

COMMENTARY

“Everyone knew but no one had proof”: tobacco industry use of medical history expertise in US courts, 1990–2002

Robert N Proctor

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Historians have played an important role in recent tobacco litigation, helping the industry with its defence of “common knowledge” and “open controversy”. Historians re-narrate the past, creating an account for judges and juries that makes it appear that “everyone has always known” that cigarettes are harmful, meaning that smokers have only themselves to blame for their illnesses. Medical historians are also employed to argue that “honest doubts” persisted in the medical community long past the 1950s, justifying as responsible the industry’s longstanding claim of “no proof” of hazards. The industry’s experts emphasise the “good science” supported by the industry, and ignore the industry’s role in spreading doubts about the reality of tobacco hazards.

kinds of historical evidence offered up in tobacco litigation. In the industry’s hands these are potent designators, representing both fields of inquiry and foregone conclusions, since by the very act of postulating these as objects of inquiry one is assured of at least some evidence in court. Did lots of newspapers and magazines talk about tobacco hazards? Yes, many did. Did lots of doctors doubt the reality of such hazards? Yes, lots did—especially in the South of the United States, but everywhere to a certain degree.

There must of course have been *some* popular knowledge of tobacco harms—witness the occasional reference to cigarettes as “coffin nails” and “cancer sticks” in films and magazines, as we are unfailingly reminded by industry experts. And there must have been some doubt: no scientific revolution occurs overnight, there are always laggards, including distinguished scholars slow to recognise the sea-change. The industry *exaggerates* common knowledge and scientific doubt, however, for reasons that are transparently self-serving. If everyone has always known, then smokers must knowingly have assumed the risks of smoking when they took up the habit. And if the science establishing such hazards has always been flawed or incomplete, then the industry acted responsibly in questioning evidence of hazards. Both points are made by the historians brought into court for the industry’s defence.

This dual presumption of common knowledge and expert ignorance has some arresting implications. There is the odd presumption that “common-folk” knew about hazards before the scholars, who were always (in the industry’s view) fighting among themselves and could not agree until, well, pretty late. (It’s important for the industry to keep the timing for this final proof indeterminate, but the obvious riposte is: if smoking really wasn’t proven to be harmful by 1954, 1964, or even later, when *did* the final proof come? The tobacco men don’t like to go down this path.) The industry’s use of historians basically resurrects and retreads arguments from two, three, or even four and five decades ago when the campaign of doubt-mongering was in full swing. The industry liked (and still likes) to characterise its stance back then as *cautious*: we needed more (and always more) research to explore the possibility of hazards, and we certainly didn’t want to rush to judgment. Industry lawyers at Jones, Day, Reavis and Pogue put it nicely in their legal brief of 1986:

Anyone familiar with tobacco industry rhetoric over the past half century or so will have noticed a certain *monotony* in the style of argumentation: the same clichés are repeated again and again, reflecting what tobacco men years ago characterised as the “holding strategy” of the industry.¹ For decades, the industry argued that there was no proof of harmful effects from smoking, that the science demonstrating such hazards was shoddy or incomplete, and that there were numerous “confounding factors” to consider. The health question was an “open one” and we certainly would not want to close down research by concluding that cigarettes were a cause of any kind of malady! As Clarence Cook Little once said of his Scientific Advisory Board at the Tobacco Industry Research Council (TIRC): “We all have an open mind.”²

A similar kind of tedium can be observed in the expert testimony of historians working for the industry, which tends to centre around the establishment of two key principles: (1) *everyone has always known* about tobacco hazards, meaning of course that people have only themselves to blame for taking up the habit; and (2) no one was ever really able to *prove* that cigarettes are harmful, or at least not until quite late, say, with the Surgeon General’s Report of 1964 or even later. There were good reasons to *doubt* the reality of those hazards: everyone knew, but nobody had proof.

AN “ABUNDANCE OF CAUTION”

These two positions—common knowledge and open controversy—define the most common

Abbreviation: TIRC, Tobacco Industry Research Council

Correspondence to:
Professor Robert N Proctor,
History Department,
Stanford University,
Stanford, CA 94305, USA;
rproctor@stanford.edu

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tobacco companies refused to admit proof of hazards out of an “abundance of caution”.³

The version now being offered up in court by the industry’s experts holds that the industry was right to go slow: it took quite some time to establish a scientific consensus, that’s just how science works. There is always debate in science, open-ended discussion. And in pointing to this history of controversy, the industry likes to confuse the political and the scientific: as if the longstanding controversy over *what to do* about tobacco hazards (a reality) implies an equally intractable controversy over *whether in fact those hazards are real* (a fabrication, by the mid-1950s at least). Tobacco Institute President Horace Kornegay in a 1972 article in the Institute’s *Newsletter* claimed it was “impossible ‘to separate evidence from evangelism’ in the cigarette controversy”.⁴ Historians have been employed to elaborate on this confusion, to make it seem real, by certifying as honest the endurance of doubts that the industry itself was busily helping to produce. I call this *agnogenesis*, the deliberate production of ignorance or doubt, the proper study of which is *agnotology*,⁵ a key complement to any exploration of the “state of the art”. We need to talk about *common ignorance* and (especially) the “state of the deception”, instances of which can be found in abundance in industry archives.

What is also important to realise, however, is that there are problems in making the distinction between popular and scientific knowledge as sharp as the industry does, with the masses being all-knowing and the experts all confused. There is a certain flexibility born of opportunism here, since knowledge is said to be “common” or “expert” according to how it plays in a particular legal case. Doctors, for example, are taken to be experts when found to be *denying evidence* of hazards, but allowed to be commoners when they *recognise* evidence of real dangers. There is also the obvious problem of how to characterise the industry’s own widely-publicised scepticism: if knowledge of tobacco hazards was “common-sense”, how did it escape their grasp?

Here I want to explore how defence experts have presented the history of the discovery of tobacco health harms in tobacco litigation. Four historians of medicine have testified for the defence in such trials: Kenneth Ludmerer of Washington University, Robert P Hudson of the University of Kansas, Jon Harkness of the University of Minnesota, and Peter C English of Duke. Other historians have worked on these same topics, or prepared to testify and were never called, and of course there are histories presented by non-historians, but these four are the medical history professionals who have taken the stand for the defence.

LUDMERER’S THREE RULES

Tobacco industry relations with historians are a fairly recent phenomenon. Before the 1980s, in fact, historical accounts organised by the industry were generally prepared by non-historians. Milton Rosenblatt, chief of New York City Hospital’s Chest Clinic and a faculty member at New York Medical College, defended the industry in many public forums, including testimony before Congress and in medical history journals. Rosenblatt had a flair for quotable outbursts—as when he characterised the idea of cigarettes causing cancer as a “colossal blunder”, an assessment featured prominently on the cover of a Tobacco Institute brochure from 1970.⁶ Rosenblatt was a recipient of substantial CTR “Special Project” funds, and as late as 1972 appeared in the Tobacco Institute’s propaganda film “Smoking and Health: Need to Know”. His primary contribution as a historian came in 1964, however, when he published an article in the *Bulletin of the History of Medicine* arguing that the 20th century’s increase in lung cancer rates was purely an artefact of improving diagnostics.⁷ Rosenblatt’s

is the only history of lung cancer ever published in the *Bulletin*, and must be regarded as part of the industry’s longstanding campaign of disinformation. (His article also did not disclose his work for the industry.) Tobacco authorities privately compared his value to that of an insulin shot for a diabetic.⁸

Dr Morris Fishbein of Chicago was another prominent defender of the industry. As iron-fisted editor of *JAMA*, Fishbein helped stave off efforts to have the journal refuse tobacco ads and, in the mid 1950s, received about \$100 000 from Lorillard to write industry-friendly articles on smoking and health. Fishbein also helped place ads for Kent cigarettes in medical magazines.⁹ His name is now honoured at the Morris Fishbein Center for the History of Science at the University of Chicago (there is also an American Medical Association fellowship in his name), but the man should also be remembered as author of a 1954 review of tobacco and health hazards, contracted by Doubleday with financial backing from Lorillard. The makers of Kent cigarettes—with its “micronite” asbestos filter—paid Fishbein tens of thousands of dollars to write the book, and though the manuscript was completed (and now resides in the Special Collections of the UC Library), the decision to publish was abandoned after Lorillard withdrew its promise to purchase thousands of copies.¹⁰ The book turned out to be more than a whitewash, and Fishbein may well have come a bit too close to the truth in talking about animal experimental demonstrations of tobacco tar’s carcinogenicity and Richard Doll’s qualified “proof that smoking is a cause of bronchial carcinoma”.¹¹ Fishbein worked for Lorillard throughout the 1960s and into the 1970s, receiving \$10 000 per year from 1957 through 1969.¹²

Kenneth Ludmerer, a widely-feted historian of medicine at Washington University in St Louis, was the first academic historian to testify for the industry—in *Kotler v. American Tobacco*, an individual plaintiff’s case tried in Boston in 1990. Ludmerer’s work for the industry dates back to August of 1988, when Murray Garnick of Arnold and Porter in Washington, DC, hired him to prepare a response to the testimony of Jeffrey Harris of the Massachusetts Institute of Technology (MIT) who, in 1985, had written a history of the recognition of tobacco health hazards for the plaintiffs in *Cipollone v. Liggett Group, Inc.*¹³ We do not yet know how Ludmerer first came to the attention of industry attorneys, but it was probably through the recruitment efforts of John C Burnham, a professor of history at Ohio State University and section director for Project Cosmic, Philip Morris’s secret effort (1987–1993) to produce “an international network of scientists and historians” to write histories casting the industry in a favourable light.¹⁴ Project Cosmic was only one of literally hundreds of Philip Morris “projects” underway at this time, often with colourful names like “Project Ambrosia”, “Project Youth”, “Project Pandora”, “Project Trinity” and “Project Apollo”. These were mostly marketing ploys of one form or another: the goal of Project Lotus, for example, was to make a low sidestream smoke cigarette; Project Natural was a plan to develop cigarettes free of artificial additives¹⁵; and Project Lolita was an effort to make a cigarette with a sweet, “fruity cake” flavour. Project Scum was Reynolds’ campaign to market Camels to San Francisco gays and “street people”.

I mention Project Cosmic because it seems to mark the beginning of the industry’s appreciation of the value of historians in defending against legal claims. Ludmerer was the first to testify for the industry, but Cosmic director John C Burnham was apparently the first to prepare for such testimony, prior even to the launching of Cosmic. Burnham was listed as an expert for the industry in *Dewey v. RJ Reynolds* (1986) and in *Cipollone* (also in 1986), and though

he ended up not testifying in either case, we know a bit about what he was going to say from disclosures submitted by defence attorneys. We know, for example, that he was hired to respond to Harris' 1985 assessment of the medical "state of the art" regarding an "alleged link between cigarette smoking and lung cancer prior to the 1960s".¹⁶ Burnham was prepared to testify that the Harris document was "ahistorical"; he was also expected to testify to the integrity of the industry's response to evidence linking cigarettes and lung cancer, including the decision to form the TIRC. In Burnham's words:

the tobacco industry's response was both timely and appropriate and constituted a respectable/commendable scientific effort—among other things it utilized peer review, co-funded research with other leading research institutions, developed a training grants program, was patterned after leading cancer research groups, and was headed up by a former president of the American Cancer Society.¹⁶

Burnham was never ultimately called to appear for Cipollone and the industry may well have miscalculated, given that it lost the case in 1988, making this the first time the industry had been held liable for a smoker's death.¹⁷ The industry corrected this mistake on appeal, however, with the help of Dr Kenneth Ludmerer.

Ludmerer claims to have agreed to work for the industry after seeing the poor quality of historical testimony introduced by the plaintiff's witness for Cipollone. In his 2002 deposition in *USDOJ v. Philip Morris* (the Federal case), he was asked:

Q: Who was the witness that testified at Cipollone?
 A: Jeffrey Harris.
 Q: And when you were reading his testimony, how did you know that he was distorting the history?
 A: He violated each of the general principles of history that I had mentioned to you before. I saw his report and I actually had original sources. He went so far as to commit fraud.¹⁸

What were these principles Harris was said to have violated? Ludmerer already in *Kotler* had elaborated "three primary rules" historians were supposed to follow, namely: (1) "comprehensiveness"; (2) "avoiding hindsight"; and (3) realising that science does not always "progress in a straight line" but is complex, halting, and above all *messy*.¹⁹ With minor variations these same principles are repeated in most

Table 1 Tobacco defence testimony of Kenneth Marc Ludmerer

Deposed for <i>USDOJ v. Philip Morris</i> (Federal case), 8 August 2002
Deposed for <i>Harvey v. ABB Lummus Global, Inc</i> , 13 May 2002
Deposed for <i>Tomkin v. American Tobacco Co</i> , 21 June 2001
Trial testimony in <i>Boeken v. Philip Morris</i> , 10 May 2001
Trial testimony in <i>Apostolou v. American Tobacco Co</i> , December 2000
Deposition in <i>Blankenship v. Philip Morris</i> , 18 October 2000
Deposition in <i>Scott v. American Tobacco</i> , October 2000
Trial testimony in <i>Anderson v. American Tobacco Co. (NY)</i> 12 June 2000
Trial testimony in <i>Williams v. Philip Morris</i> , 17–18 March 1999
Deposed for <i>Engle v. R.J. Reynolds Tobacco Co</i> , 9 June 1998
Deposed for <i>State of Washington v. American Tobacco Co</i> , 3 June 1998
Deposed for <i>State of Mississippi Tobacco Litigation</i> , 1 April 1997
Deposed for <i>Florida State Attorney General's case</i> , 1 April 1997
Deposition in <i>Cipollone v. Liggett Group</i> , 25–26 March 1991
Trial testimony in <i>Kotler v. American Tobacco Co</i> , 1 March 1990

of Ludmerer's 15-odd trial appearances and depositions (table 1).

A review of Ludmerer's own testimony, however, reveals that he himself has often strayed from such principles. In his Federal deposition, for example, he claimed to have studied the history of tobacco and health "more thoroughly, more comprehensively, more representatively, more systematically than anyone in the world had ever done".¹⁸ In this same deposition, however, he admits to having never looked at any of the industry's pronouncements regarding tobacco and health, nor at any of the documentation available concerning the companies' internal knowledge of hazards. He admits that the Surgeon General's Report of 1964 "helped erase any residual doubt" about the lung cancer hazards of tobacco,¹⁸ but nowhere does he acknowledge that the industry continued to dispute the existence of such hazards for more than three decades after that report.

There is a similar confession in his 2002 deposition in *Harvey v. Lummus*, where he admits to having never asked anyone at Philip Morris about what the company may have known about the hazards of smoking. Nor did he review any internal documents:

Q: Would it be correct to say that you have not reviewed a single internal Philip Morris company document?
 A: That is correct.²⁰

Ludmerer seems not to have been embarrassed by this, he just didn't consider it part of his assignment. That is where much of the bias in such testimony can be found: in delimitation of expertise, in the framing of questions posed and questions neglected, producing a kind of strategic myopia. Lung cancer tends to be the exclusive focus, allowing the industry to ignore the maladies clearly linked to tobacco prior even to the 20th century—cancers of the lip, throat and mouth, for example.⁵

Ludmerer seems not to realise how much the industry has influenced the science produced in this arena. In his Federal deposition he is asked whether he has looked at who had supported the studies he was assessing:

Q: Did source of funding go into your judgment?
 A: Not at all.
 Q: Why not?
 A: In science what matters is ideas and proof and argument, and not who happened to fund it....¹⁸

This is a remarkably naive conception of the sociology of knowledge. Ludmerer ignores the fact that the TIRC, for example, was planned to avoid any kind of research that might incriminate tobacco—which is why so little of what we now know about tobacco hazards was produced by TIRC grantees, despite hundreds of millions of dollars given out. The source of funding surely did matter in this instance—as in other instances where industry lawyers actually suppressed research that was getting too close to the truth (as in the notorious "mouse house" massacre at Reynolds in 1970).²¹ Asked about his neglect of such documents, Ludmerer said that this had to do with the historian's unavoidable "setting boundaries" to research.²² Queried about the TIRC he said only that: "I have heard the term.... I really don't know much about it. I have not studied it. I have no intention to study it. It is again out of my area."¹⁸

Denial of expertise has long been an industry strategy of avoiding an embarrassing confession, as when Ludmerer in *Cipollone*²³ claimed not even to know whether smoking posed a public health threat:

Q: (by Marc Edell) Sir, would you agree that there is reliable evidence today to suggest that cigarette smoking is a major threat to the smoking public?....

A: I do not have an opinion on that subject, an expert opinion.

Again, in the same deposition:

Q: Doctor, is it your opinion that cigarette smoking contributes to the development of lung cancer in human beings?

A: I have no opinion on that.

Q: Do you have an opinion as a physician?

A: No, I have no expert opinion.

Ludmerer's second principle is "avoiding hindsight"—his point being that historians must situate knowledge production in the context of its times.²² It is important to avoid anachronism, presentism, "Monday morning quarter-backing". Ludmerer uses this to argue that if we were somehow able to step back into the 1930s and 1940s we would find that cigarettes were only one of "three or four dozen" substances blamed for the lung cancer epidemic.¹⁸ The point of course is that we cannot blame the industry for not acting on what was still in doubt. Ludmerer fails to point out that while alternate theories of lung cancer causation persisted into the 1930s and 1940s (notably air pollution, tar from roads, X-rays, and infections of various sorts), cigarettes were already beginning to pull ahead of the pack. Smoking was the most commonly-cited cause of lung cancer by the early 1950s, the real question by this time being not *whether* but rather *why* cigarettes were causing so much cancer—whether it might not be the paper they were wrapped in, or the lighter fluid used to light them, or the woody stems increasingly used in manufacture, or the arsenic residues left from insecticides or the radioactive polonium-210 in tobacco leaves, and so forth.

Ludmerer claims that none of the methods used to establish the cancer-tobacco link were "credible" before the 1950s—because these were not "controlled" studies.^{18, 22} He is simply wrong, though, in stating that there were no case-control studies before 1950. Franz H Müller's Cologne study of 1939 was the first of this type, published in Germany's leading cancer research journal with an abstract of his results in *JAMA*.²⁴ A more serious historiographic error is Ludmerer's presumption that causal inferences were not possible before the invention of case-control methods. Epidemiology in the 1950s was not the radical novelty he imagines, but rather builds on a tradition of medical inference going back decades if not centuries or even millennia. Tobacco was identified as a carcinogen for many of the same reasons coal tar had been blamed for skin cancers, betanaphthylamine for bladder tumours, and X-rays for malignancies of the skin and other organs. The association in each case was strong and clear, the clinical evidence was persuasive, and there were plausible (and analogous) mechanisms that could be (and were) introduced. The case-control methods of the 1950s cannot be viewed as the "beginning" of credible evidence in the cigarette controversy, and Ludmerer is wrong to dismiss previous work as "armchair brainstorming".¹⁸

Ludmerer's third principle is basically the non-linearity of history: history "doesn't go in a straight line" but rather grows by fits and starts with detours and backtracking.²² History he says is "messy", a word which often appears in defence expert testimony.^{18, 25} In his 2002 deposition for the Federal case, for example, he states that:

what historians of science and medicine learn is that history is messy. It is messy and it is untidy, and that the

evolution of scientific knowledge is not a straight line of progress.¹⁸

He links this with the hindsight problem:

reviewing history is a very, very difficult task. One has to disassociate yourself from the ideas of the present, to immerse yourself to [sic] what people at the time were thinking and acting and believing and behaving.¹⁸

Ludmerer has been more than willing to concede certain simplicities when it suits the defence, however. Testifying under oath in Kotler, he stated: "Prior to 1950, there were no major medical problems associated with cigarettes. In fact, many people felt that cigarettes had been official [beneficial—RP] effects because of stress relief or tension relief."¹⁹ Ludmerer cited as typical a 1948 editorial from *JAMA*, which claimed that:

extensive scientific studies have proved that smoking in moderation...does not appreciably shorten life.... From a psychological point of view, in all probability more can be said in [sic] behalf of smoking as a form of escape from tension than against it.^{19, 26}

Ludmerer cited this passage as evidence of the ignorance of cigarette hazards before the 1950s, but failed to note that its author was none other than Morris Fishbein, a man so friendly with tobacco interests that Lorillard paid him tens of thousands of dollars to write an entire book on smoking and health. Fishbein was actually booted from his position as *JAMA* editor a year after his editorial, partly for his refusal to limit cigarette ads in the pages of *JAMA*.²⁷ His successor, Austin Smith, limited the kinds of ads the journal would take but also took the additional step of inviting Wynder, Graham, and Levin to publish their epidemiologic investigations in that journal, which appeared together in the 27 May 1950, issue. In 1953 *JAMA*'s new editors announced that they would no longer publish tobacco ads of any kind, by which time Fishbein was receiving tens of thousands of dollars per year to front for the industry.

Ludmerer states that Wynder and Graham in 1953 (he omits Croninger, the other co-author) were the first to present "laboratory evidence that factors in cigarette smoke might be a carcinogenic agent".¹⁸ Before the appearance of that article, however, there was already a sizable literature comparing cigarette tar with carcinogenic tars from chimneys and petrochemical plants, and a growing literature on animal experiments. Claude E Teague's 19-page "Survey of Cancer Research" prepared for RJ Reynolds in February of 1953 cited more than 40 separate sources, some dating from the first decade of the century, most of which indicated a smoking-cancer link.²⁸ Ludmerer ignores Teague but also Angel H Roffo of Argentina, who conducted a wide variety of experimental studies on tobacco tar carcinogenesis.²⁹ Ludmerer also ignores the industry's longstanding efforts to ridicule and dismiss such studies—by blaming tobacco-attributable disease on genetics, viruses, pollution, or other "confounding factors".

The cash (or legal) value of Ludmerer's three historical "principles" for the industry lies in the way in which they are deployed. The stress on *context* allows him to situate, to exculpate, to make the abnormal seem normal. The admonishment against *hindsight* allows him to say that things back then were not as they might appear to us today; we need to cut the past some slack, and must not judge too harshly. *Messiness* also suggests there is always a fog of uncertainty about the past, with neither black nor white but only shades

of grey—exculpatory historiography bordering on historical malpractice.

HUDSON'S NON-QUALIFICATION

Robert P Hudson was chair of the History and Philosophy of Medicine Program at the University of Kansas until his retirement in the 1980s. He was the second medical historian to testify for the industry, in 1994 in *Allgood v. R.J. Reynolds*, though he had earlier (1990) been hired by Murray Garnick of Arnold and Porter to prepare for a different trial—probably *Cipollone*. (He claims not to remember; he was never deposed for that case and Ludmerer seems to have taken his place.) Like Ludmerer, Hudson was recommended to Arnold and Porter by John Burnham of Ohio State.³⁰ Burnham has acted as a recruiter of historical talent for the industry, as has Otis Graham of the University of North Carolina at Wilmington. Hudson's assignment for both cases was to assess "what the scientific community knew about the relationship between cigarette smoking and tobacco and lung cancer, and when they knew it", especially in the period between 1930 and 1964. In *Allgood* he was also asked to look at the history of laryngeal cancer, since that is what the plaintiff died from in that case. By 1994 he had earned more than \$92 000 preparing for his testimony.³⁰

Hudson's deposition reveals that he himself began smoking at the age of 8 or 9, first corn silk and cedar bark, from which he graduated to roll-your-own Bull Durham and butts gathered from off the street. In 1946 at the age of 21 he was discharged from the Navy with tuberculosis, and by the following year had quit smoking. (Many industry experts are present or former smokers—for example, Peter English). What is most interesting about Hudson, however, is the fact that his testimony takes place at a time when the industry was still claiming there was no evidence of either hazards or addiction:

Q. (By Mr. Holford) So are you testifying then that, in your opinion, as a medical doctor, cigarette smoking is not addicting as opposed to habituating?

A. That's the way I've always looked on it, yes.

Q. So you disagree with the Surgeon General of the United States and his 1988 report on nicotine addiction; is that right?....

A. As a person not qualified in addiction, I'm disagreeing with the use of that term.... I've always thought of it in terms of habituation rather than addiction."³⁰

I've mentioned this opportunism with regard to whether physicians should be considered "experts" or as carriers of "common knowledge"—and here we have this oscillation within the testimony of a single individual. Even though Hudson is an MD, he retreats to the aetiologic innocence of a historian. Like Ludmerer,²³ Hudson also claims not to know whether smoking is a "cause" of lung cancer. Hudson says he prefers to characterise it as a "well-known risk factor", just as "if you eat too much you're more likely to get heart disease, not that it causes it necessarily".³⁰ "Wordsmithing" has long been an important industry tactic, along with decoy and distraction research, and their notorious calls for ever "more research" (= filibuster research).

HARKNESS' GREAT OPPORTUNITY

Jon M Harkness is another scholar to whom the industry has paid hundreds of thousands of dollars for medical history expertise. (Ludmerer has received more than half a million.) As an adjunct professor of history of science at the University of Minnesota, Harkness was also managing editor of *Isis* for eight years in the 1990s, during which time (in 1997) he

began working for Chadbourne & Parke (for American Tobacco) on whether there was a "controversy" about tobacco and health in the early 1950s.²⁵ Harkness has thus far testified only in *Boerner v. Brown and Williamson*, an individual plaintiff's case tried in May of 2003 which ended in a victory for the plaintiffs, a decision now being appealed.

Harkness's innovation—from the point of view of defence litigation expert witnessing—was to explore unpublished archival sources in an effort to show that knowledge of tobacco hazards was shaky in the 1950s. In *Boerner*, a big point was made of his having travelled to numerous archives²⁵; this flexing of historical muscle is often displayed in litigation: you want to be able to say your witness has dug deeper, probed harder than witnesses on the other side. Jeffrey Harris read only a thousand articles, Ludmerer read 1200.¹⁸ The kinds of sources can also be important, with the legal privilege being given to "primary" sources (versus "secondary" sources written by other historians). This emphasis on primary sources gives an oddly antisocial feel to much of the testimony offered up in court, since experts are discouraged from citing the opinions of other experts, which from a legal standpoint can be regarded as a form of "hearsay" (unless they fall into the class of "learned treatises"). The individual historian is supposed to represent the considered expertise of his or her profession, but not to rely on any particular expert in the formation of his or her opinion. Apart from legitimising a kind of professional theft, this means that the historiographic wheel is repeatedly reinvented; it also means that industry experts never have to reconcile their testimony with the views of historians who have actually published on this topic. It should be kept in mind that few of the 30-odd historians who have testified for the defence (see tables 2 and 3) have ever published on tobacco and health history; their interest in this topic has been entirely generated by litigation.

Harkness is clearly happy to have been able to work for the industry:

this has been a great opportunity for me to do this research. You know, the standard way of doing history in a university, it would have been difficult, if not impossible, to get the amount of funding that I have gotten to travel to these archives. It's been a great opportunity. It's a huge topic, and I don't claim to know absolutely everything. There's still more that I want to work on. But I've had a chance to do an awful lot of research, and it has been very interesting.²⁵

Harkness has in fact turned up notable material. He located the diary of Lewis Robbins, chief of cancer control at the US Public Health Service and a useful tool in the industry's efforts to show that many doctors questioned the tobacco-lung cancer link in the 1950s. Harkness also found the unpublished notes prepared for a press conference of 21 October 1954 by Oveta Culp Hobby, Eisenhower's Secretary of Health, Education, which he presents as the first official view on tobacco and health. Hobby's notebook contains a draft of a statement on lung cancer asserting that:

Few scientists question the statistical association between lung cancer and cigarettes smoking.... But there is controversy as to whether this represents a cause-effect relationship or whether smoking is associated in some way with other unidentified factors.²⁵

Harkness cites this as evidence that there was indeed a "controversy" over whether cigarettes were harmful—and

Table 2 Historians (36 in total) who have testified as expert witnesses for the American tobacco industry, 1986–2005 (excludes consulting witnesses). Compiled with Louis M Kyriakoudes

Ambrose, Stephen E (deceased). Testified in *Covert v. Liggett Group* (1994); deposed in *Florida v. American Tobacco* (1997)

Bean, Jonathan J, Southern Illinois University. Designated in *St. Louis v. American Tobacco* (2004)

Berman, Hyman, University of Minnesota. Deposed for and testified in *Minnesota v. Philip Morris* (1997 and 1998)

Burns, Augustus M III, University of Florida. Deposed in *Florida v. American Tobacco* (1997)

Carstensen, Fred V, University of Connecticut. Deposed for and testified in *Cipollone v. Liggett* (1987 and 1988)

Chesson, Michael B, University of Massachusetts, Boston. Provided affidavit in *Longden and Longden v. Philip Morris* (2003)

Cobbs-Hoffman, Elizabeth, San Diego State University. Deposed for and trial testimony in *Boeken v. Philip Morris* (2001)

Dibacco, Thomas V, American University. Deposed in and testified for *Eastman v. Brown and Williamson* (2003); deposed in *Blue Cross v. Philip Morris* (2000); deposed in *Engle v. RJ Reynolds* (1999)

English, Peter Calvin, Duke University. Testified in *Blue Cross v. Philip Morris* (2001); expert report and deposition in *USDOJ v. Philip Morris* (2001); deposed in *Bullock v. Philip Morris* (2002), etc

Ford, Lacy K, University of South Carolina, Columbia. Testified in *Raulerson v. RJ Reynolds* (1997), *Engle v. RJ Reynolds* (1999), *Little v. Brown and Williamson* (2000), *Jones v. RJ Reynolds* (2000), *Kenyon v. RJ Reynolds* (2001), *Allen v. RJ Reynolds* (2003); deposed in *Engle v. RJ Reynolds* (1997), *Blankenship v. Philip Morris* (2000) and *Little v. Brown and Williamson* (2000); deposed for and testified in *Karbiwnyk v. RJ Reynolds* (1997); designated in *St Louis v. American Tobacco* (2004); cross-noticed for *Keegan v. RJ Reynolds*

Graham, Otis, University of North Carolina, Wilmington. Testified in *Kotler v. American Tobacco* (1990); deposed in *Texas v. American Tobacco* (1997)

Green, George D, University of Minnesota. Deposed for *Minnesota v. Philip Morris* (1997)

Harkness, Jon M, University of Minnesota. Testified in *Boerner v. Brown and Williamson* (2003)

Harvey, Paul, University of Colorado, Colorado Springs. Deposed in *Coolidge v. Philip Morris* (2004)

Hilty, James, Temple University. Testified in *Carter v. Philip Morris* (2003)

Hoff, Joan, Ohio University, Athens. Testified in *Rogers v. RJ Reynolds* (1996), *Dunn v. RJ Reynolds* (1998), and *Tomkin v. American Brands* (2001); deposed in *Dunn v. RJ Reynolds* (1997 and 1998) and in *Tomkin v. American Tobacco* (2001); deposed for and testified in *Whitely v. Raybestos-Manhattan* (1999 and 2000)

Hudson, Robert P, University of Kansas (deceased). Deposed in *Allgood v. RJ Reynolds* (1994)

Judd, Jacob, Lehman College. Expert report filed in *Standish v. American Tobacco* (2003); testified in *Rose v. American Tobacco* (2003)

Lowery, Charles D, Mississippi State University. Deposed for *Mississippi AG* (1997).

Ludmerer, Kenneth M, Washington University (see table 1)

Martin, James Kirby, University of Houston. Deposed in *Burton v. RJ Reynolds* (1996), deposed and testified in *Ironworkers v. Philip Morris* (1999) and in *Falise v. American Tobacco* (2000 and 2001)

May, Glenn A, University of Oregon. Testified in *Williams v. Philip Morris* (1999)

Miller, Donald L, Lafayette College. Expert Report submitted for *Gerrity v. Lorillard* (2005)

Norrell, Robert Jeff, University of Tennessee. Testified in *Newcomb v. RJ Reynolds* (1999) and in *Scott v. American Tobacco* (2003); deposed for *Scott v. American Tobacco* (2000); deposed for and testified in *Karney v. Brown and Williamson* (1998 and 1999); earlier work for litigation in *Alabama, Florida and Louisiana Parrish, Michael E, University of California, San Diego. Testified in Miele v. American Tobacco* (2003); deposed for *Barnes (Arch) v. American Tobacco* (1997), *Washington v. American Tobacco*, and *Boerner v. Brown and Williamson* (2003); deposed and testified for *Henley v. Philip Morris* (1998 and 1999); affidavit for *Frosina v. Philip Morris* (1997)

Parssinen, Terry M, University of Tampa. Testified in *Arnitz v. Philip Morris* (2004)

Rose, Mark H., Florida Atlantic University. Disclosed in *Brown v. Liggett* (2003)

Sansing, David G, University of Mississippi, Oxford. Testified in *Boerner v. Brown and Williamson* (2003); deposed in *Mississippi Tobacco Litigation* (1997); deposed for and testified in *Horton v. American Tobacco* (1990) and in *Wilks v. American Tobacco* (1993); testimony and/or deposition in *Carter v. Philip Morris*, *Grinnell v. American Tobacco*, *Schuts and Walton*, etc

Schaller, Michael, University of Arizona. Testified in *Reller v. Philip Morris* (2003), *Lucier v. Philip Morris* (2003), *Frankson v. Brown & Williamson* (2003), etc

Sharp, James Roger, Syracuse University. Deposed for and testified in *Mehlman v. Philip Morris* (2000 and 2001)

Skates, John Ray, Jr, University of Southern Mississippi. Deposed in *Mississippi Tobacco Litigation* (1997)

Snetsinger, John G, California Polytechnic State University, San Luis Obispo. Deposition in *Bullock v. Philip Morris* (2002)

Stueck, William, University of Georgia. Expert disclosure and affidavit submitted in *Eiser v. Brown and Williamson* (2002); affidavit in *Marsh v. Brown and Williamson* (2004).

Tulchin, Joseph S, Woodrow Wilson Center, Washington, DC. Testified in *Widdick v. Brown and Williamson* (1998)

Wilson, Theodore A, University of Kansas. Deposed for *Barnes [Arch] v. American Tobacco* (1997), *Clay v. Philip Morris* (1999), *Blankenship v. Philip Morris* (2000), *Smith* (1999); deposed and expert report for *USDOJ v. Philip Morris* (2001), etc

Table 3 Scholars who have provided historical consulting for the tobacco industry but have not testified (partial listing)

Abrams, Richard M, University of California, Berkeley

Burnham, John C, Ohio State University

Clune, John J, Jr, University of West Florida

Engelmann, Larry, San Jose State University

Eitling, John, University of Houston and President of SUNY Plattsburgh

Harp, Richard, University of Kansas (Department of English)

Harley, David, formerly of Oxford University

Hook, Ernest, University of California, Berkeley

Jones, James H, formerly of University of Houston

Klein, Herbert S, Stanford University

Kline, Benjamin, San Jose State University

Kushner, Howard I, Emory University

Lankevich, George J, Bronx Community College, Manhasset

Means, Richard K, Auburn University (Department of Physical Education)

Muldoon, James, Rutgers University

Musto, David, Yale University

Savitt, Todd, East Carolina University (Medical Humanities)

Sobel, Robert N, Hofstra University (deceased)

Sosna, Morton (formerly Stanford)

Talley, Colin L, Columbia University

Unger, Irwin, New York University

and the industry acted honestly and responsibly in treating it as such.²⁵ He does not mention the industry's role in prolonging that controversy, or their many campaigns to discredit evidence of hazards.

Harkness is one of a growing number of historians who have said they plan to publish the results of their research for the industry. With so much financial support from the industry going into historical work, however, there is a chance that our knowledge of tobacco health history may be distorted. This would not be the first time scholarship has been influenced by tobacco largesse: early work on the hazards of secondhand smoke, for example, was skewed by industry support.³¹ Following decades of effort to control the science, the industry is now trying to control our knowledge of the history of that science. We can expect such distortions to continue as industry experts begin to publish some of their findings. In 2004, for example, an article on the history of the discovery of the lung cancer-tobacco link appeared in the *Journal of the History of Medicine and Allied Sciences*, accompanied by a disclosure (forced by an appalled peer reviewer) that the authors had received tobacco industry funding for the project, originally undertaken as part of a plan to prepare for expert testimony in litigation. The authors claimed not to

have been influenced by such support, but the final line gave a friendly nod to the industry's mantra that the controversy over hazards before 1964 was "reasonable".³²

ENGLISH AT DUKE

Peter C English was one of two historians prepared to testify for the defence in *USDOJ v. Philip Morris*, the other being Theodore A Wilson, a military historian at the University of Kansas in Lawrence. (Ludmerer was dropped from the defence roster in April of 2004.) English became involved in tobacco litigation in 1988, when Murray Garnick of Arnold and Porter hired him to research "smoking and health in the years leading up to the first Surgeon General's Report in 1964".³³ English did "several hundred hours" of research for the firm at \$250 per hour. He had originally prepared to testify in *Haines v. Liggett Group* but was never called to the stand. Following a decade or so of relative inactivity Garnick asked him to prepare a report for Blue Cross and Blue Shield of New Jersey v. Philip Morris, which he submitted on 3 April 2000. His Federal report of 29 January 2002³⁴ was a revised version of his Blue Cross and Blue Shield report; he admits in his Federal deposition that defence lawyers in both cases helped him revise his reports before submission.³³

English defends his work for the tobacco industry by saying how important it is to have "good history done", especially since "so much of the history is actually being played out in the court room".³³ His testimony follows many of the same lines as Ludmerer's, though he does more with addiction and testifies to events leading right up to the present. His blinders are similar to those of other industry witnesses: when asked whether industry laboratories conducted research into smoking and health, for example, he says that he hasn't explored that topic. Nor has he researched statements of the Tobacco Institute.³³ He says he isn't really comfortable talking about the "tobacco industry" as a whole, since it has so many components. What he does say is that the industry cooperated with the public health community in trying to produce low yield cigarettes, in designing warning labels, and in working with the federal government to develop low-yield cigarettes through the Tobacco Working Group, a joint National Cancer Institute (NCI)-industry body from the 1970s.^{33 34}

A key argument for English is that the epidemiological methods of the 1950s were so radically new that there was controversy about whether their use was appropriate. English uses this presumption of radical novelty to argue that there was a great deal of honest intellectual resistance to the lung cancer hypothesis. The idea is that modern epidemiology was invented with the discovery of the lung cancer hazard, which made both the methods used and the conclusions reached controversial. There is some truth to this, but three crucial facts are ignored in such a gloss: (1) the industry was busily (and dishonestly) questioning the evidence in countless press releases long after the scientific case was closed; (2) cigarettes by the early 1950s were the most commonly-blamed cause of the lung cancer epidemic; and (3) the new epidemiology was consistent with a much larger body of mutually-reinforcing evidence, including evidence from animal experiments, pathology and cytology. Epidemiology itself was experimental in that carefully constructed controls and blinding techniques made it possible to eliminate myriad forms of potential bias.

English can be charged with extracting certain quotes unfairly from sources. In his expert disclosure for the Federal case,³⁴ for example, he cites the following passage from Cornfield *et al's* famous 1959 paper in the *Journal of the National Cancer Institute*:

Because of the uncertainties associated with changes in diagnostic accuracy, no firm conclusions can be reached

on whether the rate of increase in lung-cancer mortality has, in truth accelerated since 1920.³⁴

English does not mention the conclusion of this very same text, however, which stresses that though dissenters could still be found,

Nevertheless, if the findings had been made on a new agent, to which hundreds of millions of adults were not already addicted, and on one which did not support a large industry, skilled in the arts of mass persuasion, the evidence for the hazardous nature of the agent would be generally regarded as beyond dispute.³⁵

English's report and testimony are peppered with such half-truths and misrepresentations. He cites Wynder *et al's* 1953 caution that "animal data do not necessarily confirm or deny human data", ignoring these same authors' assertion that the question was not *whether* but rather *what* in cigarettes was causing cancer. English says that cigarettes in the 1950s were "just one of several potential culprits" when, in fact, the tide had already turned and cigarettes were the most commonly-blamed explanation of the lung cancer epidemic.

It is important to appreciate the extraordinary sums of money expert witnesses have obtained from the tobacco industry. For his work in the Blue Cross Blue Shield case alone, for example, English says he earned over \$400 000.³³ He admits to having earned about \$200 000 in earlier cases (1988-1990) and in his 2002 Federal deposition³³ reveals having already billed \$120-130 000 for that case. He has also worked on a number of individual tobacco cases, including Schwarz v. Philip Morris and Bullock v. Philip Morris (both in 2002) for which he billed another 200 hours,³³ bringing his total to at least \$800 000 for his work for Big Tobacco. In *USDOJ v. Philip Morris* he testified to having earned more from his tobacco work than from his academic salary; he has also served as an expert for at least two lead pigment cases, working for the defence in both instances.³³

HIDING BEHIND HISTORY

I began by noting the monotony of certain industry claims, claims that really don't change much over the 40-odd year history of the conspiracy: we have the repeated claim for insufficient proof or evidence, the call for ever more research to eliminate doubt (filibuster research), the perils of rushing to judgment, the infinitely high bar for proof of causation, and the eternal focus on "confounding factors" or the febrility of statistics or the irrelevance of animal studies, etc. The medical historians reviewed here have all produced what might be called *confirming arguments in historical retrospect*, testifying to the legitimacy of each of these claims in the historical past.

There has been some variance in argument over time, however, notably the admission that tobacco use can in fact pose a "risk" for disease, following the industry's own admission in this regard in the mid 1990s. So whereas Ludmerer in 1991 could claim not to have an opinion on whether tobacco was hazardous,²³ the more common concession today is that 1964 was the turning point in the recognition of genuine hazards. The central historical narrative of the industry now appears to have evolved into the following set of propositions: (1) before 1950, there was no evidence of harms; (2) in 1950 you get the first suggestion of possible harms, following which time there arose a controversy; (3) the industry responded by funding research to resolve the controversy; (4) most of this controversy—but not all—was resolved in 1964 with the Surgeon General's

What this paper adds

Scholars have become increasingly interested in “the epidemiology of expertise”, recognising that experts play an important role in maintaining the power and legitimacy of polluting industries. Given the enormous political and economic clout of the tobacco industry, it should come as no surprise that experts have been handsomely paid to help the industry emerge victorious in many of the legal actions it has faced in recent decades, including lawsuits claiming negligence, conspiracy to defraud, defective product design, breach of warranty and so forth.

Here the specific role of medical historians as expert witnesses for the industry is interrogated. Historians of medicine are used by the industry to argue that the hazards of tobacco have long been known to ordinary people (“universal awareness”) and that smokers therefore have only themselves to blame for whatever illnesses they may contract from smoking. A second argument is commonly introduced: that for many years a “controversy” about the reality of tobacco hazards persisted in the medical community, justifying the industry’s longstanding claim that it had “not yet been proven” that tobacco caused physical harms (“open controversy”). Subsidiary exculpatory rhetorics have been introduced by industry experts, including claims that history is “complex” or “messy” and should not be judged by present-day standards. Historians working for the industry have tended to ignore the role of the industry in fomenting ignorance, and some of their testimony borders on historical malpractice. Industry-financed historians have begun publishing some of their findings, raising novel questions about disclosure and accountability.

report; (5) the industry printed health warnings on cigarette packs shortly thereafter—in 1966—acting responsibly.

Crucial in this historical narrative are certain common and repeated *omissions*: none of the industry’s historians make any serious effort to consult the internal documents of the industry to come up with an assessment of their actions; none have been given special access to industry documents; none look at the role of the industry in disseminating doubt or misrepresenting what they knew about hazards. Peter English in his Federal deposition was asked about the Tobacco Institute and confessed he didn’t know much about it:

I mean, I know it exists. I know it came to exist somewhere in 1954, went out of existence recently. But I haven’t paid any concerted effort to study it. I mean, in a general way, I mean, since I’ve read, you know, a lot of media reports, you know, occasionally I would come across some things from the Tobacco Institute, especially in the 50s. But I haven’t made a systematic effort in that regard.³³

Myopia of this sort has been important in testimony offered by the industry’s experts; the strategy has been to paint a sympathetic picture of the trade by ignoring its history of fraud and misrepresentation.

An important fact about Ludmerer and virtually all of the historians involved with the industry for litigation is that their professional interest in tobacco came only after being hired by the industry. Among the three dozen historians who have worked for the industry, none (or almost none) has ever published on the history of tobacco and health—though some have published industry-friendly opinion pieces.³⁶ This

may change in the future, as several expert witnesses have said they would like to publish some of the materials they have found working for the industry.³⁷ We already know of instances where consulting experts (versus witnesses) have published on the history of tobacco without divulging their financial backing from the industry¹⁴; history journals are just now beginning to worry about potential conflicts of interest of this sort.

Ignoring history is often said to doom us to repeat it, but in the hands of powerful financial interests such as those here in force, history can also be a tool to propagate useful fantasies. It is a black mark on the historical profession that so many have been so easily seduced. Much of this work has been done in the dark, but we can hope that by publicising such services, along with the distortions thereby created, historians may think twice before signing up. As Louis Brandeis reminds us, sunshine is often the best disinfectant.

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