E-Learning and Innovation in Education

*History of the JCTSE and future direction in STS*

Mark S. Allen, M.D.
Origins
JCTSE

- Early 2000’s – Thoracic Surgery in Trouble
  - Few job openings
  - Residency slots unfilled
  - Anyone could become a Thoracic surgeon
  - ABTS pass rates poor

- Leaders in the specialty meet
  - Improve the training in our specialty
  - May 2008 – JCTSE incorporated
Origins – Founding Members (2008)

- **AATS**
  - Patterson
  - Spray
  - $250,000 x 4yrs

- **STS**
  - Chitwood*
  - Wood
  - $250,000 x 4yrs

- **ABTS**
  - Rusch**
  - Feins
  - $250,000 x 4yrs

- **TSFRE**
  - Mack
  - Calhoon
  - $250,000 x 4yrs

Total: $4,000,000
Origins – Founding Members

AATS
- Patterson
- Spray
$250,000 x 4yrs

STS
- Chitwood*
- Wood
$250,000 x 4yrs

ABTS
- Rusch**
- Feins
$250,000 x 4yrs

TSFRE
- Mack
- Salhoon
$250,000 x 4yrs
Origins – Continuing Members

**STS**
- Naunheim**
- Fullerton
- Mathisen

**ABTS**
- Allen*
- Calhoon
- Shemin

- Additional revenue sources
  - Edward life sciences - $1,200,000
  - St. Jude Medical - $200,000
  - Medtronic - $170,000
  - Maquet Medical Systems - $75,000
  - Ethicon Endo-Surgery - $12,500
  - Graham Foundation - $6,400
Vision and Mission

• Improve Education in Cardiothoracic Surgery
  • Innovative new educational techniques
    • Identify
    • Introduce
    • Support
  • Improve the educators
STS Staff
Rebecca Mark
Darcy Sengewald
Lauren Aloia

Dr. Edward D. Verrier
Educational Director
Curriculum

- John Calhoon
- Carolyn Reed
- Ed Verrier
- Craig Baker
- Ara Vaporciyan
- Michael Fischbein
- George Hicks
- Richard Lee
- Nahush Mokadadam
- Mark Orringer
- Steve Yang

- Mark Allen
- William Baumgartner
- Edward Bove
- David Jones
- Bruce Lytle
- John Mayer
- J. Wayne Meredith
- Bryan Meyers
- Valerie Rusch
- Douglas Wood
- Cameron Wright
GENERAL MANAGEMENT OF A PATIENT UNDERGOING CARDIOVASCULAR SURGERY

Knowledge
Physiology
See Core Surgical Foundation
Myocardial cellular physiology
Electrophysiology
Physiology of congestive heart failure

Anatomy
See Core Surgical Foundation
Heart, pericardium and great vessels
Coronary anatomy
Valvular anatomy
Anatomy of the peripheral vascular system
Anatomy of cardiac innervation

Pathology
See Core Surgical Foundation
Atheroma, medial necrosis
Myocardial infarction and complications
Intrinsic myocardial disorders (IHSS, myocardial noncompaction)
Endocarditis
Pericarditis
Tumors of the heart
Sequelae of chest wall and mediastinal radiation

Pharmacology
See Core Surgical Foundation
Drugs used in the treatment of hypertension, heart failure, and angina
Inotropes, vasodilators and vasoconstrictors

Microbiology
See Core Surgical Foundation
Antibiotic prophylaxis for cardiac surgery

Imaging
See Core Surgical Foundation
Echo
Cardiac cath

Patient Management/Clinical Skills
General
Diagnosis, evaluation, and treatment of heart disease
Learning Management System
Content Management System

Craig Baker  Ara Vaporciyan  Jim Fann  Steve Yang
Astute Technology joins Echo360.
New STS Organization

Board of Directors

Meetings and Education
- Annual Meeting
- eLearning and Educational Innovation
  - Clinical Education
  - International meetings
  - New Technology
  - Resident Issues

Clinical Practice and Member Engagement
- Adult Cardiac and Vascular Surgery
- Associate Membership
- Career Development
  - Congenital Heart
  - Critical Care
  - General Thoracic
  - Practice Mgmt.
  - Adult - CHS
  - End-Stage CPD

Quality, Research and Patient Safety
- Evidence Based Surgery
- National Databases
- Pt. Safety
- Research Development
- Health Policy and Relationships
  - Coding and Reimbursement
  - Health Policy, Reform and Advocacy
  - International Relationships
  - Media Relations and communications
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Health Policy and Relationships
- Coding and Reimbursement
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Vision and Mission - Future

• Platform for e-Learning
• Resource for Cardiothoracic Surgeons
  • Residents, students
  • Practicing surgeons
  • International education
  • Industry resource
  • Patient resource
Thank You

Questions & Discussion