Chairman Lipps, Vice Chair Holmes, Ranking Member Russo, and Members of the House Health Committee, thank you for the opportunity to provide proponent testimony on Ohio House Bill 248.

My name is Dr. Andy Crofton. I am an assistant professor of anatomy at Case Western Reserve University School of Medicine and the President of Karamedica, Inc., a small biotech startup company. I am a biomedical scientist. I am an entrepreneur and small business owner. I am a husband. I am a father to young children. And all of these roles influence my perspective on this bill.

I support HB248 because it is vital that we, the people, retain our right to decline a medical procedure or product, no matter its potential benefit. No medicinal product, whether prophylactic or therapeutic, is without side effects. And nowadays, no medicinal products are free from the influence of profit motive. I can tell you as a biomedical scientist involved in the development of pharmaceuticals, biologicals, and medical devices, that we never fully understand all of the effects such products may have on one's body, especially long term. In fact, pre-clinical and clinical studies are designed so that averages are the main values of interest. Outliers are often ignored, dismissed, or at the very least, discounted. We are also limited in our study designs by time and resources. This means that scientists are unable to gather data on all facets of a product and its effect on animals and/or people. It might seem like focusing on averages makes perfect sense, but that is only true if you are not one of those outliers whose life is changed or ruined by experiencing a major side effect or an outlier who benefits when the average shows no benefit. Side effects of any treatment are often acceptable to those choosing to be treated for a diagnosed condition, myself included. But when trying to prevent a disease or infection that may or may not actually occur with prophylactic, or preventative, therapy, tolerance for side effects should be minimal. At the very least, each person's level of tolerance with such therapy is highly personal and should not be decided or unduly influenced by anyone else.

It is also important to understand that scientific studies are designed to control as many variables as possible. Doing so is helpful scientifically, but it oversimplifies the real world, which can lead to unforeseen consequences. Similarly, clinical trials only follow participants for a limited period of time. After that, passive surveillance continues, but with limited efficacy due to the difficulty of finding a true signal amongst immense noise. Furthermore, as anyone who studies biology or works in medicine, whether human or veterinary, will tell you, each organism is unique, which means there will always be outliers. Since we can never fully account for outliers or all possible effects a medical product may have on a person, whether physiological or psychological, it is vital that each mentally competent person be allowed to make medical decisions for themselves and their minor children or other dependents.

It behooves us to also consider the slippery slope that we would be entering if we were to allow businesses, governments, or other entities to discriminate based on one's medical condition or treatment status. Where would it end once we start allowing such discrimination? For example, many scientists around the world, including those at my company, are working on gene editing technology. Products based on this technology could save countless lives. But they could also

be used to create "designer humans" some day. So, I worry that allowing entities to require people to produce proof of vaccination or other medical procedures would potentially also eventually allow them to discriminate against those who choose not to undergo gene editing, whether that would be to eliminate genes that put people at greater risk for certain infections, higher risk of developing certain diseases, or just that make them look a certain way. Can you imagine such a world? That is, a world in which humans are not inherently good enough as they are designed at conception and/or birth. That is not a world that we should want or should allow. I believe House Bill 248 is a start toward ensuring that possibility does not become our reality in Ohio, while also ensuring that our fundamental right to control what goes into our body without undue coercion is preserved here in Ohio.

Thank you for the opportunity to provide this testimony in support of HB248.

Sincerely,

Andrew "Andy" Crofton, PhD