Engineering Contagion: UPMC, Corona-Thrax And "The Darkest Winter"

Researchers at a BSL-3 lab tied to the organizers of the 2001 Dark Winter simulation, DARPA, and the post-9/11 biodefense industrial complex are genetically modifying anthrax to express Covid-19 components, according to FOIA documents.

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Soon after having been fired from his post as secretary of the treasury in December 2002, after a policy clash with the president, Paul O'Neill became a trustee of the University of Pittsburgh Medical Center. Despite having just worked under and clashed with George W. Bush and Dick Cheney, it wasn't until O'Neill began answering to UPMC CEO Jeffrey Romoff as a member of the Center's board that he chose to publicly denounce a superior as "evil."

"He wants to destroy competition. He wants to be the only game in town," O'Neill would later state of Romoff, adding that "after 18 months I quit [the UPMC board] in disgust" due to Romoff's "absolute control" over the board's actions. O'Neill subsequently noted that UPMC "board members who have wealth of hundreds of millions of dollars are not willing to take this guy on." When pressed by a local reporter, O'Neill further elaborated that he had been told by other board members that they were "afraid" of Romoff because Romoff might "harm them in some way."

O'Neill's criticisms of Romoff are hardly an outlier, as local community activists and even a state attorney generalhave noted that UPMC's board lets Romoff do as he pleases. Jeffrey Romoff has ruled UPMC with an iron fist since his predecessor, Thomas Detre, had a heart attack in 1992. As a result of the Center's massive wealth accumulation, at first spurred by his magic touch for receiving National Institutes of Health (NIH) grants, Detre was able to use the financial power afforded to him to consolidate control over enough of the University of Pittsburgh to create his "own personal fiefdom," which is now the stand-alone corporation known as UPMC.

Not long after Romoff took over the Center's reins, he made his intentions clear to faculty and staff, stating at one 1995 UPMC meeting that his "vision" for the future of American health care was "the conversion of health care from social good to a commodity." Motivated by profit above all else, Romoff aggressively expanded UPMC, gobbling up community hospitals, surgery centers, and private practices to create a "health-care network" that has expanded throughout much of Pennsylvania and even abroad to other countries, including China. Under Romoff, UPMC has also expanded into the health-insurance business, with 40 percent of the medical claims it pays out going straight back into places of care that are owned by UPMC—meaning UPMC is essentially paying itself.

In addition, since UPMC is officially a "charitable nonprofit corporation," it is exempt from property taxes and has special access to the tax-exempt municipal bond market. UPMC can also solicit tax-deductible grants from private individuals and organizations, as well as governments. These grants totaled over $1 billion dollars between 2005 and 2017.

Despite these perks being officially justified because of UPMC's "charitable institution" status, the UPMC board, with Romoff at the top, have seen their own multimillion-dollar-per-year salaries continue to climb. Perhaps this perk also comes from UPMC being a nonprofit corporation, as there are no stockholders to whom Romoff and the board must explain their increasingly exorbitant salaries. For instance, Romoff made $8.97 million last year as UPMC's CEO, a marked increase over the $6.12 million he had raked in the prior year.

UPMC's financial chicanery is so out of control that even Pennsylvania's attorney general has taken action against it, suing UPMC in February 2019 for violations of the state's charity laws based on their "unjust enrichment" and engaging in "unfair, fraudulent or deceptive acts or practices." Though UPMC decided to settle out of court, the Center and Romoff came out of the affair relatively unscathed.

Now, thanks to the crisis caused by Covid-19, UPMC is once again on the path toward growing even larger and more powerful in pursuit of Romoff's ultimate goal, which is, in his own words, to make UPMC the "Amazon of health care."

In this fourth installment of the *The Last American Vagabond* series"Engineering Contagion: Amerithrax, Coronavirus and the Rise of the Biotech-Industrial Complex", the "nonprofit" health-care behemoth that is UPMC is squarely placed at the intersection of post-9/11 "biodefense" public-private partnerships; corporate-funded academics who shape public policy on behalf of their private-sector benefactors; and risky research on dangerous pathogens that threatens to unleash the very "bioterror" that these institutions claim to guard against.

The Odd Trajectory of UPMC's Covid-19 Vaccine Efforts

In January 2020, when much of the world remained blissfully unaware of the coming global pandemic, UPMC was already at work developing a vaccine to protect against the novel coronavirus that causes Covid-19, known as SARS-CoV-2. That month, before the state of Pennsylvania had a single case of Covid-19, UPMC formed a "coronavirus task force," which was initially focused on lobbying the US Centers for Disease Control and Prevention (CDC) to obtain samples of live SARS-CoV-2 for research purposes. That research was to be conducted at the Biosafety Level 3 (BSL-3) Regional Biocontainment Laboratory (RBL) housed within UPMC's Center for Vaccine Research. A day after the director of UPMC's Center for Vaccine Research, W. Paul Duprex, revealed UPMC's efforts to access the SARS-CoV-2 virus, he announced that the virus samples, containing an estimated 50 to 60 million coronavirus particles, were already en route to the university. At the time, UPMC was one of only a handful of institutions on the CDC's short list to receive live SARS-CoV-2 samples.

UPMC later stated that they began work on a vaccine for Covid-19 on January 21st, weeks before the February 14th announcement that the virus was on its way to the university. That original vaccine candidate used the published genetic sequence of SARS-CoV-2, released in early January 2020 by Chinese researchers, to synthetically produceSARS-CoV-2 spike proteins that would be transported into cells by an adenoviral vector, which is commonly used in a variety of vaccines. The vaccine candidate was nicknamed PittCoVacc, short for Pittsburgh Coronavirus Vaccine.

A little over a month after the live SARS-CoV-2 samples were received by UPMC's Center for Vaccine Research, UPMC received a $5 million grant from the Coalition for Epidemic Preparedness Innovations (CEPI), an international organization founded in 2017 by the governments of Norway and India along with the World Economic Forum and the Bill and Melinda Gates Foundation. The grant was officially awarded to "an international academic-industry partnership" that the Center for Vaccine Research had recently formed with the Institut Pasteur in France and Austrian vaccine manufacturer Themis. Soon after, in May, Themis was acquired by vaccine giant Merck, which began recruiting volunteers for human trials earlier this month on September 11. Merck has incredibly close ties with UPMC, particularly its commercialization arm known as UPMC Enterprises.

The CEPI grant seems to have drastically altered the Center for Vaccine Research's interest in the original adenovirus-vector vaccine candidate, PittCoVacc, as the CEPI grant was specifically aimed at funding a different vaccine candidate that instead uses the measles virus as a vector. The measles virus and the genetic manipulation of measles for use in the measles vaccine is, notably, the principal research interest and expertise of Center for Vaccine Research director Paul Duprex.

This measles-based vaccine candidate has been described as "a modified [genetically altered] measles virus that delivers bits of the new coronavirus into the body to prevent Covid-19" as well as an "attenuated [genetically modified yet weakened] measles virus as a vector with which to introduce genetic material from SARS-[CoV-]2 to the immune system." The combination of this weakened measles virus and SARS-CoV-2, per Duprex, will produce a "more benign version of coronavirus [that] will acquaint a person's immune system" with SARS-CoV-2. No vaccine using this modality has ever been licensed.

On April 2nd, less than a week after the CEPI award had been announced, the UPMC researchers who had developed the original vaccine candidate using the more traditional adenovirus-vector approach published a study in *EBioMedicine* (a publication of the medical journal *Lancet*) that reported promising results of their vaccine candidate in animal studies. The news that a US institution was among the first in the world to develop a Covid-19 vaccine candidate with promising results from an animal study was heavily amplified by mainstream US media outlets, with those reports noting that UMPC was requesting government permission to quickly move onto human trials.

This original vaccine candidate, however, was mysteriously dropped from subsequent reports and statements from UPMC regarding its Covid-19 vaccine efforts. Indeed, in recent months, Duprex's statements on the center's Covid-19 vaccine candidates no longer mention the once-promising PittCoVacc at all. Instead, new reports, citing Duprex, claim that the only UPMC vaccine candidates are the CEPI-funded measles-vaccine candidate and another, more mysterious vaccine candidate, whose nature has only been recently revealed by documents obtained through a Freedom of Information Act (FOIA) request.

Equally odd is that recent media reports on the original vaccine candidate have stopped mentioning UPMC at all, instead citing only Themis, its new owner Merck, and France's Institut Pasteur. There are no reports indicating a break-up of the original "academic-industry partnership" that had received the CEPI grant. It seems that this is what may have come to pass, as Duprex stated that the UPMC measles-vector vaccine candidate had partnered with the Serum Institute of India for mass production, first for trials and then for public use, depending on how the vaccine advances through the regulatory process. In contrast, Themis/Merck have stated that their vaccine is being produced in France. It remains unclear what the relation is between these two, and apparently analogous, vaccine candidates.

Though Duprex has been relatively forthcoming about the nature of the first UPMC vaccine candidate (i. e., the CEPI-funded measles-vector vaccine), he has been much more tight-lipped about its second vaccine candidate. In late August, he told the *Pittsburgh Business Times* that the second vaccine candidate that UPMC was developing "works by delivering genetic material coding for a viral protein instead of the entire weakened or killed virus as is standard in other vaccines." Yet Duprex declined to state what vector will be used to deliver the genetic material into human cells. Recent FOIA revelations, nevertheless, have revealed that UPMC's second vaccine candidate involves genetically engineering a combination of SARS-Cov-2 and anthrax, a substance better known for its potential use as a bioweapon.

Corona-thrax

The recently obtained documents reveal that the BSL-3 lab that is part of UPMC's Center for Vaccine Research is conducting eyebrow-raising research involving combining SARS-CoV-2 with *Bacillus anthracis*, the causative agent of anthrax infection. Per the documents, anthrax is being genetically engineered by a researcher, whose name was redacted in the release, so that it will express the SARS-CoV-2 spike protein, which is the part of the coronavirus that allows it to gain access into human cells. The researcher asserts that "the [genetically engineered anthrax/SARS-CoV-2 hybrid] can [be] used as a host strain to make SARS-CoV-2 recombinant S protein vaccine," and the creation of said vaccine is the officially stated purpose of the research project. The documents were produced by the University of Pittsburgh's Institutional Biosafety Committee (IBC), which held an emergency meeting on June 22nd of this year to "discuss specific protocols involving research with the coronavirus," which included a vote on the aforementioned proposal.

Edward Hammond, the former director of the Sunshine Project, an organization that opposed chemical and biological weapons and the expansion of "dual use" biodefense/bioweapon research, obtained the documents. Other FOIA documents recently obtained by Hammond have revealed an "explosion" of risky Covid-19-related research at other academic institutions, such as the University of North Carolina, which has already had lab accidents involving genetically engineered variants of SARS-CoV-2.

Hammond told *The Last American Vagabond* that the experiment, which he dubs "Corona-thrax," is "emblematic of the pointless research excesses that often characterize the response of scientists to the federal government throwing billions of dollars at health crises." Hammond added, "While I don't think that Corona-thrax would be infectious, it falls into the categories of pointless and crazy. The biggest immediate risk of all this activity is that a researcher will deliberately or inadvertently create a modified form of SARS-CoV-2 that is even more difficult to treat, or more deadly, and this virus will escape the lab. It only takes a stray droplet."

Jonathan Latham, a virologist who previously taught at the University of Wisconsin and who is the current editor of *Independent Science News*, agreed with Hammond that the Corona-thrax experiment is odd and said that he was "concerned here specifically about the research process and the risks of these specific experiments at Pittsburgh." In an interview with *The Last American Vagabond,* Latham asserted that it is "unusual by historical standards . . . the combining of two highly pathogenic organisms in a single experiment." He did note, however, that such studies for the purposes of vaccine research have become more common in recent years, as is made clear in a 2012 study.

Few experiments have been conducted that specifically utilize anthrax in this way. Since 2000, the studies that have examined the use of genetically modified anthrax as a potential vaccine vector have been affiliated with Harvard University. One of these studies was on the use of anthrax as a vector in a potential HIV vaccine and was jointly conducted in 2000 by Harvard researchers and the vaccine company Avant Immunotherapeutics (now part of Celldex).

Despite reporting positive preliminary results in their experiments, Avant/Celldex did not fund further experiments into a vaccine that used this anthrax-based modality, and it does not currently market or have any such vaccine in its product pipeline. This suggests that, for whatever reason, this company did not see much value in this vaccine, despite the preliminary study with Harvard claiming that the methodology was safe and effective.

The Harvard researchers involved in that 2000 study, however, continued to investigate the possibility of an anthrax-based HIV vaccine in 2003, 2004, and 2005, though without corporate sponsorship. Related yet different research has explored the use of "disarmed" anthrax components as an adjuvant in vaccines and as the basis for enzyme-linked immunospot assays.

The aforementioned Harvard researchers patented their methodology of using anthrax in this way for the production of a vaccine in 2002. This means that the anthrax-based "vaccine" currently being developed by UPMC's Center for Vaccine Research would have to develop a *new* method that utilizes anthrax in much the same way so as not to infringe on the patent, which is unlikely. The other alternative is that UPMC would pay the patent holders for use of their methodology if they want to commercialize it in a vaccine. Yet, given UPMC's business model in general, as well as that of UPMC's Center for Vaccine Research specifically, this also seems unlikely.

Also odd is what sort of incentive UPMC's Center for Vaccine Research possesses for the Corona-thrax experiment. There are currently over a hundred vaccine candidates that use existing and tested vaccine

platforms in pursuit of a Covid-19 vaccine, a fact Duprex himself has acknowledged. As Hammond told *The Last American Vagabond*, "It is perfectly obvious that there are numerous existing vaccine platforms for Covid-19 and that some of them will, sooner or more likely later, succeed. There is no serious need for some sort of quite strange bacterial platform, much less one that happens to be anthrax. It's completely unnecessary and frankly bizarre."

The Crown Jewel of the Biotech-Industrial Complex

The Corona-thrax experiment is being conducted at the Center for Vaccine Research's Regional Biocontainment Laboratory (RBL), where the center's work with pathogenic agents, such as anthrax and SARS-CoV-2, is conducted.

The creation of UPMC's RBL was first announced in 2003, when the National Institute of Allergy and Infectious Diseases (NIAID, then and currently led by Anthony Fauci) stated it would fund the laboratory's construction with an $18 million grant. It was originally planned to be mainly "dedicated to research on agents that cause naturally occurring and emerging infections, as well as potential agents of bioterrorism." The plan to create the lab was part of the US government decision to dramatically ramp up "biodefense" research in the wake of the 2001 anthrax attacks.

The lab was also intended to work on "developing a vaccine program focusing on basic and translational research" related to viruses of pandemic potential that are at risk of being "weaponized," including SARS. After the creation of the lab was initially announced, the project expanded, eventually becoming UPMC's Center for Vaccine Research, which was launched in 2007. The Center for Vaccine Research was the second such institution to be officially added to the NIAID's "biodefense" RBL network.

The opening of both this lab and UPMC's Center for Vaccine Research was made reality thanks to the efforts of the main authors of the June 2001 Dark Winter bioterror simulation, a controversial exercise that eerily predicted the 2001 anthrax attacks as well as the initial, yet bogus, narrative that Iraq and Islamic extremist terror groups were responsible for those attacks. However, the anthrax used in the attacks was later revealed to be of US military origin. As noted in Part I of this series, participants in the Dark Winter exercise had foreknowledge of the anthrax attacks and others were involved in the subsequent "investigation," which many experts and former FBI investigators describe as a cover-up.

Dark Winter was largely written by Tara O'Toole, Thomas Inglesby, and Randall Larsen, all three of whom played integral roles in the founding or operations of UPMC's Center for Biosecurity, along with O'Toole's mentor, D. A. Henderson. UPMC's Center for Biosecurity was launched in September 2003, just days before the NIAID announced it would fund the RBL lab that would later become the UPMC's Center for Vaccine Research.

Notably, just days after the attacks on September 11, 2001, O'Toole, Inglesby, and Larsen personally briefed Vice President Cheney on Dark Winter. Simultaneously, Cheney's office at the White House began taking the antibiotic Ciprofloxacin to prevent anthrax infection. In the weeks between that briefing and the 2001 anthrax attacks, Dark Winter participants and several associates of Cheney, namely

members of the Project for a New American Century (PNAC) like Donald Kagan and Richard Perle, asserted that a bioterror attack involving anthrax would soon take place.

In the aftermath of the 2001 anthrax attacks, Henderson "was tapped by the federal government to vastly increase the number of [biodefense] labs, both to detect suspected pathogens like anthrax and to conduct bio-defense research, such as developing vaccines," with the announcement of UPMC's RBL being part of the launch of the O'Toole-led Center for Biosecurity at UPMC, where Henderson was named senior adviser. In 2003, the Center for Biosecurity was set up at UPMC partially at the request of Jeffrey Romoff to be "the country's only think tank and research center devoted to the prevention and handling of biological attacks," with UPMC's Center for Vaccine Research being the hub of a new "biodefense research" lab network Henderson was setting up and managing at the time. That network remains technically managed by the Fauci-led NIAID.

Also noteworthy is that the Center for Vaccine Research's director, from its opening in 2007 until 2016, was Donald Burke. Burke is a former biodefense researcher for the US military at Fort Detrick and other installations and, immediately prior to heading the UPMC center, was a program director at the Johns Hopkins Bloomberg School of Public Health, where he worked closely with O'Toole and Inglesby.

At the time of the 2003 announcement regarding the creation of what would become UPMC's Center for Vaccine Research, Tara O'Toole stated:

> *"This new laboratory will enable University of Pittsburgh medical researchers to delve further into possible treatments and to develop vaccines against diseases that might result from bioterrorist attack or from natural outbreaks."*

A few years later, after she was nominated to a top post at the Department of Homeland Security, O'Toole was slammed by experts over her excessive lobbying "for a massive biodefense expansion and relaxation of provisions for safety and security." Rutgers microbiologist Richard Ebright remarked at the time that "she makes Dr. Strangelove look sane." It was also noted in hearings that O'Toole had worked as a lobbyist for several "life sciences" companies specializing in the sale of biodefense products to the U.S. government, including Emergent Biosolutions – a very controversial company and a key suspect in the 2001 anthrax attacks.

The history of the Center for Vaccine Research's RBL, particularly the network of people who prompted the lab's creation, raises concerns about the nature of the Corona-thrax experiment currently being conducted within the facility. This is especially true because the researcher conducting the experiment appears to be ignorant about key parts of the research he or she is conducting.

For instance, the FOIA-redacted researcher incorrectly states that a recombinant virus proposed for use in the study is incapable of infecting human cells, while the IBC members note that this is not the case. In addition, the unnamed researcher falsely claimed that one of the viral vectors for use in the investigator's

study did not express Cas9 (a protein associated with CRISPR gene editing) and gRNA ("guide RNA," also used in CRISPR) and was unaware that handling those agents requires an enhanced BSL-2 lab (BSL-2+) as opposed to a typical BSL-2 lab.

Apparently such errors among researchers involved in Covid-19 research at UPMC is not an anomaly. During another UPMC IBC meeting included in the FOIA release, the IBC noted the following about a separate research proposal:

> *"In the investigator's notes in responses to changes requested by the IBC pre-reviewers, the investigator indicates that RNA from SARS-CoV-1 and SARS-CoV-2 infected cells will be obtained from BEI resources. Genomic RNA isolated from cells infected with SARS-CoV-1 is regulated as a Select Agent by the Federal Select Agent Program and* ***neither the University nor this investigator are registered for possession and use of these materials*** *[emphasis added] (SARS-CoV-1). The investigator must NOT obtain SARS-CoV-1 genomic RNA without prior consultation with the University's RO/AROs for Select Agents."*

This part, in particular, caught the attention of Jonathan Latham, who noted that it was odd that "a university researcher is trying to obtain approval for an experiment which no one at the university is allowed to do." Latham added in an interview that "apparently this applicant is totally ignorant of the regulatory environment and by extension the risks of SARS-CoV, which is a highly infectious virus whose escape from a lab has already led to at least one death."

While Latham assumed that this was a "university researcher," it is worth noting that the use of the UPMC Center for Vaccine Research's RBL is not exclusive to researchers affiliated with the university. Indeed, as noted on the NIH website, "Investigators in academia, not-for-profit organizations, industry, and government studying biodefense and emerging infectious diseases may request the use of biocontainment laboratories," including the RBL managed by the Center for Vaccine Research.

In addition, the Center for Vaccine Research website notes that "scientists from outside the University of Pittsburgh can work in the RBL through a collaboration or contract. Outside scientists must comply with all University of Pittsburgh training, documentation, regulatory, and medical requirements." This means that outside scientists using the facility are also subject to IBC review. Both the NIH and Center for Vaccine Research sites note that, for an outside researcher to use the UPMC RBL facility, approval from the center's director must be obtained.

Since the name of the Corona-thrax researcher is redacted, there is no way of knowing if he or she is affiliated with the university or a separate institution, corporation, or government agency. Regardless of who is conducting this experiment, however, it is possible to examine the history and motivations of the man who ultimately signed off on it—the Center for Vaccine Research's director, Paul Duprex.

Paul Duprex: DARPA-Funded Researcher and Gain-of-Function Enthusiast

Paul Duprex is a former chief scientist for Johnson & Johnson whose subsequent foray into academia was largely funded with research grants from the NIH and the Pentagon's Defense Advanced Research Projects Agency (DARPA). Much of Duprex's research has focused on recombinant (i. e., genetically engineered) viruses or viral evolution.

In terms of his research funded by DARPA, Duprex was most closely associated with DARPA's "Prophecy" program, the creation of which was overseen by Michael Callahan. Callahan's suspect past and his ties to the origin of the current Covid-19 crisis in Wuhan, China, were the subject of a recent *Unlimited Hangout* article by Raul Diego.

In that article, Diego notes that the now-defunct Prophecy program had "sought to 'transform the vaccine and drug development enterprise from observational and reactive to predictive and preemptive' through algorithmic programming techniques" and that the program further "proposed that 'viral mutations and outbreaks' could be predicted in advance to more rapidly counter the unknown disease with preemptive drug and vaccine development."

By all indications, Prophecy was DARPA's first major foray into "predictive" AI-powered health care, which has expanded considerably in the years since. It also involved a component, which Duprex was particularly involved in advancing, whereby the "predictive" viral evolutions algorithms would be "validated and tested . . . by using multiple selective pressures on at least three closely related virus strains in an experimental setting."

Such experiments, like this study by Duprex, involved the genetic engineering of three viral pathogen strains and then seeing which would become most transmissible and virulent in an animal host. Such studies are often referred to as gain-of-function (GOF) research and are incredibly controversial given that they often create pathogens that are more virulent and/or transmissible than they otherwise would be. It is also worth noting that UPMC, before Duprex joined the center, had also received millions in funding from DARPA's Prophecy program "to develop in vitro and computational models for predicting viral evolution under selection pressure from multiple evolutionary stressors."

Duprex has also been involved in conducting research for DARPA's current INTERfering and Co-Evolving Prevention and Therapy (INTERCEPT) program, a successor to Prophecy that "aims to harness viral evolution to create a novel, adaptive form of medical countermeasure—therapeutic interfering particles (TIPs)—that outcompetes viruses in the body to prevent or treat infection." TIPs are genetically engineered viruses with defective genomes that theoretically compete with real viruses for viral components in the human body but "evolve with" the viruses they are meant to protect the body against and are "susceptible to mutation over time."

The goal of the INTERCEPT program is to use TIPs as "therapeutics" and have them injected into the human body to "preemptively" protect against the virus from which a particular TIP was developed. It is worth noting that, while DARPA frames much of its gene-editing research (including its "genetic extinction" technology research) as being aimed at promoting either human or environmental health, it

has also openly admitted that these same technologies are of interest to DARPA for their ability to "subvert" the genes of human adversaries of the US military via "genetic weapons."

Duprex led an INTERCEPT study published in February of this year in which he and his coauthors explored how to create a synthetic TIP of the Nipah virus, a deadly virus with a fatality rate of over 70 percent. In that study, they used both wild and genetically engineered strains of Nipah virus. Notably, the Clade X pandemic simulation, which will be discussed in detail in the next installment of this series, involved a genetically engineered combination of the Nipah virus and a parainfluenza disease.

Clade X took place in 2018 and was led by much of the same team that was responsible for the 2001 Dark Winter bioterrorism simulation, including former FDA commissioner Margaret Hamburg and Tara O'Toole and Thomas Inglesby of the UPMC Center for Biosecurity. Another notable participant at Clade X was Julie Gerberding, former CDC director and current executive vice president at Merck, which has close ties to UPMC as well as the Center for Biosecurity's failed "21st Century Biodefense" project.

A few months after publishing the study funded by DARPA's INTERCEPT program, Duprex coauthored another study on the use of synthetic "nanobodies" (i. e., bioengineered synthetic nanoparticles acting as antibodies) that was published in August. This effort mirrors other DARPA "health-focused" projects. That study was funded by the University of Pittsburgh, the NIH, and Israel's Ministry of Science and Technology.

In addition to his ties to DARPA programs involving the genetic engineering of viral pathogens, Duprex is a leading advocate for controversial gain-of-function research and was appointed to direct UPMC's Center for Vaccine Research less than three months after the federal moratorium on GOF research ended.

In October 2014, five days after that moratorium was first imposed, Duprex gave a talk to the National Science Advisory Board for Biosecurity entitled "Gain-of-Function Studies: Their History, Their Utility, and What They Can Tell Us." In the talk, he asserted that "cross-species infection studies have already helped to improve surveillance in the field, have shed new light on basic influenza virus biology, and could assist in growing vaccine viruses better" and argues against the recently imposed moratorium.

In 2014, Duprex also wrote in a paper published in *Nature* that "GOF approaches are absolutely essential in infectious disease research; although alternative approaches can be very useful, these can never replace GOF experiments." He added that, in his view, there were only two reasons for GOF research, the first being to "improve surveillance or to develop therapeutics" and the second being merely to learn "interesting biology."

In that same paper, he also argued that "genetic engineering that is intended and likely to endow a low-pathogenicity, low-transmissibility agent with either enhanced pathogenicity or enhanced transmissibility may be appropriate if the benefits are substantial." He also suggested in this 2014 paper that it "might" be necessary "to enhance pathogenicity of coronaviruses in order to develop a valid animal model for coronaviruses." Years later, during the current coronavirus crisis, Duprex and other officials from the UPMC's Center for Vaccine Research co-developed a Covid-19 research and development "blueprint" for the UN's World Health Organization.

In addition, Duprex's work for DARPA's Prophecy program involved GOF research, as noted above, and the creator of that program, Michael Callahan – former head of DARPA's biodefense therapeutics

initiatives, is also a proponent of GOF who believes that such risky research is inseparable from "the research and development enterprise in the life sciences and for biotechnology."

Duprex is also a founding member of Scientists for Science, a group of researchers (most of whom are involved in GOF research) who opposed the GOF moratorium and were "confident that biomedical research on potentially dangerous pathogens can be performed safely and is essential for a comprehensive understanding of microbial disease pathogenesis, prevention and treatment." Another of the group's founding members is Yoshihiro Kawaoka, whose controversial GOF experiments that made pathogenic viruses more deadly have garnered considerablemedia attention.

When the moratorium on GOF was lifted in December 2017, Duprex called it a "sign of progress," adding that "on a personal level I'm really pleased these NIH funded scientists [conducting GOF research] get some clarity." As previously mentioned, he became the Center for Vaccine Research's director less than three months later, in March 2018.

The "Darkest Winter" Looms

After a cursory examination of the background of UPMC, its Regional Biocontainment Laboratory, and the man directing its Center for Vaccine Research, the question about the nature of the Corona-thrax experiment becomes: Is this yet another ill-advised experiment by a lab led by a GOF enthusiast and fueled by a feeding frenzy over the billions of dollars thrown by the government and other entities into Covid-19 research? Or is there perhaps a more nefarious motive to genetically engineering something as bizarre as Corona-thrax?

While the latter question may appear conspiratorial, it is worth pointing out that the institutions most likely to have been the sources for the anthrax used in the 2001 anthrax attacks were conducting GOF research on anthrax funded by the Pentagon and the CIA that was justified as "improving" the controversial anthrax vaccine known as BioThrax.

For instance, Battelle Memorial Institute—a Pentagon and CIA contractor—began genetically engineering a more virulent form of anthrax "to see if the [anthrax] vaccine the United States intends to supply to its armed forces is effective against that strain." While these experiments were going on, the embattled manufacturer of the anthrax vaccine now known as Emergent Biosolutions, entered into a contract with Battelle that gave Battelle "immediate exposure to the vaccine" it was using in connection with the genetically modified anthrax program.

As noted in Part II of this series, BioPort was set to lose its Pentagon contract for anthrax vaccine entirely in September 2001, and the entirety of its anthrax vaccine business was rescued by the 2001 anthrax attacks, which saw concerns over BioPort's corruption and its horrendous safety track record replaced with fervent demands for more of its anthrax vaccine. Furthermore, as noted in detail in Part III of this series, Battelle was the most likely source of the anthrax used in the 2001 attacks. The ties between UPMC's Center for Biosecurity, Battelle, and Emergent Biosolutions will be discussed in the next installment in the series.

What is also notable about these Corona-thrax experiments occurring at UPMC are the ties of UPMC's RBL and Center for Vaccine Research to another key component of the center's "biodefense" complex, the UPMC Center for Biosecurity. As previously mentioned, the people recruited to head this center at its founding in 2003 were intimately involved in the 2001 bioterror simulation Dark Winter, namely Tara O'Toole and Thomas Inglesby.

While leading the UPMC's Center for Biosecurity, O'Toole and/or her successor Inglesby engaged in other notable bioterror simulations, including one that took place last year— Event 201, which eerily predicted the coronavirus crisis that began this year. Inglesby, who is also the director of the Johns Hopkins Center for Health Security in addition to his post at UPMC, was the moderator at Event 201.

Though Event 201 has garnered considerable scrutiny in recent months, another but less well-known exercise in 2018 that involved O'Toole and Inglesby, examined how a bioterror attack involving a genetically engineered pathogen could trigger a Continuity of Government (CoG) scenario, a government roadmap for the imposition of martial law in the United States. As other investigative series of mine have noted, there have recently been a myriad of intelligence agency–linked simulations that predict the imminent imposition of martial law in the United States following the 2020 election.

It is also notable that George W. Bush's controversial and classified update to CoG plans in 2007, known as Executive Directive 51, was directly inspired by Dark Winter, and Barack Obama's subsequent executive orders on CoG gave near-complete control of American infrastructure to the Department of Homeland Security in a such a situation. At the time Obama issued those executive orders, O'Toole was the DHS undersecretary for science and technology and also influenced those updates to the CoG plans. O'Toole is currently the executive vice president of the CIA's In-Q-tel.

The simulation known as Clade X will be examined in greater detail in the next installment of this series as will the numerous and recent "predictions" from US government sources, controversial billionaires such as Bill Gates, a web of individuals tied to UPMC who have warned that a bioterror attack or related public health catastrophe is set to take place shortly after the COVID-19 crisis subsides. As one high-ranking government official put it earlier this year, this allegedly imminent event will result in "the darkest winter in modern history."

Author's correction: This piece originally discussed a specific timetable regarding the contents of a subsequent and yet to be written article in the last paragraph. References to that specific timetable were removed from the piece as the research content referred to warnings about a bioterror attack or subsequent pandemic crisis taking place in the wake of COVID-19. This information was misinterpreted due to the appearance last year that the COVID-19 crisis would wane towards the end of the year, which did not happen. I apologize for the error and have learned a valuable lesson in making and now correcting that mistake.

Covid dark winter UPMC vaccine

Author

Whitney Webb

Whitney Webb has been a professional writer, researcher and journalist since 2016. She has written for several websites and, from 2017 to 2020, was a staff writer and senior investigative reporter for Mint Press News. She currently writes for The Last American Vagabond.

11 comments

Jeff Carmack says:
September 28, 2020 at 11:29 am

Are details meant to be known through FOIA to help carry along their reality?
Reply

mdskeptic says:
October 1, 2020 at 1:36 am

Guiltless arrogance is a feature of psychopathy. Psychopaths are grandiose personalities that perceive no risk in publicly laying out their nefarious schemes. Their hubris will be their downfall. This very informative and pertinent research by Webb is enormously helpful to those of us who would derail their sick plans.
Reply

Jessica S. says:
September 28, 2020 at 5:30 pm

Haven't had a chance to go through the other articles yet, but I have a question. Have CoG contingencies already been activated, and if so, does that mean DHS can essentially go rogue?
Reply

Greg says:
October 2, 2020 at 7:41 pm

How will they find time to enjoy all that money if they lock everything down again…..
Reply

Ann says:
October 23, 2020 at 6:25 am

https://www.google.com/amp/s/www.washingtonpost.com/nation/2020/05/06/bing-liu-university-of-pittsburgh-coronavirus-researcher-murder-suicide/%3foutputType=amp
Reply

D says:
November 11, 2020 at 11:20 pm

Didn't Joe Biden warn us of a 'Dark Winter' ahead?
Reply

Clarita Maia says:
November 22, 2020 at 5:38 pm

I´m sorry, but there is still no such thing as "live SARS-CoV-2 samples". Why don´t you make an article on that alone?
Reply

somefool64 says:
January 10, 2022 at 10:06 am

Exactly
Reply

Donald Trump says:
November 28, 2020 at 11:55 pm

DARK WINTER is the Satanic elites plan to destroy the worlds energy grid using an electromagnetic pulse attack. They'll just blame it on a solar flare. Don't forget corona also pertains to the sun. The corona crown is to usher in/crown the Antichrist as new world leader. This ties in to the Rising Phoenix symbology of The Economist Magazine from the late 80's with all money burning. I believe the Phoenix and Pandemic made an appearance at the London Olympic opening games too. No electricity grid = goodbye finance/money as we know it. Bill Gates will probably then appear with his great digital ID2020 for everyone who is left. Klaus Schwab has already said the biggest threat in the future that will make COVID seem like a drop in the ocean in comparison is a cyber attack on the electrical grid. Schwab was born in Germany and his dad was a Nazi. The elites tell you before it happens. Much like how they magically predicted coronavirus with Event 201 and a few other articles from a couple of years before predicting a disease X. They'll be safe in their underground tunnels tho while everyone is looting and shooting each other. This is the biblical Mark of the Beast. Divide 2020 by 666 and you will get the 30330 the number to text to support Joe Bidens campaign. 666 is also clearly in the World Economic Forum logo. They are the ones who are calling for this Great Reset. Dark days ahead. Start preparing yourself and your loved ones now by getting lots of gas, water, food and supplies.
Reply

Tom Whaley says:
August 7, 2021 at 8:57 am

Wow, just wow. As a non psychopath I have really struggled to imagine what could be responsible for the insane reaction to this modestly threatening virus and why the establishment is so gung ho about full vaccination of the population. I suspected the real answer laid in the realm of bioweaponry and bioweaponry

defense as we edge closer and closer to an all or nothing conflict with China and Russia.
But throw in a few variables I hadn´t imagined like predictive mutation algos and the need to test those at scale to validate those predictions and the fact that AI thrives on bulk data and it all begins to make sense.
So dark winter is nothing more than what our world will look like once national security merges with AI bioengineering dual use and GoF research under the direction of psychopaths in the MIC and medical industries who share the unique trait of feeling compelled to test new technologies asap as an arms race function.
So the whole of humanity is reduced to an experiment inviting all that could go wrong with genetically modifying our species guided by arms race psychopathy.
And to think I just wanted to retire in peace sipping a cold beer.
Thanks for your work
Reply

Techno Gulag says:
September 14, 2021 at 7:58 pm

George Romero set his Zombie Apocalypse movies in Pittsburgh, I always assumed just because he was located there. His movies always ended up being about the government releasing a Zombie bioweapon on the citizens. He also had one called The Crazies, with no “monsters” in it, just people near Pittsburgh being victims of a *bioweapon which had been disguised as a vaccine*, leaked into the water supply, which caused laughter & various nutty behavior, then death. In the movie, the weapon wasn’t developed in Pittsburgh, it just fell into their water from a crashed military transport. Still, a bioweapon disguised as a vaccine with Pittsburgh as ground-zero for sickness, death, & martial law feels much too close to life-imitating-art. 🤔
This article scared the crap outta me. Thank you Whitney; keep doing what you do. Oh and if anyone wants to watch that movie for a good Halloween scare, see the original. The remake is not even remotely similar and Romero had nothing to do with it.
Reply