

The Man Who Changed Medicine

Mike Milken spent a year beating prostate cancer. He spent the next decade shaking up cancer research. Now thousands of men are living longer—and leaders everywhere are taking notice.

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The image on the oversized screen behind the podium was of a giant malignant tumor. The discussion was about prognostic indicators—doctorspeak for how much longer people with such tumors had to live. The prognosis wasn't good, with life expectancy measured in months, not years. The presenter's manner was cold, but it didn't matter: This was no hospital bedside but a roomful of physicians, gathered for a seminar on prostate cancer at Houston's prestigious M.D. Anderson Cancer Center. In the third row sat a tall, slight, unimposing man. The top of his middle-aged head no longer had hair; his eyebrows were thin. His nametag read dr. robert hackel, and all he could think about was how enormous the tumor looked onscreen. A tumor just like his own.

When the speaker, Donald Coffey, an esteemed prostate cancer expert from Johns Hopkins, was finished, Hackel made his way to the front. For 25 minutes he grilled Coffey on his presentation, asking technical questions about the research and its therapeutic implications. At what should have been the end of a friendly exchange between colleagues, Hackel turned to Coffey and said, "I am Mike Milken. I want to be cured."

Coffey knew the name. It was 1993, and Michael Milken, the once-highflying junk-bond wizard had, a few years earlier, been a familiar face in the newspapers because of his high-profile indictment on securities violations. Only two weeks before, in fact, Milken—now wearing a phony ID badge with his middle name and father-in-law's surname—had been released from prison, having served 22 months. Coffey was surprised not just by who his questioner was, but by the fact that he wasn't a doctor. His toupee gone and his toothy grin somewhat modulated, Milken seemed more like a veteran lab scientist than a desperate patient. He knew much about the biology of cancer.

It was only when Milken began to speak rapturously about turning prostate cancer research on its head and starting "a Manhattan Project for cancer" that the financier sounded a bit naive. A real physician would have known better, thought Coffey. "The truth was, at the time, there was so little research—or anything else—going on in the field [of prostate cancer], it was as if Milken was speaking in tongues," he says. Still, the good doctor listened politely.

Eleven years later many others are listening too. That's because Milken has, in fact, turned the cancer establishment upside down. In the time it normally takes a big pharmaceutical company to bring a single new drug to market, Milken has managed to raise the profile of prostate cancer significantly, increase funding dramatically to fight the disease, spur innovative research, attract new people to the field, get myriad drugs into clinical trials, and, dare we say, speed up science. Milken's philanthropy, the Prostate Cancer Foundation, formerly called CaP Cure, has raised \$210 million from its founding in 1993 through 2003 (the latest audited figures), making it the world's largest private sponsor of prostate cancer research.

That all-fronts effort, say numerous experts interviewed by FORTUNE, has been a significant factor in reducing deaths and suffering from the disease. The progress on this bottom line, in fact, has been stunning. In 1993 some 34,900 Americans died of prostate cancer; this year the figure is estimated to be 29,900,

despite the fact that the population has grown 11% since then. That translates to a 24% drop in per capita death rates. (The National Cancer Institute, which adjusts its figures to minimize the effects of the aging population, calculates the decline at 26%.) What makes the improvement all the more remarkable is that the incidence of prostate cancer rises markedly with age—70% of cases are diagnosed in men over 65, for example. And today there are 1.6 million more men over 65 than there were ten years ago. Indeed, the drop in the prostate cancer death rate is four times the decline in overall cancer rates during the past decade.

Cancer researchers, clinicians, and patient advocates rarely speak with one voice on any subject related to the disease. They fight over funding priorities; they squabble over treatment options; they joust over the relevance of biological discoveries. But virtually everyone agrees that Milken deserves an enormous share of the credit for the progress made against this major killer. "Mike's done more for prostate cancer research than anyone in America," says one of the nation's best-known prostate surgeons, Patrick Walsh, head of urology at Johns Hopkins. Across the country Mike Glode, a medical oncologist at the University of Colorado Cancer Center, doesn't even wait for the question. After hearing an offhand mention of the name, Glode offers, "Milken has done more to raise the visibility of prostate cancer than anyone else in the country." Phrases like "done more," "led the fight," and "saving lives" are thrown around with conviction. And almost nobody mentions his past.

"Michael Milken changed the culture of [medical] research," says Andrew von Eschenbach, director of the National Cancer Institute. "He created a sense of urgency that focused on results and shortened the timeline. It took a business mindset to shake things up. What he's done is now the model."

The Milken model, in a nutshell, is to stimulate research by drastically cutting the wait time for grant money, to flood the field with fast cash, to fund therapy-driven ideas rather than basic science, to hold researchers he funds accountable for results, and to demand collaboration across disciplines and among institutions, private industry, and academia. This philanthropic paradigm is spreading. The Juvenile Diabetes Research Foundation and the Cystic Fibrosis Foundation have each sought Milken's advice to juice up their grant-funding mechanisms. The Lustgarten Foundation for Pancreatic Cancer Research has directly modeled its research process after that of the PCF. And charities such as Project ALS, which fights Lou Gehrig's disease, and Michael J. Fox's foundation for Parkinson's, without consulting Milken's organization, have followed its lead by offering fast cash in exchange for collaborative research.

To be sure, Milken isn't the only business figure who has had a major impact on medicine. A growing cadre of the rich and powerful is embracing so-called venture philanthropy in the global fight against disease. Rather than just writing hefty annual checks to old-line charities, they are bringing their problem-solving skills and natural-born impatience to the fight (see *How Big Givers Are Shaping Other Quests for Cures*). Bill Gates is spending more than \$100 million to rid the world of malaria—and expects weekly e-mail progress reports from the scientists he funds. Lee Iacocca's foundation has been aggressive in finding and supporting some of the most creative diabetes research. Says Iacocca, who lost his wife to complications of diabetes 20 years ago: "I was going to spend a lot on [diabetes] education, but I changed my mind because what I really want is to lick this disease—I want a cure." Increasingly, says Stacy Palmer, editor of *The Chronicle of Philanthropy*, business-world donors have gotten fed up with the slow, tradition-bound world of medical research, where scientific breakthroughs can take decades to become treatments that people can use. These givers expect concrete results for their cash. They demand a return on investment.

None of these savvy donors, however, seems to have had a bigger ROI than Mike Milken. Indeed, when it comes to medical research, the old junk-bond king has rewritten the rules of investment.

Rudolph Giuliani is on the phone. The former New York City mayor and current GOP darling is gushing: "No one was really paying attention to prostate cancer before Milken. He is a pioneer and really created a movement," says Hizzoner. Then his voice hushes a bit as if to reveal a secret: "You know, we have a history."

Everyone knows the history. Giuliani, of course, the onetime prosecutor, got famous by putting Milken behind bars.

In the 1980s Milken was one of the most powerful men on Wall Street. He virtually created the market for the high-yield debt securities known as junk bonds. From behind an infamous X-shaped desk in Beverly Hills he dominated the market, matching the companies that issued the bonds with the banks and institutions that bought them. Milken amassed an enormous fortune as he built the firm he worked for, Drexel Burnham Lambert, into a powerhouse. To companies that couldn't find financing anywhere else, including small firms and minority businesses, he was a visionary. But the new financing had another effect, fueling a wave of hostile takeovers and mergers. Often, in this frenzy of corporate raiding, employees of older, struggling companies would suddenly find themselves out of a job. continued

And then, just as suddenly, it was Milken who was out of a job. A crusading prosecutor named Giuliani descended on Wall Street, promising to root out corruption. The first to go down was Ivan Boesky, a top arbitrageur who pleaded guilty to insider trading in 1986. Boesky fingered Milken, who four years later pleaded guilty to six counts of securities violations related to market manipulation. Milken served nearly two years in prison, paid some \$600 million in fines and penalties (plus hundreds of millions more in civil settlements), and was banned from the securities business for life. Not since the days of J.P. Morgan had any financier left so deep a mark on corporate America or stirred so many conflicting passions of support and contempt.

Some two decades after that rise and fall, it is hard to square Milken with the image of the legend. His presence is so understated that it seems almost wispy—he emanates what, for want of a better word, seems like contentment. Yes, he can still captivate a room, but he does it with a kind of buoyancy rather than overpowering charisma. He can come across as both relaxed and deeply passionate in the same breath. He still has a finger in a few businesses—but even there, his known ventures are of a lighter genre, having to do with education, wellness programs, and nutrition. He and his family have a large passive investment in LeapFrog Enterprises, for example, which makes educational toys. (The stock has dropped about 63% in the past 12 months.) Milken is notably reserved about his other public-company holdings.

His for-profit ventures, in fact, are the one topic that Milken seems loath to discuss. Otherwise, he is the Energizer bunny of talk. Milken has been known to speak, intelligently and off the cuff, for hours on subjects of personal interest—yoga, nutrition, cancer. In one interview with FORTUNE, he discoursed for four hours, barely pausing to catch his breath, and stopped only when an assistant yanked him away. "The day he came into my life it was like I hitched myself to the tail of a comet," says Stuart "Skip" Holden of Cedars-Sinai Medical Center, who became Milken's urologist 11 years ago and is now among his closest friends. "He is exhausting—physically, mentally, and emotionally exhausting."

It was cancer that reunited Milken with his old nemesis Giuliani. In 2000, soon after New York City's mayor was diagnosed with prostate cancer, he and Milken exchanged calls (they say they can't remember who dialed first). Milken offered health-care guidance and nutritional tips. They became fast friends. "He knew more than any doctor," says Giuliani. "I realize now that I didn't know him then. The man I now know is able to do tremendous things. He took the tremendous talent he had in business and is using it to fight prostate cancer. What more could you ask for?"

Milken has shared the same kind of foxhole camaraderie with an alpha list of fellow prostate cancer survivors: Senator John Kerry, News Corp. chairman Rupert Murdoch, Intel chairman Andy Grove, New York Yankees manager Joe Torre, General Norman Schwarzkopf, former Senate leader Bob Dole, and numerous others. For many prominent men, Milken is one of the first connections made after hearing they have the disease. And to hear the men talk about that first call, Milken seems to know just what to say. "He took the scare out of cancer for me," says Torre, now a close Milken friend.

Six-time Tour de France champion Lance Armstrong, who in 1996 was diagnosed with an aggressive form of testicular cancer that had spread to the lungs and brain and who would later make a miraculous recovery,

also holds deep admiration for Milken and what he has been able to accomplish. Armstrong met Milken at a luncheon in 1997—the same year he launched his own charitable group, the Lance Armstrong Foundation, to raise awareness about issues related to cancer survivorship. (The two argue jokingly over whose colored wrist band has been a more successful fundraising gimmick. Armstrong's foundation has sold 22 million neon-yellow livestrong bracelets, raising an equal number of dollars for charity. Milken's blue band has been worn by major league baseball players every June since 1996 for PCF's Home Run Challenge, an event that has raised more than \$20 million for cancer research.)

When Milken learned he had cancer in 1993, he had been home from prison only a few days. The disease had just killed his friend Time Warner chairman Steve Ross, so Milken asked his doctor during a checkup for a PSA test. The test measures a protein called prostate-specific antigen that is produced by both normal and malignant prostate cells. Very little of the protein leaks out of a healthy gland, so an elevated PSA (normal readings for most men range from zero to four) can be a red flag that warrants follow-up examination and often a biopsy. (To complicate matters further, some men have cancer despite low PSA readings. See box, "What You Need to Know About Prostate Cancer.")

The doctor told Milken, then 46, that he was too young for prostate cancer to be a threat and declined to give him the PSA test. Milken insisted: "Humor me—I can afford it." The test came back with a PSA level of 24. A biopsy revealed the worst. An MRI and other scans showed that the cancer had spread to his lymph nodes, though not yet to his bones. Surgery was unlikely to remove all the cancer. "He went around to all the best-known medical facilities in the country," remembers his wife, Lori, who has known Milken since the seventh grade. (He proposed their senior year in college in the front seat of his Ford Falcon.) "He talked to everyone, and his options were so limited," she says. Milken was given less than 18 months to live. One doctor told him to get his finances in order—it was the end. Two weeks later Milken showed up at the conference in Houston.

Back then, prostate cancer was a medical backwater. Cancer research, like any academic field, has its hot topics where all the government and private research money tends to go. And while prostate cancer is fairly common—one in six American men will eventually develop it—the field got little attention and even less funding during the 1980s and early 1990s. "I've been in this a long time, and there was just nothing going on," says Holden. "We were," he adds, pausing to find the word, "struggling." George Wilding, director of the University of Wisconsin Comprehensive Cancer Center, calls the academic environment then "dismal, dismal, dismal." When Wilding, a medical oncologist, left breast cancer research in 1988 to study prostate cancer at Wisconsin, the National Cancer Institute awarded only a handful of research grants related to the disease, he says. Things stayed that way for years. For newly minted MDs and Ph.D.s, studying prostate cancer was risking career suicide. "When I realized there was so little funding for prostate cancer, all I could think was that maybe, scientifically and career-wise, I'd made a mistake," says Wilding. Von Eschenbach, a longtime practicing urologist at M.D. Anderson before his appointment to the NCI in 2000, has a similar memory: "We were this quiet corner no one wanted to be associated with."

It wasn't that the cancer community didn't care that tens of thousands of men were dying. Oddly, the problem was nearly the opposite: People diagnosed with prostate cancer often took a long time to succumb to it. While the cancer spreads quickly in some—predominantly younger—men, others get the disease late in life and die from other causes before the malignancy has a chance to spread. Ironically, such long periods of latency make research difficult and major breakthroughs few and far between.

The extraordinary variance in outcome also led to markedly different approaches to treatment. Clinicians argued ferociously about who was a candidate for radical surgery, or radiation, or "medical castration" with hormone injections, or combinations thereof. There was almost no agreement on a course of therapy—or whether even to treat some cancers.

With little money available, the field could not attract young physician-scientists to energize research and parse the clinical data. And without exciting research advances, it was hard to attract more money. The study of prostate cancer had virtually stalled. "People were afraid to try anything," says Howard Scher,

chief of genitourinary oncology at Memorial Sloan-Kettering Cancer Center in New York City. "There was such nihilism in the field."

Adding to the cloud was the frustrating reality that the grant process took years. Applying for federal money had become a science unto itself. Proposals for NCI research funds to study a disease are ranked by a committee of top researchers in the field. But too often in the early 1990s even prostate cancer projects that scored well in the vetting process still fell short when the time came for actual funding. In 1990, for example, there were six times as many grants awarded for the study of breast cancer as there were for prostate cancer. "We were starving to death before Mike came along," says Coffey.

Another major barrier was public awareness. The disease had no spokesman—no face. By the early 1990s, in contrast, women had turned breast cancer into a powerful social and political movement. Women with the disease, including former First Lady Betty Ford, were going public with their diagnoses and successfully stirring up support, awareness, and funding. For men with prostate cancer, the story couldn't have been more different. They hid. The disease, which seemed to suggest some black mark on a man's virility and sexual prowess, was not something one discussed publicly. (When Andy Grove candidly detailed his own bout with prostate cancer in a May 1996 FORTUNE article—Taking On Prostate Cancer, the personal revelations struck a powerful chord with readers.) Sickness was seen as a weakness.

Milken told his doctors at Cedars-Sinai Hospital that he wanted an aggressive course of treatment to clear any malignant cells from his lymph nodes and prevent their spread to the bones. That meant hormone therapy, which consists of giving patients estrogen or an "anti-androgen" drug—both of which interfere with the production of testosterone, a male hormone that prostate cancer cells require to proliferate. For months Milken took two pills three times a day, plus a monthly injection. When that was over, he underwent eight weeks of radiation therapy. On his own Milken decided to change his diet radically to one virtually devoid of fat. And as a supplement to Western medicine, he added meditation, sesame-oil massages, aromatherapy (he believes that certain aromas can invigorate the body's immune system), and yoga. "No one had embraced the force, as George Lucas would refer to it. Mind over matter—so I immediately set out on that path too," says Milken, only half-jokingly. "I didn't want to discount anything." His PSA soon dropped to zero. He was in remission.

"I believe ...," begins Milken, sitting at a giant conference room table in his foundation's sleek Santa Monica, Calif., offices. Before he can finish the thought, he is interrupted by Gus, his personal chef. Dressed in white chef's gear, minus hat, Gus brings him a deep-red pomegranate-flavored soy shake atop a small silver tray. A self-proclaimed former junk-food addict, Milken is now obsessed with nutrition. He starts each morning with a shake—a mix of antioxidants including brewed green tea, lemon zest, vitamin E, and a micronutrient called genistein that is found in some soybeans—and insists that everyone should try it. (It tastes like fruity foam.) Rupert Murdoch is supposedly hooked on the shakes now, and Joe Torre drinks one in the fifth inning of every Yankees game. The recipe is culled from nutritional and cancer research, often conducted by scientists the PCF has funded.

After a swig of the shake, Milken continues: "I believe the person who waits for 110% of the facts to be in and all the information is a person who is probably not alive—because it's too late for him. A lot of businesspeople have been forced to make decisions without 100% or perfect information but based on what they know. I worked in a field where ten seconds was a long decision process. Either you're buying the securities or you're not. Either you're selling them or you're not. Now people said, 'Well, gosh, that's a short period of time,' and I say, 'No, it's not.' I've prepared my entire life to make that decision. I think getting off that inertia of making a decision qualifies well in building something."

Inertia is exactly what Milken found with the cancer community in the early 1990s: Researchers were swimming in data and theories, but nobody acted. Milken traced much of the paralysis to the government-funding mechanisms that fuel scientific discovery. The process of getting research grants is convoluted and counterproductive. Just gathering enough data and background research to apply for an NCI grant can take a year or more. (The applications and supporting data often run hundreds of pages.) Add another year for the government's review process. And throw in another year, perhaps—depending on the federal budget

cycle—to allocate the money. At the end of the ordeal, funded researchers are locked into their proposed study topic. Trouble is, in three years science has often passed the ideas by.

Great "investment" opportunities—investments in science that could pay off in lives saved—were being lost. Milken, who'd already donated millions of dollars since 1982 through his medical and educational philanthropy, the Milken Family Foundation, realized that "just giving money was no longer enough." What the cancer establishment really needed was a completely different approach for generating promising research.

The answer, he decided, was to streamline the grant application process. So the PCF put out an open call to cancer scientists to submit their most innovative and unconventional proposals. "We asked people to give us ideas they dream about rather than the safe ones that they thought they could get funding for," says Howard Soule, the PCF's chief scientist, who oversees the grant process. Better yet, it wasn't going to take long to apply—the form was only five pages long. The reward was something few cancer scientists had ever known. If approved, they'd see the money—outright gifts ranging from \$75,000 to \$150,000—in 90 days.

There was a catch, however. Scientists who received PCF money had to learn to share. The lone requirement of the gifts was that the beneficiaries had to present their findings at Milken's annual scientific meeting before their peers, competing institutions, and even private industry—and they had to do it in one year's time, often before they'd had a chance to publish the findings in a medical journal or to patent a new compound. It was a rule that many researchers, forever protective of their ideas and experimental data, initially balked at. The PCF received only 85 grant applications the first year. But in a time of strained federal budgets, the chance for funding proved too good to pass up. Doctors and scientists began applying in droves. By 1994 there were 200 applications, and a year later the PCF was getting 600 grant requests. "We weren't used to sharing," says Eric Klein, head of the urology department at the Cleveland Clinic. "Milken really fundamentally changed things. [PCF] funding is now a badge that people wear proudly."

The fast cash and long leash have not only proved to be a researcher's dream but also are getting results for people suffering from cancer. In 1998, Julian Adams, a chemist, had what he thought was a good discovery—a proteasome inhibitor that he suspected could kill cancer cells. But ProScript, the cash-strapped biotech company where he was a researcher, was on the verge of going under, so he was desperately hunting for funding. "I had a theory and no clinical data. A lot of people thought I was crazy," admits Adams. "But sometimes ideas need to be tested instead of finding reasons to kill them."

His research caught the attention of renowned prostate cancer specialist Christopher Logothetis at M.D. Anderson. After teaming up, the researchers met with Milken and Soule in spring 1998. "They got it—there was no convincing," says Adams.

Sixty days later they had a check in hand for \$75,000, enough to fund a small Phase 1 clinical trial. (The PCF does not award grants to scientists in private industry, so Adams worked out of Logothetis's lab.) By October 1999 the researchers began to test the agent in cancer patients. Five years after PCF's initial funding, Adams's proteasome inhibitor, now called Velcade, was approved by the FDA for use in multiple myeloma, a cancer of the blood, and U.S. trials evaluating the combination of Velcade and chemotherapy for advanced prostate cancer are underway. "That PCF funding was pivotal," says Adams. "The drug might have been shelved like so many drugs. But we started a whole clinical program an entire year sooner than we thought. It kept our company alive and probably saved the drug." (That extra year allowed ProScript to be acquired by Millennium Pharmaceuticals, which used the clinical trial to secure long-term research funding for Velcade.)

Because the Prostate Cancer Foundation prefers to focus on initial funding, its money has touched some 1,100 projects, which means it has a piece, even if a small one, of most of the substantial work going on in prostate cancer today. If the PCF were to own the projects it has been affiliated with over the past decade, the products that have resulted from research it has funded would make the foundation the third-largest

biotech company in the world, analysts say. But Milken's group, unlike either drug-company or even academic sponsors, keeps nothing. "We weren't looking to build a company. We were looking to solve the problem," says Milken. "Our goal is to go out of business."

Cancer is caused, it is thought, when critical genes involved in the cell division cycle are mutated, throwing cellular development out of whack. Cells not only ignore their instructions to die at appropriate times, but also fail to do the jobs they have evolved to do. In the early stages it is often hard to tell that anything is wrong. Most cases of prostate cancer, for example, produce no symptoms. (A tumorous gland can become abnormally firm, but that is generally detected only by a doctor doing a digital rectal exam, or DRE.) That silent quality can be its deadliest. If prostate cancer is unchecked, it can—though it doesn't always—spread to more vital organs, including the lymph nodes and bone.

In Milken's case, the cancer had been caught just in time—by a fluke. (His doctors say it could come back; in patients who undergo hormone therapy the cancer often returns as much as ten or 15 years later.) But too many other men weren't even conscious of the threat. Here, the paramount problem wasn't the sclerotic pace of research, but a lack of public awareness. Even worse, those most at risk—African-American men—often have no idea that they are 65% more likely to develop prostate cancer than white men. They are also twice as likely to die from the disease.

Milken knew exactly how to get attention. Just weeks after finishing his own treatment, he flew to Washington and knocked at the door of Kweisi Mfume, who was then an outspoken Congressman from Maryland and head of the Congressional Black Caucus. Milken had never met Mfume. But when the two men sat together in Mfume's office in the Rayburn building, Milken made his pitch for political support for his fledgling cancer foundation. He was so impassioned that the Congressman, who is now president of the NAACP, worried that the financier was going to "break down into tears at any moment," he says. Milken concedes as much: "Mfume told me he had to say yes because he didn't want me crying in his office," says Milken with a laugh. "I admit it, I am passionate. But when you're passionate you can do anything."

Over the next several years Milken did whatever it took to put prostate cancer on the public's radar. In late 1993 he hosted a gala in the U.S. Capitol Building and invited powerful members of Congress and celebrities to mingle with leading doctors and researchers. The idea was to make prostate cancer research "sexy." And it was so popular that it became an annual star-studded affair. (Last year's gala at the Waldorf-Astoria, hosted by Whoopi Goldberg, included a private concert by Cher, attracted 1,100 people, and raised more than \$5 million.)

In large measure, Milken was doing what he always did—working his connections and pulling the levers of power to get things done. In the world of medical research, such moves had a surprisingly dynamic effect. Lee Hood, for one, could barely believe it.

Hood was a leading molecular biologist at the University of Washington in Seattle, who, among other achievements, had invented the DNA-sequencing machine—a device critical to the mapping of the human genome. And in 1995 he was one of many researchers searching for a gene related to prostate cancer. (A few years earlier the first gene connected to breast cancer had been discovered.) The easiest way to narrow down the universe of possible culprits—there are an estimated 20,000 to 25,000 human genes—was to study the families of men suffering from the disease. Tracking down families willing to be studied, however, was difficult and time-consuming. It had taken ten years for Johns Hopkins to recruit a mere 90 families on a similar hunt related to prostate cancer heredity.

When Milken heard about the problem Hood's group faced, he nonchalantly suggested that the researchers just go on CNN and make their case. There was a collective "Yeah, right" whisper among the researchers. "It was ridiculous," Hood remembers thinking. "Who ever heard of going on a program like Larry King and making an appeal for a disease?" But then, Milken was partly responsible for CNN's very existence, since Ted Turner had used junk bonds in the 1980s to fund Turner Broadcasting and its all-news network. That same year Milken had served as a consultant to Turner when he sold his company to Time Warner

(FORTUNE's parent company), a deal that had made founder Turner billions of dollars richer and a vice chairman at the world's largest media company. Getting airtime on CNN? Well, to Milken that sounded possible.

So after Milken made some calls, the researchers, as Hood says, "got dressed up and had an hour on Larry King." The entire show was devoted to prostate cancer and included an interview with newly diagnosed Norman Schwarzkopf; the general appeared as a favor to his friend Milken. When the show asked for study volunteers, more than 3,000 people called in. In just three weeks researchers succeeded in building a sample of 300 qualified families. "Michael is always thinking creatively," says Hood, sounding like a convert. "He transformed how you do research in the field of prostate cancer and how you think about aggressively going after a disease. It has been a real revolution."

After analyzing the DNA from those families recruited from the Larry King show, scientists have been able to identify a few genes that appear to be involved in the development of prostate cancer. Treatments related to this discovery, however, are at best years away. (In 2000, inspired by Milken's collaborative approach, Hood left the University of Washington to found the Institute for Systems Biology, a group of biologists, mathematicians, chemists, and technology experts who are working together to study how genes can be used to prevent disease.)

As much as can be done with the participation of human study subjects, most cancer research involves spending hours looking at cells under a microscope. The cells, put onto slides, come from tissue specimens—that is, from ultrathin slices of tumors. Amazingly, though, in the mid-1990s there was no standard procedure for gathering, categorizing, and storing human tissue specimens. None of the cancer centers, government labs, or universities had ever bothered to set up a protocol. Milken couldn't believe it. So in 1995, PCF held what it grandly called a "Tissue Bank Summit" with four of the leading prostate cancer research hubs: M.D. Anderson, Dana Farber Cancer Institute in Boston, the University of Washington, and Washington University in St. Louis. The four centers (joined later by the University of Michigan) not only came up with common rules regarding the specimens but also agreed to coordinate efforts.

The next step was getting big medical institutions to work together in setting up major clinical trials that often require the participation of hundreds or even thousands of patients. The PCF brought eight leading centers into a therapy consortium and provided lots of funding (\$3.2 million in the latest year). Milken also enlisted Oracle CEO Larry Ellison to link (for free) the computer systems of the participating hospitals so that researchers could check on patient data across institutions. Again Milken's lone rule applied: The hospitals would have to share what they learned with one another. It was a no-brainer of an idea. Only thing is, nobody had ever done it before.

In that same busy 1995, Milken had another major brainstorm. He noticed that, astoundingly, no one had ever tried to harness the enormous political power of the millions of Americans with cancer and their families. So he began to pull every lever he could to generate a mammoth march on Washington. Organizing the march would take him and other cancer advocates a full three years. There were many hundreds of cancer organizations to pull together, from giant charities like the American Cancer Society to smaller advocacy groups to specialized medical societies—all agitating for their own research agendas. The march became an effort to get this fragmented community to speak with one voice.

Milken and Sidney Kimmel, chairman of the Jones Apparel Group, donated most of the estimated \$10 million it took to pull off the 1998 event, which included demonstrations in 200 cities. Six hundred organizations joined the effort, and more than 150,000 cancer survivors converged on the Washington Mall. Against doctors' orders, King Hussein of Jordan, who would lose his battle against cancer within the month, flew from the Mayo Clinic to take part in the march but ended up too sick to leave the VIP tent. His wife, Queen Noor, spoke to marchers instead.

The 1998 march is credited with ushering in a period of expansive funding for cancer research. In the five years since, Congress has increased funding of the NCI by nearly 70%.

It takes a long, twisting drive up Mount Rose to get from the Reno airport to the Hyatt Regency on the shores of Lake Tahoe, 6,800 feet above sea level. Winter weather always comes early to this famed Nevada hideaway, and when it does heavy snow packs the banks of the highway and ice freezes the pavement. Scientists, it seems, get a little giddy at this elevation.

In October hundreds of them gathered here for the PCF's scientific retreat, an annual confab of heady science talk and mingling, focused on the newest of the new in prostate cancer. If there is one gauge of Milken's reception in the cancer community, it is this invitation-only event, which top doctors and scientists rarely decline and which drug company emissaries fall all over themselves to attend. There are so many back-to-back-to-back presentations in the four-day lineup that the organizers have squeezed out all the bathroom breaks. A urologist joked this year that prostate cancer researchers have been evolutionarily "selected" based on the size of their bladders.

Some top doctors clearly wanted to rub elbows with Aaron Ciechanover, the Israeli researcher who had just won the 2004 Nobel Prize in chemistry for his work on the way human cells break down protein—and whose research has been funded by the PCF since 2002. Some shimmied over to Intel chairman Andy Grove. (In past years Nobel Prize-winning economist Gary Becker was the celeb du jour—the guest list invariably includes top thinkers from nonscientific disciplines.) But the biggest draw is Milken himself. He has become a godfather of sorts, and the retreat has become a medical reincarnation of his annual Predator's Ball, the lavish deal-spinning Beverly Hills dinner he hosted during his reign as the junk-bond king.

Discussions often grow lively as speakers are grilled by peers and competitors. Somehow, say many veteran attendees, the meeting elicits an energy that other research gatherings don't. The marathon sessions are standing room only, and few of the scientists seem to realize that one of the most beautiful views in America—snow-blanketed mountains surrounding a prehistoric lake—is just on the other side of the window shades. "It is fantastic. I had tears in my eyes the first time I went," says Adams, who has attended several times since Velcade's PCF grant in 1998. "It is like this think tank where you can meet all the right people. You can't help but feel this urgency and go back to the laboratory and work even harder."

Milken himself seems to feel this urgency on an ever-growing number of fronts. He doesn't get much sleep, his wife, Lori, says, because the telephone is always ringing. "People call him all the time with their medical problems—not just for prostate cancer, but other diseases or other types of problems," says Lori. "He takes everyone's calls."

Milken's latest push is to have medical records unsealed (names would be replaced with numerical codes to protect patients' privacy) so that researchers can cull for trends among millions of medical histories. Currently a slate of regulations called HIPAA, enacted by Congress in the mid-1990s to protect patient privacy, makes such a practice impossible. (Indeed, the rules are so imposing that it can be difficult for doctors running clinical trials to gather information even from their own willing patients.)

Stripping medical records of patient names, however, and then streaming the information into a giant medical database is one obvious and inexpensive way to let doctors and scientists search for common markers of disease. To Milken, who once used historical stock market data archives to broaden his understanding of debt financing, the concept is again a no-brainer. Forget prostate cancer—just imagine what that could mean to all medical research!

That's the kind of extrapolation he's been making far more often these days. Last year Milken launched a Washington, D.C., think tank called FasterCures, whose aim is to accelerate the search for medical cures to all major diseases by examining (and, if necessary, changing) public policy, government regulation, and weaknesses in technology that might be holding up science. For starters, the organization is focusing on regulatory and cultural bottlenecks related to five common diseases—Alzheimer's, breast cancer, epilepsy,

prostate cancer, and juvenile diabetes. The notion is to take lessons learned in these "case studies" and apply them to all medicine. Milken recruited Gregory Simon, who was chief domestic advisor to Vice President Al Gore on economic, science, and technology issues, to FasterCures, and has brought other big thinkers to the board—including Nobel laureates Becker and David Baltimore, president of the California Institute of Technology. And to give himself more time to devote to this latest passion, Milken has handed over day-to-day oversight of the PCF to Leslie Michelson, who recently ran Acurian, a company that recruits patients for clinical trials.

If Milken's work with prostate cancer is any indication, the path to faster cures everywhere is almost devilishly simple. There are four key elements: Improve the technology ("If we give cancer researchers the same kinds of tools that technology companies employ, we can find a cure faster," he says); rewrite the dumb policy; let scientists think big thoughts instead of spending their days begging for money; and, finally, require everyone to share what he's learned along the way. "I kind of view it as a relay race, with four runners," he says. "Everyone thinks of these types of things as sequential, and my thought was, Why can't we just start all four relay runners simultaneously? Maybe the fourth runner is only walking, and the second runner is sprinting, and the third is jogging. But at least get them all going."

Get them all going indeed.