

## **Dr. Valentin Fuster: “I Want to Be On the Frontline”**

*By Philip Berroll*

Dr. Valentin Fuster’s workday begins at 5:00 am – but for the first fifteen minutes, he does absolutely nothing except think about the hours ahead of him. “Basically I program the day in terms of priorities,” he says, “to be sure that when I start, I know exactly where I am.”

For Dr. Fuster, the Director of Mount Sinai Heart, this approach makes perfect sense. The 67-year-old cardiologist has a load of responsibilities – as doctor, teacher, researcher, administrator and activist – that would tax the strength of many younger men. Yet he maintains his energy and his equilibrium through a mindset that is equal parts optimistic and pragmatic, detail-oriented and focused on the broader view. And despite a stunning record of achievements, honors and high-level positions, he is a modest, unpretentious man who considers himself “lucky.”

At Mount Sinai, Dr. Fuster presides over a dynamic program whose innovations in technology and research have placed it in the forefront of the cardiology field. At the same time, his interests and advocacy are global in scope. A former president of both the American Heart Association and the World Heart Federation, he is currently President for Science of the National Centre for Cardiovascular Research in his native Spain (where he spends part of each week), serves as Chair of the Committee on Preventing the Global Epidemic of Cardiovascular Disease for the Institute of Medicine (IOM), the health arm of the National Academy of Sciences, and is in demand worldwide as a speaker and advisor on medical, cardiological and related issues.

“I just want to be on the frontline – this is where I am the best,” he says. “My affinity is for dealing with the issues very pragmatically, and getting results.”

Dr. Fuster spent twelve years at the Mayo Clinic before joining Mount Sinai in 1982 as chief of the cardiology division. After a four-year hiatus in the early 1990’s when he headed the cardiac unit at Boston’s Massachusetts General Hospital, he returned to New York to be director of Mount Sinai’s Zena and Michael A. Wiener Cardiovascular

Institute and later, director of the Marie-Josèe and Henry Kravis Center for Cardiovascular Health. In 2006, when the two entities were merged to form Mount Sinai Heart, Dr. Fuster was the logical choice to be its first leader.

When he talks about Mount Sinai Heart, Dr. Fuster emphasizes a number of aspects. The institute is noteworthy for integrating three disciplines – molecular cardiology, regenerative cardiology and cardiac imaging – but the doctor also praises “the integration of research, clinically applied research and clinical care.” Equally important, in his view, is that “this is a healthcare system, not a doctors’ system... we value tremendously nurses, nurse practitioners and technical people, who are very involved in what we do. We also include students who participate in projects – they are extremely helpful. And I think this is what makes this place very unique.”

He also speaks proudly of Mount Sinai’s openness to a diverse patient clientele. “This was controversial at the beginning, when we started,” he says, “but I don’t think it is anymore. I’ll never forget one day when [philanthropist] Laurance Rockefeller was sitting in the waiting area along with an ailing lady with a big hat from Harlem and he said, ‘I’ve never seen something more spectacular – this is absolutely fantastic what you have achieved here.’”

### **“A Disease of Modern Times”**

Dr. Fuster is serving at a critical juncture for the field of cardiology – a time, he says, when “there are so many advances, and at the same time, an epidemic.” The statistics are daunting: one in three American adults (80 million people) has one or more types of cardiovascular disease; it is the leading cause of death among women; 17 million people die from it each year around the world. And Dr. Fuster notes that it is a scourge of fairly recent origin – “Centuries ago, autopsies showed very little coronary disease. So it’s a disease of modern times.”

He is blunt in his assessment of how “modern times” have contributed to the problem: “Of the six risk factors that lead to the disease, two we can call ‘mechanical.’ One of these is obesity, and the other is high blood pressure – a disease of the modern world, of

tension, of stress – and obesity and blood pressure go together. There are two chemical problems, non-Type 1 diabetes and high cholesterol, which have a lot to do with obesity. And two more factors are *extremely* modern: smoking and lack of exercise. All of this represents 95 percent of the epidemic.”

His studies and experience have made Dr. Fuster a passionate advocate for preventive medicine – and not just in regard to cardiovascular disease.

“I love this country,” he says, “but the concept of prevention is not part of the culture here – the feeling is, ‘It’s not going to happen to me.’ So we have prolonged life two years per decade by *treating* disease – but we are not *preventing* it. As a result, people are dying later, but at the same time, the amount of disease is increasing. This is extremely costly. For example, the cost of treating cardiovascular disease in 2006 was over \$300 billion; ten years before, it was one-third of that. If you understand that you’re spending three times the amount of money as ten years ago, you can trust that the health system will break. It will not be possible to continue like this.

“What we have to do,” he continues, “is understand that preventing disease will make a significant difference. Let’s say, for instance, that we’re treating two twin brothers – one at the time he develops an infarction and the other, preventing the risk factors that may lead to the infarction – for a period of ten years. The cost of treating the infarction is four times the cost of preventing the infarction. You cannot get away from the fact that quality of life, preventing events, is very important economically.”

### **Learning Globally, Acting Locally**

To drive home this message, Mount Sinai Heart is conducting a number of research projects in the developing world. “We have to go to this part of the world as quickly as possible,” says Dr. Fuster, “in time to help prevent what we are experiencing in Western countries – but also because developing countries can actually help nations like the United States by teaching us a lot that we do not know.”

Indeed, Dr. Fuster becomes especially energized when talking about Mount Sinai Heart's international projects, which include an initiative in Rwanda – in collaboration with world-renowned economist Dr. Jeffrey Sachs – to help rural villagers combat cardiac disease by reducing their cholesterol and blood pressure, and a project involving 6,000 Colombian children aged three to seven, using the Spanish-language version of “Sesame Street” to teach them the importance of good health.

In another project, on the Caribbean island of Grenada, Dr. Fuster's researchers are forming peer groups among local residents who smoke or suffer from hypertension or obesity to see whether group members can help each other develop healthier lifestyles. “The point we are trying to make,” says Dr. Fuster, “is that adults only change for two reasons: peer pressure, or the law. In Grenada, we are checking the peer pressure hypothesis.”

### **“The Principle of the Four T's”**

Dr. Fuster is proud of Mount Sinai Heart's growing reputation – in *U.S. News & World Report's* “America's Best Hospitals” survey in 2009, Mount Sinai was ranked 18<sup>th</sup> in the category of Heart and Heart Surgery, up from 41<sup>st</sup> the previous year. “This jump took place because we are doing things that are very advanced,” he says, “in terms of technology, in terms of what we do globally. And I can predict another jump next year.” He also expects future breakthroughs from the institute in bioimaging – “You'll be able to see physiological processes, not just anatomy and structure, how the body works, how the mind works” – and genetics.

For now, Dr. Fuster continues to juggle his myriad interests and involvements through what he calls “the principle of the four T's – Time to reflect, discovering your Talents, Transmitting positive feelings, and Tutoring... I have two tutors, top people in the fields in which I'm interested, who can tell whether what I'm doing is right or wrong.”

And he is always finding ways to make a positive contribution to both his adopted country and his native land. He speaks with pride about bringing cardiology trainees to his wife's home town in Spain each year, where he gives a lecture on the latest

developments in the field “in the town’s movie theater – it’s like [the Italian film] *Cinema Paradiso*.”

“My life,” he says, “is really about giving back... because of how lucky I have been.”

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