Your Support Sustains the Specialty

Dear Friends of FAER,

Thank you for your support of the Foundation for Anesthesia Education and Research. By supporting anesthesiology research and scientific discovery, you have made possible life-enhancing advances in medicine and improvements in patient care. You have enabled talented anesthesiologists pursuing new knowledge to transform our specialty and our hospitals, and, most importantly, to improve lives.

In the past year, the anesthesiologists who have received FAER grants have made many achievements and advances, and the trainees who participate in our programs have continued to pursue academic careers. Recent highlights include:

- **Creating new knowledge**: FAER alumni have recently published in *Anesthesiology*, the *Journal of the American Medical Association*, and the *New England Journal of Medicine*, among others.
- **Establishing scientific independence**: More than 50% of FAER Mentored Research Training Grant recipients receive funding from the National Institutes of Health within five years of completing work on their FAER grants.
- **Building a pipeline for the future**: FAER medical student fellow, Resident Scholar and Research Fellowship Grant alumni are among our current grant recipients.

This is also a time of transition for FAER, and I thank you for your loyal support throughout it. In July, the FAER office officially relocated to the American Society of Anesthesiologists® headquarters in Schaumburg, Illinois, after calling Rochester, Minnesota, home for 20 years. In October, the FAER Board of Directors will select the next President and CEO of the foundation who will lead us into the future.

The anesthesiologists who receive FAER grants represent the future of medicine and will bring about improvements in patient care. The discoveries they will make throughout their careers will allow us to be better doctors, train better doctors and provide the highest quality care imaginable.

Thank you for your generosity and ongoing support!

Sincerely,

Joy Hawkins, MD
Chair, Board of Directors

---

**SPECIAL NOTE**
Great effort was made to include all contributors in this report and to ensure the accuracy of names and titles. If we have erred, please accept our apologies and let us know so we may make corrections in the future.

**ON THE COVER**

Winter/Spring 2015 Grant Recipients. Top row, from left: Lorenzo Berra, MD; Christopher Cropsey, MD; Robin Matyal, MD; Vivianne Tawfik, MD, PhD; Brant Wagener, MD, PhD; Eric Vu, MD; Sara Goldhaber-Fiebert, MD; Bottom row, from left: Helen Lee, MD, MPH; M. Yawar Qadri, MD, PhD; Weifeng Song, MD, PhD; Annette Rebel, MD; Gene Yocum, MD; James Rhee, MD, PhD
Pursuing Scientific Discovery

The purpose of FAER grant funding is to develop the research careers of anesthesiologists who seek to answer important questions and make scientific discoveries in the areas of anesthesiology, perioperative medicine, health care delivery and medical education research. Anesthesiologists who have received FAER grant funding often go on to have successful careers as independently funded physician scientists who advance medicine through newfound knowledge.

In 2014-15, the FAER board of directors awarded grants in the following categories:

- **Mentored Research Training Grants in Basic Science, Clinical or Translational, or Health Services Research**
  - $175,000 over two years; 75% research time, faculty within 10 years of completion of residency
- **Research Fellowship Grants**
  - $75,000 over one year, 80% research time, anesthesiology resident or fellow
- **Research in Education Grants**
  - $100,000 over two years, 40% research time, faculty of any level

NEW GRANT FUNDING

In May, 14 anesthesiologists representing 10 institutions received award funding totaling $1.75 million over two years. Work began July 1.

MENTORED RESEARCH TRAINING GRANTS

Lorenzo Berra, MD
Massachusetts General Hospital
Stored blood transfusion and nitric oxide
Mentor: Warren M. Zapol, MD

Helen H. Lee, MD, MPH
University of Illinois at Chicago
Improving access to care for the pediatric dental general anesthesia population
Mentors: Anthony T. Lo Sasso, PhD; Daniel Sessler, MD

James Rhee, MD, PhD
Massachusetts General Hospital
Role of GAPDH in the cardio-metabolic response to ischemia
Mentors: Anthony Rosenzweig, MD; Wei Chao, MD, PhD

Vivianne L. Tawfik, MD, PhD
Stanford University
Monitoring and modulating microglial cell activation in pain
Mentors: Sean Mackey, MD, PhD; David J. Clark, MD, PhD

Brant M. Wagener, MD, PhD
University of Alabama at Birmingham
Mechanisms of lung immuno-suppression after traumatic brain injury
Mentors: Jean-Francois Pittet, MD; Sadis Matalon, PhD

Gene T. Yocum, MD
Columbia University
GABA-A alpha4 subunit mediates lung inflammation and bronchoconstriction
Mentors: Charles W. Emala, MD, MS; Jeanine D’Armiento, MD, PhD

RESEARCH FELLOWSHIP GRANTS

M. Yawar J. Qadri, MD, PhD
Duke University
Assessing differential microglial activation states in acute and chronic pain
Mentors: Ru-rong Ji, PhD; Thomas Van de Ven, MD, PhD

Weifeng Song, MD, PhD
University of Alabama at Birmingham
Low molecular weight hyaluronan mediated airway hyperresponsiveness in aspiration-induced acute lung injury
Mentors: Sadis Matalon, PhD; Jean-Francis Pittet, MD

Eric L. Vu, MD
Baylor Medicine / Texas Children’s Hospital
Three-dimensional ST instability: Clinical evaluation of novel ST segment monitoring in single ventricle physiology
Mentors: Ken Brady, MD; Craig Rusin, PhD

Nathan H. Waldron, MD
Duke University
Temporary autonomic blockade to prevent atrial fibrillation after cardiac surgery
Mentors: Joseph P. Mathew, MD, MHSc, MBA; Jonathan Piccini, MD, MHSc

ON THE WEB Visit FAER.org/research-grants for more information about grant funding.

RESEARCH IN EDUCATION GRANTS

Christopher L. Cropsey, MD
Vanderbilt University Medical Center
Effects of an electronic decision support tool on team performance during in-situ simulation of perioperative cardiac arrest
Mentor: Matthew D. McEvoy, MD

Sara N. Goldhaber-Fiebert, MD
Stanford University School of Medicine
Adoption of emergency manuals: Facilitators, barriers, and characteristics of clinical use
Mentors: David M. Gaba, MD; Steven Asch, MD, MPH

Robina Matyal MD
Beth Israel Deaconess Medical Center
Fundamentals of ultrasound course with verification of proficiency
Mentors: Feroze Mahmood, MD; Stephanie Jones, MD

Annette Rebel, MD
University of Kentucky
Anesthesia resident skill development assessed by competitive OSCE event: Anesthesia olympics
Mentors: Randall M. Schell, MD, MACM; Marjorie Steigler, MD

Winter/Spring 2015 Grant Recipients. Top row, from left: Lorenzo Berra, MD; Christopher Cropsey, MD; Robin Matyal, MD; Vivianne Tawfik, MD, PhD; Weifeng Song, MD, PhD; Annette Rebel, MD; Nathan Waldron, MD, Gene Yocum, MD; James Rhee, MD, PhD; Bottom row, from left: Helen Lee, MD, MPH; M. Yawar Qadri, MD, PhD; Weifeng Song, MD, PhD; Robin Matyal MD; Nathan Waldron, MD, Gene Yocum, MD; James Rhee, MD, PhD
FROM FAER- TO FEDERALLY-FUNDED

Fifty-five investigators have completed work on a FAER Mentored Research Training Grant since 2005. Of those, 30 have received significant extramural funding from the National Institutes of Health (NIH) or other federal funding source, such as the Patient-Centered Outcomes Research Institute (PCORI).

- Thus, 54% of all MRTGs completed between 2005 and 2012 resulted in subsequent NIH or federal funding. This funding included 17 NIH K08 awards, 6 NIH K23 awards, 9 NIH R01 awards, 2 NIH R03 awards, 2 PCORI grants, and two other types of NIH grants. Seven of the 30 investigators have received both NIH K-level and R-level awards, and one has received two R-level awards.

- Overall, a high percentage of both FAER grant applicants and recipients apply for federal grant funding, indicating that this group is intent in pursuing an academic career. However, a statistically significantly greater proportion of FAER recipients have received any sort of NIH funding in their careers as compared to FAER applicants.

- Twelve of the 21 investigators who have completed work on a FAER-funded Mentored Research Training Grant since 2010 (within the past five years), had NIH or other significant federal funding in 2014 or 2015.

<table>
<thead>
<tr>
<th>FAER Grant Recipient</th>
<th>FAER Grant Type and Year</th>
<th>NIH Grant Type and Year Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zhonghui Guan, MD</td>
<td>MRTG-BS (2010)</td>
<td>NIH K08 (2012)</td>
</tr>
<tr>
<td>Christopher Hughes, MD</td>
<td>MRTG-CT (2010)</td>
<td>NIH R03 (2014)</td>
</tr>
<tr>
<td>Joshua D. Muehlechopp, MD</td>
<td>MRTG-CT (2010)</td>
<td>NIH R01 (2013)</td>
</tr>
<tr>
<td>Alexander Proekt, MD, PhD</td>
<td>MRTG-BS (2010)</td>
<td>NIH K08 (2013)</td>
</tr>
<tr>
<td>Jing Wang, MD, PhD</td>
<td>MRTG-BS (2010)</td>
<td>NIH K08 (2012)</td>
</tr>
<tr>
<td>Rebecca Aslakson, MD, MSci</td>
<td>MRTG-CT (2011)</td>
<td>PCORI (2013)</td>
</tr>
<tr>
<td>Frederic T. Billings, IV, MD, MSci</td>
<td>MRTG-CT (2011)</td>
<td>NIH K23 (2012)</td>
</tr>
<tr>
<td>Daryl Kor, MD</td>
<td>MRTG-CT (2011)</td>
<td>NIH K23 (2012); NIH R01 (2014)</td>
</tr>
<tr>
<td>Mark D. Neuman, MD, MS</td>
<td>MRTG-BS (2011)</td>
<td>NIH K08 (2012); PCORI (2015)</td>
</tr>
<tr>
<td>Arun Prakash, MD, PhD</td>
<td>MRTG-BS (2012)</td>
<td>NIH K08 (2015)</td>
</tr>
</tbody>
</table>

Catherine L. Chen, MD, MPH, Resident Physician, Research Scholar, University of California San Francisco
Dr. Chen received a Research Fellowship Grant in 2013 to study unnecessary preoperative testing of patients undergoing cataract surgery. Her findings were published in the New England Journal of Medicine in April 2015. “This study serves as an example of how anesthesiologists can use health services research to contribute to the conversation about maintaining high quality healthcare while reigning in unnecessary healthcare spending. The findings have practical implications and can have an immediate impact on the way we care for our patients.”

Tobias Eckle, MD, PhD, Associate Professor of Anesthesiology, Cardiology and Cell Biology, University of Colorado Denver
Dr. Eckle is examining the clinical consequences of short-term circadian disturbances that occur during surgery and anesthesia. In 2008, he received a Mentored Research Training Grant from FAER. Immediately after that grant, he received a career development grant, an NIH K08, from the National Heart, Lung and Blood Institute and now continues to be an NIH-funded anesthesiologist through a major grant, an NIH R01. His research has been published in Anesthesiology, PlosBiolog and Nature Medicine. “As an anesthesiologist in research, I am extremely thankful to FAER and the ASA for providing an outstanding platform such as the MRTG that allows young anesthesiologists to pursue a career as a physician scientist. Without your generous support, it would have been extremely difficult to become an independent NIH R01-funded anesthesiologist.”

Renyu Liu, MD, MS, PhD, Associate Professor of Anesthesiology and Critical Care, University of Pennsylvania
Since 2008 when he began work on a FAER-funded research project examining opioids and opioid receptor pharmacology, Dr. Liu’s research has had significant implications for public health. As an NIH-funded physician scientist, he is working to develop alternative tools and investigate the structural and functional relationship between opioids and the human mu receptor. The work Dr. Liu achieved due to his FAER grant put him on a path to receive significant funding from the NIH – first a career development grant, an NIH K08, and in 2014, an NIH R01. The grants have helped him establish independence as an investigator. Dr. Liu was recently promoted to Associate Professor and has published in Anesthesiology, Brain Research and Anesthesia and Analgesia, among others. “Such gracious support allows the advancement of our specialty and medicine. I, as a physician scientist, sincerely appreciate such support.”

ON THE WEB Visit FAER.org/research-grants for more information about grant funding.
Improving Patient Care

Mark D. Neuman, MD, MS, Assistant Professor of Anesthesiology and Critical Care, University of Pennsylvania
In April, the Patient-Centered Outcomes Research Institute (PCORI) awarded $11.9 million in funding to Dr. Neuman for a five-year study examining how to improve patient outcomes after hip fractures in older adults. The study will build off of work Dr. Neuman completed as part of his FAER-funded Mentored Research Training Grant (2010) and subsequent career development grant, an NIH K08. Dr. Neuman’s work has been published in several major journals including Anesthesiology, JAMA Internal Medicine, and the Journal of the American College of Surgeons. He is the recipient of the 2015 ASA Presidential Scholar Award.

“If successful, the proposed studies will benefit public health by identifying targets for therapies that can prevent unnecessary lung damage early in trauma while preserving the immune system’s ability to fight off infections.”

Arun Prakash, MD, PhD, Assistant Professor of Anesthesiology, University of California San Francisco
Dr. Prakash’s research focuses on lung injury in trauma and the pathophysiology of lung ischemia reperfusion injury. He is examining the interface between sterile and infectious inflammation and how the innate immune system is able to distinguish between the two and respond appropriately. His findings to date have resulted in funding that has enabled him to start his own lab at UCSF. Dr. Prakash received a Mentored Research Training Grant from FAER in 2010 and is continuing his research through a grant from the National Institute of General Medical Sciences, an NIH K08. He has published in such journals as Anesthesiology, Molecular and Cellular Biology and Nature Medicine.

“By comparing two universally available, basic anesthetic approaches, the REGAIN trial will directly and immediately affect patient decision-making, care and outcomes for the more than 300,000 U.S. patients who need surgery to treat hip fractures each year, as well as the more than 8.5 million older U.S. adults who face decisions about anesthesia for other major surgeries each year.”

Vivianne Tawfik, MD, PhD, Pain Management Fellow, Stanford University
Chronic pain is a widespread disease that costs an estimated $635 billion per year in medical treatment and lost productivity in the United States alone. Through a FAER-funded Mentored Research Training Grant, Dr. Tawfik is studying complex regional pain syndrome, a form of chronic pain that can occur after mild trauma such as a fracture or minor surgery. She is exploring how cells in the central nervous system (non-neuronal, microglial cells) contribute to the disease. Her findings could provide an avenue for diagnosis and personalized treatment of chronic pain. Prior to her current grant, Dr. Tawfik received a FAER Research Fellowship Grant in 2013.

“FAER grants have been instrumental in my continued career development as an anesthesiologist-scientist. I can’t thank the generous donors enough for providing me the opportunity to pursue this important work that will advance our understanding of chronic pain.”

Brant Wagener, MD, PhD, Assistant Professor of Anesthesiology, University of Alabama at Birmingham
After severe head injury, patients have an increased chance for pneumonia due to decreased lung immune function. This is, in part, caused by chemicals released from the brain. Through a FAER Mentored Research Training Grant, Dr. Wagener is studying this phenomenon in order to treat or prevent this secondary pneumonia that can cause significant organ damage and even death in patients with severe head injury. Dr. Wagener’s MRTG is building off of the work he completed through his first FAER award, a Research Fellowship Grant, which he received in 2013. Dr. Wagener has recently published his findings in Anesthesiology.

“I am primarily interested in studying the secondary effects of traumatic injuries. While we as physicians do a great job of treating patients after acute trauma, there are a variety of problems that occur after the initial problems are stabilized. These problems lead to significant morbidity and mortality for patients. If we can understand how and why these secondary problems occur, we can find better ways to treat or prevent them and help patients get better more quickly and return to their daily lives sooner.”

John D. Mitchell, MD, Assistant Professor of Anesthesia, Residency Program Director, Beth Israel Deaconess
Dr. Mitchell received a FAER Research in Education Grant in 2012 for his project, “Enhancing Feedback on Professionalism and Interpersonal Communication in Anesthesia Residency Programs.” Not only did his FAER grant help advance his knowledge, but it also allowed him to develop education research skills and leadership skills, both of which are necessary to make significant contributions to education outcomes and quality training of the next generation of physician anesthesiologists. Through his project, he improved his knowledge of designing and refining assessment tools in education. He has applied this knowledge in other areas of education, including assessment of curricula in echocardiography and assessment of resident professionalism and communication skills by patients.

“My career development has been strong as a result of the support I received from FAER for my multi-center project on enhancing feedback to residents. The skills in education research and leadership that I have gained during this project will enhance the quality of research I conduct and the leadership roles I undertake throughout my career.”

ON THE WEB Visit FAER.org/success-stories to learn about more FAER grant alumni.
MENTORS & EDUCATORS

Mentoring Today’s Learners

ACADEMY OF RESEARCH MENTORS IN ANESTHESIOLOGY
The FAER Academy of Research Mentors in Anesthesiology facilitates the development of educational and research programs for junior faculty members, and it supports faculty members in mentoring roles. The Research Mentor Academy is a resource for the development of mentors and role models in academic anesthesiology and perioperative medicine.

Academy members include academic anesthesiologists and others who have demonstrated outstanding contributions to the development of physician scientists in anesthesia. The academy is led by a council, elected by the academy membership. Councilors for 2014-15 include:

- President: Zeljko Bosnjak, PhD
- President-Elect: Evan Kharasch, MD, PhD
- Past President: Jeanine Wiener-Kronish, MD
- Councilor-at-Large: Rona Giffard, MD, PhD
- Councilor-at-Large: Mark F. Newman, MD
- Councilor-at-Large: David S. Warner, MD

View the full list of Research Mentor Academy members on page 30.

CURRENT ACTIVITIES

Workshop at the ASA Annual Meeting: Each year, the Research Mentor Academy hosts a workshop at the ANESTHESIOLOGY® annual meeting. Academy members and leading anesthesiology researchers and mentors participate as panel members. Topics range from how to find a mentor to how to apply for federal funding and more.

FAER Mentoring Excellence in Research Award: The FAER Mentoring Excellence in Research Award recognizes the value of outstanding mentors in anesthesiology. Each year, the Research Mentor Academy presents the award at the ASA annual meeting during the Celebration of Research. The 2014 recipient of the award was Jay Yang, MD, PhD, MSEE, Professor of Anesthesiology from the University of Wisconsin.

AUA Meeting Mentor-Mentee Program: In April 2015, the Research Mentor Academy hosted a mentor-mentee program at the Association of University Anesthesiologists (AUA) annual meeting. The program paired junior faculty presenters at the AUA meeting with members of the Research Mentor Academy. The goal of the program is to promote research and mentorship in anesthesiology, to provide mentorship on the value of an investigative career and to help the mentee develop a long-term relationship with the mentor.

FAER-HELRICH RESEARCH LECTURE
The FAER-Helrich Research Lecture recognizes outstanding scholarship by a scientist. It is part of an effort to encourage early-career anesthesiologists and trainees to consider careers in research and teaching.

Each year at the ANESTHESIOLOGY® annual meeting, the FAER-Helrich Research Lecture is presented as part of the Celebration of Research. The 14th Annual FAER-Helrich Research Lecturer was Emery Brown, MD, PhD, Warren M. Zapol Professor of Anaesthesia, Harvard Medical School and Massachusetts General Hospital. Dr. Brown discussed “The Clinical Neuroscience of Anesthesia: Research, Education and Patient Care.” He explained how neuroscience research is rapidly changing our understanding of anesthesia, how a deeper understanding of neuroscience can change patient care and he described a neuroscience education program for anesthesiologists.

ACADEMY OF EDUCATION MENTORS IN ANESTHESIOLOGY
The FAER Board of Directors established the FAER Academy of Education Mentors in Anesthesiology, as a companion to the FAER Academy of Research Mentors in Anesthesiology. The Education Mentor Academy initiates and engages in activities to improve education mentorship in anesthesiology. It recognizes educators and mentors who have made significant contributions to the development and advancement of academic anesthesiologists.

Academy members include academic anesthesiologists and educators who have demonstrated outstanding contributions to the development of physician educators and education researchers in anesthesia. The academy is led by co-chairs Catherine Kuhn, MD and Armin Schubert, MD, MBA. View the full list of Education Academy members on page 30.

CURRENT ACTIVITIES

Workshop at the ANESTHESIOLOGY® annual meeting: The FAER Academy of Education Mentors will host a workshop, “Developing and Mentoring Education Leaders,” at the ANESTHESIOLOGY 2015 annual meeting in San Diego.

Panel at the NYSSA Post-Graduate Assembly: The Education Mentor Academy hosted a panel at the 2014 NYSSA PGA and will host another panel at the 2015 meeting. The topic focuses on developing education researchers and education research mentors.
MEDICAL STUDENTS

Nurturing Future Leaders

MEDICAL STUDENT ANESTHESIA RESEARCH FELLOWSHIPS

FAER’s Medical Student Anesthesia Research Fellowships provide funding to support medical students over a summer or a year in focusing on anesthesiology research, training in scientific methods and techniques, and learning how to incorporate research into a medical career.

Mariah Kincaid, MD, PGY-1 Anesthesiology Resident
Brigham and Women’s Hospital
2014 Medical Student Anesthesia Research Summer Fellowship
“Through the MSARF experience, I was further prepared to think critically, to function with independence while still understanding my knowledge and skill deficits, and to continually seek creative ways to integrate anesthesiology and research in public health. The first-hand experience taking a project from concept to publication and follow-up studies also equipped me with a fundamental skillset that will be hugely valuable as I continue a career in academic anesthesiology.”

Stephen Shumpert, Fourth-Year Medical Student
Medical College of Wisconsin
2014 Medical Student Anesthesia Research Summer Fellowship
“I gained insight into how translational research can greatly improve patient care and the vast areas that can be further investigated. The program provided early clinical experience in allowing me to work with my mentor in caring for patients throughout the perioperative period, which confirmed my decision to choose anesthesiology as a career.”

Chad Greene, DO, PGY-2 Anesthesiology Resident
Vanderbilt University
2013 Medical Student Anesthesia Research Summer Fellowship
“My experience with MSARF was truly extraordinary. I learned how to properly approach, design and carry out a research study in a very organized and methodical manner. I was also introduced to the field of anesthesiology in a very different light through FAER.”

MATCH INTO ANESTHESIOLOGY

58% of medical students who have completed an anesthesiology research fellowship through FAER and graduated medical school have matched into an anesthesiology residency.

PUBLISH IN JOURNALS

30% of MSARF summer students are included as a co-author on a publication after their research experience.

RECOMMEND TO PEERS

98% of medical students who participated in the summer 2014 MSARF program strongly agreed to the statement, “I would recommend the MSARF program to other medical students and departments.”

ON THE WEB

Visit FAER.org/MSARF for more about medical student research.

RECENT AWARDS

Medical Student Anesthesia Research Fellowships are awarded during an annual application cycle. In 2015, 51 students matched into fellowships at 31 anesthesiology departments, bringing the total number of MSARF participants to more than 400 since the program started in 2005.

In addition to the MSARF Summer Fellowships, FAER awards year-long fellowships to students who would like to spend a year focusing on anesthesiology research and receive additional training. Recent year-long fellowships were awarded to:

Lauren Lisann, BS, 2015-16
Medical School and Fellowship Institution: Icahn School of Medicine at Mount Sinai
Mentor: Stacie Deiner, MD

Rebecca Bickham, BS, 2014-15
Medical School and Fellowship Institution: University of Michigan School of Medicine
Mentors: Alan R. Tait, PhD, Terri D. Voepel-Lewis, PhD

Claudia Sotillo, BS, 2014-15
Medical School: Boston University Fellowship Institution: Harvard Medical School Brigham and Women’s Hospital
Mentors: Jochen D. Muehlschlegel, MD, MMSc, FAHA; Simon C. Body, MB, ChB
Advancing the Specialty

RESIDENT SCHOLARSHIPS FOR ANNUAL MEETING

Sixty anesthesiology residents participated in the 2014 FAER Resident Scholar Program and 54 will participate in the 2015 program, which provides selected anesthesiology residents with the opportunity to attend the ANESTHESIOLOGY® annual meeting each year.

RESEARCH AWARDS

FAER recognizes and supports research excellence in residents by providing prizes for the best scientific posters presented at regional resident research conferences. In 2015, FAER awarded six prizes each to residents at the following conferences: the Midwest Anesthesia Residents Conference (MARC), the Pennsylvania Residents Research Conference (PARRC) and the Western Anesthesia Residents Conference (WARC). First place prize winners included:

• MARC: Seth Raymond, MD, Cleveland Clinic; Shereef Yassin, MD, Rush University Medical Center
• PARRC: Gaurav Rajpal, MD, University of Pittsburgh School of Medicine
• WARC: Reed E. Harvey, MD, David Geffen School of Medicine, University of California Los Angeles; Barrett Larson, MD, Stanford University

FAER also awarded cash prizes for the top posters presented at the ASA PRACTICE MANAGEMENT 2015 conference.

• First: Andrius Giedraitis, MD, MBA, MSE, University of Pittsburgh School of Medicine
• Second: Jordan Ash, MD, MPH, Brigham and Women’s Hospital
• Third: Trent D. Emeric, MD, University of Pittsburgh

SUBSPECIALTY SOCIETY ACTIVITIES

• In 2014, FAER made a $10,000 disbursement to the Society for Obstetric Anesthesia and Perinatology (SOAP) as part of the $50,000, five-year Gertie Marx/FAER Research and Education Grant. SOAP utilized part of the grant money for programs at its annual meeting in Toronto. Eleni Tsigas, Executive Director of the Preeclampsia Foundation, a patient advocacy group with a results-oriented mission, was the Gertie Marx/FAER lecturer. SOAP also hosted a Gertie Marx Research Competition and was able to award financial prizes due to Dr. Marx’s support of FAER.

• FAER also supports programming in conjunction with the Society for Education in Anesthesia (SEA-HVO Overseas Fellowship), and the Society for Technology in Anesthesia (FAER Panel at the STA Annual Meeting).

TRANSLATIONAL MEDICAL RESEARCH AND INNOVATION

• As part of a new initiative, FAER hosted the first-ever Anesthesiology Conference on Innovation and Entrepreneurship (ACIE) in 2014, and a workshop in June 2015. ACIE has evolved into the Anesthesiology Innovation and Entrepreneurship Program, which houses novel activities that exemplify FAER’s mission to advance medicine through research and education in anesthesiology.

Investing in the Future

Thank you for your support of the Foundation for Anesthesia Education and Research. By supporting anesthesiology research and scientific discovery, you have made possible life-enhancing advances in medicine and improvements in patient care. You have enabled talented anesthesiologists pursuing new knowledge to transform our specialty and our hospitals, and, most importantly, to improve lives.

This report recognizes donations made between 1/1/2014 and 12/31/2014. Great effort was made to include all contributors in this report and to ensure the accuracy of names and titles. If we have erred, please accept our apologies and let us know so we may make corrections in the future.

FOUNDING SUPPORTER

American Society of Anesthesiologists®

INDIVIDUAL DONORS

$10,000 OR MORE

Y. S. Prakash, MD, PhD
Michael M. Todd, MD
Paloma Toledo, MD, MPH
Cynthia A. Wong, MD
Margaret Wood, MD, FRCA
Glenn E. Woodward, MD
James R. Zaidan, MD, MBA+

$5,000 - $9,999

Frank Moya, MD
Dr. Mervyn Maze and Janet Wyner-Maze

Drs. Ximena and Daniel Sessler

Theodore H. Stanley, MD
Denham S. Ward, MD, PhD+
Warren Zapol, MD and Nikki Zapol, JD

$2,000 - $4,999

David L. Brown, MD
Stacie G. Deiner, MD and Jeffrey H. Silverstein, MD (dec.1)
Mark Dershowitz, MD, PhD
Alexander and Carol Hannenberg+
Joy L. Hawkins, MD
Jeffrey R. Kirsch, MD
Catherine M. Kuhn, MD+
Kathryn E. McGoldrick, MD+
Dolores B. Njoku, MD
Pamela P. Palmer, MD, PhD
Srikanth S. Patankar, MD, MBBS

$1,000 - $1,999

Ronald L. Katz, MD+
Dr. and Mrs. Joseph Annis+
Dr. and Mrs. Robert Cordes
Chestnut
Dr. David Chestnut and Mrs. Janet Chestnut

$500 - $999

Drs. Jerome H. and Shirley Graves Modell
Andrew A. Greenberg, MD
Onn F. Guidry, MD+
Dr. and Mrs. Steven Hall+
Judith Hellman, MD
Thomas K. Henthorn, MD
Bradley J. Hindman, MD+
Harriet W. Hopf, MD
Roger A. Johns, MD, PhD, MPH
Evan D. Kharasch, MD, PhD
Markus G. Klass, MD, PhD
Evan D. Kharasch, MD

$100 - $499

Jane and John Fitch
Lee A. Fleisher, MD+
Pamela Flood, MD and Steven L. Shafer, MD
Simon Gelman, MD, PhD+
James D. Grant, MD
Drs. Jerome H. and Shirley Graves Modell
Andrew A. Greenberg, MD
Onn F. Guidry, MD+
Dr. and Mrs. Steven Hall+
Judith Hellman, MD
Thomas K. Henthorn, MD
Bradley J. Hindman, MD+
Harriet W. Hopf, MD
Roger A. Johns, MD, PhD, MPH
Evan D. Kharasch, MD, PhD
Markus G. Klass, MD, PhD
Charles D. Kurth, MD
Mark J. Lema, MD, PhD

Acknowledging total annual contributions made between 1/1/2014 and 12/31/2014. Individual contributions listed in bold have supported FAER with $25,000 or more of donations in their lifetime. Individual contributions listed in italics have supported FAER with $10,000 or more of donations in their lifetime. Individual contributions noted with an (+) have supported FAER for 10 or more consecutive years (2005-2014). Lifetime contribution totals were calculated using donations received from 1995 to 12/31/2014.

CONTRIBUTORS
**CONTRIBUTORS**

**$1,000 - $1,999**
- Cynthia A. Lien, MD
- Dr. Philip and Christine Lumb+
- Carl Lynch, III, MD, PhD
- Linda J. Mason, MD
- James G. Mathis, MD
- Thomas M. McLoughlin, MD
- Ronald D. Miller, MD
- W. Stephen Minore, MD
- Mary J. Njoku, MD
- Rita L. Orkin
- Christina M. Pablecki, MD
- Mary Dale Peterson, MD
- James P. Rathmell, MD
- Kai Rehder, MD
- Dr. Lawrence J. Sadow
- Dr. and Mrs. Warren Sandberg
- Dr. and Mrs. Arnold Berry+

**$500 - $999**
- Philip F. Boyle, MD and Kristine
- MSC

**$200 - $499**
- Robert E. Shangraw, MD, PhD+
- Edward R. Sherwood, MD
- Kirsten J. Simononok, MD
- Jan D. Smith, MD, MBA
- Francis S. Stellaccio, MD
- Shepard B. Stone, PA
- Laurence C. Torsher
- Richard J. Trystman, PhD
- T. M. Truskill, MD

**$100 - $199**
- Myron Yaster, MD
- John P. Williams, MD
- James H. Williams, MD, PhD
- Jeanine P. Wiener-Kronish, MD
- Margaret R. Weglinski, MD

**$25 - $99**
- Philippe R. Housmans, MD, PhD
- Mindy M. Horrow
- Dr. Jay C. Horrow and Mrs. Unruh
- Brant M. Wagener, MD
- Jing Wang, MD, PhD
- Thomas L. Warren
- Jennifer P. Watkins, PhD, MD, DDS
- Barbara E. Waud, MD
- Margaret R. Weglinski
- Jeanine P. Wiener-Kronish
- James H. Williams, MD, PhD+
- John P. Williams
- Jacques T. Ya Deu, MD
- Edward A. Yaghour, MD
- Myron Yaster, MD

**CONTRIBUTORS**

**FROM LEARNERS TO LEADERS**

FAER is developing the next generation of leaders in anesthesiology and research who will see to it that the future of medicine sees as much progress as the past. Our programs and fellowship opportunities are designed to prepare anesthesiologists and trainees to be successful in pursuing academic careers, and obtaining FAER and other extramural research funding. Several recent grant awardees have previously participated in a FAER program.

- Five awardees are FAER Resident Program alumini
- One Research Fellowship Grant recipient was a FAER Medical Student Anesthesiology Research Fellow in 2011
- Two awardees who received Research Fellowship Grants in 2013 are continuing their research with Mentored Research Training Grants awarded in 2015

**Acknowledging total annual contributions made between 11/3/2014 and 12/31/2014. Individual contributors listed in bold have supported FAER with $12,500 or more in donations in their lifetime. Individual contributors contributing in total have supported FAER with $12,500 or more in donations in their lifetime. Individual contributors listed with an * have not supported FAER for 10 or more consecutive years (2005–2014). Lifetime contribution totals were calculated using donations received from 1995 to 12/31/2014.**

**Dr. John and Ms. Gina Eisenach**
- Ms. Christin L. Engelhardt
- Dr. James E. Fehr
- Dr. James H. Fitzpatrick, Jr, MD
- Herbert M. Holf, MD
- Gary B. Friedman, MD
- David J. Clark, MD
- Harlan A. Clarke, MD
- Melvin A. Cohen, MD
- Norman Cohen, MD
- John R. Cooper, Jr, MD
- Alberto J. De Armandi, MD
- Neil DiGiovanna, MD
- Thomas M. Dodds, MD
- Lena E. Dohlan, MD
- Drs. Karen B. Domingo and Gene L. Brenowitz
- John C. Drummond, MD
- Joel M. Grossman, MD
- Philip J. Housmans, MD
- Myron Yaster, MD
- John P. Williams, MD
- James H. Williams, MD, PhD
- Jan D. Smith, MD
- Margaret R. Weglinski, MD
- Jennifer P. Watkins, PhD, MD, DDS
- Barbara E. Waud, MD
- Margaret R. Weglinski
- Jeanine P. Wiener-Kronish
- James H. Williams, MD, PhD+
- John P. Williams
- Jacqueline T. Ya Deu, MD
- Edward A. Yaghour, MD
- Myron Yaster, MD
MAINTAINING OUR VITALITY

“I support FAER because it plays a critical role in providing early funding for early stage academic anesthesiologists, allowing them protected time to launch the research part of their careers. In these days of limited NIH funding, this is essential to maintain the vitality of our specialty and assure that anesthesiologists continue to contribute to generating new knowledge in medicine.”

- Rona Giffard, MD, PhD, Stanford University

Acknowledging total annual contributions made between 1/1/2014 and 12/31/2014. Individual contributors listed in italics have supported FAER with $10,000 or more of donations in their lifetime. Individual contributors noted with an (+) have supported FAER for 10 or more consecutive years. Individual contributors listed in bold have supported FAER with $25,000 or more of donations in their lifetime. Individual contributors listed in italics have supported FAER with $10,000 or more of donations in their lifetime. Individual contributors listed in italics have supported FAER with $10,000 or more of donations in their lifetime. Individual contributors listed in italics have supported FAER with $10,000 or more of donations in their lifetime. Individual contributors listed in italics have supported FAER with $10,000 or more of donations in their lifetime.
HONOR YOUR MENTOR

Mentorship is an important part of building a successful and productive career in medicine. Many FAER donors have chosen to recognize the outstanding mentors who support and guide future physician scientists by making tribute gifts to the foundation.

Melanie Alo, MD in memory of Dr. Lewis Covelier
“In memory of my mentor Lewis Covelier who showed me the path toward anesthesiology when I was an undecided medical student. Once in residency, he guided me as well, always teaching and being supportive, bolstering my confidence. I eventually had the honor of working with him as a member of our group of pediatric anesthesiologists.”

Dr. Carrie T. Anderson in honor of Clyde Anderson and Ronald L. Katz, MD
“My father was the best role model a son could have. He taught me honestly, respect for one self and a thirst to learn and do my best. Dr. Katz was the greatest chairman I have ever had. He did not put limits on me and was intellectually challenging. He taught me about more than anesthesiology — about how to be a good leader.”

Robert F. Bedford, MD in memory of Donald Clark, MD
“In memory of my mentor Donald Clark, MD. First one-on-one encounter, summer 1969.”

Fumito Ichinose, MD
“Dr. Ichinose’s patience, dedication to my education and personal growth, and kindness, perseverance, creative problem solving and exemplary care.”

Mark L. D’Agostino, MD in honor of John Patrick. “Pat” O’Gara, MD
“As a private practitioner, Pat was dedicated to learning and teaching. In addition, his patient care was excellent. He took time to know his patients, medically and personally.”

Melle Dalton, MD in honor of Ned Bowl, MD
“Dr. Bowl was my chairman who modeled fun competition with joy, stories, team patient care and excellence in academics.”

Melle Dalton, MD in honor of Paul Eckenbrecht, MD
“As my attending, he valued and modeled kindness to patients and attention to detail.”

Melle Dalton, MD in honor of Jeff Haladay, MD
“Modeled consistency, patience and unwavering quality of care as my attending.”

Melle Dalton, MD in honor of Gordon Langston, MD
“As my attending, he modeled service and efficiency and now models acceptance.”

Robert F. Bedford, MD in memory of Donald Clark, MD
“In memory of my mentor Donald Clark, MD. First one-on-one encounter, summer 1969.”

Fumito Ichinose, MD
“Dr. Ichinose’s patience, dedication to my education and personal growth, and kindness, perseverance, creative problem solving and exemplary care.”

Mark L. D’Agostino, MD in honor of John Patrick. “Pat” O’Gara, MD
“As a private practitioner, Pat was dedicated to learning and teaching. In addition, his patient care was excellent. He took time to know his patients, medically and personally.”

Melle Dalton, MD in honor of Ned Bowl, MD
“Dr. Bowl was my chairman who modeled fun competition with joy, stories, team patient care and excellence in academics.”

Melle Dalton, MD in honor of Paul Eckenbrecht, MD
“As my attending, he valued and modeled kindness to patients and attention to detail.”

Melle Dalton, MD in honor of Grant Meisner, MD
“Modeled academic excellence and knowledge as my attending and now kindness and compassion.”

Melle Dalton, MD in honor of David Oliver, MD
“Was my attending and now a mentor modeling how to serve in administrative ways.”

Melle Dalton, MD in honor of James F. Turner, MD
“Modeled later as my attending and partner now; how to help trainees relax, strive to learn and how to keep a realistic perspective of what really matters such as friends and family.”

Melle Dalton, MD in honor of John Quinn, MD
“Modeled and modeled a love of learning and leading; quiet kindness, perseverance, creative problem solving and exemplary care.”

Melle Dalton, MD in honor of Christopher Yeakel, MD
“Modeled perfection, laughter and clarity in care and collaborating with peers and providers.”

Paul Garcia, MD, PhD in honor of James R. Zaidan, MD, MBA

PROVIDING INSTRUMENTAL EXPERIENCE

“Jean-François has provided me with experience as a research fellow that has been and will be instrumental to my career development as an academic anesthesiologist. I would not be able to take my next step as a researcher without him.”
- Brant Wagener, MD, PhD, 2015 and 2013 FAER grant recipient, in honor of Jean-François Pittet, MD

ON THE WEB

Hear more donor tribute stories at FAER.org/honor-your-mentor.
## CONTRIBUTORS

### Lifetime Generosity

The Foundation for Anesthesia Education and Research recognizes individual donors who have made significant philanthropic contributions to the organization, and we thank them for their “lifetime generosity.” Private support of FAER funds the research of anesthesiologists such as Robina Matyal, MD, (pictured right) of Beth Israel Deaconess Medical Center who received a FAER Research in Education Grant in 2015 to study “Fundamentals of ultrasound course with verification of proficiency.” The discoveries and innovations FAER grantees make will change the way we practice medicine and care for our patients.

### $25,000 OR MORE

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joseph F. Antognini, MD+</td>
<td></td>
</tr>
<tr>
<td>David L. Brown, MD</td>
<td></td>
</tr>
<tr>
<td>Simon Gelman, MD</td>
<td></td>
</tr>
<tr>
<td>Ronald L. Katz, MD+</td>
<td></td>
</tr>
<tr>
<td>Kathryn E. McGoldrick, MD+</td>
<td></td>
</tr>
<tr>
<td>Edward D. Miller, MD</td>
<td></td>
</tr>
<tr>
<td>Ronald D. Miller, MD</td>
<td></td>
</tr>
<tr>
<td>Frank Moya, MD</td>
<td></td>
</tr>
<tr>
<td>Alan D. Sessler, MD+</td>
<td></td>
</tr>
<tr>
<td>Drs. Ximena and Daniel Sessler</td>
<td></td>
</tr>
<tr>
<td>Bruce M. Shepard, MD (dec.)</td>
<td></td>
</tr>
<tr>
<td>Theodore H. Stanley, MD</td>
<td></td>
</tr>
<tr>
<td>Denham S. Ward, MD, PhD</td>
<td></td>
</tr>
<tr>
<td>James R. Zaidan, MD, MBA+</td>
<td></td>
</tr>
</tbody>
</table>

### $10,000 OR MORE

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donn Dennis, MD, FAHA+</td>
<td></td>
</tr>
<tr>
<td>James C. Eisenach, MD+</td>
<td></td>
</tr>
<tr>
<td>Alex S. Evers, MD</td>
<td></td>
</tr>
<tr>
<td>Lee A. Fleisher, MD+</td>
<td></td>
</tr>
<tr>
<td>D. David Glass, MD+</td>
<td></td>
</tr>
<tr>
<td>Drs. Jerome H. and Shirley Graves Modell</td>
<td></td>
</tr>
<tr>
<td>Alan W. Grogono, MD, FRCA</td>
<td></td>
</tr>
<tr>
<td>Orin F. Guidry, MD+</td>
<td></td>
</tr>
<tr>
<td>Dr. and Mrs. Steven Hall+</td>
<td></td>
</tr>
<tr>
<td>Alexander and Carol Hannenberg+</td>
<td></td>
</tr>
<tr>
<td>Joy L. Hawkins, MD</td>
<td></td>
</tr>
<tr>
<td>Bradley J. Hindman, MD+</td>
<td></td>
</tr>
<tr>
<td>Carl C Hug Jr., MD, PhD</td>
<td></td>
</tr>
<tr>
<td>Francis M. James III, MD+</td>
<td></td>
</tr>
<tr>
<td>Joanne Jene, MD+</td>
<td></td>
</tr>
<tr>
<td>Sean K. Kennedy, MD</td>
<td></td>
</tr>
<tr>
<td>Jeffrey R. Kirsch, MD+</td>
<td></td>
</tr>
<tr>
<td>Mark J. Lema, MD, PhD</td>
<td></td>
</tr>
<tr>
<td>Cynthia A. Lien, MD</td>
<td></td>
</tr>
<tr>
<td>Dr. Philip and Christine Lumb+</td>
<td></td>
</tr>
<tr>
<td>M. Jane Matjasko, MD</td>
<td></td>
</tr>
<tr>
<td>Dr. Mervyn Maze and Janet Wyner-Maze</td>
<td></td>
</tr>
<tr>
<td>John B. Neeld, MD</td>
<td></td>
</tr>
<tr>
<td>Dr. and Mrs. Charles W. Otto</td>
<td></td>
</tr>
<tr>
<td>Srikanth S. Patankar, MD, MBBS</td>
<td></td>
</tr>
<tr>
<td>Ronald G. Pearl, MD, PhD</td>
<td></td>
</tr>
<tr>
<td>Kai Rehder, MD+</td>
<td></td>
</tr>
<tr>
<td>Michael F. Roizen, MD</td>
<td></td>
</tr>
<tr>
<td>Duane K. Rorie, MD, PhD (dec.)</td>
<td></td>
</tr>
<tr>
<td>Myer H. Rosenthal, MD</td>
<td></td>
</tr>
<tr>
<td>Armin Schubert, MD, MBA+</td>
<td></td>
</tr>
<tr>
<td>Eugene P. Sinclair, MD, PhD+</td>
<td></td>
</tr>
<tr>
<td>M. Christine Stock, MD, FCCP, FCCM</td>
<td></td>
</tr>
<tr>
<td>Michael M. Todd, MD</td>
<td></td>
</tr>
<tr>
<td>Paloma Toledo, MD, MPH</td>
<td></td>
</tr>
<tr>
<td>Charles A. Vacanti, MD</td>
<td></td>
</tr>
<tr>
<td>Shu-Ming Wang, MD</td>
<td></td>
</tr>
<tr>
<td>Mark and Mary Ellen Warner</td>
<td></td>
</tr>
<tr>
<td>Margaret Wood, MD, FRCA</td>
<td></td>
</tr>
</tbody>
</table>

### ON THE WEB
Visit [FAER.org/legacy-society](http://FAER.org/legacy-society) to become a Legacy Society member.

## FAER Legacy Society

The FAER Legacy Society honors those who make a gift to the foundation through their estates, wills or trusts. Legacy Society members help safeguard the future of anesthesiology by ensuring that discovery, innovation and education will continue on behalf of the profession for which we are so deeply passionate.

### LEGACY SOCIETY MEMBERS

- Ann Bardeen-Henschel, MD, dec. (hon.)
- Burdett S. Dunbar, MD
- Simon Gelman, MD, PhD
- Drs. Jerome H. and Shirley Graves Modell
- Carl C. Hug, Jr., MD, PhD
- Alan J. Mandel, MD
- Gertie Marx, MD, dec. (hon.)
- Linda J. Mason, MD
- Kathryn E. McGoldrick, MD
- George A. Rooke, MD, PhD
- Bruce M. Shepard, MD, dec. (hon.)
- Robert W. Vaughan, MD and Marjorie Sue Vaughan, PhD, RN
- Yvonne Wagner, MD
- Denham S. Ward, MD, PhD
- Dr. Warren and Ms. Nikki Zapol

### IN MEMORIAM: JEFFREY H. SILVERSTEIN, MD

FAER and the entire anesthesiology community remember Jeffrey H. Silverstein, MD, an esteemed anesthesiologist, researcher, educator and friend who enriched the professional careers of students, faculty and colleagues. His accomplishments in the study of postoperative cognitive dysfunction, research mentorship and the protection of human subjects are foundational. Dr. Silverstein passed away in July 2015.

Dr. Silverstein completed his medical training at the University of Extremadura in Badajoz, Spain, and his training in anesthesiology and critical care medicine at Mount Sinai Medical Center in New York City, where he worked for most of his career. He was Professor of Anesthesiology, Surgery and Geriatrics and Palliative Medicine, Vice Chairman for Research in the Department of Anesthesiology, and Associate Dean for Research at Mount Sinai.

Dr. Silverstein had a strong relationship to FAER. He received Research Starter Grant from FAER in 1990 and later mentored and advised FAER medical student research fellows and FAER Resident Scholars. He and his wife, Dr. Stacie Deiner, also made a commitment to generously support FAER in subsequent years and became strong philanthropic advocates and volunteers.

We extend our heartfelt sympathies and condolences to Dr. Silverstein’s wife and colleague, Dr. Stacie Deiner, his entire family and the anesthesiology community at Mount Sinai.
David Paulus, MD, had a passion for patient care, a strong commitment to his specialty, and he understood the importance of innovation in advancing medicine. Dr. Paulus, an anesthesiologist and professor of anesthesiology at the University of Florida, passed away unexpectedly in 2012 at the age of 67. He was also a professor in the College of Engineering’s department of mechanical engineering.

Cook Medical is honoring Dr. Paulus’ legacy through the David Paulus Anesthesia Innovation Fund and a pledge commitment to donate $250,000 over the next five years.

HONORING A TRUE INNOVATOR

David Paulus, MD, had a passion for patient care, a strong commitment to his specialty, and he understood the importance of innovation in advancing medicine. Dr. Paulus, an anesthesiologist and professor of anesthesiology at the University of Florida, passed away unexpectedly in 2012 at the age of 67. He was also a professor in the College of Engineering’s department of mechanical engineering.

Cook Medical is honoring Dr. Paulus’ legacy through the David Paulus Anesthesia Innovation Fund and a pledge commitment to donate $250,000 over the next five years.

DEFINING ANESTHESIA EDUCATION

Christina Spofford, MD, PhDAssistant Clinical Professor of Anesthesiology, University of Iowa, received a FAER Mentored Research Training Grant in 2008 and a subsequent career development grant from the National Institutes of Health, an NIH K08, in July 2011. She is working on developing educational curriculum and research that seeks to improve response times during operative crisis. Dr. Spofford has published in Anesthesiology, Anesthesia & Analgesia and the Journal of Pain.

“We know that functional pain behaviors are necessary for the study of postoperative pain and that reliance on reflexive behaviors are likely to lead to an incomplete picture of analgesic efficacy, knowing this is important for future drug development.”

DEVELOPING EDUCATIONAL CURRICULUM

Christina Spofford, MD, PhDAssistant Clinical Professor of Anesthesiology, University of Iowa, received a FAER Mentored Research Training Grant in 2008 and a subsequent career development grant from the National Institutes of Health, an NIH K08, in July 2011. She is working on developing educational curriculum and research that seeks to improve response times during operative crisis. Dr. Spofford has published in Anesthesiology, Anesthesia & Analgesia and the Journal of Pain.

“We know that functional pain behaviors are necessary for the study of postoperative pain and that reliance on reflexive behaviors are likely to lead to an incomplete picture of analgesic efficacy, knowing this is important for future drug development.”

DEVELOPING EDUCATIONAL CURRICULUM

Christina Spofford, MD, PhDAssistant Clinical Professor of Anesthesiology, University of Iowa, received a FAER Mentored Research Training Grant in 2008 and a subsequent career development grant from the National Institutes of Health, an NIH K08, in July 2011. She is working on developing educational curriculum and research that seeks to improve response times during operative crisis. Dr. Spofford has published in Anesthesiology, Anesthesia & Analgesia and the Journal of Pain.

“We know that functional pain behaviors are necessary for the study of postoperative pain and that reliance on reflexive behaviors are likely to lead to an incomplete picture of analgesic efficacy, knowing this is important for future drug development.”

HONORING A TRUE INNOVATOR

David Paulus, MD, had a passion for patient care, a strong commitment to his specialty, and he understood the importance of innovation in advancing medicine. Dr. Paulus, an anesthesiologist and professor of anesthesiology at the University of Florida, passed away unexpectedly in 2012 at the age of 67. He was also a professor in the College of Engineering’s department of mechanical engineering.

Cook Medical is honoring Dr. Paulus’ legacy through the David Paulus Anesthesia Innovation Fund and a pledge commitment to donate $250,000 over the next five years.

HONORING A TRUE INNOVATOR

David Paulus, MD, had a passion for patient care, a strong commitment to his specialty, and he understood the importance of innovation in advancing medicine. Dr. Paulus, an anesthesiologist and professor of anesthesiology at the University of Florida, passed away unexpectedly in 2012 at the age of 67. He was also a professor in the College of Engineering’s department of mechanical engineering.

Cook Medical is honoring Dr. Paulus’ legacy through the David Paulus Anesthesia Innovation Fund and a pledge commitment to donate $250,000 over the next five years.

HONORING A TRUE INNOVATOR

David Paulus, MD, had a passion for patient care, a strong commitment to his specialty, and he understood the importance of innovation in advancing medicine. Dr. Paulus, an anesthesiologist and professor of anesthesiology at the University of Florida, passed away unexpectedly in 2012 at the age of 67. He was also a professor in the College of Engineering’s department of mechanical engineering.

Cook Medical is honoring Dr. Paulus’ legacy through the David Paulus Anesthesia Innovation Fund and a pledge commitment to donate $250,000 over the next five years.

HONORING A TRUE INNOVATOR

David Paulus, MD, had a passion for patient care, a strong commitment to his specialty, and he understood the importance of innovation in advancing medicine. Dr. Paulus, an anesthesiologist and professor of anesthesiology at the University of Florida, passed away unexpectedly in 2012 at the age of 67. He was also a professor in the College of Engineering’s department of mechanical engineering.

Cook Medical is honoring Dr. Paulus’ legacy through the David Paulus Anesthesia Innovation Fund and a pledge commitment to donate $250,000 over the next five years.

HONORING A TRUE INNOVATOR

David Paulus, MD, had a passion for patient care, a strong commitment to his specialty, and he understood the importance of innovation in advancing medicine. Dr. Paulus, an anesthesiologist and professor of anesthesiology at the University of Florida, passed away unexpectedly in 2012 at the age of 67. He was also a professor in the College of Engineering’s department of mechanical engineering.

Cook Medical is honoring Dr. Paulus’ legacy through the David Paulus Anesthesia Innovation Fund and a pledge commitment to donate $250,000 over the next five years.

HONORING A TRUE INNOVATOR

David Paulus, MD, had a passion for patient care, a strong commitment to his specialty, and he understood the importance of innovation in advancing medicine. Dr. Paulus, an anesthesiologist and professor of anesthesiology at the University of Florida, passed away unexpectedly in 2012 at the age of 67. He was also a professor in the College of Engineering’s department of mechanical engineering.

Cook Medical is honoring Dr. Paulus’ legacy through the David Paulus Anesthesia Innovation Fund and a pledge commitment to donate $250,000 over the next five years.

HONORING A TRUE INNOVATOR

David Paulus, MD, had a passion for patient care, a strong commitment to his specialty, and he understood the importance of innovation in advancing medicine. Dr. Paulus, an anesthesiologist and professor of anesthesiology at the University of Florida, passed away unexpectedly in 2012 at the age of 67. He was also a professor in the College of Engineering’s department of mechanical engineering.

Cook Medical is honoring Dr. Paulus’ legacy through the David Paulus Anesthesia Innovation Fund and a pledge commitment to donate $250,000 over the next five years.
Support Today’s Learners in Becoming Tomorrow’s Leaders

Advances in anesthesiology are made possible by individuals who believe in education and research. Supporting talented anesthesiologists through the formative stages of their careers will expand research in anesthesiology, and will benefit our specialty, our medical centers and, most importantly, our patients. You can support research and education in anesthesia by making a gift to FAER.

ONLINE
Donations made online have an immediate effect on FAER’s ability to provide ongoing support for our programs and grants. You can make an online donation to FAER using your credit card. Visit FAER.org/donate to make your contribution today.

SUSTAINING GIFT
Your monthly, quarterly or semi-annual recurring gift of any amount is an excellent way to provide sustained support for anesthesia education and research. You can set up a recurring gift to FAER by visiting FAER.org/donate.

BY MAIL
You can support the future of anesthesiology by mailing a check to FAER. Send it to us at:
Foundation for Anesthesia Education and Research
1061 American Lane
Schaumburg, IL 60173

BY PHONE
You can call FAER’s office at 630-912-2554 to make a credit card donation. Our business hours are Monday through Friday, 8 a.m. to 5 p.m. CT. When you call, you may inform us whether your gift is a tribute in honor or in memory of a mentor, colleague, friend or family member.

OTHER WAYS TO GIVE
There are a number of ways to support FAER philanthropically. If you are interested in making a planned gift or would like to personalize your contribution to FAER, contact us at 630-912-2554.

MAKE YOUR DONATION ONLINE AT FAER.ORG/DONATE.
THANK YOU FOR YOUR GENEROSITY!
Fiscal Year 2014 Highlights

FINANCIAL HIGHLIGHTS FOR FISCAL YEAR 2014
These highlights are based on unaudited financials for the year ended December 31, 2014. For a copy of the complete audited financials, please contact the FAER office at 630-912-2554 or email FAER@faer.org.

INCOME

<table>
<thead>
<tr>
<th>2014 INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Society of Anesthesiologists</td>
</tr>
<tr>
<td>Corporate</td>
</tr>
<tr>
<td>State Component Society</td>
</tr>
<tr>
<td>Other Society</td>
</tr>
<tr>
<td>Individual</td>
</tr>
<tr>
<td>Anesthesiology Department, Practice Group</td>
</tr>
<tr>
<td>Foundation/Trust</td>
</tr>
<tr>
<td>Total Donation Income</td>
</tr>
<tr>
<td>Other Income</td>
</tr>
<tr>
<td>TOTAL INCOME</td>
</tr>
</tbody>
</table>

EXPENSES

<table>
<thead>
<tr>
<th>2014 EXPENSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRANTS/PROGRAMS</td>
</tr>
<tr>
<td>Research Grants</td>
</tr>
<tr>
<td>Resident Scholar Program</td>
</tr>
<tr>
<td>Medical Student Anesthesia Research Fellowship Program</td>
</tr>
<tr>
<td>Subspecialty Education Programs</td>
</tr>
<tr>
<td>TOTAL GRANTS/PROGRAMS</td>
</tr>
<tr>
<td>GENERAL OPERATING</td>
</tr>
<tr>
<td>General Operating Expense</td>
</tr>
<tr>
<td>Development Expense</td>
</tr>
<tr>
<td>TOTAL OPERATING EXPENSE</td>
</tr>
<tr>
<td>TOTAL EXPENSES</td>
</tr>
</tbody>
</table>

STATEMENT OF FINANCIAL POSITION

<table>
<thead>
<tr>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASSETS</td>
</tr>
<tr>
<td>Cash</td>
</tr>
<tr>
<td>Investments</td>
</tr>
<tr>
<td>Beneficial Interest in Trust</td>
</tr>
<tr>
<td>Receivables</td>
</tr>
<tr>
<td>TOTAL ASSETS</td>
</tr>
<tr>
<td>LIABILITIES &amp; NET ASSETS</td>
</tr>
<tr>
<td>Total Liabilities</td>
</tr>
<tr>
<td>Undesignated Net Assets</td>
</tr>
<tr>
<td>Net Income</td>
</tr>
<tr>
<td>TOTAL LIABILITIES &amp; NET ASSETS</td>
</tr>
</tbody>
</table>

Board of Directors

Joy L. Hawkins, MD, Chair
University of Colorado School of Medicine

George T. Blike, MD
Dartmouth Hitchcock Medical Center

Daniel J. Cole, MD
UCLA Medical Center

Richard P. Dutton, MD, MBA
Anesthesia Quality Institute

James D. Grant, MD
William Beaumont Hospital

Harriet Hopf, MD
University of Utah

Roger Johns, MD, PhD, MPH
Johns Hopkins University

Keith A. Jones, MD
University of Alabama at Birmingham

Zeev Kain, MD, MBA
University of California Irvine

Evan D. Kharasch, MD, PhD
Washington University

Jeffrey R. Kirsch, MD
Oregon Health & Science University

Catherine M. Kuhn, MD
Duke University School of Medicine

George A. Mashour, MD, PhD
University of Michigan

Linda Mason, MD
Loma Linda University

Mervyn Maze, MB ChB
University of California San Francisco

Francis X. McGowan, MD
Children’s Hospital of Philadelphia

Dolores B. Njoku, MD
Johns Hopkins University

Mary Dale Peterson, MD, MSHCA
Drscola Children’s Health System; University of Texas Medical Branch

Beverly Philip, MD
Brigham and Women’s Hospital

Armin Schubert, MD, MBA
Ochsner Medical Center

Alan D. Sessler, MD
President Emeritus (ex officio)

Daniel I. Sessler, MD
Cleveland Clinic

Theodore H. Stanley, MD
University of Utah

Eckehard A. Stuth, MD
Medical College of Wisconsin

Paloma Toledo, MD
Northwestern University

Rebecca S. Twersky, MD, MPH
SUNY Downstate Medical Center

Jeanine P. Wiener-Kronish, MD
Massachusetts General Hospital

Karen S. Williams, MD
George Washington University Medical Center

Margaret Wood, MB, ChB
Columbia Presbyterian Hospital

Nikki Zapol, JD
Partners Healthcare

2014-15 OUTGOING LEADERSHIP

David L. Brown, MD, Chair
Dennon Dennis, MD, FAHA
Lee A. Fleisher, MD
Alexander Hannenberg, MD
Kathryn E. McGoldrick, MD
Denham S. Ward, MD, PhD, President & CEO
LEADERSHIP & VOLUNTEERS

FAER EXECUTIVE COMMITTEE
Joy L. Hawkins, MD
Chair
Mary Dale Peterson, MD, MSHCA
Secretary-Treasurer
Evan D. Kharasch, MD, PhD
Vice Chair for Grants
Armin Schubert, MD, MBA
Vice Chair for Programs
Karen S. Williams, MD
Vice Chair for Development
Beverly Philip, MD
ASA V.P. of Scientific Affairs
Alan D. Sessler, MD
President Emeritus (ex officio)

FAER EXECUTIVE COMMITTEE
Joy L. Hawkins, MD, Chair
Mary Dale Peterson, MD, MSHCA, Secretary-Treasurer
Evan D. Kharasch, MD, PhD, Vice Chair for Grants
Armin Schubert, MD, MBA, Vice Chair for Programs
Karen S. Williams, MD, Vice Chair for Development
Beverly Philip, MD, ASA V.P. of Scientific Affairs
Alan D. Sessler, MD, President Emeritus (ex officio)

FAER EDUCATION STUDY SECTION
The FAER Education Study Section reviews applications for Research in Education Grant funding.
Armin Schubert, MD, MBA, Chair
Joy L. Hawkins, MD, Catherine M. Kuhn, MD, May C. Pian-Smith, MD, MS

ASA COMMITTEE ON RESEARCH
The ASA Committee on Research serves as the study section that reviews FAER Mentored Research Training Grant and Research Fellowship Grant applications for scientific merit. Committee membership is appointed by the ASA.
Evan D. Kharasch, MD, PhD, Chair
Michael J. Avram, PhD
Michael F. Aziz, MD, Adj.
Matthias Eikermann, MD, Adj.
Holger K. Ettzschig, MD, Adj.
Lee A. Fleisher, MD
Gyorgy Frendl, MD, PhD, Adj.
James Hecker, MD, PhD, Adj.
Judith Hellman, MD, Adj.
Max B. Kelz, MD, PhD, Adj.
Judy R. Kersten, MD
Andrea M. Kurz, MD, Adj.
Jae W. Lee, MD, Adj.
Sean C. Mackey, MD, PhD, Adj.
Dolores B. Njoku, MD, Adj.
Y.S. Prakash, MD, PhD, Adj.
Sadeq A. Quraishi, MD
Daniel I. Sessler, MD
Ken Solt, MD, Adj.
Marcos F. Vidal-Melo, MD, PhD, Adj.

FAER ACADEMY OF RESEARCH MENTORS IN ANESTHESIOLOGY
Paul D. Allen, MD, PhD
Joseph Antognini, MD
Michael Avidan, MBChB, DA, FCASA
Thomas Blanck, MD, PhD
Zeljko Bosnjak, PhD
Emery Brown, MD, PhD
John F. Capacchione, MD
C. Michael Crowder MD, PhD
Clifford S. Deutschman, MS, MD
Thomas Ebert, MD, PhD
Roderic G. Eckenhoff, MD
David Eckmann, MD, PhD
James C. Eisenach, MD
Charles W. Emala Sr., MD
Alex S. Evers, MD
Lee A. Fleisher, MD
Gerald F. Gehbhart, PhD
Simon Gelman, MD, PhD
Rona G. Giffard, MD, PhD
Michael Gold, PhD
Michael A. Groppe, MD, PhD
Neil L. Harrison, PhD
Judith Hellman, MD
Hugh Hemmings Jr., MD, PhD, FRCA
Carol A. Hirshman, MD
Quinn H. Hogan, MD
Harriet W. Hopf, MD
Roger A. Johns, MD, PhD, MPH
Keith A. Jones, MD
Michael J. Joyner, MD
John P. Kampine, MD, PhD
Judy R. Kersten, MD
Evan D. Kharasch, MD, PhD
Jeffrey R. Kirsch, MD
Paul R. Knight, III, MD, PhD
Sean Mackey, MD, PhD
James Marks, MD, PhD
Jeevendra Martyn, MD
Joseph Mathew, MD, PhD
Mervyn Maze, MB, ChB
Jianren Mao, MD, PhD
Ronald D. Miller, MD
Mark F. Newman, MD
Paul S. Pagel, MD, PhD
Pratik Pandharipande, MD
Ronald G. Pearl, MD, PhD
Jean-Francois Pittet, MD
Y. S. Prakash, MD, PhD
Peter J. Pronovost, MD, PhD
Srinivasa N. Raja, MD
Warren Sandberg, MD, PhD
Margaret M. Sedensky, MD
Daniel Sessler, MD
Steven L. Shafer, MD
Sam R. Sharar, MD
Edward Sherwood III, MD, PhD
Brett A. Simon, MD, PhD
David Stowe, MD, PhD
Eckehard A. E. Stuth, MD
Michael M. Todd, MD
Richard Traystman, PhD
Monica Vavilala, MD
David C. Warttiet, MD, PhD
David O. Warner, MD
David S. Warner, MD
Jeanine P. Wiener-Kronish, MD
Yan Xu, PhD
Jay Yang, MD, PhD
Myron Yaster, MD
Zhiyi Zuo, MD, PhD

FAER ACADEMY OF EDUCATION MENTORS IN ANESTHESIOLOGY
Arnold J. Berry, MD, MPH
Robert R. Gaiser, MD, MSEd
Joy L. Hawkins, MD
Catherine Kuhn, MD
Alex Macario, MD, MBA
Matthew D. McEvoy, MD
John D. Mitchell, MD
David J. Murray, MD
Rita M. Patel, MD
May Pian-Smith, MD, MS
Steven H. Rose, MD
Armin Schubert, MD, MBA
Alan D. Sessler, MD, Mayo Clinic (Emeritus)
Mark Stafford-Smith, MD, FRCP
James R. Zaidan, MD, MBA