

Department of Anesthesiology

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

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.

The realm of scientific investigation in anesthesiology also spans a broad range. Scientific efforts at the cellular and molecular levels are directed toward understanding the molecular mechanisms of anesthesia and analgesia. Clinical research in anesthesia 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 presents the student with the opportunity to do the following:

1. Acquire and apply pharmacologic knowledge related to anesthetic agents, opioids, paralytic and sedative drugs, and 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 with the clinical evaluation and management of patients as well as with applied physiology and pharmacology. The Department of Anesthesiology offers student experiences in the operating room, the intensive care unit, the pain management clinic and the laboratory.

Contact: Maureen Arends
Email: arendsm@wustl.edu
Website: <http://anest.wustl.edu>

Faculty

Michael Avidan, MBBCh, FCA SA

Department Chair

Scott Markowitz, MD

Department Vice Chair for Professional Development & Diversity, Equity and Inclusion

Robert Gereau, PhD

Department Vice Chair for Research

Ivan Kangrga, MD, PhD

Department Vice Chair for Health Systems Liaison

Anne Drewry, MD

Department Vice Chair

Chakrapol Lattanand, MD, MBA

Department Vice Chair for Clinical Operations

Dolores Njoku, MD

Department Vice Chair for Pediatric Anesthesiology

G. Richard Benzinger, MD, PhD

Department Interim Vice Chair for Education

Omokhaye Higo, MD, MBA

Department Vice Chair for Innovation

Visit our website for more information about our faculty and their appointments.

A

Enyo Ama Ablordeppey, M.P.H., M.D.

Associate Professor of Anesthesiology (primary appointment)

Associate Professor of Emergency Medicine

Master of Public Health, University of Pittsburgh, 2007

Doctor of Medicine, University of Pittsburgh, 2007

Joanna Abraham, Ph.D.

Associate Professor of Anesthesiology (primary appointment)

Associate Professor of Medicine

Bachelor of Science, SRM Easwari Engineering Colleg, 2001

Doctor of Philosophy, Pennsylvania State University-Main Campus, 2010

Hawa Abubakar, MBBS

Assistant Professor of Anesthesiology (primary appointment)

Foreign MD equivalent, King's College London, 2010

Oluwafunmilayo Beverly Adebayo-Adonis, M.D.

Assistant Professor of Anesthesiology (primary appointment)

Bachelor of Arts, Cornell University, 2007

Doctor of Medicine, Meharry Medical College, 2013

Gustav Akk, Ph.D.

Associate Professor of Anesthesiology (primary appointment)

Bachelor of Science, Moscow State University, 1991

Doctor of Philosophy, State University of New York at Buffalo, 1997

Ream Al-Hasani McCall, Ph.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Biochemistry and Molecular Biophysics
Doctor of Philosophy, University of Surrey, 2009

Zekeriyya Alanoglu, M.Ed., M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Ankara University, 1993
Master of Education, Ankara University, 2000

Mark Joseph Arcario, Ph.D., M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Florida, 2009
Doctor of Philosophy, University of Illinois at Urbana-Champaign, 2014
Doctor of Medicine, University of Illinois at Urbana-Champaign, 2017

Umeshkumar Athiraman, M.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Neurological Surgery
Doctor of Medicine, The Tamil Nadu Dr. M.G.R. Medical University, 2013

Jacob D AuBuchon, M.D.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Arts, University of Missouri Kansas City, 2005
Doctor of Medicine, University of Missouri Kansas City, 2008

Michael Simon Avidan, MB.BCh.

Professor of Anesthesiology (primary appointment)
Dr. Seymour and Rose T Brown Professor of Anesthesiology
Professor of Surgery (Cardiothoracic Surgery)
Head of the Department of Anesthesiology
Professor of Psychiatry
Foreign MD equivalent, University of the Witwatersrand, 1991

Chaltu Blaine Ayano, M.D.

Assistant Professor of Anesthesiology (Pending Dean Approval)
(primary appointment)
Bachelor of Science, Concordia College, 2009
Doctor of Medicine, University of South Dakota, 2014

B

Sennaraj Balasubramanian, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Tirunelveli Medical College, 1992
Doctor of Medicine, All India Institute of Medical Sciences, 1998

Jessica Bauerle, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Southwest Baptist University, 2004
Doctor of Medicine, University of Colorado Health Science Center, 2010

Charles Baysinger, M.D.

Voluntary Clinical Instructor in Anesthesiology
Doctor of Medicine, George Washington University, 2015

George Richard Benzinger, Ph.D., M.D.

Professor of Anesthesiology (primary appointment)
Bachelor of Science, California Institute of Technology, 1993
Doctor of Philosophy, University of Chicago, 1998
Doctor of Medicine, University of Chicago, 2000

Ahmet Onat Bermede, M.D.

Instructor in Anesthesiology (primary appointment)
Doctor of Medicine, Ankara University, 2003

Khairunisa Binte Mohamad Ibrahim, Ph.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Science, National University of Singapore, 2012
Doctor of Philosophy, National University of Singapore, 2018

Matthew Eugene Boland, M.D.

Associate Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
Doctor of Medicine, University of Missouri Kansas City, 1996

Anuradha Purushottam Borle, M.D., MBBS

Assistant Professor of Anesthesiology (primary appointment)
Foreign MD equivalent, GMC Miraj, 2007
Doctor of Medicine, All India Institute of Medical Sciences, 2012

Walter A Boyle, M.D.

Professor Emeritus of Anesthesiology
Bachelor of Science, University of California San Francisco, 1974
Doctor of Medicine, University of California San Francisco, 1977

Jamie Cao Brown-Shpigel, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Houston, 2009
Doctor of Medicine, University of Texas Health Science Center, 2014

Bernard H Brownstein, Ph.D.

Associate Professor Emeritus of Anesthesiology
Bachelor of Arts, Occidental College, 1961
Doctor of Philosophy, University of California, 1968

Sarah Buday, Ph.D.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Science, Washington University in St Louis, 2002
Doctor of Philosophy, University of Missouri in St Louis, 2013

Reginald Bulkley, M.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Medicine, University of Missouri Kansas City, 1983

C

Yuqing Cao, Ph.D.

Professor of Anesthesiology (primary appointment)
Bachelor of Science, Fudan University (####), 1989
Doctor of Philosophy, University of California San Francisco, 1999

Brandon Chaffay, M.Eng., MB.BCh.

Assistant Professor of Anesthesiology (Pending Dean Approval)
(primary appointment)
Assistant Professor of Emergency Medicine (Pending Dean Approval)
null, Queen's University, 2013
null, University of Western Ontario, 2017
null, University College Dublin National University of Ireland, 2019

Alexander George Chameessian, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Duke University, 2019

Baron Chanda, M.S., Ph.D.

Professor of Anesthesiology (primary appointment)
Professor of Biochemistry and Molecular Biophysics
Professor of Neuroscience
Bachelor of Science, University of Delhi, 1991
Master of Science, Savitribai Phule Pune University, 1993
Doctor of Philosophy, National Centre for Biological, 2000

Stephanie Kae Charshafian, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Assistant Professor of Emergency Medicine
Bachelor of Science, University of Florida, 2009
Doctor of Medicine, Washington University in St Louis, 2014

Tao Che, M.S., Ph.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Biochemistry and Molecular Biophysics
Bachelor of Science, Wuhan University (#####), 2007
Master of Science, Wuhan University (#####), 2010
Doctor of Philosophy, Case Western Reserve University, 2015

Ziwei Chen, M.S., Ph.D., MBBS

Assistant Professor of Anesthesiology (primary appointment)
Foreign MD equivalent, Dalian Medical University (#####), 1995
Master of Science, Dalian Medical University (#####), 1998
Doctor of Philosophy, Peking University (#####), 2001

Wayland W. Cheng, Ph.D., M.D.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Science, Wheaton College Illinois, 2005
Doctor of Philosophy, Washington University in St Louis, 2012
Doctor of Medicine, Washington University in St Louis, 2012

Kelly Lynne Chilson, M.D.

Professor of Anesthesiology (primary appointment)
Doctor of Medicine, University of Missouri Columbia, 1999

Salik Choudhary, M.D.

Voluntary Clinical Instructor in Anesthesiology
Bachelor of Arts, University of Missouri Kansas City, 2013
Doctor of Medicine, University of Missouri Kansas City, 2013

James Close, M.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Medicine
Bachelor of Arts, Washington University in St Louis, 1980
Doctor of Medicine, Washington University in St Louis, 1984

Albert Murray Cohen, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Baylor University, 1977

Bryan A Copits, Ph.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Philosophy, Northwestern University, 2012

Thomas E Cox

Professor Emeritus of Anesthesiology

Meaghan Claire Creed, Ph.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Neuroscience
Associate Professor of Psychiatry

Bachelor of Science, University of Toronto, 2008
Doctor of Philosophy, University of Toronto, 2012

Lara W. Crock, Ph.D., M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Arts, Barnard College, 2001
Doctor of Philosophy, Washington University in St Louis, 2013
Doctor of Medicine, Washington University in St Louis, 2013

Michael John Cuipa, M.D.

Voluntary Clinical Instructor in Anesthesiology
Bachelor of Science, Tufts University, 1988
Doctor of Medicine, University of Massachusetts Amherst, 1994

Caitlin Curcuru, M.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Arts, Kansas City University of Medicine and Biosciences, 2018
Doctor of Medicine, Kansas City University of Medicine and Biosciences, 2018

D

Charl Johan De Wet, MB.ChB.

Professor of Anesthesiology (primary appointment)
Professor of Surgery (Cardiothoracic Surgery)
Foreign MD equivalent, University of Pretoria, 1990

Ding Ding, M.S., M.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Science, University of Science and Technology of China (#####), 2001
Master of Science, University of Colorado Boulder, 2004
Doctor of Medicine, University of Colorado Anschutz Medical Campus, 2019

Anne Meredith Drewry, M.D.

Professor of Anesthesiology (primary appointment)
Vice Chair
Division Chief of Critical Care Medicine
Doctor of Medicine, Washington University in St Louis, 2006

Julie Kosto Drobish, M.D.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Science, Pennsylvania State University-Main Campus, 2006
Doctor of Medicine, Washington University in St Louis, 2009

Leon du Toit, M.S., MB.ChB.

Assistant Professor of Anesthesiology (primary appointment)
Foreign MD equivalent, Stellenbosch University, 2005
Master of Science, University of Cape Town, 2020

Nicole Marie Durko, D.O.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Science, Saint Xavier University, 1995
Doctor of Osteopathic Medicine, Midwestern University, 2001

E

Bahaa Eldien Elgendy, M.S., Ph.D.

Associate Professor of Anesthesiology (primary appointment)

Associate Professor of Biochemistry and Molecular Biophysics
Bachelor of Science, Benha University, 1999
Master of Science, Benha University, 2003
Doctor of Philosophy, University of Florida, 2010

Daniel Emmert, M.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Surgery (Cardiothoracic Surgery)
Doctor of Medicine, Saint Louis University, 2005

Alex S Evers, M.D.

Professor of Anesthesiology (primary appointment)
Henry Elliot Mallinckrodt Professor of Anesthesiology
Professor of Developmental Biology
Professor of Medicine
Bachelor of Science, Yale University, 1974
Doctor of Medicine, New York University, 1978

F

Daniel Patrick Fernandez, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Southern Methodist University, 2012
Doctor of Medicine, Indiana University Indianapolis, 2016

Mitchell Evan Fingerman, M.D.

Professor of Anesthesiology (primary appointment)
Division Chief - Division of Regional and Ambulatory Anesthesia/North
Doctor of Medicine, University of Connecticut, 2004

Catherine Foster, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Arts, University of California Berkeley, 2008
Doctor of Medicine, University of Chicago, 2016

Rosemary Foster, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Saint Louis University, 2013

Bradley Alexander Fritz, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Case Western Reserve University, 2010
Doctor of Medicine, Washington University in St Louis, 2015

Brian M Fuller, M.D.

Professor of Anesthesiology (primary appointment)
Professor of Emergency Medicine
Bachelor of Arts, University of Alabama in Tuscaloosa, 1998
Doctor of Medicine, University of Alabama in Tuscaloosa, 2003

G

Preeta George, MBBS

Associate Professor of Anesthesiology (primary appointment)
Foreign MD equivalent, Bangalore University, 1998

Robert W Gereau, Ph.D.

Professor of Anesthesiology (primary appointment)
Dr Seymour and Rose T Brown Professor of Anesthesiology
Division Chief - WU Pain Center
Vice Chair - Department of Anesthesiology

Professor of Neuroscience
Bachelor of Science, Missouri State University (Formerly Southwest Missouri State), 1991
Doctor of Philosophy, Emory University, 1995

Jason R Gillihan, M.D.

Professor of Anesthesiology (primary appointment)
Chief Medical Officer of Barnes West County
Associate Chief Medical Officer of Barnes-Jewish Hospital
Bachelor of Science, University of Southern Indiana, 2002
Doctor of Medicine, Southern Illinois University Carbondale, 2006

Thomas James Goblirsch, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Notre Dame, 1980
Doctor of Medicine, Loyola University Chicago, 1985

Judith P Golden, M.A., Ph.D.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Science, Hofstra University, 1984
Master of Arts, Hofstra University, 1986
Doctor of Philosophy, Saint Louis University, 1994

Cesar Emmanuel Gonzalez, M.A., Ph.D.

Assistant Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
Bachelor of Science, Jacksonville State University, 2014
Master of Arts, University of Alabama in Huntsville, 2017
Doctor of Philosophy, University of Alabama at Birmingham School of Medicine, 2023

Vivian Maria Gonzalez-Perez, Ph.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Universidad de la Habana, 1997
Doctor of Philosophy, Universidad de Valparaíso, 2009

Burel Goodin, Ph.D.

Professor of Anesthesiology (primary appointment)
Doctor of Philosophy, University of Maryland Baltimore County, 2010

Thomas J Graetz, M.D.

Associate Professor of Anesthesiology (primary appointment)
Division Chief - Division of Cardiothoracic Anesthesiology
Associate Professor of Surgery (Cardiothoracic Surgery)
Doctor of Medicine, Saint Louis University, 2005

Stephen H Gregory, M.D.

Associate Professor of Anesthesiology (primary appointment)
Division Chief - Division of Perioperative Medicine
Doctor of Medicine, Saint Louis University, 2012

Russell J.I. Groener, MB.ChB.

Associate Professor of Anesthesiology (primary appointment)
Foreign MD equivalent, University of Cape Town, 1983

Ryan C Guffey, M.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Wayne State University, 2007

Katharine Nicole Gurba, Ph.D., M.D.

Assistant Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)

Doctor of Philosophy, Vanderbilt University, 2013
Doctor of Medicine, Vanderbilt University, 2014

H

Mark Francis Hanak, M.D.

Instructor in Anesthesiology (primary appointment)
Doctor of Medicine, University of Virginia, 2019
Bachelor of Science, University of Virginia, null

Charles B Hantler, M.A., M.D.

Professor Emeritus of Anesthesiology
Bachelor of Arts, University of Michigan Ann Arbor, 1971
Master of Arts, Davenport University, 1973
Doctor of Medicine, Davenport University, 1977

Simon Haroutounian, M.A., Ph.D.

Professor of Anesthesiology (primary appointment)
Division Chief - Division of Clinical and Translational Research
Master of Arts, Hebrew University of Jerusalem, 2005
Doctor of Philosophy, Hebrew University of Jerusalem, 2011

Melissa Erica Hector-Greene, Ph.D., M.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Arts, Mount Holyoke College, 2006
Doctor of Philosophy, Duke University, 2018
Doctor of Medicine, Duke University, 2018

Daniel Luke Helsten, M.D.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Kentucky, 1997
Doctor of Medicine, University of Kentucky, 2001

Mohammad Anas Helwani, M.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Surgery (Cardiothoracic Surgery)
Doctor of Medicine, Damascus University, 1998

Bernadette M Henrichs, M.S.N., Ph.D.

Professor of Anesthesiology (primary appointment)
Master of Science in Nursing, Saint Louis University, 1993
Doctor of Philosophy, Saint Louis University, 1999

Erin Leigh Carline Herrera, M.S.N.

Assistant Professor of Anesthesiology (primary appointment)
Master of Science in Nursing, Goldfarb School of Nursing, 2013

Jessica Ann Higginbotham, Ph.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Arts, Saint Louis University, 2012
Doctor of Philosophy, Washington State University, 2019

Omokhayo M Higo, M.B.A., MBBS

Associate Professor of Anesthesiology (primary appointment)
Vice Chair
Bachelor of Science, University of Ibadan, 1984
Foreign MD equivalent, University of Ilorin, 1990
Master of Business Administration, Washington University in St Louis, 2021

Alexander Michael Hincker, M.D.

Assistant Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
Doctor of Medicine, Columbia University, 2013

Gary E Hirshberg, M.D.

Professor Emeritus of Anesthesiology
Bachelor of Arts, Princeton University, 1968
Doctor of Medicine, Hahnemann University, 1972

Katherine Jeanne Holzer, M.S., Ph.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Arts, Illinois Wesleyan University, 2010
Master of Science, Washington University in St Louis, 2012
Doctor of Philosophy, Saint Louis University, 2019

Richard S Hotchkiss, M.D.

Professor of Anesthesiology (primary appointment)
Professor of Medicine
Professor of Surgery (General Surgery)
Professor of Developmental Biology
Doctor of Medicine, University of Virginia, 1976

Rocco Hueneke, M.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Martin-Luther-University, 1996

I

Catherine Ifune, M.B.A., Ph.D., M.D.

Professor of Anesthesiology (primary appointment)
Bachelor of Science, California Institute of Technology, 1985
Doctor of Philosophy, Washington University in St Louis, 1990
Doctor of Medicine, Washington University in St Louis, 1997
Master of Business Administration, Washington University in St Louis, 2014

Selma E.h.o. Ishag, Ph.D., M.D.

Professor of Anesthesiology (primary appointment)
Doctor of Medicine, University of Khartoum, 1987
Doctor of Philosophy, University of Khartoum, 1996

J

Danish Jaffer, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Texas Austin, 2011
Doctor of Medicine, University of Texas San Antonio, 2016

York Jiao, M.D.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Science, Washington University in St Louis, 2009
Doctor of Medicine, University of Connecticut, 2013

Jessica Justmann, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of California Davis, 2005
Doctor of Medicine, American University of the Caribbean, 2012

K

Mohammadmehdi Kafashan, M.S., Ph.D.

Assistant Professor of Anesthesiology (primary appointment)
Assistant Professor of Psychiatry
Bachelor of Science, Amirkabir University of Technology, 2008
Master of Science, Sharif University of Technology, 2010
Doctor of Philosophy, Washington University in St Louis, 2016

Muthuraj Kanakaraj, M.D., MBBS

Assistant Professor of Anesthesiology (primary appointment)
Foreign MD equivalent, Tirunelveli Medical College, 1995
Doctor of Medicine, Madras Medical College, 2005

Suman Subbaraya Kandachar

Instructor in Anesthesiology (Pending Dean Approval) (primary appointment)

Ivan M Kangrga, Ph.D., M.D.

Professor of Anesthesiology (primary appointment)
Vice Chair - Clinical Anesthesiology at BJH
Doctor of Medicine, University of Belgrade, 1982
Doctor of Philosophy, Iowa State University, 1991

Thomas George Kannampallil, Ph.D.

Associate Professor of Anesthesiology (primary appointment)
Assistant Professor of Computer Science and Engineering
Associate Professor of Medicine
Assistant Dean for Data Science
Bachelor of Science, University of Kerala, 1999
Doctor of Philosophy, University of Illinois at Chicago, 2018

Menelaos Karanikolas, M.D.

Professor of Anesthesiology (primary appointment)
Doctor of Medicine, National and Kapodistrian University of Athens, 1988

Jan Kasal, M.D.

Professor of Anesthesiology (primary appointment)
Professor of Medicine
Doctor of Medicine, Charles University, 1993

Monica Marie Keeline, M.D.

Assistant Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
Bachelor of Arts, Tulane University, 2006
Doctor of Medicine, Saint Louis University, 2010

Paul William Kerby, MBBS

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Science, King's College London, 2001
Foreign MD equivalent, King's College London, 2004

Kirin Marjan Khan

Assistant Professor of Anesthesiology (Pending Dean Approval) (primary appointment)

Arthur Kheyfets, D.O.

Instructor in Anesthesiology (primary appointment)
Bachelor of Arts, Saint Louis University, 2012
Doctor of Osteopathic Medicine, Kansas City University of Medicine and Biosciences, 2016

Shahrdad Khodamoradi, M.D.

Assistant Professor of Anesthesiology (primary appointment)

Bachelor of Arts, Vanderbilt University, 1985
Doctor of Medicine, Washington University in St Louis, 1990

Bryan James Kidd, M.S., M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Illinois at Urbana-Champaign, 2006
Master of Science, University of Alabama in Tuscaloosa, 2010
Doctor of Medicine, Southern Illinois University Carbondale, 2015

Christopher Ryan King, Ph.D., M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Philosophy, University of Chicago, 2012
Doctor of Medicine, University of Chicago, 2014

Tessa Marie King, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, University of Kansas, 1997

Justin Knittel, M.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Case Western Reserve University, 2009

Ahalya Kodali, M.S., M.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Science, Boston University, 2010
Master of Science, Boston University, 2012
Doctor of Medicine, Boston University, 2015

Brendan Joseph Kurtz, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Arts, University of Missouri Kansas City, 2016
Doctor of Medicine, University of Missouri Kansas City, 2018

L

Anand Lakshminarasimhachar, MBBS

Professor of Anesthesiology (primary appointment)
Foreign MD equivalent, Bangalore University, 1994

Demetrios G. Lappas, Ph.D., M.D.

Professor Emeritus of Anesthesiology
Bachelor of Science, Abet School, 1954
Doctor of Medicine, Aristotle University (Duplicate of Aristotle University of Thessaloniki), 1961
Doctor of Philosophy, Aristotle University (Duplicate of Aristotle University of Thessaloniki), 1966

Chakrapol Lattanand, M.D.

Professor of Anesthesiology (primary appointment)
Vice Chair for Clinical Operations
Doctor of Medicine, Hahnemann University, 2000

Michael Edward Leavell, M.D.

Assistant Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
Bachelor of Arts, Harvard University, 1978
Doctor of Medicine, University of Kansas, 1984

Chris Cheng-Fu Lee, M.B.A., Ph.D., M.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Hubei Medical University, 1985
Doctor of Philosophy, Beijing University, 1991

Master of Business Administration, Washington University in St. Louis, 2021

Leander K Lee, M.B.A., M.D.

Voluntary Clinical Instructor in Anesthesiology
Doctor of Medicine, University of Nebraska, 1980

Master of Business Administration, Washington University in St. Louis, 1990

Woo Kyung Lee, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Yonsei University, 2009

Ilya Lembrikov

Assistant Professor of Anesthesiology (Pending Dean Approval)
(primary appointment)

Jun-Nan Li, Ph.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Science, Harbin Medical University, 2010
Doctor of Philosophy, Harbin Medical University, 2015

Christopher J Lingle, Ph.D.

Professor of Anesthesiology (primary appointment)
Professor of Neuroscience
Bachelor of Science, University of Oregon, 1972
Doctor of Philosophy, University of Oregon, 1979

Stephanie Link, D.O.

Assistant Professor of Anesthesiology (primary appointment)
Associate of Science, Southwestern Illinois College (SWIC), 2011
Bachelor of Science, Southern Illinois University Edwardsville, 2013
Doctor of Osteopathic Medicine, Lincoln Memorial University, 2018

Qianjin Liu, Ph.D., M.D.

Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Nanjing Medical University (#####), 1983
Doctor of Philosophy, Saint Louis University, 1997

Qin Liu, Ph.D.

Professor of Anesthesiology (primary appointment)
Professor of Medicine (Dermatology)
Professor of Ophthalmology and Visual Sciences
Professor of Neuroscience
Bachelor of Science, Wuhan University (#####), 1998
Doctor of Philosophy, Chinese Academy of Sciences, 2004

Jenna Lizzo, M.M.Sc., M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Illinois at Urbana-Champaign, 2012
Master of Medical Science, Loyola University Chicago, 2014
Doctor of Medicine, Southern Illinois University School of Medicine (SIU-SOM), 2018

John Jacob Long, M.D.

Assistant Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
Bachelor of Science, North Carolina State University, 1995
Doctor of Medicine, A T Still University of Health Sciences, 2003

Sunny Shang Lou, Ph.D., M.D.

Assistant Professor of Anesthesiology (primary appointment)

Bachelor of Science, Massachusetts Institute of Technology, 2009
Doctor of Philosophy, Stanford University, 2017
Doctor of Medicine, Stanford University, 2017

M

Jooyoung Maeng, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Cornell University, 2011
Doctor of Medicine, Indiana University School of Medicine, 2017

Susruta Majumdar, M.S., Ph.D.

Professor of Anesthesiology (primary appointment)
Bachelor of Science, Delhi University, 1998
Master of Science, Delhi University, 2000
Doctor of Philosophy, University of Florida, 2006

Bruno Maranhao, Ph.D., M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of California Los Angeles, 2007
Doctor of Philosophy, University of California San Diego, 2015
Doctor of Medicine, University of California San Diego, 2016

Lukas Heinrich Matern, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Arts, Columbia University, 2014
Doctor of Medicine, University of Chicago, 2018

John D McAllister, M.D.

Professor of Anesthesiology (primary appointment)
Professor of Pediatrics
Director of Clinical Operations, Pediatric Anesthesiology
Doctor of Medicine, University of Manitoba, 1980
Bachelor of Science, University of Manitoba, 1982

Jordan Gary McCall, Ph.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Philosophy, Washington University in St. Louis, 2015

Molly Ann McCormick, M.D.

Associate Professor of Anesthesiology (primary appointment)
Division Chief - Division of Anesthesiology, General
Doctor of Medicine, University of Missouri Kansas City, 1987

Laura McKenzie, M.D.

Assistant Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
Doctor of Medicine, University of North Texas Health Science Center, 2014

Brennan Michael McMillan, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Arts, University of Colorado Boulder, 2012
Doctor of Medicine, Albany Medical College, 2017

Carl McMullen, D.O.

Associate Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
Doctor of Osteopathic Medicine, Midwestern University Illinois, 2011

Bhavi Deepak Mehta, M.D.

Assistant Professor of Anesthesiology (primary appointment)

Bachelor of Arts, University of Missouri Kansas City, 2010
Doctor of Medicine, University of Missouri Kansas City, 2010

Caitlynn Miller, D.O.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Osteopathic Medicine, Kansas City University of Medicine and Biosciences, 2018

Gregory Charles Miller, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Missouri Kansas City, 2010
Doctor of Medicine, University of Missouri Kansas City, 2016

Allison Denise Mitchell, M.D.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Science, Howard University, 2008
Doctor of Medicine, University of Texas Health Sciences at San Antonio, 2012

David Thomas Monks, M.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Medicine, University of Birmingham, 2018

John David Moore, M.D.

Instructor in Anesthesiology (primary appointment)
Doctor of Medicine, Universidad Autónoma de Centro América, 2020

David James Moquin, M.D.

Instructor in Anesthesiology (primary appointment)
Doctor of Medicine, University of Tennessee, 2017

Rachel Willis Moquin, M.Ed., Ph.D.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Arts, University of Mississippi, 2011
Master of Education, University of Mississippi, 2013
Doctor of Philosophy, Vanderbilt University, 2017

Ehab Samir Morcos, M.D.

Voluntary Clinical Instructor in Anesthesiology
Doctor of Medicine, Cairo University, 1991

Jose Moron-Concepcion, Ph.D.

Professor of Anesthesiology (primary appointment)
Henry Elliot Mallinckrodt Professor of Anesthesiology
Division Chief - Division of Anesthesiology, Research Unit
Professor of Psychiatry
Professor of Neuroscience
Doctor of Philosophy, University of Barcelona, 1998

Jimmy Lewis Moss, M.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Science, Florida State University, 2010
Doctor of Medicine, Florida State University, 2015

Christopher Marlowe Murphy, M.A., M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Arkansas Main Campus, 2010
Master of Arts, University of Arkansas Main Campus, 2012
Doctor of Medicine, University of Arkansas Main Campus, 2016

Amjad Issam Musleh, M.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Emergency Medicine

Bachelor of Science, University of New Mexico-Main Campus, 2008
Doctor of Medicine, University of New Mexico-Main Campus, 2013

N

Hadas Nahman-Averbuch, M.S., Ph.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Haifa University, 2005
Master of Science, Israel Institute of Technology, 2009
Doctor of Philosophy, Israel Institute of Technology, 2015

Jessica Lauren Nelson, M.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Emergency Medicine
Doctor of Medicine, University of Michigan Ann Arbor, 2012
Bachelor of Science, University of Wisconsin, 2018

Vincent Nelson, M.D.

Assistant Professor of Anesthesiology (Pending Dean Approval)
(primary appointment)
Adjunct Instructor
Doctor of Medicine, University of Chicago, 1998

Daniel C Nieve, M.D.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Iowa, 1998
Doctor of Medicine, University of Iowa, 2003

Kyle Niziolek, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Assistant Professor of Emergency Medicine
Doctor of Medicine, Georgetown University, 2012

Dolores Benedicta Njoku, M.D.

Professor of Anesthesiology (primary appointment)
Rudolph L. and Mary Frances Wise Endowed Chair in Pediatric Anesthesiology
Division Chief of Pediatric Anesthesiology
Vice Chair
Doctor of Medicine, University of Mississippi, 1987

Aaron John Norris, Ph.D., M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Colorado State University, 2001
Doctor of Philosophy, Washington University in St Louis, 2012
Doctor of Medicine, Washington University in St Louis, 2012

Victoria Novoselova, MBBS

Assistant Professor of Anesthesiology (primary appointment)
Foreign MD equivalent, Peoples' Friendship University of Russia, 2010

Sydney Marie Nykiel-Bailey, M.D.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Science, Saint Louis University, 2001
Doctor of Medicine, University of Missouri Kansas City, 2005

O

Uchenna Ofoma, M.S., M.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Medicine, University of Nigeria, 1998

Master of Science, Pennsylvania State University-Main Campus, 2010

P

Ben Julian Palanca, M.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Psychiatry
Bachelor of Science, University of Washington, 1997
Doctor of Medicine, Washington University in St Louis, 2005

Arvind Palanisamy, Ph.D., M.D.

Professor of Anesthesiology (primary appointment)
Division Chief - Division of Obstetrical Anesthesia
Professor of Obstetrics and Gynecology
Doctor of Medicine, Tamilnadu Medical University, 2000
Doctor of Philosophy, All India Institute of Medical Sciences, 2003

Chris M Palmer, M.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Emergency Medicine
Bachelor of Science, Virginia Polytechnic Institute and State University, 2004
Doctor of Medicine, SUNY Empire State College, 2008

Hess Amir Panjeton, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Miami, 2003
Doctor of Medicine, University of Miami, 2007

Kyle Edward Parker, Ph.D.

Instructor in Anesthesiology (primary appointment)
Doctor of Philosophy, University of Missouri Columbia, 2013

Colby Parks, M.D.

Associate Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
Bachelor of Science, Rockhurst University, 2006
Doctor of Medicine, Saint Louis University, 2010

Jesus Ceferino Patino, M.D.

Voluntary Clinical Instructor in Anesthesiology
Bachelor of Science, University of the Philippines, 1997
Doctor of Medicine, University of the Philippines, 2002

Jennifer Pearlstein, Ph.D.

Assistant Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
Doctor of Philosophy, University of California Berkeley, 2022

Bethany Pennington, Pharm.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Pharmacy, Saint Louis College of Pharmacy, 2010

John Philibert, M.D.

Instructor in Anesthesiology (primary appointment)
Doctor of Medicine, Southern Illinois University School of Medicine (SIU-SOM), 2018

Mitchell R Platin, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Kent State University, 1987

Amynah Pradhan, Ph.D.

Professor of Anesthesiology (primary appointment)
Professor of Biochemistry and Molecular Biophysics
Bachelor of Science, McGill University, 1997
Doctor of Philosophy, McGill University, 2005

Debra D Pulley, M.M.E., M.D.

Professor of Anesthesiology (primary appointment)
Bachelor of Science, Vanderbilt University, 1978
Master of Mechanical Engineering, University of Missouri Columbia, 1982
Doctor of Medicine, Saint Louis University, 1987

Q

Victor Qi, M.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Arts, University of Pennsylvania, 2014
Doctor of Medicine, University of Pennsylvania, 2019

R

Lesley Kathryn Rao, M.D.

Associate Professor of Anesthesiology (primary appointment)
Division Chief - Division of Pain Management
Doctor of Medicine, Saint Louis University, 2006

Satish Reddy, M.D.

Assistant Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
Bachelor of Science, University of Georgia, 2006
Doctor of Medicine, Medical College of Georgia, 2011

Andrea Bulkley Reidy, M.D.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Science, Illinois Wesleyan University, 2005
Doctor of Medicine, Illinois Wesleyan University, 2010

Eduardo Reina, M.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Medicine, University of Illinois at Chicago, 2011

Sasha Adrianna Ridgell, M.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Science, Brown University, 2013
Doctor of Medicine, University of Arkansas for Medical Sciences, 2019

Clare H Ridley, M.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Surgery (Cardiothoracic Surgery)
Bachelor of Arts, Columbia College of Physicians and Surgeons, 2002
Doctor of Medicine, Washington University in St Louis, 2008

Isabella Rossi Riordan, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Division Chief for the Progress West Division
Doctor of Medicine, Loyola University Chicago, 2014

Stephen L. Ristvedt, M.A., Ph.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Psychiatry
Bachelor of Arts, University of Minnesota, 1981

Master of Arts, University of Pennsylvania, 1983
Doctor of Philosophy, University of Pennsylvania, 1989

Charles M Robertson, M.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Arts, University of Virginia, 1997
Doctor of Medicine, University of Virginia, 2003

Andrea Rodriguez-Restrepo, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Pontificia Universidad Javeriana, 2013

Evan Ward Roller, M.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Medicine, University of Cincinnati-Main Campus, 2010

Brian Christopher Ruyle, Ph.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Arts, University of Missouri in St Louis, 2012
Doctor of Philosophy, University of Missouri in St Louis, 2019

S

Angela K Saettele, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Simpson College, 2004
Doctor of Medicine, University of Missouri Columbia, 2008

Levent Sahin, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Eskisehir Osmangazi University, 1999

Emine Aysu Salviz, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Baskent University, 2004

Vijaya K Samineni, Ph.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Philosophy, Southern Illinois University Carbondale, 2013

Maryam Sammet, D.O.

Assistant Professor of Anesthesiology (Pending Executive Faculty Approval) (primary appointment)
Doctor of Osteopathic Medicine, Western University of Health Sciences, 2010

Jessica Lauren Sanford, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Arts, Emory University, 2009
Doctor of Medicine, University of Missouri Columbia, 2014

Benjamin Sanofsky, M.Ed., M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Arts, Colgate University, 2008
Master of Education, CUNY Hunter College, 2012
Doctor of Medicine, Stony Brook School of Medicine, 2016

Matthew Stringfellow Sanzalone, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Louisiana State University, 2015

Charles R Schrock, M.D.

Associate Professor of Anesthesiology (primary appointment)

Bachelor of Science, University of Notre Dame, 1986
Doctor of Medicine, University of Missouri Columbia, 1991

Rajiv K Shah, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, University of Rochester, 2010

Nicole Jimin Shin, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Washington University in St Louis, 2010
Doctor of Medicine, Washington University in St Louis, 2015

Manjaap Singh Sidhu, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Baccalaureatus, Washington University in St Louis, 2014
Doctor of Medicine, Southern Illinois University School of Medicine (SIU-SOM), 2019

Preet Mohinder Singh, M.D., MBBS

Associate Professor of Anesthesiology (primary appointment)
Foreign MD equivalent, Dayanand Medical College, 2007
Doctor of Medicine, All India Institute of Medical Sciences, 2010

Pratik Sinha, Ph.D., M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Manchester, 2001
Doctor of Medicine, University of Manchester, 2002
Doctor of Philosophy, Imperial College, 2013

Richard Allan Slivicki, Ph.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Science, Winona State University, 2012
Doctor of Philosophy, Indiana University Bloomington, 2018

Jeffrey Barrett Small, M.D.

Assistant Professor of Anesthesiology (Pending Dean Approval)
(primary appointment)
null, Saint Louis University, 2001

Sarah Kendall Smith, Ph.D., M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Kansas, 2004
Doctor of Philosophy, University of Kansas Medical Center, 2011
Doctor of Medicine, University of Kansas Medical Center, 2013

Ziyan Song, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Florida State University, 2014
Doctor of Medicine, Florida State University, 2018

John Charles Spitler, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Missouri Columbia, 1998
Doctor of Medicine, University of Missouri Columbia, 2003

Joseph H Steinbach, Ph.D.

Professor Emeritus of Anesthesiology
Bachelor of Arts, Reed College, 1968
Doctor of Philosophy, University of California San Diego, 1973

Tracey Wagner Stevens, M.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Washington University in St Louis, 2008

Sanjay Subramanian, M.D.

Associate Professor of Anesthesiology (primary appointment)
Associate Professor of Medicine
Doctor of Medicine, Christian Medical College, 1994

Robert A Swarm, M.D.

Professor of Anesthesiology (primary appointment)
Bachelor of Arts, Oberlin College, 1978
Doctor of Medicine, Washington University in St Louis, 1983

T

Brandon Kyle Tan, M.S., M.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Science, Duke University, 2010
Master of Science, University of Cincinnati-Main Campus, 2013
Doctor of Medicine, University of Cincinnati-Main Campus, 2018

Rene Tempelhoff

Professor Emeritus of Anesthesiology

Raghu P Terkonda, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Missouri University of Science and Technology
(Formerly University of Missouri at Rolla), 1983
Doctor of Medicine, University of Missouri Columbia, 1987

Leslie Terrell, D.O.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Osteopathic Medicine, Lincoln Memorial University, 2017

Loc Vinh Thang, Ph.D., M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Michigan State University, 2015
Doctor of Philosophy, Michigan State University, 2103

Jeremy Michael Thompson, Ph.D., M.D., B.Eng

Instructor in Anesthesiology (primary appointment)
Bachelor of Engineering, Vanderbilt University, 2012
Doctor of Philosophy, Texas Tech University Health Sciences Center, 2017
Doctor of Medicine, Texas Tech University Health Sciences Center, 2019

Vinicius Tieppo Francio, M.S., M.D.

Instructor in Anesthesiology (primary appointment)
Master of Science, National University of Health Sciences, 2012
Doctor of Medicine, University of Science, Art and Technology, 2018

V

Swarup Varaday, MBBS

Professor of Anesthesiology (primary appointment)
Foreign MD equivalent, Andhra University, 1989

Anandhalakshmi Varadharajan, M.D., MBBS

Voluntary Clinical Instructor in Anesthesiology
Foreign MD equivalent, Sri Ramachandra Institute of Higher Education
and Research, 2000
Doctor of Medicine, St. Lukes, 2007

Richard Florentine Villegas, M.D.

Instructor in Anesthesiology (primary appointment)

Bachelor of Science, University of Nevada Las Vegas, 2003
Doctor of Medicine, University of Santo Tomas, 2008

W

Michael Wadle, D.O.

Assistant Professor of Anesthesiology (Pending Executive Faculty
Approval) (primary appointment)
Doctor of Osteopathic Medicine, Des Moines University-Osteopathic
Medical Center, 2018

Ashley Brooke Weinhold, M.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Medicine, University of Arkansas Main Campus, 2011

Brian T Wessman, M.D.

Professor of Anesthesiology (primary appointment)
Associate Director - Critical Care Medicine Fellowship
Professor of Emergency Medicine
Bachelor of Science, College of William and Mary, 2000
Doctor of Medicine, Commonwealth College, 2005

James Douglas Wirthlin, M.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Science, Brigham Young University, 2006
Doctor of Medicine, Uniformed Services University of the Health
Sciences, 2012

Brett D Wolff, M.D.

Professor of Anesthesiology (Pending Executive Faculty Approval)
(primary appointment)
Bachelor of Arts, Indiana University Bloomington, 1981
Doctor of Medicine, Indiana University School of Medicine, 1985

Maxim Wolfson, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Washington University in St Louis, 2015

X

Xiaoming Xia, M.S., Ph.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Fudan University (#####), 1984
Master of Science, Shanghai Jiao Tong University (#####), 1987
Doctor of Philosophy, Vollum Institute of Oregon Health and Science
University, 1998

Y

Branden Edward Yee, M.P.H., M.D.

Associate Professor of Anesthesiology (primary appointment)
Division Chief of Barnes West County Hospital
Bachelor of Science, Tufts University, 2004
Master of Public Health, Tufts University, 2008
Doctor of Medicine, Tufts University, 2008

Xiaobin Yi, M.D.

Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Hunan Medical University, 1985

Alexander H Young, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Arts, University of Mississippi, 1986
Doctor of Medicine, University of Arkansas Main Campus, 1990

Anna Rebecca Young, M.D.

Associate Professor of Anesthesiology (primary appointment)
Bachelor of Science, Asbury College, 2004
Doctor of Medicine, University of Kentucky, 2008

Jaclyn Yu, M.D.

Instructor in Anesthesiology (primary appointment)
Doctor of Medicine, Washington University in St Louis, 2019

Kevin Zheng Yuan, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Washington University in St Louis, 2014

Z

Paul Battista Zanaboni, Ph.D., M.D.

Professor of Anesthesiology (primary appointment)
Doctor of Philosophy, Saint Louis University, 1990
Doctor of Medicine, Saint Louis University, 1992

Jing Zhong, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, Duke University, 2009
Doctor of Medicine, University of North Carolina at Chapel Hill, 2017

Yu Zhou, M.S., Ph.D.

Instructor in Anesthesiology (primary appointment)
Bachelor of Science, Wuhan University (#####), 1996
Master of Science, Zhejiang Medical University, 1999
Doctor of Philosophy, State University of New York at Buffalo, 2005

Anita Mathew Zimmerman, M.D.

Assistant Professor of Anesthesiology (primary appointment)
Bachelor of Science, University of Illinois at Chicago, 2010
Doctor of Medicine, University of Illinois at Chicago, 2014

Jonathan Kramer Zoller, M.D.

Associate Professor of Anesthesiology (primary appointment)
Doctor of Medicine, Tulane University, 2009

Research Electives

Anesthesiology Research Electives

During the fourth year, opportunities exist for many varieties of advanced clinical or research experiences.

Special electives in basic science research as it applies to anesthesiology can be arranged with the principal investigators in the Department of Anesthesiology; in the Division of Basic Research under the direction of Jose Moron-Concepcion, PhD; in the Washington University Pain Center under the direction of Rob Gereau, PhD; and in the Division of Clinical and Translational Research under the direction of Simon Haroutounian, PhD.

The basic science laboratories focus on various topics related to ion channel structure and function, molecular mechanisms of anesthetic action, sepsis, cellular and molecular mechanisms of reward and addiction, and the cellular and genetic basis of acute and chronic pain. Arrangements for these special electives are made through the specific investigators: Meaghan Creed, PhD; Alex S. Evers, MD; Robert W. Gereau, PhD; Richard S. Hotchkiss, MD; Christopher J. Lingle, PhD; Qin Liu, PhD; Jose Moron-Concepcion, PhD; or Arvind Palanisamy, MD. In addition, opportunities exist for clinical research under the direction of Joanna Abraham, PhD; Michael Avidan, MBBCh; Anne Drewry, MD; Brian Fuller, MD; Simon Haroutounian, PhD; Thomas Kannamapallil, PhD; or Ben Palanca, MD, PhD.

Courses

ANESTH 8000 General Anesthesiology (Clinical Elective)

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. The student will learn the basics of preoperative evaluation of surgical patients, the use of intraoperative monitoring inpatient management and postoperative care. In addition to perioperative care, the student will be exposed to other clinical areas which include our pain management clinic, regional anesthesia / acute pain management, cardiothoracic intensive care unit, labor and delivery, pediatric anesthesia, and the Center for Preoperative Assessment and Planning. During the four-week rotation, the student will learn airway management skills, basic IV 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 at least one clinical simulator session using a simulator mannequin for practical management of airway problems.

Credit 4 units.

Typical periods offered: Medicine Year

ANESTH 8010 Cardiothoracic Anesthesiology (Clinical Elective)

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 post-operative 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.

Credit 4 units.

Typical periods offered: Medicine Year

ANESTH 8015 Pediatric Anesthesiology (Clinical Elective)

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 active participation with pediatric anesthesiologists at St. Louis Children's Hospital where you will have the opportunity to learn about pre-anesthetic assessment, the performance of routine anesthetics (which includes instruction and practice in pediatric airway skills), other technical skills such as intravenous line placement, and the management of patients in the post-anesthesia care unit (PACU). Students on this rotation will also have 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.

Credit 2 units.

Typical periods offered: Medicine Year

ANESTH 8020 CTICU: Cardiothoracic Intensive Care Unit (Clinical Elective)

This clinical elective offers practical experience in the postoperative management of cardiothoracic patients. The student will be fully integrated into one of the intensive care teams and have the opportunity to contribute to the management of critically ill patients. Students will have the opportunity to follow specific patients over the course of their stay in 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. Students will gain unique insight into cardiorespiratory physiology and pharmacology which will be demonstrated at the patients' bedside, an invaluable and unforgettable learning experience. Students will have opportunities to learn and sometimes assist with procedures, such as central lines, chest tubes, bronchoscopy and pulmonary artery catheter insertion as well as bedside ultrasound including TTE and TEE. Principles of management and resuscitation of hemodynamically unstable patients following surgery will be emphasized as well as ventilator management. Students will also see and help manage patients with unique physiology such as those patients on ventricular assist devices, and on ECMO. We also have a very busy and heart and lung transplantation program at the hospital - all of these patients are cared for in the CTICU. 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 hemodynamic data and waveforms, and cardiac echo exams. Students will be encouraged to present on their patient at morning rounds, during which constructive feedback and interactive teaching will occur. Medical students will be asked to present a short discussion on a topic of their choice. This should be a short 20 - 30 minute presentation followed by a discussion on the topic which will be moderated by the attending. Discuss the time and topic of choice with the attending of service.

Credit 4 units.

Typical periods offered: Medicine Year

ANESTH 8030 Pain Management (Clinical Elective)

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.

Credit 4 units.

Typical periods offered: Medicine Year

ANESTH 8040 Anesthesiology for Neurosurgery (Clinical Elective)

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.

Credit 4 units.

Typical periods offered: Medicine Year

ANESTH 8050 Obstetrical Anesthesiology (Clinical Elective)

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).

Credit 2 units.

Typical periods offered: Medicine Year

ANESTH 9100 Anesthesiology Advanced Clinical Rotation (ACR)

This Advanced Clinical Rotation is similar to the General Anesthesiology elective in exposure to anesthesiology, but the level of participation and assessment is enhanced. The expectation is that the students act at the level of a Clinical Anesthesia Year 1 resident. Though a prior elective in anesthesia is not required, it is encouraged, if possible. Students will learn the basics of preoperative evaluation of surgical patients, the use of intraoperative monitoring in patient management, and postoperative care. In addition to perioperative care, they will be exposed to other clinical areas which include labor and delivery, pediatric anesthesia, and the Center for Preoperative Assessment and Planning. The students will interact with patients across all age ranges and demographics. 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. Grading will be based on competency of anesthesia skills such as preoperative evaluation, bag mask ventilation, intubation, vascular access, handoffs, postoperative pain orders, etc. 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 clinical simulator sessions using a simulator mannequin for practical management of airway problems, resuscitation, and trauma emergencies as well as supplemental educational sessions covering relevant topics in anesthesiology.

Credit 4 units.

Typical periods offered: Medicine Year

ANESTH 9150 Surgical Critical Care Advanced Clinical Rotation (ACR)

The 4400 Surgical ICU provides an exciting and challenging opportunity to care for some of the sickest patients in the hospital. From acute trauma to complex organ transplants, the SICU offers incredible teaching and education about a variety of medical topics and conditions. The ACR SICU rotation integrates medical students into one of the two SICU teams, and each medical student, in conjunction with a resident, will care for 3-5 patients on the service. This entails, at minimum, examining the patient, gathering pertinent information (lab results, significant events, etc.), and presenting the patient on rounds. Working with the resident, medical students will develop a problem list, as well as an organized plan for their patients. They will then need to follow up on the execution of all determined labs/interventions/

consults, closely communicating with the residents, fellow, and attending throughout the shift, as well as presence for sign-outs each morning/evening at shift change. In addition, medical students will be expected to attend and participate in multiple educational conferences throughout the week/rotation, as well as sessions for skills such as line placement and ultrasound. This rotation takes place at the Barnes-Jewish Hospital 4400 ICU Surgical and Burn/Trauma Intensive Care Unit. This ICU takes care of patients from a variety of backgrounds, including general surgery, trauma/acute care surgery, transplant surgery, vascular surgery, urology, as well as medical ICU overflow patients. The Surgical ICU is divided into 2 teams, Red and Blue, with each covering up to 18 patients. Medical students will be assigned to either the blue or red critical care teams while on the SICU rotation. Credit 4 units.

Typical periods offered: Medicine Year
