



TEXAS TAKES ON CANCER: The Cancer Prevention and Research Institute

A CASE STUDY OF PROPOSITION 15



LANCE ARMSTRONG, CANCER SURVIVOR

"As I said earlier, I thought bike racing was political...

I am not a doctor, a scientist, an economist or a statistician, but I really don't need to be. I'm a cancer survivor. I'm a Texan. I sit on the President's Cancer Panel, and there are only three people on that. I know how deadly the disease is. The numbers do not lie. I mean, we can talk about the 35,000 deaths due to cancer just in this state every year. We can talk about the United States, which is 550,000 to 600,000 cancer deaths per year. Or, we can talk globally, which is 7 million cancer deaths per year, which is, in fact, the biggest killer that we have on the planet Earth. Cancer is bigger than malaria, tuberculosis and AIDS combined globally. This is a huge problem and it is not going to go away. Have we had success stories? Of course, I am sitting here. I've had a pretty good 10 years since I was diagnosed. But, we have a long ways to go. The fact of the matter is the system is broken.

The beauty of this initiative is we have the opportunity to actually try to fix the system and set an example — not just for our great state, but for all the other states, for the federal government, for the National Cancer Institute, for the future President, for Congress — to say, 'Look how they did it down there in Texas.' Sitting on the President's Cancer Panel, I can tell you that, unfortunately, less than half the money at the NCI goes to actual research. That's a crime. With this system, I think that we can put some things in place — I know that we can put things in place — that will ensure that 90-plus percent of these proceeds go towards direct research. As Dr. Lichtenfeld told us, this is a very exciting time. If you tour the hallways of M.D. Anderson, UCLA, or the NCI, the scientists will tell you that number one: it is a very exciting time; number two: they are seeing their fellow researchers, their fellow students leaving the profession because they are lacking money, which therefore directly results in a lack of morale. To me, a lack of money is a problem, but a lack of morale is fatal. So, we have to do more.

I would argue that this is not enough money. And, I would also argue that this is not an expense, rather this is an actual investment. And, you can be very cold about it: this is an investment in science and research and all these things that are almost like they come out of a comic book, but this is an investment in human life. And, you can check your pager to see what your 11-year-old is going to eat for dinner tonight, but let me tell you something, when he is 30, he'd like to know that you sat down and we all decided to do this. Because that is what this is about.

I'll tell you a personal story. I don't want to be here tonight. I don't want to have to do this. When I was diagnosed and I started my Foundation, I did not think I would be doing this 10 years later. I am supposed to be at a rehearsal dinner for my step-sister, just down the street. I grew up with a single mother in Plano, and I never had any brothers or sisters. But I swam on the City of Plano swim team with three kids, the Kelly family: Maureen, who is getting married, Mike and Megan. They were just my friends on my swim team at the time. And their father was Ed and their mother was Peggy, and they were my extended family. My mom and I were sort of on our own.

Our lives diverted at that point because I went off and did other things and they went to school, swam collegiately and had a happy life. Long story short, their mother got breast cancer and died shortly thereafter. And then after that, their father starting dating my mother and they got married. So now Ed has a stepson, and I have a stepbrother, stepsisters and a stepfather. And the rehearsal dinner is tonight. I probably should be there, but I am here to talk about this because while my mother's happy and her husband's happy, I'm sure that the bride-to-be would like to have her mother there. And it's my job."

Lance Armstrong

Testimony before the Texas Senate Finance Committee



Photo courtesy of Dave Gresham

GOVERNOR RICK PERRY SIGNS HOUSE BILL 14

TEXAS TAKES ON CANCER:

The Cancer Prevention and Research Institute

A CASE STUDY OF PROPOSITION 15

In November 2007, Texas voters approved a landmark \$3 billion bond initiative to establish the Cancer Prevention and Research Institute of Texas (“Institute”) to make grants to create and expedite innovation in research, prevention and cures for all human cancers. They also vested the Institute with the responsibility to implement the Texas Cancer Plan and to continually monitor and revise it as necessary. The push for the initiative started at the grassroots level, spurred by patient advocates and cancer survivors.

According to the American Cancer Society (ACS), more than 1.4 million new cancer cases will be diagnosed in 2008, and about 565,650 Americans are expected to die of the disease in the same year. This amounts to more than 1,500 deaths a day, making cancer the second most common cause of death in the United States, exceeded only by heart disease. And, as the population grows and ages, the number of people diagnosed with cancer also will grow, with the total number of cancer cases doubling by the year 2050. (1)

Cancer accounts for one of every four deaths in the United States and, according to the National Institutes of Health (NIH), its overall costs in 2007 exceeded \$219 billion—\$89 billion for direct medical costs (total of all health expenditures); \$18.2 billion for indirect morbidity costs (cost of lost productivity due to illness); and \$112 billion for indirect mortality costs (cost of lost productivity due to premature death).

In Texas alone the numbers are compelling:

- ★ The Centers for Disease Control and Prevention (CDC) estimates there will be more than 96,000 new cancer cases diagnosed in Texas in 2008 (see Table 1).

- ★ Nearly 35,000 Texans already diagnosed with cancer will die in 2008 (see Table 2).
- ★ Cancer costs Texans \$30 billion a year in direct and indirect costs.
- ★ Cancer is the leading cause of death for Texas women between the ages of 35 and 74.
- ★ Cancer is the leading cause of disease-related deaths of Texas children between the ages of 1 and 14.
- ★ One out of every two Texas men will be diagnosed with cancer in his lifetime.
- ★ Incidence and mortality rates for many cancers are increasing as the population ages.

At the same time that cancer incidence remains high, and is growing in some populations and in some body sites, only 10 percent of proposed cancer research is ever funded. (2) For example, the National Cancer Institute (NCI) will see its budget remain at \$4.8 billion in 2009, 11 percent below the 2004 funding level in real terms. Additionally, the federal investment in cancer research has been significantly cut from the level of funding requested by NCI every year since 1997. The budget shortfall for NCI in Fiscal Year 2007 was more than \$1.1 billion.



CATHY BONNER

TABLE 1: ESTIMATED NEW CANCER CASES FOR SELECTED CANCER SITES IN TEXAS, 2008*

All Sites	96,320
Female Breast	12,210
Uterine Cervix	970
Colon and Rectum	9,570
Uterine Corpus	2,100
Leukemia	3,330
Lung and Bronchus	13,840
Melanoma of the Skin	3,940
Non-Hodgkin Lymphoma	4,650
Prostate	12,960
Urinary Bladder	3,610

*Rounded to the nearest 10; estimated new cases exclude basal and squamous cell skin cancers and in situ carcinomas except urinary bladder. About 67,770 female carcinoma in situ of the breast and 54,020 melanoma in situ will be newly diagnosed in 2008.

Source: Estimated new cases are based on 1995-2004 incidence rates from 41 states and the District of Columbia as reported by the North American Association of Central Cancer Registries, representing about 85 percent of the U.S. population. Estimated deaths are based on data from U.S. Mortality Data, 1969-2005, National Center for Health Statistics (NCHS), CDC, 2008.

TABLE 2: ESTIMATED CANCER DEATHS FOR SELECTED CANCER SITES IN TEXAS, 2008*

All Sites	34,960
Brain/Nervous System	850
Female Breast	2,520
Colon and Rectum	3,020
Leukemia	1,420
Liver	1,680
Lung and Bronchus	9,890
Non-Hodgkin Lymphoma	1,320
Ovary	930
Pancreas	2,060
Prostate	1,730

*Rounded to nearest 10.

Note: State estimates may not add up to the U.S. total because of rounding and the exclusion of state estimates of fewer than 50 deaths.

Source: U.S. Mortality Data, 1969-2005, NCHS, CDC, 2008.

Prospects are no better in this or future years. In Fiscal Year 2008, the \$4.8 billion NCI appropriation is essentially flat compared with 2007, requiring NCI leaders to initiate 3 percent reductions across each division, office and center. This includes reducing the number of research project grants, decreasing the numbers of patients recruited into cancer clinical trials and reducing funding for long-term cancer survivorship research by \$1.7 million. Moreover, it was the agency's fifth consecutive year of no real budgetary growth, representing a 13 percent drop in purchasing power since 2003.

In an October 2007 newspaper interview, Dr. David Poplack, deputy director of the Dan L. Duncan Cancer Center at Baylor College of Medicine, said of the funding environment, "It's never been bleaker. The tragedy in this is that it's bleak at a time when science is perhaps at its most exciting time." (3) The sentiment was expressed elsewhere in the state. Dr. Joan Schiller, deputy director of the Simmons Comprehensive Cancer Center at the University of Texas Southwestern Medical Center, said, "The problem with the fight against cancer is not the lack of ideas, but the lack of resources to carry those ideas out." (4)

Scientists are on the verge of achieving major breakthroughs in understanding cancer biology, genetics and biochemistry, and also in translating these discoveries into more effective and less toxic treatments. The Human Genome Project and its follow-on activities, such as the Cancer Genome Atlas, are opening doors to entirely new approaches to tackling prevention, diagnosis and treatment of cancer—hardly the time to decrease the research investment.

TEXAS RESPONDS

There's a saying, "If you find yourself in a hole the first thing to do is stop diggin." In 2007, Texans decided to stop digging and instead to start filling the void in financial support needed to advance cancer research and prevention in

Texas. On November 6, 2007, the voters of Texas approved Proposition 15:

The constitutional amendment requiring the creation of the Cancer Prevention and Research Institute of Texas and authorizing the issuance of up to \$3 billion in bonds payable from the general revenues of the state for research in Texas to find the causes of and cures for cancer.

The constitutional amendment specifies that the state can issue up to \$3 billion in bonds over 10 years (up to \$300 million a year) starting in 2009 to finance cancer research and prevention. The newly created Cancer Prevention and Research Institute of Texas ("Institute") will distribute the funds based on competitive grant applications, following review by a panel of scientists.

The Institute is soon to become a significant source of cancer research funding in the United States. As an example of a bold state initiative to spur research toward prevention and cures, what can be learned from this activist, grass-roots approach to advancing the search for new therapies?

The Lance Armstrong Foundation believes a better understanding of the passage of Proposition 15 can be instructive for other states considering similar or related investments in cancer research and programs. This case study describes the events, people, organizations and strategies used in Texas that led to this historic achievement and concludes with a discussion of the lessons learned from this populist effort and the challenges ahead as the state implements its new and ambitious cancer plan.

This report is based on interviews conducted with individuals involved in the development and passage of Proposition 15, scientists who will be involved in setting the research agenda or receiving research funds from the state, and an extensive review of media reports, both print and online, leading up to and following the November 2007 referendum.

Grassroots initiatives are powerful in Texas politics, and this was an alliance that was hard to stand down.

THE BEGINNINGS OF A PLAN

In 2006, John Mendelsohn, president of the University of Texas M.D. Anderson Cancer Center, former Travis County Democratic Party Chairman Ken Wendler, former state Comptroller John Sharp and Cathy Bonner, who served in former Governor Ann Richards' Cabinet as commerce secretary, met at a summer retreat in New York. Bonner's father had died of cancer, her mother successfully fought it, and she too was a cancer survivor since 2003. At the time, Bonner was watching her close friend and mentor, Ann Richards, die of esophageal cancer. The idea of a Texas cancer research project was discussed.

With incredible speed and determination, Bonner and Sharp formed KillCancer.org and reached out to other organizations, including the Lance Armstrong Foundation, Susan G. Komen for the Cure, the Texas Medical Association and ACS to form a coalition. Their message was "Cancer kills and we can do something about it."

The group devised a plan that would lead to the creation of the Institute. It was simple—\$3 billion for cancer research over 10 years. Bonner said that after she and Sharp first put their heads together, she immediately went to Lance Armstrong with the idea; she was confident that he would sign on. Bonner said Armstrong's response was, "Let's do it. I'll do whatever it takes."

Representatives from the various groups first met in early January 2007 to discuss the strategy. The notion, as Bonner describes it, was the equivalent of President John F. Kennedy's 1960's federal investment in putting a man on the moon in a decade. "After all," she said, "we've got Houston," alluding to the famous NASA Johnson Space Center.

Taking a cue from California's 2004 Proposition 71—in which California voters passed a \$3 billion stem cell research bond measure—Bonner believed it was entirely possible to convince Texans to also invest \$3 billion over a decade to make as much progress as possible to control and manage cancer in all its forms. The funding would go to Texas's public research institutions and, through partnerships, to private researchers.

The case was easy enough for Bonner to make. "We're not doing what we should, which is to double the investment in cancer research," she said. Bonner said it's true that Texans think big, and the successful passage of a far more controversial investment in California led her to believe that Texans might just be willing to make a similar investment in cancer research.

Even with the California example, however, "We all thought the chance of it going anywhere was remote," said Bonner. "I put it at about 60 percent, which I found out later were much higher odds than anyone else gave it," said Bonner, adding that she is glad she didn't know that at the time. However, grassroots initiatives are powerful in Texas politics, and this was an alliance that was hard to stand down.

PRECEDENTS IN STATE-SUPPORTED BIOMEDICAL RESEARCH

Texas would not be the first state to launch a biomedical research program. Many state governors and legislatures have considered major life sciences R&D efforts as part of their economic development strategies. State funding for biomedical research has increased since the 1970s and rises and falls with fluctuations in the economy. State biomedical research investments have fueled substantial economic growth in Northern California's Bay Area, San Diego, the Boston area and the Research Triangle Park

area of North Carolina. Fueling some state support of R&D is the transition from a manufacturing to an innovation economy—with “invented here” edging out “made here.”

Typically, states get involved in sponsoring research when they believe their funds can leverage other sources of funding or when public investment can bridge critical gaps in the R&D process. State support traditionally has been in the form of direct appropriations to universities, tax credits, endowment funds and formation of nonprofit corporations. More recently, some states have used funds from tobacco settlements to support research.

Nevertheless, state support of R&D is only 3 percent of national (federal, industry and state) investment (5), so typically it cannot compete with the federal government or private sector in terms of volume of research supported (with the exception of human embryonic stem cell research, for which federal funding has been limited). Although California voters made the biggest investment to date with its bond proposal for embryonic stem cell research, similar but smaller state-funded programs in stem cell research are under way in nine additional states, and many states support biomedical research in general.

Other states are considering increased funding for major cancer research. For example, North Carolina established a cancer research fund that will provide \$25 million this year and \$50 million per year starting in 2009. Additionally, the California Breast Cancer Research Program has been in place since 1993. The program is funded through the tobacco tax, the voluntary tax check-off on personal income tax forms and individual contributions. The revenue is used to make grants for California scientists and community researchers to find better ways to prevent, treat and cure breast cancer. Since 1994, it has awarded more than \$181 million through 761 grants to 92 institutions across the state.

The Texas initiative would match the size and scope of the California stem cell program, but

with an entirely different research focus—cancer. In an unpublished article about the passage of Proposition 15 called “Run Over by a Bicycle,” former Texas Deputy Comptroller Billy Hamilton wrote, “It is the conceit of these two large states that they have the resources and wherewithal to do something truly sweeping and important, not just for their own citizens but for the world.”

MAKING THE CASE

Making the case for such a large venture in Texas involved convincing a fiscally conservative legislature and governor to make a 10-year investment in something that had no clear endpoint. That meant talking dollars—not just costs—but also the impact of doing nothing.

Hamilton was asked to prepare some estimates of the costs of cancer and the financing options. A report, *The Cost of Cancer*, prepared for the Texas Comprehensive Cancer Control Coalition on the Economic Impact of Cancer by the Lyndon B. Johnson School of Public Affairs at The University of Texas at Austin was a starting point. (6) It found that the total estimated direct medical costs due to cancer in 1998 were \$4.9 billion, and indirect costs from lost productivity were \$9.1 billion—for a total of about \$14 billion attributable to cancer in Texas that year. Hamilton extrapolated to 2007 and estimated that cancer cost Texans \$30 billion that year in direct and indirect costs. He documented a half billion dollars in costs to the state government annually for the treatment of cancer in Medicaid clients, state workers, public school teachers and retirees.

Hamilton said everyone had that California-based, \$3 billion mark as the starting point, so it was fortuitous that his estimates of the cost of cancer came to \$30 billion—spoken like a true accountant. A \$3 billion effort over 10 years—or \$300 million a year—amounted to spending \$1 on research for every \$100 spent on treating the disease. Also fortuitous was the fact that in 2006, Texas researchers received \$256 million in grants from NCI. Another



CAPITOL PRESS CONFERENCE

\$300 million a year would more than double the current research investment in Texas, representing in a way a 50/50 partnership with the federal government.

In “Run Over by a Bicycle,” Billy Hamilton wrote:

The \$3 billion figure would become an issue. Why \$3 billion? Why 10 years? Well, the obvious answer is that that amount is what California adopted for stem cell research, although that’s a tough admission for a Texan to make. However, \$300 million a year would also represent a doubling of what Texas institutions get annually from the National Cancer Institute, and it was a figure the experts from M.D. Anderson and other institutions said could be put to good use by Texas researchers. Moreover, federal cancer research allocations have been declining of late as the feds struggle with their own budget issues, so only about 10 percent of the potentially beneficial cancer research ever actually gets funded.

So, for a host of reasons, asking for \$3 billion seemed to make good sense.

State investment in R&D often is intended to spur economic development. Although combating cancer was the primary motivator for the passage of Proposition 15, the promise of secondary economic benefits—which might be more short term and measurable—also was an important consideration for some. Pumping money into research can attract and retain great scientific minds, and—more tenuously—the state of Texas could use equity return on this investment through patents, royalties and licenses to assist in paying the interest on and retiring any bonds issued to support the initiative.

Texas already had a record of supporting R&D and reaping its rewards, and there was every reason to believe the results from Proposition 15 would mirror this. In 2005, the Texas legislature created the \$200 million Emerging Technology Fund to accelerate the growth of research-based companies in Texas, so this approach to economic development was not new. According to a study conducted by the Texas Higher Education Coordinating Board, all publicly funded Texas colleges and research organizations generated \$40.5 million in licensing income in 2006, up 1.5 percent over the previous year. Some believed this may be a partial measure of the potential impact of the Emerging Technology Fund. (7)

In addition to returns to the state through licensing, the promise of bringing in new businesses has always been a goal of state investment in R&D. Long-term commitments by state governments help attract venture capital. As the measure began to percolate, business groups would support the effort for just this reason. The Greater Houston

Partnership, much like a chamber of commerce that promotes business in Houston and Harris County, would eventually endorse Proposition 15, citing the potential to draw new medical, biomedical and nanotechnology businesses to the region and the resulting increase in jobs. (8)

It was not just the business community that saw the economic benefits of state cancer research funding. Dr. William Hinchey, Texas Medical Association president, said, “The idea that we will be able to recruit the best and the brightest researchers and not lose them to other states has untold economic benefits.” (9)

Beyond the economic case, it was easy to make the case that Texas was well situated to hit the ground running with an infusion of new research dollars. There already is a vibrant, nationally recognized cancer research infrastructure in the state, which meant that the funds could immediately be put to good use.

Currently, about \$2.8 billion goes to 16 institutions each year in Texas for all kinds of medical research, according to Dr. John Mendelsohn. So, committing \$3 billion exclusively to cancer research over a 10-year period would have a major impact. “The fund will work by providing a boost for Texas research institutions, supporting innovation, stimulating collaboration, attracting brilliant scientists from around the world to Texas and creating a great opportunity for our state to accelerate its goal of leadership in biomedical research and biotechnology,” said Mendelsohn in support of the initiative. (9) With funding so fiercely competed at the national level, a 10-year commitment creates highly attractive stability for grant-seeking scientists.

Finally, Texas already had a cancer plan, developed by the Texas Cancer Council, a state agency “dedicated to reducing the human and economic impact of cancer on Texans through the promotion and support of collaborative, innovative and effective programs and policies for cancer prevention and control.” (10) As the proposal progressed, it would be important to

consider how the Texas Cancer Council and the Texas Cancer Plan would relate to the new Institute.

MONEY, MARBLES AND CHALK

There’s an old Texas phrase in politics — “money, marbles and chalk” — from a song recorded by Patty Paige. It means “it’s for everything,” as in “this campaign is going to be for money, marbles and chalk.” That was the attitude that Bonner and her partners adopted — they were going for all or nothing. They would fan out, sign partners up, make the case and start the legislative process necessary to get the proposal on the ballot. Then they would have to convince Texas voters.

The proposal would require a constitutional amendment for the bonding capacity. Texas is a state that has never shied away from constitutional amendments. Voters there have approved 440 amendments to the state constitution since its adoption in 1876. However, the measure would require issuing state General Obligation bonds, that is, incurring debt. Texas tends to be fiscally conservative, and the Texas constitution has a pay-as-you-go requirement, which means that a constitutional amendment is needed to incur debt.

To get the amendment on the ballot meant having the legislature propose a constitutional amendment in joint resolutions from the House or the Senate, with adoption requiring at least a two-thirds vote of the membership of each house of the legislature (100 votes in the House of Representatives, 21 votes in the Senate); the governor cannot veto a joint resolution. Some constitutional amendments are self-enacting and require no additional legislation to implement their provisions. Other amendments grant discretionary authority to the legislature to enact legislation in a particular area or within certain guidelines. These amendments require “enabling” legislation to fill in the details of how the amendment would operate.

One of the reasons the measure succeeded was getting the right people in place from the early stages.

Thus, before going to the voters, Bonner and company would first have to take their idea to the Texas legislature and build a bipartisan coalition willing to introduce the legislation necessary to get a proposition on the ballot requesting a constitutional amendment. John Sharp had just worked closely with Jim Keffer, Chair of the House Ways and Means Committee, on a tax reform panel looking at revising the school financing system. They became close friends, and Sharp asked Keffer if he would author the enabling legislation. He said yes.

The coalition, now including Keffer, approached several key members regarding co-authorship and sponsorship for the House bill: Representatives Patrick Rose, Dianne White Delisi, Geanie Morrison and Senfronia Thompson. They also lined up Senators Jane Nelson and Kirk Watson. A bipartisan approach was critical, as was enlisting the chairs of the most powerful committees in the Capitol.

Representative Rose said that one of the reasons the measure succeeded was getting the right people in place from the early stages. His senior colleague Representative Keffer would introduce House Bill (HB) 14 in the House, the legislation setting the details for establishing the Cancer Prevention and Research Institute of Texas via a constitutional amendment, to be funded through the issuance of general obligation bonds. HB 14 would become the enabling legislation for House Joint Resolution (HJR) 90, which would propose that a constitutional amendment be put before Texas voters, providing for the establishment of the Institute and authorizing the issuance of general obligation bonds for the purpose of scientific research of all forms of human cancer. Eventually, this team would line up 100 sponsors in the House.

Not surprisingly, there was some concern about the fiscal implications of the bill. At a March 21, 2007, hearing of the House Committee on Public Health, Chair Dianne White Delisi reminded an ACS official that “Texas lives off its sales tax, everyone will be paying off the bonds.”

Plus, bond measures typically were viewed by many as for funding “things,” and not for funding something as amorphous and uncertain as research. Across the country, voters approved 84 percent of the roughly \$29 billion of bond questions put before them in 2007. Typically, such measures are aimed at construction or mass transit projects, highway improvement, or schools.

Moreover, asked some legislators, with a budget surplus, why incur debt? The Texas legislature meets every two years and sets budgets on a two-year basis. They opined that the budget might not be as flush in the out years and that servicing the debt would be expensive. Senate leadership, including Lieutenant Governor David Dewhurst and Finance Chair Steve Ogden, were concerned about making new commitments with the budget problems likely to surface in the coming years.

In his account of the legislative debates, Billy Hamilton wrote:

The cancer research effort would require no state appropriations in the current budget, but it was going to need a minimum of \$62 million in the next budget to pay for debt service. Since there was more than a little legislative resistance to the idea of issuing debt to pay for research, there was a push to pay for the program directly from state general revenue. That would have pushed the cost to \$600 million for the first two

years, probably more than enough to have killed the legislation.

Another issue continued to raise concerns. In February, during his State of the State address, Governor Perry offered an alternative plan for funding the program, proposing to raise the \$3 billion through the sale of the state lottery. The Texas legislature rejected this proposal and continued to explore funding through bonds, despite the concerns about debt service.

The bills would work their way through the committee structure and would be amended in ways to ease passage by those legislators harboring fiscal concerns. A preference would be given to Texas businesses should the Texas Public Finance Authority contract with a private entity to issue the bonds, including using a “historically underutilized business.” In addition, an amendment stated that “the oversight committee shall establish standards to ensure that grant recipients purchase goods and services from historically underutilized businesses.” Finally, an amendment was added stating:

Before the oversight committee may make any grant of any proceeds of the bonds issued under Subchapter E, the recipient of the grant must have an amount of funds equal to one-half of the grant dedicated to the research that is the subject of the grant request.

This last amendment helped move the bill on the House side, said Representative Rose. He said it helped minimize the concerns by some that this could just become a slush fund for the universities, signaling that only serious takers are welcome. However, others interviewed for this case study expressed concerns that the amendment would make it difficult for young investigators to compete or disadvantage poorer institutions not able to find the cash. Often it is the young investigator who has new ideas, bringing innovation into fields that can become entrenched or resistant to change. Many expressed hope that this situation would be monitored and that if the

amendment is found to be stifling innovation, this should be taken up at a future Legislative Session for reconsideration.

Although it was extremely difficult getting the measure on the House calendar for a floor vote, it was finally scheduled in the eleventh hour as the deadline for the session approached. The measure cleared the House with a clear two-thirds margin and moved on to the Senate, where it faced an uphill battle. Because time was running out on the Legislative Session, a decision was made to try to advance the House-passed versions rather than the Senate companions. A friendly bill referral to Senator Nelson’s public health committee (where the Senate companion had been referred) would have made things easier, but instead the bills were referred to Senate Finance. The bills would have to clear the Finance Committee, a far tougher audience than committees concerned with health and public health. In the Senate debates, “bonding for cancer” was the hang up, with its inevitable debt servicing costs (\$1.69 billion in interest spread out over 29 years).

On the Texas state legislature web site you can watch the May 18, 2007, Senate Finance Committee hearing on the bills. Many panelists testified, and one of them was Lance Armstrong, who led off by joking that he thought bike racing was political until he entered the Texas legislative process. He then made the discussion personal and human. He told the committee that he didn’t want to be there, because he was supposed to be at his stepsister’s rehearsal dinner that night. His mother had married the bride’s father many years after his first wife had died of breast cancer. He added, “I probably should be there, but I am here to talk about this because while my mother’s happy and her husband’s happy, I’m sure that the bride-to-be would like to have her mother there. And it’s my job.” Within moments, both HB 14 and HJR 90 were sent to the Senate floor by a vote of 11 to 0.

Billy Hamilton tells of encountering Chairman Ogden a few days later. As finance chair, wrote



BUS TOUR

Hamilton, "Ogden's job, more often than not, is to say 'no.'" Hamilton expressed his gratitude for Ogden supporting the bill despite his concerns about the cost. His response was, "You know I just tell everyone I got run over by a bicycle." However, person after person would testify that they knew cancer personally and that its devastation had to be stopped.

Once the measure reached the Senate floor, additional amendments threatened to send the bill back to the House. These focused on the appointment process, tightened legislative fiscal oversight and imposed restrictions against using the funds for embryonic stem cell research. Two amendments to mandate that at least 10 percent (or 20 percent) of monies awarded should be used for cancer prevention and control programs were tabled. However, the final language allows for up to 10 percent of the funds to be used for prevention, a provision that accomplished two things: first, it made it clear that the prevention activities of the Texas Cancer Council would not be eliminated, and second, that the initiative might be able to document some early successes, because early detection and screening efforts would get a huge influx of new funds.

The final vote in the Senate on HB 14 was 25 votes in favor and 6 against, sending the measure to Governor Perry's desk. HJR 90 passed by a margin of 24 to 7, but since it was amended on the Senate floor, the revised version had to be passed by a two-thirds margin in the House before the session ended. This was a major concern to the coalition, because Speaker Tom Craddick was fending off a coup attempt and the Texas House was in turmoil. The House took up HJR 90 on the final Friday before adjournment and passed the measure 116 to 26, which was a credit to the strong coalition of lawmakers who were advancing the bill. Staffers at the Texas Capitol said they raced every deadline put in their way, and the final vote came literally in the closing hours of the Legislative Session.

In the end, even the most fiscally conservative Republicans had to support it, said Bonner. The key to its success was bringing in legislative champions for the cause, including chairs of the major committees in the Texas House and Senate. The strong backing of former state Comptroller John Sharp, Treasurer for Texans to Cure Cancer and Billy Hamilton, former Deputy Comptroller, also helped the legislation's passage. The bill's main champion in the House, Jim Keffer, is Chairman of the Ways and Means Committee and was author of a business tax reform bill the previous year. The Senate sponsor Jane Nelson chairs the Health and Human Services Committee and is a long-time advocate of health issues. Senator Nelson was used to fighting battles for funding short-term health needs and was willing to fight a tougher one—asking citizens to pay for long-term research. She would spend four hours on the Senate

Support for the cancer research amendment led opposition by a two-to-one margin and cut across all demographic subgroups.

floor arguing for passage. How could so many smart people with such a long record of protecting Texans' money be wrongheaded?

Many insist that it was the cancer survivor community's endurance, however, working the halls of the Texas legislature and the phones that made it impossible to say no.

Governor Perry signed HB 14 in June, creating the Cancer Prevention and Research Institute of Texas. Proposition 15 would become the ballot measure put before the Texas voters on November 6, 2007, authorizing the Texas legislature to proceed with establishing the Institute and authorizing the Texas Public Finance Authority to issue the bonds necessary to fund the Institute and grants.

TAKING THE CAMPAIGN ON THE ROAD

After the bills passed the House and Senate, it was time to start the public campaign for Proposition 15, the number randomly assigned to the ballot initiative through a lottery system. In an election year with no presidential or gubernatorial race on the ballot, many thought that the biggest challenge for Proposition 15 might be voter apathy or low turnout. In addition there were 16 constitutional amendments to be considered, ranging from school construction to a proposition that "abolishes the authority of the inspector of hides and animals, a title no one holds in Texas."

The Lance Armstrong Foundation conducted a statewide poll of 1,000 likely voters in July 2007 to gauge the public's receptivity. It found that cancer was the top health priority and that strong support existed for government funding. Respondents ranked cancer higher than heart

disease, Alzheimer's disease, obesity, or HIV/AIDS regarding the need for federal and state funding. Strong majorities believed that it was important for both federal and state government to fund cancer research programs. Support for the cancer research amendment led opposition by a two-to-one margin and cut across all demographic subgroups. The survey also found that cancer treatment experts, doctors and nurses and survivors are highly credible sources of information on the issue.

The original Bonner/Sharp coalition was instrumental in the campaign for Proposition 15, which secured \$1 million in donated television advertising time and worked to line up key endorsements.

The coalition also was able to quickly garner significant support from Texas politicians at all levels and from both parties. Texas's senior Senator Kay Bailey Hutchison publicly supported Proposition 15. Hutchison had long been an advocate for cancer research and prevention, introducing legislation in Washington to reauthorize the National Breast and Cervical Cancer Early Detection Program, which was passed by both houses and signed into law by President Bush. She also introduced the Breast Cancer Research Stamp Reauthorization Act to extend the sale of the stamp for another two years. Proposition 15 also was endorsed by former President George H.W. Bush and Governor Rick Perry.

Ads by Governor Perry sponsored by the "Yes on 15" Political Action Committee aired in Houston, San Antonio, Dallas and other markets the week of the election. Perry is a conservative Republican known for his commitment to property tax cuts and controlling spending, yet he

“I don’t think there’s a greater legacy we can leave our children or grandchildren than providing research to cure cancer.”

Senator Nelson

made cancer research support the centerpiece of his State of the State speech to the Texas legislature in February 2007.

Lance Armstrong and his partners launched a statewide bus tour to get out the vote for Proposition 15. He was joined on occasion by the Texas legislators who pushed the measure onto the ballot and by such celebrities as tennis player Andy Roddick. On one of the many stops of the bus tours, Sharp told the crowd, “One cannot put a price tag on human life. . . but with their vote, Texans can invest in a full decade of cancer research. Working together, we can accelerate the pace of research, find a cure and save countless lives.” (11,12)

Senator Nelson, a sponsor of the initial bills, told crowds, “I don’t think there’s a greater legacy we can leave our children or grandchildren than providing research to cure cancer. . . . If Texas is to attract and retain the best researchers, the state must be able to make a long-term commitment. The hope is that the state program will fund discoveries and that Texas would retain the royalties. One good discovery will pay for everything.” (13)

Almost all of the editorial boards of the major newspapers in Texas supported the measure, although some hedged their support, expressing concern about the bond issue or at least about justifying the expense based on possible revenue streams. Much of the support centered on economic development potential.

For example, an editorial in the *Victoria Advocate* said:

The state is not required to ever actually issue the bonds. The state still may finance the cancer research program in other ways. By authorizing the issuance of \$3 billion in general obligation bonds for cancer research, the state is telling the world that Texas is making a long-term commitment to attract the top researchers to the state and make the state a world leader in cancer research. Much of the cost of the debt service would be offset by royalties, income and other intellectual property benefits realized by the state as a result of projects developed with grants of the bond proceeds. (14)

The *Fort Worth Star Telegram* wrote:

Texas is attempting to build its future on five key economic biotechnology and life sciences; aerospace and defense; energy; advanced technology and manufacturing; and communications technology. The institute would be an inspired addition to the state’s already impressive cluster of biotechnology assets and a wise investment in economic development—as well as a laudable contribution to the well-being of humanity. (15)

Knowing that people were more likely to trust clinicians and researchers than politicians on an issue like this one, the campaign relied heavily on the scientific community to step forward, just as it had during the hearings in the Texas legislature.

News stories focused on how the funding could make a difference in scientific progress. In arguing the scientific case for the referendum, Dr. Mendelsohn, of M.D. Anderson Cancer Center, said in a *Science* magazine article that he hopes the money will encourage researchers to conduct innovative research in areas such as nanotechnology that are considered too high-risk for the more conservative NIH study sections. He also hoped that the funds would attract new researchers, especially young investigators to the state. (16)

In other stories, researchers explained how the current approach to treating cancer is not working and called for more research. In one story, Dr. Roy Herbst, a professor in M.D. Anderson's Department of Thoracic/Head and Neck Medical Oncology, said, "Chemotherapy is like using a cannon to hit an ant. You're hitting the tumor hard, but you're hitting the body, too." (3) In the same article, M.D. Anderson scientist Dr. Bert O'Malley described how his research—which focuses on ways to keep cancer-causing molecules from functioning—requires equipment and personnel that cost more than \$1 million a year. Baylor has not been able to obtain federal funding for such an expensive project, meaning that O'Malley's lab is stuck with a good idea and nowhere to go. "At this stage, what we could do in five years would take 20 years. There's going to be a lot of people dying for an extra 15 years that possibly we could prevent or delay." (3)

Dr. Karen Fields, then president of the Cancer Therapy and Research Center University of Texas Health Science Center at San Antonio, supported the measure by emphasizing how close the science was moving to slowing cancer:

The Human Genome Project really gave us a lot of tools that will be critical for us to develop a better understanding about cancer, and more targeted therapies that are going to be more effective. That is no longer a nebulous promise we're giving people. We're right on the doorstep of actually turning those into

real therapies. And I think this is a very good time to be investing in cancer research. (17)

Having the scientific community explain the opportunity costs of insufficient research funding was a powerful tool. It also helped that Senator Nelson and others insisted that the Institute be established in the most transparent way possible, that there be no money taken from tobacco or pharmaceutical interests, and that there be a critical focus on prevention. At the time, Texas was spending \$3 million on cancer programs annually, much of it focused on prevention and control. Proposition 15 would allow up to \$30 million to be spent on cancer control—a 10-fold increase. It is in prevention, screening and early detection where a more immediate and measurable impact is likely to be seen. Thus, this enormous expansion in the prevention dollars was a critical and persuasive feature of the proposal.

THE OPPOSITION

Not everyone was on board. Opponents said the proposal posed too much of a burden for taxpayers and were particularly concerned about what could amount to as much as \$1.6 billion in interest on the bond debt. Concerns about the cost of investing in something that might not pay off was the basis of opposition from two groups from Texas's largest county, the Harris County Republican Party and the Young Conservatives of Texas, which both went on the record as opposed to the measure. (18)

However, even the opposition was somewhat muted. Michael Quinn Sullivan, Texans for Fiscal Responsibility, said in an *Austin-American Statesman* article, "My concern is, this is going to be a lot of money spent without any real success. But we should all hope for the best." (19)

An editorial in the *Beaumont Enterprise* said, "This proposal also gets state government involved in a medical issue that lies way outside its traditional mission. If this proposal



ELECTION DAY

succeeds—and it probably will—should it be followed by other state institutes to fight heart disease, diabetes, multiple sclerosis, etc.? Texas has many universities and hospitals deeply involved in this research.” The editorial ended by stating, “We support Proposition 15 anyway despite some misgivings.” (20)

The uncertainty of a return on the investment bothered some critics. With NCI spending \$4.7 billion annually on research, others wondered, what evidence was there that Texas could do any better or make that much of a difference? Other critics believed that if government could not be trusted to fix the healthcare crisis, why should it do any better with research? Some also questioned why the money should be earmarked specifically for cancer.

Proponents argued other diseases such as diabetes and Parkinson’s disease will benefit indirectly from cancer research. Judith Haley, president of Texans for Advancement of Medical Research, said, “Sometimes, multiple disease questions are answered by a single research advance. So, the more that goes into all types of research the better for everyone.” (13) In hearings before the Senate, scientists explained that much of the advances in such diseases as HIV/AIDS came from what we have learned from cancer research.

TEXAS VOTES TO TAKE ON CANCER

In the end, 61 percent of Texas voters approved Proposition 15. Interestingly, of all the bond measures on state ballots in 2007, Texas accounted for about two-thirds of the total. All of the statewide propositions in Texas passed, allowing the state to issue up to nearly \$10 billion of debt for highway improvements, cancer research and the state’s student loan program. (21) At the same time that Texas voted for its cancer research initiative, voters in New Jersey rejected \$450 million of new general obligation debt for stem cell research, roundly defeating an initiative that had the support of the governor and senate president. In addition to opposition from religious and anti-abortion groups, many attribute the defeat to the financial condition of the state, which at the time was shouldering \$31 billion of outstanding debt.

THE FINAL VERSION: JUST WHAT IS THE CANCER PREVENTION AND RESEARCH INSTITUTE OF TEXAS?

The eventual language of Proposition 15 states that the Institute will assume the functions of the Texas Cancer Council, which was established in 1985 as a small agency with a focus on cancer prevention programs. The council currently funds approximately \$3 million in cancer control programs annually. During the debates,

many expressed concern about not eliminating the council altogether. Specifically, the new Institute has a three-part purpose:

1. create and expedite innovation in the area of cancer research and in enhancing the potential for a medical or scientific breakthrough in the prevention of cancer and cures for cancer;
2. attract, create, or expand research capabilities of public or private institutions of higher education and other public or private entities that will promote a substantial increase in cancer research and in the creation of high-quality new jobs in this state; and
3. develop and implement the Texas Cancer Plan.

In writing the language that would create the Institute, House and Senate staffers looked closely at the Center for Regenerative Medicine (CIRM), the institute created through California Proposition 71. Their goal was to borrow the good and guard against the pitfalls that had slowed CIRM's first year. (22) They were mindful of creating an oversight system that minimized conflicts of interest while ensuring that Texas scientists and research facilities had input. They recognized that some institutions might benefit from the funds more than others and tried to lay the groundwork that funding decisions would be based on what was best for science and for Texans.

Governance

State officials are to appoint two committees: the Oversight Committee, and the Scientific Research and Prevention Programs Committee, whose tasks will include reviewing grant and loan applications and recommending funding.

The Institute's governance is vested in the Oversight Committee, an 11-member body, to be appointed to staggered, four-year terms, as follows:

- ★ three members appointed by the governor;
- ★ three members appointed by the lieutenant governor;

- ★ three members appointed by the speaker of the House of Representatives;
- ★ the comptroller or his/her designee; and
- ★ the attorney general or his/her designee.

On March 13, 2008, Governor Perry appointed three members to the Oversight Committee for terms to expire December 4, 2011—a professor and former president of Rice University, a Dallas businessperson and former presidential appointee to the Organization for Economic Cooperation and Development in Paris and an Austin business owner. The following day, House Speaker Tom Craddick appointed three members as well—an oncologist with experience in legislation, public policy and advocacy; an attorney and cancer survivor; and a public relations professional and founder of a nonprofit organization that funds childhood cancer research.

The law directs that Oversight Committee members must represent the geographic and cultural diversity of the state, and that in making appointments, the governor, lieutenant governor and speaker of the House of Representatives should attempt to include cancer survivors and family members of cancer patients, if possible. A person may not be a member if he/she or his/her spouse is employed by or participates in the management of an organization receiving money from the Institute; owns or controls, directly or indirectly, more than a 5 percent interest in an organization receiving money from the Institute; or uses or receives a substantial amount of tangible goods, services, or money from the Institute (except reimbursement related to expenses for committee meetings).

Day-to-day activities of the Institute are to be performed by an executive director, to be hired by the Oversight Committee. Additionally, the committee is required to hold public meetings at least quarterly. The Texas Cancer Council employees are being transferred to the new Institute, which helps alleviate the costs and delays of building an entirely new infrastructure from scratch, which was what had to be done

Each of the nine voting members must be either a physician or another professional who treats cancer patients or who represents a cancer treatment center or patient advocacy group.

in California, causing substantial delays. In the initial years, there are plans to use contractors to get things up and running. Everyone is watching to make sure the funds are not diverted toward creating a new bloated bureaucracy.

The law directs that the Oversight Committee must adopt conflict of interest rules based on standards applicable to members of scientific review committees of NIH.

There was widespread intent to leave the details of management to the administrators and not to make the legislative language so prescriptive as to be binding. "That was a real lesson we learned from looking at what happened in California," said House staffers. The language about governance was also left general because the legislature can come back every two years and amend it as it sees fit. Bonner agrees. She said from the start that the intent was to keep the language about governance as broad as possible, to give the scientific community the greatest leeway possible in setting a research strategy that was consistent with and built on the Texas Cancer Plan. "We are trusting the two committees to make good decisions," she said.

The Institute is subject to the Texas Sunset Act and would be abolished unless otherwise continued pursuant to provisions of that act.

Grantmaking

As noted, the primary mission of the Institute is to make grants to public or private persons or institutions for 1) research into the causes of and cures for all types of cancer in human (from laboratory research to clinical trials, and including translational research); 2) facilities where such research is conducted; and

3) prevention and control programs in the state to mitigate the incidence of cancer. The body charged with reviewing applications and making specific recommendations for funding is an 18-member Scientific Research and Prevention Programs Committee ("Research Committee") appointed by the governor, lieutenant governor and speaker of the House of Representatives to represent physicians, licensed healthcare professionals, licensed healthcare facilities, voluntary health organizations and researchers, along with *ex officio* members representing the major Texas healthcare and research systems.

The Research Committee is charged with reviewing grant and loan applications and making recommendations to the Oversight committee regarding the awarding of grants; the Oversight Committee must follow the funding recommendations of the Research Committee unless two-thirds of Oversight Committee members vote to disregard a recommendation.

The law also stipulates that the Research Committee shall perform an ongoing "peer review progress oversight review" of each grant to ensure compliance with the terms of the award and to ensure its scientific merit.

The legislation requires that 9 of the 18 grants reviewers represent Texas colleges and universities, although they are nonvoting members to steer clear of conflicts of interest. Each of the nine voting members must be either a physician or another professional who treats cancer patients or who represents a cancer treatment center or patient advocacy group. It could be difficult to ensure that the voting members understand the nuances of research.

Several other states with biomedical research initiatives specifically require that reviewers not be from a state institution, to minimize conflicts and decisions made for political rather than scientific reasons. For example, California, New Jersey and Connecticut's stem cell efforts require reviewers be from out of state. The preference of most legislators was to have the scientific peer review conducted by Texans. However, in several hearings, the scientific community raised concerns about such a restriction, noting that other states had adopted policies mandating that reviewers not be potential grant recipients—that is, that they be from out of state. Such policies circumvent conflicts of interest and minimize decisions being made for political rather than scientific reasons. The eventual language would state that out-of-state peer reviewers could be used if it were determined that such expertise was necessary to ensure a quality review.

Grants from the Institute may be used for certain purposes only (e.g., honoraria, salaries and benefits, travel, supplies), and persons receiving funds may not be paid more than 5 percent in indirect costs. Additionally, not more than 5 percent of the money awarded may be used for facility construction purposes during any year, and, as noted previously, not more than 10 percent of the money awarded annually may be used for cancer prevention and control programs. Also, as mentioned above, an amendment to the original bill requires the recipient of a grant to have an amount of funds equal to one-half of the grant in place before the Oversight Committee may approve an Institute grant.

No more than \$300 million in grants may be awarded in any single fiscal year.

Funding

Proposition 15 does not require lawmakers to issue the bonds, up to \$300 million of which can be sold each year and could cost \$1.6 billion in

interest. The bonds were put in the constitution to ensure that the Institute would have a source to support researchers and provide grants.

Funding for the Institute's operations and grantmaking activities is to be primarily through requests the Oversight Committee makes to the Texas Public Finance Authority to issue and sell general obligation bonds. No more than \$300 million in general obligation bonds in any year is authorized, which means that the total funding over the 10-year period is \$3 billion. Debt is to be issued as the program proceeds, and repayment is to be structured to take place between 2010 and 2039. According to the Authority, the total cost to repay principal and interest will be \$4.69 billion over the 29-year period.

Additional funding could be available to the Institute from patents, royalties and licensing fees; appropriations from the legislature; gifts, grants, or other donations; and investment interest.

How to pay for the measure was and is a subject of debate. Texas lawmakers next meet in regular Legislative Session in 2009 and must decide whether to directly fund the program out of revenues, which would avoid interest payments. The status of the Texas economy and other budget demands will likely play a role in the decision. A group called Americans for Prosperity-Texas opposed all the bond proposals on the ballot and is still lobbying to have the measure financed through existing revenues. However, Representative Jim Keffer said issuing bonds will be "a lot easier on the state, even though you do have the back end of the financing charges, which is a big deal." (23) In a *Houston Chronicle* interview he said, "Getting things under way and not having that upfront expense is going to be better for the state. . . I think it'll be better on the state to not have to shell out \$600 million in a biennium. However, that'll be up to the powers that be to get that figured out."



ELECTION NIGHT

Intellectual Property

There is a clear expectation that the Institute (and therefore the state and taxpayers) should benefit from any patents or other intellectual property derived through grants made by the Institute. Toward that end, the Oversight Committee is directed to establish standards that require all grant awards to be subject to an intellectual property agreement that allows the state to collect royalties, income and other benefits realized as a result of projects undertaken with money the Institute awards.

In setting forth this provision, the only guidance provided about the nature of such standards is the following:

In determining the state’s interest in any intellectual property rights, the Oversight Committee shall balance the opportunity of the state to benefit from the patents, royalties, licenses and other benefits that result from basic research, therapy development and clinical trials with the need to ensure that essential medical research is not unreasonably hindered by the intellectual property agreement and that the agreement does not unreasonably remove the incentive on the part of the individual researcher, research team, or institution.

Much of the policy was based on the existing intellectual property policies of the University of Texas system; however, the Oversight Committee retains the right to develop further guidelines.

Other Provisions of Note

Several other provisions relate to annual reporting to the governor and legislature outlining the Institute’s activities, grants awarded, grants in progress, research accomplishments and future program directions. Another provision requires the Institute to annually commission an independent financial audit of its activities from a certified public accounting firm and to provide the audit to the comptroller of public accounts (comptroller). The comptroller is to review and evaluate the audit and annually issue a public report of that review and to make recommendations concerning the Institute’s financial practices and performance.

Finally, a provision requires that any project be conducted with “full consideration” of ethical and medical implications and in accordance with state and federal law.

LESSONS LEARNED

The timing was right to push for funding in Texas; the state was experiencing a budget surplus, providing a window of opportunity not likely to open again for a while. The legislature was not worried about “putting food on the table.” However, this was a stretch even

Texas legislators and voters didn't have to be convinced that the market was failing. They saw the cancer rates; almost all had experienced the devastation of cancer.

for Texas, which tends to be fiscally conservative. The argument had to be made that this investment would make a difference. That's a hard argument to make in funding research, especially when it's a public investment.

Government typically steps in when the market fails. Texas legislators and voters didn't have to be convinced that the market was failing. They saw the cancer rates; almost all had experienced the devastation of cancer. When asked why the bills and the referendum ultimately passed, to a person, everyone said it is because cancer is personal—everyone has been or is affected by it. If you watch the archived videotapes of the legislative hearings on the bills, every legislator had a story to tell, whether it was a child, a mother, a cousin, a neighbor, or a friend. They all had lost someone to cancer, and it hurt. Lance Armstrong might be the most famous survivor in Texas, but he's not the only one, and a lot of people have lost loved ones from the disease.

Representative Rose said that “the greatest strength we had in moving this through to completion was the advocates, the cancer survivors who every day demonstrate their commitment.” He said that advocacy groups such as Susan G. Komen for the Cure, the Lance Armstrong Foundation and ACS provided the “horsepower and credibility” needed to persuade the skeptics. “Look, there is always going to be a general hesitance when you ask taxpayers for \$3 billion, no matter what you aim to spend it on,” he added. “This was not such a hard request, and I am very excited by the response.”

So, in 2007 in Texas there was a perfect storm—a budget surplus, a low profile election year, a

powerful coalition, and the ideal adversary, cancer. It didn't hurt to have star power and the support of key leaders of the Texas House and Senate. But interviews with key players uniformly revealed the sentiment that no single person or interest prevailed. No one could say, “but for the involvement of that person, this would not have passed.” It was a once-in-a-lifetime coalition that was able to rustle up people to testify in the legislature, travel around the state and drum up key endorsements.

But, as in California and other states that have tried to mount complex research programs, the devil is in the details. The effort still must stand the test of time—can it remain free of political instincts to use the measure for political gain? Keffer's staff is confident that there are sufficient checks and balances on the Institute's committee system to guard against that. It will take a two-thirds vote by the Oversight Committee to override the scientific review. Putting elected officials with the power of appointment at the top is perhaps unavoidable, but it raises the possibility that priorities other than science might influence the awarding of grants. Strict guidelines will be needed to guarantee that those receiving state dollars are chosen as a result of scientific peer review rather than political pressure.

Unlike California—where the research focus itself was controversial—the Texas program is not likely to be subject to the same legal challenges, either by the public or the legislature. Dr. Mendelsohn of M.D. Anderson expects the noncontroversial nature of cancer research to make the process in Texas much smoother. In California, public groups have demanded that the peer review process be public and

Representative Rose said his hope is that immediate use of funds for early detection and more cost-effective screening programs will be an “early return” on the investment, as more long-term studies are conducted in the background.

that access to treatments emerging from the research be available to all. Other than requirements for public reporting and quarterly public meetings, the Texas measure has not faced similar challenges.

When asked what other states might consider if they are contemplating a similar initiative, Bonner noted that “it would be nice if there were a national strategy for cancer, put together with the role of the states in mind.” Then, any state could look at the strategy, identify its own internal strengths and make a contribution that supplements or complements the efforts of the federal government or the states. For example, if a state had a critical mass of pediatric cancer researchers and excellent children’s hospitals, it might take on childhood cancers. Or, if a state has an exceptionally high rate of a certain form of cancer, it might target its efforts there. Her advice to any state contemplating a cancer initiative is to “identify your strengths, and then be realistic about what your economic and political climates will tolerate. Not every state can do \$3 billion, but that doesn’t mean it can’t make its mark,” she said.

Additionally, not every state has someone with the unique attributes of Lance Armstrong—a well-known cancer survivor with strong local roots who had already worked on behalf of fighting cancer and assisting survivors for nearly a decade. The strength of his appeal was multilayered, which helped get the attention of lawmakers and the commitment of the public.

GOING FORWARD AND LOOKING BACK

The originators of Proposition 15 want to make sure that now that the state has decided to make this commitment to cancer research, the proper metrics are in place to ensure it is working.

There clearly will be a need to maintain the momentum and quickly put together a program so that there are some near-term results for the legislature. In the words of Billy Hamilton, “They are not going to forget about \$3 billion.”

In January 2009, the Texas legislature will reconvene. When asked what the measures of success might be at that point, Representative Rose had this to say—he expects that by then, the legislature will be content if:

1. the Oversight and Scientific Review Committees have been appointed;
2. an executive director for the Institute has been named;
3. the Texas Cancer Plan has been revised to account for the \$3 billion, 10-year plan; and
4. the new Institute has developed a strategic plan for going forward.

Because so much new money is going into cancer prevention activities—a 10-fold increase over current levels—many legislators are hopeful that the first signs of progress will be in lives saved. Representative Rose said his hope is that immediate use of funds for early detection and more cost-effective screening programs will be an “early return” on the investment, as more long-term studies are conducted in the background.

Dr. Raymond DuBois, Provost and Executive Vice President at M.D. Anderson Cancer Center, sees huge opportunities for using the prevention monies to immediately improve services in underserved areas, by using telemedicine and other approaches to assist doctors and patients. The funds can be used for improving cancer healthcare quality and delivery, which would have an immediate impact. He also sees great promise in using the funds to improve the outcome in cancer morbidity and mortality in the Hispanic population in Texas, which currently are at rates he views as unacceptable. This can be achieved with research, for example, by expanding cohort studies through collaborations among institutions to more rapidly identify the reasons for health disparities so that interventions can be launched.

The advocacy groups behind the initial proposal are standing guard. In the words of one advocate, “We are not giving them [researchers] \$300 million to keep doing what they’ve been doing. We want change.” That might be one of the greatest challenges facing the new Institute. How can it do things differently, so that it does not just become a “little NCI”?

DuBois says it will be by giving priority to projects that could immediately lead to breakthroughs, more focus on problem-based research and more focus on studies conducted by teams. He also said that commercialization potential was important to the legislature. To the research community, that means facilitating translational research and measures to get discoveries into the clinic faster. He believes the Texas money provides a real advantage in building teams around problems in cancer.

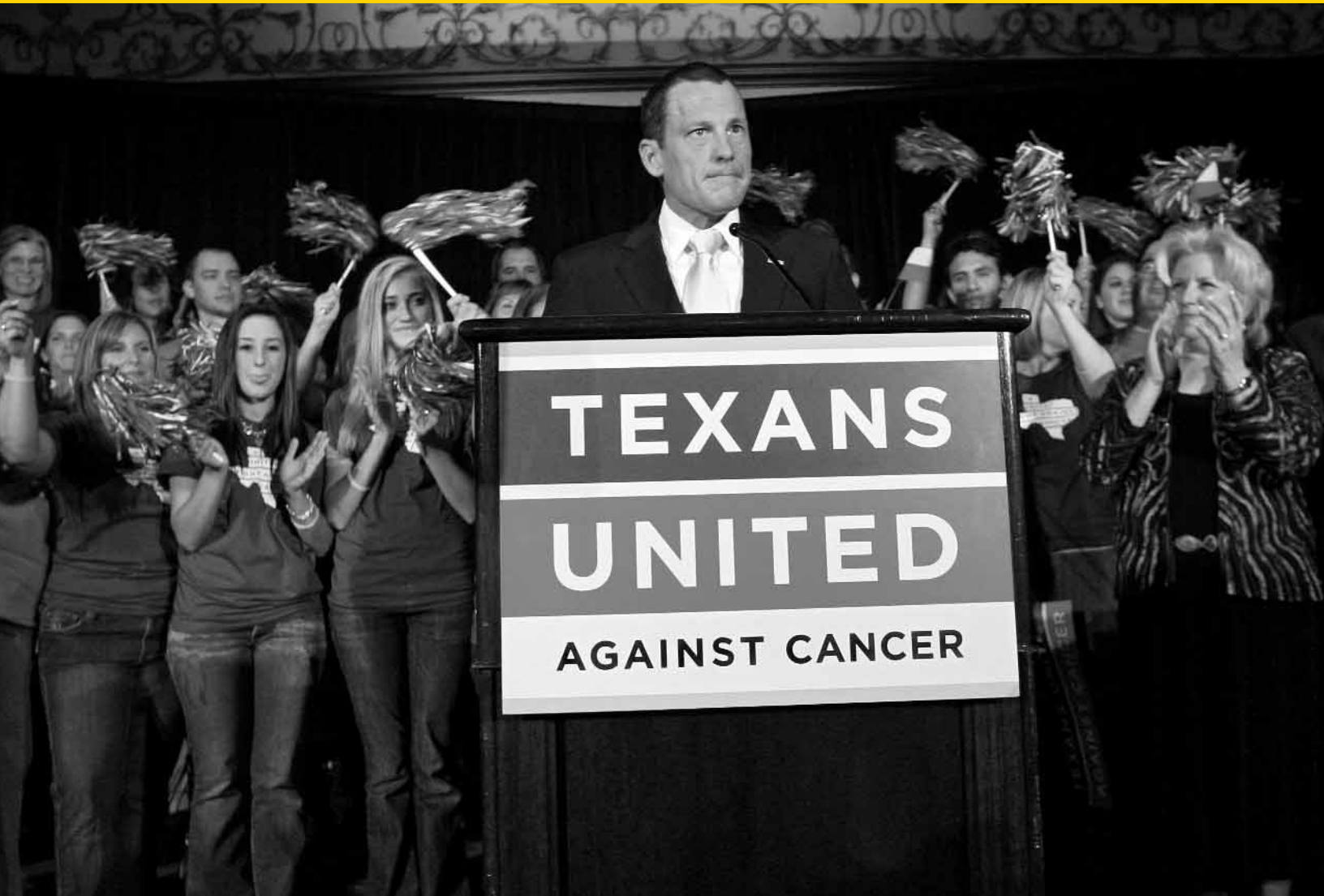
The founding parents of the original concept intend to hold the Institute accountable—they expect to see innovative new approaches to cancer research being tackled by Texas investigators benefitting from these new funds. This is the chance to do something really groundbreaking, said one legislative staffer, noting that there’s a saying in Texas, “Don’t squat on your spurs.” Well, “that’s pretty much the message here. This is a gift for cancer research and cancer patients—run with it.”

REFERENCES

1. American Cancer Society. *Cancer Facts & Figures 2008*. Atlanta, GA: American Cancer Society; 2008.
2. NCI Funding Policy for FY 2008, Research Project Grant (RPG) Awards. Available at: <http://deainfo.nci.nih.gov/grantspolicies/FinalFundLtr.htm>.
3. Corrie MacLaggan. State asks voters to boost cancer research funding. *The Austin American-Statesman*. Pg. A01, October 7, 2007.
4. Emily Ramshaw. Legislature: senate, voters must OK Perry's massive research effort. *The Dallas Morning News*. May 9, 2007.
5. National Science Foundation. *Science and Engineering Indicators, 2006*. Available at: <http://nsf.gov/statistics/seind06/>.
6. The Lyndon B. Johnson School of Public Affairs, The University of Texas at Austin and the Texas Health Care Information Council. *The Cost of Cancer in Texas: A Report to the Texas Comprehensive Cancer Control Coalition on the Economic Impact of Cancer*. 2001. Available at: <http://www.dshs.state.tx.us/tcccp/pdf/seconded.pdf>.
7. Kirk Ladendorf. Cashing in on innovation. *Austin American-Statesman*. September 20, 2007.
8. Richard Williamson. Harris County, Tex., GOP opposes Perry's \$3B for cancer research. *The Bond Buyer*. Pg. 36 Vol. 362 No. 32738, October 17, 2007.
9. Polly Ross Hughes. Cancer funds may hinge on voter turnout; higher numbers give proposition a better chance, but critics question \$3 billion plan. *The Houston Chronicle*. B, Pg.1, October 7, 2007.
10. Texas Cancer Council. Available at: <http://www.tcc.state.tx.us/>.
11. Karen Brooks. On the ride of his life Armstrong leads bus tour for Nov. 6 cancer funds vote. *The Dallas Morning News*. Pg. 1A, October 16, 2007.
12. Matt Frazier. Armstrong brings push for cancer money to Fort Worth. *Fort Worth Star-Telegram*. October 16, 2007.
13. Jan Jarvis. Debate over cancer-research plan continues. *Fort Worth Star-Telegram*. State and Regional News, October 27, 2007.
14. Editorial. 16 proposed constitutional amendments. *Victoria Advocate*, Texas. October 22, 2007.
15. Editorial. Case and cancer. *Fort Worth Star Telegram*. October 1, 2007.
16. Jocelyn Kaiser. Cancer research: Texas voters asked to approve \$3 billion cancer initiative. *Science* 317:1154-1155. August 31, 2007.
17. Don Finley. Prop 15 stirs up passionate support. *San Antonio Express-News Medical Writer*. Web Posted: November 3, 2007.
18. Clay Robison. Cancer research gets go-ahead: state can issue \$3 billion in bonds over next 10 years. *The Houston Chronicle*. State and Regional Section, November 7, 2007.
19. Corrie MacLaggan and W. Gardner Selby. Cancer research proposal passes. *The Austin American-Statesman*. Pg. A01, November 7, 2007.
20. Editorial. Cancer proposal aids good cause, raises questions. *The Beaumont Enterprise*. October 29, 2007.
21. Jason Philyaw. Bonds get thumbs up across U.S.; voters approve 84% of debt questions. *The Bond Buyer*. Pg. 1 Vol. 362 No. 32754, November 8, 2007.
22. FasterCures. Proposition 71: A Model for State Involvement in Biomedical Research? Fall 2005. Available at: http://www.fastercures.org/pdf/csci_one_year_later.pdf.
23. Peggy Fikac. Talk shifts to best way to pay for cancer plan; state can avoid interest by using direct funding. *The Houston Chronicle*. B, Pg. 1 MetFront, November 8, 2007.

ACKNOWLEDGMENTS

- ★ Ky Ash, Office of Texas Representative Jim Keffer
- ★ Cathy Bonner, President and CEO of the National Coalition for Cancer Survivorship
- ★ Shannon Dick, Office of Texas Senator Jane Nelson
- ★ Raymond DuBois, Provost and Executive Vice President, M.D. Anderson Cancer Center
- ★ James Gray, American Cancer Society in Texas
- ★ Billy Hamilton, former Texas Deputy Comptroller
- ★ Mark Moreno, M.D. Anderson Cancer Center
- ★ Dave Nelson, Office of Texas Senator Jane Nelson
- ★ Texas Representative Patrick Rose
- ★ Mireya Zapata, Office of Texas Representative Patrick Rose



VICTORY SPEECH



PO Box 161150
Austin, TX 78716-1150

LIVESTRONG.ORG