We promote and support the SCA mission of excellence in the care of patients undergoing cardiothoracic and vascular procedures through education and research.
The main cornerstone of our programming to improve patient care is the FOCUS Initiative (Flawless Operative Cardiovascular Unified Systems). FOCUS is a complementary and cooperative effort designed to raise the bar on patient safety through human factors engineering.

We are working with Peter Pronovost, M.D., Medical Director of the Center for Innovation in Quality Patient Care at the Johns Hopkins School of Medicine. This team’s proposal was selected by the FOCUS Steering Committee from responses to a Request for Proposals sent to 60 institutions.

Dr. Pronovost has a special interest in applying research methods that improve quality of health care and safety, especially in critical care settings such as Intensive Care Units (ICUs) and operating rooms (OR). His expertise in this area has gained international attention, and Dr. Pronovost was awarded a MacArthur Genius Grant in 2008. On the national level, he is leading an effort with the Institute for Healthcare Improvement to develop an idealized ICU design. He is also developing standards for ICU quality measures with the Veterans Health Association. He is an active member of the National Coalition on Health Care and medical advisor for the Leapfrog Group for patient safety. The FOCUS Initiative observes cardiovascular OR teams in various sites to study communication, human interaction, machine set up and design, team development and leadership. Ultimately, our goal is to improve patient care through the elimination of human error in the OR. In 2008, five study sites were chosen from a field of 36 applicants. Site visits are taking place in the winter of 2009. Initial sites include:

**Baystate Medical Center**
(Springfield, MA)
Anesthesiologist: Gary Kanter, M.D.
Surgeon: John A. Rossou, M.D.

**Lehigh Valley Hospital**
(Allentown, PA)
Anesthesiologist: Nanette Schwann, M.D.
Surgeon: Gary Szydlowski, M.D.

**Medical University of South Carolina**
(Charleston, SC)
Anesthesiologist: Jake Abernathy, M.D.
Surgeon: Fred A. Crawford, Jr., M.D.

**New York University**
(New York, NY)
Anesthesiologist: Marc Kanchuger, M.D.
Surgeon: Aubrey C. Galloway, M.D.

**St. John’s Mercy**
(St. Louis, MO)
Anesthesiologist: Christopher Young, M.D.
Surgeon: Edward B. Savage, M.D.

In 2008, five study sites were chosen from a field of 36 applicants. Site visits are taking place in the winter of 2009. Initial sites include:

**Baystate Medical Center**
(Springfield, MA)
Anesthesiologist: Gary Kanter, M.D.
Surgeon: John A. Rossou, M.D.

**Lehigh Valley Hospital**
(Allentown, PA)
Anesthesiologist: Nanette Schwann, M.D.
Surgeon: Gary Szydlowski, M.D.

**Medical University of South Carolina**
(Charleston, SC)
Anesthesiologist: Jake Abernathy, M.D.
Surgeon: Fred A. Crawford, Jr., M.D.

**New York University**
(New York, NY)
Anesthesiologist: Marc Kanchuger, M.D.
Surgeon: Aubrey C. Galloway, M.D.

**St. John’s Mercy**
(St. Louis, MO)
Anesthesiologist: Christopher Young, M.D.
Surgeon: Edward B. Savage, M.D.
In 2008, the Foundation partnered with Michael Roizen, the Anesthesia Research Foundation, and the International Anesthesia Research Society to significantly enhance research funding. The generosity of these gifts has transformed the research program. In 2009, the following grants will be awarded:

**SCA/IARS Starter Grant** — $25,000 a year for two years

**Roizen Anesthesia Research Foundation New Investigator Grant** — $50,000 a year for two years

**SCA/IARS Mid-Career Grant** — $40,000 a year for two years.

For the 2007–08 fiscal year, a total of four research grants were awarded, three starter grants to new investigators, and one mid-career grant to an established investigator.

### 2008 STARTER GRANT RECIPIENTS

Zhengyuan Xia, M.D., Ph.D.
University of Hong Kong
Hong Kong, China

Jochen Daniel Muehlschlegel, M.D.
Brigham and Women’s Hospital, Harvard Medical School
Boston, MA

Ragnar Huhn, M.D.
University of Amsterdam
Amsterdam, Netherlands

---

I am very excited about my SCA Starter Grant. It is the first external funding I have received since starting my job as an independent investigator at the University of Hong Kong. It is very meaningful that I obtained this grant in my first year. This award is highly regarded by the Department and the Faculty. I expect it will prove helpful for future promotions. Academically, this grant shapes the direction of my research. I will be able to focus my research on the peer-identified study of why the commonly used intravenous anesthetic propofol is not clinically cardiac protective when used at relatively low doses. The answer to this question may improve patient care both during anesthesia and post-operatively since this anesthetic is also administered as a sedative.

— Zhengyuan Xia, M.D., Ph.D.
University of Hong Kong

---

### 2008 MID-CAREER GRANT RECIPIENT

Mark Gerhardt, M.D., Ph.D.
Ohio State University

---

INVESTIGATION

Basic science research provides the foundation for effective clinical advances. The SCA Foundation funds all of the research grants awarded by the SCA Research Committee. Grants for research projects are available to both beginning and mid-career investigators.

---

**Nitrate Tolerance Compromises Propofol Protection of the Endothelium Against Inflammation: the Role of PKC-B2 and NADPH Oxidase Interaction**

**Functional Analysis of Protease Activated Receptor-4 Polymorphisms Associated with Myocardial Injury**

**Does the Noble Gas Helium Protect the Myocardium in State of Hypertension in vivo?**

**Cytoskeletal Alterations in a Porcine Model of Restrictive Ventricular Septal Defect**
Early interest in cardiac anesthesiology must be developed to attract and retain the best and brightest medical students and residents. SCA educational programming includes offers of financial assistance for workshop attendance, materials and international outreach.

2007-2008 has seen an expansion of the funding available for education. Funds provided by the Foundation were used to provide a human torso to enhance learning in the SCA workshops. In addition, the generous support of the membership established the Wynands Education Fund.

The Wynands Fund kickoff was held on June 19th as part of our Annual Meeting. Over $10,000 was raised to establish this fund, which will support educational seminars and lectures. The fundraising event honored John Earl Wynands, O.C., M.D., a Past President of the SCA.

As the SCA Foundation moves forward, we are establishing criteria for scholarships. Having a strong directive to build the next generation of cardiovascular anesthesiologists, our educational programs are currently focused on residents and fellows to build their leadership ability and mentoring skills.

John Earl Wynands O.C., M.D.

John Earl Wynands (Earl) is Emeritus Professor of Anesthesiology at the University of Ottawa, in the capital city of Canada. Born in Montreal, Earl is perhaps best known in the cardiac anesthesiology world for his contributions to the care of patients undergoing revascularization of the heart. His seminal article entitled “Coronary Artery Disease and Anesthesia” was published in the Canadian Journal of Anesthesiology in 1967, and was followed by more than 100 publications over the next 30 years, including a series of papers in the 1980s on opioid “anesthesia.”

Earl has been a beloved leader throughout his career. He has served as the President of the Canadian Society of Anesthesiologists and President of our own Society of Cardiovascular Anesthesiologists. He received the Gold Medal from the Canadian Society, and the first Distinguished Service Award from the SCA—the highest level of awards from both societies. Wherever he has worked, Earl has been a major resource to his colleagues and students, providing a sympathetic ear, offering wise and compassionate feedback and advice both professional and personal. Anyone with the good fortune to have known Earl realizes they have been touched by a unique and wonderful human being. Establishment of the Wynands Education Fund recognizes and continues his legacy of the highest quality of education in cardiovascular anesthesiology.

Compiled and edited by James G. Ramsay, M.D.
The Founders Society

The supporters of the SCA Foundation are the founders of the organization. We wish to thank each of the following individuals for either making a gift to the Foundation or a pledge over multiple years to build our organization:

- Joyce A. Wahr, M.D. *
- Glenn P. Gravlee, M.D. *
- Paul G. Barash, M.D. *
- Nancy A. Nussmeier, M.D. *
- Ellise Delphin, M.D. *
- Michael F. Roizen, M.D. *
- Joel A. Kaplan,  M.D.
- Pam Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D. *
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Richard F. Davis, M.D. *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth
- George E. Burgess, M.D.
- John E. Ellis, M.D. *
- Brian M. Callaway, M.D.
- Glenn P. Gravlee, M.D.
- George E. Burgess, M.D.
- Richard F. Davis, M.D. *
- Pamela Butterworth *
- Dr. John F. Butterworth

Table: Financial Report

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>$33,802</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>2,000</td>
</tr>
<tr>
<td>Pledges receivable – net</td>
<td>520,838</td>
</tr>
<tr>
<td>Pledges receivable – current portion</td>
<td>2,432</td>
</tr>
<tr>
<td>Total current assets</td>
<td>559,072</td>
</tr>
<tr>
<td>Property and equipment – net</td>
<td>7,318</td>
</tr>
<tr>
<td>Pledges receivable – net</td>
<td>1,713,815</td>
</tr>
<tr>
<td>Investments</td>
<td>1,246,315</td>
</tr>
<tr>
<td><strong>Total net assets</strong></td>
<td><strong>$3,526,520</strong></td>
</tr>
</tbody>
</table>

Table: Liabilities and Net Assets

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable and accrued expenses</td>
<td>$7,992</td>
</tr>
<tr>
<td>Net assets</td>
<td>1,377,569</td>
</tr>
<tr>
<td>Temporarily restricted net assets</td>
<td>2,140,959</td>
</tr>
<tr>
<td>Total net assets</td>
<td><strong>$3,518,518</strong></td>
</tr>
<tr>
<td><strong>Total net assets</strong></td>
<td><strong>$3,526,520</strong></td>
</tr>
</tbody>
</table>

The SCA Foundation hired Goodman & Company to conduct an independent financial audit for the fiscal year of 2007-08. The audit was conducted in accordance with auditing standards generally accepted in the United States of America. The financial statements present fairly, in all material aspects, the financial position of the SCA Foundation as of October 31, 2008, and the changes in its net assets and cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

**Financial Report**

The SCA Foundation hired Goodman & Company to conduct an independent financial audit for the fiscal year of 2007-08. The audit was conducted in accordance with auditing standards generally accepted in the United States of America. The financial statements present fairly, in all material aspects, the financial position of the SCA Foundation as of October 31, 2008, and the changes in its net assets and cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

**Liabilities and Net Assets**

- **Current liabilities**
  - Accounts payable and accrued expenses: $7,992
- **Net assets**
  - Unrestricted: $1,377,569
  - Temporarily restricted: $2,140,959
- **Total net assets**: $3,518,518

**Statement of Financial Position**

- **Assets**
  - Cash and cash equivalents: $33,802
  - Accounts receivable: 2,000
  - Pledges receivable – net: 520,838
  - Pledges receivable – current portion: 2,432
- **Total current assets**: 559,072

- **Liabilities and Net Assets**
  - Property and equipment – net: 7,318
  - Pledges receivable – net: 1,713,815
- **Total net assets**: 3,526,520

**Statement of Activities**

- **Total revenue and support**: 88,117

**Changes in unrestricted net assets**: (295,356)

**Temporarily restricted net assets**: 2,453,813

**Net assets released from restrictions**: (421,354)

**Change in temporarily restricted net assets**: 2,032,459

**Change in net assets**: 1,737,103

**Net assets – beginning of year**: 1,781,425

**Net assets – end of year**: 3,518,528