Department of Anesthesiology

Anesthesiology is a medical specialty encompassing a broad range of medical and scientific activities. The clinical practice of anesthesiology includes:

1. assessment of, consultation for and preparation of patients for anesthesia and surgery;
2. provision of insensibility to pain during surgical, obstetric, therapeutic and diagnostic procedures;
3. monitoring and restoration of physiologic homeostasis during the perioperative period, as well as homeostasis in the critically ill or seriously injured patient;
4. diagnosis and treatment of painful syndromes; and
5. clinical management and teaching of cardiopulmonary resuscitation (CPR).

The realm of scientific investigation in anesthesiology also spans a broad range. Scientific efforts at the cellular and molecular levels are directed to understanding the molecular mechanisms of anesthesia and analgesia. Clinical research in anesthesiology includes broad epidemiological approaches to identifying indicators of outcome as well as prospective clinical studies examining new technologies, anesthetic agents and methods.

The Department of Anesthesiology (http://anest.wustl.edu) presents the student with the opportunity to:

1. acquire and apply pharmacologic knowledge related to anesthetic, narcotic, paralytic and sedative drugs and to drugs affecting the autonomic nervous system;
2. understand and apply the basic principles of airway management and mechanical ventilation;
3. understand and apply the principles of cardiopulmonary resuscitation;
4. understand and apply the technical skills and anatomic and pharmacologic knowledge used in performing regional nerve blocks;
5. learn and apply the fundamental principles of acute and chronic pain management; and
6. learn and apply the basic principles of critical care medicine.

Anesthesiology bridges the gap between basic science and clinical medicine. It provides experience in the clinical evaluation and management of patients, and in applied physiology and pharmacology. The Department of Anesthesiology offers student experiences in the operating room, the intensive care unit, the pain clinic and the laboratory.

Website: http://anest.wustl.edu

Degrees & Requirements

While the Department of Anesthesiology does not offer its own degree, some of the department's courses are open to students in the MD and MSTP (MD/PhD) programs. Further information about the MD and MSTP degrees can be found in the Degrees & Programs Offered (http://bulletin.wustl.edu/medicine/degrees) section of this Bulletin.

Research

Research Electives in Anesthesiology

Special electives in basic science research as it applies to anesthesiology can be arranged with the principal investigators in the Department of Anesthesiology (http://anest.wustl.edu), in the Anesthesiology Research Unit and the Washington University Pain Center under the direction of Rob Gereau, PhD, or the Division of Clinical and Translational Research under the direction of Michael Avidan, MBCh. These laboratories focus on various aspects of molecular neurobiology, including ion channel structure and function; G-protein molecular biology; molecular mechanisms of anesthetic action; genetics of anesthetic responsiveness; and the molecular, cellular and genetic basis of acute and chronic pain and itch. Arrangements for these special electives are made through the specific investigators: Walter A. Boyle III, MD; Zhou-Feng Chen, PhD; Alex S. Evers, MD; Narasimhan Gautam, PhD; Richard S. Hotchkiss, MD; Christopher J. Lingle, PhD; Gustav Akk, PhD; Michael Bruchas, PhD; Yu-Qing Cao, PhD; Robert W. Gereau, PhD; DP Mohapatra, PhD; or Jose Moron-Concepcion, PhD. In addition, opportunities exist for clinical research under the direction of Michael Avidan, MBCh; Evan Kharasch, MD, PhD; Peter Nagele, MD; or Ben Palanca, MD, PhD.

Faculty

Department Chair
Alex S. Evers, MD

Department Vice Chair
Ellen M. Lockhart, MD

Visit our website for more information about our faculty (http://anest.wustl.edu/about/faculty) and their appointments.

A

Enyo Ama Ablordepey, M PH, MD
Assistant Professor of Anesthesiology (primary appointment)
Assistant Professor of Emergency Medicine in Medicine
M PH University of Pittsburgh 2007
MD University of Pittsburgh 2007

Sirajuddin Agha, MBBS
Assistant Professor of Anesthesiology (primary appointment)
MBBS Liaquat Medical College 1969
Gustav Akk, PHD
Associate Professor of Anesthesiology (primary appointment)
BS Moscow State University 1991
PHD State Univ of NY Buffalo 1997
Ream Al-Hasani, PHD
Adjunct Assistant Professor of Anesthesiology (primary appointment)
PHD University of Surrey 2009
Amrita Aranake - Chrisinger, BS1, MD
Instructor in Anesthesiology (Pending Dean's Approval) (primary appointment)
BS1 Rutgers University 2008
BS Rutgers University 2008
MD Washington Univ in St. Louis 2013
Umeshkumar Athiraman, MD
Assistant Professor of Anesthesiology (primary appointment)
MD M.G.R. Medical University 2013
Jacob D Aubuchon, MD
Assistant Professor of Anesthesiology (primary appointment)
BA University of MO Kansas City 2005
MD University of MO Kansas City 2008
Michael Simon Avidan, MBBCH
Professor of Anesthesiology (primary appointment)
Professor of Surgery (Cardiothoracic Surgery)
MBBCH University of the Witwatersra 1991
Devin M Barry, PHD
Instructor in Anesthesiology (Pending Dean's Approval) (primary appointment)
PHD University of MO St Louis 2012
Holger Matthias Baumann, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Free University of Berlin 1988
Arbi Ben Abdallah, PHD
Assistant Professor of Anesthesiology (primary appointment)
PHD Washington Univ in St. Louis 2011
George Richard Benzinger III, PHD, MD
Associate Professor of Anesthesiology (primary appointment)
PHD University of Chicago 1998
BS California Institute Technolo 1993
MD University of Chicago 2000
Laila M Bottros, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Ain Shams University 1977
Michael M Bottros, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Washington Univ in St. Louis 2006
Walter A Boyle III, MD
Professor of Anesthesiology (primary appointment)
Assistant Professor of Developmental Biology
Professor of Surgery (General Surgery)
MD University of CA San Francisco 1977
BS University of CA San Francisco 1974
Michael Raymond Bruchas, PHD
Henry Eliot Mallinckrodt Professor of Anesthesiology (primary appointment)
Associate Professor of Neuroscience
PHD Creighton University 2004
Yuqing Cao, PHD
Associate Professor of Anesthesiology (primary appointment)
PHD University of CA San Francisco 1999
BS Fudan University 1989
Laura Francesca Cavallone, MD
Assoc Professor of Anesthesiology (primary appointment)
MD University of Milan 1993
Zhoufeng Chen, MS, PHD
Russell D and Mary B Shelden Professor of Anesthesiology (primary appointment)
Professor of Developmental Biology
Professor of Psychiatry
MS School Not Listed 1987
BS Wuhan University 1983
PHD University of Texas Austin 1994
Ziwei Chen, MBBS, PHD, MS
Assistant Professor of Anesthesiology (primary appointment)
MBBS Dalian Medical University 1995
PHD Peking University 2001
MS Dalian Medical University 1998
Wayland W. Cheng, MD, PHD
Instructor in Anesthesiology (primary appointment)
BS Wheaton College 2005
MD Washington Univ in St. Louis 2012
PHD Washington Univ in St. Louis 2012
Kelly Lynne Chilson, MD
Associate Professor of Anesthesiology (primary appointment)
MD University of MO St Louis 1999
Albert Murray Cohen, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Baylor University 1977
Bryan A Copits, PHD
Instructor in Anesthesiology (primary appointment)
PHD Northwestern University 2012
Thomas E Cox, MD
Professor of Anesthesiology (primary appointment)
BA Johns Hopkins University 1981
MD University of Virginia 1985
Bakul Dave, MD, MD1
Assistant Professor of Anesthesiology (primary appointment)
MD BJ Medical College 1984
MD1 University of Toledo 1997

Thomas Allen Davis, MD
Assistant Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
MD University of Tenn Memphis 1969

Charl Johan De Wet, MBCHB
Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Surgery (Cardiothoracic Surgery)
MBCHB University of Pretoria 1990

Julianne Elizabeth Donnelly, MD
Assistant Professor of Anesthesiology (primary appointment)
Assistant Professor of Surgery (Cardiothoracic Surgery)
MD University of Kansas 2009

Anne Meredith Drewry, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Washington Univ in St. Louis 2006

Julie Kosto Drobish, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Washington Univ in St. Louis 2009
BS Pennsylvania State University 2006

Nicole Marie Durko, DOST
Assistant Professor of Anesthesiology (primary appointment)
BS St Xavier University 1995
DOST Midwestern University 2001

Daniel Emmert, MD
Assistant Professor of Anesthesiology (primary appointment)
Assistant Professor of Surgery (Cardiothoracic Surgery)
MD Saint Louis University 2005

Alex S Evers, MD
Henry E Mallinckrodt Professor of Anesthesiology (primary appointment)
Head of the Department of Anesthesiology
Professor of Developmental Biology
Professor of Medicine
MD New York University 1978
BS Yale University 1974

James J Fehr III, MD
Professor of Anesthesiology (primary appointment)
Professor of Pediatrics
MD Davenport University 1988
BA Davenport University 1984

Steven Edward Feit, MD
Assistant Professor of Anesthesiology (primary appointment)
BA Indiana State University 1978
MD University of MO Columbia 1982

Mitchell Evan Fingerman, MD
Associate Professor of Anesthesiology (primary appointment)
MD University of Connecticut 2004

Rosemary Foster, MD
Instructor in Anesthesiology (primary appointment)
MD Saint Louis University 2013

David Alan Friedman, MD
Assistant Professor of Anesthesiology (primary appointment)
BS University of Kansas 1981
MD University of Kansas 1985

Narasimhan Gautam, PHD, MS
Professor of Anesthesiology (primary appointment)
Professor of Genetics
PHD University of Bombay 1985
BS School Not Listed 1977
MS School Not Listed 1979

Preeta George, MBBS
Assistant Professor of Anesthesiology (primary appointment)
MBBS Bangalore University 1998

Robert W Gereau, PHD
Dr Seymour and Rose T Brown Professor of Anesthesiology (primary appointment)
Professor of Neuroscience
PHD Emory University 1995
BS Southwest Misouri St Universi 1991

Erin A Gibbons, MD
Assistant Professor of Anesthesiology (primary appointment)
MD University of North Carolina 2008
BS University of North Carolina 2003

Yehuda Ginosar, MD
Professor of Anesthesiology (primary appointment)
MD University of London 1986

Thomas James Gobhirscb, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Loyola University Chicago 1985
BS University of Notre Dame 1980

Judith P Golden, PHD, MA
Assistant Professor of Anesthesiology (primary appointment)
BS Hofstra University 1984
PHD Saint Louis University 1994
MA Hofstra University 1986  
**Vivian Maria Gonzalez-Perez, PHD**  
Instructor in Anesthesiology (primary appointment)  
PHD University of Valparaiso 2009  

**Thomas J Graetz, MD**  
Associate Professor of Anesthesiology (primary appointment)  
Associate Professor of Surgery (Cardiothoracic Surgery)  
MD Saint Louis University 2005  

**Stephen H Gregory, MD**  
Instructor in Anesthesiology ( Pending Dean’s Approval) (primary appointment)  
MD Saint Louis University 2012  

**Russell J.I. Groener, MBCHB**  
Associate Professor of Anesthesiology (primary appointment)  
MBCHB University of Cape Town 1983  

**Anthony Herbert Guarino, MA, MD**  
Associate Professor of Anesthesiology (primary appointment)  
MA Yale University 1988  
BA Yale University 1986  
MD University of Maryland 1992  

**Ryan C Guffey, MD**  
Assistant Professor of Anesthesiology (primary appointment)  
MD Wayne State University 2007  

**Charles B Hantler, MD, MA**  
Professor of Anesthesiology (primary appointment)  
MD Davenport University 1977  
BS Davenport University 1971  
MA Davenport University 1973  

**Courtney Alan Hardy, MD**  
Associate Professor of Anesthesiology ( Pending Executive Faculty Approval) (primary appointment)  
MD Loyola University Chicago 2000  

**Simon Haroutounian, PHD, MA**  
Assistant Professor of Anesthesiology (primary appointment)  
PHD Hebrew University 2011  
MA Hebrew University 2005  

**Daniel Luke Helsten, MD**  
Associate Professor of Anesthesiology (primary appointment)  
MD University of Kentucky 2001  
BS University of Kentucky 1997  

**Mohammad Anas Helwani, MD**  
Assistant Professor of Anesthesiology (primary appointment)  
Assistant Professor of Surgery (Cardiothoracic Surgery)  
MD Damascus University 1998  

**Robert E Herold, MD**  
Assistant Professor of Anesthesiology (primary appointment)  
MD Washington Univ in St. Louis 1974  

---  

BA Wabash College 1970  

**Omokhaye M Higo, MBBS**  
Associate Professor of Anesthesiology ( Pending Executive Faculty Approval) (primary appointment)  
MBBS University of Ilorin 1990  
BS University of Ibadan 1984  

**Gary E Hirschberg, MD**  
Professor Emeritus of Anesthesiology (primary appointment)  
MD Hahnemann University 1972  
BA Princeton University 1968  

**Richard S Hotchkiss, MD**  
Professor of Anesthesiology (primary appointment)  
Professor of Developmental Biology  
Professor of Medicine  
Professor of Surgery (General Surgery)  
MD University of Virginia 1976  

**Hawpeng Stephen Hsu, MD, MS**  
Assistant Professor of Anesthesiology (primary appointment)  
MD Taipei Medical University 1983  
MS Emory University 1993  
BA Georgia St University 1991  

**Hongzhen Hu, PHD**  
Associate Professor of Anesthesiology (primary appointment)  
PHD Ohio State University 2004  

**Rocco Huenelke, MD**  
Assistant Professor of Anesthesiology (primary appointment)  
MD Martin-Luther-University 1996  

**Catherine Ifune, PHD, MD**  
Associate Professor of Anesthesiology (primary appointment)  
BS California Institute Technolo 1985  
PHD Washington Univ in St. Louis 1990  
MD Washington Univ in St. Louis 1997  

**Selma E.h.o. Ishag, MD, PHD**  
Assistant Professor of Anesthesiology (primary appointment)  
MD University of Khartoum 1987  
PHD University of Khartoum 1996  

**Daniel Thomas Kane, MD**  
Assistant Professor of Anesthesiology (primary appointment)  
MD Washington Univ in St. Louis 1989  

**Ivan M Kangrga, PHD, MD**  
Professor of Anesthesiology (primary appointment)  
PHD Iowa State University 1991  
MD University of Belgrade 1982  

**Menelaoas Karanikolas, MD1, MD**  
Associate Professor of Anesthesiology (primary appointment)  
MD1 School Not Listed 1998
MD Athens University Med School 1988

Jacob Brian Keeperman, MD
Assistant Professor of Anesthesiology (primary appointment)
Assistant Professor of Emergency Medicine in Medicine
MD Loyola University Chicago 2006

Rainer Kentner, MD
Assistant Professor of Anesthesiology (primary appointment)
MD University of Tuebingen 1987

Paul William Kerby, MBBS
Assistant Professor of Anesthesiology (primary appointment)
BS King's College London 2001
MBBS King's College London 2004

Evan David Kharasch, PHD, MD
Russell and Mary Shelden Professor of Anesthesiology (primary appointment)
Professor of Biochemistry and Molecular Biophysics
PHD Northwestern University Med 1983
MD Northwestern University Med 1984

Shahrdad Khodamoradi, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Washington Univ in St. Louis 1990
BA Vanderbilt University 1985

Tessa Marie King, MD, MD1
Assistant Professor of Anesthesiology (primary appointment)
MD University of Kansas 1997
MD1 University of Kansas 1997
BA School Not Listed 1993

Justin Knittel, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Case Western Reserve Univ 2009

Helga Komen, MD
Instructor in Anesthesiology (primary appointment)
MD University of Zagreb 1996

Joseph F Kras, DDENT, MD
Associate Professor of Anesthesiology (primary appointment)
BS Loyola University Chicago 1977
DDENT Loyola University Chicago 1982
MD Hahnemann University 1991

Catherine P Kruycyak, MD
Assistant Professor of Anesthesiology (primary appointment)
BA Rutgers University 1982
MD U Medical-Dental Of New Jersey 1986

Anand Lakshminarasimhachar, MBBS
Associate Professor of Anesthesiology (primary appointment)
MBBS Bangalore University 1994

Chakrapol Lattanand, MD
Assistant Professor of Anesthesiology (primary appointment)

MD Hahnemann University 2000

Chris Cheng-Fu Lee, PHD, MD
Associate Professor of Anesthesiology (primary appointment)
PHD Beijing Medical University 1991
MD Hubei Medical University 1985

Christopher J Lingle, PHD
Professor of Anesthesiology (primary appointment)
Professor of Neuroscience
BS University of Oregon 1972
PHD University of Oregon 1979

Qianjin Liu, MD, PHD
Assistant Professor of Anesthesiology (primary appointment)
MD Nanjing Medical University 1983
PHD Saint Louis University 1997

Qin Liu, PHD
Assistant Professor of Anesthesiology (primary appointment)
Assistant Professor of Ophthalmology and Visual Sciences
BS Wuhan University 1998
PHD Chinese Academy of Sciences 2004

Ellen M Lockhart, MD
Professor of Anesthesiology (primary appointment)
Vice Chairman of Anesthesiology
MD University of Texas Southwest 1993

Nicolas Massaly, PHD
Instructor in Anesthesiology (Pending Dean's Approval) (primary appointment)
PHD Universite Paul Sabatier 2012

John D McAllister, MD
Professor of Anesthesiology (primary appointment)
Professor of Pediatrics
MD University of Manitoba 1980
BS University of Manitoba 1982

Jordan Gary McCall, PHD
Assistant Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
PHD Washington Univ in St. Louis 2014

Molly Ann McCormick, MD
Assistant Professor of Anesthesiology (primary appointment)
MD University of MO Columbia 1987

Heather McKenzie, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Loma Linda University 2005

Konrad Meissner, MBBS
Adjunct Instructor in Anesthesiology (primary appointment)
MBBS University of Leipzig 1998

Allison Denise Mitchell, MD
Instructor in Anesthesiology (primary appointment)
BS Howard University 2008
MD Univ Texas Health Sci San Anto 2012

Durga Prasanna Mohapatra, PHD
Associate Professor of Anesthesiology (primary appointment)
PHD University of Erlangen 2011

Michael C. Montana, MD
Instructor in Anesthesiology (Pending Dean's Approval) (primary appointment)
MD Washington Univ in St. Louis 2012
BA University of Virginia 2003

Robert Paul Moore, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Washington Univ in St. Louis 2004

Jose Moron-Concepcion, PHD
Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Neuroscience
PHD University of Barcelona 1998

Jeremiah J Morrissey, PHD
Professor of Anesthesiology (primary appointment)
BA Macmurray College 1969
PHD Saint Louis University 1974

David J Murray, MD
Carol B. and Jerome T. Loeb Professor of Anesthesiology (primary appointment)
MD University of Saskatchewan 1978
BS University of Saskatchewan 1973

Guido Musch, MD
Professor of Anesthesiology (primary appointment)
MD University of Milan 1993

Peter Nagele, MD
Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Genetics
MD Univ. of Innsbruck - Medical 1995

Joan M Niehoff, MD
Associate Professor of Anesthesiology (primary appointment)
BA University of MO Kansas City 1982
MD University of MO Columbia 1982

Daniel C Nieva, MD
Associate Professor of Anesthesiology (primary appointment)
BS University of Iowa 1998
MD University of Iowa 2003

Aaron John Norris, PHD, MD
Instructor in Anesthesiology (Pending Dean's Approval) (primary appointment)
PHD Washington Univ in St. Louis 2012
MD Washington Univ in St. Louis 2012
BS Colorado St University 2001

Sydney Marie Nykiel-Bailey, MD
Assistant Professor of Anesthesiology (primary appointment)
BS Saint Louis University 2001
MD University of MO Kansas City 2005

Patrick Ross O'Neill, PHD
Instructor in Anesthesiology (primary appointment)
BS University of California 2004
PHD University of California 2010

Folasade Oladapo, MD
Assistant Professor of Anesthesiology (primary appointment)
MD U Medical-Dental Of New Jersey 2008

Ben Julian Palanca, MD
Assistant Professor of Anesthesiology (primary appointment)
BS University of Washington 1997
MD Washington Univ in St. Louis 2005

Arvind Palanisamy, MD, PHD
Assistant Professor of Anesthesiology (primary appointment)
MD Tamilnadu Medical University 2000
PHD All-India Inst of Medical Sci 2003

Chris M Palmer, MD
Assistant Professor of Anesthesiology (primary appointment)
Assistant Professor of Emergency Medicine in Medicine
MD SUNY - Empire State College 2008
BS Virginia Tech 2004

Patricia A. Penkoske, MD
Instructor in Anesthesiology (primary appointment)
BS Lindenwood University 1969
MD Washington Univ in St. Louis 1974

Mitchell R Platin, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Kent St University 1987

Adrienne Rae Poe, PHD
Instructor in Anesthesiology (primary appointment)
PHD Washington St University 2011

Debra D Pulley, MME, MD
Associate Professor of Anesthesiology (primary appointment)
MME University of MO Columbia 1982
MD Saint Louis University 1987
BS Vanderbilt University 1978

Carlos Angel Puyo, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Juan N Corpas School of Medici 1989

Lesley Kathryn Rao, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Saint Louis University 2006

Rashmi R Rathor, MD
Assistant Professor of Anesthesiology (primary appointment)
MD University of Illinois 2007

Jebadurai Ratnaraj, MD1, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Madurai Kamaraj University 1979
MD1 Northrhine Westfalen Medical 1985

Eduardo Reina, MD
Instructor in Anesthesiology (primary appointment)
MD University of Illinois Chicago 2011

Michael Todd Rice, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Univ of Texas San Antonio 2002

Clare H Ridley, MD
Assistant Professor of Anesthesiology (primary appointment)
BA Columbia College of Phy & Surg 2002

Stephen L. Ristvedt, MA, PHD
Associate Professor of Anesthesiology
MA University of Pennsylvania 1983

Evan Ward Roller, MD
Assistant Professor of Anesthesiology (primary appointment)
MD University of Cincinnati 2010

Adnan Sadiq, MD
Assistant Professor of Anesthesiology (primary appointment)
Assistant Professor of Surgery (Cardiothoracic Surgery)
MD Royal College of Surgeons 2001

Angela K Saettele, MD
Assistant Professor of Anesthesiology (primary appointment)
BS State Univ of NY Buffalo 1996

Charles R Schrock, MD
Associate Professor of Anesthesiology (primary appointment)
BS University of Notre Dame 1986

Karen Seibert, PHD, MA
Professor of Anesthesiology (primary appointment)
BS Northwestern University 1981

MA University of Toledo 1983

James Serot, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Loyola University Chicago 2006

Rajiv K Shah, MD
Assistant Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
MD University of Rochester 2010

Sonia Malhotra Shahrawat, MD
Instructor in Anesthesiology (primary appointment)
MD Bharati Vidyapeeth Med College 2000
BS Tufts University 2001

Anshuman Sharma, MD
Professor of Anesthesiology (primary appointment)
BA Government Medical College 1987

Andrew John Shepherd, PHD
Instructor in Anesthesiology (primary appointment)
PHD University of Manchester 2006

John Charles Spitter, MD
Assistant Professor of Anesthesiology (primary appointment)
MD University of MO Columbia 2003

Tracey Wagner Stevens, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Washington Univ in St. Louis 2008

Sanjay Subramanian, MD
Associate Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
MD Christian Medical College 1994

Robert A Swarm, MD
Professor of Anesthesiology (primary appointment)
BA Oberlin College 1978

Martha Zorko Szabo, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Medical College of Ohio 1990

Douglas Royce Thompson, MD
Associate Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
MD University of CA San Diego 2003
BS University of CA San Diego 1998

V

Swarup Varaday, MBBS
Assistant Professor of Anesthesiology (primary appointment)
MBBS Andhra University 1989

Molly Rose Vila, MD
Instructor in Anesthesiology (primary appointment)
MD U Medical-Dental Of New Jersey 2011

Gershon Ram Volotzky, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Tel-Aviv University 1979

W

Ashley Brooke Weinhold, MD
Instructor in Anesthesiology (primary appointment)
MD University of Arkansas 2011

Timothy P Welch, MD
Assistant Professor of Anesthesiology (primary appointment)
Assistant Professor of Pediatrics
MD University of Cincinnati 2004

Brian T Wessman, MD
Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Emergency Medicine in Medicine
BS College of William and Mary 2000
MD Commonwealth College 2005

Troy S Wildes, MD
Associate Professor of Anesthesiology (primary appointment)
BS Illinois Wesleyan University 1998
MD Washington Univ in St. Louis 2002

Brett D Wolff, MD
Associate Professor of Anesthesiology (primary appointment)
MD Indiana University Bloomington 1985
BA Indiana University Bloomington 1981

X

Xiaoming Xia, MS, PHD
Assistant Professor of Anesthesiology (primary appointment)
MS Shanghai Jiao Tong University 1987
PHD Vollum Institute OHSU 1998
BS Fudan University 1984

Y

Branden Edward Yee, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Tufts University 2008
BS Tufts University 2004

Xiaobin Yi, MD

Associate Professor of Anesthesiology (primary appointment)
MD Hunan Medical University 1985

Alexander H Young, MD
Assistant Professor of Anesthesiology (primary appointment)
MD University of Arkansas 1990
BA University of Mississippi 1986

Anna Rebecca Young, MD
Assistant Professor of Anesthesiology (primary appointment)
MD University of Kentucky 2008
BS Asbury College 2004

Z

Jessica Ann Zenga, MD
Assistant Professor of Anesthesiology (primary appointment)
MD Saint Louis University 2006

Yu Zhou, PHD, MS
Instructor in Anesthesiology (primary appointment)
BS Wuhan University 1996
PHD State Univ of NY Buffalo 2005
MS Zhejiang Medical University 1999

Jonathan Kramer Zoller, MD
Instructor in Anesthesiology (Pending Dean's Approval) (primary appointment)
MD Tulane University 2009

Courses

Visit online course listings to view offerings for M10 Anesth

M10 Anesth 805 Anesthesiology
This clinical elective is designed to familiarize the student with basic aspects of anesthesiology practice. The primary teaching method is patient care in a clinical setting (one-on-one). The student will learn the basics of preoperative evaluation of surgical patients, the use of intraoperative monitoring in patient management and postoperative care. During the four-week rotation, the student will learn airway management skills, practical perioperative fluid and electrolyte therapy, along with general and regional anesthetic techniques. As an integral part of the anesthesia care team, the student will participate actively in the anesthetic management of surgical patients. The student's specific requests to be assigned to certain types of cases will be honored as time and availability dictate. The rotation will include three clinical simulator sessions using a simulator mannequin for practical management of airway problems, resuscitation and trauma emergencies. By the end of the rotation, the student should be able to independently (under supervision) provide anesthesia for uncomplicated surgical procedures. Note: Presence and participation in the three Friday Simulator Sessions and the Presentation on the last day of the rotation are required to receive a grade. If there is a conflict with attendance, prior arrangements can be made to accommodate the student.
M10 Anesth 611 Cardiothoracic Anesthesiology
This clinical elective offers practical experience in the perioperative assessment and management of surgical patients undergoing cardiothoracic procedures. The student, as an integral part of the cardiothoracic anesthesia team that is composed of faculty members, fellows and residents, will learn basic principles of airway management and lung ventilation, essential aspects of pharmacologic treatment of hemodynamic abnormalities and cardiac dysrhythmias, and management of intraoperative coagulation disturbances. Emphasis will be placed on the interpretation of intraoperative hemodynamic data, echocardiographic finding (TEE), and laboratory results. During this rotation, the student will also gain practical experience in endotracheal intubation as well as the placement of intravenous lines and invasive monitoring lines, including radial artery and pulmonary artery catheters. Students will learn how to use these parameters in clinical decision making during anesthesia. At the conclusion of the rotation, the student will have a better understanding of invasive monitoring and data interpretation, as well as a more systematic approach to the management of intra-and postoperative hemodynamic, pulmonary and coagulation abnormalities. The students are expected to attend the didactic sessions of CTA and the Department of Anesthesiology. A presentation will be assigned.

M10 Anesth 812 Pediatric Anesthesia
This clinical elective is designed to teach the theory and practice of pediatric anesthesiology and pain management. It features individualized instruction with faculty who specialize in the perioperative care of pediatric patients. The elective consists of four weeks of active participation with pediatric anesthesiologists at St. Louis Children’s Hospital and St. Louis Shriners Hospital learning preanesthetic assessment, the performance of routine anesthetics (which includes instruction and practice in pediatric airway skills), learning other technical skills such as intravenous line placement and the management of post-anesthesia care and pain therapies. The final week may be tailored to meet the student’s individual interests, needs and career goals. Possibilities include exposure to sedation and anesthesia for procedures outside of the operating rooms, and to subspecialties including cardiovascular anesthesia, neurosurgical anesthesia, and acute and chronic pediatric pain management. Students will also have an opportunity to learn the management of some common medical emergencies in the Clinical Simulation Center.

M10 Anesth 819 Cardiothoracic Critical Care
This clinical elective offers practical experience in the postoperative management of cardiothoracic patients. The student will be fully integrated into the intensive care team and have the opportunity to contribute to the management of critically ill patients. Students will be afforded the opportunity to follow specific patients throughout the course of their stay on the ICU, during which time they will gain insight into holistic management of patients with multi-organ dysfunction. The CTICU environment is both challenging and exciting. Cardiorespiratory physiology and pharmacology will be demonstrated at the patients’ bedside, an invaluable and unforgettable learning experience. Students will have numerous opportunities to learn and sometimes assist with procedures, such as central lines, chest tubes, bronchoscopy and pulmonary artery catheter insertion. Principles of management and resuscitation of hemodynamically unstable patients following surgery will be emphasized. Students will also see and help manage patients on ventilator assist devices, ECMO, and following heart and lung transplantation. At the conclusion of the rotation, the student will have a better understanding of shock, sepsis, multi-organ failure, organ system support and compassionate withdrawal of life support. In addition to bedside teaching, there will be informal teaching sessions on a wide variety of topics as well as teaching on interpreting cardiac echo exams. Students will be encouraged to present on their patient at morning ward rounds, during which constructive feedback and interactive teaching will occur. Students will present on a topic related to one of their patients at the end of the block.

M10 Anesth 820 Critical Care
Students on this rotation are integral members of the multidisciplinary intensivist-led critical care team in the Surgical Intensive Care Unit (SICU). Students learn an organ systems-based approach for evaluation and management of critically ill and injured patients, and application of evidence-based principles in delivery of state-of-the-art critical care. Emphasis is placed on critical care knowledge and techniques used at the bedside in the clinical management of serious traumatic and surgical conditions. Students become familiar with resuscitation and cardiopulmonary support, including methods for noninvasive and invasive hemodynamic monitoring, and techniques for airway management and pulmonary support in respiratory failure. Basic knowledge and skills in the management of neurologic injuries, liver and/or renal failure, and life-threatening infections in the surgical patient are also taught, as is the importance of treatments to alleviate anxiety and pain, maintain fluid and electrolyte balance, and provide adequate nutrition. Practical experience is gained in placement of vascular access devices, interpretation of laboratory data, and use of guidelines, protocols and quality assurance tools in the management of critically ill patients.

M10 Anesth 821 Pain Management
Acute pain is the most common symptom of medical illness and is ubiquitous after major surgery. Chronic pain is the leading cause of worker disability. Severe pain afflicts most people with advanced cancer. Learning the fundamentals of pharmacologic, interventional, and multidisciplinary pain management is important for all areas of clinical medicine. Rotation is based at Barnes-Jewish Hospital with focus adjusted to meet student’s interest and career plans.

M10 Anesth 821B Pain Management - Missouri Baptist Medical Center
Acute pain is the most common symptom of medical illness and is ubiquitous after major surgery. Chronic pain is the leading cause of worker disability. Severe pain afflicts most people with advanced cancer. Learning the fundamentals of pharmacologic, interventional, and multidisciplinary pain management is important for all areas of clinical medicine. Rotation is based at Missouri Baptist Medical Center with focus adjusted to meet student’s interest and career plans.

M10 Anesth 822 Anesthesia for Neurosurgery
Students will help care for patients having challenging neurosurgical procedures. Students will become familiar with complex procedures, brain monitoring, cardiovascular support and airway management and will be exposed to all kinds of neurosurgical pathology. Student must be prepared to participate in the intricate anesthetic management of patients undergoing surgery in our novel intraoperative MRI rooms. For those interested, clinical research projects are ongoing and student participation is encouraged.
M10 Anesth 823 Obstetrical Anesthesia
The medical students will learn the different analgesia/anesthetic options for the labor patient. They will also learn how the physiological adaptations of pregnancy influence anesthetic management. They will be actively involved in the parturient's management, i.e., starting an IV, placement of spinal, epidural or CSE (combined spinal epidural) anesthetics. They will also attend the OB anesthesia conferences and interview patients in labor (with an OB anesthesia attending).

M10 Anesth 900 Research Elective - Anesthesiology
Research opportunities may be available. If interested, please contact the Department of Anesthesiology.