

The Truth about the Covid Vaccines Herald and Times-Argus (September 11, 2021)

https://www.rutlandherald.com/opinion/perspective/betts-the-truth-about-covid-vaccines/article_926e301b-01f0-5e5e-bf29-5096e5894d77.html

It is easy to invent lies on the web, since they can come from anyone, anywhere in the world with no fact-checking. Lies can be more creative than the truth and they attract ten times more readers; and this brings billions in advertising profits to the web-sites. The webs of lies about the Covid-19 vaccines (and now face-masks) have been a tragedy. As Covid strains get more infectious and dangerous, many more people are getting sick, and more than 95% of those dying are now unvaccinated. It is bizarre that Facebook and other websites permit (encourage?) people to spread lies that may kill others, but this is capitalism where the freedom to kill others for profit is tolerated. Similarly the Fossil fuel Empire has free rein to kill us, our children and much of life on Earth to maintain their \$50+ billion in annual profits. Exxon-Mobil is not expected to pay for the destruction from Hurricane Ida, even though they are directly and criminally responsible, because they have known and lied about climate change for forty years.

Where can we find the deeper truth? The mRNA vaccines for Covid-19 are a beautiful illustration. When I ask people the story of the invention of the mRNA vaccines, very few know. There is nothing on the popular web-sites of vaccine lies. You have to search, but unless you know who to look for, you probably still won't find the amazing story below. You will find only government information, along with many pages that are skillful advertising or bogus claims. It is almost as if the astonishing truth has been suppressed. American society has crumbled in recent years into fear-filled worlds, where the freedom to spread lies that harm others is worshipped by many. In reality of course it is the truth that sets you free.

The brilliant Hungarian-born scientist Dr. Katalin Karikó was behind the key mRNA development. She was an expert on coronaviruses, and she knew we needed new types of therapeutics and vaccines. In 1985, she left Hungary, then still a communist country, and came to the US with her husband and 2-yr-old daughter, thinking there would be more support here for this critical work. They sold their car and purchased 900 British pounds (about US\$1200), which was sewn into their daughter's teddy bear for the journey. Hungary did not encourage emigration. They settled in Philadelphia where she worked for Temple University.

Her determined struggle to develop mRNA vaccines lasted many decades. For more than ten years her applications for funding were simply rejected by reviewers saying "These have never been made, so you cannot prove they can be made". Is this a good framework for funding creative scientists? Perhaps some may have also thought: why should we fund an immigrant woman scientist from a communist country? In 1998 this all changed when she met a young American immunologist Dr. Drew Weissman, a professor of medicine at the University of Pennsylvania, and the two formed a research partnership. Today, Karikó and Weissman are widely recognized for their groundbreaking work in developing mRNA therapeutics and vaccines over decades. In December 2020, more than 20 years after they began their collaboration, she and Weissman were each vaccinated with a first dose of the Pfizer/BioNTech Covid-19 vaccine at the University of Pennsylvania. They will receive the Columbia University

2021 Louisa Gross Horwitz Prize in January 2022 for their trailblazing work on messenger RNA vaccines for COVID-19.

Katalin Karikó still lives in Philadelphia, but she is also a senior vice-president of BioNTech, which manufactures the Pfizer vaccine in Germany. Her greatest pride is her daughter, who carried that teddy bear stuffed with cash to the US at age 2. Susan Francia, who grew up in a family where it was clear from childhood that hard work is part of life, and if you embrace it, there will be a fulfilling reward, won Olympic gold medals in 2008 and 2012 in the US Women's Rowing Eight Team.

The Pfizer/BioNTech mRNA vaccine development was shared with Moderna. So when I am asked if you can trust these vaccines, I tell them the story of their long development by a brilliant woman scientist Katalin Karikó who refused to quit. And I say “you can trust her with your life”. Watch closely the many new developments in the next six months.