

Byram Bridle – Spike Protein Misinformation

Let's start with the red flags:

- 1.) Misrepresentation of expertise: Dr. Byram Bridle is an associate professor of viral immunology University of Guelph – in the Ontario VETERINARY College. He is not a professor of human immunology.
- 2.) Provides zero citations: In the interview, he makes the following statements before launching into his untested, unproven, and demonstrably false theory: "I don't have the time to describe the scientific data but I can assure you that everything I'm about to say is backed up by peer reviewed data (does not provide citations) Well known and respected journals, (doesn't name them). I'm making a document I will circulate later." Neglecting to back up his statements with data, vaguely referencing papers without citing to them is a huge red flag.
- 3.) Conflict of Interest: Dr. Bridle is developing his own vaccine candidate to target SARS-CoV-2 and has received funding from 14 sources, including the Canadian government: Canadian Institute of Health Research and Ontario Covid-19 Rapid Research Fund (Source: ovc.uoguelph.ca). He has a financial interest in trying to discredit the existing vaccines, which with nearly 2 billion doses given worldwide, have demonstrated remarkable safety and efficacy thus far.
- 4.) Caught redhanded: Finally, the author of one of the major papers Bridle vaguely alludes to, Dr. Uri Manor, has spoken out against this malicious misrepresentation of his work, and confirms that the relatively small amount of spike protein produced by the mRNA vaccine would not nearly be enough to do any damage and that Dr. Bridle's fantastical claims are not possible.

In regard to his argument, from a scientific standpoint, he is also wrong. He purposely conflates outcomes of SARS-CoV-2 INFECTION with vaccination. SARS-CoV-2 Infection CANNOT be equated with vaccine induced immunity. CANNOT. Period.

- 1.) The main difference is that when a virus infects your cells, it hijacks your cellular machinery to make copies of itself, basically endlessly, until your infection has cleared. Source: Principles of Virology). On the other hand, the vaccine teaches your body to make a miniscule amount of spike protein that degrades within a few days AND YOUR BODY CANNOT MAKE MORE. Even if it could, which it can't, the amount of spike protein made by vaccination is approximately 5,000x LESS than what would be needed to bind to ACE2 receptors to cause the type of damage that actual viral infection does. This alone kills Dr. Bridle's untested, unproven theory.
- 2.) The spike protein expressed by cells as a result of vaccination CANNOT wander freely throughout the body. It is stuck on the cell that presents it by a transmembrane anchor. Again, this alone would kill Bridle's "theory" even without the other mountains of evidence we have that it is bogus. The spike protein created in response to vaccination also DOES NOT persist in the body after vaccination. (Source: Ogata et al.)
- 3.) Another difference between vaccine induced spike protein and infection is that the spike protein created by the vaccine is modified to prevent binding to cells. When the VIRUS infects your cells, the spike protein undergoes a conformation change in order to bind to the host cell's ACE2 receptor. This means the spike protein IN A VIRAL INFECTION changes forms from a pre-fusion

(unbound to receptor) to post-fusion (bound to receptor and ready to wreak havoc). The spike proteins induced by the vaccination have been molecularly modified to be locked in a pre-fusion state – they CANNOT bind to cells in the same way that spike protein attached to intact virus can. (Source: cen.acs.org paper) This is where we all thank the molecular and cellular biologists who developed these vaccines for being so incredibly smart and capable. This detail, by the way, is the final nail in the Bridle theory coffin.

- 4.) Just in case that wasn't enough, and you don't have to be a scientist to understand this like some of the other more technical refutations, the fact that post-market monitoring is ongoing looking for safety signals and none of his assertions are bearing out just further confirms that they are not credible in the least.

Sources:

Ovc.uoguelph.ca

Principles of Virology - Chegg

<https://blogs.sciencemag.org/pipeline/archives/2021/05/04/spike-protein-behavior>

<https://www.nature.com/articles/s41586-020-2622-0>

<https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciab465/6279075>

<https://cen.acs.org/pharmaceuticals/vaccines/tiny-tweak-behind-COVID-19/98/i38>