

# Moral courage and our common future

Environmental advocate **Robert F Kennedy Jr**, Chairman of the US charity, Children's Health Defense, has written the Foreword to this very important book that reflects the issues of our extraordinary times

**A**nd yet, it moves! Galileo whispered those defiant words in 1615 as he left the Roman Inquisition tribunal, before which he repudiated his theory that the Earth – the immovable centre of the Universe according to contemporary orthodoxy – revolves around the Sun. Had he not recanted, his life would be forfeit.

We like to think of Galileo's struggles as the quaint artifact of a dark, ignorant and tyrannical era where individuals challenged government-anointed superstitions only at grave personal risk. Dr Judy Mikovits' story shows that stubborn orthodoxies anointed by pharmaceutical companies and corrupt government regulators to protect power and profits remain a dominant force in science and politics.

## Pioneer in human retrovirology

By any standard, Dr Judy Mikovits was among the most skilled scientists of her generation. She entered professional science from the University of Virginia with a BA degree in chemistry in 1980, as a protein chemist for the National Cancer Institute (NCI) working on a life-saving project to purify interferon. The quality of her work and her reliable flashes of genius soon propelled her to the apex of the male-dominated world of scientific research.

At NCI, Mikovits began what would become a 20-year collaboration with Dr Frank Ruscetti, a pioneer in the field of human retrovirology. While heading up the lab of Robert Gallo in 1977, Ruscetti made scientific history by co-discovering, with Bernie Poiesz, the first human retrovirus, HTLV-1 (human T-cell leukemia virus). A retrovirus is a 'stealth virus' that, like HIV, enters the host without alerting the immune systems. It may then lie dormant for years without causing harm. Before killing a person, a retrovirus will usually destroy their immune system. As a result, many retroviruses cause cancer. With an esca-

lating understanding of retrovirus behaviour, the Ruscetti/Mikovits collaboration and Mikovits' award-winning PhD thesis from George Washington University in 1991 changed the paradigm of HIV-AIDS treatment, turning the disease from a death sentence into a manageable condition.

## Integrity before personal ambition

From the outset, the most daunting obstacle to Mikovits' career advancement was her scientific integrity. She always placed it ahead of personal ambition. Judy Mikovits never meant to wade into a public health brawl. She never considered herself a renegade or revolutionary. Judy's relatives mainly worked in government or law enforcement. They believed in the bedrock American principles of hard work, respect for authority, and, above all, telling the truth. That backdrop made it impossible for her to abandon her high fundamental standards of honesty and integrity, even when they became a hindrance.

After leaving NIH, she worked a stint for Upjohn, leading a project to prove the safety of the company's blockbuster Bovine Growth Hormone. When she discovered the company's formula could cause precancerous changes in human cell cultures, she refused direct orders from her boss to hide her discoveries. Her revelation suggested that the ubiquitous presence of the hormone in milk could lead to breast cancer in women who drank it. Her refusal to back down precipitated her departure from Upjohn and her return to NIH and graduate school. Judy's war on BGH eventually led to Upjohn abandoning the product.

## A new retrovirus timebomb

In 2009, now in academia, Mikovits and Ruscetti, who was still at NCI, led a team that discovered a strong association between a previously unknown retrovirus and myalgic encephalo-

myelitis, commonly known as chronic fatigue syndrome (ME/CFS). Predictably, the retrovirus was also linked to certain blood cancers. Collaborators had named it Xenotropic Murine Leukemia Related Virus (XMRV) when they first detected it in DNA sequences in prostate cancer a few years earlier.

The medical community had dealt with chronic fatigue syndrome, which strikes mostly women, in bad faith since its appearance in the mid-1980s. The medical establishment derided ME/CFS as 'yuppie flu' and attributed it to the inherent, psychological fragility of career women pursuing professions in high-pressure, corporate ecosystems. Mikovits found evidence for the retrovirus in approximately 67 percent of women afflicted with ME/CFS and in a little less than 4 percent of the healthy population.

On October 8, 2009, Mikovits and Ruscetti published their explosive findings in the journal *Science*, describing the first-ever isolation of the recently discovered retrovirus XMRV and its association with ME/CFS. Her revelation about ME/CFS immediately triggered angry reactions from jealous cancer power centres, stubbornly resistant to science that attributed cancer and neuroimmune diseases to viruses.

The blowback grew even grimmer when Mikovits' subsequent research suggested that the new retrovirus, originally found in mice, had somehow jumped into humans via contaminated vaccines. Even more troubling to the medical establishment, Dr Mikovits' research revealed that many of the female patients afflicted with XMRV had children with autism. Suspecting XMRV might be passed from mother to child, as with HIV, Mikovits tested 17 of the children; 14 showed evidence of the virus. Those findings dovetailed with parental reports of autistic regression following vaccination. Subsequent studies linked XMRV to epidemics in leukemia, prostate cancer, autoimmune disease and the explosion of Alzheimer's disease.

Worse yet, research also found wide-





spread XMRV contamination in the blood supply and blood products. Based on her research and the findings of others, it seemed that anywhere from 3 to 8 percent of the population now carry the virus; XMRV has become part of human ecology, passed from mother to child *in vitro* or through breast milk. Mikovits' data suggest that more than 10 million Americans are harbouring this virus like a ticking timebomb – a potential threat far greater than the HIV-AIDS epidemic.

In January of 2011, HIV-AIDS expert Ben Berkhout published these explosive revelations in *Frontiers in Microbiology*. He included Mikovits' evidence that mouse tissue used in vaccine production was the likely vector for human contamination. Unbeknownst to Judy, her co-author on this book, Kent Heckenlively, had already independently discovered published, medical research showing that the first recorded outbreak of ME/CFS was among 198 doctors and nurses at the Los Angeles County Hospital in 1934-5, following their injection with an experimental polio vaccine grown in mouse brain tissue.

### Big Pharma fights back

Mikovits' evidence threatened financial catastrophe for the world's pharmaceutical companies because of their negligent use of animal cell cultures to produce vaccines and other pharmaceutical products. Her findings put at risk billions of dollars of revenues from an entire branch of medicine called 'biologics', which depends on animal tissue and products.

Pharmaceutical companies and their captive regulators unleashed a furious broadside against Mikovits and Ruscetti, besieging them from every stronghold.

The journal *Science* feverishly pressed Mikovits to retract her October, 2009, article. In September, 2011, the Whittemore Peterson Institute at the University of Nevada, Reno, fired Judy from her faculty job. Judy and her family noticed menacing-looking men following her in pickup trucks and other incidents indicating she was under surveillance. In one incident, burly thugs surrounded her home and forced her to flee in a boat. After she escaped, they barged into her home, claiming to work for the Government.

In November, Ventura Police arrested Judy without a warrant and held her in jail for five days without bail. The police searched her house from top to bottom, strewing her papers everywhere. That

same day, cops raided the home of her friend, Lilly, and forced her to sit in a chair for several hours while they ransacked the building. NIH officials told Nevada police that Dr Mikovits had illegally taken her research notebooks from their lab. This was a fabricated charge. As the principle investigator on two government grants, it was Dr Mikovits' obligation to retain all of her research papers. Furthermore, Judy had left all of the notebooks in her university office on September 29<sup>th</sup>. That same day, someone illegally burgled Judy's office, removed her notebooks and then somehow planted them in a closet of her home, apparently to incriminate her. Weeks later, as Judy languished in a cell, her husband, David, found the journals neatly packed in a linen beach bag in an obscure closet in her Southern California home. David frantically took them



to the jail after midnight and then handed them over to Ventura Police.

While she was in jail, Judy's former boss told her husband and Dr Ruscetti that if she just signed an apology admitting her paper was wrong, the police would release her from confinement and she could salvage her science career. Judy refused. No prosecutor has ever filed charges against her, but the pharmaceutical cartel and its captive scientific journals launched a campaign of vilification against her. Less than two years earlier, the journal *Science* had celebrated her. Now, the same journal published her mugshot and retracted her paper.

Judy lost federal grants for which she was the principle investigator. She has gone bankrupt trying to find work and restore her good name. The scientific journals, admittedly all now controlled by Big Pharma, have refused to publish her papers. The NIH medical libraries have locked her out. Despite spending hundreds of thousands of dollars in legal

fees, she has not been able to get her day in court. The US Attorney in Nevada has kept the case 'under seal' for years. Fraudulent acts of public health officials at the highest levels of Health and Human Services (HHS) have effectively rendered her unemployable.

### Challenging contemporary orthodoxies is hazardous

The persecution of scientists and doctors who dare to challenge contemporary orthodoxies did not end with Galileo: it has always been, and remains today, an occupational hazard. Henrik Ibsen's 1882 play, *An Enemy of the People*, is a parable for the pitfall of scientific integrity.

Ibsen's fictional doctor experienced what social scientists call the 'Semmelweis reflex'. This term describes the knee-jerk revulsion with which the press, the medical and scientific community, and allied financial interests greet new scientific evidence that contradicts an established scientific paradigm. The reflex can be particularly fierce in cases where new scientific information suggests that established medical practices are actually harming public health.

### Dr Ignaz Semmelweis

The real-life plight of Ignaz Semmelweis, a Hungarian physician, inspired the term and Ibsen's play. In 1847 Dr Semmelweis was an assistant professor at Vienna's General Hospital maternity clinic, where around 10 percent of women died from puerperal 'birth bed' fever. Based on his pet theory that cleanliness could mitigate transmission of disease-causing 'particles', Semmelweis introduced the practice of mandatory hand-washing for interns between performing autopsies and delivering babies. The rate of fatal puerperal fever immediately dropped to around 1 percent. Semmelweis published his findings.

Rather than building a statue to Semmelweis, the medical community, unwilling to admit culpability in the injury of so many patients, expelled the doctor from the medical profession. His former colleagues tricked Dr Semmelweis into visiting a mental institution in 1865, then committed him against his will. Semmelweis died mysteriously two weeks later. A decade afterwards, Louis Pasteur's germ theory and Joseph Lister's work on hospital sanitation vindicated Semmelweis' ideas.

### Modern analogues abound

#### Dr Herbert Needleman

Modern analogues abound. Herbert Needleman, of the University of Pittsburgh, endured the Semmelweis