

# “BEING A VIRUS TRAFFICKER”

*A STORY OF SCIENCE AND BITTER INJUSTICE*

By Ilaria Capua – Rizzoli 2019

“Resilience is the essence of survival, and no one can do it for you.”

## **Foreword**

Throughout scientific history, the prevalent politics of the time have hindered scientists in pursuit of their scientific goals. Galileo (1564–1642), the Italian astronomer and physicist, was tried and convicted in 1633 for publishing his observation that the earth revolves around the sun. The Holy Inquisition banned his writings, and Galileo spent the remainder of his life under house arrest. The recent book and popular film *Hidden Figures* retold the story of African American women mathematicians who helped win the Space Race in the mid-twentieth century. Prior to that, few people knew that Katherine Johnson, Dorothy Vaughan, and Mary Jackson overcame racial and gender discrimination while working at the National Aeronautics and Space Administration (NASA). Rosalind Franklin, a physical chemist, produced the first x-ray photographs of DNA that were one of the most critical pieces of information that allowed Watson and Crick to finally describe its structure in 1953. The Nobel committee at the time only acknowledged the role of the gentlemen in the discovery. Such examples from history compel us to examine our present: what adverse forces hinder women scientists today as they strive to become expert and trustworthy defenders of science?

*Being a Virus Trafficker* makes a valuable contribution to this discussion. Written by one of today’s leading women scientists, Prof. Ilaria Capua, this memoir is a fascinating account of the scientific, political and legal challenges she overcame during her tenure in the Italian Parliament’s House of Representatives from 2013-2016.

## **Synopsis**

Our story begins on June 16<sup>th</sup>, 2016. Ilaria lands at Orlando International Airport in Florida. She is alone, accompanied only by the family cat and two large suitcases. Her husband and 12-year-old daughter are set to arrive one week later. She has recently resigned as a member of the Italian Parliament. She is a world-renowned virologist charged with international trafficking of viruses and subsequently causing disease epidemics in the human population in Italy. These grave charges are punishable by life imprisonment. And the judicial process has not yet concluded. But now she arrives in the USA to start a new life. The prestigious position of Director of the One Health Center of Excellence at the University of Florida awaits her.

“I am starting over at age 50.” It’s a major step.

Since she was a child, Ilaria knew that she wanted to be a scientist. She followed her passion, completing her first degree in veterinary medicine and subsequently becoming a world-renowned virologist following her work on avian influenza (known as bird flu) during the time of major disease outbreaks in Italy from 1999-2003. She established a large research laboratory within the Italian state veterinary surveillance system to international acclaim. Together with her team, she developed the first EU authorized vaccination strategy for bird flu. She also challenged the pre-existing World Health Organization (WHO) position that supported tight restrictions on the sharing of virus genetic information. She led an international debate on genetic data sharing in the face of bird flu outbreaks that were now threatening the health of global poultry stocks as well as the human population.

Fundamentally, she drove a change in the international approach to pandemic preparedness.

Her achievements were reported by mainstream media worldwide including the Economist, the New York Times and the Wall Street Journal.

It has often been said that one of the greatest threats to success is the status quo. In this instance, the ‘Status Quo’ not only defended itself but went actively on the attack following the successes Ilaria achieved. After being included in Seed’s Revolutionary Mind series and becoming the first woman to receive the Penn Vet World leadership award in Animal Health, the environment at her Institute changed for the worse. She began receiving anonymous warning letters; it was suggested her house was bugged; the work environment became blocked by bureaucracy at every turn; the Institute even initiated disciplinary proceedings against her with no basis in reality.

She decided that it was time to leave the country and find a job abroad. But then, in early 2013, the sitting Italian Prime Minister Mario Monti asked her stand in the Italian general election to be run later that year. Monti chose a series of leading technical experts from a variety of disciplines to cross-fertilize the political environment with operational excellence. He was impressed by the global leadership and self-sacrifice for the country Ilaria had shown and offered her a safe seat. She accepted the challenge and was duly elected.

Less than a year after her appointment, and somewhat surreally on the 1<sup>st</sup> April, Prof. Capua was questioned by a journalist from the weekly magazine, Espresso (one of the two foremost magazines in Italy), who informed her that she was being indicted, along with her husband and 38 other people, for corruption, abuse of her position in state office, international virus trafficking, and deliberately causing an epidemic for personal gain. She was given no official notification of this from the legal authorities who would not do so for a further 2 months. For journalists to receive information on secret on-going judicial investigations is illegal under Italian law.

She immediately asserted her total innocence on TV and in the major newspapers, explaining why the science behind the accusations was completely erroneous. The subsequent defense of her reputation

from violent political attacks and unjust press coverage became an on-going battle. Regardless of her request for the issue to be examined rapidly by the judiciary, she had to wait over two years before her case was considered. The process was slow with the overall investigation split into multiple judgements in different geographical territories. It felt like officialdom preferred to defer and delay rather than resolve. The failure to arrive at a prompt conclusion exposed Prof. Capua to intense attacks by her political opponents, who used the outstanding legal 'cloud' to paralyze her initiatives in Parliament. Despite the intense psychological pressure, during her three years in politics Prof. Capua continued to co-chair the Science Education and Culture Commission, where she lobbied tirelessly on behalf of the scientific community.

On July 5th, 2016, three weeks after leaving Italy with her family and moving to the USA, the court finally rejected the charges as false and "fabricated." All criminal accusations were dismissed because the evidence for the charges simply did not exist. In other words, the crimes did not happen and there was no basis on which to hold a trial. In legal systems in many other developed countries, the charges would never have been formalized or been deemed fit to enter judicial process. The decision marked the end of a nightmare lasting almost a thousand days that would forever transform Ilaria's life and that of her family.

This memoir is a striking story of someone who was able to transform a devastating experience into an opportunity. After the abuse Ilaria experienced, resulting in severe psychological and physical distress for both her and her family, she is once again exhibiting outstanding leadership. As she writes, "Resilience is the essence of survival, and no one can do it for you."

At the heart of this odyssey are disagreements that Capua experienced with global organizations such as WHO as well as clear conflicts with the media and sections of the Italian judiciary. In the former, she successfully fought to democratize information achieving a wide consensus for her vision of open access data sharing to facilitate greater understanding of major infectious disease events; in the latter, she became one of the first true victims of Fake News, where substandard journalism working hand in hand with rogue components of the judicial system attempted to influence the political system of the country. The irony will not be lost on readers. Capua emerges as an expert and responsible proponent of making scientific information more widely available, against the backdrop of investigators and media who irresponsibly misused the power of investigation and publication to spread baseless rumors and false accusations of scientific misconduct. Her emergence from the fight with her head held high and the promise of new scientific successes in a new land is both inspiring and tragic. A true female leader in her field, educated and supported in her country who is effectively expelled from the same country due to the total misunderstanding of her endeavors. To date she has received no formal apology from the authorities.

In the end, Capua's book leaves us with two urgent questions to consider: how does society manage Fake News in the era of such rapid scientific advancements and how do scientists themselves balance openness and data sharing requirements in a legal environment that lacks the technical understanding of what they do?