# THE LAUGHING GURU 

Madan Kataria's prescription for total well-being.

BY RAFFI KHATCHADOURIAN

The cameras and spotights were positioned overhead, and millions of people in different parts of the worldLos Angeles, London, Kigali, Rio de Janeiro, Cairo, Mumbai-were watching him, the Indian doctor from the tiny village of Mohrewala, as he stood beside Goldie Hawn on a shiny circular platform that was lit up like a pearl. The doctor was at the center of an arenalike set, constructed at Sony Pictures Studios, in Los Angeles, with a live audience sitting in tiers around him. In the other countries, crowds of people could see him by satellite, his image projected onto large screens. Everyone was in attendance for a four-hour global film festival, called Pangea Day, and had just viewed a short documentary about an odd thing that the doctor had created in 1995: a series of physical exercises intended to generate fits of laughter, now practiced by thousands of people in sixty-six countries. After the film ended, Hawn looked at the doctor, brought a hand to her eyes, laughed warmly, and told the crowd, "I am laughing with tears in my eyes." She then introduced her guest, whom she called a "most amazing, beautiful man-Dr. Madan Kataria." Across several continents, the crowds cheered as she hugged him and then stepped aside to allow him to speak. Kataria was wearing a long cream-colored kurta, with a yellow vest, and his head was shaved to the scalp, as if he belonged to some monastic order. He is just under six feet tall, but he has the physical presence of a much larger man. In a soft voice, amplified by a microphone, he said, "A very warm special greeting from India," and, after a few remarks, added, "May I request all of you to stand, and just laugh with me." He encouraged everyone to mimic him as he looked upward, held his arms wide apart above his head, and laughed as if he were Zeus standing atop Mt. Olympus. And the many, many people who were
watching him did just what he said. They laughed, and they shook their bellies and shoulders, and they stretched their hands into the night sky until the mood shifted from playfulness to praise: the laughter gave way to clapping, and Kataria hugged Hawn, subtly bowed his head, and walked off the stage.

In the pantheon of celebrity doctors, Madan Lal Kataria has claimed for himself what is surely the strangest mantle. He is a physician who has transformed himself into the leader of an international movement that promotes laughter as a cure for just about any ailment-physical, psychological, or spiritual. He is known as the Guru of Giggling, a title bestowed upon him by the Times of London, which he enjoys repeating. The title is an allusion to the Maharishi Mahesh Yogi, of Beatles fame, who was known to acolytes as the Giggling Guru, and who established a worldwide organization that was reportedly worth more than three billion dollars. Kataria, by contrast, has a staff of nine people, who work from either their homes or his, on an annual budget of less than sixty thousand dollars.
Estimates of the number of people who engage regularly in Kataria's exercises are as high as two hundred and fifty thousand, but there is really no way to gather precise figures. Last November, in Iran, Tehran's city council decided to promote a network of laughter-yoga clubs, and by July of this year twenty thousand people had signed up. Kataria has said that in India alone there are six thousand clubs, with two hundred just in Bengaluru (formerly Bangalore). He has also said, "The numbers I can provide you are all guesswork. Don't rely on them. Laugh about them." His calculations do not take into account the proselytizing efforts of splinter factions, or of kindred spirits who claim to have developed similar exercises independently of him. Ramesh Pandey, a yogi in California with several hundred followers, says
that he discovered laughter yoga in 1997 while meditating in the hills outside Palm Springs. (Pandey has a Hollywood agent, and was recently a contestant on "America's Got Talent") Steve Wilson, a psychologist in Ohio who runs a company called World Laughter Tour, broke with Kataria in 2001-the two could not agree on who would lead the laughter movement in America-and claims to have trained five thousand certified Laughter Leaders.
Kataria's self-published book, "Laugh for No Reason," which he wrote in English, in 1999, has been translated into Italian, French, German, Farsi, Indonesian, and Korean. The book argues that people should laugh far more than they do, and that they should do so not by relying upon humor but by coming together and engaging in simple forms of play, mostly built around faking laughter. Kataria insists that such gatherings be free of charge, and nearly all are. His clubs, like Tupperware parties, are not really his: the people who form them do so without centralized direction. They gather in informal settings, such as homes or parks, and usually improvise upon his ideas. Kataria believes that rules would slow his movement's dissemination, so a club in Tokyo might involve singing children's songs, while one in Tallahassee might not. There is a club near Times Square that meets in an eleventh-floor office belonging to a company that imports fabric from Hong Kong. At 5:30 P.M. every Wednesday, people show up, push away chairs and tables to clear a space, and laugh and goof around for about forty-five minutes. Then they chat over potato chips and caramel-nut clusters, and leave.

Daniel Pink, a writer and speaker on workplace motivation, has argued that $\frac{2}{2}$ laughter yoga exemplifies a form of "right-brain thinking" that managers should promote, and Kataria often speaks at corporate retreats and team-building a


Kataria, a doctor from India, promotes laughter as a cure for physical, psychological, and spiritual ailments.
sessions. Hewlett-Packard, Emirates Airlines, Volvo, and Glaxo Pharmaceuticals have hired him to motivate employees. He sells his services as a public speaker and trainer for his own profit. This is how he earns his living.

As a former general practitioner, Kataria has concentrated his energies on promoting the therapeutic and health benefits of his exercises. In India, he has conducted them in maximum-security prisons and at schools for homeless children and for the blind, and he encourages his acolytes to share laughter yoga in similar venues. In the United States, they have taken it to senior centers, universities, and gyms, and into medical settings, such as the cancer wards at Swedish Covenant Hospital, in Chicago, and at Massachusetts General Hospital. Celebrity doctors like Sanjay Gupta and Mehmet Oz have given the movement good press and some legitimacy. "I can't think of any other mindbody technique that has caught on in this way," Andrew Weil, the author and physician, told me. Weil met Kataria in 2008, and he quickly came to believe that laughter was a "powerful intervention" against illness. Last year, he helped Kataria obtain a "genius visa"-issued by the U.S. government to people with exceptional abilities-and he recently told a Senate committee, during a hearing about health-care reform, that laughter yoga could help lower American health-care costs.

Initiates of laughter yoga tend to be struggling with emotional or physical difficultiesdepression, spiritual listlessness, chronic pain-and they describe the exercises as a life-changing release. In 1999, Mira Nair, the director, made a short film, titled "The Laughing Club of India," about Kataria's movement, after finding herself stuck in Mumbai traffic because two thousand of his laughers were crossing the street. Perplexed by the scene, she left the cab that she was in and caught up with the group. "My anger melted away," she later told a journalist. "It was like being in a Fellini movie." Oprah Winfrey has promoted Kataria's exercises on her show and on her Web site; a year before the Pangea Day event, in 2008, she sent
her makeup artist and "resident skeptic," Reggie Wells, to a laughter-yoga session in Chicago, and then asked Wells to discuss it on her program. "A stress lifted from my soul," he said. "It lifted from my body."

I$t$ was late evening when $I$ arrived at the Bengaluru International Airport, a modern edifice of glass and steel that serves as the main gateway into the southern Indian state of Karnataka. Waiting for me by the arrivals gate was Kataria's personal assistant, a young man named Arjun, who was holding a sign that read "Khatchadourian-Но, Но, На, Ha, Ha." Arjun was busy making trips from the city to the airport, to pick up laughter-yoga trainees from Singapore, Malaysia, the Cook Islands, France, and Oman, among other places, for a five-day session with the movement's founder, at a small hotel in town. Two laughter-yoga trainees from Bulgaria had travelled by bus to Turkey, and then by plane to India, and were spending two months' salary on the trip. (Kataria charged seven hundred and ninety-five dollars for the course, a fee that did not include lodging.) The Bulgarians wanted to open the first laughter-yoga club in their country.

The next morning, twenty-one trainees, all but three of them women, gathered in a room on the fifth floor of the hotel. When Kataria arrived, he was dressed in a maroon kurta with gold embroidery and a tan vest. He instructed the trainees to arrange their chairs in a wide circle, and said, "We start the training with a special introduction, by saying our names, and then laughing." He began the process, and after saying his name and profession ("a doctor") he leaned forward slightly. From his mouth poured a rich flow: $A b b b-$ hababa-whoohoohoo-ha-heeheehee. Kataria is an exceptional fake laugher. His face flushed, his shoulders heaved, he squinted, and as his laughter trailed off he wiped a tear from the outer corner of his eye. The trainees announced their names and professions ("I do insurance and investment," "music teacher," "I own two laundry shops") and then
laughed. An atmosphere of levity was quickly established.
"What did we learn from this exercise?" Kataria asked.
"Not to take ourselves seriously," someone said.
"Great," Kataria said. "If you want to laugh, no one can stop you." He made a sweeping gesture around the circle, and other trainees testified.
"Immediately, there was a deep con-nection-just the way love has no language," another trainee observed.
"Laughter connects you with people," someone else called out.
"It reduces stress."
"It releases you from the bondage of your ego."

Kataria spoke again. "Laughter is a choice," he said. "A connector of people. No barriers. No language." Then he instructed everyone to form a tighter circle, and said, "O.K., I am going to tell you about laughter yoga." He took a sip from a water bottle, folded his hands in his lap, and opened his mouth. But, instead of speaking, he began to laugh again, this time very differently. The laughter emerged from him in pulses, spaced about five seconds apart, and each pulse began with a heavily aspirated sound that trailed off into a cascade of ha-ha-has. As he laughed, Kataria looked around the room, raising his eyebrows and making eye contact with the trainees, or bringing his hand to his forehead, or opening his mouth wide and leaning forward. The group fell into his rhythm, laughing sympathetically if somewhat mechanically, until a minute or so into it, when a natural wave of laughter broke out among a few women to Kataria's left. Something-perhaps the giggling of a neighbor, or the inherent ridiculousness of the situation-appeared uncontrollably funny to them. After two or three minutes, the natural waves began to overlap, amplifying one another as they intersected across the group, and many of the trainees descended into hysterical fits of laughter. Faces reddened, and people gasped and swayed and turned away from one another or covered their faces, in futile attempts to stem their laughter; others seemed to be immobilized. Ten minutes in, Kataria lost control of himself, too-his brow pinched up, his face
turned crimson, his mouth fell open, and he slapped his knee, causing everyone else's hysterics to crescendo. Fitfully, the laughter began to die down. Kataria calmed his body, and the trainees, following his cue, gradually relaxed, and grew silent. They had all been laughing, more or less continuously, for fifteen minutes.
"I was about to define laughter yoga," Kataria said. "And I did it." He giggled at this little remark, and then continued. "Friends," he said, "I found a breakthrough. You don't have to wait for anything to happen-no jokes, no humor, no comedy required. Just laugh. Since we met this morning, we laughed, and I didn't tell you a single joke. I am not a comedian, and still we laughed like we never laughed before."

The exercise that the group had just done was called Gradient Laughter, for the way it developed out of silence and slowly gathered momentum as the laughter became more natural and contagious. It is Kataria's most unstructured exercise, and he calls it "very powerful." Initiates also clap, and chant "Ho! Ho! Ha! Ha! Ha!" while walking about in a jumble, making eye contact, and acting out a series of poses. There is No Money Laughter, a pose in which initiates pretend that their pockets are empty, and then laugh; and Visa Bill Laughter, in which they point to an imaginary Visa bill in their palm, and laugh; and Milk Shake Laughter, in which they pretend to pour milk back and forth between two cups, and laugh. Kataria also advises his disciples to laugh silently, and to laugh alone, and he has invented a number of simple mantras and games intended to create a nonjudgmental atmosphere within a laughter club, and to stimulate childlike playfulness. During a laughter-yoga session, when an exercise has been completed, or after an initiate shares a thought, Kataria encourages everyone to call out, in unison, "Very good! Very good! Yay!" People then throw their hands in the air, make a thumbs-up sign, and smile. Clowning around composes the bulk of the disci-pline-if it can be called a discipline, since laughter yoga is, by design, a freeform enterprise, and easy. A typical session includes almost no stretching or physical exertion. Kataria uses the term "yoga" only because a few of his exer-

"I've never been so humiliated in my entire week."
cises involve controlled breathing. Also, when people laugh, they exhale more than they inhale-a ratio that yogis tend to consider beneficial.

Laughter is a funny thing. Even in the eyes of modern science, it remains mystifying, in part because it is so difficult to study. In the nineteenth century, scientists used a device called a magnetoelectric machine to probe happy faces. More recently, they have taken blood and urine samples of people watching videos of the comedian Gallagher smashing watermelons or of other standup routines. They have conducted fMRI and PET scans of people laughing. They have tickled students and great apes, and even rats. They have learned, by manipulating digital recordings of giggles and guffaws, that the range of what we comprehend as laughter is remarkably wide. When laboratory work has proved futile, they have gone into the field, observing people in their natural habitats-a college campus, for instance, where, one researcher told me, he set out to watch students "as if they were primates in the wild." Still, laughter science must reckon with a frustrating paradox: a controlled environment, where all but the most salient variables can be eliminated-the experimental ideal-is often inimical to laughter.

Kataria told his trainees that laughter
yoga "is based upon the scientific fact that, even if you laugh for the sake of laughing, even if you are pretend laughing, your body cannot tell the difference." He says this often. There is no such scientific fact, but the idea may contain elements of truth. Kataria likes to cite William James, who, in 1884, made the case that emotions were not manifested in the body but, rather, created by it. In an essay titled "What Is an Emotion?," James offered the following thought experiment: imagine a strong emotional response to some event in your life, and then try to erase from it "its characteristic bodily symptoms"-for instance, fear without a rush of adrenaline and the physical impulse to run, or sadness without flushness and tears. In such cases, James argued, "We find we have nothing left behind, no 'mind stuff' out of which the emotion can be constituted." James was so convinced that the body was the source of our feelings that he argued that people could undo a particular emotion by "cold-bloodedly" acting out its opposite. Recently, psychologists and neuroscientists have explored this insight. It seems that people lean forward while thinking about the future, and are more ready to judge a personality to be warm if they are holding a hot cup of coffee instead of a cold drink. Botox injections, which immobilize parts of the face, may limit one's ability not only to express

"You can't buy forgiveness with airline miles, Charles."
emotions but also to feel them. In 2002, Charles Schaefer, a psychologist at Fairleigh Dickinson University, studied how forced laughter affected the state of mind of students. He noted that "adults who act happy (broad smile; hearty laugh) for a minute a day are likely to elevate their mood."

Schaefer's study was conducted in an uncontrolled setting, with only twentytwo subjects, and he told me that it was intended not to prove anything but merely to open the door to further research. Many studies like his are not designed to be definitive, and their conclusions are negligible. And even William James recognized that "just as an artificially imitated sneeze lacks something of the reality, so the attempt to imitate an emotion in the absence of its normal instigating cause is apt to be rather "hollow.'" With feigned laughter, the "hollowness" appears to have a neurological basis. The parts of the brain that light up when we force ourselves to laugh are different from those involved in the real thing. In 1862, a French anatomist named Guillaume Duchenne de Boulogne noticed that involuntary mirthful
facial expressions-the kind "only put in play by the sweet emotions of the soul"contracted muscles belonging to the orbicularis oculi, near the eyes, in a way that voluntary ones never do. Brain scans of people laughing suggest that Duchenne laughter, as it is now called, originates within the limbic system, where fight-or-flight decisions are made, and within portions of the brain stem. Voluntary, or non-Duchenne, laughter appears to originate elsewhere-in the frontal opercular areas and the motor cortex, among other regions. This kind of laughter can bring about feelings of pleasure, and is often spontaneous, but that may be because we have conditioned ourselves to use it automatically. Its evolutionary history seems to be different; one scientific study suggests that it emerged, long after Duchenne laughter, "to signal, to appease, to manipulate, to deride, or to subvert." When the waves of natural laughter spread among the trainees during the Gradient Laughter exercise, the group experienced a neurological shift-even if, outwardly, the laughing did not change all that much.

Kataria believes that true mirthful
laughter can have a liberating, transformative effect-one that momentarily erases all practical concerns, fears, needs, and even notions of time, and provides a glimpse into spiritual enlightenment. This puts him at odds with the world's major religions, where laughter is rarely celebrated, and where virtue and spiritual self-awareness are usually matters of discipline and solemnity. The Buddha found laughter unbecoming, even, at times, "an offense of wrongdoing." (He asked his acolytes, "How can there be mirth or laughter when the world is on fire?") But Kataria tells his followers that laughter is a divine vehicle for empathy and compassion. "There is definitely a higher power trying to speak through me," he told the trainees in Bengaluru, and, throughout the session, talk of science was blended with vague New Age sentiments about self-discovery. Kataria recognizes that people return to laughteryoga sessions because of the emotional reward the experience provides, and one of the first things he did with the trainees was to share his own tale of struggle and awakening. "O.K., guys," he said, just after the Gradient Laughter exercise. "A little bit about my history."

Kataria's story begins on New Year's Eve, 1954, in Mohrewala. The village, populated by no more than a few hundred people, is situated in Punjab, near the border with Pakistan, and is about five miles from the nearest town, Firozpur. Mohrewala's houses, built primarily from cow dung and mud, are clustered amid tilled fields, and were not wired for electricity until 1971. But in Kataria's memory it was a joyful place, uncomplicated by modernity. "Life was not hard," he said-especially when compared with life in an urban slum-and celebrations were often jubilant and affecting. Kataria's father, Tirath Ram Kataria, was a farmer, with piercing blue eyes and a broad mustache. Kataria describes him as a stern and egotistical person, who, when money was scarce, would descend into fits of rage. His mother, Raj Karni, was pious and attentive. Madan was her fourteenth child, and her last, and, though both parents were illiterate, it soon became apparent that he was bright and should be educated. Six of Raj Karni's children died at a young age- the nearest medical clinic was twenty-five
miles away-and she wanted her youngest son to become a doctor who could care for the village.

Raj Karni's bangles-heirlooms of great sentimental value-paid for a room in a hostel and schooling in Firozpur, and Kataria flourished. "I was very brilliant in my studies," he told me.) With the help of his sister, he eventually gained admittance to the Government Medical College, in the city of Amritsar. Kataria earned a reputation as a hardworking medical student, but also as an impresario and as a dandy. "He used to dress up in a very smart way," Tejwant Singh Randhawa, a fellow-student, told me. Kataria was popular and charismatic. His high-school drama teacher wrote a series of plays about overcoming India's myriad social problems, which the medical students performed in Amritsar, and Kataria would often claim the starring role for himself. "Regarding theatre-I excelled in that," he told me. "I found a very good actor within myself." Upon graduation, Kataria was wait-listed for a coveted postgraduate program at his medical school, but, rather than wait, he went to Bombay. "I was having thoughts of being a rich and famous doctor," he recalled. Randhawa said that Kataria was yearning for even more than that: Bombay was also home to Bollywood, India's film industry. "He wanted to be an actor," Randhawa told me. "And he wanted, above all, to have his face recognized in the crowd."

Salman Rushdie once described Bombay as a city of kaleidoscopic intensity, where all of India converged and refracted into something new-"All rivers flowed into its human sea." Kataria went there in 1981, and quickly secured a residency at the Jaslok Hospital and Research Center, under the chief of cardiology. Kataria was well-liked, but his quest for fame made him an oddity. Early in the morning, he would sit on a balcony and make a humming noise-to train his voice for acting, he told another doctor. Hubert Fernandes, a nephrologist who then lived on his floor, told me, "He would come to our room and recite things. He thought he was good-looking, and he was, but he was very cocky. I thought he was a diamond in the rough. He had come from Punjab to the big city, and in certain Bombay circles you have to be really sophisticated. He would come and tell us he was trying to be a
movie star. All of us thought he was a little delusional."

After his residency ended, Kataria married Madhuri Sajnani, the daughter of a police official from Rajasthan, and opened a practice in Bombay, in an upper-middle-class apartment block called the Lokhandwala Complex. Kataria says that corruption hampered his practice; doctors demanded kickbacks for referrals, which he refused to pay. (A colleague disagreed: "He was not doing well- -that's all.") And so Kataria pursued one ill-conceived venture after another. He made plans to open a chain of private hospitals, then a pharmaceutical company. He bought a van, and used it to create one of the city's first mobile clinics. He purchased land, where he housed street beggars, hoping to employ them. (The beggars refused to work, and he sold the land.) He flew plastic surgeons from the United States to India to discuss opening a visiting doctors' clinic, only to realize later that if anything went wrong at the clinic he would be stuck with the liabilities. These ventures caused tension with his wife and elicited concern from his family. Kataria's sister told me, simply, "He wasted a lot of money."

By the nineteen-nineties, Kataria was wrestling with failure. "I used to read books by Dale Carnegie, and other books on how to become successful, and nothing happened," he told the trainees. "In fact, my mother came to me and said, 'Madan, you don't look happy. What is wrong with you?' And I told my mom, I am really struggling.' And she said, 'Why
don't you come to our home town? Why are you stuck in Bombay?' I said, 'Give me two more years.' I was hoping to find some great idea." Around that time, Kataria's wife suffered a series of miscarriages. (When I first asked Kataria if he had children, he said, "You are all my children," laughed, and then grew quiet, adding, "It was not meant to be.") But he did not relinquish the grand vision he held of his future. In 1991, he started a magazine that offered medical advice to lay readers, called My Doctor, modelled on Reader's Digest. "It was a mammoth task," Kataria recalled. "I lost half my hair." He began to wear an ill-fitting toupee.

Kataria was interested in alternative medicine, and in yoga, but he did not think much about laughter until the spring of 1995 , when he decided to publish an article titled "Laughter-The Best Medicine." He had read about Norman Cousins, an American journalist who claimed to have laughed his way out of a fatal illness, and he asked his editorial staff to research the topic. "We ended up discussing it a lot," one of the magazine's former editors, a doctor named T. D. Rajan, told me. "A couple of days later, Dr. Kataria said, 'Let me put this to the test.' He said it very casually, and we didn't take it seriously." Kataria's recollection is more prophetic. The notion came to him a little after four in the morning, his normal waking hour. "Suddenly, an idea flashed in my mind: If laughter is so good, why not start a laughter club?" he told the trainees. "And I was so excited I could

"'Small potatoes' is no defense."
hardly wait." At 7 A.M., he rushed out to a public park and began asking passersby if they wanted to laugh with him.

At first, the plan flopped. Kataria asked hundreds of people, and nearly all declined-or laughed at him. Still, he managed to persuade four men to join in. For half an hour, they stood in a circle and, not really knowing what to do, told jokes. The following day, they met again, and were joined by a dozen other people. A week later, fifty-five people were attending. "Everything went very well for about ten days, but then after that the stock of good jokes ran out," Kataria told the trainees. "Most of the jokes were repetitions. Then came negative jokes, sexual jokes, vulgar jokes, and people thought it was not a good idea. There were two ladies in the laughter club, and they thought, If you are telling dirty jokes and vulgar jokes, you better please stop this laughter club. I said, ${ }^{\text {No, no, no. We will }}$ not stop. From tomorrow, we will laugh without jokes,' and people said, 'How?',' and I said, 'I don't know. I have no idea.'"

Kataria had never got around to publishing his article on laughter, but he still had all his research. He went home and rummaged through it, until he found a compendium of articles from the magazine Prevention, called "The Complete Guide to Your Emotions and Your Health." In a section titled "Feigning Fun," the authors suggested, "If you don't feel full of fun, pretend." The book quoted Harry Olson, a psychologist and motivational speaker, and the author of a self-help manual titled "The 8 Keys to Becoming Wildly Successful and Happy." In 1981, Olson founded a business in Maryland called Maximum Potential, and he used hypnosis and a men-tal-conditioning regimen that he calls Champion Mind Power to help athletes and executives become competitive. "You have to start somewhere, even if it means going through the motions at first," Olson told Prevention. "Because if you decide to be healthy, hopeful, and funloving, that's what you'll be."

In this, Kataria stumbled upon a distinctly American idea: the power of positive thinking. He underlined Olson's words, and returned to the park with the idea of faking laughter. "This idea was like a divine inspiration," he recalled. Within a month, his club had swelled to a hundred members, and was covered by

Reuters and, later, by the BBC and CNN. "I became very, very popular," he said. "At one point, I thought, Let me go, and take this idea, and make money. I said, 'Maybe this is a breakthrough.' Then, that same month, people from faraway places began to come to my clinic in Mumbai. In India, for people whom we respect, we bow down and touch their feet and place offerings by their feet, and I was feeling very embarrassed, because I was so young, and so many elderly people were coming to me in this way after being in a laughter club and finding so much relief. I started crying. And at that time some kind of realization came to me: I should not make money from this ideathis is something great. That was the time that I decided: I am going to give laughter free to this world."

On the second day of the training session in Bengaluru, Kataria made some startling assertions. Going through the motions of laughter, he said, would not only improve one's mood, as William James had speculated, but enhance physical well-being. Laughter, he explained, alleviates pain, and mitigates Parkinson's and Alzheimer's. Patients with multiple sclerosis who laughed regularly "had a lot of improvement," Kataria claimed. "Asthma patients-they have benefits." Laughter boosts immunity, he said, and "laughter yoga, being a physically oriented technique, can benefit cancer patients very much-it can definitely improve the survival chances of cancer patients." Kataria urged members of the group to "go and give some sessions with cancer self-help groups." He added, "It is amazing how, more and more, people are practicing laughter yoga, and are getting better."

Can laughter cure? In sixteenth-century England, Richard Mulcaster, a humanist educator, argued that laughter produced warmth throughout the body, and was a good antidote for colds, headaches, and bouts of melancholy. ("Parties which desire it, can suffer themselves to be tickled," he recommended.) In Victorian England, George Vasey, the author of "The Philosophy of Laughter and Smiling," argued the very opposite, that laughter was a kind of sickness, like a coughing fit, and that "these absurd and stupid excitements are not only unnecessary and vulgar, they are positively mis-
chievous, producing effects which are invariably injurious, and sometimes fatal." The earliest scientific research on the subject focussed on laughter's physical effects: how it alters breathing and muscle tone, and exercises internal organs. But, for many years, to argue that laughter's "favorable impact on the mind influences various functions of the body and makes them healthier," as an American physician named James Walsh did in 1928, in his book "Laughter and Health," was to make a claim without evidence. No one had investigated the matter, because the medical community in Walsh's time, and for nearly half a century afterward, held that the human nervous system was entirely cut offfrom the immune system.

This bias was credibly challenged only in 1975, when Robert Ader, a psychologist at the University of Rochester, was trying to learn if rats could be conditioned to associate nausea with saccharin. Ader had given his rats the sweetener along with a drug called cyclophosphamide, to turn their stomachs. But the animals didn't just become nauseated; they began to die. Strangely, when Ader stopped administering the cyclophosphamide but continued to feed the rats the sweetener, they still died. Cyclophosphamide, he learned, suppresses the immune system, so he contacted an immunologist named Nicholas Cohen, and the two studied the problem further. They concluded that the rats had been conditioned to suppress their immune systems whenever they tasted the sweetener. In other words, their minds were killing them.

The experiments that Ader and Cohen conducted gave birth to a field called psychoneuroimmunology, but their work did not have popular resonance. That changed a year later, when Norman Cousins wrote about his experience with laughter in the New England Journal of Medicine. Turning Ader and Cohen's inquiry on its head, he asked the medical community, If feelings of physical and mental distress damage the body's chemistry, then shouldn't positive ones rehabilitate it? "Is it possible that love, hope, faith, laughter, confidence, and the will to live have therapeutic value?" Cousins asked. "Do chemical changes occur only on the downside?"

Cousins, who was the editor of the

Saturday Review, had travelled to the Soviet Union in 1964, and while he was there, he said, he experienced intense stress and severe pollution. As a result, he concluded, he suffered from adrenal exhaustion, which in turn triggered ankylosing spondylitis, a painful degenerative disease of the joints. After his doctor told him that he had a one-in-five-hundred chance of full recovery, Cousins checked himself out of the hospital and into a hotel room, took huge doses of Vita$\min$ C, and watched "Candid Camera" and the Marx Brothers. There he made "the joyous discovery that ten minutes of genuine belly laughter had an anesthetic effect and would give me at least two hours of pain-free sleep."

Laughter, Cousins claimed, helped cure his chronic ailment. In 1979, he wrote a best-selling book about his experience, titled "Anatomy of an Illness, as Perceived by the Patient," and began to teach at U.C.L.A.'s medical school. The book attracted thousands of supporters, but also a number of skeptics. Florence Ruderman, a sociologist of medicine at Brooklyn College, writing in Commentary, took apart much of his story in a careful analysis. Ader and Cohen had demonstrated that the immune and nervous systems were linked, but Cousins was arguing something different, some-
thing unproved: that the link could be exploited as a cure. Even if positive emotions were physically beneficial in the long term, Ruderman asked, "is the will to live so easily manipulated, so dependent on trivial, superficial agencies?"

Cousins set out to prove his story. In 1988, he contacted two scientists, Lee Berk, a doctor at Loma Linda University, in Southern California, and William Fry, a psychiatrist at Stanford, after he heard that they "were dabbling in laughter." Berk and Fry had run an experiment to learn whether laughter dampened the production of cortisol, a hormone that naturally suppresses immune function. Fry watched episodes of "Laurel \& Hardy" and "Abbott \& Costello," and Berk sampled his blood. As Fry laughed, it appeared, his cortisol levels decreased. Cousins gave them a grant to do a more formal study, and, along with six other researchers, they conducted the experiment with five laughers and five other subjects who were used as controls. The results were similar, and Berk and his collaborators published them in the American Journal of the Medical Sciences. "The study has shown objective, measurable, and significant neuroendocrine and stress hormone changes with mirthful laughter," they wrote, noting that laughter "can reverse or attenuate" hormonal changes

"You have no idea what it's like to be a 'just between you and me' person in a 'just between you and I' world."
brought on by stress. In 2001, Berk released a paper concluding that mirthful laughter increases the production of natural-killer cells, which help the body to fight viral infections and cancerous growths. Subsequent reports by Berk and others argue that laughter can have salutary effects on everything from heart disease to diabetes and allergies.

Still, much of the science on laughter and healing has not been convincingly replicated, or suffers from methodological problems or small sample sizes. Often, it is difficult to know whether the fluctuations in blood chemistry are the result of the giggling, or of just watching a video. And, even if mirth provides measurable health benefits, there is no proof that they are lasting or significant. Three exhaustive scientific reviews on the subject of laughter, humor, and health have arrived at the same conclusion: there is not enough evidence to conclude much of anything. At the moment, perhaps the most solid scientific argument one can make about laughter and healing is that it can briefly limit physical pain-just as Cousins ob-served-though exactly how this works is not fully understood. As Robert Provine, a neuroscientist at the University of Maryland and the author of "Laughter: A Scientific Investigation," has said, "Faster and better physical healing through laughter remains an unrealized, tantalizing, but still reasonable prospect."

Kataria's home in Mumbai is more or less the same as it was when he practiced medicine. It is a small groundfloor apartment, with a courtyard. By the dining-room table, there is an oversized photograph of Kataria and his wife, taken when he was still wearing his toupee. An adjoining clinic, with three small rooms, now serves as his office-its walls and bookshelves covered with mementos from his laughter-yoga work. By the entrance, a stuffed albino gorilla hangs on a doorknob. The gorilla has red plastic eyes, and a motion detector inside it. Whenever anyone walks by, its eyes blink, and it says, "I love you, I love you, I love you." This happens more than fifty times a day.

After the training session, Kataria returned to Mumbai to prepare for a weekly TV series on India's Sony Entertainment

Network, which was soon to begin airing, but he kept in close touch with his trainees. Three of the trainees stayed on at his apartment in Bengaluru, and he called them daily. "The whole laughter movement exists because of feelings and emotions," he told me, which were evident in e-mails from his acolytes. The Bulgarian women, who had returned home, wrote to say that they had conducted their first session in Sofia. ("We laughed and laughed and we could hardly stop.") A trainee from Greece wrote, "Girls, that is fantastic!!!!" Others chimed in with encouraging banter; one from Singapore wrote, "I have been practicing laughing alone religiously since the exciting days in Bangalore! The effects have been amazing!"

From his office one afternoon, Ka taria, using Skype, dialled in to Laughter Yoga on the Phone, a free service whereby people across the United States can call in, fourteen times a day, to laugh with strangers. Two men were on the line. One was from Indianapolis, the other from South Carolina. "We started about four minutes ago," the man from Indianapolis said; it was just after six in the morning where he was.
"Let's laugh for a few minutes," Kataria said.
"O.K.," the man said.
They laughed together, the sound of their exhalations clipped and distorted as they passed through the Internet. Kataria then asked the man from South Carolina about himself. The man lived alone. He had heard about the psychological and physiological benefits of laughing-"the chemical advantages" of it-when he was going through "some rough personal stuff." He now calls in every day.
"Very good! Very good! Yay!" Kataria said. "You're a great laugher. Im proud of you." When Kataria hung up, he shook his head and said, "I learn from them." There are several Internet radio shows devoted to laughter yoga, and Kataria clicked on one; a host from Canada came on and began talking about the various exercises. Kataria was amazed that people had taken his idea so far. "I would never have thought of this," he said, referring to the radio program.

There are times when Kataria falls easily into the role of observer. Friends and colleagues have tried to push him to build a more formal and centralized structure for laughter yoga, but Kataria
told me, "The last thing that I want to show the world is that laughter makes me feel stressed." Still, he has long been dreaming about building an ashram outside Bengaluru, to be called Laughter University, but he has not tried to raise any money for it. He likes to leave such things to chance, and recently chance rewarded him. Several months ago, a building contractor in Bengaluru offered to provide him with land. And, a few days after the training session, Kataria learned that the son of an Indian agribusiness mogul and supporter of laughter yoga wanted to donate a quarter of a million dollars toward the university's construction, to honor his father's recent death. Legally, Kataria's foundation was too inchoate to accept such a large donation, and Kataria told me, "I just called my certified accountant and I said, 'We need to get tax-exempt status. Get going!" "

Kataria got going, too. He sat down at his desk to work out a prospectus for the mogul's son. Kataria does not like to write. Instead, using a Bluetooth earpiece and speech-recognition software, he dictates into his laptop, and then sends each line of text to an assistant, an Anglo-Indian woman named Ira Flynn, who is a former journalist with the Times of India. Flynn sits nearby, at another computer, and polishes up his prose.

Dictating into the laptop, Kataria began to explain his vision for the university. There would be a residential compound, called Laughter City, with its own apartments, transportation, supermarkets, and cafés. There would be a Department of Tourism, which would host international laughter conferences, and a Department of Alternative Medicine. There would be classes in singing and dancing, and a Department of Spirituality, which would further develop Kataria's mystic views. "Most people believe that it is not easy to attain spiritualitythat one has to follow an intricate path," Kataria said. "Based on laughter yoga, we will explore how laughter can help attain spirituality in a simple way." A bit later, he said, "Silence combined with pure laughter will help empty your mind."

Flynn teased him. "Go to your saffron robes," she said, referring to the clothing of Buddhist monks, and Kataria giggled. "Sometimes people are visualizing mewhat I will look like in ten years," he said. "One of my friends in Australia says, 'I see
you with a long beard, and you have stopped speaking. Just laughing-'"

Flynn began to giggle, too. "Just laughing," she said.
"'-and there is a queue of thousands of people coming to see you,'" Kataria continued. "And they are saying things like "Doctor, I have diabetes." " Kataria stopped speaking, and demonstrated his response: Whoohoohoo-habahababaha. "، "Next please." "Tve got a heart problem." " Heeheebeehee-babahabaha.
"Yeah, that's therapy," Flynn said.
Kataria returned to his dictation, but a few minutes later he stopped again. He was having trouble focussing on technicalities. "We are at the level of a quantum leap," he said. "Creating a million laughter clubs in the next ten years will be easy, and when we create a million clubs we will shift the consciousness of the globe in a major way. We will become a contributor to world peace."

His thoughts drifted to a used ocean liner that he has been planning to buy. He wants to christen the ship the S.S. Shanti (after the Sanskrit word for peace), and he intends it to perpetually circumnavigate the globe, spreading laughter from continent to continent. "Oh, dear, what a dream," Kataria said to Flynn, but she refused to include it in the proposal.
"That's going too far," she said.
"I didn't tell you," he added. "India is going to get another Nobel Prize." He smiled, making it clear that the prediction referred to him.
"I should have guessed," Flynn said.
It was four-thirty in the afternoon, and the sun had lost its midday intensity. One of Kataria's servants walked past the stuffed albino gorilla. "I love you, I love you, I love you," it said, in its highpitched mechanical voice. Mumbai's evening traffic roared as auto-rickshaws and cars vied for dominance-their din merging with the sound of women chanting in a nearby temple. Kataria seemed lost in thought. "So I need to work more with laughter clubs in Norway now," he finally said, and then, suddenly, his eyes began to twinkle, and he was grinning, and his grin became a laugh, and for a second or two his laughter was all that could be heard.

## NEWYORKER.COM/VIDEO

Dr. Kataria leads laughter exercises.

