Research and Its Importance to Our Specialty

Over the past several years, the AATS Council and its Scientific and Government Relations Committee (SAGR) have wrestled with the significant reduction in the involvement of cardiothoracic surgeons in projects supported by the National Heart, Lung and Blood Institute, and the National Cancer Institute. Over the last year the AATS has initiated two formal visits to the NIH campus to meet with representatives of both the NHLBI and NCI regarding this issue.

In early August I was honored to serve as a Visiting Scholar Lecturer at the NHLBI’s Division of Cardiovascular Sciences (NHLBI/DCVS). It provided an excellent opportunity to share with Dr. Susan Shurin, the Acting Director of the NHLBI and a number her professional staff, the role CT surgery plays in the American Public Health System, the history and contributions the NIH/NHLBI has brought to the advancement of CT surgery, and the unique role CT surgeons play in translational research, a vital part of the Institute’s mission. Among the issues I stressed in my lecture was the immediate need for an increase in the number of CT surgery research training programs. I reminded them of the former NIH Clinic of Surgery program which for 37 years (1953-1990) trained 170 of today’s surgeons with almost 30% achieving the position of Division Chief or Department Chair. There was a collegial and encouraging response to the AATS recommendations. At the present time, NHLBI is planning a working group to discuss future directions in cardiac surgery research and the participation of organizations such as AATS in developing this initiative.

In mid December a group of SAGR Committee members, led by Dr. David Jones, met with staff from the National Cancer Institute (NCI) to discuss the intramural program, the NCI Training Branch, and NIH Center for Scientific Review. Through this meeting the AATS was able to gain a better understanding of areas for increased involvement by CT Surgeons:

- The AATS is concerned about the transition from K to R awards. NCI agreed that K awardees could be utilized as junior reviewers under the mentorship of more senior reviewers and might also review other K award applications within NCI.
- The developing field of “treatment sciences” in which cancer treatment is tailored to individuals and populations using molecular and clinical characterization of disease. Collaboration is critical to make treatment sciences a success and AATS was encouraged to get more involved in this developing field.
- There is a new (2 stage) translational review process for grants that combine both imaging and oncology for clinical research involving humans. Applicants can choose whether they want to go through the new two stage process or stay with the traditional one. Cardiothoracic surgical clinicians were encouraged to get more involved with this process.
- Focus the next Steering Committee working group on the Lung Cancer Screening Trials and come up with ways in which a consensus for what should be studied and funded in the future can be built in collaboration with Radiologists.

This time with the leadership of NIH, NHLBI, and NCI was most productive in exploring avenues which may result in an increase in the availability of support for innovative research in our specialty. AATS will continue to interact with the NHLBI and NCI to improve and expand collaboration which will result in better care for our patients – our ultimate goal.

In Vivo Animal Models Course

On Thursday, March 3rd in Bethesda, MD the AATS hosted its first In-Vivo Animal Models Course. The program provided training to surgical investigators in relevant thoracic and cardiac in-vivo models with a morning session on large animal heart failure models, ex-vivo pulmonary perfusion and lung regeneration models. Leading and funded investigators will discuss their experiences and preferences. In the afternoon, those choosing the cardiac track visited Dr. Keith Horvath’s laboratory at the NIH for a live demonstration of his chronic myocardial ischemia model, and those choosing the thoracic track visited Dr. Bartley Griffith’s laboratory at the University of Maryland to receive hands-on experience with ex-vivo perfusion.
Grant Writing Workshop
On the day following the In Vivo Models Course, the AATS also hosted its fifth Grant Writing Workshop. Designed for all levels of academic cardiothoracic surgeons interested in applying for grants, the workshop provided attendees a better understanding of the complex nature of and most current guidelines for preparing and submitting grant proposals. Through the use of lectures focused on the entire grant writing process and hands on mock study sessions analyzing actual grants, participants were given the proper assistance to clarify the ambiguities of the grant writing process so that submissions by CT surgeons are competitive and of the highest quality.

AATS/NHLBI: Cardiothoracic Surgery Exploring Collaborative Clinical Research Opportunities
In an effort to explore collaborative clinical research opportunities, the AATS and NHLBI have developed a one day symposium to be held in Bethesda, MD on April 26th. This symposium is designed to bring together experts in seven broad areas relevant to clinical and translational research in cardiothoracic surgery. Research experts will be making presentations that will outline gaps and opportunities in the following research areas;

- Structural Valve Disease
- Ischemic Heart Disease
- Therapies for Advanced Heart Failure
- Operative Strategies
- Endografts
- Arrhythmias, and
- Aging Populations and Co-morbidities

2011 AATS Leadership Academy
Over the past two years immediately prior to our Annual Meeting, the Association has hosted the AATS Leadership Academy which has proven to be a rewarding educational experience for 36 division chiefs and a like number of faculty. For 2011, the AATS has altered the format of the Leadership Academy by focusing on the daily needs of surgeons who are currently department chairs or division/section chiefs. The day-long program will include sessions on “Faculty”, “Finance”, “Strategies for Growth” and “Lessons Learned from Six Year Training Programs”. I believe that this initiative is exactly what the AATS should be doing to fulfill its mission and provides an avenue for surgeons to discuss the non-scientific leadership techniques often not covered in standard clinical training programs.

Continued Growth in Collaborations
In addition to the expansion of our Annual Meeting scientific program, the Association’s Education Committee, under the leadership of Dr. Chip Bolman has continually worked with affiliate organizations across other subspecialties on educational courses. Whether it is through formal co-sponsorships, joint sponsorships or as a content provider, the AATS is dedicated to the continued growth of educational relationships with other organizations. Over the past year the Association has worked with affiliates on the following educational activities;

- AATS/ACC Heart Valve Summit
- AATS/ASCVTS Postgraduate Course
- AATS/ESTS Postgraduate Course
- TCT for Surgeons
- Multidisciplinary Symposium in Thoracic Oncology
- Cardiovascular - Thoracic (CVT) Critical Care
- 15th Annual Update on Cardiopulmonary Bypass
- International Society for Rotary Blood Pumps

Additional Programming – 2011 Annual Meeting
Over the past few years AATS has continued to expand the content of its Annual Meeting to appeal not only to our cardiothoracic surgical colleagues but other subspecialties. As many of you know, this year’s Annual Meeting includes additional programming for Physician Assistants, Nurse Practitioners, Perfusionists, and Critical Care professionals. Additionally the Association was able to offer a Non-Technical Skills for Surgeons (NOTSS) course developed in the United Kingdom to improve performance and communication, which will ultimately improve surgical outcomes. While our specialty continues to evolve, the need for greater expansion of ideas and collaboration is becoming more evident. AATS hopes to continue to enhance the Annual Meeting each year to fulfill our mission and ensure that our patients receive the best care possible.