD
Preoperative Assessment Center

John S. Rogoski, DO
Ohio State’s Eye & Ear Institute

Kenneth R. Moran, MD
Residency Program Director

Steven A. Severyn, MD, MBA
Pain Medicine Services

Thomas J. Smith, MD
Post Anesthesia Care Unit

W. Daniel Traetow, MD
Clinical Anesthesia
James Cancer Hospital and Solove Research Institute
Transplant Anesthesia
Faculty

Professor
Ronald Harter, MD
Fedias Christofi, PhD, AGAF

Professor Clinical
Costatino Benedetti, MD
Sergio Bergese, MD
Thomas Papadimos, MD

Associate Professor w/Tenure
Mark Gerhardt, Ph.D., MD
Hamdy Elsayed-Awad, MD

Associate Professor Clinical
Michael Andritsos, MD
Fernando Arbona, MD
Dean Connors, MD, PhD
Peter DeSocio, DO
Steve Severyn, MD
Robert Small, MD
Katja Turner, MD
Yun Xia, PhD, MD

Assistant Professor Clinical
Wiebke Ackermann, MD
Sujatha Bhandary, MD
Richard Bryant, MD
John Coffman, MD
Ryan Dalton, MD
Victor Davila, MD
Assistant Professor
Clinical Continued
Peter Dienhart, MD
Galina Dimitrova, MD
Dishong, Brian
Michael Essandoh, MD
Jill Faraci, MD
Qian Fleming, MD
Antolin Flores, MD
Teri Gray, MD
Rebecca Gutmann, MD
Charles Hamilton, MD
James Highley, DO
Jonathon Houser, MD
Ritu Kapoor, MD
Jamie Keller, MD
Garrett Kelly, MD
Michael Kushelev, MD
Alec Lawerence, MD
Lin Li, MD
Samuel Lindsay, MD
Jonathon Lipps, MD
Eric Lipscomb, MD
Deborah Lowery, MD
Michael Lyaker, MD
Martharbootham Mani, MD
Matthew McKiernan, MD
Lori Meyers, MD
Kenneth Moran, MD
John Norton, DO
Maxim Novikov, MD
Jyoti Pandya, MD
William Perez, MD
Demicha Rankin, MD
Goran Ristev, MD
Sonia Ristev, MD
Barbara Rogers, MD
John Rogoski, DO
Andrew Roth, MD
Assistant Professor
Clinical Continued
Gurneet Sandhu, MD
Uma Sasso, MD
Sree Veena Satyapriya, MD
Thomas Smith, MD
Gaylynn Speas, MD
Andrew Springer, MD
David Stahl, MD
Erica Stein, MD
Joseph F. Swan, MD
Wayne Traetow, MD
Ravi Tripathi, MD
Rashmi Vandse, MD
Gregg Weidner, MD
Sarah Wendling, MD
Joseph Werner, MD
David Yablok, MD
Yerington, Greg, MD
Clinical Associate Professor
Luis Lopez, MD
Mike Guertin, MD

Clinical Assistant Professor
Farid Edwards

Faculty Emeritus
Ernesto Goldman, MD
Joel Weaver, DDS
Michael Howie, MD
Bhagwandas Gupta, MD
Mona Halim, MD

Joint Faculty Appointments

Professor
John Christman, MD
David D. Woods, Ph.D.
Steven Steinberg, M.D.

Professor Clinical
Steve Allen, MD
Joseph Tobias, MD
Samer Narouze, MD

Assistant Professor
Kent Williams, MD

Associate Professor Clinical
Tarun Bhalla, MD
Aymen Naguib, MD
Helah Saadat, MD

Assistant Professor Clinical
Graciela Argote-Romero, MD
Rita Banoub, MD
Ralph Beltran, MD
Sharie Benoit, DO

Assistant Professor
Clinical Continued
Gregory Benson, MD
Jason Bryant, MD
Gregory Cambier, MD
Richard Cartabuke, MD
Marco Corridore, MD
Olamide Dario, MD
Nicole Elsey, MD
Gina Fedel, MD
Hiromi Kako, MD
Mineto Kamada, MD
Terri Keegstra, DO
Senthil Krishna, MD
Anjana Kundu, MD
Christopher McKee, DO
Veronica Miler, MD
Matthew Mitchell, MD
Alok Moharir, MD
Vidya Raman MD
Brian Schloss, MD
Timothy Smith, MD
Ahsan Syed, MD
Thomas Taghon, DO
Arlyne Thung, MD
Joshua Uffman, MD
Giorgio Veneziano, MD
Tariq Wani, MD
Emmett Whitaker, MD
Peter Winch, MD
Fellows

Cardiothoracic Anesthesiology Fellows
Kiran Chandrashekarappa, MD
Kasey Fiorino, MD

Critical Care Anesthesiology Fellows
Jonathan Houser, MD
Prabhav Patil, MD

Neuroanesthesia Fellow
Lakshmi N Kurnutala, MD

Obstetric Anesthesiology Fellows
Teri Gray, MD

Pain Medicine Fellows
Maged Ghattas, MD
Eric Stewart, MD

Regional Anesthesiology and Acute Pain Medicine Fellows
Anthony Lopez, MD
RESIDENTS

CBY
Aly Branstiter, MD
Douglas Dearth, MD
Andrea Fuller, MD
Seth Hayes, MD
Joseph Kuhn, DO
Connor McNamara, MD
Stephen Miller, DO
Kaitlin Moore, DO
Samiha Nasser, MD
Shruti Patil, MD
Joseph Potter, MD
Jasmine Ryu, DO
Mitesh Thakkar, MD
Natalie Alsup, DMD
James DiFranco, DMD

CA-1
Meghan Cook, MD
Adam Dalia, MD
Elisabeth Dewhirst, MD
Maribeth Guletz, MD
Christopher Gushue, DMD
Clinton Highley, DO
Russell Legg, MD
Erika Manis, MD
Sarah Marks, DDS
Paul Mathew, MD
Dominic Robinson, DO
Daric Russell, DO
Brittany Straka, MD
Dheer Vyas, MD
CA-2
William Beeston, DO
Thomas Felter, MD
Jarrett Heard, MD
Craig Imm, MD
Matt Jaruwannakorn, MD
Linden Lee, MD
David Mendel, MD
Mike Powell, MD
Cassidy Schwab, MD
Michelle Stephens, MD
Daniel Verrill, MD
Lisa Weaver, MD
Colleen Wirtz, DO
Jean O'Banion, DMD
Zach Van Hilsen, DDS

CA-3
Amar Bhatt, MD
Peter Dienhart, MD
Eric Egeler, MD
Jeffrey Fujii, MD
Amy Geskey, MD
Warren Grace III, MD
Alec Lawrence, MD
Jonathan Lipps, MD
Kyle Macaluso, MD
Matthew McConnell, MD
Shaheen Moezzi, DDS
Joshua Perry, DDS
Jesse Richards, MD
Christian Walker, MD
**Clinical & Technical Support Staff**

**University Hospital**

*Judith Novinc, RN*
Program Manager, Acute Pain Service

**University Hospital East**

*Laurah Carlson, RN*
Acute Pain Service Nurse

**OSU Preoperative Assessment Center**

*Patricia Bailey, CNP*
Nurse

*Susan R. Barrett, RN*
Nurse/Patient Care Coordinator

**Tina Echard**
Medical Assistant

**Claudia Ferryman-Massie, RN**
Nurse/Patient Care Coordinator

**Regina Hall**
Patient Care Coordinator

**Donna Heavener, RN**
Nurse/Patient Care Coordinator

**Amy Horton**
Patient Care Coordinator

**Amy Hosgood**
Medical Assistant

**Tyson Kaufman**
Medical Assistant

**Beverlee Keels**
Medical Assistant

**Joyce Porginski, CNP**
Nurse Practitioner
Certified Registered Nurse Anesthetists

Charles E. Martin, Chief CRNA
Bruce Alden
Wendy Allen
Nicole Amore
Karl Amstutz
Rachel Ashworth
Peggy Barnum
Nichole Barrick
Kaitlin Barringer
Brittney Bracone
Kelly Bruntz-McDonald
Kristine Burbacher
Teresa Caldwell
Jessica Catenacci
Amy Chieffo
Caroline Criswell
Christina Dalzell
Jim Dando
Kyle Devillers
Ashley Dorkoskie
Lisa Ann Downs
Michael Edmunds
Reza Emami
Lisa Emmerling
April Everest
Kate Fisher
Nate Flath
Joseph Friessen
Tawni Fuller
Justin Grime
Megan Gropp
Heather Gschnell
Elizabeth Hange
Susan Harper
Shawn Hedderman
Andrew Hicks
Betsy Hill
Rachel Gray (Holt)
Eric Hoover
Matt Hoskinson
Christine Houser
Lon Jenkins
Karenann Jones
Elizabeth Keister
Alyson Kuhn
Jennifer Lewis
Kimberly Lucas
Michael Lucas
Craig Luehrs
Carrie Malfatto
Tracey Marks
Charles Martin
Shawn McDonald
Chris McEnroe
Jeremiah Meeks
Patti Moomaw
Connie Moore
Herb Neff
Kami Nemcik
Barbara Olcott
Rhonda Paletta
Alison Pierre
Rebecca Petzinger
Patti Rabinowitz
Gina Reno
Phil Rinehart
Catherine Romano-Clark
Christopher Rosile
Megan Samonas
Daniel San Filippo
Raymond Sanzo
Danielle Scharpf
Amber Seelandt
Joseph Sevier
Ann Siefert
Linda Spizzirri
John Stefaniuk
Charles Stockton
Kelley Stone
Robert Stragisher
Daniel Terbeek
Katie Thomas
Rhonda Tipple
Bora Tucture
Diane Vance
Lara Van Huysen
Zach Vorst
Joe Walsh
Joe Zynda
Anesthesia Technicians
Chad Barto, Anesthesia Tech Manager
Brittany Anderson
Jamie Andriko
Julie Beougher
Jessica Burns
Brice Caleb
Kyle Devillers
Jordan Gentzel
Robert Giffin
Tristan Gonzales
Lindsey Guth
Justin Hall
Leslie Henderson
Fredrick Innocent
Tyson Keufman
Megan Kelly
Erin Kelosky
Monica Knapper
Yared Kumneger
William Lorton
Calvin Lugo
Caitlin Magnacca
Whitney Mattingly
Brooke McNerny
Tom Minto
Richard Preston
Johnathon Rerucha
Destanie Robinson
Stiven Saveski
Anthony Sawell
Ann Shepherd
Charles Small
Christopher Strohmeyer
Koppert Tanner
Curtis Vance
Cara Watkins
Basic Science Research Staff

Arturo J. Cardounel, PhD
Research Scientist

Iveta Grants
Research Associate II

Clinical Research Staff

Suren Soghomanyan, MD, PhD
Research Scientist

Nicoleta Stoices, MD, PhD
Post- Doctoral Researcher

Juan Portillo, MD
Post -Doctoral Researcher

Alberto Uribe, MD
Post -Doctoral Researcher

Eduardo Quevedo Reyes, MD
Post- Doctoral Researcher

Andrew Otey
Clinical Research Coordinator

Ye-Seong Kim
Clinical Research Assistant

Anirudh Damughatla
Student Assistant

Carla Castillo de la Pena
Student Assistant
Administrative Staff

Steven S. Smith, MA
Director, Administration

Sharon L. Adams
Administrative Manager

Mary A. Fisher
Office Administrative Associate

Terese M. Marinelli
Office Associate

Denise McMaster
Program Manager, Education

Kathy Creamer
Office Assistant

Ryan Powell
Program Coordinator

Sarah Robertson
Office Associate

Lynda West
Office Associate

Jill Moore
Administrative Assistant

Carol Miller
Office Associate

Meena Dhawan
Office Associate

Marsheleen Curtis-Kuno
Office Associate
Education

Kenneth R. Moran, MD
Assistant Professor Clinical Residency Education Program Director

At The Ohio State University Wexner Medical Center, our anesthesiology residency program’s mission is to produce quality clinicians and scholars that will improve the field of anesthesiology. We are proud to offer exceptional training in addition to the excellent exposure they receive to a vast spectrum of cases. Our residents leave our program prepared to deal with any clinical experience and represent the high standard we expect from residency training at The Ohio State University Wexner Medical Center. In 2014, we will strive to continue this tradition of excellence in research, education and clinical care.

Research

2013 – 2014 Highlights and Accomplishments

We continued to encourage academic activity this year among our residents and Fellows. We are working to improve each year on the number of presentations and publications that involve trainees. As part of this initiative, each resident is required to present a scholarly abstract/presentation at the Midwest Anesthesia Residents Conference (MARC).


Cook M, Tripathi R, Papadimos T. Treatment Of Diffuse Alveolar Hemorrhage With Cryotherapy And Intrapulmonary Recombinant Factor VIIA. Critical Care Medicine 2013, Volume 41, Number 12 (Suppl.).

Egeler E, Gray T, Mahoney B. Severe Hemodynamic Instability from Aortocaval Compression in a Parturient with Marfan Syndrome. Accepted for poster presentation at the Society for Obstetric Anesthesia and Perinatology 2014.

Guletz M, Papadimos T, Tripathi R. Improving Preoperative Decision Making For LVAD Placement; A Case Report. Critical Care Medicine 2013, Volume 41, Number 12 (Suppl.).


Conference Presentations (Posters Included):


**Education**

2013 – 2014 Highlights and Accomplishments

This year, our residency program continued to provide both traditional and innovative educational experiences for our residents and Fellows. Some of the highlights from this year include:

- **Simulation Training:** The anesthesia department’s involvement in simulation education has grown to incorporate resident, medical student and faculty training. The core simulation faculty (Dr. Desocio, Dr. Moran, Dr. Mahoney, Dr. Kushelev, and Dr. Meyers) prepared for a workshop on simulation at the Ohio Society of Anesthesiologists annual meeting. These experiences will assist us as we prepare to apply to become a simulation center that provides maintenance of certification for anesthesiologists (MOCA) for the nation.

- **Annual Skills Lab:** Ohio State’s Anesthesiology Department hosts an annual skills lab for CA-1 residents and dental anesthesia residents. The skills lab provides the opportunity for residents to practice a variety of skills, including epidurals, nerve blocks, chest tube placement, vascular access, fiberoptic bronchoscopy with
bronchial blocker placement, GlideScope and laryngeal mask airway placement, percutaneous airways, and surgical airway techniques.

• Protected Lecture Time: Each Friday, one of the residency classes is scheduled to attend two hours of lecture. They are not scheduled in the operating room to protect that time for their education.

• Project Ear: Biannually, our department supports a medical mission trip to the Dominican Republic. During each trip, four residents and two faculty accompany ear, nose and throat surgeons from Ohio State to provide anesthesia services for otolaryngology procedures that would otherwise be unobtainable for these patients. The trip is a great educational experience for the residents and allows exposure to different cultures and socio-economic environments.

2013-2014 Visiting Professor Grand Rounds Lecturers

• 10/2/13 Sasha Shilcutt, MD, Director, Perioperative Echocardiography, Department of Anesthesiology, University of Nebraska Medical Center

• 12/5/13 Hilary Grocott, MD, FRCPC, FASE, Tenured Professor of Anesthesia and Surgery, University of Manitoba, Cardiac Anesthesia Fellowship Director, Editor in Chief, Canadian Journal of Anesthesia, St. Boniface Hospital, Winnipeg, Manitoba, Canada

• 1/8/14 Pamela Flood, MD, Professor, Department of Anesthesiology, University of California, San Francisco

• 1/23/14 Bruce Spiess, MD, FAHA, Departments of Anesthesiology and Emergency Medicine,

  Director, Senior Fellow VCURES, Virginia Commonwealth University
Traditionally, our program has 12 residents allotted for each PGY-2, PG-3 and PGY-4 year. We have seven categorical PGY-1 positions during which the residents spend their first year of general medical training at Ohio State. The remaining five PGY-1 spots are advanced positions in which the resident does an internship at an outside hospital and then starts with us in his/her PGY-2 year. Starting in July of 2014, we will have a total of 14 residents allotted for each PGY-2, PGY-3, and PGY-4 year and 9 categorical PGY residents.

We offer accredited fellowships in pain medicine, obstetrical anesthesiology, critical care medicine anesthesiology, and cardiothoracic anesthesiology. The obstetric anesthesiology fellowship became accredited by the ACGME during the 2012-2013 year. We also provide non-accredited fellowships in neuroanesthesia and regional anesthesia.

In the 2014, we graduated 12 residents. Seven of them went on to do fellowships and five entered private practice.

Graduating Residents

· Amar Bhatt, MD, graduated and is now a Anesthesia Critical Care Fellow at The Ohio State Wexner Medical Center, Columbus, Ohio
· Peter Dienhart, MD, graduated and is now a Regional Anesthesiology Fellow at The Ohio State Wexner Medical Center, Columbus, Ohio

· Eric Egeler, MD, graduated and is working as an attending Anesthesiologist at a private practice in Grand Rapids, Michigan

· Jeffrey Fujii, MD, graduated and is now a Neuro Anesthesiology Fellow at The University of Washington, Seattle, Washington

· Warren Grace, MD, graduated and is now a Pain Medicine Fellow at Mt. Sinai Hospital, New York City, New York

· Alec Lawrence, MD, graduated and is working as an attending Anesthesiologist at The Ohio State Wexner Medical Center, Columbus, Ohio

· Jonathan Lipps, MD, graduated and is working as an attending Anesthesiologist at The Ohio State Wexner Medical Center, Columbus, Ohio

· Kyle Macaluso, MD, graduated and is working as an attending Anesthesiologist at Mt. Carmel East Hospital in Columbus, Ohio

· Matthew McConnell MD, graduated is now a Cardiothoracic Anesthesiology Fellow at Cleveland Clinic, Cleveland, Ohio

· Jesse Richards, MD, graduated and is now a Regional Anesthesiology Fellow at The Ohio State Wexner Medical Center, Columbus, Ohio

· Matthew Victor, MD, graduated and is working as an attending Anesthesiologist at University of Colorado Denver, Denver, Colorado

· Christian Walker, MD, graduated and is now a Pediatric Anesthesiology Fellow at University of California Los Angeles, Los Angeles, California

Graduating Fellows

· Eric Stewart, MD, Pain Medicine Fellowship, graduated and stayed with Ohio State as an attending Pain Doctor with the Department of Physical Medicine and Rehabilitation at The Ohio State Wexner Medical Center, Columbus, Ohio
· Maged Ghattas, MD, Pain Medicine Fellowship, graduated and is working as an attending at a private practice in New Jersey

· Kiran Chandrashekarappa, MD, Cardiothoracic Anesthesia Fellowship, graduated and is working as an attending Anesthesiologist at University of Wisconsin, Madison, Wisconsin

· Kasey Fiorini, MD, Cardiothoracic Anesthesia Fellowship, graduated and is now a Obstetric Anesthesiology Fellow at The Ohio State Wexner Medical Center, Columbus, Ohio

· Anthony Lopez, MD, Regional Anesthesia Fellowship, graduated and is working as an attending Anesthesiologist at Mt. Carmel East Hospital, Columbus, Ohio

· Lakshmi Kurnutala, MD, Neuro Anesthesia Fellow, graduated and is working as an attending Anesthesiologist at Louisiana State University, Baton Rouge, Louisiana

· Goran Ristev, MD, Obstetric Anesthesia Fellowship, graduated and is working as an attending Anesthesiologist at The Ohio State Wexner Medical Center

· Jonathan Houser, MD, Critical Care Anesthesia Fellowship, graduated and is working as an attending Anesthesiologist at The Ohio State Wexner Medical Center

· Prabhav Patil, MD, Critical Care Anesthesia Fellowship, graduated and is working as an attending at a private practice in Youngstown, Ohio

In 2013, we received 859 applications for PGY-1 residency spots. We will interview a total of 125 candidates for 14 available spots. Nine of these residents began on June 17, 2014. Five of these residents will begin July 1, 2015.

Starting June 17, 2014
· Luke Dong, MD, Medical University of South Carolina College of Medicine
· Nakia Hunter, MD, Michigan State University College of Human Medicine
· Ali Idrees, MD, The University of Toledo College of Medicine
· David Kallile, MD, The Ohio State University College of Medicine
· Dalton Paluzzi, MD, Jefferson Medical College, Thomas Jefferson University
· Anthony Nguyen, MD, Jefferson Medical College, Thomas Jefferson University
· Scott Nickel, MD, University of Nevada School of Medicine
· Ibrahim Warsame, MD, The University of Toledo College of Medicine

Starting July 1, 2015

· Joseph Holecko, MD, Northeast Ohio Medical University
· Andrew Koogler, MD, Northeast Ohio Medical University
· Shilpa Ramesh, MD, The Ohio State University College of Medicine
· Renuka Shenoy, MD, Northeast Ohio Medical University
· Cody Yerger, MD, Indiana University School of Medicine

Nine new fellows began their Anesthesia Fellowships on July 1, 2014

· Cardiothoracic Anesthesia Fellow- Leonid Gorelik, MD, completed his Anesthesiology Residency at University of Cincinnati, Department of Anesthesiology on June 30, 2013, before starting his Cardiothoracic Anesthesiology Fellowship.

· Cardiothoracic Anesthesia Fellow- Jacob Uhler MD, completed his Anesthesiology Residency at Loma Linda University, Department of
Anesthesiology on June 30, 2013, before starting his Cardiothoracic Anesthesiology Fellowship.

- Neuroanesthesia Fellow- Brian Dishong, MD, completed his Anesthesiology Residency at University of Alabama Birmingham on June 30, 2013, before starting his Neuroanesthesia Fellowship.

- Regional Anesthesia Fellow- Peter Dienhart, MD, completed his Anesthesiology Residency here at Ohio State Wexner Medical Center on June 30, 2013, before starting his fellowship in Regional Anesthesia.

- Regional Anesthesia Fellow- Jesse Richards, MD, completed his Anesthesiology Residency here at Ohio State Wexner Medical Center on June 30, 2013, before starting his fellowship in Regional Anesthesia.

- Critical Care Anesthesiology Fellow- Kathleen Marzluf, MD, completed her Anesthesiology Residency at University of North Carolina, Department of Anesthesiology, June 30, 2013, before starting her fellowship in Critical Care Anesthesia.

- Critical Care Anesthesiology Fellow- Amar Bhatt, MD, completed his Anesthesiology Residency at The Ohio State University Wexner Medical Center, June 30, 2013, before starting his fellowship in Critical Care Anesthesiology.

- Obstetrical Anesthesiology Fellow- Kasey Fiorini, MD, completed her Cardiothoracic Anesthesiology Fellowship at The Ohio State University Wexner Medical Center on June 30, 2013, before beginning her fellowship in Obstetrical Anesthesiology.

- Pain Medicine Fellow- Tristan Weaver, MD, completed a residency in Anesthesiology at Emory University, Department of Anesthesiology on June 30, 2013 at The Ohio State University Wexner Medical Center, before starting his fellowship in Pain Medicine.

The 2013-2014 year held new changes from the American Board of Anesthesiology and the ACGME. This includes a new written board examination at the end of the PGY-2 year and integration of the ACGME milestones. We had a 100% pass rate on the new exam with the American Board of Anesthesiology.
The Department of Anesthesiology has built a robust simulator education program. Our department was selected to become a national simulation site for the Maintenance of Certification in Anesthesiology (MOCA) program. It is our goal to become a national leader in education for students, residents, and faculty.

In 2015, we will continue to recruit and train excellent residents. This year, we have placed additional focus on the residency recruitment process for the upcoming academic year. While we are very happy with the quality of our current residents, we expect that our 10 year accreditation status in addition to our increase in resident complement will allow us to bring in an even brighter and motivated class of residents.

We will also use 2015 year as an opportunity to continually integrate digital resources in new and innovative ways to improve education. This initiative includes giving iPads to incoming residents, and providing digital textbooks. These tools will be used to improve resident education and contribute to the innovation of education in our field. We have recorded lectures and Grand Rounds to stream online; in addition some rotations have all information available on iTunesU.

Clinical

Our residents continue to receive an excellent clinical experience as a direct result of our abundant clinical operating room volume. They easily meet and exceed their case counts each year. Last year’s graduating residents averaged over 1,000 cases each during their PGY-2, PGY-3 and PGY-4 years. We are fortunate to have a wide variety of clinical experiences and cases with varying levels of difficulty.

2015 Future Goals

We will continue to find new ways to provide clinical experiences to our residents in 2014. The expansion of surgical volume at the medical center and the growth of innovative procedures, such as minimally invasive surgery, robotic procedures and endovascular interventions, provide us with constantly growing clinical opportunities for our residents and Fellows.
Research
Submitted by Fievos L. Christofi PhD, AGAF
Professor and Vice Chair of Research

SYNOPSIS
Our department made progress in the past year in funding, new research initiatives, new submissions and publications.

FUNDING: Our funding level has been steadily increasing over the past several years, and this year, from July 1, 2013 to June 30, 2014 for the first time the total of funds received (according the PI portal) was $1,700,000 from all types of grant awards. This is higher than the previous year by several hundred thousand dollars, and it raises our national ranking to ~25th among the more than 120 Academic Anesthesia departments in the country. A total of 25 new grant proposals were submitted, and 14 grant proposals were awarded, 2 proposals are pending and 9 were not funded. In the 2013-2014 period, 34 grants were funded all together (including those continuing from an earlier period), and 2 additional grants through RINCH (funding not included in $ total). Funding was received from 2 NIH R01 operating grants and a sub-award on an NIH grant from another Academic institution (University of Southern Texas). In addition, a NIH LRP grant was funded by Emmett Whitaker, MD – He is a Pediatric Anesthesiologist appointed at RINCH/Anesthesiology and is working in Dr. Christofi’s laboratory. Kent Williams MD is another NINCH/Anesthesiology investigator who is a pediatric gastroenterologist in Dr. Christofi’s laboratory on an NIH K08 Award during this period. There were also 2 awards through RINCH, and a developmental fund (MOU) provided by the Neuroscience Signature Program to support the development of ‘neuromodulation research’. There are many other grants funded by industry and pharmaceutical companies, other academic institutions (Duke...
University, Mt Sinai, Cleveland Clinic, etc) or RINCH for investigator initiated studies/trials, multi-center clinical trials, for testing new devices (e.g. cerebral oximetry) and include an FDA approved proposal by one of our investigators to study emergence delirium.

**PUBLICATIONS**: Our publications represent steady improvements in quality and numbers of both peer-reviewed publications and those published in anesthesia related journals. There were 57 articles published in 35 different journals. Twenty one of our publications had impact factors ranging from 1.2 – 14 that included publications in the top journals in the field of Anesthesiology or other clinical research disciplines (e.g. Anesthesiology /IF=6.2; Anesthesia and Analgesia/IF=3.4; Inflammatory Bowel Diseases, IF=5.4) and one publication in Circulation with impact factor of 14.9; Academic Medicine 3.5, etc. PloSONE, IF=3.4; Journal of Neurology/IF=3.8; Philosophy, Humanities/IF=2.0, etc). In addition, our faculty published 2 editorials in Anesthesia and Analgesia, several case reports, 4 chapters, and letters to the editor.

**NATIONAL SCHOLARLY PRESENTATIONS**: In addition, our faculty, residents, fellows, students, trainees and researchers presented 45 abstracts at 26 national and international meetings that included Anesthesia (e.g. American Society of Anesthesiologists, the largest meeting for Anesthesiologists in the world), Critical Care, Cardiac (e.g. Society of Cardiac Anesthesiology), Pain and Obstetrics and Gynecology scientific meetings to mention a few, during the period of July 1st 2013 to June 30th 2014. In addition, our residents presented 21 abstracts at the Midwest Anesthesia Residents Conference (MARC) 2014, Chicago, Illinois April 2-4, 2014. This is the largest resident Anesthesia conference in the country. Locally, we strongly encourage our research trainees to present at Research Day at OSU. In the past year, we had 13 abstracts presented at research day that included basic researchers, Samuel J. Roessler Scholars, FAER scholars, postdoctoral fellows and resident/fellow trainees. Overall, 79 abstracts were presented at all conferences by our trainees and faculty physicians and basic researchers. This represents a tremendous volume of scholarship, and national visibility of our academic efforts.

**NEW RECRUITS AND SPACE ALLOCATIONS**: We recruited a junior faculty as a Research Assistant Professor, Esmerina Tili Ph.D. on a joint appointment (60:40 split) with Dr. Croce’s department (and her TIU in Anesthesiology). She just submitted a new NIH R01 grant with a tenured Anesthesiologist in our department. We recruited a patch-clamp expert, Fernando
Ochoa (senior postdoctoral researcher) and he set up a new electrophysiology laboratory to study glial and neural circuit behavior in health and disease in vitro, in human specimens – A new R01 is pending, and his efforts are yielding multiple publications in impact journals, and further pilot/preliminary data for additional R01 applications. This has increased our capabilities tremendously in the neurosciences. Office space was made available for our research personnel, and a small lab space (~150 sq. ft.) became available for us after one of our faculty had to retire from basic research (for health-related reasons). This partially relented our space issues, and we are still waiting for a decision on additional space that was officially requested in September of 2013 for our expansion needs – this is still pending.

**INSTITUTIONAL SUPPORT FOR RESEARCH:** We are very grateful for all and any support we received from the College of Medicine to develop our research infrastructure, and to begin to build a national research program in Anesthesiology. However, an ongoing and serious concern is whether additional support from the College earmarked for research and academic development is forthcoming for next year. The gains we’ve made in research and scholarship in the past few years are in serious jeopardy without further support from the College to sustain and grow our research program that supports all our academic activities, and contributes to resident education, scholarship and national visibility, professional growth and promotion of our faculty, and translates to better retention and job satisfaction of our faculty, and better recruitment of top Academic Anesthesiologists and scholars to our programs, including the recruitment of some of our best residents and fellows to faculty positions. All departments saw deep cuts in their budgets in the past year (2014-2015). We received a $0.0 new budget for 2014-2015 to support research infrastructure. We remain optimistic, but we hope that this issue is resolved in the near future, so we can continue to grow our Academic Department. In keeping with the growth of our research/scholarship/educational programs in the past 5-7 years, we were able to promote many of our faculty to higher rank positions through the promotion and tenure process. Twelve clinical faculty members have been promoted during this time period and 2 were promoted during 2013-2014. Currently, we have 5 faculty members pending promotion to Associate (3) or Full Professor (2). Faculty members were promoted on both the Clinical and Tenure Tracks. We also recruited > 20 new faculty in the department (i.e. fellowship trained physicians) at all ranks during this time. Additional Aux faculty members have been promoted from NCH (Pediatric Anesthesiology). I had the privilege and honor to Chair the College Promotion and Tenure Committee for the past several years, and continue to Chair our department P&T committee. We all
understand and appreciate how important scholarship and advancement in science and new knowledge are to the fabric of our tripartide mission: clinical service and patient care, education, research and scholarship. We hope to have the continued support of the College to promote our Academic mission, and to grow further by recruitment of NIH funded faculty members to complement our efforts and those of our collaborators in Neurosciences, Neuromodulation, Surgery, Molecular Virology and Immunology, Inflammatory Bowel Diseases, RINCH, DHLI, NIH and our national and international collaborators. We have great potential to achieve much more as an Academic Anesthesiology department, but very promising and innovative, new and emerging research programs such as those described below require and deserve some institutional support to capitalize on everyone’s efforts. One of our goals is to secure a T32 grant in our department for training future academic Anesthesiologists.

**EMERGING PROGRAMS AND Investigators with Pending Proposals**

1. **Hamdy Elsayed Awad, MD & Esmerina Tili Ph.D.** (A new NIH R01 grant as New Investigator(s) was submitted February 2015 on Ischemic spinal cord injury (ISCI) relevant to TAAA patients who get paralysis during aortic surgery / ischemia and reperfusion injury. **Collaborators:** Dr. Carlo Croce, Dr. Arthur Burghes

2. **Fievos L. Christofi, Ph.D., AGAF** – A new NIH R01 grant was submitted February 2015 on ‘Human Glial Cell Modulation in Inflammatory Bowel Diseases (PI, CHRISTOFI; **Co-Investigators:** Alan Harzman, MD Assistant Professor of Surgery; Wendy Frankel, MD Interim Chair of Pathology; Esmerina Tili PhD, Research Assistant Professor of Anesthesiology; **Collaborators:** Sven Wehner PhD BONN, Germany, Principal Investigator at Fraud Institute; Fabio Turco, Investigator at Univ. Napoli, Italy; Rosario Cuomo, Gastroenterologist at Univ. Napoli; Jack Grider PhD, Professor at Virginia Commonwealth University; Kenneth Jacobson, PhD, Chief of NIH NIDDK, Medicinal Chemistry Division; Brian Perrino, Associate Professor, University of Nevada.

3. **Emmett Whitaker, MD (RINCH/Anesthesiology).** A Pilot CTSA grant (Bremer foundation) was submitted (pending) on ‘Potential for neurotoxicity of Anesthetics in Neonates.’ Dr. Whitaker is a trainee in Dr. Christofi’s Laboratory. An IRB has been approved to ‘study isoflurane-induced neuroinflammation in children with hydrocephalus: A bench-side to bedside..."
translational study of molecular pathways and therapeutic approaches’. The next step is for the FDA IND application to be approved (pending).

(4) Ken Moran, MD Director of the Residency Program. SAGE multi-institutional education research group! DR. MORAN IS A LEADER OF THIS INTERNATIONAL EFFORT. First publication in Anesthesiology (I.F. = 6.2) accepted (personal communication)

(5) Thomas Papadimos, MD, MPH, Vice Chair of Academic Affairs, Director of Critical Care Division/Anesthesiology. Dr. Papadimos has just completed an agreement with Optima and the United States Army Institute (USAISR) indicating that OSU is a vital partner in this new relationship aimed at "evaluating new technologies and strategies to improve healthcare delivery in complex patients (i.e. critical care patients). Optima and the U.S. Army Institute pledge their support (as noted in the Appendix Statement of work) for equipment, resources, personnel for these clinical research efforts. It should provide significant new opportunities for clinical research in our department.

(6) A patent was filed (Ali Rezai, MD/ Fievos L. Christofi, Ph.D., AGAF) on Neuromodulation in Visceral Pain. An FDA proposal (ND) is being developed for neuromodulation in collaboration with Dr. Rezai (Neuromodulation Core) and Dr. Arsenescu (IBD Center) to run a pilot / proof of concept study in 20 patients, to treat visceral pain in patients (with irritable bowel syndrome; this is the theme of an active translational NIH NIDDK R01 grant).

(7) Magnetic stimulation of the stellate ganglion in neuromodulation therapy – An IRB is in process to evaluate the use of Magnetic stimulation as a novel modality in neuromodulation therapy. Dr. Ali Rezai has developed a clinical laboratory for evaluation.

(8) Study of neural circuitry in epilepsy in human brain biopsy – We have an approved IRB with Neurosurgery (Ali Rezai and other others) to collect brain biopsy to study neural circuits in the human brain (by in vitro patch clamp/imaging/molecular signaling studies)

(10) Delirium and cognitive dysfunction - Several IRB’s are approved to study Delirium cognitive dysfunction in patients undergoing different types
of surgeries, and an important target of investigation is looking for potential biomarkers (i.e. microRNA’s, etc.). We are collecting pilot / preliminary data to develop new grant applications for external funding agencies including the NIH.

- **PRINCIPAL INVESTIGATORS OF FUNDED PROPOSALS (11)**

  Sergio Bergese; AJ Cardounel, Fievos L. Christofi, Joseph Werner, Thomas Papadimos, Michael Essandoh, Nicole Stoicea, Fernando Arbona, Demicha Rankin, Emmett Whitaker (RINCH), Kent Williams (RINCH)

- **TYPES OF AWARDS**

  1) 3 NIH GRANTS – 2 R01 OPERATING GRANTS; 1 SUB-AWARD, WITH UNIVERSITY OF TEXAS (SBIR): Christofi, Cardounel/ Inflammation/cardiovascular diseases
  2) 2 - RINCH (Research Institute at Nationwide Children’s Hospital (Christofi)
  3) 1 NIH Loan Repayment Grant, Emmett Whitaker (2 year grant in Dr Christofi’s Laboratory) – Potential for Neurotoxicity of Anesthetics in Neonates (**NIH Mentor:** Christofi)
  4) NIH K08 Mentored Clinical Investigator Award (Kent Williams, RINCH, Mentor – Christofi)
  5) 12 industry grants (SPLIT IN TYPES OF GRANTS)
     a. Investigator initiated clinical trials/studies, e.g. safety and efficacy; clinical evaluation of devices (pulse oximetry; smartCuff Algorithm – noninvasive electronic physiological data collection)
     b. **FDA approved studies**, methylphenidate in active emergence from general anesthesia
     c. Educational studies (Papadimos/Moran/others)
     d. Multi-center Clinical Trials sponsored by industry
     e. Investigator initiated clinical trials supported by Academic institutions, e.g. Duke University=3; Cleveland Clinic=1, Mt. Sinai =1,Dex/POCD;U.T, Southern Med. Center at Dallas = 1

**CURRENTLY ACTIVE IRB’S:**

10 Investigator initiated studies
1 NIH translational study
21 sponsored clinical trials / studies (PI: Bergese, Essandoh, Michaels, Papadimos, Ristev, Rankin, McGregor)

<table>
<thead>
<tr>
<th>Type</th>
<th>Amounts</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Directs</td>
</tr>
<tr>
<td>NIH</td>
<td>$655,713</td>
<td>$429,975</td>
</tr>
<tr>
<td>Industry</td>
<td>$789,427</td>
<td>$626,527</td>
</tr>
<tr>
<td>Other national awards</td>
<td>$255,120</td>
<td>$208,798</td>
</tr>
<tr>
<td>Total RECEIVED</td>
<td>$1,700,260</td>
<td>$1,265,300.00</td>
</tr>
</tbody>
</table>

**ADDITIONAL PROPOSALS SUBMITTED BUT NOT FUNDED = $1,329,661**

American Heart Association (ISCI/TAAA)
Muscular Dystrophy Association (SMA)
Society of Cardiovascular Anesthesiologists (aortic aneurysm repair)
5 National Institutes of Health grants (R21/SBIR grants): Topics = therapeutic hyperthermia for restoration of aged diabetic vascular reactivity; heat shock factor in atherosclerosis; doxorubicin cardiomyopathy

**Peer Reviewed Published Journal Articles (types of journals)**
57 articles, and additional editorials, letters to editor, case reports and book chapters

1. Academic Medicine, IF 3.468
2. American Surgery
3. Anesthesia & Analgesia, IF 3.422
4. Anesthesiology, IF 6.168
5. Anesthesiology Research and Practice
6. Argentinian Journal of Cardiovascular Surgery
7. Austin Journal of Anesthesia and Analgesia
8. BMJ Open, IF 2.063
11. Current Therapeutic Research, IF 0.446
12. Examiner.com
13. **Frontiers In Pharmacology** – first IF score will be in 2015
14. Inflammatory Bowel Diseases, IF 5.475
15. Internal and Emergency Medicine, IF 2.410
16. International Journal of Anesthesiology & Research (IJAR)
17. International Journal of Clinical Anesthesiology
18. International Journal of Clinical Exp Medicine, IF 1.422
19. International Journal of Critical Illness and Injury Science first IF score will be in 2015
20. International Journal of Pediatric Otolaryngology, IF 1.319
21. Journal for Healthcare Quality
22. Journal of Cardiovascular Disease
23. Journal of Cerebrovascular Disease
24. Journal of Clinical Monitoring And Computing, IF 1.448
25. Journal of Emergencies, Trauma and Shock (JETS)
26. Journal of Intensive Care Medicine first IF score will be in 2016
27. Journal of Investigative Medicine - High Impact Case Reports, IF 1.503
28. Journal of Mechanical Circulatory Devices
29. Journal of Medical Cases
30. Journal of National Comprehensive Cancer Network
31. Journal of Neurology, IF 3.841
32. Open Journal of Anesthesiology, IF 0.52
33. Philosophy, Ethics, and Humanities in Medicine Unofficial 2.03
34. PLoS ONE, IF 3.534
35. Scientific World Journal, IF 1.219

Editorials – 2 in Anesthesia & Analgesia I.F. =3.4
Letter To The Editor – 2 letters published in International Journal of Critical Illness and Injury Science
Case Reports - 3 case reports publishes in Mechanical Circulatory Support, Journal of Gastrointestinal Liver Disease (I.F. = 3.4), and International Journal of Critical Illness & Injury Science

Book Chapters: (4)

Posters presentations/abstracts (one per meeting unless otherwise noted):
79 abstracts/posters to 28 local, regional, national and international meetings

3. 67th Annual Post Graduate Assembly in Anesthesiology, New York, NY, December 13-17, 2013 – 3 abstracts
5. ASA Annual Meeting, San Francisco, CA, October 2013. – 5 abstracts
8. PGA (Post Graduate Assembly) in New York, New York December 2013 – 3 abstracts
10. 13th Annual OSUWMC (Ohio State University Wexner Medical Center) Trainee Research Day Columbus, OH, April 10, 2014 – 13 abstracts
16. Association for Surgical Education Annual Meeting, Fairmont Hotel, Chicago, IL, April 10, 2014.
18. Critical Care Medicine – 4 published abstracts
19. Current Therapeutic Research
20. IndusEM, October 2013, Thrissur, India.
21. The Academic Surgical Congress; San Diego, CA; February 5th 2014.
22. The Fourth Annual Central Ohio Trauma System (COTS) Trauma Research Symposium, Columbus, Ohio, September 9th, 2013.
24. Scholar One Abstracts – 2 abstracts submitted
26. The Heart Surgery Forum
27. The Ohio Society of Anesthesiologists, Cleveland, Ohio, September 2013.
National and International Lectures = 43

Panel Discussions = 3
Clinical Operations University Hospitals

Luis A. Lopez, MD
Clinical Associate Professor
Clinical Director for Operation, OSUMC

It is my pleasure to give my Clinical Operations Report for 2014-2015. Our service, as always, is challenging due to the demands for anesthesia services in multiples areas. This year in particular has been full of new demands for anesthesia services in off-site areas and with the opening of the New James Cancer Hospital. We have significantly increased the percentage of cases across operating rooms in all hospitals as well in the off-site services. Our commitment to do any and all cases that are scheduled and to give the best care to patients in all areas has been the reason for our increased work load. We are also committed to giving our faculty and residents the opportunity to work in the clinical and research arenas to round out their education.

Research

1. The clinical Department of Anesthesiology is committed to providing support to all the areas of our department, including research. The department provides allotted time to all the anesthesiologists who are participating in investigations or clinical trials for drugs.

2. For clinical anesthesiologists, we must provide the time for activities like committees and planning/information for the growth of our department and Wexner Medical Center.

3. This year we provided a significant number of non-clinical days.

4. We give our faculty time to cover medical school interviews.

To provide multiple off-site clinical services, our teams have to pick up clinical work and provide proper coverage for all the areas in which our services are
required. This must be accomplished without disrupting our other responsibilities and by always providing the best patient care. This is where the challenge of proper personnel distribution plays a large role.

2014 – 2015 Goal

Our plans are to continue to provide a fertile environment to stimulate, increase and encourage the interest in research for all faculty and residents without sacrificing our commitment to our patients.

Education

Our department is committed to assisting and maintaining the education of our residents. Our responsibility and participation is to have the residents relieved on time to assist with all the lectures and activities they have scheduled for their continual education. This includes the lectures for the CA-I residents every Tuesday and every Friday morning for CA-II and CA-III residents. We give the residents time for educational activities on different rotations, participation in Project EAR (a mission trip to the Dominican Republic in which a group of faculty and residents are relieved from clinical services) and involvement of residents and faculty in anesthesia simulation education.

Starting on November 1, 2014, the residents have been given the pre- and post-call day off. This has decreased the number of personnel in the OR pool by three almost every day.

Education is our commitment to all of the residents and faculty who participate. It is our intention to continue to facilitate this educational plan. Dr. Kenneth Moran also has plans to give the faculty time to prepare their lectures as well as to provide time for residents to participate.

Clinical

2014 – 2015 Highlights and Accomplishments

The clinical service has increased tremendously with requests for anesthesia service in a number of areas. Thus, our department has to be in constant evolution and communication with all the areas of the hospital where our services are required. Covering and scheduling the proper number of personnel has increased in the following ways:
1. The Surgical Outpatient Center, located at Ohio State’s Eye & Ear Institute, where six operating rooms opened and required assignments of three anesthesiologists, six certified registered nurse anesthetists (CRNAs), and a resident in rotation to do the block (since the demand for blocks has increased and one of the faculty has to be a for the blocks). Our Regional Fellows also have the opportunity of continuing their training and education by spending clinical time at our Surgical Outpatient Center.

2. Ohio State University Hospital East has increased the number of operating rooms from 12 or 13, so we have to increase the number of faculty to six and the CRNAs to 12 on a daily basis. Much like our Surgical Outpatient Center, UH-East provides a fantastic environment in which our Regional Fellows can continue to develop their regional anesthesia skills.

3. The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute has increased the number of ORs to nine daily until December when the New James Hospital (CCCT) was open, and we went up to fourteen (14) rooms, which are very busy and present a challenge on making the assignments since is a large hospital and at more distance from the others. We have assigned a faculty in charge, for that area in cover the Code Blue, and assist other faculty in starting the cases as the person in charge does it in UH.

4. In Ohio State’s Richard M. Ross Heart Hospital, we have a constant volume in the number of cases and hours of surgery. Many days, this hospital has cases going until late into the evening. We are covering two rooms in the EP lab with one CV anesthesiologist and more often than before we are doing an extra room for TAVR.

5. Another place that has been a challenge to provide proper coverage for is The Ohio State University Preoperative Assessment Center (OPAC), where we have to send a faculty, a resident. Then we have to cover vacation and ill time for the rest of the personnel to be able to cope with the volume of patients seen at OPAC.

6. An important part of our organization is the coverage of the off-site services. We have assigned a Dr. Fleming Q. to coordinate all the off side since this is a continuous increase and required one faculty to approve the days, to
decrease conflict

- Gastroenterology (OR 95): Daily service with a four room with a very busy schedule many times working past 5pm

- We have added coverage for Endoscopy to every Saturday morning. One extra Faculty and three extra CRNAs are required to get through the work load.

- EP lab (invasive cardiology) (OR 96 and 97): Two rooms every day, plus many days, more often now, we need to open a third room TAVR, done in the same area but covered by one Anesthesiology and a Resident or CRNA. Since this Anesthesiologist is taken from the CV group, it has to be assigned an extra CV faculty to cover this cases. We continued discussions to open more rooms to cover the high demand of anesthesia in this area.

- Pulmonology (OR 98): Every Thursday, Pulmonology and many times we cover also Wednesday or other day that they need anesthesia for their cases.

- We have one day (Tuesday) to cover two rooms for IR (this cases are done in the New James). We cover MRI, TIPPS or any other case in IR that need Anesthesia this is done in the UH this is done on demand and availability of Anesthesiologist. This area has always been a challenge for the faculty in charge, since many of them are Emergency.

- Pediatric radiation oncology (OR 99) is done now by a Pediatric Anesthesiologist from the Childrens Hospital, we provide a CRNA to assist during the case.

- We have been asked to provide our services for adult patients in RO (Braky Therapy) this is done one or two times a week, and required one Faculty with a CRNA or Resident. The cases are done now in the New James.
• We have now ECT on Monday, Wednesday, Thursday and Friday. Increasing one day Thursday for the numbers of ECT need to be done.

• For the increase of number of Neurology cases we had daily assign an Neuro faculty on call with the next day off this was until January 2015, now we have two Neuro faculty on call daily and this second faculty will have Wednesday and Friday Off.

• We have a faculty in charge on Saturdays; this is to facilitate the efficiency of the cases done during the day. In the past, we have had two CRNAs scheduled to work Saturdays from 8am-4pm plus a beeper CRNA available from 8am until 4pm. Now we have added another beeper CRNA from 3pm-11pm on Saturdays.

• On Sundays, we have had one CRNA scheduled 8am-4pm and a beeper CRNA available from 8am until 4pm. Now, we have added one more CRNA scheduled to work an 8am-4pm shift.

The year of 2014 – 2015 has been full of wonderful experiences since we have seen an incredible growth in our number of cases and hours of surgery.

• University Hospital East has increased the numbers of rooms and cases done.

• Ohio State’s Comprehensive Cancer Center – James Cancer Hospital and Solove Research Institute maintains its high volume until December when The New James (CCCT) was open and the cases when to the roof.

• Ross Heart Hospital is having an increase in cases and we have been assigning coverage for all the rooms.

• University Hospital has increased the hours of time running the operating rooms. Since more rooms cannot be opened, longer hours are required to meet the demand. We are running all of the available rooms. The first case starting times have significantly improved and Anesthesia’s responsibility of
delayed cases has decreased.

Overall, our operations have been running above budget in the number of cases and in the hours of surgery. The type of cases at University Hospital has become more complex and longer since a big part of our outpatients were moved to the Surgery Center. We have been very creative in providing coverage for all the areas needing anesthesia without compromising patient care.

2014 – 2015 Goals

In the future, we want to increase the number of faculty and CRNAs to provide coverage without causing delays to the rest of the scheduled cases. The study about the turn over time between the following cases will star being monitored and documented to find out the causes of the delays.

We have continued to use our electronic scheduling program, SpinFusion, for Faculty, Residents, and CRNAs.

Now, we are all working in IHIS in all of the hospitals. This has been accepted by the entire faculty in a positive way, since we have more information about the patients during the interview are at hand.

As we hire more CRNAs, we are hoping that our overtime needs will shrink. However, it is our duty as a department to find a way to cover, on average, 50 sites around University Hospitals on a daily basis. At the same time, we do our best to send CRNAs as needed to University Hospital East and the Eye & Ear Institute on their busier days.

In the near future, we would like to have enough personnel to run this operation as the demands of our services are continuously increasing. We have an excellent group of anesthesiologists, CRNAs, and anesthesia assistants that make it possible to run this operation smoothly. I am proud to be part of this great and enthusiastic group of people who are committed to give the best to our patients and the Wexner Medical Center.

I am extremely proud and happy to be part of this incredible evolution in the OHIO STATE UNIVERSITY, this is my last year I write this report and in it I want to tell everyone, my life has been fulfilled and I take with me the most wonderful
memories and I thank all of you for the help and friendship thought these short 33 years.

Thank you
Research
2013 Highlights and Accomplishments

Michael J. Andritsos, MD
Associate Professor-Clinical
Director, Cardiothoracic and Vascular Anesthesia

Research
2013-14 Highlights and Accomplishments

The Section of Cardiothoracic and Vascular Anesthesia is continuing to progress in areas of research throughout the academic year of 2013-14. We continue to progress with multiple publications and continued research awards. These include areas in spinal cord ischemia; wound healing, side effects of antifibrinolytic agents, efficacy of point of care testing for coagulopathy in cardiac surgery and liver transplantation, aortic disease, pain management in cardiac and thoracic anesthesia, and right heart dysfunction in cardiac surgery. We continue to make a strong presence as moderators, abstract reviewers and presenters at our Society of Cardiovascular Anesthesiologists’ Annual Meeting held this year in New Orleans, Louisiana and the annual SCA Thoracic Symposium.

Education
Fellowship

We continue with our accreditation of our CV fellowship under the direction of Galina Dimitrova, MD. This academic year became our 7th consecutive year having two fellows under our direction and the 5th consecutive sponsored by the Accreditation Council for Graduate Medical Education (ACGME). We continue to train two fellows annually under the ACGME requirements, and have successfully recruited two more candidates to start in July 2014 through the ACGME Match Process. Our previous Fellows both successfully passed their perioperative transesophageal echocardiogram (TEE) exam and have become certified in perioperative TEE. They both enlisted in practice outside Ohio State’s Wexner Medical Center and are successfully enjoying their new employment.
**Resident Education**

We continue to excel in resident education with high marks in attending scores from resident evaluations. We are currently concentrating our efforts to provide scheduled didactic teaching to the residents during their rotation in cardiovascular anesthesia, thoracic anesthesia and perioperative TEE resident rotations.

**Clinical**

Clinically, we continue to excel in cardiac anesthesiology procedures with contributions to improved patient outcomes and decreased mortality. Over this year, we experienced a steady rise in the number of cardiac cases. This academic year we performed anesthesia on an all-time high of 865 cardiac cases, under the direction of Interim Cardiac Surgery Director, Juan Crestanello, MD. With the addition of two more cardiac surgeons, we continue to perform CABG, OPCAB, and CABG-valve surgeries, VAD procedures, heart transplant and thoracoscopic MAZE procedures. We are averaging approximately one to two heart transplants per month. We continue to play an integral part with our surgical colleagues in providing anesthesia for percutaneous implantation of aortic valves. In thoracic anesthesiology, the volume of lung surgery continues to rise along with VATS procedures and lung volume reduction surgery. Additionally, we successfully launched the lung transplant program this year headed by our surgical colleague Dr. Bryan Whitson. Our first successful transplant occurred in August 2013 and we have successfully participated in 13 transplants this academic year. In vascular anesthesiology, we are seeing a steady increase in the number of endovascular procedures for abdominal and thoracoabdominal aneurysms, and continue to participate in the success of the Center of Aortic Excellence under the direction of Patrick S. Vaccaro, MD. We continue to be extensively involved in providing anesthesia services for cardiology electrophysiologic procedures including atrial fibrillation ablations, ventricular tachycardia ablations, and pacemaker and defibrillator lead extractions. We also lend ourselves to assist our anesthesiology colleagues in performing intraoperative TEE during liver transplantation and have assisted in the implementation of point of care testing for coagulopathy in that arena.

In echocardiography, we continue to perform perioperative echocardiography in 2D and 3D modalities and continue to participate in multiple research endeavors
with our cardiology colleagues, implementing 3-D analysis of mitral and aortic valve pathology. Our residency program continues with improving an elective rotation in perioperative TEE with one-to-one instruction on basic perioperative TEE.

Administratively, we are maintaining operating room efficiency at Ohio State’s Ross Heart Hospital, as reported by the Ross Heart Hospital Quality Management Committee. We continue to minimize delays in operating room start times with the best start times among the three hospitals and a reduction of case turnover times. The members of our division also serve the department through extensive representation in multiple administrative committees at the medical center, college, local and national levels. These include the College of Medicine Admissions Committee, OSUMC Practitioner Executive Committee, OSUMC Professionalism Council, OSUMC Medical Documentation Steering Committee, OSUMC Transfusion Committee, Department of Anesthesiology Education Committee, Clinical Competency Committee, Evidence-Based Medicine Committee, Finance Committee, Ohio Society of Anesthesiologists Committee on Education and Annual Meeting, the American Society of Anesthesiologists Committee on Practice Management, ASA Committee of Young Anesthesiologists, the SCA Membership Committee, SCA Bylaws Committee, Ross Heart Hospital Cardiovascular Services Quality Management Committee, Ross Heart Hospital OR Operating Council, Ross OR Efficiency Committee, Ross Heart Hospital Mortality Reduction Council, and numerous advisory committees.

In summary, the Section of Cardiothoracic and Vascular Anesthesia has seen steady success, in all areas of research, education and clinical and administrative service. We continue to excel in clinical service, as evidenced in our operating room efficiency, patient satisfaction, and steady growth in volume.
Clinical

2013 – 2014 Highlights and Accomplishments

We have continued to expand the number of transplants performed. With the use of the POC INR device and the ROTEM, we have dramatically decreased the amount of blood products that were given for liver transplantation. We have been able to incorporate more residents into the call schedule, so as to expand their transplant experience. Currently the entire liver transplant faculty is critical care trained. Dannie Scharpf CRNA recently was able to give her doctorate presentation on the use of the ROTEM and the cost savings and overall decrease in product usage during liver transplantation. Using the data from her presentation, we are going to submit the results for publication. With the assistance of Dr. Flores, we are now using an algorithm to aid in coagulation product management. This algorithm is posted in the liver transplant room and is available on line. I was able to obtain laminated cards that have the basic values for the use of the ROTEM to be distributed to the residents that do liver transplants.

We have also continued to streamline the protocol for these cases so that every member is using the same set up so the residents can prepare the ORs in a consistent manner.

Education

At the 2014 ASA, we officially launched the SATA, Society for the Advancement of Transplant Anesthesia. The society will focus mainly on liver transplant anesthesia initially. This is intended to be a society with an international membership. We will be co-sponsoring a 2 day meeting this fall at the University of Pittsburgh centered on transplant anesthesia. I was elected as one of the inaugural board members to serve as treasurer for the society.
This summer, we plan to have all of the team have basic TEE eligibility or certification to eliminate the need for 2 faculty members for every liver case. We may still need an advanced TEE specialist for the more difficult cases.

I have also amended the kidney and kidney/pancreas transplant protocols to include the use of the Esophageal Doppler for more improved fluid management during these cases.
OBSTETRIC ANESTHESIA

Robert H. Small, MD
Associate Professor-Clinical
Director, Obstetric Anesthesia
After the slow end to 2013 that we experienced due to several surgeons leaving OSU in the late Summer, the first part of 2014 showed consistent growth. This came in the form of recruiting a few new surgeons in specialties, such as Plastics, and also from an increase in surgical volume from the existing surgeons. In the Summer of 2014, several more new surgeons in the General Surgery and Orthopedics specialties began operating at OSU East. As their practices grew rapidly, so did our OR Volume. As a result, the final 6 months of OR Volume showed significant productivity of completing surgeries at 16% above the budgeted volume... approximately a 660 surgical case surplus. We expect to maintain at this level of productivity for the near future and hope that we are able to recruit even more surgeons to operate at OSU East.

We had another of our OSU East Anesthesiologists leave this year for a job in Private Practice. **Anthony Lopez, MD** left at the beginning of 2015. He was our previous Fellow, and had worked as an Attending at a 75% position for the entire year. In his absence, we added our 2014 Fellow, **Peter Dienhart, MD**, to our staffing at the beginning of 2015 at a 100% position. He is an excellent addition to our group at OSU East.
Research

2014 Highlights
Several members of the OSU East Anesthesiology Faculty continued to serve as principal investigators for several investigator-initiated, as well as Industry-funded, research projects focused on perioperative pain control. Several of the Faculty also had a poster presented at several conferences, including several Orthopedic conferences. Several of the OSU East Faculty continue to serve on several national committees and as journal editors.

Education

2013 Highlights
OSU East is the main site in which regional anesthesia is performed at The Ohio State University Wexner Medical Center. Because of this, it is also the main site for educating the Anesthesiology residents and is the headquarters for the Regional Anesthesiology Fellowship program, which typically enrolls one to two Fellows per year. Our Anesthesiology Faculty continue to mentor residents who present abstracts at several national meetings, and lead quarterly journal clubs for residents, Fellows and Faculty (from Ohio State and Nationwide Children’s Hospital) focused in the current literature of regional anesthesiology. Additionally, OSU East Faculty have been invited to speak and lead workshops at regional and national conferences, including the 2014 Annual Ohio Society of Anesthesiologists Conference.
CLINICAL DIRECTOR REPORTS ACUTE PAIN MEDICINE SERVICES

Costantino Benedetti, MD
Professor, Clinical Section Director, Acute Pain

For the academic year 2013-2014 Costantino Benedetti, MD provided attending coverage for the Inpatient Pain Medicine Service with calls responsibilities shared by Peter De Socio, MD, Steve Severyn, MD, Gregg Weidner, MD and Joseph Werner, MD. Also, members of the team are Acute Pain Nurse Judith Novinc, RN, rotating anesthesiology residents and forth-year medical students.

The Service provides a full spectrum of inpatient care for both acute and chronic pain conditions as an active consulting service. Patients suffering from acute pain (post-operative or post traumatic) are treated with epidural analgesia or Patient Controlled Analgesia (PCA). Patients with a chronic pain conditions admitted to the hospital for an exacerbation of the pain are stabilized during their hospitalization and, if indicated, referred to the outpatient Spine Center for further evaluation and treatment or referred back to their pain specialist or primary care physician.
Research

The Service research consisted of collaboration with national agencies and organizations involved in evaluating proper opioid use and developments of pain therapy guidelines. A member of the acute pain service team (Costantino Benedetti, MD) participated in the following activities:

1. Member of the following national committees:
   a. American Pain Society –
      Public Policy Committee
   b. National Comprehensive Cancer Network (NCCN)
      Adult Cancer Pain Guidelines - panel member

Publication:


Award Lectureship

Costantino Benedetti, MD was awarded the 14Th “Marialuisa Ferrari Lectureship for Life”

which he delivered at the Methodist Research Institute in Houston on September 16, 2013

The lecture title was: “The Two Faces of Pain: A Beneficial, Protective Vital Function; A Malefic Consuming Neurologic Disease.”

Future Goals
• Continue to:

Provide guidance at the local and national level on the improvement of pain therapy.

Participate in the NCCN Cancer Pain Guidelines.

Participate in the American Pain Society Public Policy committee.

Education:

• One member of the team (Costantino Benedetti, MD) is the director of the DOC 3, four-week elective clinical rotation of Anesthesiology Pain Medicine; 2 to 3 fourth-year medical students took the rotation each month of the academic year.

  • Fourth-year medical student DOC 3 lectures given
  • Total 3 hours per month.
  • The lecture on Pathophysiology of Pain video recorded and placed on the medical School internet for students to see before the two life lectures.

  • The following one-hour lectures were given on 11 different occasions as live lecture. All these lectures are mandatory for all fourth-year students:

1. Pain: *The Disease and Its Therapy - Basic Consideration*

2. Basic Concepts of Analgesic Therapy and Case Reports

  • Medical student anesthesia rotation lectures, “The Two Faces of Pain: A Beneficial, Protective Vital Function; A Malefic Consuming Neurologic Disease,” were given on six different occasions. Given once a month.

Future Goals

Continue to educate medical students and other healthcare professionals on pain medicine and emphasize the need for increasing education regarding the difference
of the vital protective function which is the perception of physiological pain versus the malevolent neuropathic disease which is acute and chronic pain.

Clinical

2013-2014 Highlights and Accomplishments

During the academic year 2013-2014, the Acute Pain Service provided the following patient care:

- **3555 in-patient visits (previous year 3375 visits, 5% increase)**
  - 450 consults
  - 1,413 follow-up consult visits
  - 520 patients received epidural analgesia for acute postoperative or post traumatic pain
  - 1692 epidural follow-up visits were provided to these patients

Future Goals

- Expand the use of epidural analgesia for postoperative and post traumatic pain.
- Educate primary service physicians on the proper use of equianalgesic opioid dosage conversion to expedite hospital discharge.
POST ANESTHESIA CARE UNIT

Thomas J. Smith,
MD Assistant
Professor Clinical
Director, PACU
University Hospital

Research

2013–2014 Highlights and Accomplishments
The post anesthesia care unit (PACU) is directly involved with ongoing research projects by being a central location for data collection. Currently we are enrolled in a new postoperative nausea and vomiting study which directly affect PACU care and length of stay.

2014-2015 Future Goals
PACU staff and faculty will be encouraged to seek out research opportunities and help facilitate ongoing research projects while assisting in patient enrollment and data collection on current projects.

Education

2013-2014 Highlights and Accomplishments
Residents are assigned a daily reading schedule including chapters, journals, and reviews in order to strengthen the educational value of the PACU rotation. A PACU packet is distributed at the beginning of the rotation to help guide the residents to meet the goals and objectives of the rotation. Residents take an active role in postoperative pain management using different modalities, including peripheral nerve block techniques, in order to decrease pain and increase patient satisfaction.

2014-2015 Future Goals
Milestones are being implemented into the PACU rotation. The residents are met with and given expectations for the rotation for the month. They are then met with informally mid-month and given verbal feedback on their performance by information gathered from PACU faculty and nursing staff. There will be an end of rotation meeting at which time verbal feedback and assign milestones levels will be given, as well as, a summative PACU evaluation.

Clinical

2013–2014 Highlights and Accomplishments
The opening of The James Cancer Hospital has added more operating rooms and anesthetic locations, in turn, leading to more recovery beds and a larger PACU dedicated to James’ patients. An Anesthesiologist is assigned daily to this specific PACU location with limited operating room responsibility in order to be readily available, thus increasing patient care and satisfaction while expediting transfer of patients to the next level of recovery.

2014–2015 Future Goals
Continue to provide exemplary patient care by utilizing best practice guidelines and evidence based medicine.
Barbara M. Rogers, MD
Assistant Professor
Clinical
Medical Director, OPAC

2014 Highlights and Accomplishments

• OPAC nursing staff provided the following patient education:

• Pre-op skin prep with chlorhexidine gluconate soap distribution and education for all patients
• Pre-op general instruction
• Pre-op type and cross patient instruction that has led to fewer blood bank errors.
• Pre-op nasal culture screening procedure, indication for and potential treatment of positives
• Obstructive sleep apnea risk (condition and sleep study information) education
• Preparation of the known obstructive sleep apnea patient for day of surgery
• Tobacco cessation
Clinical

2014 Highlights and Accomplishments

OPAC has finished the first full year as a clinic with both an anesthesia and Internal medicine focus.
OPAC has made several process changes including sending patients to the lab for phlebotomy instead of using the OPAC clinic staff. This frees the OPAC staff for more immediate needs.
We have re-engineered many of our clinical work flows to use our staff in a more efficient manner.

OPAC is currently undergoing remodeling, this will allow the clinic space to be used in the most efficient and cost appropriate manner.

OPAC continued with several quality initiatives. We continue to receive a report that lists all patients with cancelled surgical cases within 48 hours of scheduled surgery who have gone through the OPAC. We then review all cases for improvement initiatives.

We continue to work with all surgeons to improve same day OPAC visits to improve patient and surgeon satisfaction.
We continue to work with international patients and patients coming from other parts of the US to streamline their visits and gather appropriate information before surgery.

OPAC continues as part of a Per-op Quality Blood Banding Initiative where blood bank policies are revised and work flows from registration to lab are being improved.

The anesthesia alert Integrated Healthcare Information System documentation flow was revised to include documentation within the OPTIME scheduling screens so that better planning could take place during the daily anesthesia/leadership meetings.

OPAC continues to collaborate with the transplant team to have a transplant anesthesiologist see potential liver transplant patients in the OPAC clinic.
OPAC has started a new initiative with hematology when a sickle cell patient is identified in the clinic, to decrease perioperative complications in this subset of patients.

OPAC continues to collaborate with cardiology and pharmacy to better identify and prepare patients who have vascular stents.

**Education**

We continue to educate anesthesiology residents in the clinic during their preoperative rotation. The residents then choose an educational project to be involved in during the rotation. These have included case reports, presentations to the clinic and developing new worksheets for patient care.

**Work Place Culture**

The OPAC leadership is actively working on creating a work place of choice, thru small group staff meetings and team member assignments in issues such as emotional intelligence and communication.
Outpatient Surgery Center (OSC)

The Outpatient Surgery Center (OSC) at The Ohio State University Eye and Ear Institute is a free-standing outpatient department (HOPD) of The Ohio State University Wexner Medical Center. Outpatient procedures requiring various combinations of General, Regional or Sedation Anesthesia are performed at the center by surgeons from Otolaryngology, Ophthalmology, Upper Extremity Orthopedics, Plastic Surgery, and Urology. The seven operating rooms include a state-of-the art cystoscopy suite. Additionally, preoperative and postoperative patient care areas along with reception and waiting areas are located on the first floor of The Ohio State University Eye & Ear Institute. The center is staffed from 6:00 am to 5:00 pm, Monday through Friday, primarily for adult patients requiring surgical intervention under local anesthesia, monitored anesthesia care, regional anesthesia, or general anesthesia. Surgery is anticipated to be performed between the hours of 7:00 am to 3:00 pm with most patients being discharged by 5:00 pm. The center does not have the capacity for overnight patient stays.

The OSC’s medical director, administrative director, and nursing clinical managers assess, plan, implement and evaluate the delivery of care and services. The OSC has an Executive Team and a Process and Quality Committee to ensure that the delivery of care provided is consistent with the mission, standards, and policies established for patient care. The Scope of Care, which is unique and specific for the OSC, is reviewed and updated on an annual basis and must be approved by the Executive Team. This past year the Scope of Care was revised to more specifically delineate criteria for morbidly obese patients and to allow patients with a prior
history of difficult intubation to be anesthetized at OSC if prior anesthesia evaluation is obtained. The OSC’s patient population includes those of ASA-PS I-IV. Pediatric patients of ages 13-18 must be prescreened and preapproved.

The goal of the OSC is to support the tripartite mission of The Ohio State University Wexner Medical Center: Patient Care, Research, and Education.

The OSC uses a multi-disciplinary approach in the delivery of patient care that encourages continuous quality and performance improvement as well as collaboration. Results of quality measures and benchmarks are used to optimize both patient satisfaction and patient outcomes. To meet this objective, the OSC became an enrolled member in the SAMBA Clinical Outcomes Registry and began collecting patient outcomes and quality data in April 2014. The large amount of data collected, when combined with benchmarked data obtained from hundreds of other ambulatory facilities, should provide insight into opportunities to further improve our surgery center. Multiple initiatives aimed at improving patient satisfaction were implemented during the fiscal year. These include increased family presence with patients throughout the perioperative process, most significantly during the entire preoperative course. Another key patient initiative was the standardization of the IV placement process including the use of buffered lidocaine prior to IV catheter insertion. Process changes aimed at improving quality outcomes included moving placement of blocks for Ophthalmology procedures from the preop holding area to the operating room which allowed for enhanced monitoring and sedation of patients for these procedures. Development of an efficient and timely process for obtaining chest x-rays in ambulatory surgery patients was also implemented. Notably, the Department of Anesthesiology initiated use of an intraoperative electronic record-keeping module during a Go-Live process in February 2014. This system should allow for further standardization of anesthesia records to improve the quality of data and the capturing of billed services. All of these changes were put into practice during the busiest year, as measured by surgical volume, in the history of the Outpatient Surgery Center. The OSC surgical volume topped 6000 cases for the first time, finishing at 6113, a 7.2% increase year over year. This also represents a 115% growth in surgical volume in the 5 years of operation for the center (see Figure 1). Due to a commitment to preoperative screening and high quality care only 64 patients had their surgery postponed or cancelled on the day of surgery (1.04%) and 14 patients required hospital admission (0.23%) despite a relatively high patient acuity for an ambulatory surgery facility. In an effort to drive these numbers even lower, an aggressive overhaul of the PAT process began in February. This multi-disciplinary team is developing an entirely new process aimed at improving patient screening and preop optimization, proper utilization of the limited operating locations in the Medical Center, and patient and surgeon satisfaction. This process improvement is
expected to operationalize in FY 2015 and should completely change how and when we prepare patients for surgery at OSUWMC. However, all of these initiatives are meaningless if patient satisfaction is not improved. Significantly, the OSC demonstrated improvement throughout the year in its organization-leading Press Ganey Overall Assessment scores. This culminated in June 2014 with a raw score of 99.2 (99th percentile), which was one of the highest ever achieved. Continued improvement is expected as the center moves forward.

Training of residents and fellows in multiple disciplines occurs daily at the OSC. Anesthesiology resident education is being revised to achieve the objectives of the American Board of Anesthesiology Content Outline in the sections “Anesthesia for Ambulatory Surgery” and “Costs of Medical/Anesthesia Care, Operating Room Management.” New methods of presenting this material includes narrated, self-running PowerPoint presentations that are accessible online through a new OSC-specific Buckeye Box folder. This will allow residents to watch the presentation when it is convenient for them and then have a more in-depth discussion of the content with their attending. Another exciting development was the approval of a new Ambulatory Business Fellowship that was approved at a meeting of the Graduate Medical Education committee in June 2014. This fellowship, scheduled to begin in July 2015, will offer the opportunity for a graduate of an Anesthesiology residency program to acquire skills in the clinical management of ambulatory surgery patients, to develop management skills and to obtain an Executive MBA at the OSU Fisher College of Business. This 2-year fellowship is unique in that it will prepare physician leaders and equip them with the necessary skills to guide medicine into the future.

Research at OSC is ongoing in multiple disciplines as well. In the Department of Anesthesiology during FY 2014 we began to prepare the IRB application for a study titled: “A Retrospective Chart Review of Patients with Obstructive Sleep Apnea undergoing ENT Procedures that Required Hospital Admission.” The Principal Investigator is Dr. Michael Guertin and the collection and analysis of data is being coordinated through the clinical research division in the Department of Anesthesiology with support provided by the department. This multi-disciplinary initiative is the first-step in a process to determine the best postoperative course of treatment for patients with obstructive sleep apnea who undergo ENT procedures. Based on the results of this study, further prospective protocols will be undertaken. Other future prospective trials were being discussed including a study to evaluate the effectiveness of multimodal preemptive analgesia with acetaminophen and gabapentin.
### Figure 1. Surgical Volume at the OSUWMC Outpatient Surgery Center at EEI

<table>
<thead>
<tr>
<th>Volume By Service</th>
<th>Ophthalmology</th>
<th>Otolaryngology</th>
<th>Plastics</th>
<th>Hand</th>
<th>Urology</th>
<th>Other</th>
<th>Total</th>
<th>Year over Year Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY10</td>
<td>1422</td>
<td>731</td>
<td>254</td>
<td>431</td>
<td>0</td>
<td>2838</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY11</td>
<td>1635</td>
<td>1114</td>
<td>351</td>
<td>1305</td>
<td>0</td>
<td>4405</td>
<td>55.2%</td>
<td></td>
</tr>
<tr>
<td>FY12</td>
<td>1818</td>
<td>1051</td>
<td>381</td>
<td>1513</td>
<td>196</td>
<td>4959</td>
<td>12.8%</td>
<td></td>
</tr>
<tr>
<td>FY13</td>
<td>1963</td>
<td>997</td>
<td>552</td>
<td>1637</td>
<td>551</td>
<td>5700</td>
<td>14.9%</td>
<td></td>
</tr>
<tr>
<td>FY14</td>
<td>2360</td>
<td>959</td>
<td>321</td>
<td>1914</td>
<td>556</td>
<td>6113</td>
<td>7.2%</td>
<td></td>
</tr>
</tbody>
</table>
**Anesthesia Services James Cancer Institute**

**Dr. Ryan Dalton**

**Education**

*2014 Highlights and Accomplishments*

Perioperative technician FTE’s have fully been transitioned and integrated into anesthesia technicians. The service is coordinated by Chad Barto. Chad continues to onboard and orient technicians as the service needs grow.

The focus of current and future education will be cancer specific anesthesia care and patient safety.

**Clinical**

*2014 Highlights and Accomplishments*

December, 2014 witnessed the transition to The New James Cancer Hospital and the opening of five additional operating rooms. The transition went very smooth in terms staff satisfaction and patient safety in the perioperative areas. Surgical hours were 37 percent over the expanded budget for the first month of service and then leveled off to budget in January.

However, there are challenges that will need to be addressed. We saw an increase of “outlier” turn over time by 26 percent. Outliers are defined by turn over times that are greater than one hour. The average duration of the outliers was 90 minutes. We are continuing to investigate the etiology of the outliers. Areas of improvement will concentrate on central processing, anesthesia work flow and surgical staff work flow.

Another challenge has been an increased propensity of delayed first case starts. We will address workflow issue to improve this.

At this point it is difficult to judge the growth in any one service due to the expansion of surgeons and surgical groups into the business unit. With that being said there has been a successful transition of neurologic surgery and orthopedic tumor surgery to the cancer center. Currently there are four services waiting on block time. These blocks should be filled once The James annexes four additional operative rooms from University Hospital.
Radiation oncology completed 27 cases in the past year. The block allocation for radiation oncology has been expanded to approximately 14 cases per month. Utilization of this block will be examined throughout the year.

There should also be future increases in interventional radiology as those suites come online for anesthesia.

2015 Future Efforts

While the transition to the New James tower has been a success, the future does hold challenges with efficiency. We plan to meet these challenges through increased teamwork and communication. The center of this effort will be a James centric daily meeting to discuss the challenges that wait the following day. We hope to improve first case OR start times and decrease turn over times by discussing the cases and making sure proper equipment and staffing are available.

I would like to thank everyone who has been a part of the transition effort. Your work has been amazing.

Sincerely,

Ryan Dalton, MD
Assistant Professor, Clinical Department of Anesthesiology
Director of Anesthesia Services, The Arthur G. James Cancer Hospital Wexner Medical Center at The Ohio State University
CRNA ANNUAL REPORT 2014

CHARLES MARTIN, CRNA

CLINICAL:
1. The Department of Anesthesiology at The Ohio State University Wexner Medical Center consists of over 90 anesthesiologists, 82 CRNAs and 1 AA. CRNAs/AAs currently provide anesthesia to all hospitals within the Health System including: University Hospital, The new James Cancer Hospital and Solove Research Institute, The Ross Heart Hospital, Ohio State East Hospital, The Eye and Ear Institute, and Harding Hospital.
2. An extension of the Outpatient Surgery Center is set to open in May 2015 complete with 4 operating rooms.
3. CRNAs/AAs provide anesthesia for a growing list of surgical services including: Hearts, Neurology, Transplant, Obstetrics, Thoracic, and Surgical Oncology. We also staff many off-site locations including: EP Lab, MRI, CT scan, ECT, Endo, Interventional Radiology, Radiation Oncology, and Pulmonary Diagnostics.
4. CRNAs/AAs continue to provide weekend and holiday coverage as part of the team approach.
5. Our current FTE count stands at 71.35 with a total staff count at 82, including IRP staff.
6. CRNAs/AAs staff 1 pediatric OR with attendings from Nationwide Children’s Hospital to perform daily radiation procedures.
7. CRNAs/AAs provide OT to all services on a needs basis.
8. CRNA Heart team will expand call services to include two weekends per month. This is a new approach brought forward this year and Joe Friessen, lead CRNA for Cardiac Anesthesia has taken ownership of this project.
9. Recruiting continues with a SRNAs coming this year from Duke University, Otterbein University, and The University of Akron. We also have our second AA arriving April 2015 from Houston, Texas.
EDUCATION:

1. Ohio State Wexner Medical Center continues to serve as a clinical site for SRNAs and AAs. The SRNA programs are Otterbein University and The University of Akron. The AA program is The Cleveland Clinic. On a daily basis, there are about 3-6 students throughout the health system. Jim Dando, CRNA serves as the clinical coordinator for the SRNAs and Nate Flath, AA serves as the clinical coordinator for the AA students.

2. Danielle Scharpf, is the first CRNA to complete the DNP at Ohio State.

3. Shawn Hedderman, CRNA serves as Chair of the CRNA Subcommittee which reports to senior nursing leadership through the Shared Governance model. Shawn also continues to serve as the lead CRNA for Quality and was selected as “CRNA of the Year 2014” by his peers.

4. The CRNAs/AAs at OSUWMC maintain an active Journal Club facilitated by Beth Hange, CRNA

5. Zach Vorst, CRNA is active with and serves on the OSANA Board of Directors.

FUTURE GOALS

1. Continue to practice in a team approach model with attending anesthesiologists who cover all CRNAs and AAs in a 2:1 or 3:1 model.

2. Participation in Anesthesia Grand Rounds and Departmental M&M.

3. We foster professional development through involvement or membership in state and national organizations and their publications (OSANA, AANA, NBCRNA, and ASPF). These organizations are congruent with our dedication to excellence and providing safe, high quality nurse anesthesia care.
Grants/trials


SIRS (Steroids in Cardiac Surgery) Trial, **TJ Papadimos (site Co-I).**

AbbVie Clinical Study Protocol M13-796: A Phase 2b, Randomized, Double-Blind, Placebo-Controlled, Safety and Efficacy Trial of Multiple Dosing Regimens of ABT-719 for the Prevention of Acute Kidney Injury in Subjects Undergoing High Risk Cardiac Surgery, **TJ Papadimos (site Co-I).**

SBIR. Antibiotic decision support study. Pappada S, PI, Aptima, Inc. **Papadimos TJ** and **SB Moffatt Bruce, Co-Principal Site Investigators**, $40,000 ($10,000 to The Ohio State University). Proposal to design, develop, and commercialize a fully functional antibiotic prediction tool that will allow health care providers to dynamically modify antibiotic delivery. **Awarded** April 2014.

SBIR. A New Quantitative Monitor for Continuous Assessment of ICU Sedation (OptiSED). National Institute of General Medical Sciences. Gov. Proposal #1R43GM108262, $350,000 ($120,000 to The Ohio State University). **Sikov T,**
Principal Investigator. **Papadimos TJ, Principal Site Investigator. Awarded 13 September 2013.**

SBIR. ACLAMATE Study (Phase II). Automated Cognitive Load Assessment for Medical StaAff Training and Evaluation. Topic #: DHP13-002. Control#H2-0066, $1,000,000 ($190,000 to The Ohio State University). **Awarded September 2014.** Pappada S, PhD, Corporate PI (Aptima, Inc). Susan Moffat-Bruce, T.J. **Papadimos (Site Co-PIs).**

A prospective, multi-center, randomized, double-blind placebo controlled to evaluate the safety and efficacy of perioperative anti-thrombin supplementation in patients undergoing high risk cardiac surgery with cardiopulmonary bypass [Grifols Therapeutics, Inc; #GTI1307]. Essandoh M, Dimitrova G Co-I, Flores A Co-I, Stein E Co-I, **Papadimos TJ (Co-I).**

Intramural OSU Grant. Development of a comprehensive clinical decision support system and educational tool to support optimization of glycemic control in the hospital and critical care setting. $20,000. **Papadimos TJ, Principal Investigator;** Susan Moffatt-Bruce Co-I, Pappada S, Co-I, Casellion-Laros K, Co-I, Feeney J, Co-I. **Awarded Jan 2014.**

**IRBs**

2013H0285. Development of a comprehensive clinical decision support system and educational tool to support optimization of glycemic control in the hospital and critical care setting (TJ Papadimos PI).


2012H0383. Retrospective evaluation of the association of nutritional indices with postoperative outcomes in patients undergoing cardiac surgery (TJ Papadimos Co-I).


2013E0145. A retrospective study evaluation the usefulness of the comorbidity-polypharmacy score (CPS) for assessing patients undergoing cardiac surgery (TJ Papadimos Co-I).

2011H0212 Steroids in cardiac surgery (TJ Papadimos Co-I).


Original papers and case reports

Paying medical bills at Kiosks in China: Is it a viable model for the USA?  
Xia Y, Xu X, Zheng X, Papadimos TJ.  
Related citations  
Select item 25024948

Chlorhexidine mediated access site ulceration.  
Patil PS, Branstiter AD, Tripathi RS, Papadimos TJ.  
Related citations  
Select item 25024942

Thoracostomy tubes: A comprehensive review of complications and related topics.  
Papadimos TJ, Cook CH, Stawicki SP.
Related citations
Select item 25024935

What's new in critical illness and injury science? State of the art in management of ARDS.
Stawicki SP, Swaroop M, Galwankar SC, Papadimos TJ.
Related citations
Select item 24995097

Survival of patients with cystic fibrosis on ECMO: analysis of the Extracorporeal Life Support Organization Registry.
Hayes D Jr, Kopp BT, Preston TJ, Kirkby S, Tobias JD, Papadimos TJ, Whitson BA.
Related citations

Swaroop M, Galwankar SC, Stawicki SP, Balakrishnan JM, Worlton T, Tripathi RS, Bahner DP, Bhoi S, Kaide C, Papadimos TJ.
Related citations
Select item 24804725

Challenges in managing amniotic fluid embolism: an up-to-date perspective on diagnostic testing with focus on novel biomarkers and avenues for future research.
Stawicki SP, Papadimos TJ.
Panic attack: An unusual cause of spontaneous pneumomediastinum.
Papadimos JS, Davis CS, Papadimos TJ.

Eluding meaninglessness: a note to self in regard to Camus, critical care, and the absurd.
Papadimos TJ.

Impact of infection on the prognosis of critically ill cirrhotic patients: results from a large worldwide study.
PMID: 24606193 [PubMed - in process]

An iatrogenic metabolic encephalopathy in a nonagenarian: The dilemma of a critical miss as a possible social dismissal.
Tripathi RS, Russell SB, Lyaker MR, Stawicki SP, Papadimos TJ.

Diagnosing dying.
Papadimos TJ, Gafford EF, Stawicki SP, Murray MJ.
No abstract available.
PMID: 24413552 [PubMed - indexed for MEDLINE]
Related citations
Select item 24370917

The mentor.
Papadimos TJ.
PMID: 24370917 [PubMed - indexed for MEDLINE]
Related citations

Acute upper gastrointestinal bleeding secondary to Kaposi sarcoma as initial presentation of HIV infection.
Mansfield SA, Stawicki SP, Forbes RC, Papadimos TJ, Lindsey DE.
Related citations

Anion gap as a predictor of trauma outcomes in the older trauma population: correlations with injury severity and mortality.
Leskovan JJ, Justiniano CF, Bach JA, Cook CH, Lindsey DE, Eiferman DS, Papadimos TJ, Steinberg SM, Bergese SD, Stawicki SP, Evans DC.
PMID: 24165258 [PubMed - indexed for MEDLINE]
Related citations

Invited presentations


The Ohio State University Wexner Medical Center, Department of Anesthesiology Grand Rounds. *Transurethral Resection Syndrome/Osmotic Demyelination Syndrome;* November 21, 2013.
CREATING EFFECTIVE ACADEMIC COLLABORATIONS, CENTER FOR FACULTY ACADEMIC MENTORING AND ENGAGEMENT; PANEL DISCUSSION. THE OHIO STATE UNIVERSITY COLLEGE OF MEDICINE, COLUMBUS, OHIO, FEBRUARY 6, 2014.

VISITING PROFESSOR. THE FUTURE OF PREDICTIVE MODELING AND ITS CONTRIBUTION TO PATIENT SAFETY. WENZHOU MEDICAL UNIVERSITY, WENZHOU, CHINA; APRIL 3, 2014.

VISITING PROFESSOR. MANAGEMENT OF AN ACADEMIC DEPARTMENT. WENZHOU MEDICAL UNIVERSITY, WENZHOU, CHINA; APRIL 4, 2014.

VISITING PROFESSOR. SINO-US SCIENTIFIC COLLABORATION. WENZHOU MEDICAL UNIVERSITY, WENZHOU, CHINA; APRIL 4, 2014.

THE FUTURE OF PREDICTIVE MODELING AND ITS CONTRIBUTION TO PATIENT SAFETY. THE OHIO STATE UNIVERSITY DEPARTMENT OF ANESTHESIOLOGY, COLUMBUS, OHIO; GRAND ROUNDS, MAY 15, 2014.
NEUROANESTHESIA

Sergio D. Bergese, MD
Professor
Director of Neuroanesthesia
Director of Neuroanesthesia Fellowship
Director of Clinical and Perioperative Research Fellowship
Department of Anesthesiology and Neurological Surgery

Directors Activity Report for 2013/2014 for the annual Budget and Narrative to the College of Medicine.

The Neurosciences signature program vision is to develop a top-ranked Neurosciences Institute with a strong foundation of research, education and patient care. It will be known for its compassionate, full-service, individualized “state of the art” care, cutting edge research and scholarly environment.

Key opportunities were identified and prioritized by reviewing the OSUMC neurosciences program’s current state, external competition, scientific advances by disease state, US News and World Report rankings and ability to strengthen other signature programs. The following selected opportunities will have an immediate, positive impact on the neuroscience program:

- Consolidation of the neuroscience research programs to facilitate translational research and collaboration between clinicians, clinical researchers and basic science researchers.
- Consolidation of the inpatient and outpatient care areas to maximize expertise specific to the neurosciences population and improve care coordination.
- Enhance the educational aspect through additional fellowships.
- Development of a Neurosciences Institute to coordinate all neurosciences activity, drive strategic development and hold accountability for financial performance.

A major focus of our plan is around space consolidation, and infrastructure
OSU Wexner Medical Center plans to expand its Neurological Institute with the addition of a new **Brain and Spine Hospital** in the former James Cancer Hospital and Solove Research Institute, pending approval of the $14.3 million renovation by Ohio State’s Board of Trustees.

The Brain and Spine Hospital will open in early 2016 to meet the growing need for services for patients with neurological disorders, including Alzheimer’s disease, Parkinson’s disease, multiple sclerosis, spinal cord injury, traumatic brain injury, stroke and many others. The Brain and Spine Hospital, which will be part of Ohio State’s Neurological Institute, will provide advanced clinical services and innovative research to improve the diagnosis, treatment and cure of neurological diseases.

**Ohio State’s Neurological Institute** is a university wide initiative involving 14 colleges – including engineering, business, dentistry, social work, nursing and pharmacy – along with Nationwide Children’s Hospital, that are collaborating with Ohio State’s Wexner Medical Center in areas of neuroscience and brain research.

The new Brain and Spine Hospital will expand in-patient capacity, using 90 private rooms, including some dedicated solely to clinical trials. Once the renovation is completed, the Neurological Institute’s clinical enterprise will include the new Brain and Spine Hospital, **Dodd Hall** for inpatient rehabilitation, **OSU Harding Hospital** for behavioral health and **Talbot Hall** for alcohol and drug addiction services.

The Neurological Institute is comprised of researchers, scientists and clinicians in neuroscience, neurology, neurosurgery, psychiatry, and physical medicine and rehabilitation, focusing on neuro-oncology/skull base, spine/spine trauma, stroke/cerebrovascular, neuromuscular/multiple sclerosis, neurodegenerative disorders/dementia, movement disorders, epilepsy, spinal cord injury, pain and psychiatric disorders.

In December we opened the new James Cancer Hospital and added four Neurosurgery operating rooms with a total of 8 to 10 daily sites to be covered. The new home of the James Cancer Hospital and Solove Research Institute is the third-largest freestanding cancer hospital in the United States and contains one of the largest surgical floors in the country. The size of the facility coupled with the
experienced clinical, surgical and support staff, will enable experts at the new James to handle a large volume of surgical patients.

While the residency programs are robust, we added a clinical and perioperative research fellowship; and that we accepted 6 international fellows supported by their University and or governments. The research fellows are Thomas Wojda, Byron Rosero, Omnia Mohamed, Milad Francis, and Satoshi Kimura.

Our Neuroanesthesiology fellowship had Brian Dishong, M.D., David Yehsakul, M.D., and Suren Soghomonyan, M.D., Ph.D. Dr. Dishong and Dr. Yehsakul are now faculty in the department. Michelle Humeidan, M.D. will be our new fellow this upcoming year. Neuroanesthesia, as part of the Neurosciences program will continue recruiting to meet our surgical clinical needs. Our number of neuroanesthesiologists increased to nine with the addition of Dr. Brian Dishong and Dr. David Yehsakul.

Also, Neuroanesthesia will continue its expansion of clinical research. A total of sixty-eight research protocols are active with a total of thirty-seven principal investigators, and twelve intra-departmental collaborations.

- The total industry sponsored funding is $1,275,313.69.
- Our total NIH funding is $963,036.80.
- Our PHRI funding (NIH Canadian equivalent) is $331,122.00.
- Our grant funding is $209,620.44.
- Our Grand Total is $2,779,092.93.

Resident education continues to be one of our priorities. The weekly lecture (CME category 1) added to the curriculum last year continue with great success. A weekly Journal club has also been added and continues with great attendance.

Our interest in neuro-physiology, neuro-monitoring and consciousness monitoring is growing. Several lectures on these topics were presented at conferences and grand rounds solidifying our division as an expert in this arena. The academic Thoracic and Vascular Anesthesia Program continues to thrive and grow at an exponential rate in the Department of Anesthesiology. Endovascular surgery encompasses a large number of different cases, from endovascular aneurysm repair (EVAR), to carotid stenting, to coiling of intracerebral aneurysms. The majority of vascular and thoracic patients coming through our institution have multiple co-
existing diseases including severe cardiorespiratory compromise. These patients have an extensive preoperative evaluation by anesthesia and/or internal medicine, cardiology and respirology. We have developed a multi-disciplinary perioperative high-risk clinic for optimization and follow up of these patients.

There were 3500 neurosurgical cases including gamma knife, endovascular neuro-radiology, ENT-middle fossa craniotomies and spine surgery (Neurosurgery and Orthopedics) are staffed by our service. We provide neurosurgical call coverage for all cases and this year we increased this call to a second (neuro 2). This call covers Neurosurgical and spine cases, endovascular procedures, MRI and stroke treatment.

Our goal, excellent clinical care and efficiency remain a priority. Our major asset is team work as defined in our Medical center vision statement:

*Working as a team
We will shape the future of medicine
By creating, disseminating and applying
New knowledge,
And by personalizing health care
To meet the needs of each individual.*
Pain Medicine Service

Steven Severyn, MD
Associate Professor
Clinical

The Pain Medicine Services maintained a vigorous operation fulfilling the missions of service, education, and academic activity during 2013-2014 and began preparing for a medical center-wide expansion of services and enhanced unity of effort in caring for those experiencing painful conditions. The Multidisciplinary Pain Medicine Fellowship was granted 1 permanent and 1 temporary increase in training complement and prepared to appoint its first Associate Program Director. The Pain Section of the Comprehensive Spine Center remained an essential component of the site’s pace-setting volume of > 33,000 encounters and record-setting satisfaction score of 88.2%. The section recruited 1 full-time and 2 part-time pain specialists and participated in the recruitment of additional pain specialists by the Departments of Neurology and of Physical Medicine and Rehabilitation. The section Director has been appointed to lead the development of a unified program of care envisioned to coordinate pain medicine care across the medical center utilizing physician resources of at least 3 departments. The objectives of this line of effort for the coming year include establishing a Comprehensive Pain Medicine and Headache Clinic, an Opioid Management Program, and within the OSUWMC Brain and Spine Hospital an outpatient infusion center and a designated inpatient pain medicine ward.