

Forever Begins With elegant WEDDING

**SUBSCRIBE
ON-LINE**

CITYMAGNET

BOSTON



Mar. 26, 2002

Boston Magazine



SEARCH ARCHIVES

[Subscribe](#)

[Media Kit On-line](#)

[Restaurants](#)

[Best Of Boston](#)

[Best Places to Work](#)

[Best Schools](#)

[Best Places to Live](#)

[Top Docs](#)

[Power List](#)

[On the Town](#)

[Letters To The Editor](#)

[The Short List](#)

[New Issue](#)

[Personals](#)

City of Hope

By Doug Most

Alzheimer's, cancer, diabetes — we almost accept them as life's course. But in Boston, which gets more funding than any other city for medical research, doctors are not simply making breakthroughs in curing these diseases. They're leading the race.

Picture your body as a library filled with millions of books. Imagine that somewhere on one of those shelves is a book you need, somewhere in that book is a page you need, and somewhere on that page is a single word with one misplaced letter.

Now go find that letter. Starting at the front door to the library.

If that sounds daunting, welcome to the challenge faced by today's doctors, scientists, and researchers as they chase after the elusive origins of diseases. Hidden somewhere in the maze of the human makeup is a flawed gene, a diseased cell, something molecular that's gone haywire and caused Alzheimer's disease to start forming, diabetes to evolve, or cancer to emerge.

Medicine has come a long way since the days of the 18th-century French philosopher Voltaire, who once said: "The art of medicine consists in amusing the patient while nature cures the disease." Nature isn't finding a way to regrow severed spinal cords, or cut off the blood supply to cancerous tumors, or pinpoint the gummy protein in the brain that may cause permanent memory loss. And nature certainly isn't developing artificial hearts or looking for a way to administer a patient's medicine through a chip implanted in the body that releases the prescribed doses at the exact moment they're needed.

All of these advances are happening now, and all are happening here in Boston, which might explain why 200,000 people come to this city each year for medical care. As any good scientist knows, the numbers don't lie.

Boston ranks first among all cities in the nation in research funding from the National Institutes of Health (NIH), receiving \$1.1 billion in 2000. Among states, only California — 20 times larger than Massachusetts — got more research money. A breakdown by hospitals shows an even greater dominance. The five independent hospitals that received the most NIH support in 2000 are all in Boston.

As Mark Stern, NIH spokesman, jokes: "The only grant they don't know in Boston is Ulysses S."

[Social Datebook](#)**[Ad-Link](#)****[Coming Up](#)**

These are remarkable times in medicine, starting with the Human Genome Project, the impact of which doctors say cannot be overstated. "For NIH funding, this is the best it's been in 30 years," says Dr. Jeffrey Drazen, editor in chief of the *New England Journal of Medicine*. And Boston-area scientists are in the forefront. If cancer is one day contained, Dr. Judah Folkman's groundbreaking work at Children's Hospital is sure to be largely responsible. If a once-paralyzed patient walks again, it might very well be the result of Dr. Clifford Woolf's research at Massachusetts General Hospital. If the skyrocketing number of people diagnosed with Alzheimer's finally slows, Dr. Dennis Selkoe at Brigham and Women's Hospital seems as likely as anyone to be a key contributor, just as Dr. Denise Faustman at Massachusetts General Hospital is closing in on a cure for Type 1 diabetes.

Of course, for every study that touts a breakthrough, another yields disappointing results, serving to remind both doctors and their patients just how stubborn certain diseases can be. The optimism of late in Alzheimer's, cancer, and diabetes research, for example, is not being felt in the AIDS community. "We haven't turned the corner yet in AIDS," says Dr. Ronald Desrosiers, director of Harvard University's New England Regional Primate Research Center. "I think some of the reports have blown results out of proportion and given false hope. I don't see the hope."

Therein lies every scientist's quandary: how to announce with great fanfare the results of a new study while maintaining some sense of humility and not offering premature hope that a cure is near. It's the reason scientists and doctors shun the word "cure," preferring "treatment" or "containment." Nevertheless, with research funding at record levels, breakthroughs are occurring more frequently than ever. And no city is contributing more to that pace than Boston, where 40 percent of the workforce is involved in healthcare.

This month, we take the pulse of the medical breakthroughs coming out of Boston-area labs and making worldwide headlines. We also bring you our annual list of the city's top doctors. This year's method for compiling the list was slightly different from that used in the past. As usual, we surveyed hundreds of doctors, asking, in various specialties: To whom would you refer a loved one who was sick? But we also asked the same question of the people who work closest with doctors: more than 500 Boston-area nurses, members of the Massachusetts Nurses Association.

List in hand, we checked the background of each doctor against the physician profiling system of the state Board of Registration in Medicine. As we discovered last year, this method is not always foolproof—the system failed to show that one of the doctors had been issued "letters of concern" by state investigators because of negligent record-keeping — but it is at least a gauge. Most, but not all, doctors on the list are accepting new patients at the time of publication. Some are so besieged by requests from prospective patients that they decline to make new appointments in the weeks after this issue comes out.

Patients, after all, know that it's the doctors who will one day cure their ills — not nature, as Voltaire declared — and that the cures are getting closer than ever.

Or, as Dr. Lindsay Farrer, chief of Boston Medical Center's renowned genetics program, puts it: "We've gotten to the right book."

Alzheimer's Disease**Brain Main**

Fighting a disease that affects four million Americans, Dr. Dennis Selkoe may have the key to unlocking a century-old mystery.

Seventy-six-year-old Robert Tobin had finished packing for a reunion of his Air Force buddies in St. Louis three years ago when he went downstairs to watch television in his home in West Roxbury. His wife, Janet, suggested that he go to bed; their flight was leaving early in the morning, she reminded him. "Where are we going?" he snapped. St. Louis, of course, she said. She should have told him earlier, Tobin told his wife. He would have packed.

"That was the first time I realized something was wrong," says Janet. "It was frightening."

Alzheimer's is an agonizing disease to witness, like watching a light slowly dimming and knowing it's only a matter of time until darkness settles in. It affects four million people in the United States, a number that's expected to triple by 2050 as the population grows and medical advances in other areas help people live longer. "We are in an epidemic," says Bill Thies of the Alzheimer's Association. And with the likes of former President Ronald Reagan deteriorating from the disease, the stakes have been raised in one of medicine's greatest chases. An increasing number of scientists are tracking a variety of leads, sometimes directly at odds with one another.

Leading the charge is Dr. Dennis Selkoe, 58, a Harvard neurologist and codirector of the Center for Neurologic Diseases at Brigham and Women's Hospital. His breakthroughs, and those of others in recent years, have helped pinpoint exactly where Alzheimer's might get its start, a theory that, if confirmed, should help doctors diagnose it earlier, and help preserve patients' memories. "We think we know how Alzheimer's begins, 20 years before you get your first symptoms," Selkoe says. "Now we think we know what kind of drug we'd use to block it." After years of sitting helplessly, experts, including Selkoe, predict that one drug, and possibly several, will reach the market within a few years that will slow and even prevent a disease once considered invincible.

"I don't like to say we're going to cure this disease," Selkoe says with a cautious tone. "We're slowing it down. We're going to blunt it."

Every person suffers memory lapses. But people with Alzheimer's never remember, forgetting their grandchildren's names, their own birth dates, what they ate for breakfast. Janet Tobin says her husband's personality hasn't changed, that he has his good and bad days. He remembers his children's names but sometimes forgets his grandchildren's. He remembers his grandson is in the military but forgets what branch. When the couple hosted parties, Janet Tobin says, he would remember every person's drink. Now he can't even remember hers. "It's the most common cause of human mental failure," Selkoe says.

Like the disease itself — which progresses slowly — research to cure it has crawled along since Alzheimer's was discovered in 1906 by German neuropathologist Alois Alzheimer. Because the first patient diagnosed died at 55, and doctors linked her death only with a few other patients who also died before reaching 60, Alzheimer's was not seen as widespread. That soon changed as treatments including vaccines and antibiotics became popular and the average life span grew. In the 1960s, doctors started noticing a huge jump in cases of senile dementia. Only then did they put the two together and realize that Alzheimer's disease is simply one form of senile dementia.

The controversy lies in the question of what exactly causes Alzheimer's. Selkoe believes that too much beta amyloid, a sticky protein secreted by cells, eats away at the brain, a phenomenon analogous to cholesterol weakening the walls of blood vessels over time. That beta amyloid was central to Alzheimer's became evident to him in 1982. "The more I studied this protein," Selkoe says, "the more I recognized

it was at the root of Alzheimer's."

Others point elsewhere in the brain, at molecules they say change shape once struck by a chemical imbalance, and twist like pretzels until the nerve cells housing the molecules shrivel up and die. They're focused on finding a way to prevent the entanglements and save the cells.

It's a fierce battle, with nearly \$600 million in research funding at stake. Bristol-Myers Squibb has already started testing a compound using a method developed by Selkoe and his team that might block the beta amyloid protein. Another hope, a vaccine made by the Elan Corporation, has so far been shown to be safe in humans but is only now being tested for improvements in memory or cognitive abilities.

Whether Selkoe is right or wrong, his theory has launched a scientific frenzy to find the faulty genes that cause the brain to begin deteriorating. It's taken two decades, but now scientists think they've at least narrowed it down to those two theories — that Alzheimer's is caused either by the sticky protein outside the cells or by the tangled web of molecules inside. If any of the drugs being tested on volunteers prove successful at slowing or stopping the spread of the beta amyloid protein, Selkoe will have his proof.

As with all experimental treatments, the biggest concerns about this lie in the potential side effects. The drugs may slow Alzheimer's, and the principle behind the drugs may be applicable to other neurologic diseases including Parkinson's and Huntington's. But what else will they do to the brain? No pill or vaccine will reach the shelves before that question has been answered, and in the meantime a sad trend continues: Roughly half of all nursing home beds in the country are filled by patients with some form of dementia.

Diabetes

Sweet Dreams

Having reversed a form of diabetes in mice last year, Dr. Denise Faustman now wants to test her possible cure on human volunteers.

Bleary eyed and messy haired, nine-year-old Ben Rosenthal is perched on a stool in his kitchen. He opens a black, wallet-sized packet, pulls out a device, pricks his finger, and leaks a drop of blood onto another small mechanism. It spits back a number: 324. Breakfast will have to wait.

The readout indicates his blood-sugar level, the number that rules the life of every diabetic. For a normal person, the level is usually about 100. Ben's is typically closer to 150. This morning it's abnormally high, explaining the sluggish behavior of a nine-year-old on the day after he got a new stereo for Christmas.

Diagnosed at 14 months with Type 1 diabetes — also known as juvenile diabetes since most cases occur in patients between the ages of 10 and 16 — Ben now walks around with a tiny needle in his belly attached to an insulin pump he carries in his pocket. Still, he says, "I don't feel different than other kids. It's not that big a deal."

But mention the name of Dr. Denise Faustman, the director of Massachusetts General Hospital's immunobiology laboratory, and Ben lights up. Faustman and her researchers, working out of a lab at the Charlestown Navy Yard, managed for the first time last year to reverse Type 1 diabetes in severely hyperglycemic mice. As a surprise bonus, the scientists found that the mice automatically regrew healthy insulin-producing islet cells, another first.

Ben has never met Faustman, but the fourth grader, who has already suffered three diabetic seizures, knows what she's doing through his mother, Susan Williams. Sitting on his stool, he asks her: "Why can't they test it on a person?"

Patience, Ben. That may not be far off, maybe even sometime next year.

"Denise's work is remarkable, but I try not to get too excited," Williams says. "I've heard for a decade that a cure is around the corner."

Whether the therapy Faustman has given to her lab mice will work as well on humans is, of course, the next big question, and even Faustman is unsure. What is known about diabetes — a leading cause of blindness, kidney failure, and complications that necessitate amputation — is that even early diagnosis, as in Ben's case, does little if anything to help patients beat it in the long run. Diabetics still must live their lives hampered by daily insulin injections. "It treats the complications," Faustman says. "But it's a miserable lifestyle. It's not a cure."

The white blood cells of people with Type 1 diabetes attack the insulin-producing islet cells of the pancreas. Finding a way to modify the attacking cells before they do too much damage and replacing them with healthy islet cells has been the challenge for researchers trying to help people who have the disease.

"The way we got rid of the white blood cells in the mouse, we think we can get rid of them in humans the same way," says Faustman. "We're trying to develop a therapy that will kill off the cells that are bad, and that look bad."

That therapy for the mice was a 40-day course of injections with a drug compound known as CFA. It sparks a process in which diseased autoimmune cells in the body die off. The drug worked in the mice, and Faustman was thrilled. But she thought it had solved only half the problem, since the body would likely produce more defective cells and continue its assault. She and her team were about to transplant healthy islet cells they had grown when they made a shocking finding. Adult stem cells had taken over and regrown as, Faustman says, "beautiful islets."

She says the process took 40 days and worked in 80 percent of the mice. "We didn't predict that," she admits.

Faustman's work has concentrated on curing Type 1 diabetes, which accounts for about 10 percent of all cases. It's unclear if it will also help Type 2, or adult-onset diabetes, which typically occurs after age 40 and can be contained with exercise and a healthy diet. But she's especially optimistic because she thinks her findings may help fight other autoimmune diseases, those in which the body attacks itself, including lupus, rheumatoid arthritis, and multiple sclerosis.

That's exciting news for women, given that they are most often the victims of autoimmune diseases. Of roughly 8 million people stricken with autoimmune diseases, 6.7 million, or more than 80 percent, are women.

For now, though, Faustman will stick strictly with diabetes.

"I think if you can detect the disease reliably in humans, you can treat the defects reliably," she says.

As for when she hopes to begin widespread testing on humans, she says it's all a matter of getting funding and Food and Drug Administration clearance. "Getting volunteers is not the problem," she says.

There's already one nine-year-old boy just waiting for the chance.

Cancer

Divide and Conquer

A pill called Gleevec and a doctor named Folkman are two reasons why cancer is more likely to be cured here than in any other city.

Forty tumors in his stomach. If that's not a diagnosis for death, what is? Ken Garabadian had survived kidney failure, lung problems that hampered his breathing, and a perforated bowel, but his fast-spreading gastrointestinal cancer seemed certain to take him from his wife and two grown kids just as he turned 50. That was July 2000.

A few dozen orange pills and a month later, and the cancer was erased. "We went home and cried our eyes out," says Garabadian, who lives in Bellingham.

That pill was Gleevec — which was first developed and tested nine years ago by a young Oregon physician-researcher named Brian Druker, who believed in its potential and had to convince skeptical drug companies. Gleevec's emergence last year from the labs at Dana-Farber Cancer Institute and Novartis Oncology was the breakthrough many in cancer research are saying might finally lead to widespread advances against dozens of the most deadly cancers.

Of course, nothing will happen easily or quickly. "Cancers are probably going to fall a few at a time," says Dr. Edward Benz, president of Dana-Farber. He cautions against raising false hope among patients as a result of breakthroughs such as Gleevec. "It's not a perfect drug," he says. "Some tumors have developed a resistance to it."

That's why scientists say cancer must be attacked from many angles, not just one. That's certainly happening in Boston, where Harvard researcher Dr. Judah Folkman, director of the Surgical Research Laboratories at Children's Hospital, has become a legend. Those who follow the progress of cancer killers say there's no denying that if the disease is one day contained, Folkman will deserve the lion's share of the credit. He was the first to suggest that tumor cells grow, gain strength, and spread by recruiting their own blood supply — a process called angiogenesis — and that cutting off that blood supply and starving cancer cells could control the disease. The first four angiogenesis inhibitors for cancer were developed in his laboratories; today, there are 24 in trials around the country. In Boston alone, more than 40 labs are studying angiogenesis treatments, and Folkman, who turns 69 this month, participates in a regular angiogenesis meeting in the city every few months. "It grew up here," he says, strolling the halls of Children's Hospital. Just last month, Beth Israel Deaconess researchers announced they had unraveled how a critical tumor-fighting protein in the body works to stem blood flow to cancer cells. It was the latest breakthrough in angiogenesis science.

One of the drugs Folkman is currently working with, Endostatin, has been found to inhibit the growth of blood vessels and thereby starve cancerous tumors. It's being tested in about 100 patients, with 1,800 more on a waiting list, and Folkman says early signs show few side effects, a halt in the progression of the disease in some patients with advanced cancer, and a gradual tumor regression in others. Another cancer fighter that works to starve cancer cells, Cambridge-based Millennium Pharmaceuticals' LDP-341, has proven effective in preliminary treatment of multiple myeloma, a form of cancer that kills more than 10,000 people a year. LDP-341 may

reach the market by 2004. "In theory," says Benz, "[Folkman's idea] should work for all forms of cancer, since all forms of cancer need a blood supply. The reality is, it's been true for some forms of cancer, but not all. We don't know why."

Folkman says the challenge all cancer researchers face is decreasing the likelihood that the body will build up a resistance to those drugs, and finding ones that don't carry brutal side effects such as hair loss and nausea. Most new drugs are first tested on healthy volunteers. Cancer drugs, because of their side effects, are tested only on cancer patients, and only after all other forms of treatment have been exhausted.

In the meantime, someone dies from cancer every minute.

Ken Garabadian was on the road to certain death before Dana-Farber's Dr. George Demetri intervened and started treating him with Gleevec, also known as STI-571. It disables cancer cells with a precise attack, barely touching normal cells—a problem with some other trial drugs that are toxic to both normal and cancerous cells. "The ability of the Human Genome Project to look at hundreds of thousands of genes in a cancer cell at once allows us to see for the first time where the disease started," Benz says. To date, Gleevec has been shown to work against only two rare types of cancer — chronic myelogenous leukemia and gastrointestinal stromal tumors. Still, it proved so effective against myelogenous leukemia that the Food and Drug Administration fast-tracked its approval for widespread use after barely three months, the fastest any cancer-fighting drug has been approved.

"There I was one day, terminal disease, probably a few months to live, and then I'm taking a pill for cancer," Garabadian says. "It seemed too simple."

Folkman says it's not, that he envisions the day when cancer can be treated as chronic and manageable, like we treat heart disease today. But he's cautious about using the word cure. "We don't use the word 'cure,'" he says, "for chronic diseases."

Spinal Cord Research

Growing Back

One celebrity's accident energized the field, and now Dr. Clifford Woolf has regrown severed spinal cords in lab rats, begging the question: Is paralysis permanent?

There's no question about the importance of the spinal cord. If it's severed, in some cases we can't walk, talk, or even breathe. Running from the base of the skull to the small of the back, the cord is protected by a membrane and a liquid collar that cushion it from impact, and by a tough, bony canal. It takes a crushing blow, like the one Travis Roy suffered in 1995 playing his first hockey game for Boston University, to injure the cord and leave a person crippled. "Once you damage the cord," explains Dr. Clifford Woolf, director of the Neural Plasticity Research Group at Massachusetts General Hospital, "there is no return."

At least that was what Woolf and other scientists believed for years: that spinal cord injuries were irreversible and that the only relief doctors could provide to their paralyzed patients was to help them enjoy productive, pain-free lives with limited abilities. Now Woolf is surprising even himself, voicing new optimism thanks largely to the research coming out of his own lab at Charlestown Navy Yard. He and his team of scientists have managed to regrow severed spinal cords around lesions in lab rats and mice. "The results are truly spectacular," Woolf says.

Even though an estimated 11,000 people in the U.S. suffer spinal injuries each year,

spinal cord research took a back seat in the medical world for many years. Most spinal injuries are caused by car crashes, violence, falls, and sports accidents, and more than half occur in patients between the ages of 16 and 30. Roy, now 26, was a freshman at BU when he shattered his fourth cervical vertebra, leaving him a quadriplegic with no feeling below his shoulders and no movement in his legs or his left arm. He marvels at how much more attention spinal cord research gets today than it did when he became paralyzed. "Ten years ago they were saying it would never be cured," he says. "Five years ago they said maybe. Now they're saying definitely. I try not to get too excited."

It was when actor Christopher Reeve was paralyzed in a highly publicized riding accident that research into spinal cord injuries was instantly energized. In the last four years the National Institutes of Health has doubled its budget for such research, from \$12 billion to nearly \$25 billion. Still wary of giving victims false hope, Woolf says he's reluctant to utter the word "cure" quite yet. But he does admit to reversing his opinion as to whether someone who's been paralyzed might walk again. "It's not around the corner, but we are at a point where I can envision we will cure spinal cord injuries within my professional lifetime," he says.

Stumbling blocks remain. When the fibers in the spinal cord are damaged, whether it's from a football collision, a bullet wound, or even a tumor, basic motor skills are lost. The location of the damage along the 32 segments of the cord determines the extent of the injury. For some it might mean a loss of movement in the legs, for others, in the arms and legs. In the most severe cases, like Reeve's, breathing is hampered, forcing patients to live out their lives on a respirator.

What is now known is that scars form quickly on the spinal cord after an injury. Scientists have determined what causes those scars and are finding ways to dissolve them. Dr. Wise Young, a New Jersey neuroscientist, has proven that high doses of a steroid called methylprednisolone given within eight hours of an injury can save 20 percent of a person's ability to function. There is still a major hurdle, though. Nerve cells in the body grow, but the central nervous system repels any growth of cells there. "We need to change that environment," Woolf says.

It's as if the body is fighting itself. Transplanted cells want to grow in the central nervous system, and even start to grow when moved there, but then they break down and finally die. Scientists have cloned what Woolf calls the "stop signs" that prevent nerve growth in the central nervous system, but they are still struggling to learn how to restart the growth.

Once that happens, Woolf says, spinal cord surgical teams could become a regular part of emergency rooms just like cardiovascular units. One doctor would race to minimize the damage and scarring; another would take down the "stop signs" that prevent regrowth; and another would administer the drugs, gene therapy, or whatever is needed to get the spinal cord growing again.

"Even if we get a cord to grow two or three centimeters," Woolf says, "it would make a tremendous difference in people. With each segment we can get back, you get more and more power in your arms and legs."

Roy, who got his degree in communications last year and travels the country giving motivational speeches, says he accepts that he won't play hockey again. "If I could get out of bed, get dressed, and walk unassisted," he adds, "that would be a cure for me."

Heart Disease

Beating the Odds

High cholesterol is blamed for only half of all heart attacks. Dr. Paul Ridker discovered what, if not cholesterol, might be causing the rest.

Just as an author knows he's hot when Oprah calls, a doctor can feel pretty good about his new theory when the president of the United States tests it out. When Dr. Paul Ridker read in the New York Times last summer that President George W. Bush had not only had his cholesterol checked on a routine trip to the doctor, but also his C-reactive protein (CRP) level, he knew the significance. A framed copy of the article now sits on his desk.

Casual readers undoubtedly overlooked the brief mention of the test, which appeared toward the bottom of the article. They shouldn't have, because if Ridker has his way, physicians nationwide will soon be screening all heart patients for CRP. After a decade of dogged research, this 42-year-old cardiologist at Brigham and Women's Hospital and leading expert on inflammation of the arteries may have solved one of the great mysteries of his field. Heart disease continues to be the leading cause of death for both men and women — a heart attack or stroke occurs roughly every 20 seconds — and it's costing the country more than \$60 billion a year. Scientists hope a proactive approach to heart disease — finding it before an attack occurs — will one day bump it from the list of top killers. "I believe in that dream," says Dr. Sidney Smith, chief science officer for the American Heart Association. "I think it's within reach."

Ridker's discovery started with a statistic: Half of all heart attacks occur in people who have perfectly normal cholesterol levels. "We have to move beyond cholesterol," he says. "People relax if they're told their cholesterol is fine. We were doing them a disservice."

But if high cholesterol was causing only half of all heart attacks, Ridker wondered, what was causing the other half?

Ridker searched for other possible sources of plaque buildup in arterial walls and settled on the most obvious: inflammation. It was hardly a breakthrough hypothesis. Cardiologists have long recognized the significance of inflammation as a factor in heart attacks. But they were skeptical of finding a reliable way to measure it at low levels in the blood.

Ridker set out to find an easy, cheap, and quick test, just like the cholesterol test, that might show a person's level of inflammation in the arteries. He found it in the C-reactive protein, a protein in the blood that helps repair cuts and responds to infections and traumas. Studies have shown that people with high CRP levels had a greater risk of heart attacks, even if they also had a low cholesterol level. "That was big," Ridker says.

The Food and Drug Administration approved the test for widespread use two years ago, and it's quickly catching on. Last year, Ridker says, hundreds of thousands of CRP tests were done — including the one on President Bush. A few years ago, such tests were almost never performed.

"This is going to enhance our ability to predict risk," says Smith. "The ability to identify risk with great precision is hugely important."

Soon, Ridker hopes, patients will come to know that a cholesterol level above 220 (the president's was 170) is not the only barometer of whether they are at risk for a heart attack, and that a CRP level above 2.0 milligrams per liter (Bush's was 0.4) could also signal trouble.

Ridker, who was himself the subject of a medical study as a nine-year-old boy because he was suffering from a puzzling immune system disorder, is now looking beyond what causes heart attacks. He wants to find ways to stop them from happening. He has already been able to show that statins, the preferred choice of cholesterol-lowering drugs for patients at risk of heart disease, also are anti-inflammatory and reduce CRP levels. Having learned that statins help reduce inflammation, scientists can see if they might also help fight other diseases, such as diabetes, in which inflammation of the pancreas is a critical factor.

"Statins appear to reduce the risk of heart attack or stroke among people with low cholesterol but high CRP," Ridker says. "The combination of the two gives us a much better method of predicting risk. We as cardiologists are great at taking care of diseases. But the Holy Grail is finding at-risk patients and preventing heart attacks from occurring."

The Top Doctors

Our annual list of the best physicians in the city includes 170 doctors in 23 fields of medicine.

These are the city's best doctors, according to a survey of hundreds of their peers and members of the Massachusetts Nurses Association, who answered this question for us: To whom would you send a loved one who was sick? We've checked the background of each doctor against the state Board of Registration in Medicine's physician profiling system. Keep in mind that doctors chosen for this list are often so besieged by calls that some may decline to accept new patients.

Autoimmune Disease

Bonnie Bermas

Brigham and Women's Hospital

Lloyd Klickstein

Brigham and Women's Hospital

Peter Merkel

Boston Medical Center

Peter Schur

Brigham and Women's Hospital

Michael Weinblatt

Brigham and Women's Hospital

Cardiac Surgery

Cary Akins

Massachusetts General Hospital

Lawrence Cohn

Brigham and Women's Hospital

Ralph Delatorre

Beth Israel Deaconess Medical Center

Frank Sellke

Beth Israel Deaconess Medical Center

David Torchiana

Massachusetts General Hospital

Cardiology

Charles Boucher

Massachusetts General Hospital
Roman De Sanctis
Massachusetts General Hospital
Michael Fifer
Massachusetts General Hospital
Thomas B. Graboys
Brigham and Women's Hospital
Eric M. Isselbacher
Massachusetts General Hospital
Paula Johnson
Brigham and Women's Hospital
Joseph Kannam
Beth Israel Deaconess Medical Center
Patrick O'Gara
Brigham and Women's Hospital
Khether Raby
Winchester Hospital
Pedro Sanchez
Brigham and Women's Hospital
Marc Semigran
Massachusetts General Hospital
Lynne Stevenson
Brigham and Women's Hospital

Dermatology

Lynn Baden
Newton-Wellesley Hospital
Jeffrey Dover
Beth Israel Deaconess Medical Center
David Feingold
New England Medical Center
Harley Hanes
Brigham and Women's Hospital
Richard Horan
Newton-Wellesley Hospital
Bonnie MacKool
Massachusetts General Hospital

Endocrinology

Martin Abrahamson
Beth Israel Deaconess Medical Center
Gilbert Daniels
Massachusetts General Hospital
Robert Dluhy
Brigham and Women's Hospital
Jeffrey Garber
Harvard Vanguard Medical Associates
John Godine
Massachusetts General Hospital
Pamela Hartzband
Beth Israel Deaconess Medical Center
Meryl Leboff
Brigham and Women's Hospital
Stephanie Lee
Boston Medical Center
Ellen Seely
Brigham and Women's Hospital

Joseph Wolfsdorf
Children's Hospital

Gastroenterology

Peter Banks
Brigham and Women's Hospital

David Brooks
Brigham and Women's Hospital

Z. Myron Falchuk
Brigham and Women's Hospital, Beth Israel Deaconess Medical Center

Larry Friedman
Massachusetts General Hospital

Marshall Kaplan
New England Medical Center

Peter Kelsey
Massachusetts General Hospital

Jose Marcal
Melrose-Wakefield Hospital

Mark Peppercorn
Beth Israel Deaconess Medical Center

Fred Ruymann
Harvard Vanguard Medical Associates

Robert Schapiro
Massachusetts General Hospital

Michael Zinner
Brigham and Women's Hospital

Infertility

Elizabeth Ginsburg
Brigham and Women's Hospital

Mark Hornstein
Brigham and Women's Hospital

Keith Isaacson
Newton-Wellesley Hospital

Thomas Toth
Massachusetts General Hospital

Elena Yanushpolsky
Brigham and Women's Hospital

Internal Medicine

Christopher Coley
Massachusetts General Hospital

James Dineen
Massachusetts General Hospital

Ken Falchuk
Brigham and Women's Hospital, Beth Israel Deaconess Medical Center

Peter Gross
Massachusetts General Hospital

Phyllis Jen
Brigham and Women's Hospital

Kay McGowan
Faulkner Hospital

Richard Parker
Beth Israel Deaconess Medical Center

Jane Sillman

Brigham and Women's Hospital

Martin Solomon

Brigham and Women's Hospital

Katherine Treadway

Massachusetts General Hospital

Marshall Wolf

Brigham and Women's Hospital

Beverly Woo

Brigham and Women's Hospital

Neonatology

John Cloherty

Children's Hospital

Cynthia Cole

New England Medical Center

Ivan Frantz

New England Medical Center

Dewayne Pursley

Beth Israel Deaconess Medical Center

Steve Ringer

Brigham and Women's Hospital

Neurology

Louis Caplan

Beth Israel Deaconess Medical Center

Steven Feske

Brigham and Women's Hospital

Carl Heilman

New England Medical Center

Shahram Khoshbin

Brigham and Women's Hospital

Michael Ronthal

Beth Israel Deaconess Medical Center

Martin Samuels

Brigham and Women's Hospital

Lee Schwamm

Massachusetts General Hospital

Daniel Tarsy

Beth Israel Deaconess Medical Center

Obstetrics & Gynecology

Robert Blatman

Massachusetts General Hospital

Jeffrey Ecker

Massachusetts General Hospital

Fredric Frigoletto

Massachusetts General Hospital

Vivian Hernandez

Brigham and Women's Hospital

Henry Klapholz

Metrowest Medical Center

Rafik Mansour

Brigham and Women's Hospital

Patricia McShane

Deaconess-Waltham Hospital

Robert Weiss
Boston Medical Center

Oncological Surgery

Sarah Feldman
Brigham and Women's Hospital
Anne Kathryn Goodman
Massachusetts General Hospital
Chitra King
Winchester Hospital
Robert Osteen
Brigham and Women's Hospital
Mark Ott
Massachusetts General Hospital
Barbara Smith
Massachusetts General Hospital
Andrew Warshaw
Massachusetts General Hospital

Oncology

George Demetri
Dana-Farber Cancer Institute
John Erban
New England Medical Center
Judy Garber
Dana-Farber Cancer Institute
Paul Hesketh
St. Elizabeth's Medical Center of Boston
Mark Huberman
Beth Israel Deaconess Medical Center
Roger Lange
Beth Israel Deaconess Medical Center
Thomas Lynch
Massachusetts General Hospital
Ursula Matulonis
Dana-Farber Cancer Institute
Robert Mayer
Dana-Farber Cancer Institute
Lawrence Shulman
Dana-Farber Cancer Institute
Charles D. Taylor
Lawrence Memorial Hospital

Ophthalmology

Amita Bhatt
Newton-Wellesley Hospital
Don Bienfang
Brigham and Women's Hospital
Romeo Chang
Massachusetts Eye and Ear Infirmary
Jay Duker
New England Medical Center
Thomas Hutchinson
Massachusetts Eye and Ear Infirmary
Deborah Jacobs

Beth Israel Deaconess Medical Center

Claudia Richter

Massachusetts Eye and Ear Infirmary

Brad Shingleton

Massachusetts Eye and Ear Infirmary

Orthopedics

Greg Brick

Brigham and Women's Hospital

Dennis Burke

Massachusetts General Hospital

Thomas J. Gill

Massachusetts General Hospital

Dinesh Patel

Massachusetts General Hospital

John Ready

Brigham and Women's Hospital

Richard Scott

New England Baptist Hospital, Brigham and Women's Hospital

Tom Thornhill

Brigham and Women's Hospital

Pediatrics

Jonathan Benjamin

Newton-Wellesley Hospital

Bruce Bunnell

Children's Hospital, Brigham and Women's Hospital

Thomas Connolly

Newton-Wellesley Hospital, Children's Hospital

Michael Cunningham

Massachusetts Eye and Ear Infirmary

Marjorie Curran

Massachusetts General Hospital

Richard Kerbel

Mount Auburn Hospital

Eileen Kramer

Newton-Wellesley Hospital

Sally Roth

Children's Hospital, Brigham and Women's Hospital

Mary Scott

Children's Hospital

Robert Stacks

St. Elizabeth's Medical Center of Boston, Children's Hospital, Brigham and Women's Hospital

Plastic Surgery

Karl Breuing

Brigham and Women's Hospital

Joel Feldman

Mount Auburn Hospital

Charles A. Hergueter

Brigham and Women's Hospital

James May

Massachusetts General Hospital

Psychiatry

Jonathan Borus

Brigham and Women's Hospital

Alison Fife

Brigham and Women's Hospital

Henry Friedman

Private practice

Randy Glassman

Brigham and Women's Hospital

Paul Hans

Lahey Clinic

Miriam Ornstein

Cambridge Hospital

Lowell Schnipper

Beth Israel Deaconess Medical Center

Pulmonary

Scott Epstein

New England Medical Center

Christopher Fanta

Brigham and Women's Hospital

Charles Hales

Massachusetts General Hospital

Elliot Israel

Brigham and Women's Hospital

David Kanarek

Massachusetts General Hospital

Taylor Thompson

Massachusetts General Hospital

Rheumatology

Ronald Anderson

Brigham and Women's Hospital

Karen Atkinson

Massachusetts General Hospital

Bonnie Bermas

Brigham and Women's Hospital

Jonathan Coblyn

Brigham and Women's Hospital

William Docken

Brigham and Women's Hospital

Steven Goldring

Beth Israel Deaconess Medical Center

Elena Massarotti

New England Medical Center

Robert Sands

Brigham and Women's Hospital

Allen Steere

New England Medical Center

David Trentham

Beth Israel Deaconess Medical Center

Michael Weinblatt

Brigham and Women's Hospital

Sexual Dysfunction

Irwin Goldstein
Boston Medical Center
Michael O' Leary
Brigham and Women's Hospital

Sports Medicine

Charles Brown
Brigham and Women's Hospital
Alan Curtis
New England Baptist Hospital, Beth Israel Deaconess Medical Center
Scott Martin
Brigham and Women's Hospital
Tamara Martin
Brigham and Women's Hospital

Urology

Alex Althausen
Massachusetts General Hospital
Christopher Doyle
Brigham and Women's Hospital
Robert Eyre
Faulkner Hospital, Beth Israel Deaconess Medical Center
Gary Kearney
Beth Israel Deaconess Medical Center
Francis McGovern
Massachusetts General Hospital
Peter Tiffany
Lawrence Memorial Hospital

[About Us](#) | [Order Back Issues](#) | [Contact Us](#)

© 2002 Metrocorp Corporation. All rights reserved.