

Dear Michael,

Thank you for sharing Francis Collins' letter and for your response. As you know, I worked as a PI at the NIH during Dr. Collins ongoing tenure and I have the greatest respect for his leadership and scientific achievements. However, his statement was very disturbing. His words evoked memories of my first days at St. Jude Children's Research Hospital. One of my first projects was to provide PK/PD support in a pilot study utilizing leucovorin rescue in high dose methotrexate therapy for leukemia. The PI had the whole research team meet with the initial patients and their parents. I asked him why it was necessary for me to attend this meeting as my work was abstracted from the actual patient care. This is the response, which has been one of my guiding principles throughout my career,

"The parents are entrusting us with the life of their child out of confidence and respect for us and for the medical science we represent. We cannot just accept their trust and respect, we must earn it. Your attendance at this meeting is a pledge to the patient that this is what you will do as part of the clinical team."

You touched on this very issue in your reply to Dr. Collins when you wrote,

"As you know, as you wrote to me, I am not anti-science and I am certainly a very strong proponent of vaccination and a very strong supporter of our medical establishment, an establishment that until now has had the **respect** of all professionals in the world."

As you correctly point out, the FDA and CDC have done nothing to promote confidence and respect in their SARS-CoV-2 vaccine development or COVID-19 treatments. Indeed, they have done just the opposite, as evidenced by the unwillingness of many Americans to receive an FDA approved vaccination. There is a great danger that the general population will reject successful vaccines. This will have far ranging and catastrophic consequences, which will not be due to your questioning of the process. It will be the result of the failure of the leadership of the FDA, CDC and NIH to convince Americans that they are putting the public's interest first and will ensure that their work "will do no harm".

Everyone is aware of the tremendous political and economic pressures surrounding the SARS-CoV-2 vaccine development. It is going to take brave and dedicated scientists and lay people to ensure that safety is not going to be sacrificed for votes and billion-dollar profits. Unfortunately, Dr. Collins's statement that he is "deeply engaged," that vaccine development is "a consuming passion," and that he is spending "100-hour weeks" is not enough. Scientists like me are also spending enormous amounts of time working to combat this pandemic, and we know that effort and passion are not enough.

At this time, it is not "guaranteed" that the vaccine approval process will be transparent for all to see. It is important for Dr. Collins to explicitly state how he and the NIH are

going to ensure vaccine efficacy and safety and what he is personally willing to do to make this a reality.

The morning that I spent with the patients and families shaped the next 30 years of my clinical research career and continues to be a driving force. It is what I expect from my colleagues and students and, most of all, from our leadership.

Irv