The Burzynski controversy in the United States and in Canada: A comparative case study in the sociology of alternative medicine*

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Abstract. A remarkable controversy which developed in the 1980s surrounding Dr. S. Burzynski’s “antineoplaston” cancer therapy serves to illuminate several issues in the sociology of medicine: the professional politics of cancer therapeutics, the role of the state in resolving medical-scientific disputes, and the role of the mass media in disseminating medical knowledge. A comparative analysis of the distinctive ways in which this controversy unfolded in the United States and Canada provides insights into the current crisis of biomedicine, the role of professional ideology in hampering medical innovation, and the limits of Canadian medicare as a form of “socialized medicine.”


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Introduction
Since 1977, Stanislaw R. Burzynski, M.D., Ph.D., has operated a biomedical research facility and cancer therapy clinic in Houston, Texas, where he has treated over two thousand advanced cancer patients with a class of drugs called antineoplastons. Both the research and clinical branches of the Burzynski Research Institute, Inc. (BRI) have grown considerably over this period, making this one of the largest medical establishments of its kind in the United States. Yet Dr. Burzynski has also been the subject of persistent public controversy and scrutiny. The reason: despite many apparent successes in the treatment of usually incurable cancers (i.e., cancers that are refractory to surgery, toxic chemotherapy, or radiotherapy), his antineoplastic therapy remains unrecognized by the American Medical Association, the National Cancer Institute, and the American Cancer Society. Indeed, the medical and cancer establishments in both the United States and Canada have maintained a public posture of insisting that the treatment is unproven (and possibly harmful), and that Dr. Burzynski’s research and clinical practices are, at best, scientifically and ethically dubious (NCI, 1990; ACS, 1991). Despite this, Dr. Burzynski remains in business; his fame as an “alternative” cancer therapist has grown; and his treatment continues to attract sympathetic interest from medical professionals and cancer patients alike, in North America and around the world.¹

It is, of course, widely known that many utterly useless treatments are marketed to the gullible and the desperate for everything from hair loss and wrinkles to arthritis and cancer. Yet it is also widely believed among the general public that the medical profession and the pharmaceutical industry are far from irreproachable; that these established components of the “medical-industrial complex” (Wohl, 1984; Salmon, 1984) are motivated in no small measure by an appetite for profit and power; and that their denigration of the “quack,” the “charlatan,” or the “merchant of false hope” has been known to extend to the authentic medical-scientific pioneer. How often has the innovator been tarred with the same brush as the swindler? Popular culture teems with stories of genius

¹ In this article I am primarily concerned with events in the Burzynski controversy up to 1986. It should be noted, however, that Dr. Burzynski has made significant strides in recent years in gaining recognition from his peers (see Leeson, 1988 and Oncology News, 1990). In 1989 Burzynski received Investigatory New Drug clearance from the U.S. Food and Drug Administration for clinical trials of “Antineoplastic A10” in the treatment of breast cancer. In December 1991, the National Cancer Institute (U.S.) announced that it would be conducting four “Phase II” trials in brain tumors using Antineoplastons A10 and AS2-1 after an NCI site-visit-team filed a positive report on a “best case series” presented by Dr. Burzynski. Independent clinical trials have already been conducted in Japan with positive results. Further trials have been announced for Poland, Lithuania, and Russia. Burzynski’s troubles are far from over, however. On 15 January 1992, the Texas Department of Health notified him of four citations pertaining to the manufacture and distribution of an unapproved drug. Further, on 29 January 1992, the Texas Attorney General, at the request of the Department of Health, filed a lawsuit to obtain a permanent injunction to prevent the production and distribution of antineoplastons in the State of Texas.
stifled, bought off, or otherwise manacled by the self-interested occupants of seats of power and authority. But the examples which spring most readily to mind are precisely those unwelcome challengers of what ephemerally passes for “good medical science”: Pasteur, Simmelweis, Jenner, Freud, Fleming, Ehrlich. Images of the final vindication of Edward G. Robinson’s title character in Dr. Ehrlich’s Magic Bullet, in the face of a medical community hostile to his pioneering treatment for syphilis, provide a salutary reminder that a healthy scepticism regarding the verdicts of ostensible experts is always in order. Such images and related anti-authoritarian public attitudes resonate well with anti-positivist themes in contemporary philosophy and social theory: from Foucault’s (1972) and Derrida’s (1982) discourse theories to Feyerabend’s (1988) anarchistic epistemology to Bhaskar’s (1986) scientific realism. At the same time, the issues posed in such controversies are often deeply rooted in the more traditional preoccupations of the conflict-power paradigm within sociology: the ideological dimensions of established science; professional organization and ideology in the service of dominant socio-economic interests; forms of authority and their relationships to particular power resources (Larson, 1977; Turner, 1987; Navarro, 1976; McKinlay, 1984; Derber, 1984). But whether rooted in a belief in the indeterminacy of discourse, in scepticism toward monolithic concepts of scientific method, or in distrust of the wealthy and powerful, the conviction has become increasingly widespread, among social scientists and the public at large, that an “open mind” is necessary when evaluating the claims of those whom the hierophants of the medical profession would have us believe are disreputable.2

Is Stanislaw Burzynski a charlatan or a major innovator, a common swindler or a courageous pioneer? This is the question that has dominated the Burzynski controversy for well over a decade. It is not, of course, a question that can be definitively answered by a sociologist. Yet certain features of this controversy are clearly amenable to sociological inquiry. Indeed, an examination of the controversy from a critical sociological perspective can yield a number of important insights pertaining not only to the individual case of Stanislaw Burzynski, but to the problematic of “alternative medicine” in general. Moreover, it is my view that the lessons of this controversy can in some ways be most clearly delineated on the basis of a comparative sociological analysis of how the controversy has unfolded in Canada and in the United States respectively. Hence,

2. This article is not concerned with epistemological issues in the sociology of alternative medicine and therefore takes no definitive stand with respect to such questions as objective knowledge, social constructionism, the cultural relativity of medical knowledge, the nature of the scientific enterprise, etc. The author is, however, in broad sympathy with the perspectives of “scientific realism” — especially its project of disclosing those “hidden” but nevertheless real structures which mediate the relations between natural laws and individual subjects or events. In my opinion this approach allows for a closing of the epistemological gap between a (non-positivist) conception of objective scientific knowledge and the legitimate claims of social constructionism. I believe that the analysis of this paper is informed in a general way by this outlook.
not only should an inquiry into the Burzynski controversy be able to shed light on such prominent issues in the sociology of health, illness, and medicine as the professional politics of cancer therapeutics and strategies of ostracization/challenge within the medical profession; it also affords the opportunity to compare the handling of such controversies by the state and by the mass media in the similar but culturally and politically distinct contexts of the United States and Canada.

The agenda of this paper, then, reflects a dual concern: with the sociology of unorthodox cancer therapeutics and medical knowledge, on the one hand, and the differentiated expressions of a medical-scientific controversy in two countries with distinctive institutional patterns and ideological notions of health care delivery, on the other. I shall begin with descriptive summaries of the American and Canadian controversies and then proceed to a comparative analysis of the roles played by the medical profession, the state, and the mass media within the two countries. Finally, an attempt will be made to identify some of the more important lessons of the controversy as a whole.

**Case study A: The Burzynski controversy in the U.S.**

*Background*

On the face of it, Stanislaw Burzynski is an unlikely candidate for the role of “medical renegade.” Born in 1943 in Poland, he enjoyed an early rise to scientific prominence in his native country. A precocious student, by the time he graduated from medical school in 1967 he had published fourteen scientific papers. In the following year he earned his Ph.D. in biochemistry with a thesis entitled “Investigations on amino acids and peptides in blood serum of healthy people and patients with chronic renal insufficiency.” Proceeding from the well-established epidemiological observation that people suffering from chronic kidney failure (renal insufficiency) rarely develop cancer, Burzynski noted that this could be correlated with an elementary biochemical phenomenon which distinguished such patients from normal (cancer-prone) subjects — namely, a superabundance of peptides (amino-acid compounds) within their bloodstream. This insight was the basis of Burzynski’s subsequent research into the cancer-inhibiting properties of peptides — their role in a naturally occurring biochemical defense system against the formation and spread of cancer cells within the human body.

To pursue his research (and to escape what he describes as political persecution resulting from his unwillingness to join the Polish Communist party), Dr. Burzynski immigrated to the United States in 1970. Soon after he was invited to the prestigious Baylor College of Medicine in Houston by Dr. George Ungar who was heading up a research project in Baylor’s Department of Anesthesiology into the biochemical bases and mechanisms of memory. Like Burzynski, Ungar and
his associates were concerned with the role of peptides in carrying and transmitting information vital to a wide range of physiological functions. Impressed with Burzynski’s independent discovery of thirty-nine peptide fractions in human blood, Ungar immediately arranged for his hiring as a research associate with the understanding that 50 percent of his time would be devoted to further research into the peptide-cancer link.

The period from 1970 to 1976 was a productive and professionally rewarding one for Burzynski. He published several articles on the Baylor team’s isolation of previously unknown peptide combinations, was promoted to the rank of assistant professor in 1972, became an American citizen, received distinguished-citizenship awards, and registered significant progress in his cancer research.

In 1973 Burzynski and George Georgiades (a researcher at M.D. Anderson Hospital and Tumor Institute) reported the results of an experiment on the effects of a group of peptides on a tissue culture of human bone cancer (osteosarcoma), concluding that four specific peptides had inhibited mitosis (cellular differentiation and growth) in cancer cells while having no discernible effects on normal cells. This study paved the way for Burzynski’s receipt of a research grant from the NCI in 1974. Shortly thereafter Dr. Ungar left Baylor for the University of Tennessee, and Dr. Burzynski assumed the directorship of the peptide research project. Under his leadership the project became increasingly cancer oriented and, within Baylor College as a whole, increasingly controversial. According to Burzynski, many cancer specialists in other departments, along with the new head of his own department, were unhappy that a major cancer research project had emerged in the Department of Anesthesiology. Their complaints were forcefully registered with the college administration but were not acted upon as long as Burzynski continued to receive funding from the NCI.

Between 1974 and 1976, Burzynski authored or co-authored six peer-reviewed articles documenting the progress of his research. The last of these summed up the results of his cancer research during his Baylor years:

According to our definition, antineoplastons are substances produced by the living organism that protect it against development of neoplastic [cancerous] growth by a nonimmunological process which does not significantly inhibit the growth of normal tissues. . . . Assuming that an error in the program for normal cell differentiation may be responsible for neoplasia, components of a biochemical defense system should be information-carrying molecules. Because of their high information content, therefore, peptides are ideal compounds to participate in the system. (1976: 275)

Despite the increasing interest that Burzynski’s research was generating within the medical-scientific community, he was unable in 1977 to secure immediate continuation of his NCI funding (although a new grant was approved in principle). This led to an ultimatum from the Baylor College administration. He was advised that he must either discontinue his cancer research and involve
himself in research more appropriate to the Department of Anesthesiology or go his own way. Burzynski decided to leave.  

The transformation of Dr. Burzynski into a medical outcast was a gradual process. Initially, his independent efforts seemed primarily directed toward a rapid institutional reintegration of his work. His research had already captured the interest of a number of cancer researchers at M.D. Anderson and Tumor Institute, at Houston’s Twelve Oaks Hospital, and even at Baylor. With their cooperation and a few bank loans to finance the Burzynski Research Laboratory, plans were laid for the first trials of Antineoplaston A on human subjects.

The results of these trials appeared in an article entitled, “Antineoplaston A in Cancer Therapy” (Burzynski et al., 1977). It reported that early in 1977 Burzynski and his colleagues administered Antineoplaston A to a group of cancer patients at Twelve Oaks Hospital in Houston. Twenty-one cancer and leukemia patients participated, representing a wide range of cancer types. In most cases the disease was in a very advanced stage and conventional therapies were considered of little value. Over the course of the next nine months, four of the patients achieved complete remission. Four others achieved partial remission (50 percent or greater reduction in tumor size). Stabilization was obtained in six cases, and two patients discontinued the treatment after obtaining less than partial remission. Five patients died from complications resulting from the original disease.

Apparently convinced that the antineoplaston therapy could save the lives of many cancer victims, Burzynski launched an independent cancer therapeutics clinic and began the practice of charging his patients for what he continued to describe as an experimental treatment. In the absence of any institutional backing, Dr. Burzynski insists that he had no practical or moral alternative. Without the financial support of his patients (or their medical insurance policies), neither his research nor his clinical programs could have survived. But in taking this step Burzynski opened himself up to charges of unethical conduct and to the suspicion that he had become a merchant of false hope. Increasingly isolated within the medical community, denied access to the pages of professional journals, the subject of an inconclusive investigation by the Harris County Medical Society and the target of a campaign of damaging innuendo, Burzynski soon decided that he had little choice but to take the publicity offensive and aggressively seek out the terminally ill cancer patients that the medical associations were trying hard to divert from his door.

3. According to Moss (1991: 296): “Although [Burzynski] received an impressive certificate for meritorious service from Dr. Michael De Bakey, the famous president of Baylor College of Medicine, his [department] chairman’s last words were not auspicious: ‘Just wait, Burzynski. They’re going to kick your ass.’”
The American media controversy

From 1979 to 1986 (the period of greatest public controversy surrounding Burzynski in the United States and Canada, and the period with which I am primarily concerned in this article), Burzynski was the focus of several journalistic treatments in the American mass media. For the most part the coverage was favorable to him, critical of the cancer establishment and at least superficially balanced in its attention to the issues raised by both Burzynski and his critics.

In October 1979, Penthouse magazine carried an article on “The Suppression of Cancer Cures” that was entirely devoted to Burzynski’s therapeutic results and to painting a picture of his persecution by the cancer establishment (Null, 1979). This was his first major exposure in the mass media, and Dr. Burzynski has acknowledged that it played a major role in increasing his case load.

Two years later Dr. Burzynski again received favorable coverage in a “Special Report” aired by ABC’s 20/20 entitled “The War on Cancer: Cure, Profit or Politics?” The purview of Geraldo Rivera’s report was broader than Null’s, but the tenor was strikingly similar: “cancer is not just a disease; it’s a political and economic phenomenon, a $30 billion-a-year business”; “the cancer establishment [is reluctant] to acknowledge and support work being done outside the mainstream.” While interviews were conducted with some of Burzynski’s professional critics in the Harris County Medical Society, Rivera gave equal if not greater attention to the testimony of three of Burzynski’s patients, all of whom appeared to be responding well to the antineoplaston treatment. A later instance of the American media coverage of Burzynski — similar in content to ABC’s — was the “Special Report” prepared by Gabe Pressman for News 4 (NBC) in New York City in November 1985 on “The Politics of Cancer.”

The thrust of these three reports, despite all attempts at projecting objectivity or even-handedness, was decidedly critical of the cancer establishment while partial to the beleaguered individual innovator. In each case, however, the real object of scrutiny was not so much Burzynski (or other cited practitioners of unproven methods) but rather the U.S. Food and Drug Administration (FDA), together with the influential and powerful NCI and ACS (i.e., the well-funded government and private bureaucracies leading “the war on cancer”). Moreover the scarcely concealed intent of these investigations was not to promote the benefits of unorthodox cancer therapies but to question why tax dollars and charitable donations are often wasted or misused by powerful agencies and institutions, which are nevertheless quick to dismiss the efforts of outsiders like Burzynski. The flavor of this message is well captured in the following excerpt from the ABC report:

Rivera: [T]here is a cancer establishment, and it’s basically divided into two parts. One is our most lavishly funded government health agency. It’s called the National Cancer Institute, the NCI. The other is our wealthiest private charity, the American Cancer Society. But their leaders, interests and philosophies have been closely aligned since the war on cancer began. And these two organizations
overlap in virtually every single area: boards, committees, grants, even publications. To doctors and scientists who work with the Cancer Society and the Cancer Institute, close cooperation is a useful way to avoid duplicating work. But to critics their combined function has a stranglehold effect, creating a kind of monopoly on cancer research and information. (ABC, 1981: 2-3)

Rivera's critical attitude toward the cancer establishment was clearly shared by Dr. Burzynski: "I believe that big cancer institutions which are getting tons of money, they probably got too rich and too fat" (ABC, 1981: 7).

*The insurance companies, the state, and Dr. Burzynski*

Despite the public antipathy that representatives of the cancer establishment usually displayed toward Burzynski and his antineoplaston therapy, it is a striking fact that no real "disciplinary action" was taken against the doctor by any of the professional organizations to which he belonged.⁴ Throughout the early to mid-1980s Burzynski went his own way, gradually building up his clientele and continuing his research with a growing staff of medical doctors, research scientists, nurses, technicians, and administrative personnel. New antineoplastons were isolated, targeting a broader range of cancer types; the biochemical structures of several of the relevant peptide combinations were defined, enabling Burzynski and his research team to develop methods of synthesizing them (previously all of Burzynski's antineoplastons had been extracted from blood or urine); and several journal articles and conference papers appeared between 1983 and 1985, his first publications since 1979.

Burzynski's greatest problems were on two fronts: relations with the Food and Drug Administration in Washington, and intermittent court battles with insurance companies that balked at paying for treatments received by their policy holders at the Burzynski clinic. These battles involved two levels of the American state: the federal government bureaucracy (i.e., the FDA) and the judiciary.

In his battles with the insurance companies, the courts were generally favorable to Burzynski and his patients. A series of court decisions upheld the principle that many insurance companies offering health insurance throughout the United States are still reluctant to recognize: the right of policy-holders to avail themselves of Burzynski's treatment despite its "unrecognized" status within conventional cancer therapeutics.⁵ Several circumstances mitigated in

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⁴. A 1985 BRI brochure lists the following affiliations: the AMA, the American Association for Cancer Research, the Harris County Medical Society, the International Society for Supramolecular Biology, the New York Academy of Sciences, the Society for Neuroscience, the Texas Medical Association, the Society of Sigma Xi, and the World Medical Association. For an interesting case study of the reluctance of the medical profession to move against its own "skilled heretics," see Bullough and Groeger (1982).

⁵. The attitudes of American insurance companies toward Dr. Burzynski have been by no means uniform. While Prudential and especially Aetna have involved themselves in costly, drawn-out and bitter litigation with BRI and/or BRI patients, other insurance firms have become unexpected
favor of these judgements: the fact that no evidence was ever adduced that antineoplastons posed a health hazard; the fact that most of his patients arrived at the door of his clinic with formal (if often reluctantly extended) referrals from their doctors; the fact that the great majority of his patients had failed to respond to conventional therapies; and, perhaps most importantly, the fact that evidence of the therapy’s efficacy was persuasive to presiding judges.  

The most serious challenge to Burzynski’s practice occurred in 1985. On July 17, agents of the FDA and the Harris County Sheriff’s office entered his clinic and seized eleven filing cabinets containing past and current patient medical records together with all insurance and billing files. The stated reason for the raid was suspicion of interstate shipment of antineoplastons. (Dr. Burzynski was authorized under a 1983 Federal Court order to produce, administer, and sell antineoplastons only within the state of Texas.) As of March 1992, the FDA had not yet brought charges against Dr. Burzynski in this connection; even so, the 200,000 medical documents and business records seized in 1985 remain in the FDA’s hands.

Case study B: The Burzynski controversy in Canada
From the outset, the controversy surrounding the efficacy of Dr. Burzynski’s cancer treatment in Canada was both more animated and more narrowly focused than it was in the United States. At one level, the greater intensity of the Canadian controversy is easily explained. Owing to the existence in Canada of universal government health insurance (the medicare system) what does or does not constitute a legitimate treatment is far more immediately a public-policy issue in Canada than in the United States, where only private insurance companies are likely to be called upon to pay for unconventional treatments. At another level, however, this different institutional pattern of health care delivery and payment both stems from and generates a distinctive ideological frame of reference. This

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supporters of the antineoplastic therapy. In protest against the Texas Department of Health’s citations of BRI (see note 1), Robert W. Maver, Vice President and Director of Research at Fortis Benefits Insurance Company, wrote: “After verifying a number of provocative remissions, our conclusion was that Dr. Burzynski’s antineoplastons represent a most promising new approach to cancer that should be formally evaluated in independent clinical trials” (Maver, 1992). See also Discoveries in Medicine, 1991.

6. In deciding the case of Hanks v. Time Insurance Company (1987), Wyoming District Judge Robert B. Ranck concluded that the brain tumor of Ms. Christina Hanks underwent remission as a result of antineoplastic treatment rather than as a result of conventional treatment as claimed by her insurer. Another judgment (Brown v. Prudential, 1991) in favor of a Burzynski patient was based on narrower technical issues in contract law; but even here the twelve-year survival of Mr. Brown (one of Dr. Burzynski’s earlier “terminal” patients) could not have failed to impress the court.

7. See Moss (1991) for an in-depth account of the FDA’s actions against BRI and of the Patients’ Rights Legal Action Fund defense campaign organized in response by Burzynski’s patients and supporters.
frame of reference is characterized by respect for centralized authority, a view of the relationship between individual rights and public welfare as somewhat problematic, and a more suspicious attitude toward the unregulated entrepreneur than toward either government bureaucracy or entrenched professional power.

Before a controversy of any sort could develop concerning the Burzynski treatment in Canada, however, public interest in it had first to develop. The media, both Canadian and American, played the key role here. Moreover it should be noted that the tenor of the first Canadian media reports of Burzynski was similar to that of the American reports which had preceded them and which had already attracted a few Canadian patients to the Burzynski clinic.

Early Canadian media coverage
The first major coverage of Burzynski in Canada appeared in the 1 March 1982 issue of Maclean's under the headline “A Renegade Doctor with a Cancer Cure” (Firby, 1982). Much of the article was devoted to the case of John Roumeliotis, an apparently terminal lung cancer patient from Vancouver who had been treated by Burzynski in early 1980 and had undergone a complete remission after just three weeks of antineoplaston therapy. While noting that there was interest in Burzynski's work among Canadian oncologists, Firby also quoted a criticism, expressed by Dr. Robert Macbeth, executive vice-president of the National Cancer Institute of Canada, of “Burzynski’s high profile nurtured by hard-sell tactics with the media.”

Firby’s article produced a dramatic increase in the number of Canadians going to Houston for Burzynski’s treatment. (In 1985, Dr. Ian Henderson of Health and Welfare Canada estimated that Dr. Burzynski had at least fifty Canadian patients.) This, in turn, led to mounting pressures on the provincially administered Medicare plans across Canada to decide whether or not the treatment should be recognized and paid for out of the public purse.

Stephanie Kusan was a case in point. A young Sudbury resident, Ms. Kusan had been treated unsuccessfully for a nasal cancer at Princess Margaret Hospital in Toronto. Following several months of antineoplaston treatment, however, she appeared to have registered considerable progress in her fight with the disease. But the high cost of the Burzynski treatment (at that time, $170 per day) was quickly driving her parents into bankruptcy. Accordingly, the Kusans, together with several other Ontario families, were demanding that the costs of the medication be assumed by the Ontario Health Insurance Plan (OHIP).

In response to these pressures, two well-known cancer specialists from Toronto were assigned by the Ontario Medical Association (OMA) to visit the Burzynski clinic and file a report. The visit of Drs. Daniel Bergsagel and Martin Blackstein was to be a watershed event in the Burzynski controversy in Canada, both fuelling it for a time and finally bringing it to a close on a national scale.
The Bergsagel-Blackstein report was unequivocally negative in its assessment of Burzynski's research and clinical results. Upon his return to Toronto, Dr. Bergsagel was interviewed in a televised satellite-linked confrontation with Dr. Burzynski on CTV's Canada A.M. Bergsagel was adamant in his scepticism, asserting that he had found even Burzynski's best cases unconvincing and disputing his claim to a 40 percent rate of total remission: "[Burzynski] can't say what the rate is because so many people drop out."

Concentrating on Bergsagel's dismissal of his best cases, Burzynski pointed out that he had made available no less than twenty-four documented cases of complete remissions to the Canadian doctors — cases which he claimed had been corroborated by oncologists working independently of his clinic. Burzynski went on to attribute Bergsagel's obvious hostility to the fact that he was chief of medicine at Stephanie Kusan's Toronto hospital (Princess Margaret) and had long been associated with Houston's M.D. Anderson Hospital and Tumor Institute, a confirmed institutional foe of BRI.

The Bergsagel-Burzynski confrontation incited the Roumeliotis family into action in Vancouver. Angered that Bergsagel's report was being used to deprive Burzynski's Canadian patients of much-needed financial assistance from Medicare, the family decided to publicize the fact that, following his treatment in Houston, John Roumeliotis had received (partial) compensation from the B.C. Medical Services Plan. In Vancouver reporters wanted to know why John Roumeliotis had received Medicare benefits while other B.C. patients of Dr. Burzynski had been refused compensation. The story was picked up nationally and the family found themselves deluged with interview requests from reporters across the country. Yet this groundswell of media interest in Burzynski and the plight of his Canadian patients was to end abruptly with the broadcasting of what many in the Canadian media may well have deemed the "definitive" journalistic treatment of the Burzynski controversy. This was The Journal's half-hour documentary entitled "The Merchant of Hope," produced by the CBC to coincide with the Bergsagel-Blackstein visit to the Burzynski clinic.

Stephanie Kusan's heart-rending ordeal was the human-interest angle of Terence McKenna's documentary. It was easy for viewers to sympathize with Stephanie when she said she would rather die than proceed with mutilating conventional treatments which promised nothing more than a brief prolongation of her life. But was her faith in Dr. Burzynski justified? This was the question that McKenna ostensibly set out to answer. Yet in doing so he seemed far more

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8. For details of the Bergsagel-Blackstein report, see Moss (1991: 301-2). Moss also provides a cogent rebuttal to all six of the doctors' major conclusions.
9. In passing it might be noted that it was more than a little unusual for a medical-scientific site-visit team to agree to (arrange for?) accompaniment by a television documentary crew. This in itself raises questions about the open-mindedness of Bergsagel and Blackstein, not to mention the objectivity and purpose of the CBC news team.
concerned with the business side of Burzynski’s operation than with the scientific basis or the therapeutic efficacy of the antineoplaston treatment. Thus, while inaccurately referring to antineoplastons as “peptide cells,” McKenna emphasized the desperation of Burzynski’s patients and the large sums of money that many of them were paying him for treatment.

The central scientific issue highlighted by McKenna concerned the content of Burzynski’s antineoplastons: “The medical establishment is sceptical of Dr. Burzynski mostly because he won’t disclose his chemical formula . . . something the [Canadian] doctors tried to discover during their tour” (CBC, 1982). Certain highly germane facts were elided, however: McKenna failed to report that disclosing the chemical formulae for the numerous antineoplaston medicines in use was an on-going research project at BRI; that even Burzynski did not know the formula for Antineoplaston A in his first clinical trials; and that the chemical formulae that had been discovered at BRI, through analysis of what are naturally occurring substances, remained confidential pending the outcome of several patent applications.

After reporting that “the American Cancer Society has circulated a letter urging cancer patients to stay away from [the Burzynski] clinic,” and noting that the U.S. Food and Drug Administration had ruled antineoplastons “unfit for human consumption,” McKenna proceeded to ask Dr. Burzynski a number of questions concerning out-of-state shipments of the drug. The effect was to exploit Burzynski’s legal entanglements with the FDA and the Texas courts in such a way that he looked bad rather than the government agencies that were attempting to limit access to what his patients regarded as life-saving medication.

The overall tenor of McKenna’s report was strikingly different from anything that had appeared before in either the American or Canadian mass media. The very title of the documentary implied that Dr. Burzynski might well fit the label of “quack”. But the other conspicuous feature of this report was McKenna’s uncritical posture toward Drs. Bergsagel and Blackstein, and toward the American and Canadian cancer establishments in general. Exposing the errant individual — not the system from which he had been ostracized — seemed to be his main and governing concern.

The combined effect of the Bergsagel-Blackstein report and the Journal documentary was to bring to a close the Burzynski controversy in Canada. It was to be revived briefly only in British Columbia in 1985.

**The controversy in British Columbia**

In February 1985 John Roumeliotis and his family celebrated the fifth anniversary of his total remission. In cancer therapeutics, the passage of five cancer-free years signifies that the patient has been cured. To mark the occasion, the

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10. The material in this section is based to a considerable extent on the author’s own experiences and observations as a participant-observer of the controversy in British Columbia.
family invited Dr. Burzynski and his wife, Dr. Barbara Burzynski, to visit them in Vancouver and to participate in a number of events intended to publicize the antineoplas ton treatment. A public forum was organized and local television station CKVU was given an exclusive to do a story on John Roumeliotis and Dr. Burzynski’s visit to Vancouver. Far from contributing to the celebration of John’s victory over cancer, however, these events were transformed, by CKVU and the local cancer establishment, into an attempt to discredit Burzynski.

During the discussion period following Dr. Burzynski’s presentation at the public forum, Dr. Hulbert Silver, chief of therapeutics at the B.C. Cancer Control Agency, criticized Burzynski for: a) failing to publish supporting scientific papers in peer-reviewed journals, and b) illegitimately claiming credit for so many complete remissions and cures. In particular, Dr. Silver argued that John Roumeliotis’ remission could be attributed to the radiation therapy he had received in Vancouver prior to his treatment in Houston.

Dr. Burzynski replied by quoting from a report written by Roumeliotis’s radiotherapist, Dr. Voss: “The disease in his thorax was so extensive that I was unable to irradiate all of the tumor. The treatment was purely palliative in intent.” Other doctors in attendance (including Dr. Marlene Hunter, the Roumeliotis’s family physician) backed Dr. Burzynski’s opinion that radiation therapy could not have been the curative factor in this case.

As for Dr. Silver’s other line of criticism, Dr. Burzynski stated that in the previous year and a half alone he and his associates had published approximately twelve full publications. When Dr. Silver responded by saying that he had been unable to find these new publications on med-line research, Dr. Burzynski displayed a copy of a journal entitled Drugs Under Experimental and Clinical Research which contained a recent article on Antineoplaston A10. After the forum, Dr. Silver conspicuously declined Dr. Burzynski’s offer to allow him to inspect this journal. Telephone inquiries to the medical library at the University of British Columbia later disclosed that Drugs Under Experimental and Clinical Research was available at several government and academic institutions in Canada, and that it could be ordered through the UBC library. 11

If Burzynski’s public forum was a model of democratic (if at times heated) debate, the discussion on CKVU’s Vancouver Show the following evening was an example of just how tendentious a televised public affairs program can be. Despite a prior agreement between the program producers and the Roumeliotis family that John and Peter Roumeliotis as well as Dr. Hunter would be included

11. Between 1985 and 1990, Dr. Burzynski authored or co-authored fifty-two articles and monographs appearing in such journals as International Journal of Experimental Clinical Chemotherapy, Advanced Experimental Clinical Chemotherapy, and International Journal of Tissue Reactions, among others. Moreover, between 1987 and 1990, at least fourteen articles and monographs and twenty-three abstracts concerning antineoplastons appeared that were written by researchers independent of BRI. (These are listed in the most recent BRI brochure.)
in the discussion, Dr. Burzynski was the only person permitted to speak on his behalf. Dr. Burzynski was interviewed for six minutes at the beginning of the show, followed by over twenty minutes of interviews with Drs. Bergsagel, Silver, Connors, and Lepawsky and with Bruce Brown of the FDA. Dr. Burzynski was then given a mere three minutes to respond to the multiple criticisms raised. Even more seriously, on the following evening, in Burzynski’s absence, CKVU’s Laurier Lapierre interviewed Dr. Ian Henderson of the Human Prescription Drugs Branch of Health and Welfare Canada in Ottawa, and suggested to him that, since Dr. Burzynski “might be a quack,” the federal government should consider barring shipments of antineoplastons into Canada.

A protest of CKVU’s treatment of Dr. Burzynski, signed by friends and family of some of his Vancouver patients, was made to the Canadian Radio-television and Telecommunications Commission (CRTC) in Ottawa. This eventually resulted in a formal offer from the station management to provide Dr. Burzynski with a “further forum” and “ample time to present his case” (Duggan, 1985).

Circumstances, however, were not to permit the realization of such a forum. In October 1985 John Roumeliotis was again diagnosed as having lung cancer (notably, however, a cancer of a different cell type than the one that had afflicted him six years earlier). No therapy was prescribed or recommended by his Vancouver doctors. Treatment at the Burzynski clinic, supplemented by conventional chemotherapy and radiation, was unsuccessful. He died on 6 April 1986.

The Canadian state and Dr. Burzynski
Owing to the fact that medicare in Canada is administered provincially, pressure was never placed on the federal government to take a clear-cut position on the Burzynski treatment. In Ontario, the Bergsagel-Blackstein report became the basis for the provincial government’s policy of non-recognition of Antineoplastons under medicare. Other provinces were to follow suit. (The Bergsagel-Blackstein report also became the bellwether for much American policy, including the public pronouncements of the NCI for a time.)

But where medicare compensation was not the issue, the Canadian state was prepared to adopt a somewhat more flexible approach. For example, after some lobbying from Dr. Burzynski, the federal government agreed in 1982 to permit shipments of antineoplastons into Canada. In an interview conducted by CKVU’s Laurier Lapierre on 12 February 1985, Dr. Henderson of Health and Welfare Canada explained that, to insure that Burzynski’s Canadian patients could continue treatment at home, he had arranged for an exemption from the general American rule not to allow the drug to be shipped beyond the borders of the state of Texas (CKUV, 1985).

The American and Canadian controversies: A comparative analysis

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Comparative analysis of the American and Canadian controversies surrounding Dr. Burzynski appropriately begins with the observation that the two controversies were remarkably distinct. Framing the respective controversies in each country were specific premises, issues, and questions reflecting the institutional and ideological similarities as well as differences existing between the U.S. and Canada. In their own ways, however, both controversies were concerned with a common overarching question: Was the negative attitude of the cancer establishment with respect to Dr. Burzynski’s research and clinical practices justified? How this question was handled by the medical establishment, the state, and the mass media in the two countries is the guiding thread of the following comparative analysis.

The role of the American and Canadian medical establishments

The professional ostracization of Stanislaw Burzynski began with his decision in 1977 to establish his own independent research laboratory and clinical practice. It should be recalled, however, that this step was only taken as a result of the untenable situation in which Dr. Burzynski found himself at Baylor College with the expiry of his NCI funding in 1976. A purely local political battle or turf war between the Department of Anesthesiology and departments more traditionally associated with cancer research led to an ultimatum from the Baylor administration which resulted in Burzynski’s departure. Thus, the original professional transgression that paved the way for Burzynski’s subsequent ostracization appears to have been a relatively petty one: his failure to have observed the customary institutional boundaries of medical-scientific research as defined by the departmental division of labor within a medical research college. Significantly, the intrinsic worth of Burzynski’s research was not an issue in this original controversy; nor indeed was it to be the main issue in the subsequent controversies in either the United States or Canada. The real issue in these controversies so far as the medical profession was concerned was always Burzynski’s conduct and status as an independent researcher/cancer-therapist/entrepreneur. Moreover, it is important to stress that this was the dominant concern of both the American and Canadian medical professions, despite the different degrees of entrepreneurial spirit generally associated with medical professionals in the two countries.

While American MDs may typically be more profit-oriented than their Canadian counterparts, the ideology of individual entrepreneurship is nevertheless one that is adhered to by the American medical profession only up to a point. The right of a doctor to establish an independent practice and to decide upon a fee structure set through individual choice and limited only by market competition is certainly regarded as inviolable; indeed, recognition of this freedom is a cornerstone of the American Medical Association’s opposition to universal public health insurance of the types found in Canada and Britain, and to
socialized medicine in general. At the same time, however, the American medical profession in no way champions the right of independent practitioners to practice treatment modalities that are not approved by officially recognized medical bodies; and here, clearly, the positions of the American and Canadian medical professions are entirely congruent.

Individual entrepreneurship within North American biomedicine as a whole is checked and attenuated by the medical profession's commitment to three principles that have been key to what Magali Larson (1977: 40-52) has called its "collective mobility project": 1) the elaboration of a standardized and well-defined cognitive basis permitting the attainment of visibly good results through the utilization of an esoteric body of knowledge, 2) the perpetuation of a system for the production of producers which is highly institutionalized, highly standardized and under professional control, and 3) the articulation of a professional ideology which coincides with dominant ideological structures. To this I would add the need of the profession to promulgate and defend policies and practices that are in harmony with dominant socioeconomic interests. Further, it should be emphasized that North American biomedicine has never been friendly to the notion that patients should be given wide latitude to choose amongst treatment modalities — not least because patients' rights of this sort can only undercut the profession's ability to shape and control its own market. All rhetoric aside, then, North American medical professionals are far more committed to the principle of minimal government control over the profession than to the principles of free enterprise in the health care market. The North American medical profession, in fact, evinces many classical characteristics of a "monopoly" (Larson, 1977; Conrad and Schneider, 1981).

The dominant position enjoyed by biomedicine over health care delivery in the U.S. and Canada is dependent upon the ability of the medical profession to exercise strict and hierarchically structured control over professional activities pertaining to research, the deployment of new drugs or other treatment modalities, relations with the state, and relations with the pharmaceutical industry. On virtually all counts, the activities of Dr. Burzynski could be construed as an objective threat to the established practices and positions of the medical profession. Indeed, a preoccupation with these professional precepts is reflected in the basic indictment against Dr. Burzynski that emerges from criticisms levelled against him by professional critics in both the U.S. and Canada. The broad lineaments of this indictment may be summarized as follows:

1. It was unethical for Dr. Burzynski to charge cancer patients for the use of an experimental therapy — i.e., a therapy whose efficacy had not been demonstrated in more than one setting and which consequently remained unproven in the eyes of the leading bodies of cancer research. (Read: his conduct violated the principle of collective and hierarchically structured
professional control over the marketing of medical services.)

2. Key to replication of experimental results by other researchers in different institutional settings is publication of methods and results in peer-reviewed journals. Burzynski’s efforts were deficient in this area. (Read: his conduct violated the principle that the cognitive basis of medical practice is a collective asset of the medical profession as a whole, and one subject to professional regulation.)

3. Instead of sharing the antineoplaston formulae with other interested researchers, Burzynski took the entrepreneurial road of becoming the sole producer of antineoplastons and seeking patent protection for his production techniques. (Read: his conduct violated the principle of professional collegiality while also challenging the customary division of labor between the medical profession and the pharmaceutical industry within the medical-industrial complex.)

4. Dr. Burzynski’s activities have been sufficiently provocative as to incite intervention from the FDA. Indeed, Dr. Burzynski may well have violated the law while pursuing his medical practice. (Read: his conduct damages the principle of professional self-regulation and jeopardizes the profession’s relations with the state.)

Although information provided earlier in this article calls into question the cogency of some aspects of this indictment, it is not possible here to make a definite judgment concerning its over-all strength. What is arguably most interesting about it, however, is not the justice or accuracy of its content, but what it does not contain. It is a striking fact that this indictment by the medical profession against Dr. Burzynski is almost entirely lacking in scientific argumentation. Indeed, between 1977 and 1986, so far as I am aware, not a single attempt was made by any of Dr. Burzynski’s antagonists to scientifically refute or test the clinical-therapeutic efficacy of antineoplastons.

Moreover, what efforts were made to establish a scientific basis for dismissing his clinical results served only to reveal the existence of a striking double standard within the protocols of cancer research. Dr. Burzynski was repeatedly criticized for crediting his own treatment for complete remissions in patients who had been previously treated with conventional therapies. According to both Dr. Silver and Dr. Bergsagel in televised statements, such claims are inadmissible. The methodological protocols of “good medical science” require that Dr. Burzynski refer only to those patients for whom antineoplastons had been the exclusive treatment modality.

Yet the rules of good scientific method are evidently somewhat more elastic than Drs. Bergsagel and Silver were prepared to allow in Dr. Burzynski’s case. Thus, in December 1985, Dr. Steven Rosenberg, a researcher at the NCI in

12. For a critical analysis of the medical-scientific indictment against Dr. Burzynski (his alleged violations of “protocols” especially), see Moss (1991).
Bethesda, announced the results of a year-long study of Interleukin-2, a promising new drug used in adoptive immunotherapy. Rosenberg’s report in the *New England Journal of Medicine* was greeted with much alacrity and enthusiasm by the cancer establishment and the mass media alike, even though he had treated only twenty-five patients and had succeeded in producing only one complete remission and a few partial remissions. The excitement over his results was explained by a cover story in Newsweek as follows: “All 25 patients, including those who showed improvement, had been treated by conventional means for a variety of tumors, including cancers of the kidney, lung and rectum, without effect. ‘He took a crack at the most difficult, resistant cancers and has shown that this treatment is unique,’ says one of Rosenberg’s NCI colleagues, Dr. Gregory Curt” (Clark et al., 1985: 62). On the basis of this it can be observed, at the very least, that “two weights and two measures” appear to have applied in the evaluations of Dr. Burzynski’s and Dr. Rosenberg’s respective results.

What this points to is that the medical profession’s indictment against Dr. Burzynski has always had much more to do with his apparent disregard for the ideological basis, hierarchical structure, and socioeconomic location of the medical profession within North American society than with his violations of scientific method. This observation serves to explain a pattern that was discernible in both the Canadian and American controversies: most of Burzynski’s medical critics displayed little knowledge of or curiosity toward the antineoplaston treatment and seemed to think that if Burzynski had fallen afoul of the cancer establishment then this in itself was sufficient grounds for dismissing his research and his treatment as worthless or at least highly suspect.

There was little to distinguish the respective positions of the American and Canadian medical establishments in their handling of the Burzynski controversy. The close similarity of their tacks is perhaps largely attributable to the very similar ideological and structural locations of the American and Canadian medical professions. The cancer establishments in the two countries, in particular, have very similar interests in the much-touted “war on cancer” and have exhibited a common determination to maintain tight control over cancer research and therapy and the allocation of public funding for same.

In Canada, however, the relation between the medical profession and the government has a somewhat more internal character than in the United States, due largely to the institutional mediation afforded by medicare. The tendential integration of the medical profession and the state in Canada limits the autonomous power of the profession while strengthening the cognitive authority of biomedicine in relation to certain kinds of challenges. This relative empowerment of professionally organized biomedical practitioners is illustrated by the fact that the Ontario Ministry of Health looked to the Ontario Medical Association (the Bergsagel-Blackstein report) to directly determine its policy on compensation of Burzynski’s Canadian patients. At the same time, the state’s
position was strengthened against the “illegitimate demands” of Burzynski’s patients by virtue of the special relationship that it enjoyed with the medical profession. “Good medical science,” as defined by the elite of the medical profession, became the unchallengable technocratic imperative governing Canadian health care policy in this as in so many other areas.

The roles of the state in Canada and the United States

The Canadian and American states were called upon to take positions on two fundamental questions in the Burzynski controversy: 1) patients’ rights, and 2) professionally unregulated cancer therapeutics. On the first issue the state in both countries was equivocal. In Canada, the provincial governments used the position of the medical establishment (in particular, the OMA) as a basis for denying medicare compensation to Burzynski’s Canadian patients. Yet the federal government was accommodating toward patients’ rights to the extent that it facilitated the shipment of antineoplastons into Canada so that Canadian patients could continue their course of therapy at home. In brief, no level of the Canadian government sought to directly block access by cancer patients to this professionally unrecognized cancer therapy. Yet, by denying the Burzynski clinic access to medicare revenues, the Canadian state struck a powerful blow against professionally unregulated cancer therapeutics and effectively denied all but the wealthiest of Canadian cancer patients access to the Burzynski treatment.

In the United States, we again see two levels of the state playing contradictory roles. The courts were largely favorable to the principle of patients’ rights and blocked the attempts of private insurance companies to deny coverage to those receiving antineoplaston therapy. At the same time, the federal government (the FDA, in particular) carried out a campaign of harassment of Dr. Burzynski stretching over many years, a campaign which seemed aimed at driving him out of business. In pursuing this objective, the FDA displayed little regard for patients’ rights but did exhibit an often overweening concern with standards and protocols reflecting the established practices, ideology, and socioeconomic interests of the medical profession and the pharmaceutical industry. 13

On the face of it, the role of the state in the U.S. was less damaging to Burzynski’s project in alternative cancer therapeutics than the role of the Canadian state. But it is important to recognize that this had little to do with a greater commitment to patients’ rights. Had the FDA been successful in its efforts to prosecute Burzynski in 1985-86, or in driving him out of business

13. In postponing a decision on Burzynski’s Investigatory New Drug application, the FDA often referred to the ineffectiveness of antineoplastons as demonstrated by the standard murine (mouse or rat) tumor test — a screening test specifically designed for the evaluation of toxic chemotherapeutic agents. (This criticism also figured in the Bergsagel-Blackstein report.) Yet Dr. Burzynski had already documented that human antineoplastons are “species-specific” and therefore could not be expected to produce an anti-tumor effect on laboratory animals. See Moss (1991: 303-4).
through harassment, this would have constituted a far greater blow to Burzynski's practice and to the rights of his patients than any action taken by the Canadian state.

As for the issue of professionally unregulated cancer therapeutics, it must be said that the positions taken by governments in the United States and Canada were virtually indistinguishable. In both countries government policy toward Burzynski was decisively shaped by the public (and perhaps covert) actions of the cancer establishment (and, more generally, the medical-industrial complex) in seeking to marginalize and/or discredit his practice.

The mass media in the United States and Canada
Several observations have already been made regarding the respective roles of the American and Canadian media in both generating and interpreting the Burzynski controversy. The differences can be summarized in two points: 1) The American media often heralded Dr. Burzynski’s work, while the Canadian media seldom did; 2) While both the American and Canadian media were interested in exposés, the former was concerned with exposing the unchecked power of the NCI and the ACS, while the latter was concerned primarily with exposing a suspected “merchant of false hope” and with disseminating the warnings of the medical establishment against an unproven method.

What accounts for this difference of approach? There are undoubtedly a myriad of factors involved, but a focus on three considerations in particular seems warranted: a common concern with the time-honoured theme of the corrupting influence of money; the differentiated character of medical-professional power in the United States and Canada; and, American laissez-faire ideology versus Canadian nationalist/statist ideology.

1) It may seem paradoxical, but one of the reasons for the different reactions of the Canadian and American media to Dr. Burzynski stems from their common preoccupation with the issue of money and its potential to corrupt even the loftiest of professional projects. As we have seen, the Burzynski controversy in the United States coincided with the first major efforts on the part of the American mass media to call attention to the fact that “the war on cancer” being prosecuted by the American government and the cancer establishment was not going well. Billions of dollars had already been spent on research, public education, and new experimental therapies, but the return on this investment seemed paltry (Epstein, 1979). Moreover what progress had been made in developing new therapies was arguably being matched or surpassed by the efforts of independently funded researchers like Burzynski.

In Canada, however, there had been no comparable governmental commitment to massively fund a “war on cancer.” In the early 1980s, the cancer establishment continued to enjoy high public esteem, an esteem that had been bolstered considerably by its association with the “Marathon of Hope” under-
taken by the now legendary Terry Fox.\textsuperscript{14} Given that there was little crisis of public confidence in the cancer establishment in Canada (except perhaps among some cancer patients and their families), it is hardly surprising that the mass media would have been sympathetic to the medical establishment’s campaign to expose and thwart the efforts of “merchants of false hope” to financially exploit the terminally ill and their families — all the more so when this financial exploitation threatened to involve the publicly funded medicare insurance system.

2) In both the United States and Canada, the mass media reflect the interests of dominant socioeconomic forces (corporations and the capitalist state) (Clement, 1975; Bagdikian, 1990). These forces are concerned to maintain a certain equilibrium within society with respect to claims on social wealth and the exercise of power. In the United States the power of the medical profession and the medical-industrial complex in general has grown considerably since World War II, a shift reflected in the ever-growing share of GNP represented by a health care system dominated by biomedicine.\textsuperscript{15} Consequently, powerful elements of the American capitalist class, with considerable control over the mass media, may well have concluded that the rising power of biomedicine deserved greater scrutiny.

In Canada, as already suggested, the tendential integration of biomedicine into the state via medicare had already checked the independent power of the medical profession while also enhancing its cognitive authority. In this context, the owners and controllers of the mass media were less likely to regard biomedicine as an imminent threat to the prevailing power equilibrium, and were therefore less inclined to challenge the authority of the medical profession to define public policy with respect to medical-scientific issues.

3) The American mass media complex is much more strongly committed to the ideology of entrepreneurial individualism and government non-interference in the economy than is its Canadian counterpart. It is also far more likely to be hostile to or suspicious of “government bureaucracy.” These characteristics reflect the fact that the major American media are themselves almost entirely profit-oriented private-sector corporations, as well as the circumstance that anti-statist ideology has long held sway in American political culture.

The Canadian media, on the other hand, include a significant government-

\textsuperscript{14} A young cancer victim who had lost one of his legs to osteosarcoma, Terry Fox became famous for his fund-raising on behalf of cancer research by attempting to run across Canada with the aid of a prosthesis. Tragically, he was forced to terminate his run halfway after being stricken with a new tumor in his lung. His martyrdom on behalf of the cancer establishment’s agenda helped generate a new enthusiasm for a Canadian version of “the war on cancer.”

\textsuperscript{15} In 1970, health-care costs in the United States represented about 8 percent of Gross National Product; by 1990, they had surpassed 11 percent. In the 1970s and 1980s, health-care costs rose two to three times the average inflation rate.
owned segment (the CBC) and are generally subject to closer government scrutiny (via the CRTC) than their American counterparts. Moreover, a major ideological motif of the Canadian mass media has traditionally been a concern with the integrity of the Canadian state and its role in defending the national interest vis-à-vis the American colossus to the south. This perennial concern with American domination/exploitation was easily transferable to the activities of an American cancer therapist seeking to attract Canadian cancer patients, and their dollars, to his clinic in the U.S.

**Conclusion: Sociological implications and lessons of the controversy**

In broad terms, the Burzynski controversy highlights two clusters of issues that are central to the sociology of health and illness: one pertaining to “alternative medicine,” and the other pertaining to public health care policy and the social bases of medical knowledge.

**Alternative medicine**

Assuming that Dr. Burzynski has been able to provide a level of treatment superior to conventional therapeutics for at least some cancer patients, it is tempting to suggest that the scepticism and resistance that he met with from the cancer establishment might be explicable in terms of a paradigm shift (Kuhn, 1970): i.e., Dr. Burzynski’s antineoplaston theory/therapy was simply too far removed from the ways in which cancer specialists were accustomed to thinking about the etiology and treatment of cancer, and for this reason was unacceptable to them. Complicating matters was the fact that Dr. Burzynski’s theory/therapy failed to conform to the usual profile of an alternative medicine. The cancer establishment was unable to easily label the antineoplaston therapy as just another holistic or naturopathic approach predicated on minimal “medical intervention,” as it had, for example, with the Vitamin C therapy (Richards, 1988). Nor could orthodox oncology simply co-opt aspects of the antineoplaston therapeutic regimen into its clinical practice as the medical profession had done with such potentially threatening and philosophically alien “imports” as acupuncture (Wolpe, 1985). As a *non-toxic chemotherapy* intended to reinforce the human body’s natural biochemical defense system against cancer, Burzynski’s antineoplaston treatment appeared uniquely situated in the anti-cancer arsenal and could even be regarded as a bridge connecting the old and the new: a medical-interventionist approach consistent with a holistic emphasis on the body’s capacity to heal itself; and a curative therapy which lends itself to a cancer prevention regimen. Such an approach is arguably at peril in a climate where orthodox and holistic approaches remain sharply polarized.

However, while such considerations partially explain the cool reception accorded to the Burzynski therapy, they may not go to the heart of the matter. There are two reasons for asserting this. The first is that while the antineoplaston
theory/therapy represents a major departure from the *traditional* mainstays of cancer research and therapy (surgery, toxic chemotherapy, and radiation therapy), it remains fully consistent with the basic approach and aims of the biomedical model in which Dr. Burzynski himself was educated. (Briefly, the biomedical model is characterized by a focus on *individual* organic pathology, exclusively *physiological* causes of illness, and the indispensability of biomedical *intervention* following the onset of disease.) Furthermore, this explanation sits uneasily with the observation that the old paradigm of cancer therapeutics has been yielding ground to nutritional, immunotherapeutic, and psycho-emotional theories, treatments, and preventative regimens (though it should be noted that this new openness may have arrived somewhat late to have helped Burzynski).

The second reason for questioning the paradigm-shift theory as a sufficient explanation of Burzynski’s troubles is that it cannot account for the fact that the latter have always had a far more political (*cum* ideological) character than a scientific one. Unlike a Simmelweis, a Pasteur, or an Ehrlich, Burzynski has not been ridiculed by the medical profession for “bad science”; instead, he has been ostracized for his failure to play by the customary “rules of the game,” as set by the medical establishment. Indeed, the fact that Burzynski received his training in Poland may well have engendered the suspicion that he was professionally “undersocialized” from a North American biomedical standpoint. Even more importantly, however, it should be stressed that the medical establishment’s public efforts to fault Burzynski’s research methodology served to obscure and conceal the real animus motivating his ostracization: that his practice constituted an implicit *internal threat* to the professional project of North American biomedicine.

I have already indicated in a general way how Burzynski’s project posed an objective challenge to the ideology and policy orientation of the North American medical profession. It should now be added that his project represented a very specific threat to the profession at a time when its credibility was being undermined with respect to “the war on cancer.” Hence, while Burzynski’s break from conventional cancer therapeutics was not so radical as to classify him as a full-fledged medical heretic, an understanding of strategies of heretical challenge within biomedicine may help to shed light on certain aspects of the Burzynski controversy.

According to Wolpe (1990: 913), a successful heretical challenge involves four key elements: “the heretics must portray the discourse as in crisis, must provide an alternative ideology to rescue the discourse, must legitimize their ideology through appeal to a reframed historical myth, and must portray the orthodoxy as a betrayer of the discourse.” The Burzynski case illustrates the first and last of these: his practice, both medical and pedagogical, has served a) to highlight a crisis in contemporary cancer therapeutics, and b) to suggest that the doyens of cancer treatment and research have betrayed, or at least lost sight of,
the goals to which they are ostensibly committed. The fundamental point here is that the whole controversy surrounding Burzynski and the antineoplaston treatment has served to expose a curious conservatism within the cancer establishment and a disturbing blindness to anything but the most narrow considerations of proper procedure and conduct. When such considerations assume primary importance within biomedical discourse, as they clearly have in the evaluation of Burzynsaki’s treatment, the profession’s credibility in the eyes of the general public is bound to suffer, and the suspicion may even be nurtured that the real goal of the discourse is no longer to discover a cure for cancer but to perpetuate a professional way of life. Furthermore and related to this, one does not have to be a conspiracy theorist to note that there may well be structural resistance, stemming from a variety of sources, to new therapeutic approaches to the alleviation of cancer. Certainly the existing “cancer industry” (a complex ensemble of clinicians, drug companies, researchers, and institutes) is very well established and has a compelling economic interest in perpetuating itself (Moss, 1991). Whether or not Burzynski’s approach has the potential he claims for it, these considerations may be of more than passing interest in explaining why his work has been ignored or summarily dismissed by so many of his peers.

Still, unlike the holistic movement in medicine (Wolpe’s archetypical exemplar of biomedical heresy), Dr. Burzynski’s challenge to the established discourse/paradigm stops short of articulating an alternative ideology to rescue a crisis-ridden field of medical practice. Ideologically, Dr. Burzynski offers little more than a plea for tolerance and open-mindedness toward new approaches in cancer therapeutics, and a defense of his patients’ right to avail themselves of the treatment modality of their choice. While this resonates well with antimonopoly/pro-“free market” sentiments in contemporary discourse on health care policy, it ignores the very real crisis within the health care system as a whole: the problem of iatrogenic disease, the spiraling costs of health care, and the declining rate of return on society’s overall investment in medical research and treatment.

Health care policy, medical power, and social knowledge

Among other things, the Burzynski controversy illustrates that a medical profession and a health care delivery system preoccupied with rising costs, scarce resources, and the defense of the institutional status quo provide a poor environment in which innovative approaches to the alleviation of cancer can be soberly assessed. Moreover it shows that this is as true in Canada, under conditions of universal government health insurance, as it is in the U.S.

Criticizing various liberal proposals for an American “national health insurance” program from a socialist perspective, Ehrenreich and Fein argued as early as 1971 that “[NHI] will fail because it fails to face the fundamental questions about our health system — control, accountability, accessibility, responsibility
to the community. . . . The only way to fundamentally change the health system so that it provides adequate, dignified care for all is to take power over health away from the people who now control it. Not merely the funding of the health system, but the system itself must be public” (1981: 507). Admittedly, the Canadian health care system does have a large public component and in such a context government health insurance has a greater scope for meeting needs than it would in the much more privatized American system. Yet Ehrenreich and Fein’s argument retains much of its relevance for a critique of the Canadian health care system. If most hospitals in Canada are public institutions, the same cannot be said of the drug companies. If the autonomous power of the medical profession has been curtailed in Canada, its near-monopoly of cognitive authority in the realm of health care has also been strengthened. And if the costs of health care have been socialized through public health insurance, the anarchic and socially destructive consequences of production for private profit continue to burden Canadian society with a host of ills that are entirely preventable (Chernomas, 1984a; 1984b).

What the Burzynski controversy in Canada serves best to illuminate is that the power of the medical profession to adjudicate disputes in medical knowledge, and to define the terms of discourse over health care policy, may be greatly increased through an integration of the profession with the state which leaves biomedicine’s monopolistic status intact. This is surely a far cry from an authentic socialized health system in which the cognitive bases of public health, disease prevention, and biomedical treatment of sick individuals would be a collective asset of society as a whole, and not a private asset of health care practitioners and drug manufacturers, or, indeed, of any “merchants of hope.”

Appendix: Data sources
In addition to the public domain information sources itemized in the reference section below, I have drawn on the following materials: 1) Recorded interview with Dr. S.R. Burzynski in Vancouver, B.C. on February 9, 1985, conducted by Murray Smith, Kostas Roumeliotis, and Peter Roumeliotis; 2) Interviews with Peter and Kostas Roumeliotis between December 1984 and June 1986; 3) Medical records of John Roumeliotis from Vancouver and Houston, October 1979 to April 1986; 4) Tape recording of Burzynski public forum in Vancouver, February 10, 1985; 5) the unpublished report of Dr. David Walde, a Canadian M.D. who visited the Burzynski clinic on April 2, 3, 4, and 5, 1982, about six months prior to the Bergsagel-Blackstein visit. 6) “Brief Factual Description of the Hanks v. Time Insurance Company Litigation” (Nov. 11, 1987); 7) “S.R. Burzynski, M.D., Ph.D.: A Brief History of His IND Application to the Food and Drug Administration” (Nov. 15, 1991); 8) “Antineoplastons — A lecture presented by S.R. Burzynski on October 7 at the 1990 World Research Foundation Congress, Los Angeles, California”; 9) “Prudential Loses Fight, Pays $1.2
Million to Insured" (Nov. 5, 1991) and accompanying “Final Judgment” by Judge A. O. Tevethan in the case of Brown v. Prudential Insurance Company of America; 10) Chronology of Swanson v. Aetna (June 17, 1991); 11) BRI public information brochures; 12) Letter to Texas Dept. of Health by R.W. Maver (Jan. 17, 1992). Items 6-12 were provided courtesy of BRI.

References

ABC News

American Cancer Society

Bagdikian, Ben H.

Bhaskar, Roy

Bullough, V.L. and S. Groeger

Burzynski, Stanislaw R.


CBC News

Chernomas, Robert
1984b “One-sided ideology, a methodological straight-jacket and a questionable application of germ theory.” International Journal of Health Services 14(1).

CKVU

Clark, Matt, et al.

Clement, Wallace

Conrad, Peter and Joseph Schneider

Derber, Charles

Derrida, Jacques
Discoveries in Medicine
Duggan, Barry
Ehrenreich, John and Oliver Fein
Epstein, Samuel
Feyerabend, Paul
Firby, Doug
1982  “A renegade doctor with a cancer cure.” Maclean’s, March 1.
Foucault, Michel
Kuhn, Thomas
Larson, Magali S.
Leeson, Patricia
McKinlay, John
Moss, Ralph W.
National Cancer Institute
1990  “Antineoplastons/Dr. Stanislaw Burzynski.” 5/15/90.
Navarro, Vicente
Null, Gary
Oncology News
Richards, Evelleen
Salmon, J.
Turner, Bryan
Wohl, Stanley

tt	Wolpe, Paul R.