

Italian scientist bounces back after virus trafficking accusation

By Kristine Crane / Correspondent

Posted Jul 22, 2018 at 5:42 PM

Updated Jul 22, 2018 at 5:42 PM

Since 2016, Ilaria Capua has been director of the One Health Center of Excellence at the University of Florida.

On April 1, 2014, Ilaria Capua, now the director of the One Health Center of Excellence at the University of Florida, received a phone call that changed her life.

At the time, the renowned Italian virologist — widely recognized for pioneering a strategy that successfully contained bird flu in the mid-2000s — also served in the Italian Parliament. The phone call came at the end of a long day of a Parliamentary session, from a journalist at an Italian weekly magazine called L'Espresso.

The journalist's accusatory questions caught Capua off guard. Before hanging up, he told her she was under investigation for illegally trafficking the same virus that she had helped contain. A few days later, the incriminating cover story in L'Espresso was published, implicating Capua and others in crimes that were never committed.

"I was like paralyzed," said Capua, now 52. "I was being crucified."

Two years later, and just two weeks after Capua had moved to Florida for her position at UF, the Italian courts cleared Capua of any wrongdoing. Many other defendants, including scientists, health ministry executives and private company managers, were also cleared.

Capua's dramatic story, which she wrote about in a memoir published by Rizzoli in 2017 (*Io, Trafficante di Virus: Una Storia di Scienza e di Amara Giustizia*), takes something from the pages of Galileo, the 17th-century Italian scientist accused of heresy by the Catholic Church for declaring that the Earth revolves around the sun.

Capua's detractors were anonymous, but most likely political rivals. She was able to push through a number of pro-science initiatives in Parliament, and was outspoken about others that challenged what she calls Italy's lack of science-based politics. Her "crime," she said, might have been none other than her very own success.

In addition to Capua's stellar career as a research scientist — among her many accolades is being the 2011 recipient of the Penn World Leadership in Animal Health Award — she had been and continues to be a proponent of public data sharing, a controversial concept in some scientific circles.

Capua's advocacy of the concept, which earned her mention in international media such as the *Economist* and *The Wall Street Journal*, was used against her. Those conducting the investigation tapped her phone and turned statements such as "You can take my virus" — a process widely accepted among scientific institutions such as the World Health Organization — into evidence of virus trafficking.

UF pursued Capua's candidacy even after she explained that she was still, at that point, under investigation.

"We decided to do our own investigation within the community of scientists throughout the world," said Jack Payne, who as the UF senior vice president for agriculture and natural resources, oversees the Institute of Food and Agricultural Sciences. "Word got back that they were all false charges. It was all politics."

Satisfied that the criminal charges against Capua were "baseless," Payne continued, they hired her to start in the summer of 2016. When she was then quickly cleared back in Italy, "We weren't surprised," he said. "We were happy to know."

Capua, who was previously the director of the department of comparative biomedical sciences at the Istituto Zooprofilattico Sperimentale Delle Venezie, a public veterinary institute in Padua, said she appreciates the risk UF took in hiring her before the case was officially dropped. She immediately settled into her role at the helm of the One Health Center, which is housed at the Emerging Pathogens Institute.

“One Health,” Capua explains, is not a new concept. It was coined in the 19th century by a German pathologist studying how diseases pass between animals and humans.

The center at UF has widened that scope to include research on the interconnectivity of human, animal, plant and environmental health. Their research encompasses fields such as law, history, religion, economics and politics, among others, with the overall aim of managing complex health issues.

For example, such interdisciplinary research could be used to manage diseases such as Ebola and Zika — which are cyclical — before they become emergencies, Capua said.

UF is a good place to carry out such research, she added, because it has several strong departments, in addition to a powerful super-computing facility, the HiPerGator 2.0.

“It’s a comprehensive school, the best place to implement this vision,” she said. “The whole world is exploring interdisciplinarity. It can be difficult to implement. From my little office, I’m trying to turn that around.”

Payne agreed that UF is a great place for One Health because of its strong departments. However, “everybody is so busy doing their own thing,” he said. “For the next several years, Ilaria will focus on breaking down those silos.”

She’s already created a One Health certificate for students, a mentorship program for women scientists, and is organizing art exhibits as part of the 500-year anniversary of Leonardo Da Vinci’s death next year.

Capua has also brought a bit of Italy to Gainesville, where she lives with her family. Her book reading at Third House Books & Coffee at the end of March was packed — mostly with Italians living here. She teaches Italian cooking and

hosts occasional film nights at her home, which is filled with Italian furniture, paintings and even silver cutlery from her father's estate. A red Fiat is parked in her driveway.

Capua grew up in an upscale neighborhood in Rome, next to the Canadian Embassy, and was schooled at St. George's British International School before attending the University of Perugia, where she graduated with highest honors. She has two doctoral degrees — from the universities of Pisa and Padova. She is on the board of directors of two prestigious Italian universities and goes back to Italy a few times a year.

"It's always hard to go back," she said. "My story holds together so many things that go wrong with the Italian system. My mission is to talk about it."