On January 11, 1964, at a packed press conference at the State Department in Washington, DC, US Surgeon General Luther L. Terry released what would become one of the most important and most widely quoted documents in the annals of medicine: *Smoking and Health—Report of the Advisory Committee of the Surgeon General of the Public Health Service*. "Few medical questions have stirred such public interest or created more scientific debate than the tobacco–health controversy," noted Dr. Terry. But the findings of the year-long study by the 10-member committee were blunt and unequivocal. Principal among the conclusions was that "cigarette smoking is causally related to lung cancer in men; the magnitude of the effect of cigarette smoking far outweighs all other factors." Moreover, the report emphasized that smoking "is a health hazard of sufficient importance to warrant appropriate remedial action."

Fifty years after the Surgeon General's landmark report, the health and economic toll taken by smoking remains devastating. Dr. Terry's 1964 indictment of cigarettes as the principal cause of lung cancer should have marked the beginning of the end of the Marlboro Man. But far from riding off into the sunset, the tobacco industry has more than met the challenge of maintaining the nicotine addiction of nearly 50 million Americans. The tragic result is that cigarette smoking is still the nation's number one avoidable health problem, accounting for 440,000 deaths a year. Although adult cigarette smoking prevalence in the United States has been cut in half since 1964, to 20% of the population, approximately the same number of Americans smoke, and the cohort of smokers is younger.

Those with the lowest income and least education are most likely to light up. Approximately 40% of individuals who lack a high school diploma smoke, compared to 10% of those with a college degree. It is abhorrent that Philip Morris (now called Altria), the manufacturer of Marlboro, the nation's and the world's leading cigarette brand, continues to be welcomed with open arms by career centers at dozens of US universities, where the company recruits students at campus job fairs for positions as Territory Sales Managers to stock Marlboro cigarettes in convenience stores, supermarkets, and drugstores. These include CVS, Walgreens, and Rite-Aid, which claim to be partners in healthcare. Two-thirds of the nation's 56,000 pharmacies are now owned by such drugstore chains, nearly all of which still sell cigarettes.

Health organizations praised CVS effusively for its surprise announcement in February that it would phase out cigarette sales within the year in its 7,600 drugstores. The Campaign for Tobacco-Free Kids, a Washington, DC, anti-smoking lobbying group, even called the move "courageous." What nonsense! Over the past three decades, CVS and its rivals have swallowed up thousands of locally owned, independent, community pharmacies, most of which had long ago stopped selling cigarettes or had never sold them to begin with because tobacco products are antithetical to the health-care role of the pharmacist. Meanwhile, these chains had rebuffed repeated calls over the years from medical activists to remove tobacco products from their shelves. The real reason CVS will stop selling cigarettes is the company's rapid expansion into a broad range of health services, notably walk-in clinics staffed by nurses and physicians. To continue to sell cigarettes in this setting is hypocrisy that even hard-boiled smokers would not fail to notice.

Contrary to popular belief, the 1964 Surgeon General's Report did not mark the beginning of our knowledge about the devastating impact of cigarette smoking on health, but rather the moment when the government put an end to all doubt about the cause of the rising epidemic of lung cancer. It should also have marked the beginning of vigorous government action against smoking, but this did not occur.

In fact, robust research warning against the dangers of smoking had been available 25 years earlier. In 1939, a review of the relationship between smoking and lung cancer—a comprehensive study with more than 400 references—was published by Ochsner and De Bakey. They had observed for several years that their patients with this once-rare condition had all started smoking as soldiers during World War I, when they had been given cartons of cigarettes by the Red Cross and other health organizations. Yet Dr. Ochsner's vocal anti-smoking advocacy in the 1940s was met with indifference or derision by fellow physicians, more than two-thirds of whom...
smoked. His 1954 book, *Smoking and Cancer: A Doctor’s Report* (Figure 1), was negatively described in the March 1955 issue of the *American Journal of Public Health*, with the reviewer opining that, while "written...by an outstanding surgeon," the causal relationship between cigarettes and cancer "is not proved," adding, “This reviewer plans to place this book in the nonscience section of his library.”

Epidemiologic studies by Hill and Doll in the United Kingdom and Wynder and Graham, Levin, and Hammond and Horn in the United States in the late 1940s and early 1950s elucidated the causal role of cigarette smoking in lung cancer. Dancing around this evidence, tobacco companies competed to promote the “safest” cigarette brands. R.J. Reynolds claimed in certain advertisements that “more doctors smoked camels” (Figure 2). P. Lorillard created the Micronite filter for Kent that was made of an unnamed substance “so safe, so pure, it’s used to filter the air in many hospitals.” That substance was asbestos.

The *Journal of the American Medical Association* (JAMA) accepted such cigarette advertisements until 1954, and tobacco companies remained sponsors of some state medical association meetings—where they gave out cartons of cigarettes and other gifts to doctors—until the mid-1980s (Figure 3). (With few exceptions, hospitals did not prohibit smoking until the 1990s, and then only because the Joint Commission for the Accreditation of Hospitals [JCAH] finally mandated this policy; the American Hospital Association had simply turned a blind eye to the issue until the JCAH policy became effective.)

In the 1960s and 1970s, when smoking was implicated as the major avoidable cause of emphysema and heart disease, cigarette manufacturers invented “low-tar” and “light” cigarettes. Yet filtered, low-tar, light, and ultra-light cigarettes, or those infused with menthol (an anesthetic), are not safer in any way. At the same time, beginning in 1968, Philip Morris co-opted women’s liberation slogans to run successful marketing campaigns promoting Virginia Slims (Figure 4).

The implied health claims of all cigarette brands were found to be fraudulent in August 2006 by federal judge Gladys Kessler, who ruled that Philip Morris, R.J. Reynolds, Brown & Williamson, and other tobacco companies had engaged in racketeering—and decades of deceiving the American public. Yet even today no major health organization has made it clear to the public that the filter is a fraud. Filtered brands, the choice of more than 95% of cigarette smokers, not only fail to confer a scintilla of reduced harm but also actually increase the risks of heart disease and emphysema because smokers tend to compensate for the presence of a filter by inhaling more deeply to get the desired nicotine effect.

Upon publication of the Surgeon General’s Report, Senator Maurene Neuberger (D–Ore.) urged the American Medical Association (AMA) to join with other health organizations such as the American Cancer Society (ACS) in taking a strong stance against cigarette smoking. But rather than assuming a leadership role in such a campaign, the AMA entered into a $10 million contract with six cigarette manufacturers to conduct more research on smoking—with the aim of creating a safer cigarette. Such acquiescence enabled the tobacco industry to perpetuate the myth that there was still doubt about smoking as a major cause of death and disease. Meanwhile, from the 1950s through the 1990s, while tobacco industry scientists and executives were testifying before Congress and issuing reports claiming that the association between cigarette smoking and lung cancer was merely statistical, the industry’s own researchers and officials were acknowledging in internal memoranda that smoking caused cancer.

In 1978 the AMA published *Tobacco and Health*, a summary of its research projects funded by the tobacco industry, which confirmed the findings of the 1964 Surgeon General’s
Report on smoking and lung cancer and cemented the association between smoking and heart disease. However, the tobacco industry had succeeded in stifling any AMA action on smoking for 14 years. Well into the 1980s, the AMA was known more for its silence on smoking than for courage in confronting the tobacco industry. In a 1982 memo, the then-editor of JAMA cautioned the journal’s editorial staff to “exercise appropriate caution in our JAMA publications on tobacco and control of tobacco use, nuclear war, and abortion.” In providing this “preventive advice,” he noted that “sensitivities are particularly high prior to the meetings of the Board of Trustees and the Annual and Interim Meetings of the House of Delegates.”

But what about other major health professional organizations and medical specialty associations? Surely they would fill the leadership void left by the AMA in those crucial years following publication of the Surgeon General’s Report. Yet the actions of these groups have seldom spoken louder than their resolutions. Medical schools in particular have dropped the ball. For decades such institutions were fearful of incurring the wrath of the tobacco industry. In 1987, as a new faculty member at a medical school, I was strongly encouraged by one dean to back off on tobacco, which was not an area well-funded by the National Institutes of Health, and instead “get into something more socially acceptable, like cocaine.” Even today there is scant attention paid to the tobacco pandemic in either the clinic or the community.

Other culprits include mass media corporations. In 1969 Congress banned cigarette advertising from television and radio, effective January 1, 1971. Few people realize this measure was supported by the tobacco industry as a means of also removing anti-smoking ads that had begun to reduce cigarette sales—ads mandated by the Federal Communications Commission 3 years earlier in response to a petition by John F. Banzhaf III, founder of Action on Smoking and Health (ASH) in a test of the Fairness Doctrine. No sooner did the ban take effect than the tobacco companies purchased title sponsorships of numerous sports events that happened to be televised, most memorably the Virginia Slims Circuit in women’s tennis and Winston Cup NASCAR stockcar racing. A single 90-minute telecast of the Marlboro Grand Prix IndyCar race in 1989 featured over 5,000 visual and verbal mentions of Marlboro, thus circumventing the federal ban on tobacco advertisements on television, and providing primetime juxtapositions of athletes and cigarettes for tens of millions of young viewers.

The tobacco industry shifted its overt cigarette advertising dollars into the print medium. Magazines such as TIME, Newsweek, Sports Illustrated, Playboy, and Rolling Stone all published numerous cigarette advertisements in each issue throughout the 1970s, 1980s, and 1990s, while editorial content on the adverse effects of smoking virtually disappeared from their pages. A cover story in Newsweek in 1977 entitled “What Causes Cancer?” listed the top 10 causes of cancer in alphabetical order, in such a way as to imply that arsenic and asbestos were the most significant. “Tobacco smoke” was number eight. By 1985 lung cancer deaths had surpassed breast cancer deaths among US women, a fact that largely unreported in women’s magazines, most of which continued to accept cigarette advertising. In 1986, Ms. magazine publisher Gloria Steinem defended her publication’s heavy dependence on such ads, even in its annual...
al health issue, claiming that it could not otherwise survive.

In the past year, cigarette advertisements for Camel ("Passionate, Inspired, Original") have appeared in most issues of popular magazines like Vanity Fair, Entertainment Weekly, Sports Illustrated, TIME, and Wired (including in an issue guest-edited by Bill Gates, who has helped fund anti-smoking initiatives around the world). Ebony, Essence, and Jet, the foremost magazines among African Americans, continue to carry ads for Newport and other cigarette brands in nearly every issue. These magazines have never published a single article on the devastating impact of smoking on the black population. Rather than condemning such exploitation and cowardice, the ACS continues to advertise in these publications—but about colon cancer screening and not about the health harms of smoking.

Thus in the crucial years following the Surgeon General’s Report, progress in reducing demand for cigarettes was thwarted because of a combination of the tobacco industry’s political power and lucrative payoffs to the very forces that should have been in the vanguard of efforts to end the pandemic of smoking-related disease. Congress, the mass media, organized medicine, and academia have all been chronic recipients of largesse from the tobacco industry and have been reluctant to bite the hand that fed them. Meanwhile, the health community has carried on, bouncing from one failed public relations crusade to another and putting its faith in mirages such as safer cigarettes, a cash settlement with the tobacco industry, and a misguided federal law (crafted largely by the Campaign for Tobacco-Free Kids and Philip Morris)—the absurdly named Family Smoking Prevention and Tobacco Control Act—that was supposed to give the US Food and Drug Administration (FDA) regulatory control over tobacco products.

In its 5 years of existence, the FDA tobacco agency has done nothing substantive to reduce cigarette smoking. On the contrary, hamstrung by Congress in applying the same regulatory standards to the most irredeemably harmful form of tobacco—namely, cigarettes like Marlboro—it seems likely that the FDA will settle instead for attempting to regulate the far less hazardous electronic cigarettes.

Tobacco companies have also out-maneuvered health advocates who believed they had found a way to use the industry’s money to fund anti-smoking education. The 1998 Tobacco Master Settlement Agreement between the state attorneys general and the tobacco industry did lead to $2.5 billion for the newly created American Legacy Foundation. But after showing initial promise by underwriting a massive Internet release of internal tobacco industry documents, the Foundation squandered the bulk of its funds on duplicative programs and inconsequential research. As a result, tobacco control has become less about fighting tobacco than about fighting over grants to write papers about fighting tobacco.

The experience of watching the feeding frenzy for a share of this newfound wealth led veteran anti-smoking advocate Dr. Ed Anselm to comment that “the most addictive thing about tobacco is money.” Only a tiny fraction of settlement funding, 2.6%, is now directed by the states toward smoking prevention and cessation programs. Because the states are now dependent on the annual payments of the settlement—with a concomitant decline in programs with depth and breadth to counteract the smoking pandemic—progress has stalled.

Similarly, by virtue of the latest $50 million in research grants awarded by the FDA to create a dozen “centers of excellence” to study tobacco policy over the next 5 years (as if we haven’t already learned what needs to be done)—it would appear that we are mainly interested in perpetuating the field.
of tobacco control and providing full employment for researchers rather than finally taking the necessary remedial action that Dr. Terry called for 50 years ago. Grassroots activist groups like GASP, ASH, and DOC, which laid the foundation for tobacco control in the 1960s to 1990s in spite of their bare-bones budgets, have all but disappeared, replaced by well-paid tobacco control bureaucrats, who equate policy papers with progress and studies with success. We are learning more and more about less and less.

The tobacco industry’s age-old delaying tactics of calling for more research appear to have become official government policy and the Marlboro Man’s dream come true. This is backed up by the fact that tobacco stocks remain a solid investment. Virtually all universities as well as the largest pension fund for medical, academic, and government employees, TIAA-CREF, are heavy shareholders in two of the most profitable companies on the New York Stock Exchange, Altria and Philip Morris International. Altria continues to donate to hundreds of cultural and academic organizations, including universities, museums, and institutions such as the Kennedy Center for the Performing Arts and the Smithsonian National Museum of African American History and Culture. This is hardly the scenario of “remedial action” that Dr. Terry envisioned in 1964.

Even if the ACS and other oncology organizations are never going to devote upwards of a third of their budgets to fighting smoking and its promotion (based on the evidence that smoking causes at least a third of all cancer deaths), there is an urgent need for the ACS to dedicate far more of its resources and clout to this effort and reassume a leadership role it long held in tobacco control and medical education. But to do so, it will have to cut its own ties to allies of the tobacco industry, such as the drugstore chains and the financial services sector.

The 50th anniversary of the Surgeon General’s Report on Smoking and Health is not a time for celebration, but rather one of sober reflection about missed opportunities. Our progress in reducing the prevalence of smoking is undeniable, but our current efforts have become more symbol than substance.

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Editor’s Note: The Work of Dr. Alan Blum

Dr. Alan Blum is the Gerald Leon Wallace MD Endowed Chair in Family Medicine at the University of Alabama School of Medicine, in Tuscaloosa.

In the early 1980s, he published the first theme issues on smoking of any journal (MJA, March 5, 1983; NY State J Medicine December 1983 and July 1985). In 1977, he founded Doctors Ought to Care (DOC), the first international physicians’ anti-smoking and health promotion organization, and in 1988 he received the Surgeon General’s Medal from Dr. C. Everett Koop. In 1998, Dr. Blum founded the University of Alabama’s Center for Tobacco and Society, and he serves as its Director. The Center comprises the largest collection of original documents, artifacts, and images on both the tobacco industry and the anti-smoking movement.

To mark the 50th anniversary of the 1964 Surgeon General’s report, Dr. Blum curated an exhibition, “The Surgeon General vs. The Marlboro Man: Who Really Won?” It first went on view in November 2013 at the University of Alabama’s Gorgas Library (and includes the images used in this article). The exhibition highlights the rise in popularity of cigarette smoking beginning in the 1920s, tobacco industry tactics to promote smoking and deflect criticism, and ways that the medical community has at various times both advocated for public health reforms and been complicit in perpetuating the myth that cigarettes do no harm. Requests for hosting this exhibition or others by the Center for the Study of Tobacco and Society should be sent to Dr. Blum at: ablum@chhs.ua.edu.

Dr. Blum also produced the 15-minute film, “When More Doctors Smoked Camels,” which is a gallery tour of the exhibition (and is available at: http://youtube.be/01-8DY90jL0), as well as the 2013 film “Blowing Smoke: The Lost Legacy of the Surgeon General’s Report” (available free of charge at: http://tinyurl.com/k9k66u7).