Q & A with Jonathan Salk, MD

MARY KORR RIMJ MANAGING EDITOR

JONATHAN SALK, MD, a psychiatrist and co-author with his late father, JONAS SALK, MD, of the 1981 book, "A New Reality," revised in 2018 and reviewed in this issue, answered queries from RIMJ editors on a range of topics – from his earliest memories of being vaccinated by his father, to the worldwide excitement that ensued with the formal announcement of the success of the polio vaccine, and finally to the present COVID-19 "new reality" the world is struggling with.

RIMJ: What are your memories of you and your brothers getting vaccinated by your father during the polio vaccine clinical trials in 1953–1954?

DR. SALK: I was around 3, so my memories are predominantly of my Dad giving us the shot or drawing our blood while we sat on the kitchen table. There was no sense of danger or risk of getting polio. He wasn't experimenting on us; he gave us the vaccine because he knew it worked, and he wanted us protected. There was, however, an element of fear and a kind of trauma in getting the shot from him. There is a photo of me getting one of my first injections that pretty much tells that whole story. (**Figure 1**)

RIMJ: What were the challenges and highlights of growing up the son of a famous father and then as a physician who was the son of a famed physician?

DR. SALK: There were many of both. One of the highlights was returning home to Pittsburgh from the University of Michigan where the vaccine's success was announced, and my father was vaulted, literally overnight, into worldwide fame. The results of the field trials were secret, even from my father, until the announcement on April 12, 1955. There was bedlam about it, with banner headlines, and church bells ringing. We had to stay an extra week there because of the crush of attention. We arrived home



Figure 1. Jonathan Salk receiving polio vaccine from his father, Dr. Jonas Salk, in a photograph taken by a March of Dimes photographer. His mother, Donna Salk, is at left.

[PHOTO COURTESY OF JONATHAN SALK]

to a crowd of reporters and well-wishers, and to my delight as a 5-year-old, we had a police motorcycle escort home from the airport. We also went to the White House and met President Eisenhower. (Figures 2 & 3)

Other highlights were things I experienced in the beginnings of the Salk Institute in La Jolla, CA. I can recall, when I was around 11 or 12, Louis Kahn, the architect, and my father going over the plans and their visions for the building and the institution that they both saw as a place where scholars from both the sciences and the humanities could come together to address the basic problems of humankind. The building they worked on is considered to be one of the masterpieces of 20th-century architecture. And a few years later, there was a gathering of scientists at our home that included Francis Crick, who co-discovered the structure of DNA, and Leo Szilard, who conceived of the nuclear chain reaction. I didn't appreciate those things then, but as an adult, I see those moments as truly remarkable.

A persistent highlight was being around my father's extraordinary creativity – first with the vaccine, then with the

Salk Institute and later, with his writings. He had the ability to have creative intuitions and actually make them come into reality.

As for challenges, a big one was being frequently asked if I were related to him and dealing with people's responses. I was in my thirties before I made peace with that, understanding that it gave people a lot of joy to meet me.

As a physician in training it was mixed. On the one hand people joked with me about doing something great. But I found that patients felt remarkably confident and reassured being taken care of by a "Dr. Salk." As a practicing physician, I have, for the most part, felt secure in my identity as a psychiatrist and as a clinician.

RIMJ: What would be your father's approach to COVID-19 vaccine development in this time of global crisis?

DR. SALK: He would, of course, support a cooperative international effort to develop the vaccine. He would urge a balance between speed and caution, knowing the risks of putting out a vaccine that could potentially have harmful and adverse side effects. He would also point out that controlling and containing a viral epidemic is not only a scientific and technological





Figures 2 & 3. President **Dwight D. Eisenhower** presented citation to **Dr. Jonas Salk** recognizing his achievement in developing the first safe and effective polio vaccine on April 22, 1955, with the Salk family in background.

[THE EISENHOWER LIBRARY]

problem; it is also a social, economic and political one. He would insist that when developed, the vaccine would be available and distributed to everyone, worldwide, at an affordable cost.

RIMJ: What do you think about the vaccine deniers, and the anti-vaccination movement which challenges your father's landmark achievement and legacy?

DR. SALK: I don't think the movement really affects my father's legacy of humanitarian commitment combined with scientific achievement. That can't really be changed. I am very distressed that there is so much misinformation and vitriol and that the matter has become so polarized. Mostly, I am troubled by the threats to public health and the resulting unnecessary toll of illness and death. This would have pained my father deeply. He couldn't bear to see unnecessary human suffering in any form.

RIMJ: How do you think anti-vaccine parents should be approached?

DR. SALK: I think we have to start with an understanding and empathy for the parents' position and their concern for their children's well-being. Next we have to establish that neither they nor the physician is evil incarnate or ignorant. Once that is done, there can be room for discussion.

James C, Hagerty, Press Secretary to the President

THE WHITE HOUSE

Following are the Citations given today by the President of the National Foundation for Infantile Paralysis

The Citation for Dr. Salk is as follows:

Because of a signal and historic contribution to human waifare by Dr. Jonas E, Salk and the National Foundation for Infantile Paralysis

The Citation for Dr. Salk is as follows:

Because of a signal and historic contribution to human waifare by Dr. Jonas E, Salk in this development of a vaccion to prevent paralytic policionyellitis, I, Dwight D. Eisenhower, President of the United States, present to him this citation for his extraordinary achievement.

The work of Dr. Salk is in the highest tradition of solitiess and dedicated medical research. He has provided a means for the control of a dread disease, By helping acientists in other countries with technical information; by offering to them the strains of seed virus and predestional aid see that the production of the control of a fread disease, By helping acientists in other countries with technical information; by offering to them the strains of seed virus and predestional aid see that the production of the section of seed virus and predestional aid see that the production of the section of mankind.

His achievement, a credit to our entire scientific community, does honor to all the people of the United States, present this special citation to the National Foundation for Infantile Paralysis is as follows:

1, Dwight D. Eisenhower, President Franklin D. Roosevelt, whose personal courage in overcoming the handicage of policonyellitis stands as a symbol of the Hight against this disease.

Without the support and encouragement of the Foundation, the work of Dr. Jonas E, Salk and of many others who contributed to the development of a preventive vaccine could not have gone

RIMJ: As a psychiatrist, can you speculate on the long-term behavioral sequelae of COVID-19 for the general population and for health professionals, as a result of the widespread, adverse individual/family, educational and societal disruptions?

DR. SALK: Among those most directly confronting suffering, loss, and death there will be PTSD and unresolved grief. Front-line medical personnel have already been severely affected, not only feeling overwhelmed and helpless in the face of the disease, but also confronting, in a new way for most, the danger and their own mortality. For those without financial and health security, this situation is devastating, creating chronic, severe stress in a large part of the population. The sequalae of children being sequestered for months at a time, and having reduced socialization, are unknown, and may well cause changes later in life. On the other hand, in some families, there has been enhanced family bonding, with potential positive effects.

Of interest to me will be the social, economic and political consequences as we adapt. While there is short-term uncertainty and chaos, in the long term I see some positives. We may learn that we can live with less demand for fossil fuels, accelerating a change to renewables.

People are going to be working from home. There may be increased bonding with children and family members. We may adapt by forming novel forms of communities. Our economy may be forced to change to be based on human and planetary well-being instead of material growth and profit. This crisis is an opportunity to make significant individual and societal changes that will help us adapt to the approaching of planetary limits. This is one of the main messages of our book, "A New Reality."

RIMJ: What were the most profound insights your parents instilled in you and that you hope to pass on to the Millennials

born in what the book, "A New Reality," terms Epoch B?

DR. SALK: What was instilled in me from the beginning was the importance and value of doing good for others and for the world as a whole. My mother was very active in civil rights, a social worker and a therapist herself, so I learned compassion and political activism from toddler-hood on. From my father, I learned that one can truly make a difference in people's lives and in society as a whole. For our family, that is a primary objective in life.

Epoch B represents a future in which we must adapt to limits and the resulting slowing of growth – a very different reality from what we have known for hundreds and thousands of years. In that new reality, the book maintains that those who are able to cooperate, who make decisions and plans for the long term and who are interdependent will be most successful and predominate. What I hope to pass on to coming generations is the possibility, despite the crises that plague us today, of a much better, more balanced and healthful world for all. •

