
Tobacco: Use, Abuse, Substitutes, Marketing and Clinical Effects

This program is approved for up to 9 hours of Category 1 credit for the AMA Physician's Recognition Award and for up to 9 elective hours for the American Academy of Family Physicians

**Sunday, June 14, 1981
8:30 a.m. - 5:30 p.m.
The New York Botanical Garden,
Bronx, N.Y.**

Program

As an organization accredited by the Accreditation Council for Continuing Medical Education, The New York Botanical Garden certifies that this offering meets the criteria for up to 9 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association, provided it is used and completed as designed.

The moderator for the program will be Lewis Goldfrank, M.D., Director of Emergency Medical Services, Bellevue and New York University Hospitals, Associate Professor of Clinical Medicine, New York University School of Medicine, Consultant, New York City Poison Control Center

Registration: 8:30 a.m., The Snuff Mill, The New York Botanical Garden

Tobacco

Linda D. Rachele, Ph.D., The New York Botanical Garden

An introduction on the history, ecology and botanical importance of tobacco and how it came to occupy a significant position in today's society.

Tobacco Additives and Substitutes

Walter H. Lewis, Ph.D., Washington University and The Missouri Botanical Garden

Chewing and pipe tobaccos, snuff, cigars and cigarettes are cured and aged by processes that include the addition of sugar, licorice, deer's tongue and other products in order to obtain specific flavors and aromas. Such additives as well as adulterants and contaminants are important constituents in the final product ingested or smoked.

Tobacco substitutes derived from plants, for example nicotine-free herbal cigarettes are also smoked or ingested in an attempt to overcome the need for tobacco. All of these

products will be discussed in relation to human health.

Mechanisms of Lung Parenchymal Destruction in Chronic Obstructive Lung Disease

Gerard M. Turino, M.D., College of Physicians and Surgeons of Columbia University

This discussion will deal with the mechanisms of lung injury in chronic obstructive airway disease and the effects of tobacco smoke on lung connective tissue content and composition. There will be particular emphasis on the interactions between *in vivo* proteases and protease inhibitors in the development of lung parenchymal destruction. These factors will be linked to the ultimate physiological abnormalities of lung function which occur in chronic obstructive lung disease. Also, the role of long term exposure to tobacco smoke in the development of destructive emphysema and the implications of these mechanisms for prevention and therapy of chronic obstructive lung disease will be reviewed.

Coffee Break

Smoking Tobacco and Risk of Cardiovascular Disease

William Castelli, M.D., Framingham Heart Study, National Heart, Lung, and Blood Institute

Using multi-variate analysis, the independent impact of cigarette smoking on coronary heart disease is almost two-fold. Heavy smokers (a pack or more a day) experience five times the rate of sudden death as non-smokers. Congestive heart failure and peripheral vascular disease are also greatly increased in cigarette smokers. Those who quit the habit lose their increased cardiovascular risk in less than one year. Traditional pipe and cigar smokers (those who do not inhale) do not have an increased risk. Men who switched to low tar and low nicotine cigarettes in the 60's and 70's in Framingham did not decrease their

risk of cardiovascular disease. Mechanisms by which tobacco increases risk of cardiovascular disease will be discussed.

Box Lunch

Luncheon Talk

Fighting Smoke With Smoke

Alan M. Blum, M.D.

Far from being a time-honored tradition, cigarette smoking (the only use of burned tobacco that involves inhaling) is barely a century old. Dr. Blum will discuss the cigarette in historical, social, economic, and medical contexts since its appearance in the United States. In this "light refresher on the history of sex and cigarette advertising" he points out that in spite of the devastating toll taken by smoking, the tobacco industry has turned every adverse health report into a marketing advantage. Dr. Blum will discuss the solution that he feels has been proven to reduce and even eliminate this nation's number one preventable health problem.

Smoking and Cancer

Jesse L. Steinfeld, M.D., Medical College of Virginia

The dose response relationship of smoking to cancer in various organs in humans will be discussed. The incidence of cancer correlated to the use of filter tip, low tar and/or low nicotine cigarettes and recent studies on cancer induction in humans as a result of passive smoking will be covered in this presentation.

Maternal Smoking and Pregnancy Outcome

Charlotte Catz, M.D., National Institute of Child Health and Human Development

An overview of the effects of maternal smoking during pregnancy on the growth and maturation of the fetus will be presented. Long term effects on child development will be included in the discussion.

Coffee break

General Information

Tobacco Use: Aspects of Behavioral and Physical Dependence

John Grabowski, Ph.D., University of Pennsylvania and National Institute on Drug Abuse

Tobacco use has elements in common with use (and misuse) of other behaviorally active drugs. Current theoretical and applied analyses of both behavioral and pharmacological variables require that these similarities, as well as differences, be considered when examining development, maintenance and cessation of tobacco use. Therefore, aspects of tobacco use, specifically cigarette smoking, will be discussed in the context of habitual behavior in general and other drug use in particular. Consideration will also be given to the implications of this analysis on the efforts of physicians to encourage smoking cessation. In this context both behavioral and pharmacological interventions will be discussed. A brief overview of current efforts in this area by the National Institute on Drug Abuse and the National Institutes of Health will also be provided.

Tobacco—Its Role in Allergy and Immunity

Dorothy D. Sogn, M.D., National Institute of Allergy and Infectious Disease

Tobacco and its products, including smoke, can affect the immune system in two ways. As antigens, they can interact with the immune system to induce specific responses evidenced by production of specific antibodies or sensitized cells. Or, as irritants, pharmacologic and toxic agents, they can interact with cellular elements of the host defense system, thereby influencing the functional ability of these elements. Criteria for diagnosing clinical allergy will be discussed and studies pertaining to tobacco allergy will be reviewed and interpreted in light of these criteria. Experimental models which examine the effects of tobacco and its products on the immune system and the allergic state and the clinical implications of these effects will be discussed.

This course is approved for up to 9 hours of Category 1 credit. Category 1 credit will be awarded based on the actual number of instructional hours attended.

The fee for the program includes all materials (illustrative hand-outs, reprints, bibliographies), coffee and parking. Luncheon, transportation

and accommodation costs are not included. All participants will receive a certificate of attendance.

For further information, please contact Linda D. Rachele, Ph.D., Assistant Director of Education, The New York Botanical Garden, Bronx, N.Y. 10458, 212-220-8740.

Conference Location

Participants must make their own arrangements for transportation and accommodation. The Education Department of The New York Botanical Garden will provide information

for registrants on area hotels and transportation. Please include requests for this information with your registration form or call 212-220-8739.

Vitae

Allan M. Blum, M.D.

B.A. Amherst College; M.D. Emory University. Family Practice Physician Lutheran General Hospital, Park Ridge, IL. Dr. Blum is President of the organization DOC (Doctors Ought to Care). A Fellow of the American Academy of Family Physicians and a recent Morris Fishbein Fellow in Medical Journalism, he is a frequent contributor to medical journals on the subjects of preventive medicine and community-wide health promotions.

William Castelli, M.D.

B.S. Yale College; M.D. University of Louvain (Belgium). Dr. Castelli is

Medical Director of the Framingham Heart Study, National Heart, Lung and Blood Institute and a Lecturer in Preventive Medicine at the Harvard Medical School.

Charlotte Catz, M.D.

B.A. Lycum #2, Buenos Aires, Argentina; M.D. University of Buenos Aires-School of Medicine, Argentina. Dr. Catz is the Head of the Pregnancy and Perinatology Section, Clinical Nutrition and Early Development Branch, Center for Research for Mothers and Children, National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, Md.

Lewis Goldfrank, M.D.

B.A. Clark University; M.D. (magna cum laude) University of Brussels Medical School. Director of Emergency Medical Services Bellevue and New York University Hospitals, Associate Professor of Clinical Medicine New York University School of Medicine; Consultant, New York City Poison Control Center. Dr. Goldfrank is a member of several professional organizations including the American College of Emergency Physicians and the American Academy of Clinical Toxicologists. He is an author of texts and original communications in reviewed journals and is a member of The New York Botanical Garden's Continuing Medical Education Advisory Committee.

John Grabowski, Ph.D.

B.A., Ph.D. and Psychopharmacology postdoctoral training, University of Minnesota. Assistant Professor, Department of Psychiatry, University of Pennsylvania, currently on leave at the Division of Research, National Institute on Drug Abuse. He is a psychologist and behavioral pharmacologist who has served on research and instructional staffs of several universities. He is a member of several professional societies and has published original research papers, invited chapters and several books in areas of behavioral psychology and behavioral pharmacology.

Walter H. Lewis, Ph.D.

B.A., M.A. University of British Columbia; Ph.D. University of Virginia. Professor of Biology, Washington University, St. Louis and Senior Botanist, Missouri Botanical Garden. A Guggenheim Fellow and member of numerous scientific societies, Dr. Lewis is co-author with Memory P.F. Elvin-Lewis of the text *Medical Botany, Plants Affecting Man's Health*, among other books and original research papers.

Linda D. Rachele, Ph.D.

A.B. Barnard College; Ph.D. New York University. Assistant Director of Education, The New York Botanical Garden. Dr. Rachele has overseen the development of the continuing medical education program of The New York Botanical Garden from its inception. She is a palynologist by training and has published original communications in reviewed journals in both palynology and taxonomy.

Dorothy D. Sogn, M.D.

B.A. Wellesley College; M.D. New York University Medical College. Special Assistant to the Director, Immunology, Allergic and Immunologic Diseases Program, National Institute of Allergy and Infectious Diseases, National Institutes of Health and on the Staff, Allergy, OPD Clinic of Walter Reed Army Medical Center. Dr. Sogn is a member of several professional societies, has published original communications in reviewed journals and was senior author on the topic of tobacco allergy in the 1979 Surgeon General's Report.

Jesse L. Steinfeld, M.D.

B.S., University of Pittsburgh; M.D. Case Western Reserve. Dean, School

of Medicine, Medical College of Virginia, Virginia Commonwealth University. Dr. Steinfeld served as Surgeon General of the United States from 1969 until 1973 and was the Deputy Director of the National Cancer Institute prior to that. He is a member of a number of medical, scientific and honorary societies and is the author of over 60 papers on cancer, hematology, protein physiology, public health, public policy and health.

Gerard M. Turino, M.D.

A.B. Princeton University; M.D. College of Physicians and Surgeons, Columbia University. Professor of Medicine, Columbia University and Attending Physician, Presbyterian Hospital and Harlem Hospital. Dr. Turino is a member of many professional societies, frequently serving in an executive capacity. He is a consulting editor for the *American Journal of Medicine* and a member of the editorial board of *Respiration*. He has been the recipient of many honors and awards including the Award of Merit of the American Heart Association.

Collateral Program

Arranging with Silk and Dried Flowers

In this workshop participants will explore the different techniques of picking, wiring and composing lovely long-lasting arrangements using silk and dried materials. Your choice of silk flowers and supplementary materials will be available at cost.

Nora Fields

10 a.m.-3 p.m., Rm. 101, Watson Building

Designed to accommodate those accompanying registrants at the Tobacco conference, the program provides a four-hour course, luncheon with the conference participants and time to enjoy the floral displays, both outdoor and indoor, at The New York Botanical Garden. If desired you may participate in the symposium lectures at the hospital house officer rate.