




# NEW YORK STATE JOURNAL OF MEDICINE

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## THE WORLD CIGARETTE PANDEMIC

### Part II



**D**on't remove the moisture-proof wrapping from your package of Camels after you open it. The Humidor Pack is protection against dust and germs. In offices and homes, even in the dry atmosphere of artificial heat, the Humidor Pack delivers fresh Camels and keeps them right until the last one has been smoked

*PRIMUM NON NOCERE?*



# When researchers accept funding from the tobacco industry, do ethics go up in smoke?

**Biologist Gordon Sato, PhD**, director of the W. Alton Jones Cell Science Center in Lake Placid, NY, tells the story of Ignaz Semmelweis and his money machine. It seems that the Hungarian obstetrician was called on the carpet by the dean of his medical school for accepting money from a manufacturer of condoms. "The dean told Semmelweis 'We can't accept money from them.' Semmelweis said, 'Don't worry. In my basement, I have a machine where you put dirty money in on top and it comes out clean on the bottom.'"

Sato is making a point: In his opinion, how research money is used, not its source, is the important thing. Sato is sensitive about funding because he serves as a member of the Scientific Advisory Board of the Council for Tobacco Research-USA, the biomedical research arm of the tobacco industry.

While universities are under siege to sell off their stock in companies that do business with racist South Africa, and the warning flags have been hoisted about university financial relations with corporate America, the cigarette industry's efforts to launder its tobacco-stained profits in research go virtually unnoticed. The scientific community has yet to reach a consensus on whether the source of funds in itself can sully a project.

Abbott Lawrence Lowell, president of Harvard University from 1909 until 1933, used to say that he would accept money from anyone as long as they did not tell him how to spend it. But if he were at the helm today, some faculty members might question whether taking money from a tainted source does not somehow taint the recipient.

At Yale University, investigators can no longer do classified government research, because such work is considered antithetical to the free flow of scientific information. At Tufts University, a flap occurred in 1977 when Philippines dictator Ferdinand Marcos offered to endow a chair in his own name in the Fletcher School of Law and Diplomacy. Some Tufts faculty members argued that taking Marcos' money would legitimize a bloody regime. Tufts President Jean Mayer, PhD, asked, "Does accepting money from the Carnegie Foundation mean endorsing the shoot-

ing of miners? Does accepting money from the Rockefeller Foundation mean endorsing monopolistic practices? Obviously, we will not accept money from any and every source. But how do you draw the line?"

When it comes to tobacco, virtually no lines have been drawn.

## NOBLE RESEARCH?

Cigarettes remain a legal product in this country, and the tobacco companies are happy to spend some of their profits on research programs and, apparently, most researchers would be happy to take it.

When Philip Morris, the makers of Marlboro and other brands of cigarettes, held a symposium for scientists from government, academia, and industry in 1981 in Richmond, VA, two Nobel laureates—physicists Rosalyn A. Yalow, PhD, of the Veterans Hospital, Bronx, developer of the first application of the radioimmunoassay, and Alan M. Cormack, MSc, of Tufts, whose work led to the development of computerized tomographic scanning—were among the researchers present. The tobacco companies have a knack for sponsoring the stars of science as well as of the performing arts and sports.

The industry-funded Council for Tobacco Research (CTR) boasts that it was among the patrons who supported the Nobel prize-winning immunology research by Baruj Benacerraf, MD, chairman of the department of pathology at Harvard Medical School. Some researchers may have reservations about taking tobacco-industry money, but the New York-based council's scientific director, Sheldon C. Sommers,

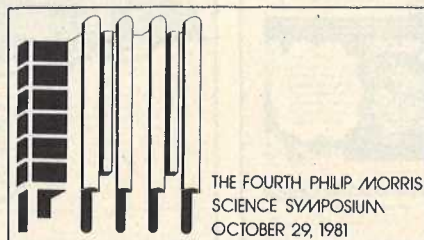
MD, said he personally knows only one.

Perhaps only one institution in the world, the University of Sydney in Australia, has publicly disclosed its debate over the ethics of accepting tobacco money. According to the *Medical Journal of Australia* (1982; 2:391-392), the university decided in 1982 to turn down financial support from any tobacco company if the firm is publicly identified as the source. In calling for this action, cardiologist Gaston Bauer, warden of the clinical school at Royal North Shore Hospital, pointed out that by refusing funds the university would "gain the respect of the community."

According to Sommers, a consulting pathologist at Lenox Hill Hospital, New York, "Ten, 15 years ago, there were some organizations, such as Rockefeller University, that didn't want CTR money, but that's all gone by. [Now,] there's not a single organization, a university, a research institute, a college, that turns down the money."

Rockefeller University apparently has changed its tune, because it now has an RJ Reynolds Research Fellowship. Current projects funded by the CTR are being conducted at New England Deaconess Hospital, the University of California at Berkeley, Sidney Farber Cancer Institute, Johns Hopkins Oncology Center and the university's School of Hygiene and Public Health, Yale University School of Medicine, Harvard Medical School, and Albert Einstein College of Medicine. The smoky trail of funding can be followed down many other prestigious corridors.

And researchers in growing numbers are seeking funding from tobacco companies. There are at least two reasons for this. The first is that the tobacco industry has been increasing its investment in research at the same time government funds have diminished. Second, the Council for Tobacco Research has been attracting accomplished scientists to its board and gaining publicity for its research funding efforts. Sommers said the CTR has seen an increase in applicants as federal sources for research funding have dried up. "We are in a world where the National Institutes of Health are slowly making it more difficult to get money. And the side ef-



Tobacco company-sponsored conference. All in the name of science?



# PLAY SAFE

## SMOKE CHESTERFIELD

THEY'RE *MUCH Milder* WITH NO UNPLEASANT AFTER-TASTE

because— A. CHESTERFIELD uses the world's best mild, ripe tobacco, producing the most desirable smoking qualities.

B. CHESTERFIELD keeps these tobacco's leafy and fresh with tried and tested conditioning agents—pure natural sugars, costly glycerol... nothing else.

C. CHESTERFIELDS are wrapped in cigarette paper of the highest purity.



**CHESTERFIELD**  
CONTAINS ONLY INGREDIENTS THAT GIVE YOU  
*The Best Possible Smoke—*  
AS PROVED AND APPROVED BY  
THE LONDON UNIVERSITY

"I've been saying it for 6 years now—and I'll say it again...much milder Chesterfield is best for me."  
*Arthur Jeffrey*

## NOW...10 Months Scientific Evidence For Chesterfield

A MEDICAL SPECIALIST is making regular bi-monthly examinations of a group of people from various walks of life. 45 percent of this group have smoked Chesterfield for an average of over ten years.

After ten months, the medical specialist reports that he observed:

*no adverse effects on the nose, throat and tissues of the group from smoking Chesterfield.*

**MUCH Milder CHESTERFIELD IS BEST FOR YOU**

First and Only Premium Quality Cigarette in Both Regular and King-Size



CONTAINS TOBACCO OF BETTER QUALITY & IMPROVED FLAVOR THAN ANY OTHER KING-SIZE CIGARETTE

ASK YOUR DEALER FOR CHESTERFIELD...SOME WAY YOU LIKE IT

Buy **CHESTERFIELD** Much Milder

# NOSE, THROAT,

## and Accessory Organs not Adversely Affected by Smoking Chesterfields

**FIRST SUCH REPORT EVER PUBLISHED ABOUT ANY CIGARETTE**

A responsible consulting organization has reported the results of a 10-month study by a distinguished medical specialist on the effect of smoking Chesterfield cigarettes.

The specialist, after a thorough examination of every member of the group, stated: "In my opinion, at the end of ten months, there are no accessory organs of all participating subjects examined by me were not adversely affected in the six-month period by smoking the cigarettes provided."

A group of people from various walks of life are requested to smoke only Chesterfields. For six months this group of men and women smoked their normal amount of Chesterfields—10 to 40 a day. 45% of the group have smoked Chesterfields for a minimum from one to thirty years for an average of 10 years each.

At the beginning and at the end of the six months period each individual was given a thorough examination (including X-ray pictures) by the medical specialist and his assistants. The examinations covered the tissues as well as the nose, ears and throat.



Buy **CHESTERFIELD** Much Milder

## Of cigarettes and science.

This is the way science is supposed to work. A scientist observes a certain set of facts. To explain these facts, the scientist comes up with a theory. Then, to check the validity of the theory, the scientist performs an experiment. If the experiment yields positive results, and is duplicated by other scientists, then the theory is supported. If the experiment produces negative results, the theory is re-examined, modified or discarded.

But, to a scientist, both positive and negative results should be important. Because both produce valuable learning.

Now let's talk about cigarettes.

You probably know about research that links smoking to certain diseases. Coronary heart disease is one of them.

Much of this evidence consists of statistics that show a statistical association between smoking and the disease.

But statistics themselves cannot explain why smoking and heart disease are associated. These statistics have developed a theory that heart disease is caused by smoking. Then they performed various experiments to check this theory.

We would like to tell you about one of the most important of these experiments.

**A Little-Known Study**

It was called the Multiple Risk Factor Intervention Trial (MRFIT).

In the words of the *Wall Street Journal*, it was "one of the largest medical experiments ever attempted." Funded by the Federal government, a cost \$11,000,000 and took 10 years, ending in 1982.

The subjects were over 12,000 men who were thought to have a high risk of heart disease because of three risk factors that are statistically associated with this disease: smoking, high blood pressure and high cholesterol levels.

Half of the men received no special medical intervention. The other half received medical treatment that consistently reduced all three risk factors, compared with the first group.

It was assumed that the group with lower risk factors would have fewer, and/or significantly fewer deaths from heart disease than the higher risk factor group.

But that is not the way it turned out.

After 10 years, there was no statistically significant difference between the two groups in the number of heart disease deaths.

The theory persists.

We at R.J. Reynolds do not claim this study proves that smoking doesn't cause heart disease. But we do wish to make a point.

Despite the results of MRFIT and other experiments like it, many scientists have not abandoned or modified their original theory; or re-examined its assumptions.

They continue to believe these factors cause heart disease. But it is important to label that belief accurately. It is an opinion. A judgment. Not a scientific fact.

We believe in science. That is why we continue to provide funding for independent research into smoking and health.

But we do not believe there should be one set of scientific principles for the whole world, and a different set for experiments involving cigarettes. Science is science. Proofs are proof. That is why the controversy over smoking and health remains an open one.

R.J. Reynolds Tobacco Company

## ON REQUEST: SMOKING STUDIES

from *completely reliable sources*

Because it is good scientific practice to rely on work done by others, *provided the source of the investigation is recognized as competent and authoritative...* we shall be happy to send you, upon request, reprints of papers published\* on the influence of hygroscopic agents on irritation from cigarette smoke.

**PHILIP MORRIS**

Philip Morris & Co. Ltd., Inc.  
119 FIFTH AVENUE, N. Y.

\*Lancet, Feb. 11, 1950, Vol. 2, 149-154—Lancet, Jan. 10, 1951, Vol. 2, 119-120—N. Y. State Jour. Med., Vol. 51, 4-11, Nov. 11, 1951-52

TO PHYSICIANS WHO SMOKE A PIPE: We suggest an unusually fine new blend—COUNTRY DOCTOR PIPE MIXTURE. Made by the same process as used in the manufacture of Philip Morris Cigarettes.

See you now in the NEW YORK STATE JOURNAL OF MEDICINE

## Important News For Smokers:

# New Merit Research Released!

New survey results prove MERIT delivers in key areas of taste, ease of switch, and long-term satisfaction.

Regular case MERIT research reveals MERIT's superiority in taste, ease of switch, and long-term satisfaction.

Case 4: Major factor in switching to a cigarette is its taste. MERIT's taste is superior to other brands.

Case 5: Major factor in switching to a cigarette is its ease of switch. MERIT's ease of switch is superior to other brands.

Case 6: Major factor in switching to a cigarette is its long-term satisfaction. MERIT's long-term satisfaction is superior to other brands.

Case 7: Major factor in switching to a cigarette is its taste, ease of switch, and long-term satisfaction. MERIT's taste, ease of switch, and long-term satisfaction are superior to other brands.



**MERIT**  
Kings & 100's

THE MEDICAL RESEARCH DIVISION OF CAMEL CIGARETTES BELIEVES THAT

THE MOST VALUABLE CLINICAL DATA RESULTS FROM THE COLLECTIVE EXPERIENCE OF PRACTISING PHYSICIANS.

THE PROFESSION IS INVITED TO FOLLOW THIS PRINCIPLE IN EVALUATING THE PHYSIOLOGICAL IMPORTANCE OF THE AMOUNT OF NICOTINE IN THE SMOKE OF A CIGARETTE.

**CAMEL**  
THE CIGARETTE OF CONFINED TO A CIGARETTE

Medical Specialists report on 20-day test of Camel smokers:

"Not one single case of throat irritation due to smoking Camels!"

More Doctors Smoke Camels



## PROGRESS THROUGH RESEARCH



THE RESEARCH DIVISION OF CAMEL CIGARETTES BELIEVES THAT THE MOST VALUABLE CLINICAL DATA RESULTS FROM THE COLLECTIVE EXPERIENCE OF PRACTISING PHYSICIANS.

THE PROFESSION IS INVITED TO FOLLOW THIS PRINCIPLE IN EVALUATING THE PHYSIOLOGICAL IMPORTANCE OF THE AMOUNT OF NICOTINE IN THE SMOKE OF A CIGARETTE.

**CAMEL**

## RESEARCH:

key to Kent's popularity

THE RESEARCH DIVISION OF KENT CIGARETTES BELIEVES THAT THE MOST VALUABLE CLINICAL DATA RESULTS FROM THE COLLECTIVE EXPERIENCE OF PRACTISING PHYSICIANS.

THE PROFESSION IS INVITED TO FOLLOW THIS PRINCIPLE IN EVALUATING THE PHYSIOLOGICAL IMPORTANCE OF THE AMOUNT OF NICOTINE IN THE SMOKE OF A CIGARETTE.

**KENT**

In its promotional efforts over the past 50 years the tobacco industry has used science and research to sell cigarettes.



Causes Of Cancer Remain Unknown

The cause of cancer is still unknown. The tobacco industry...



Lung Cancer/Smoking Link Evidence Called Deficient

Scientists Doubt Ads Cause Smokers To Start

Cigarette advertising leads to an increase in smoking...

Scientists doubt that advertising causes people to start smoking...

Further research is needed to determine the link between advertising and lung cancer...

Industry, Government Agree: Heart Disease 'Risk Factor' Mechanisms Unknown

Heart disease is a major cause of death in the United States...



Smoking/Pregnancy Link Unproven

Parental Smoking Not Affecting Children, Researchers Report

Parental smoking does not appear to affect children's health...

Researchers report that children of smokers do not have higher rates of lung disease...

Stress Called Malady Of Decade

Stress is the malady of the decade, according to researchers...

Stress is linked to many health problems, including heart disease and cancer...

In the News

It was called by The Washington Post...

Table with multiple columns and rows, likely a news summary or index.

Parental Smoking Not Affecting Children, Researchers Report

Researchers report that children of smokers do not have higher rates of lung disease...

The Tobacco Observer, tobacco industry publication, reports on smoking and health. The Council for Tobacco Research's Scientific Director Sheldon Sommers, MD, gave this testimony at Congressional hearings on warning labels: "Cigarette smoking has not been scientifically established to be a cause of chronic diseases, such as cancer, cardiovascular disease, or emphysema. Nor has it been shown to affect pregnancy outcome adversely."

fect is that we attract more applicants," he said.

The tobacco industry has nearly doubled its funding of CTR research to \$9 million since 1980. CTR funds about 40% of its 200 applicants per year, compared with a 20% funding level in many parts of NIH.

NOT JUST SMOKING

Since it was founded in 1954, CTR claims to have spent \$83 million on 865 projects in 279 medical schools, hospitals, and research institutions. Though the bulk of the money has been devoted to issues of smoking and health, the council—with the blessing of its benefactors—has recently become a general biomedical research group, devoting about half of its funds to research unrelated to smoking. The council pays a stipend of \$7,000 per year to its members.

Epidemiologist Gary Friedman, MD, assistant director of the Department of Medical Methods Research, Kaiser Foundation Research Institute, Oakland, CA, a former grantee, said, "We were very concerned that they would try to influence the results. I can't speak for everything the tobacco industry supports, but that particular group, the Council for Tobacco Research-USA, seems to be an independent group that is trying to sponsor good studies. They did not say anything to us about what to publish or what not to publish. They did not try to influence us in any way." Friedman noted that several studies

published by his group found harmful effects from tobacco.

The council may have avoided criticism, in part, because the researchers it funds follow a practice known as "piggybacking" or mingling money from a variety of sources. The council's annual report shows that it is co-funding research with the American Cancer Society, the National Science Foundation, the National Institutes of Health, and other leading organizations.

Joanne Luoto, MD, director of the US Office of Smoking and Health, stated that the council "is buying legitimacy when its funds are mixed with those from NCI and other federal agencies."

Sommers said that piggybacking used to feed the fires of hostility between the council and the American Cancer Society. However, the animosity has abated in recent years. In fact, Joann Schellenbach, director of press relations for the American Cancer Society in New York, said of the council, "They're legitimate. We're very critical of the tobacco industry in terms of their advertising practices and many other things that they do. But here's an area where they seem to be doing something by the book and promulgating good research. So I guess we can't criticize them across the board."

Historically, tobacco companies, like many other firms, bought research and used it to peddle their products. Scientific studies of tar and nicotine content of cigarettes often have been the subject of advertisements. Philip Morris adver-

tisements of the 1930s, 1940s, and 1950s, as in one that appeared in The Laryngoscope, told physicians that they could use their "scientific knowledge" to help their patients "discriminate between mere claim and basic facts" made in cigarette promotion. The blurb concluded, "Test Philip Morris on patients suffering from congestion of the nose and throat due to smoking. Verify for yourself Philip Morris superiority." (see also NY State J Med 1983; 83:1347-1352)

But today's battle to win hearts and minds through the research sponsored by the Council for Tobacco Research and the individual tobacco companies is more subtle and sophisticated. By design or default, the tobacco industry seems to be reaping a bonus of good public relations for being a patron of research, just as it does from sponsoring art exhibitions, ballet, orchestra and sporting events.

AND ON AND ON

Why would the tobacco industry take the risk of sponsoring research that could place its product in an unfavorable light?

Joseph Cullen, PhD, deputy director of the National Cancer Institute, believes that the industry wins even when the research turns up negative findings. He maintains that the research always breeds other research, so that the companies can keep saying that major questions about tobacco remain unanswered. "As long as they keep funding



## The research game

Publicly, little has been said in the scientific community about the possible compromise represented by the acceptance of funding from the tobacco industry. Privately, however, scientists point to the ethical problem that would arise for a colleague financed by an industry, who discovers that his research is being used in advertisements or public relations.

Yet this is precisely the *modus operandi* of the Tobacco Institute (TI), the information arm of cigarette manufacturers. Both the TI and the Council for Tobacco Research (CTR) are funded by the tobacco industry. Extensive coverage of the views of researchers who have received grants from the CTR has been carried in the *Tobacco Observer*, the bi-monthly newspaper of the TI that is sent to journalists, Congressmen, and thousands of other government officials. Few if any of these researchers are identified as having received remuneration from the CTR for travel or research. In contrast to the description of scientists who testify in support of stricter measures to discourage smoking as "anti-smokers," tobacco industry-financed researchers and others who oppose such measures are described as eminent, noted, or prominent authorities, experts, and scholars.

In addition to the *Tobacco Observer*, numerous tracts and pamphlets are distributed by the TI to tell "the other side" of the smoking "controversy." A review of the *Tobacco Observer* since its inception in 1976 (with the front-page headline, "Pesty anti-smokers blasted") reveals several techniques employed time and again, including the following:

- Highlighting proponents of the theory that genetics or personality are linked to diseases that most other research has attributed to smoking. This theory goes something like this: "People are

born with a predisposition to smoke and to get lung cancer—and often these are the same persons."

- Pointing to the limitations of research, especially that which has implicated smoking as a major cause of lung cancer and heart disease, while praising research into the role of stress, anger, chemicals, occupation, eating habits, air pollution, and radiation as the culprits in these diseases.
- Claiming that the Tobacco Institute is not responding to the various reports and statements of the Surgeon General, but rather that it is making a "contribution to the public dialogue" on the question of whether cigarette smoking is a cause of disease.
- Likening measures to restrict smoking in public places to the segregation of blacks; and suggesting that victims of lung cancer are being made to bear guilt for having smoked, and that this alleged situation is akin to the scapegoating and massacre of Jews during outbreaks of plague in the Middle Ages.
- Citing the opinion of researchers in areas other than their field of expertise, such as Ernst Wynder, MD, one of the early discoverers of the link between smoking and lung cancer, to support the tobacco industry view that advertising does not influence people to smoke and should not be banned.
- Conversely, citing the opinion of experts in a given field to deny the very influence of that field (eg, the research director of the Advertising Association, the British and European lobbying arm of the advertising business, who suggested in Congressional testimony that "cigarette advertisements do not sell the idea of smoking. They are not intended to sell the idea of smoking. They are intended to sell brands and that is what they do").
- Pointing to newspaper articles reporting on research that either does not

implicate smoking as a cause of disease or that implicates other, usually rare, suspects. Some of these reports have reached the news media through press releases of the TI.

- Fostering the notion that there exists a serious scientific dispute about the risks of smoking, and implying that some scientists (eg, the late Dr Hans Selye) have considered smoking to have benefits to health.
- Suggesting that the emphasis on smoking is diverting attention from other kinds of research such as that related to Alzheimer's disease or interferon. (Tobacco companies are increasingly funding health research in areas unrelated to smoking.)

Although the CTR claims to be an independent research organization funding independent researchers, several members of its Scientific Advisory Board have been awarded grants from the board. This is not to suggest that the researchers are compromised, but rather that the type of funding in question puts researchers in the position of having to be careful not to be compromised. After comparing the public testimony of researchers receiving funding from the CTR with the use made of that testimony by the TI's *Tobacco Observer*, one might conclude that the tobacco industry would find it in its best interest to fund research only in areas in which it feels safe or has the expectation of being able to use or publicize the data. However generous tobacco companies may be toward research, and however dedicated their grant recipients may be, the main concern of tobacco companies is to increase the sale of cigarettes—and the main concern of the Tobacco Institute is to help deflect threats to the sale of cigarettes, including scientific evidence indicting cigarette smoking as the leading preventable cause of death.

—Alan Blum, MD

science, it makes them look like they truly are concerned and interested in what the truth and the facts are," added Cullen. "They have some terrific people on their board. It is in their [the tobacco industry's] interest to look honest, to look as if they are scientifically curious about the real truth."

Luoto agreed, saying, "Funding research helps the industry keep alive the notion that the dangers of smoking are still in question. As long as they keep funding research and people keep doing research, even if it's into the subcellular molecular basis of carcinogenesis, John Q. Public is not going to know that dis-

tingtion so he's going to think, 'Hmmm, they haven't proved that it causes cancer yet.' They're using research funds directly or indirectly to further their aims. It's an issue that has not been raised before. It is conceivable that they are doing legitimate research while they are getting illegitimate public relations benefit from it."

The funding offers the industry another bonus: It has culled a group of scientists who can testify on the industry's behalf. During cigarette-labeling hearings in March 1983, at least nine researchers, including CTR's Sommers, who had received council money pre-

sented statements to the House Subcommittee on Health and the Environment.

CTR's Sommers discounts these arguments, holding that the only purpose of the research is to uncover scientific truths. "We are disease-oriented, not public relations-oriented people as a group," said the pathologist, who believes that tobacco primarily acts in concert with other factors to cause disease. "I'm not a propagandist. I don't give a damn what happens to the tobacco industry."

Cullen believes that despite pressures on researchers to find grants where they



are available, investigators are starting to realize that by accepting tobacco money they are aiding an industry responsible for 1,000 deaths per day in the United States. "I've been an investigator for many years. I wouldn't take a nickel from them," the behavioral psychologist said.

Fredrick Stare, MD, PhD, founder of Harvard's Department of Nutrition,

accepted grants from the council 30 years ago, but says that, with a single exception, he wouldn't touch their money today. "The case against tobacco wasn't as well documented when I accepted their money as it is now," he said. "I wouldn't accept their money today because it would help improve the image of an industry whose main product is killing so many people. However,

there is an exception. I'd accept their money to research tobacco as a food source. Maybe if they could sell tobacco as food for humans or livestock, they wouldn't have to sell it as cigarettes."

Howard Wolinsky

*Howard Wolinsky is the medical reporter for the Chicago Sun-Times.*

## Tobacco dilemma intensifying in North Carolina

This day in early May many of his fellow tobacco farmers are well into another uncertain season, transplanting tender seedlings from bed to fields; but John Vollmer takes time off to plow a different field.

At North Carolina State University in Raleigh, the state's leading agricultural school and a stalwart tobacco institution, Vollmer is an emissary. Despite the setting, he meets not with tobacco compatriots, but with their long time nemeses, health professionals. About 100 have congregated for a unique North Carolina Health Council Convocation on the tobacco dilemma—a first in the heart of tobacco's dominion.

Trained in the tobacco leadership program of the Philip Morris Company, Vollmer nevertheless appears uncomfortable. Loosening his tie, he warms the too-quiet audience by acknowledging, "I've been wanting to sneak off to the men's room for a smoke all morning."

He is here to tell them about the other side: what tobacco farmers do and why. He does not dispute the health consequences of smoking; in fact, he acknowledges his father has emphysema and that his children are well-schooled in the hazards of smoking. He talks of choice and freedom. He appeals for their understanding, saying, "It's important that we begin to talk to one another."

No more incongruous scene could have been imagined five years ago in the capital of the nation's leading tobacco and cigarette producing state. Despite more than 20 years of assault by medical research and surgeon generals' warnings, here tobacco remains the golden currency.

### FADING GLOW

The North Carolina tobacco crop is

worth about \$1 billion a year. Long the leading farm income producer, tobacco's throne now is being challenged by a fast growing poultry industry. Still, tobacco represents about 25% of the state's agricultural income and is the mainstay for some 60,000 tobacco farmers. Additionally, five of the nation's six cigarette manufacturers have plants in the state. These employ about 25,000 people who take home annual gross wages of about \$600 million. In aggregate, the North Carolina tobacco industry from farm to auction warehouse to cigarette factory approaches \$2 billion and provides 147,000 jobs.

Even though the leaf's glow has faded over the last two decades, it is ingrained in the Carolina heritage. It is money to be sure. But also it is steeped in tradition, pegged to the ritual of the seasons, as Vollmer's slide show demonstrates. It is smothered in lifestyle. It is colored the red, white, and blue of American self-reliance and independence. The call for a smoke-free society within 15 years is like a declaration of hostilities. Yet, the real battle has been brewing for years and is far more immediate. Farmers, cigarette manufacturers, and politicians are trying to fashion a new alliance out of the now divisive and failing tobacco price support and quota program.

Price supports are too high, making American tobacco noncompetitive on international markets. Tobacco warehouses are bulging with government-financed surpluses. Even though it will mean reduced income, many farmers agree with manufacturers that the support price must come down. Quota owners, however, do not favor price support reductions because that will affect the value of their allotments. And farmers are wary of a heavy 25 cent per pound assessment on their leaf sales this year, to guarantee the stabilization program

loans. They are pressing for legislation to allow cigarette manufacturers to buy out the surplus leaf at large discounts. That will result in huge program losses at a time when the tobacco program faces its severest criticism in Congress. Not even the experts are willing to predict the outcome.

### "NO NET COST" MAY BE COSTLY

At first glance, the tobacco system looks simple; in fact, it is incredibly complex. Created by New Deal legislation in the 1930s, the federal price support system guarantees farmers a price, currently \$1.70 a pound for flue-cured tobacco. Leaf, not purchased by tobacco company buyers at auction, is automatically bought up at the federally guaranteed price by the Flue-Cured Cooperative Stabilization Corp. But because the guaranteed price is higher than world prices, and manufacturers have been importing greater amounts of cheaper foreign leaf, the stabilization program is anything but stable. Its warehouses are filled with 812 million pounds of unsold flue-cured leaf, dating to the 1975 crop. Flue-cured, or bright leaf, is the major ingredient in cigarettes. It is the type overwhelmingly grown in North Carolina, with some burley tobacco grown in the mountain counties. Burley, also used in cigarette blends, as well as in smoking and chewing tobacco, is the most widely grown. Raised in 12 states, including Kansas, Ohio, and Indiana, burley is mainly produced in Kentucky. About 512 million pounds of burley are in surplus warehouses. Clearing out these large stores through a discount manufacturers' buyout will cost, primarily taxpayers, an estimated \$500 million to \$1 billion in failed subsidy loans. Farmers will share the burden for loans made since 1982 when the No Net Cost feature began. It assesses a per pound