The Roseto Mystery

"These people were dying of old age. That's it."

-JOHN BRUHN, SOCIOLOGIST

out•li•er noun

1: something that is situated away from or classed differently from a main or related body

2: a statistical observation that is markedly different in a value from the others of the sample

1.

Roseto Valfortore lies 100 miles south east of Rome in the Apennine foothills of the Italian province of Forggia. In the style of medieval villages, the town is organized around a large central square. Facing the square is the Palazzo Marchesale, the Palace of the Saggese family, once the great landowner of those parts. An archway to one side leads to a church, the Madonna del Carmen – Our Lady of Mount Carmine. Narrow stone steps run up the hillside, flanked in by closely cluttered two-story stone houses with red tile roofs.

For centuries, *paesani* of Roseto worked in the marble quarries in the surrounding hills or cultivated fields in the terraced valley below, walking four or five miles down the mountain in the morning and then making the long journey back up the hill at night. Life was hard. The townsfolk were barely literate and desperately poor and without much hope for economic betterment until word reach Roseto at the end of the 19th century of the land of opportunity across the ocean.

In January of 1882, a group of 11 Rosetans – 10 men and one boy – set sail for New York. They spent their first night in America sleeping on the floor of the on Mulberry Street, in Manhattan's Little Italy. Then they ventured west, eventually finding jobs in a slate quarry 90 miles west of the city near the town of Bangor, Pennsylvania. The following year, 15 Rosetans left Italy for America and several members of that group

ended up in Bangor as well, joining their compatriots in the slate quarry. Those immigrants, in turn, sent word back to Roseto about the promise of the new world and soon one group of Rosetans after another packed their bags and headed for Pennsylvania, until the initial stream of immigrants became a flood. In 1894 alone, some 1200 Rosetans applied for passports to America, leaving entire streets of the old village abandoned.

The Rosetans began buying land on a rocky hillside connected to Bangor by a steep, rugged wagon path. They built closely clustered two-story stone houses with slate roofs on narrow streets running up and down the hillside. They built the church and called it our Lady of Mount Carmel and named the mainstream, on which instead, Garibaldi Avenue, after the great hero of Italian unification. In the beginning, they called their town New Italy. But they soon changed it to Roseto, which seemed only appropriate given that almost all of them had come from the same village in Italy.

In 1896, a dynamic young priest by the name of father Pascal de Nisco took over at our Lady of Mount Carmel. De Nisco set out spiritual societies and organized festivals. He encouraged the townsfolk to clear the land and plant onions, beans, potatoes, melons and fruit trees in the long back yards behind their houses. He gave the seeds and bulbs. The town came to life. The Rosetans began raising pigs in their backyards and growing grapes for homemade wine. Schools, a park, a convent and a cemetery were built. Small shops and bakeries and restaurants and bars opened along Garibaldi Avenue. More than a dozen factories sprang out making blouses for the garment trade. Neighboring Bangor was largely Welsh and English and the next town over was overwhelmingly German, which meant – given the fraction relationships between the English and Germans and Italians in those years – that Roseto stayed strictly for Rosetans. If you had wandered up and down the streets of Roseto in Pennsylvania in the first few decades after 1900, you would have heard only Italian and not just any tally but the precise southern Foggian dialect spoken back in the Italian Roseto. Roseto, Pennsylvania, was its own tiny, self-sufficient world – all but unknown by the society around it – and it might well have remained so but for a man named Stuart Wolf.

Wolf was a physician. He studied digestion and the stomach and taught in the medical school of the University of Oklahoma. He spent his summers on a farm in Pennsylvania, not far from Roseto – although that, of course, didn't mean much, since Roseto was so much in its own world that it was possible to live in the next town and never know much about it. "One of the times when we were up there for the summer – this would've been in the late 1950s – I was invited to give a talk at the local medical society", Wolf said years later in an interview. "After the talk was over, one of the local doctor's invited me to have a beer. And while we were having a drink, he said, you know, I've been practicing for 17 years. I get patients from all over and I rarely

find anyone from Roseto under the age of 65 with heart disease".

Wolf was taken aback. This was the 1950s, years before the advent of cholesterol-lowering drugs and aggressive measures to prevent heart disease. Heart attacks were an epidemic in the United States. They were the leading cause of death in men under the age of 65. It was impossible to be a doctor, common sense said and not seeing heart disease.

Wolf decided to investigate. He enlisted the support of some of his students and colleagues from Oklahoma. They gathered together the death certificates from residents of the town, going back as many years as they could. They analyzed physicians' records. They took medical histories and constructive family genealogies. "We got busy", Wolf said. "We decided to do a preliminary study. We started in 1961. The mayor said, 'all my sisters are going to help you.' I said, 'where are you going to have council meetings?' He said, 'well, will postpone them for a while.' The ladies would bring us lunch. We had little booths where we could take blood, few EKGs. We were there for four weeks. Then I talked with the authorities. They gave us the school for the summer. We invited the entire population of Roseto to be tested."

The results were astonishing. In Roseto, virtually no one under 55 had died of a heart attack or showed any signs of heart disease. For men over 65, the death rate from heart disease in Roseto was roughly half of the United States as a whole. The death rate from all causes in Roseto, in fact, was 30 to 35% lower than expected.

Wolf brought in a friend of his, a sociologist from Oklahoma name John Bruhn, to help it. "I hired medical students and sociology grad students as interviewers and in those 70 we went house to house and talk to every person age 21 and over", Bruhn remembers. This happened 10 years ago but Bruhn still had a sense of amazement in his voice as he described what they found. "There was no suicide, no alcoholism, no drug addiction and very little crime. They didn't have anyone on welfare. Then we looked at peptic ulcers. They didn't have any of those either. These people were dying of old age. That's it."

Wolf's profession had a name for a place like Roseto – a place that way outside everyday experience, where the normal rules did not apply. Roseto was an *outlier*.

2.

Wolf's first thought was that Rosetans must have held onto some dietary practices from the oil world that left them healthier than other Americans. But he quickly realized that wasn't true. The Rosetans were cooking with large instead of the much healthier all of oil they had used back in Italy. Pizza in Italy was a thin crust with salt, oil and perhaps some tomatoes, anchovies or onions. Pizza in Pennsylvania was bread

dough plus sausage, pepperoni, salami, ham and sometimes eggs. Suites such as biscotti and taralli used to be reserved for Christmas and Easter, in Roseto they were eating year-round. When Wolf had dietitians analyzed the typical Rosetan's eating habits, they found that a whopping 41% of their calories came from fat. Nor was this a town where people got up at dawn to do yoga and money brisk 6 miles. The Pennsylvanian Rosetans smoke heavily and many were struggling with obesity.

If diet and exercise didn't explain the findings, then what about genetics? The Rosetans were a close-knit group from the same region of Italy and what's next on was to wonder whether they were of a particularly hardy stock that protected them from disease. So he tracked down relatives of the Rosetans who were living in other parts of the United States to see if they shared the same remarkable good health as their cousins in Pennsylvania. They didn't.

He then looked at the region where the Rosetans lived. Was it possible that there was something about living in the foothills of Eastern Pennsylvania that was good for their health? The two closest towns to Roseto were Bangor, which was just down the hill and Nazareth, a few miles away. These were both about the same size as Roseto and both are populated with the same kind of hard-working European immigrants. Wolf combed through both towns' medical records. For men over 65, the death rates from heart disease in Nazareth and Bangor were three times that of Roseto. Another dead end.

What Wolf began to realize was that the secret of Roseto wasn't diet or exercise or jeans or location. It had to be Roseto itself. As Bruhn and Wolf walked around the town, they figured out why. They looked at how the Rosetans visited one another, stopping to chat in the Italian on the street, say or cooking for one another in their backyards. They learned about the extended family clans that underlay the town's social structure. They saw how many homes had three generations living under one roof and how much respect grandparents commanded. They went to mass at our Lady of Mount Carmel and saw that unifying and calming effect of the church. They counted 22 seven and civic organizations in a town of just under 2000 people. They picked up on the particular egalitarian ethos of the community, which discouraged the wealthy from flaunting their success and helped the unsuccessful obscure their failures.

In transplanting the *paesani* culture of southern Italy to the hills of eastern Pennsylvania, the Rosetans had created a powerful, protective social structure capable of insulating them from the pressures of the modern world. The Rosetans were healthy because of where they were from, because of the world they had created for themselves in their tiny little town in the hills.

"I remember going to was an old for the first time and you see three generational

family meals, all the bakeries, the people walked up and down the street sitting on their porches talking to each other, the blouse mills where the women work during the day, while the men worked in the slate quarries", Bruhn said. "It was magical."

When Bruhn and Wolf first presented their findings to the medical community, you can imagine the kind of skepticism they face. They went to conferences where their peers were presenting long rows of data arrayed in complex charts and referring to this kind of gene or that kind of physiological process and they themselves were talking instead about the mysterious and magical benefits of people stopping to talk to one another on the street and of having three generations under one roof. Living a long life, the conventional wisdom at the time said, depended to a great extent on who we were – that is, our genes. It depended on the decisions we made – on what we chose to eat and how much we chose to exercise and how effectively we were treated by the medical system. No one was used to thinking about health in terms of community.

Wolf and through had to convince the medical establishment to think about health and heart attacks in an entirely new way: they had to get them to realize that they wouldn't be able to understand why someone was healthy if all they did was think about an individual's personal choices or actions in isolation. They had to look beyond the individual. They have to understand the culture he or she was a part of and who their friends and families were and what town their families came from. They had to appreciate the idea that the values of the world we inhabit and the people we surround ourselves with have a profound effect on who we are.