

# American Thoracic Society Documents

---

## An Official American Thoracic Society Workshop Report: Tobacco Control Initiatives within the American Thoracic Society

Mary Ellen Wewers, William C. Bailey, Kai-Håkon Carlsen, Mark D. Eisner, Patricia Folan, Janie Heath, Mary D. Klinnert, Tom Kovesi, Grace W. Pien, Virginia C. Reichart, Arunabh Talwar, and Katherine Thompson, on behalf of the American Thoracic Society Subcommittee on Tobacco Control Initiatives

THIS OFFICIAL WORKSHOP REPORT OF THE AMERICAN THORACIC SOCIETY WAS APPROVED BY THE ATS BOARD OF DIRECTORS ON MAY 20, 2009.

Cigarette smoking represents the single most preventable cause of premature morbidity and mortality in the United States and the burden of tobacco use is apparent world-wide. Cigarette smoking is a major risk factor for chronic obstructive pulmonary disease, the third leading cause of death in the United States in 2004. The American Thoracic Society (ATS) and its members have contributed significantly to an understanding of the biological and pathophysiologic mechanisms responsible for the development and management of tobacco-attributable disease and disability. The society's active involvement in tobacco control advocacy and policy-related initiatives are central to its mission. Within the ATS, there is also increased interest in accelerating the society's efforts to understand the mechanisms responsible for the uptake, persistence, and cessation of tobacco use. Scientific, clinical, and educational activities that include an examination of these underlying mechanisms are warranted. This paper describes findings from an ATS initiative that developed a preliminary strategy for enhancing scientific, clinical, educational, and policy-related tobacco control efforts that are consistent with the vision of the ATS. The specific aims of this project included the identification of existing mechanisms, as well as the current governance in place within the ATS infrastructure, to address tobacco control issues related to scientific inquiry, policy initiatives, and advocacy for tobacco control. This assessment generated recommendations to inform the ATS leadership with regard to the future development of relevant tobacco control initiatives.

**Keywords:** tobacco control; tobacco policy; professional society

### INTRODUCTION

That so many diseases, major and minor, should be related to smoking is one of the most astonishing findings of medical research in this century . . . less astonishing perhaps than the fact that so many people have ignored it. (Sir Richard Doll, 1999) (1)

Cigarette smoking and other forms of tobacco use represent the single most preventable cause of premature morbidity and mortality in the United States (2). Tobacco use is responsible for more than one in five deaths in the United States; over 30% of all cancers are due to tobacco, with cigarette smoking responsible for 87% of lung cancer deaths (3). It is well documented that cigarette smoking is a major risk factor for chronic obstructive pulmonary disease (COPD), including emphysema and chronic bronchitis. In 2001, it was estimated that approximately 12 million U.S. adults had COPD (4).

During the years 2000–2004, COPD was the third leading cause of mortality in the United States (3). For the years 2000–2005, COPD accounted for 126,000 deaths (5), and during this time the annual number of deaths from COPD increased 5% and 11%, for men and women, respectively. In sum, tobacco use is responsible for nearly 80% of all COPD deaths (3). Exposure to second-hand smoke is also associated with a variety of health conditions (6). Nonsmokers who are exposed to second-hand smoke in the home or at work increase their risk of developing lung cancer by as much as 30%. Second-hand smoke causes bronchitis and pneumonia among infants and children, and increases the risk of ear infections. Children with asthma who are exposed to second-hand smoke experience more frequent and severe attacks. Approximately 15 to 25% of all hospitalizations of infants and children with lower respiratory illnesses (bronchitis and pneumonia) were due to second-hand smoke exposure (7). Parental smoking results in annual direct medical expenditures of \$4.6 billion for American children (8). Overall, the health costs of tobacco use in the United States alone are estimated at \$193 billion annually, with about \$96 billion in direct medical costs and approximately \$97 billion in lost productivity (3). Of note, in 2007 only \$595 million was invested in comprehensive U.S. state-based tobacco prevention and control programs (3).

Globally, the tobacco epidemic is staggering. According to the World Health Organization (9), tobacco use is the second major cause of death in the world; it claims one in ten worldwide (about 5 million deaths each year). More importantly, if current smoking patterns continue, it is estimated that by 2020, 10 million deaths will occur each year. Half the people that smoke today, about 650 million people, will eventually be killed by tobacco. Smoking accounts for 5.1 million years of potential life lost in the United States each year (3). Among developing countries, this loss will create significant effects for fragile economic markets.

Professional health societies whose members care for patients and conduct basic or clinical research related to tobacco-attributable diseases have dedicated their efforts toward understanding and alleviating the effects of tobacco use. While not exhaustive, the list of these societies or associations include the American Cancer Society, the American Lung Association, the American Heart Association, the European Respiratory Society, and the American Thoracic Society.

As an example, the American Thoracic Society (ATS) is recognized as a premier organization with interests in all respiratory, critical care, and sleep-related health conditions. The ATS is dedicated to the belief that “scientific inquiry is the solution to the threats to human health” (10). Tobacco use represents one of the most striking threats, and ATS members

have contributed significantly to an understanding of the biological and pathophysiologic mechanisms responsible for the development of tobacco-attributable disease and disability. The ATS has been a leader in promoting an understanding of the pathogenesis of tobacco-attributable diseases. Given these accomplishments, it would be wise to also use the talent within professional health societies like the ATS to investigate mechanisms responsible for the uptake, persistence, and cessation of smoking. These root mechanisms of tobacco use merit increased emphasis, as tobacco consumption is responsible for a significant proportion of lung disease. Clinical, educational, and scientific efforts that include investigations to examine the root mechanisms responsible for the initiation and continuing use of tobacco, as well as testing the efficacy of tobacco dependence treatment, are warranted. In addition, professional health societies, like the ATS, often have a central mission of tobacco control advocacy and policy initiatives. Health services research, policy-related studies, and advocacy efforts that influence the treatment of smokers deserve attention from professional health societies that have tobacco control as an area of focus.

Before ATS' separation from the American Lung Association (ALA) in 2000, tobacco control efforts were emphasized within the ALA arm of the organization. Since separation, less attention has been directed within the ATS at understanding the social, biological, behavioral, and policy-related factors responsible for the uptake, persistence, and cessation of tobacco use. Given that the ATS defines its vision as the "dedication to a spirit of inquiry as the principal means for preventing respiratory disease and advancing patient care" (10), additional emphasis must be directed at the investigation of persistent tobacco use.

The purpose of this report is to describe an initiative funded by the ATS in 2007 that charged a subcommittee to develop a preliminary strategy for enhancing scientific, clinical, educational, and policy-related tobacco control efforts that are consistent with the vision of the ATS, that is, "working toward a world without lung disease" (10). The specific aims of the project included the identification and review of existing mechanisms, as well as the current governance in place within the ATS infrastructure to address tobacco control issues related to scientific inquiry, tobacco policy initiatives, and tobacco control advocacy. This assessment was intended to inform the ATS with regard to the future need to develop relevant tobacco control initiatives.

## METHODS

Each of the twelve ATS assemblies that existed in 2007 was invited to nominate a representative to the subcommittee. The final subcommittee was composed of representatives from seven ATS assemblies. The specific aims were accomplished during four conference calls and one face-to-face meeting at the ATS International Conference in San Francisco in 2007. Described below are the aims and methods used to obtain information about each aim.

1. Review and describe existing tobacco control efforts within the ATS Organizational Structure. The ATS mission statement, vision, and strategic plan documents and ATS committees' charges were reviewed. Chairs of committees that had a logical link to tobacco use were contacted and asked about tobacco control efforts within their respective committee. Committee chairs that responded included Corporate Relations (ad hoc), Environmental Health Policy (ad hoc), Ethics and Conflicts of Interest (ad hoc), Health Policy (ad hoc), International Lung Health (ad hoc), Publications Policy (standing), Research Advocacy (ad hoc), Scientific Advisory (ad hoc), and Strategic Planning (standing).
2. Compare ATS tobacco control efforts to those of the ERS. One member of the subcommittee was also a member of the European Respiratory Society (ERS) and gathered information about past and current ERS tobacco control efforts.
3. Describe tobacco control research awards in ATS and compare with peer organizations. The number of tobacco control grants funded by ATS in 2007\* were reviewed, described, and compared with tobacco control grant funding within peer professional organizations. (\*Note: 2008 data have been added since the project was completed.)
4. Describe tobacco control efforts at ATS' International Conference during the past seven years. Abstracts and presentations (i.e., Meet the Professor, Sunrise Seminars, Mini-symposia, Scientific Symposia, Year-in-Review, Clinical Workshops, and Post-graduate Courses) were reviewed from 2002–2007\* and analyzed to determine the frequency of tobacco control presentations, using search terms: "environmental tobacco smoke," "nicotine," "secondhand smoke," "smoking," and "tobacco." (\*Note: 2008 data have been added since the project was completed.)
5. Describe ATS clinical/training efforts in tobacco control and compare with peer organizations. Postgraduate courses, State of the Art course content, ATS journals, and the ATS website content were reviewed and described to identify tobacco control content and compared with peer organizations. A literature search was completed to compare articles published from an ATS journal (i.e., *AJRRCM/ARRD*) to *Chest* for the years 1995–2007. The PubMed database was used and the search terms included "smoking cessation treatment," "smoking cessation intervention," "counseling," and "pharmacotherapy." The abstract of each identified article was then read by two committee members independently to confirm that the article addressed tobacco control.
6. Describe ATS advocacy efforts for tobacco control. The Health Policy committee provided information on tobacco control advocacy efforts within the ATS.

## RESULTS

The activities associated with each of six aims were assigned to a specific committee member who was responsible for completing the assignment and presenting the findings to the full committee. Working as a whole, the workgroup used a consensus-based approach to develop specific recommendations for enhancing tobacco control efforts within the ATS. Next, the proposed recommendations were voted upon. Final recommendations (to follow) were endorsed unanimously by the full committee. Subsequently, the workgroup chair was charged with writing the final workshop report to be reviewed by the full committee, again for endorsement, before submission to the ATS Board of Directors. Presented below in Table 1 is a summary of findings related to the specific aims of the project, followed by recommendations from the workgroup.

## CONCLUSIONS

The ATS leadership is to be congratulated for efforts to examine the Society's tobacco control initiatives with the goal of eliminating the tobacco-attributable burden of lung disease. As the Society continues to expand and transform, it is crucial to accelerate tobacco control efforts. According to a recent Institute of Medicine report entitled *Ending the Tobacco Problem: A Blueprint for the Nation* (11), it is projected that if a *status quo* approach is maintained, the prevalence of tobacco use in the year 2025 (U.S. alone) will be approximately 16%, compared with 20.9% today. This discouragingly slow rate of decline in adult tobacco use prevalence mandates that the scientific community, including the American Thoracic Society, participate more fully in: (1) the investigation of the root causes of tobacco use, (2) the treatment of nicotine dependence, and (3) advocacy efforts to eliminate its use. As

**TABLE 1. SUMMARY OF AIMS, FINDINGS AND RECOMMENDATIONS RELATED TO AIMS OF PROJECT**

Aim	Findings	Recommendations
Describe existing tobacco control efforts within ATS Organizational Structure	<ol style="list-style-type: none"> <li>1. Tobacco control related to ATS mission, vision, and strategic plan. No explicit mention of tobacco control in these documents.</li> <li>2. No committee charge explicitly mentions tobacco control                             <ul style="list-style-type: none"> <li>● Ethics and Conflict of Interests has policy about tobacco industry relationships</li> <li>● Publication Policy has restrictions on publications funded by tobacco industry</li> <li>● International Lung Health has representative to the World Health Organization Framework Convention on Tobacco Control (FCTC)</li> <li>● No tobacco control committee</li> </ul> </li> <li>3. Little activity related to tobacco control within assemblies                             <ul style="list-style-type: none"> <li>● Only seven assemblies (58.3%) appointed a representative to this project upon invitation</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. Create a formal entity (e.g. section, assembly, or committee) that is charged with fostering tobacco control research initiatives, training activities, and advocacy efforts within the ATS organization</li> <li>2. Contact ATS Strategic Planning Committee about increasing tobacco control efforts within the Society</li> </ol>
Compare ATS tobacco control efforts to ERS	<ol style="list-style-type: none"> <li>1. ERS has 15 standing committees, including a Tobacco Control Committee (formerly named the Smoking Cessation Committee). The function of the committee is to coordinate ERS' activities in relation to tobacco control.</li> <li>2. ERS active with initiation of tobacco control efforts; ATS role is usually as "partner" with other societies. ERS activities include:                             <ul style="list-style-type: none"> <li>● Founder of Smoke-free partnership</li> <li>● Sponsored consensus conference on tobacco product regulation in Europe</li> <li>● Offers organized smoking cessation courses for European clinicians</li> <li>● Developed policy to restrict tobacco industry funding</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. Create a formal entity (described above) that resembles ERS tobacco control committee and functions to coordinate ATS' activities in relation to tobacco control</li> <li>2. Collaborate with ERS Tobacco Control Committee on joint efforts</li> </ol>
Describe tobacco control research awards in ATS and compare to peer organizations (see APPENDIX A)	<ol style="list-style-type: none"> <li>1. No history of tobacco control awards</li> <li>2. Awards (targeted and unrestricted) focus on diseases and their treatment</li> <li>3. No targeted award in area of tobacco control                             <ul style="list-style-type: none"> <li>● ATS has no formal partner with a tobacco control foundation</li> <li>● No awards in area of prevention, including tobacco prevention</li> </ul> </li> <li>4. ALA has history of awards in tobacco control</li> <li>5. Canadian Lung Association has funded one award in past</li> <li>6. No awards funded through Chest Foundation or ERS</li> </ol>	<ol style="list-style-type: none"> <li>1. Create a partnership with a tobacco research foundation to sponsor tobacco control research within the ATS Research Program. The American Legacy Foundation, Robert Wood Johnson and state Master Settlement Agreement Foundations are logical partners</li> <li>2. Present a "Best Tobacco Control Research Abstract" Award at the International Scientific Meeting</li> <li>3. Provide a travel award to International Scientific Meeting for new investigator in area of tobacco control</li> </ol>
Describe tobacco control efforts at International Conference (past six years) (see APPENDIX B)	<ol style="list-style-type: none"> <li>1. Overall, very little activity in tobacco control</li> <li>2. No Postgraduate course since 2002</li> <li>3. There was an increase in abstracts in 2005; reasons for this are unknown as there are no apparent themes</li> <li>4. One Amberson Lecture on "tobacco control" since 1956 (1968: Marvin Kuschner "The Causes of Lung Cancer")</li> <li>5. One ATS President's Lecture since 1987 (2006: Stanton Glantz "Dispatches from the Tobacco War")</li> <li>6. Joint ALA/ATS Symposium (2002) on global tobacco control</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase overall tobacco control programming at International Conference</li> <li>2. Ensure that "Tobacco Control" content is evident on program annually (e.g., postgraduate course offering, symposia, plenary session)</li> </ol>
Describe ATS clinical/training efforts in tobacco control and compare to peer organizations	<ol style="list-style-type: none"> <li>1. For years 1995–2007, there was one review article (2001) and one research paper (1995) about tobacco control in ATS outlets (i.e., both in <i>AJRCCM</i>) compared to 41 papers in <i>Chest</i> during same time period</li> <li>2. No <i>AJRCCM</i> deputy or associate editors have expertise in primary prevention research</li> <li>3. No ATS postgraduate course in tobacco control since 2002</li> <li>4. First tobacco control lecture given in 2008 ATS State of the Art course</li> <li>5. Treatment recommendations on ATS website are difficult to find</li> <li>6. ACCP has formal CME education curriculum and includes "Tobacco Cessation and Prevention"</li> </ol>	<ol style="list-style-type: none"> <li>1. Appoint associate editor to <i>AJRCCM</i> with background in prevention research</li> <li>2. Increase number of tobacco control research papers and clinical review articles in <i>AJRCCM/Proceedings</i></li> <li>3. Increase tobacco control training within ATS through formal training activities for new fellows and members, and especially for clinicians who treat children and adolescents</li> <li>4. Provide travel award for tobacco control training to fellows</li> <li>5. Create tobacco control webpage on ATS website</li> </ol>

(Continued)

TABLE 1. (CONTINUED)

Aim	Findings	Recommendations
Describe ATS advocacy efforts for tobacco control	<ol style="list-style-type: none"> <li>1. Unlike other agencies that support health (e.g. National Cancer Institute, American Public Health Association), ATS does not have a policy about sponsoring and organizing meetings and conferences ONLY in a state, county, city, or town that has adopted a comprehensive smoke-free policy. ATS does have a policy that International Conference venue (i.e., convention center and hotels) have smoke-free restrictions.</li> <li>2. ATS representative on FCTC (Al Munzer)</li> <li>3. ATS has been active with reimbursement recommendations for tobacco treatment (CMS, AMA RUC)</li> <li>4. ATS has supported legislative efforts for tobacco control (FDA regulation, DOJ case, Supreme Court rulings, congressional lobbying effort)</li> </ol>	<ol style="list-style-type: none"> <li>1. Create policy that ATS organized and sponsored events (i.e. International Scientific Meeting, State-of-the-Art Course) are held in a state, county, city, or town that has adopted a comprehensive smoke-free policy</li> <li>2. Continue advocacy efforts, in collaboration with formal tobacco control entity described above</li> </ol>

a first step, the subcommittee strongly endorsed as its most critical recommendation the creation of a formal and sustainable entity (e.g., committee, section, etc.) that is charged with fostering tobacco control research initiatives, training activities, and advocacy efforts within the ATS organization. This entity provides the necessary infrastructure to implement the comprehensive listing of recommendations put forth in this document. The ATS vision of “a world without lung disease” will only be achieved through dedicated and focused efforts to eliminate tobacco use. These recommendations represent the next logical step toward eliminating the burden of tobacco-attributable respiratory diseases. Whether these recommendations are sufficiently comprehensive in leading to meaningful change in tobacco control is unknown; however, the strategies advance the society’s efforts to prioritize the agenda of tobacco control. Vigilant monitoring on the part of the ATS is needed to determine whether these recommendations promote the desired change and assist with the vision of achieving a world without lung disease.

This Workshop Report was prepared by the American Thoracic Society Subcommittee on Tobacco Control Initiatives.

*Members of the Task Force were:*

MARY ELLEN WEWERS, Ph.D., M.P.H. (*Chair*)  
 WILLIAM C. BAILEY, M.D.  
 KAI-HÅKON CARLSEN, M.D., Ph.D.  
 MARK D. EISNER, M.D., M.P.H.  
 PATRICA FOLAN, B.S.N.  
 JANIE HEATH, Ph.D.  
 MARY D. KLINNERT, Ph.D.,  
 TOM KOVESI, M.D.  
 GRACE W. PIEN, M.D.  
 VIRGINIA C. REICHAERT, M.S.N.  
 ARUNABH TALWAR, M.D.  
 KATHERINE THOMPSON, M.S.N.

**Conflict of Interest Statement:** M.E.W. received grant support from the NIH/NCI, NIH/NHLBI, NIH/NCRR, the Ohio Dept. of Development \$100,001 or more, and the Walther Cancer Institute \$10,001–\$50,000. W.C.B. does not have a financial relationship with a commercial entity that has an interest in the subject of this manuscript. K.-H.C. served on the Board or Advisory Board for GlaxoSmithKline and received lecture fees from GlaxoSmithKline and Merck up to \$1,000. M.D.E. served as a consultant for Genentech, Inc. and as an expert witness for DLA Piper, LLP \$5,001–\$10,000; he received grant support from Roche \$50,001–\$100,000 and the NIH up to \$1,000. P.F. does not have a financial relationship with

a commercial entity that has an interest in the subject of this manuscript. J.H. received lecture fees from Pfizer up to \$1,000. M.D.K. received grant support and is employed by the NIH. T.K. does not have a financial relationship with a commercial entity that has an interest in the subject of this manuscript. G.W.P. received grant support from the NIH/NHLBI and the NIH/NICHD \$100,001 or more. V.C.R. does not have a financial relationship with a commercial entity that has an interest in the subject of this manuscript. A.T. received lecture fees from Pfizer \$1,001–\$5,000. He and spouse owned stock in Philip Morris \$1,001–\$5,000 as part of mutual fund; stock has been divested. K.T. is employed by the NIH.

#### References

1. Doll R. Tobacco: a medical history. *J Urban Health* 1999;76:289–313.
2. US Department of Health and Human Services. The health consequences of smoking: a report of the Surgeon General. Washington, D.C. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2004.
3. Centers for Disease Control and Prevention. Smoking-attributable mortality, years of potential life lost, and productivity losses – United States, 2000–2004. *MMWR Morb Mortal Wkly Rep* 2008;57:1226–1228.
4. Lethbridge-Çejku M, Vickerie J. Summary health statistics for U.S. adults: National Health Interview Survey, 2003. National Center for Health Statistics. Vital Health Stat Series 10;2005:No. 225 [Table 3] [Accessed 2009 Apr 6]. Available from: [http://www.cdc.gov/nchs/data/series/sr\\_10/sr10\\_225.pdf](http://www.cdc.gov/nchs/data/series/sr_10/sr10_225.pdf)
5. Centers for Disease Control and Prevention. Deaths from chronic obstructive pulmonary disease—United States, 2000–2005. *MMWR Morb Mortal Wkly Rep* 2008;57:1229–1232.
6. US Department of Health and Human Services. The health consequences of involuntary exposure to tobacco smoke: a report of the Surgeon General. Washington, D.C. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 2006.
7. DiFranza JR, Lew RA. Morbidity and mortality in children associated with the use of tobacco products by other people. *Pediatrics* 1996;97:560–568.
8. Aligne CA, Stoddard JJ. Tobacco and children: an economic evaluation of the medical effects of parental smoking. *Arch Pediatr Adolesc Med* 1997;151:648–653.
9. World Health Organization. Global burden of disease [Accessed 2009 Apr 6]. 2007. Available from: <http://www.who.int/healthinfo/bod/en/index.html>
10. Schwartz DA, Anderson KL, Brower RG, Carlomagno CG, Fein AM, Garcia J, Kimoff RJ, Malanga EDF, McColley AS, Osborne ML, et al.; The 2020 Group. The American Thoracic Society Vision. New York, NY: ATS Communications & Marketing Dept.; 2005. 8 pp.
11. Institute of Medicine. Ending the tobacco problem: a blueprint for the nation. Washington, D.C.: The National Academies Press; 2007.

**APPENDIX A: TOBACCO RESEARCH AWARDS****SUMMARY OF 2007 RESEARCH AWARDS FOR SELECTED PEER ORGANIZATIONS**

Funding Organization	Total Awards (#)	Tobacco Control Awards (#)
ALA	14	2
ATS	13	0*
Chest Foundation	12	0
CLA/CTS	40	1

American Thoracic Society (reviewed 3/29/07).

\* At the time the workgroup conducted this project, the ATS did not fund any research awards related to tobacco control. In 2008, the ATS/ALA of Hawaii offered two tobacco control research grants.

**2006 ATS Research Program Portfolio, with funding beginning 1/2007 (from website, updated 3/29/07):**

- 1 grant for translational research in asthma (ATS + Asthma & Allergy Foundation of America)
- 1 grant for translational studies in pulmonary fibrosis (ATS + Coalition for Pulmonary Fibrosis)
- 2 grants for translational research on bronchiectasis (ATS + COPD Foundation)
- 1 grant for sarcoidosis research (Foundation for Sarcoidosis)
- 2 grants for novel studies of lung cancer (ATS + LUNGevity Foundation)
- 2 grants for novel studies of pulmonary hypertension (ATS + Pulmonary Hypertension Association)
- 4 unrestricted research awards

**Current ATS Research Grantees (from website, updated 3/29/07):**

- Shweta Choudhry, Ph.D. *University of California, San Francisco*  
Research: "Whole Genome Association Study to Identify Asthma Related Genes in Puerto Ricans"
- Patricia, J. Dubin, M.D. *Children's Hospital of Pittsburgh*  
Research: "Type I and III IFNs in *Pseudomonas aeruginosa* pneumonia"
- William E. Lawson, M.D. *Vanderbilt University Medical Center*  
Research: Defining the Origins of Effector Fibroblasts in Pulmonary Fibrosis
- Hara Levy, M.D. *Brigham and Women's Hospital; Children's Hospital Boston*  
Research: "IL-1 gene family polymorphisms and susceptibility to *P. aeruginosa* in CF patients"
- Jingsong Xu, Ph.D. *Brigham and Women's Hospital*  
Research: "Role of Lysyl Oxidases (LOX and LOXL1) in Normal Lung Development"
- Renee D. Stapleton, M.D., M.Sc. *University of Washington; Harborview Medical Center*  
Research: "Anti-inflammatory Effects of n-3 Fatty Acids in Patients with Acute Lung Injury"
- Harvey O. Coxson, Ph.D. *University of British Columbia*  
Research: "Quantification of post-transplant bronchiolitis obliterans syndrome using CT scanning"
- Darrell N. Kotton, M.D. *Boston University*  
Research: "Stem Cell-based Therapy for Alpha-1 Antitrypsin Deficiency"
- Janet Lee, M.D. *University of Pittsburgh*  
"Fractalkine/CX<sub>3</sub>CL1: A Novel Pathway Related to the Pathogenesis of COPD"
- Chun Geun Lee, M.D., Ph.D. *Yale University*  
"Genetic Factors Controlling TGF- $\beta$ <sub>1</sub> in the Pathogenesis of COPD"
- Arnold S. Kristof, M.D. *The Research Institute of the McGill University Hospital Centre*  
Research: "The Role of Protein Kinase C $\delta$  in the Pathogenesis of Lymphangioliomyomatosis"
- Charles A. Powell, M.D. *Columbia University*  
"Molecular Signatures of Invasiveness in Lung Adenocarcinoma"
- George M. Verghese, M.D. *University of Virginia*  
"Regulation of Non-Small Cell Lung Cancer Invasion by Membrane Serine Proteinases and Antiproteinases"
- Todd M. Bull, M.D. *University of Colorado Denver HSC*  
Research: "The Role of Kaposi's Sarcoma Herpesvirus (HHV-8) in the Development of Severe Pulmonary Hypertension"
- Xinqi Wu, Ph.D. *Children's Hospital Boston*  
Research: "Hypoxic Regulation of Bone Morphogenetic Protein (BMP) Signaling and the Role of Id1 in the Development of Pulmonary Hypertension"

- Lynn Schnapp, M.D. *University of Washington*  
“HIV-Matrix Interactions in the Lung”
- Jan A. Wahlström, M.D., Ph.D. *Karolinska Institutet*  
Research: “Antigen Specificity in Sarcoidosis”
- Richard F. Silver, M.D. *Case Western Reserve University*  
Research: “Abnormal TLR Responses in the Pathogenesis of Pulmonary Sarcoidosis”
- Stavros Garantziotis, M.D. *Duke University*  
Research: “The Role of Innate Immunity in Alloimmune Lung Injury After Transplantation”

**American Lung Association, Research Awards Nationwide, 2007 (from website pdf, updated 3/29/07):**

In the research area of COPD, Smoking and Air Pollution, 2/14 grants address tobacco control:

- Won Sup Choi, Ph.D., M.P.H., *University of Kansas*  
Addressing Cigarette Smoking Among Native Americans
- Elizabeth Edsall, M.Sc., *Bloomberg School of Public Health, Johns Hopkins University, Baltimore, MD*  
Do Media Matter In Health Policy? Examining The Influence Of Print News Coverage On Six States’ Tobacco Tax Initiatives

**Chest Foundation, Clinical Research Awards, 2005 and 2006 (from website, updated 3/29/07):**

- 2006: 0/9 awards related to smoking cessation
- 2005: 0/12 awards related to smoking cessation

**Canadian Lung Association and Canadian Thoracic Society (from website, 3/29/07):**

1/40 national and regional awards in tobacco control:

- Dr. Jennifer O’Loughlin, *Sante physique, Direction de sante publique de Montreal-Centre*  
Project: Strengthening the links between research, practice and public policy to reduce the burden of tobacco

**European Respiratory Society (from website, 3/29/07):**

Grant recipients and projects are not listed on the website.

**European Lung Foundation (from website, 3/29/07):**

The ELF appears to fund 2 fellowships per year for trainees. For 2006, the goals of both trainees were to gain experience and knowledge in rigid bronchoscopic procedures and techniques.

**Thoracic Society of Australia and New Zealand (from website, 3/29/07):**

Grant recipients and projects not listed on website.

**Australian Lung Foundation (from website, 3/29/07):**

The ALF funds 4 awards, 2 in lung cancer research. Specific projects are not listed.

**Asia Pacific Society for Respirology (from website, 3/29/07):**

Does not appear to grant research awards.

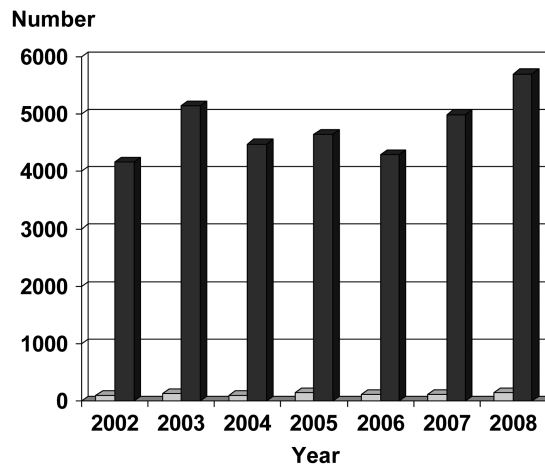
**British Thoracic Society (from website, 3/29/07):**

Does not appear to grant research awards

**APPENDIX B: TOBACCO CONTROL PRESENTATIONS AT INTERNATIONAL CONFERENCE 2002–2008**

**TOBACCO CONTROL PRESENTATIONS AND ACCEPTED ABSTRACTS AT INTERNATIONAL CONFERENCE 2002–2008**

Category	2002	2003	2004	2005	2006	2007	2008
Scientific Symposia	0	1	0	1	3	2	0
Topics in Pulmonary Medicine	0	0	0	1	0	0	0
Year in Review	1	1	0	0	0	0	0
Critical Care Track	0	0	0	0	0	0	0
Special Research Symposium	0	0	1	0	1	1	0
Sunrise Seminars	2	0	2	1	0	0	1
Meet the Professor	2	1	3	1	0	0	0
Clinical Workshops	1	0	0	0	0	0	0
Joint ALA/ATS Symposium	1	1	2	0	0	0	0
Evening Postgraduate Seminars	0	0	0	2	0	0	0
Postgraduate Courses	3	0	0	0	0	0	0
Abstract Submitted	0	0	0	0	0	0	0
Mini-Symposia	5	6	6	6	9	8	4
Thematic Poster Sessions	38	64	56	88	62	45	101
Poster Discussion	50	64	37	48	46	60	36
Poster Colloquia	0	0	0	0	0	0	0
Late-Breaker Abstract Sessions	0	0	0	0	0	0	0
Other			1		2		
<b>Tobacco Control Presentations (Total)</b>	<b>103</b>	<b>138</b>	<b>107</b>	<b>148</b>	<b>121</b>	<b>116</b>	<b>142</b>



*Figure 1.* Number of tobacco control abstracts (lightly shaded bars) at International Conference compared with total accepted abstracts (darkly shaded bars) 2002 to 2008.