The Jewish Mad Scientist
Erev Rosh Hashanah
1 Tishrei 5786 // א' בתשרי תשפ"ו Rabbi Jesse A. Epstein
Temple Beth Am
Seattle, WA

When I was a kid, I wanted nothing more than to be a mad scientist. I'd raid the fridge, the bathroom cabinet, even the cleaning supplies under the sink – anything liquid or powder I could get my hands on – and mix it all together in cups and jars just to see what would happen. In my imagination, the stakes were sky-high: maybe this would be the time I'll discover a new element, invent a monster, or blow the roof off the house. In my head, I was conducting world-changing experiments. In reality, I was just making a lot of mess.

It's no surprise that around then, my parents started sending me to camp. And it was at science camp that I fell more and more in love with our natural world. My desire to know it intimately – to understand it as much as I could – only grew. It was around the same time that I watched my grandfather battle cancer, and my childhood quest to become a *mad* scientist *matured* into a determination to become a real one – specifically, a biomedical researcher, set on, someday, "curing cancer."

And so, as soon as I was old enough, I stopped going to camp and spent my high school summers interning in biomedical research facilities, first in a human genetics and genomics laboratory and later in neurology and immunology, playing a very, very minor role in supporting the eventual development of bioelectronic medicine, which arose from that very lab.

Now I know what you're thinking – Rabbi Jesse – you're not a scientist. You're a rabbi! What happened?! And to that I respond: "Not a scientist? That's what you think!" Let me back up for a second:

You see, my love of science did not begin with my mad science experiments as a little kid. My affinity for systematic testing and knowing of the universe with an ultimate aim to do good for humanity was pre-destined before I was even born. Most people know Dr. Jonas Salk as an American hero – a *Jewish* American hero, I'll add – who created the world's first polio vaccine in the early 1950s and launched the eradication efforts that reduced cases of polio, one of the world's worst infectious diseases, by over 99%¹.

My family knew Dr. Salk, or Jonas, differently. My parents, who first knew each other as colleagues in the intellectual property department of an international law firm, were working on a case regarding the patent for the discovery of HIV². Salk was brought in as a mediator on the

¹ World Health Organization, "*Poliomyelitis (polio)*," World Health Organization, accessed September 21, 2025, https://www.who.int/health-topics/poliomyelitis.

² Institut Pasteur v. United States Department of Health and Human Services, 104 F.3d 489 (D.C. Cir. 1997). Claims court case dismissed 1988; settlement revised 1994

case, for at this stage in his life, he was working tirelessly on a cure for AIDS, and his reputation for moral clarity made him a natural choice to step in. After all, he was the man who had famously refused to patent the polio vaccine – turning down billions – with his unforgettable line: "Well you can't patent the sun!3"

Through that case, Salk and my father became close friends. So close, in fact, that Jonas Salk was one of the two witnesses on my parents' ketubah – their wedding contract. He flew from La Jolla, where he had established the Salk Institute, to New York City for their wedding, and then made his way home as my parents set out for their honeymoon in France. And on the final day of their trip, they received a devastating call: Jonas had died suddenly, and their presence was requested at the forthcoming funeral.

It was at that moment that my parents decided they would give their first child a "J name," honoring their friend who contributed so much to the world, hoping their child would carry forward Salk's legacy of selflessness, guided by dreams of repairing the world. No pressure, right?!

All kidding aside I do my best to make all those I'm named after – biological and spiritual ancestors – including Jonas – proud. I try every day to live up to the values they embodied. And that is why, in my attempt to channel Jonas in this time and space – America in 2025 – 5786 – I feel his outrage. I feel it in my bones: if Jonas were alive today – he would be completely and utterly dumbfounded, heartbroken, at what he saw.

I'm talking about – to name just a few –:

- Our nation's longstanding prioritization of profits over people in the pharmaceutical industry.
- About the lack of healthcare access for so many Americans including the recent Medicaid cuts projected to cause 51 THOUSAND preventable deaths every year⁴. 51,000 lives, annually.
- The gutting of scientific institutions and the politicization of vaccines led by the Secretary of Health and Human Services who dismantled the CDC's vaccine expert panel⁵, and fuels *pseudoscience* from the highest levels of government.
- This afternoon, the New York Times reported that President Trump stood at the White House podium and promoted an unproven link between vaccines, Tylenol, and autism⁶ — contradicting decades of research. He claimed babies were being "loaded up with too much liquid" from vaccines and told pregnant women to "fight like hell not to take

https://www.nytimes.com/2025/09/22/health/kennedy-autism-tylenol-trump.html?searchResultPosition=4

³ "Could You Patent the Sun?" YouTube video, posted by Global Citizen, January 29, 2013. https://www.youtube.com/watch?v=erHXKP386Nk

⁴ Hoag Levins, "House Bill Seen Causing 51,000 Preventable Deaths Annually," Penn Leonard Davis Institute of Health Economics, June 23, 2025. https://ldi.upenn.edu/our-work/research-updates/trump-senate-bill-seen-causing-51000-preventable-death s-annually/

⁵ RFK Jr. Removing 17 Members of CDC's Vaccine Advisory Panel," ABC News, September 9, 2025, https://abcnews.go.com/Health/rfk-jr-removing-17-members-cdcs-vaccine-advisory/story?id=122670046 6 Apoorva Mandavilli, "Kennedy and Trump Promote Ties Between Tylenol Use and Autism, Against

Scientific Consensus," New York Times, September 22, 2025,

Tylenol." Every reputable medical authority — from the FDA to the American College of Obstetricians and Gynecologists — immediately reaffirmed that acetaminophen is safe and that vaccines do not cause autism. But once again, misinformation was elevated to the highest level of government, with dangerous consequences for public trust and public health.

- And more: The new restrictions on MMRV vaccine access for low-income children announced just four days ago out of RFK Jr's office.
- Research funding withheld from our top universities, extorted with absurd demands to scrub the word "diverse" from grant applications⁸ even when describing *diverse cell populations*.
- And the abrupt dissolving of USAID, which until recently funded the global fight against the AIDS, malaria, maternal mortality, and Tuberculosis *still* the world's *most* deadly infectious disease⁹. These cuts are expected to cause 14 MILLION preventable deaths by 2030, including 4.5 million children *under the age of five*¹⁰. Fourteen million, including four and a half million children under five. Incomprehensible.

"Who shall live and who shall die?" As if we don't know. We know *exactly*. *Science* tells us who is not written in the book of life this Rosh Hashanah and in years to come.

Maybe, what would sting most for Salk, the scientist raised by a Jewish family in the Bronx: because of the growing public distrust for vaccines and our nation's apparent indifference to human suffering around the world, polio re-entered *the Americas* in 2022¹² – paralyzing an American for the first time since 1994 – the last year of Salk's life, when the disease was finally declared eradicated from this hemisphere¹³. He died thinking we were on the right track. He died having been honored with the *Congressional Gold Medal* and the *Presidential Medal of Freedom* for his work. He died, believing his work was safe in *our* hands.

I don't fully have the right to speak for him, but as one entrusted to carry on a small part of his legacy, I will: *Thank G-d*, he's dead. Thank G-d, he's not here. He would be *ashamed* of what we've done with his life's work. Of how we dropped the ball on his sacred mission. Of how far we've allowed ourselves to become *anti-science*.

⁷ Chelsea Cirruzzo, "Federal Advisory Committee Restricts Access to MMRV Shot for Some Low-Income Children," STAT News, September 19, 2025, https://www.statnews.com/2025/09/19/mmrv-vaccine-acip-vote-vfc/

⁸ Vera Nienaber and Jack Leeming, "What Research Might Be Lost after the NIH's Cuts? Nature Trained a Bot to Find Out," *Nature*, September 24, 2025, https://www.nature.com/articles/d41586-025-02748-8
⁹ World Health Organization, "Tuberculosis Disease Burden, Mortality," in Global Tuberculosis Report 2023, accessed September 21, 2025,

https://www.who.int/teams/global-programme-on-tuberculosis-and-lung-health/tb-reports/global-tuberculosis-report-2023/tb-disease-burden/1-2-tb-mortality

¹⁰ NPR, "How Cuts to USAID Could Cause Deaths Abroad," Goats and Soda, July 1, 2025, https://www.npr.org/sections/goats-and-soda/2025/07/01/nx-s1-5452513/trump-usaid-foreign-aid-deaths

¹¹ Central Conference of American Rabbis. *Mishkan HaNefesh: Machzor for the Days of Awe, Rosh Hashanah.* New York: CCAR Press, 2015. (from Unetaneh Tokef liturgy)

¹² Lisa Schnirring, "New York detects vaccine-derived polio case," CIDRAP News, July 21, 2022, https://www.cidrap.umn.edu/new-york-detects-vaccine-derived-polio-case

¹³ Pan American Health Organization. Polio-Free in the Americas. Washington, DC: PAHO, 1994.

And perhaps you think this isn't fair. Perhaps you think that we are not anti-science. That it's not the *whole* country. It's certainly not *this* city. It's certainly not the people in this room! Perhaps not. But the message of our High Holy Day confession is one of collective responsibility.

We began chanting *Ashamnu*¹⁴ at selichot last week, and we'll do so again in nine days. This prayer, is *in the plural*. It's not Ashamti, Bagad'ti, Gazalti – *I* am guilty, *I* have betrayed, *I* have robbed. It's Ashamnu, Bagadnu, Gazalnu – *We* are guilty, *we* have betrayed, *we* have robbed. Even if *we*, as individuals, didn't do all those things. We still say it! Because *someone* has. And we *all* take credit for that sin, for letting it happen, for not doing enough to prevent it, for not addressing it afterward.

It's the same here. We, as a nation, have become anti-science. We have let it happen. And this is the greatest teshuva¹⁵ we need to do, right now. I really believe that. Perhaps second only to the war we are waging on our planet, a war which will also claim millions upon millions of lives.

We *must* do teshuva. Teshuva, which is about actions, not words. Actions that bring us closer to the world Jonas Salk imagined – Salk, a scientist, who knew, as a *proud Jew*, that he could not *just* pray for the World to Come, but that we each must dedicate ourselves *to* working *with the Divine* to bring it about.

It will not be easy to act. To do our teshuva, and *turn* things around – to *return* to an ideal of celebrating scientific advancement, to restore the search for truth, the drive to uncover the mysteries of the natural world, from the micro-cosmos to the macro-cosmos, to restore the mission of the pursuit of knowledge to our collective American ethos.

It will not be easy. I know that. But I also know this. If anyone can be leaders in that charge, it's the people *here*, in this room. This room is *full* of Seattleites! Who live and breathe innovation and progress. But even more than that – we're Reform Jews!

Since the founding of our movement, we have embraced scientific advancement. Our very first platform, the "Pittsburgh Platform" of 1885¹⁶ declared, "We hold that the modern discoveries of scientific researches in the domain of nature and history are not antagonistic to the doctrines of Judaism..." The Columbus Platform of 1937¹⁷, reaffirmed: "The new discoveries of science, while replacing the older scientific views underlying our sacred literature, do not conflict with the

¹⁶ Central Conference of American Rabbis. *The Pittsburgh Platform (1885)*. CCAR, accessed September 21, 2025. https://www.ccarnet.org/rabbis-speak/platforms/declaration-principles/

¹⁴ Central Conference of American Rabbis. *Mishkan HaLev: Prayers for S'lichot and the Month of Elul.* New York: CCAR Press, 2017. (from Short Vidui)

¹⁵ Babylonian Talmud, Rosh Hashanah 17b.

¹⁷ Central Conference of American Rabbis. *The Columbus Platform (1937).* CCAR, accessed September 21, 2025. https://www.ccarnet.org/rabbis-speak/platforms/guiding-principles-reform-judaism/

essential spirit of religion as manifested in the consecration of man's will, heart, and mind to the service of G-d and humanity."

Our movement celebrates progress because we are the *Reform* movement. Active, present tense. Not *reformed*, but *reform*. We are *always* <u>re-forming</u>. *Always* striving to meet modernity head-on. Our calling is to re-apply the wisdom of our tradition to the world *as* it changes, to look at the world through the lens of Judaism, and to look at Judaism through the lens of the modern world! Our greatest strength is to find awe in the human mind and all it can discover through the Divine gifts of inquiry, observation, and collaboration.

But look: not only is our country becoming anti-science, but the *data* tells us that we're also drifting toward anti-religion. We know this *firsthand*, here, in what has been reported as America's most secular city. What is that about? Is that *because* Seattle is so tech-focused and on the cutting edge of *innovation*? If so, what a shame. Too many assume religion and science are opposites, but we Reform Jews know better.

And it's not just the science-affirming platforms from the early days of our movement. We know that science and religion are actually two sides of the same coin. You don't need to "pick a lane." You don't have to reject science if you're religious as voices on *the right* contend, and you don't have to reject religion if you embrace science, as voices on the *left* sometimes suggest. We reject that binary! Both are about seeking, asking life's big questions, trying to make sense of our observations, daring to dream.

We Reform Jews *know* that our world is *holy* – and it is *holy* to cherish it by seeking to understand it. Our tradition helps us to find the *sacred* in science and to create ritual *around* progress. When I got my first COVID shot five years ago – I said a blessing¹⁸, thanked G-d and the scientists who created that miraculous vaccine, and *I started to cry!* Judaism gives us the *tools* to see a medical breakthrough as a sacred moment. It captures the awe we feel when we peer through a microscope, or a telescope. It teaches that *pikuach nefesh*¹⁹ – saving a life – *outweighs all else*, because every life is an entire world. How could that *not* compel us to defend science?! To champion vaccine research? To expand healthcare access as a sacred duty?

I believe, with my whole heart, we *need* both science and the wisdom of our tradition to fully experience life's boundless beauty. Science sustains us, but also opens doors to "wonder." And our tradition helps us uncover it, remember it, and let it inspire us to ask more, and *more* questions. To *wrestle* with what doesn't seem right, to seek *new* answers – the very foundation of *science* itself.

¹⁸ Sarah Flores Shannon, "The Perfect Jewish Prayer for Your Vaccination: A Way to Mark Just How Important This Occasion Is," *Hey Alma*, April 6, 2021, https://www.heyalma.com/the-perfect-jewish-prayer-for-your-vaccination/. (This article gathers variations of blessings people wrote or recited for their COVID vaccination, reflecting the sacredness of the moment.)

¹⁹ Mishnah Sanhedrin 4:5.

Look around this room. Look at this beautiful community. We are Reform Jews. And we are Seattleites – some super brand-new, but nonetheless, proud, Seattleites. As *Reform Jews* in *this* city, we are champions of science and cultural wisdom, together. And we are part of a congregation founded *seventy years ago* by the most learned professors and academics of the region. *Who better* to lead our nation in this teshuva? *Who better* to champion the cause for science? *Who better* to assert that the wisdom of our tradition *commands* us to act – for vaccines, for truth, for access to knowledge and healthcare? On this planet, there is *no one* better suited.

We Reform Jews love to quote Pirkei Avot 2:16 – "It is not your duty to *finish* the work, but neither are you at liberty to neglect it." Just because we might not achieve the results we dream of in *our* lifetime, doesn't mean we're off the hook from making progress. Jonas Salk lived by this teaching up until the day he died. He did not discover a cure for AIDS, but his laboratory carried his work forward long after he was gone, and that sacred work continues today. I am *sure* that it was his Jewish upbringing, driving him to *never* give up the fight.

Salk once said, "Hope lies in dreams, in imagination and in the courage of those who dare to make dreams into reality.²⁰" My dad recently told me that Salk once confided in him that if he *hadn't* become a scientist, he would have become a rabbi.

When I was a kid, I hoped someday I'd be a scientist. And now – I know that I am. Every day, like scientists around the world, I wrestle with life's biggest questions: how we got here, why we're here, and how to best fulfill the task at hand. I ponder good and evil, love and hate. I feel awe at the beauty of the universe, and at my place within it – simultaneously large and yet, oh so, small.

Like any scientist, the truths I uncover drive me to seek new ones. And, like Jonas Salk and the rabbis and scientists before me, I do my best to bring us one step closer to a transformed world – the world of our dreams, a world to come.

And the best part is, that calling is not just for rabbis or scientists. Judaism charges *all* of us with this work: To be seekers. To defend truth. To save lives, *whenever* we can. To find awe in nature. To never retire from the task of trying to make the world better. And yes, sometimes, to *experiment* – to be a *mad scientist* – just to see what might happen.

²⁰ Bill Moyers, *"Jonas Salk on Searching for the Next Medical Miracle,"* February 18, 1990, Bill Moyers, https://billmoyers.com/content/jonas-salk/