Initiatives for Building Infrastructure For Preventing and Curing 90% of Chronic Diseases and Saving Lives on The Planet

Presented for Consideration by Several States of The U.S.

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SUMMARY

This proposal is presented to several states to explore the possible joint effort to establish a health infrastructure in support of a health culture that will enable state residents and U.S. Citizens to avoid more than 90% of chronic diseases including heart diseases, cancer, mental diseases, rare diseases, etc. As shown in the proposal, the proposed infrastructure or its equivalent is the only measure for addressing challenging human health problems. This infrastructure will enable human beings to survive from overwhelming disease agents from toxic substances to infectious agents to harsh climate. Our researches have firmly established that adverse effects of all disease agents in our planet are one to several orders of magnitude larger than what has been recognized and understood in the past. Past studies failed to provide strong warning on the danger of the massive disease agents on human survival. The proposed measure is not an option, and nor a political choice, but a required measure for finding cures for chronic diseases and human survival.

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I. INTRODUCTION

In the last century, medicine has failed in finding cures for chronic diseases and failed to control environment, ecosystem and climate. The two failures can be traced to same problems: the deep flaws in population-based medicine which was developed long before disease causes are understood. Medicine has failed to find cures for chronic diseases, cancers, AIDS, mental diseases, the COVID-19 disease, etc.

Due to overwhelming flaws, medicine could not identify disease causes and cure diseases. A series of our studies show that population-based research model, side-effect evaluation model, drug independent action model, and reductionist treatment model, etc. were deeply flawed. I have provided conclusive proof elsewhere. By using clinical trials as the gold standard, medical researches cannot correctly characterize any weak factor among a massive number of interference factors. By failing to take into accounting the massive organ functions, clinical trials cannot find long term side effects that are materialized slowly. By using the toxicity independent action model, researches could not determine the total combined effects of all toxic substances on human health. By treating humans like machines, medicine cannot cure diseases that are primarily rooted in the brain. Influenced by all flaws, medicine has created a misleading impression that the impacts of all disease agents are one to several orders of magnitudes less than what actually is. In the last fifty years, by relying on the independent action model, human beings have dumped massive amount of toxic substances and man-made chemicals into seas and oceans. Since most substances have not reached daily exposure limits, governments have hard time to ban or limit their production.

Due to series of past mistakes traceable to medicine, humans are in the line of life species in extinction. More than half of U.S. population get at least one chronic disease; and virtually all animals including household pets, wide fish, birds, panda, and even remote polar bears may have chronic diseases or under severe stress. The medical spending for the U.S. will reach \$5.7 trillion (but no amount of money will be enough in the long run). Based on current spending trend, medical spending will eventually swallow all GDP. The life time odd for a U.S. resident to get cancer has increased from near zero to 0.04 and to 0.4 now. There is an irreversible trend for this odd to reach a full unit. For those aged above 80, the chance of finding tumors in their bodies is already unity. The frequency of heat diseases is very high and will go up under the influences of COVID-19 pandemic. Based on the change in male sperm count, infertility is another irreversible trend that will threat human continuation. Mental diseases are rising and will have more severe impacts on society. Some disease incidences may show small decline, but are achieved by creating a large number of health problems that cannot be well characterized by existing disease definitions (which are generally flawed). The general trends are that heart attacks, stroke, cancer, mental diseases, infertility, etc, strike people at increasingly younger and younger ages. Unless those trends can be reversed, I project that human beings will be in extinction from the planet.

All problems can be attributed to the flaws in research models, side effect study models and toxicity independent action model, reductionist research model, binary disease classification. They are all inaccurate or wrong. I have firmly proved that no suitable experimental method is able to accurately characterize health problems or diseases by using clinical trials.

By relying on evidence from ten of thousands of published studies, I found beyond any doubt that health problems are caused by an overwhelming number of factors, and that symptoms were merely chancy manifestation of systemic injuries caused by massive disease agents. Each person is routinely attacked by hundreds to thousands of cancer-causing substances, thousands of infectious agents, thousands of immune-suppressants, etc. Human bodies have been systematically damaged while their manifested symptoms reflect merely the most vulnerable organs and parts. Five decades of researches have firmly established that chronic diseases cannot be cured by drugs, medicines, or any wonder devices unless exposures to disease agents are stopped. Heavy metals, pesticides, carcinogens, toxic chemicals, etc can all cause systemic damages to all cells in the body. When a patient keeps ingesting hundreds of culprit disease agents, he would be in the process to develop more and more diseases in more and more parts and organs. Heart disease is not just a problem in the heart; and liver cancer is not a just liver problem that can be cured by removing the liver. It is beyond dispute that a real cure must include stopping exposure to all culprit disease agents.

Each of us is exposed to disease agents from food, water, air, environment and things we contact. We ingest tens to hundreds of foods in each month; we might breathe in air from various cities and localities, we may live or present in private homes, friend homes, public buildings, etc. We may drink waste from city water systems, bottled water, beverage of various brands, etc. We may pass through heavily populated roads, construction sites, air contaminated atmosphere, micro-climate polluted by chemical spills, etc. We might contact any disease agents at homes, kitchens, trains, buses, shared offices, office appliances, etc. No one can know what he can avoid and what he cannot. The most common exposure is unpredictable. One serve of an acid source may provide lead in an amount that is more than thousand times of recommended daily limit. We do not know that a brand of food we eat might be harvested from a farm next to a toxic junk yard. We don't know heavy metals and their amounts in a processed food such as fish cans. Even a piece of innocent furniture may contain many toxic substances and a resident may keep ingesting it due to her peculiar activities or habit. A second kind of exposures is avoidable but is accepted by those who do not know their adverse health effects. A piece of bread may contain hundreds of ingredients rather just three required ones. People knowingly ingest food additives, colorants, flavors, texture-modifiers, etc under the assumption that they all are harmless, safe or satisfy FDA's approval requirements. Another kind of exposures comes from production aids such as pesticides, fungicides, and insecticides. Since agricultural products are imported from many nations and different nations are regulated by different laws and follow different farming practices, it is very difficult to find what are in those products.

Our own studies have shown that more than 90% of chronic diseases can be prevented and cured. It is generally believed that more than 90% heart diseases can be prevented and cured, and more than 90% cancer can be prevented by change of lifestyle; and most AIDS diseases could be prevented and cured by addressing multiple problems unrelated to therapeutic drugs. We even found that that more than 90% of COVID-19 diseases can be prevented and mitigated. All of those studies findings are not based on drugs and medical treatments, but lifestyle, emotional health, avoidance of disease agents, exercises, etc. Most diseases arise because our current living environment is too different from what humans have

evolved from. I found that that temperature can affect disease incidence rate by ten to one hundred folds. COVID-19 disease reflects human poor ability to adapt to the changing climate. Our daily temperature fluctuations can be as large as 30° F. Each time when temperature changes by more than 30° F, fluctuating temperatures cause massive more infection cases and thousands of additional deaths. Both incidence rate and death rate in the U.S. and other nations are consistent with the pattern of temperature fluctuations.

Looking at a typical person's life, there is no way to find all sources of exposures and avoid them in a predictable way. Most homes, buildings, appliances, cars, trains, furniture, etc. were made before disease causes are fully understood. Cancer-inducing agents can be found in most buildings, particularly those old buildings. Recent studies have expose great risks from cookware and kitchen products, but a good portion of householders are unaware of this threat, do not pay attention to the adverse effects of disease agents, or hope that no bad outcome will happen. Thus, those who know the risks of exposures cannot avoid exposures in a predictable way, and those who do not know risk of cookware will provide incentives for continuous sales of harmful products. Many disease agents can cause noticeable health problems at very low concentrations. Medical laboratory analysis, as used in the present manner, cannot provide useful information. Besides, if damages to cells and organs are detected, it is always too late to completely cure such systemic body injuries.

The widespread presence of “forever chemicals” (PFAS, PFOA and PFOS) implies that pollutants and chemicals are capable of dispersing into every part of the planet. The forever chemicals have been found in animals in every part of the world. An implication is that other chemicals, as long as they cannot be broken down rapidly, could reach all parts of the planet. Based on the second law of thermodynamics, small particles must disperse into air, water, soils, etc. I must assume that chemicals from different origination sources at different geographic locations reach atmosphere, soil, surface water, underground water, drink water, plants, animal bodies, and human foods. After the chemicals have entered our bodies, they will interact with each other to deliver accumulative adverse effects. It may take a long time for them to reach harmful levels that can be detected. Many synthetic chemicals dumped in the last half a century are particularly harmful because they cannot be broken down in nature in a reasonable speed. As long as they stay in nature for too long, they will have an ample time to reach every part of the world. After they have damaged the environment, they must hurt human beings.

I have proposed numerous research proposals, but found that all federal programs are not designed to address such a problem. NIH research programs narrowly focus on drugs and devices with little interest in lifestyles. DOD lacks suitable funding sources. NSF fund has very limited in allowable uses and is largely useless for this mission. Private venture funds do not support business that is primarily intended to benefit state residents and all citizens in the U.S. Non-profit foundations promote whatever federal agencies do. I pitched with some foundation including Robert Johnson Woods foundation, none of them showed interest in any part of my proposed projects that can completely alter heath landscape in the U.S. and is a desperate emergence measure for human survival.

Therefore, I now urge all state governments to start a joint effort to establish the re-

quired infrastructure in support of health culture. When federal agencies and private funds cannot support this cause, states must do. Each state will be the direct beneficiary of this cause; the interest of finding cures is clearly reflected by state movements to enact cure bills. This attempt reflects that lack of cures is due to lack of monetary incentives. The mission to prevent and cure 90% of chronic disease is a mission for everyone. A health culture will also advance state interest. If people have personal experience in curing their diseases, they could understand how toxic pollutants actually affect their health, chronic diseases, and healthy spans. When more and more people understand the true roles of environment, foods, water, and air, more of them will do their parts to protect the environment and conserve energy, resources, etc. and fewer of them oppose environmental regulations. If more of them learn how to cure diseases by avoidance, lifestyle and physical activities, more of them will realize that toxic substances are not just theoretical risks but actual culprits for diseases.

II. SYSTEMATIC CONFLICT OF INTEREST IN MEDICINE

In the capital economy, everything is driven by money and profits, but most industries have performed well. Medicine is the only art that has failed in the biggest way. I will show that its failure is rooted in systematic conflict interest.

In the production industry, each product maker must develop and sell best products to win competition. The incentive for making money and the incentive for developing good products are consistent. If a car maker wants to make more money, the maker must improve its car quality or reduce its car prices. In the production industry, all executives and employees generally align their personal financial interest with their corporate interest. If a car designer wants to make the highest pay, the designer must design better models or best models. This rule is applicable to all players such as parts makers, component testers, part distributors, car sales persons, etc. Even all parts distributors will have incentives to distribute best and cheapest parts. If any of the vendors in the industry fails to deliver product quality, the vendor must get high returns and will lose customers. Similarly, car sellers must sell the best or most suitable cars that can attract at least some customers.

Medicine has a very unique problem that is not seen in any other field of sciences or production industries. Medicine, like all production industries, must seek revenue. Potential products that enable medical industry to make profits are synthetic drugs, equipment, devices, prescriptions, treatments, and surgeries. Those are profit-generating options. Synthetic drugs can be patented and owned and thus drug companies have to choose to develop synthetic drugs because they can own and monopolize the drugs for about 20 years. Equipment and devices can be owned and sold for profits, and medical device companies can sell equipment and devices for profits. Medical practitioners can charge fees for conducting diagnosis, writing prescriptions, and doing operations. All medical options have a firm basis to generate revenues.

However, it is clear that none of those medical options can cure chronic diseases. As we have proved beyond any doubt that what can prevent and cure chronic diseases are lifestyles, personal health wisdom, exercises, avoidance of disease agents, good emotional

health, etc. Those things exist in nature or have passed down from evolution. None of them can be owned or monopolized to generate predictable profits. Our temperature management protocol can be used by anyone because no body is required to buy the way of managing body temperature. Thus, generating revenues and curing diseases are diametrically against each other: curing disease means less revenue and getting more revenues means NOT curing diseases. This conflict is intensified by the fact that medical options can instantly relieve symptoms but real cures cannot generate satisfactory results in a short time. In this fast pace world, people can be easily misled to believe in fast fixes. The incentive of medical practitioners is using medical treatments to generate revenues, but not curing chronic diseases for diminished revenues. This inherent industrial conflict of interest is the main reason for failure of medicine. The limited personal ability to pay for medical treatments and practical difficulties to use multiple treatment options determine that medicine must do its best to preclude real cures. To increase industrial revenues, drug companies, device companies, medical practitioners must promote their products. Since no one can own natural products, lifestyles, way of exercise, and natural methods for preventing and curing diseases. All non-medical options must be disparaged by all players.

A large majority of medical researchers have to choose research subjects on drugs and devices in order to find vendors to finance their researches. Researchers cannot do research for finding cures because both federal government and states have failed to support their researches for finding cures. With time passing, institution medical researchers have developed research culture of focusing on drugs and devices. When a large number of medical research articles concerns drugs and devices, medical publishers must support such research articles.

Driven by the industrial conflict of interest, an overwhelming majority of players have common incentives for developing synthetic drugs, equipment, medical devices, etc, but lack incentives to develop real cures. They all make industrial revenues even though many of them are not aware of it. After this industry has existed for more than a century, everyone knows how to promote their revenues. Simply by looking at the revenues, they naturally do their best to maintain this deeply flawed medicine in a way for promoting revenue. Practicing doctors, established researchers, medical publishers, etc. share this common interest to maintain infrastructure for their interest.

The failure of medicine was primarily attributed to clinical trials. In the very early time, researchers naturally wanted to use a method for conducting comparisons. They did not know that all humans are different and personal differences are more than the amount of alterations for causing chronic diseases. Some problems were obvious as early as 1930s or before. Due to then technological limitations, researchers did not understand the root problem. Instead, early researchers tried to address inconsistent and conflicting outcomes of clinical trials by introducing statistical analysis as fixes. It was natural to attribute research outcome uncertainty to experimental errors. Most people might mistakenly believe that statistical analysis is the mastic fix, but it was possible that improper motivation drove a small number of advocates for use of statistics. It is in the same time window that peer review was introduced into medical researches in the U.S. Here, the combination of wrong research model and a wrong data analysis method often produce results that will escape from challenges to the foundation of

medicine. All inconsistencies and conflicts in research outcomes can be justified by probability. Essentially, statistical analysis turns disease processes into lottery-like processes. If a trial outcome is clearly consistent with reality, the model is right. If a research outcome is clearly contrary to reality, it can be attributed to unusual odds. It is often claimed that an outcome can happen no matter how it is statistically unlikely. To further preclude challenges to research models, research articles have promoted clinical trials as a “gold standard” and a final arbiter for controversies in medicine. If anything is wrong, something else is to blame. While people in medicine have lost vigilance against a gold standard, any scientist from outside medicine would question the motivation of freezing a research model. Any scientist should know that no method can be as good as for addressing everything in science. It is possible that a small number of interest holders might have used medical publishing machinery to permanently freeze the research landscape. Peer review is a device for anyone to defend existing knowledge and his personal interest. The general acceptance standard, as enforced by peer review, can effectively preclude fundamental changes to existing knowledge and vested interests. Years of propaganda has impaired the population's thinking. We thus see a system full of flawed sciences that cannot be corrected.

Clinical trials are wrong methods for developing valid treatments, but they are great tools in support of drugs discoveries, a mission that can produce billions of dollars for a single successful drug. Drug industry spends more than \$20 billion on doctor-directed advertisement (2019). Massive amount of money is provided to sponsor researches for university researchers, provide publication fees, conference spending, traveling spending in all kinds of names. Drug companies also support practicing doctors by providing research funds (for case study), publication fees, speaker fee, conference fees, author fees for opinions, vacation fees, and drugs samples or anything that can promote sale of drugs.

With that kind of money, interest holders cannot question the validity of drug study models, must defend them if their flaws are challenged, and must suppress challenging article if they cannot depend. However, as seen in published articles, many researchers still challenge existing theories and practices by narrowly reporting their factual findings without actually openly rejecting flawed theories and practices. In the last half a century, medical researchers have generated two spheres of medicine. One sphere of medicine is the reductionist research and treatment model for promoting drugs, devices and medical treatments. And the other sphere is tens of thousand of factual discoveries that firmly support multiple factors disease cause model, holistic treatments, mind-body model, and various balances in the body. The first sphere is driven by massive money and used in clinics, while the second sphere implies real cures without revenues. The massive good and great sciences are never used in practice.

This money-and-cure conflict is best reflected in how medicine deals with somatic mutation theory. Somatic mutation theory was undoubtedly good for a small number of cancers which are most probably caused by non-natural causes. This theory was quickly extended to all types of cancer in clinics. Based on that theory, a treatment must be kill all cancer cells or remove the tumor together with big margins. Over the years, cancer researchers have added a body of evidence to show that this theory is actually wrong or inapplicable in a super majority of natural cancer instances. It was found that cancer can be caused by foreign matters, in-

ert substance, firm, infectious agents, imbalanced diets, and even things like disturbed emotion and disrupted working cycles (e.g., night work). It is even found that many cancers do not have the kind of mutation for cancer. Moreover, genetic mutation may exist in non-cancer patients or normal cells. One hundred years later, a comprehensive review published in 2018 found that somatic mutation theory is correct only in a small number of cancers. This study implies that a treatment intended to root out mutated cells or tumor must be questioned.

It is indisputable that cancer can heal naturally as it is well documented in hundreds of cases. Based on this indisputable fact, anyone should suspect that cancer is a common biological phenomenon that comes and goes in the human body. It is driven or intensified by toxic substances, emotion, feeling, hormones, etc. The better theory is that subtle alternation of tissue ecosystem results in its inability to control cell integrity and CNS plays a crucial role in cancer development. In other words, cancer is a result of altered biological processes' relative rates in the biological process network in the body cell. Then, cancer cannot be cured by merely removing the tumor and killing all cancerous cells. While surgery is necessary to address emergency issues, cutting tumors is like using a sword to cut water in an attempt to change chemical position of the water. Medicine will not rethink those questionable treatments even though a final verdict has refuted its validity. The real motivation is not curing cancer but generating service revenues. If a doctor can prescribe an exercise program to cure heart disease of a patient or sells a drug to control his symptoms, the doctor must choose the drug. If exercise can enable the doctor to make twice more money, the doctor could prescribe exercise.

The inability to correct flaws is reflected in how medicine clings to the epidemiological model R0. The model was developed by imitating human birth model to model infectious disease incidences. There is no point to argue how bad this idea was at this point. I examined all key assumptions, and found that each is flawed. It is still used to assess what is a good pandemic measure and what is not. After 1980, tens of thousands of studies have firmly established that a large number of disease agents can affect the same disease and human health. Those findings imply that human health and chronic diseases are distinctive life phenomena that are much more complex than the subjects in Quantum Mechanics or General Relativity. Health and chronic diseases cannot be studied by treating human beings as simple classical objects and thus doing an A versus B comparison. The findings in the last half a century are game-changing. They imply that the reductionist model, dualism, binary disease approach, use of mathematical models, etc. were all wrong as long as they are used to find cures for chronic diseases. By looking at their knowledge dependence, I must find that everything from research models, disease theories, and practicing methods are grossly inaccurate or completely wrong as long as they are used to formulate treatments for chronic diseases. Even the same research article may provide valuable information for certain purposes, but completely wrong if they are used as the basis for evaluating cures for chronic diseases. I estimate that about 99% of medical articles in dealing with treatments for chronic diseases have problems to different extents.

Medicine does not denounce massive wrong research findings, but continues generating meaningless research articles. Serious flaws have been found in population-based research models, epidemiological models, use of synthetic drugs as cures, statistical analysis,

mathematical models for population, side effect determining methods, binary disease classification approach, disease symptom concepts, nearly all disease theories (all cancer theories and all rare disease theories), precision medicine, evidence-based medicine, etc. Many of those concepts can be correct or useful for limited purposes, but fail whenever they are used to evaluate treatments for chronic diseases. Many issues are very subtle. For example, mathematical models can be used in a large number of situations to address all kinds of problems, but are wrong whenever they are used to model a plurality of persons in an attempt to find cures. Precision medicine is not what can be used to human beings due to massive uncertainty of disease agents.

Medicine has an inherent incentive to suppress real cures and challenges. As any business entity, its core incentive is to develop more customers. Medical practitioners must develop their customers as revenue feeds. The biggest revenue comes from patients with chronic diseases. Thus, curing diseases is in conflict with the purpose of increasing customers. Thus, all players have an inherent incentive to suppress and kill competing arts. It is not strange that they will use deeply flawed findings to criticize anything that could have negative effects on their revenue streams.

After I discovered flaws in medicine, leading medical journals suppressed my articles, and peer reviewers rejected my article for technicalities. They did so without providing reasonable explanation. They rejected my articles because my articles would negatively affect their revenues and their personal interest. In the medical industry, some people are retained to kill competition, some are paid to provide biased opinions, some hold jobs for exaggerating medical performance, some are taught in medical schools to distrust alternative medicine, and some do so for their revenue streams. When medicine has an industry-wide conflict of interest, its players collectively preclude cures and preventive methods that come from nature and evolution.

One reason for my initiative is that if a person keeps ingesting same disease agents such as carcinogens and immune suppressants, none of drug, surgery or medical treatment can cure his cancer or chronic disease. Even if the cancer is removed or the diseased organ is replaced, disease agents will cause new disease. When chronic diseases are caused by toxic substances, a real cure cannot be one or a few more synthetic chemicals. The second main reason is that medical studies normally underestimate real benefits of lifestyle-related factors. Medical researches normally investigate one factor a time and thus cannot determine the combination effects of a large number of lifestyle-related factors. Thus medical research findings grossly underestimate the benefits of lifestyles. In contrast, medical researches grossly underestimate the side effects of drugs because true damages to organs cannot be detected until massive organ surplus functions have been diminished. Medical researches grossly exaggerate benefit-to-risk ratio for synthetic drugs, but grossly underestimate the curative power of lifestyle factors. Those two reasons explain why synthetic drugs cannot cure diseases, but lifestyles have much larger curative power than what is recognized in medicine.

III. FAILURE TO FIND PREDICTABLE CURES FOR CHRONIC DISEASES

A. Flawed Presumptions in Foundation of Medicine

Medicine is an art that is deeply flawed in all aspects from research models and methods, practicing models, selection of treatment options, etc. Those flaws cause humans fail to realize the true harmful effects of pollutants and have caused mankind to miss at least 50 years to act.

Health is a reflection of mind-mediated personal multiple factor dynamic process balance. Thousands to potentially millions of studies published after 1980 have produced conclusive evidence to show that the population-based reductionist static binary comparison model is wrong.

(1) Population-based research model is biased, inaccurate or even completely wrong as long as it is used to find cures for chronic diseases. Population based studies are only useful in finding potential causes and assessing the impact of factors, but have been routinely misused as treatment guidelines. If this method were used in car repair or plane repair, every car would be dead on road and every plane would crash.

(2) Reductionist treatment is poor at least, and completely wrong in most cases. Studies to examine the limitation of reductionist approach have proved in one way or the other that health cannot be addressed by focusing on one single factor. To overcome reductionist limitations, many biological sciences have evolved systems sciences such as systems biology to focus on the whole system.

(3) The binary scale is used in characterizing diseases, health, and a large number of health properties. In reality, all diseases and health properties are continuous quantitative properties and nearly all diseases are caused by lost balances in biological processes or structures. This approach is thus flawed. In addition, when a binary scale is used in research, the use of the scale introduces excessive errors (49.9%) in research data.

(4) Treatment effects are assessed by focusing on the body part only, while in reality, mind is often more important than the body. The role of mind was recognized in ancient medicines and noted in medicine 146 years ago. Post 1980 studies and recent studies also refute the notion that the body can be treated in isolation of mind.

(5) Static comparison is often improper because disease outcomes depend on the balance among multiple biological processes in a dynamic system. Process timing, activity phases, factor interactions, etc. often have decisive effects on health or disease outcomes. The difference from measuring A and B is often meaningless.

(6) The presumption that everything can be solved by mathematics is wrong and has no reality. Use of statistics, use of mathematical methods, etc were all wrong except in limited situations, where the effect of the factor under investigation is a super strong factor.

(7) Most disease theories in medical literature are grossly inaccurate or wrong. After massive disease causing factors are discovered, medicine fails to correct flaws in disease

theories established before 1980. Somatic mutation theory, drug/toxicity independent action model, and epidemiological models are all very poor or completely wrong, depending on research purposes.

(8) Stressing the role of evidence is clearly unworkable in personalized medicine. Evidence acquired from a population has no relevance to any person, while evidence from a specific patient is very limited in reality. It is dangerous to rely upon partial evidence to make a treatment decision. Courts can rely on evidence purely for necessity, but reliance on partial evidence in medicine can cost lives. Concerning most health problems, what a doctor sees is not what really is. The multiple factor disease cause model makes evidence meaningless.

Evidence-based treatments are clearly wrong and unworkable: administration of any toxic substance, drug, or a combination of them on different persons can result in different adverse reactions, diseases, or damages to different organs. This is a well known fact and can be repeated by using any toxic substances. Thus, disease is only a chancy manifestation of the interactions between one or more culprit factors and a large number of other factors for a given gene. It is natural to find that a cancer, a heart disease, or diminished organ function may require same or similar treatments. Conversely, stomach cancer caused by arsenic and stomach cancer caused by an infectious agent require different treatments even though they share the same name. Based on overwhelming findings, effective treatments cannot be based on diseases, but must be directed to the real causes. Massive findings also show that precision medicine is a flawed concept.

(9) Population-based medicine is also deeply flawed. It is valid only if it is used to evaluate a measure on a population. A population study finding can be an important basis to allocate societal resources. However, population findings have been misused and abused as treatment guidance or used as basis to preclude other measures. Population medicine is responsible for the failure of this pandemic measure. If we have 100 measures for one hundred patients, when a right measure is used correctly to a patient, it can cure that patient. Thus, all of the patients could be cured by using a matched measure or combination. However, if one tries to determine if one measure is good for all 100 people, each measure will be found to have no benefit due to interference factors. The idea that a fix is good for all people in a population is completely wrong and that is the very reason that medicine will never solve chronic diseases. The population method is good at finding a strong effect that can stand out in all patients and thus is misused to reject all lifestyle factors. Population medicine can be off the mark by one to several orders of magnitudes as far as lifestyle factors are concerned. Population medicine is also responsible for transferring disease risks from a small number of distinctive persons to the population. The risk of deaths from COVID-19 is nearly zero for most young and healthy people. By using personalized approach, society only needs to focus on those at risk. However, by transferring the risk from the distinctive vulnerable persons to the population, medicine creates a huge patient population for treatment, vaccination, etc; Thus, population medicine is responsible for generating enterprise revenues and shutting down national economy. It should be rejected as flawed science in most use situations or severely limited.

(10) The design drug concept started about 1980s, but the parallel researches in dis-

ease cause factors essentially refute its validity. With limited exceptions, the drug design principle cannot survive the firmly established multiple factors disease cause model. Chronic diseases are affected potentially by hundreds to thousands factors. The validity of the design drug concept is questioned because it fails to take into account tens to hundreds causal and influencing factors, mind-body interactions, tissue chemical environment, process dynamics, etc. If health can be achieved by focusing on a single target process, medicine can be reduced to Chemistry 101.

In summary, mountains of evidence acquired in the last half century have firmly established beyond any doubt that medicine is deeply flawed in every aspect. If any health property has a value of 100 relative value, medical data, if used for treatment of diseases, may be off the target mark by 90%-99%. Some treatments may actually hurt patients. Many COVID-19 patients were harmed by misused drugs in an attempt to control body temperature. Medical treatments from the flawed models cannot cure chronic diseases.

B. Scientific Merit Is Decided by Money

The biggest problem is that research is conducted for something that can be owned and patented. Thus, selection of research subjects is made for patented or owned things. Studies done for money are not science by presumption. Medicine has long become a money science for achieving highest revenues. I will show how “medicine” meaning was changed for money and how medicine precludes real cures.

1. Medicine Becomes an Art of Medicalization with Drugs

“Medicine as cure” is an experienced-based notion that has stood longest time test. However, after human developed technology for making synthetic drugs, “medicines” was replaced by “synthetic drugs” without vetting the effects of synthetic drugs. Now drugs are used as the primary treatment options. The use of synthetic drugs clashes with the evolution theory, mind-body theory, biological pathway network balance, etc. A single active compound cannot correct a large number of subtle changes caused by diseases in biological pathway networks. Subtle imbalance underline a chronic disease cannot be corrected by using a synthetic drug as a fast fix. Drug benefits have been found in a large number of recent studies on cancer, heart diseases, mental diseases, etc. Target drugs are based on the reductionist concept that a disease can be cured by correcting a single step in the biological pathway networks. It cannot happen except by accident.

Researches have produced hundreds of meta reviews, with most of them finding no real benefits. However, positive drug benefits in a small number of studies are inflated by clinical trials, flawed statistical analysis, flawed drug side effect model, flawed reductionist approach, flawed independent action model, and failure to consider organ redundant function. The true benefit-to-risk ratios are completely different from the nominal values of clinical trials. Due to the overwhelming model and method problems, we often observed confusing stories: clinical trials found very high effective, but the drugs often do not work on patients; and clinical trials show great safe, but real word data show much poor results. Numerous drug screening studies add more evidence that a good portion of drugs are carcinogens. This is why lifetime cancer risk has increased to 0.4 and will reach unity. Now, every one may worry about cancer

from time to time even without cancer diagnosis.

Medicine has become a deeply flawed science for an entirely different reason. Medicine has narrowly focused on drugs, devices, radiation and surgeries as primary treatment options. Medicine has precluded everything else under the Sun. It discriminates options from nature. All favored treatments are selected for their revenue-driving potentials. This means that nearly all clinical trials engage in chain-wise comparisons. Drug A is compared with drug B, then drug B is compared with drug C, and drug C is compared with drug D. Assuming that research method were valid, such studies can prove only relative merit of those involved drugs. As long as medical options are selected based on revenues, medical research cannot be a valid science because it is like choosing the tallest dwarf from a room full of dwarfs. Medicine can never tell whether lifestyle interventions are much powerful and safer than drugs.

Most synthetic drugs used in medicine are just as bad as Chinese elixirs, which dominated society for thousands of years and killed at least 12 emperors. Elixirs showed great instantaneous benefits but contained heavy metals to kill users slowly. Synthetic drugs clash with evolution and all other theories (e.g., biological process networks) I have tried, and are inflated by deeply flawed clinical trials and side-effect evaluation methods. Elixirs could gain attraction because of noted instant benefits and claimed life-extending benefits; and synthetic drugs can attract people because of claimed benefits of controlling symptoms of diseases. The common driving force is money. Elixirs long term side effects are delivered mainly by heavy metals, while synthetic drug adverse effects are realized by novel chemical structures that human body cannot tolerate in a long run. Due to evolution, nature seems unable to address a large number of man-made chemicals including plastics, construction materials, polymers, man-made organic compounds, etc).

Man-made drugs can disturb balance preferred by nature. This point can be shown by looking at a large picture. Genetic modified organism, DES (a mimic female hormone), herbicides, etc can disturb nature-intended balances, resulting in catastrophic adverse impacts on human health in a long run. One theoretic uncertainty is that a man-made drug may affect or interfere with potentially more than 20,000 genes-encoded proteins and a large number of metabolic intermediate products in the human body. Their adverse effects may be realized by any of known chemical and non-chemical mechanisms (e.g., pH, volume displacement, charges, viscosity, entrapment, etc). While humans are unable to resolve those uncertainties now, history has consistently shown that clinical trials were wrong in nearly all cases. Indeed, among the massive adjudicated drug injury cases, clinical trials have not correctly predicted one single instance. In cases like Roundup, medicine was always on the wrong side. As in Roundup case, 800 studies done in more than forty years have consistently shown that this product is safe. However, the final verdict is that medicine is wrong.

2. Medicine Has Become a Dysfunctional System.

(1) Medial publishers select articles by looking at their revenues potential. Publisher's decisions are mainly based on the publish-for-money trade. Anyone can find a large number of scandals in the publishers' business. If an article can hurt their readers but save millions of lives, the publisher will choose the option to keep their readers but let patients to die. This is

strictly a business decision that no body can object. The world should have never trusted publication merit in the first place.

(2) The general acceptance standard is used in all aspects of medicine. This standard ensures that only commonplaces are published. Junk science in 30s to 80s continues controlling medicine forever. Virtually everything is based on population medicine, reductionist treatment, binary disease classification, etc.

(3) The random drawing method used by publishers in selecting peers is an implied requirement that every statement in an article is acceptable and understandable to every potential peer. Thus, researchers must be extremely conservative in every aspect of researches. A safest approach is doing similar researches, using similar methods, and making limited findings. I see that a huge number of articles are similar except that they study different drugs or different diseases.

(4) Medical publishers use peer reviewers to kill disruptive, game-changing discoveries so that published articles will not disrupt their revenues. When a publisher assigns biased and incompetent reviewers, an expected review outcome is suppressing the article. A publishable article must be something that every peer reviewer would accept. This guarantees that medical articles are extremely conservative and researchers can explore things that are common places.

Peer review was introduced to scholarly medical publication in 1731 by the Royal Society of Edinburgh. Despite this early start, peer reviewers did not have right to make final publication decisions for scientific journals while the editors made final decisions. Peer review and general acceptance standard are now widely abused to protect existing interests and further publishers' revenues. This practice imposes a requirement that every point in a publishable article must be acceptable to two to three randomly selected peers. This is equivalent to proposition that publishable article would be endorsed by all potential peers. This practice has the effect of handing control to all peers in deciding what is published or what is not. When money becomes a primary driving force, peer review is the most powerful tool for precluding disruptive findings. If this method has been used in outside medicine, it would have killed General Relativity and Quantum Mechanics, and all important changes in science. If peer review had been used in determining invention's merit, it could have precluded ground-breaking technologies such as personal computer, the internet, cellular phones, etc.

Science and The Journal of the American Medical Association did not use outside reviewers until after 1940 and The Lancet did not implement peer-review until 1976. All researches are done at huge spending and years of straggle. Researchers cannot accept even slightest risks of being rejected. After peer reviews have set examples of rejecting innovative discoveries, researchers had to be extremely conservative. I will spend years to do my research because my research is not funded by anyone and rejection will cause big problem to sponsors. The claim of improving research quality is false. There is no sound basis that peers who had no first hand experience in investigative tasks can have required wisdom to judge research validity or future values. A large number of disease theories, practicing methods, and research models are found wrong after more than a hundred of years of influences, there is no sound basis to claim that a few randomly selected peers can pass judgment on research

merit by spending a few hours of brief review. The true motivation of using peer review cannot be improving research quality because peer review cannot change the research process that has been completed. The peer reviewers do not participate in research design and performing specific tasks and thus cannot change research course. Peer review may improve way of expression or style of articles, but those improvements could be achieved by editorial review or in-house edits. The only motivation for using peer review must be to protect medical financial interest, professional knowledge and industrial service revenues. Most peer reviewers are unpaid but are driven by the incentive to express a say in field development direction. Since research grants are decided by peer reviewers, active participation is a way to protect the power and influences of each researcher. This is like everyone has a say in dividing research fund. A large number of studies on peer review reveal peer review is responsible for all kinds of other problem. I must say peer review is an evil for most problems in medicine. Peer review has played important role in keeping deeply flawed research models, obsolete practicing methods, and flawed disease theories. As in 2000, many problems in medicine were obvious, but peer review must have prevented anyone from making changes. Most players in medicine would figure out that peer review would kill anything that does not support medical revenue or discoveries of competing arts. Peer review is the biggest driving force for creating the phenomenon that a large number of studies were done by using the same flawed models and methods, doing similar things, making similarly conservative findings, and reaching similarly flawed and wrong conclusions.

(5) NIH funding practices are focused on researcher jobs, applicant's fairness with no focus on search impacts on cures, public health, etc. Public interest is only a slogan in NIH mission statements, but is replaced by a large number of technicalities and unnecessary limitations. While federal laws never require that NIH fund things that can generate profits, it has produced track records that NIH funds mainly researches for drug discoveries. Even though medicine has failed to find cures in its entire histories, NIH has not paid attention to the very reason why nearly all chronic diseases cannot be cured by a magic drug and it pays no attention to our theoretical findings that chronic diseases cannot be addressed by synthetic drugs in the reductionist model. NIH is the only organization that has tax dollars for funding unpopular research subjects, questioning research models, improving researching models, and addressing foundational problems, etc. However, NIH funding programs are often defined by massive technicalities and non-technicalities. This practice is even used in addressing this COVID-19 pandemic. This practice implies that NIH has already known what will work and what will not. Another problem is that NIH gives its full trust to commercial publishers. Even in addressing COVID-19, NIH can only rely on articles that have been published by commercial publishers on a publishing-for-money trade. When the pandemic shuts down the whole national economy, NIH still uses the same method. Thus, if important articles are blocked by medical publishers, NIH will not do anything to bypass the blockage of commercial publishers.

(6) Since most diseases can be traced to lifestyle, daily activities, work and thinking habits, and exposures, the best prevention and cures most probably come from patients who have fought diseases for decades. This was how most early treatments were discovered. However, medicine has completely precluded patient discoveries by demanding clinical trials. No publisher accepts patient stories. Publisher demands outrageous publication fees.

Medicine, as both flawed and money sciences, has built everything needed to preclude all real cures from folk medicine, ancient medicines, personal discoveries, healing miracles, and disease avoiding experience. Only choice for patients is synthetic drugs.

I believe that SARS-CoV-2 is nature's revenge against human activities of ruining environment, ecosystem and climate. There are obvious connections between AIDS, potentially this SARS-CoV-2 AIDS, and more future AIDS in light of environment, ecosystem and climate. Climate with extreme temperature, and large temperature fluctuations are important contributory factors. After human bodies are loaded with toxic substances, humans lose immunity against diseases.

C. Summary of Problems in Medicine

In the following tables, I summarize how medicine would belittle the benefits of good lifestyle and exaggerated drug benefits and underestimates drug side effects.

Table 1. Population-based Medical Research Models Underestimate Benefits of Lifestyle Factors

Problems	Reasons of Errors	Impact Route or Mechanisms	Degrees of Impacts
Use of a single factor (reductionism)	Failure to get the sum of all lifestyle factors	Cumulative effects.	Underestimate by 99% or more (depend on factors number)
Failure to control other factors.	All other factors interfere with measured health property.	Effect the error term which is used as a measure of error in statistical analysis.	Underestimated. The benefits of any single lifestyle factor will not be detected.
Ignore the role of mind.	Normally do not evaluate the role of mind.	Miss half of the health system.	Study focusing on a single factor cannot guide treatment.
Failure to consider personal differences.	Nutrition, toxic substances, and behaviors are all variables.	All factors have different scales in different persons.	Significant error.
Characterize diseases in a binary status.	Nearly all health properties are quantitative and health is achieved by balance.	Definitions of normal person, diseased person are used in the treatment and the control.	Fatal error based on balance theory; one single data conversion can introduce 49.9% error.
Total Impacts			Medical findings are generally wrong and meaningless.

Table 2. Population-based Medicine Exaggerate Benefits of Synthetic Drugs

Problems	Reasons of Errors	Impact Route or Mechanisms	Degrees of Impacts
Narrowly focus on revenue-generating objects.	Select the tallest dwarf from a room full of dwarfs.	Bias is driven by revenue; drug benefits are established by chain comparison.	“Validity” based on a chain comparisons may be best among 1% revenue-generating objects.
Select a health property sensitive to drug benefits.	Detected benefits do not represent real benefits.	Bias is driven by revenue.	Significant. Create misleading claim: high significance level but little real benefit.
Try to get fast results.	Use high concentrations or doses to achieve fast results.	Bias is driven by revenue.	Fast benefits often mean terrible outcomes in a long run.
Overall impacts			Treatments for controlling symptoms.

Table 3. Medical Research Models Routinely Underestimate Drug Side Effects

Problems	Reasons of Errors	Impact Routes or Mechanisms	Degrees of Impacts
Synthetic drugs tend to cause long term side effects.	Synthetic drugs are used in place of “medicines” which were natural products in medical history.	They are safe in short-term use. But, they are not in food chain and have not been a selection pressure in evolution.	Nature, humans, and other lives cannot tolerate many of them in a long term.
Ignore massive organ reserves.	If a drug damages only partial organ function, its impact will not show up as symptoms.	A healthy person can have more than 60% organ reserve, but may have 10 to 100 times of biological reserve.	Catch only a small percent of side effects.
Interference of other lifestyle	Manifestation of symptoms depends on personal health	Increase the error term in statistical	Enough to make findings meaningless.

factors.	conditions influenced by a large number of factors.	analysis and do data averaging across persons.	
Use of symptom-based method.	Symptoms may appear in any organ or part but real damage actually happens in the whole body.	It is impossible to determine true damages by symptoms.	Catch only strong and distinctive symptoms but ignore all others.
Inability to differentiate common symptoms	A large number of signs e.g., fatigue, headache, stomach discomfort, mental disturbance, etc. can be caused by many causes.	All non-distinctive signs are ignored in practice.	Most common signs are dismissed by mistake.
Unknown effects on CNS and brain.	Drugs may affect CNS by many mechanisms.	Impair signal transmission and brain cells. Effect may be through impaired vascular system.	Because the brain contains almost 100 billion cells, mind damages to cells and brain cannot be detected.
Flaws in key presumptions in clinical trials.	It is flawed that all persons are treated as similar members in a population.	All individual persons are different.	Complete failure for non strong and slow-delivering effects.
Pervasive effects on biological and cellular networks.	High dose of drug affects multiple processes in the biological networks.	Drug effect cannot be limited to the target mechanisms.	Affect multiple processes in the biological and cellular network.
Short trial duration.	If a trial's duration is too short, expected side effects cannot be detected.	Motivation for saving costs.	Even serious side effects will be missed for most drugs.
Focus on one single drug or chemical a time.	In reality, the adverse effects of all drugs and chemicals are added up linearly, randomly and synergistically.	Independent action model (it is wrong)	This is a game over-mistake, and the real risk of pollutants to human survival is magnitudes higher.
Summary			Medical findings can be completely wrong and meaningless.

As shown in Table 1, medical study conclusions on the roles of a single factor may reflect only a fraction of the combined effects of all factors. Among lifestyle factors, some factors such as exercise can reduce relative cancer hazard rate by 40% to 50% while others may alter survival rates by a few percents. If they are used in combination, they must have ex-

tremely large curative power. As shown in Table 2, drug benefits are exaggerated grossly mainly by biases in promoting drugs for revenues. As shown in Table 3, the side effects of drugs are grossly under rated. From all of the three tables, one should find that lifestyle factors have curative power that is one to several orders of magnitudes larger than nominal rating of clinical trials while benefit-to-risk ratios of drugs are grossly exaggerated. By extending this analysis to hundreds to thousands of toxic substances, I must find that we could not detect weak toxic effects of most man-made chemicals. The true adverse effects of all man-made chemicals on humans and wildlife are hundreds of times more than what was believed in the past. This explains why many disease trends show disease incidence rate rapidly approach unity and disease onset ages rapidly go down.

I will provide some details on how to create an infrastructure that can change the landscape of human health and planet health.

IV. INITIATIVES FOR SEVERAL STATES

It is clear that medicine is driven by money; and the incentive is to preclude cures for chronic diseases. Cure bills presented to state legislatures will not work unless relevant measures are taken to correct the flaws in medicine. I present several initiatives for addressing health problems below.

A. An Infrastructure for Mitigating Disease Agents

Human extinction is a brutal truth if one accepts our multiple factors disease causes model. The planet cannot be protected unless we know how to cure diseases.

Flaws in research and treatment models are revealed by tens of thousands of studies published after 1980. Those studies imply that if a diseased person is under continuous attack of hundreds to thousands of toxic substances, the disease cannot be cured by ingesting drugs or any medical treatments. One single heavy metal can ruin all major organs, the immune system and disease defense mechanisms. Since every disease reflects multiple changes in biological process attributes in the biological pathways networks, one single drug cannot correct all departures in the networks. Most drugs are predicted to fail by nearly certainty. Among those successful drugs, their true merit is exaggerated by clinical trials, mis-used statistical analysis, and inability to study drug effects as a whole system. A real cure cannot be focused on what is intended to fix, but must consider other biological pathways that are continuously impaired by massive toxic substances, drugs, and carcinogens.

As demonstrated by a century of research findings, modern humans are attacked by an overwhelming number of harmful and toxic substances. When human blood and body cells are loaded with harmful substances, ingesting more harmful drugs will not solve disease. Massive toxic substances are from food production lines, family kitchens, working places. The exposure levels are often related to personal cooking habits and cooking culture and a large number of random factors. Just one bad cooking pan can generate 2,800 times more of lead than personal daily limit recommended by California. A bottled water contains potentially 24,520 chemicals. We do not know culprit substances that we are ingesting each day. When

multiple cancers or chronic diseases are diagnosed for a family, the first thing to look into is foods they eat and family's cooking habits. If a person has developed a habit of ingesting certain toxic substances, he will ingest them every day or regularly. We can see unlimited scenarios to have a whole family members poisoned. Cited references represent only a small number of health risks. Real problems are much more pervasive and severer than what we can show. People may poison themselves without slightest ideas and most health problems can be prevented only by changing human behaviors. Health problems caused by toxic substances cannot be addressed by federal agencies. The current federal spending cannot really solve massive health crises from cancer, AIDS, heart diseases, COVID-19 pandemic, mental diseases, population infertility, future pandemics, etc.

One global measure is to build a national database for public use. The database enables ordinary users to search and seek information about toxic substances and potential exposure. For example, a person can search the database to determine the amount of leached heavy metals from a particular brand of pan, pesticide residues in a water system, the best way of cooking a particular food, the identities of substances from home appliances, etc. This database is intended to help people to determine what might damage their health. By using this program, anyone can have their food samples, air samples, water samples, etc. tested at low or no cost. Test result data are entered into the searchable database so that anyone can search. Sparing tens to hundreds of cancer cases from one test report is a huge saving to society and government. Since all test results are shared, people do not need to send samples for testing the same pans, same heaters, same furniture, or same appliances. We estimate those two measures can help the population to avoid 80% to 90% toxic substances, prevent most cancer, dramatically reduce lung infection, and solve most challenging diseases and prevent future pandemics.

The key components of this infrastructure comprise disease agent-surveillance measures, disease agents central publication services, disease agent issue resolution mechanism, and disease agent test service/infrastructure. After those components are in operation, any one can know or reasonably know whether he is exposed to harmful disease agents. It takes time and great resources to implement this infrastructure. The final goal is that this infrastructure will support information on everything that could be found in households and everything that is sold in the U.S. To reduce spending, existing test facilities may be converted for this purpose.

(1) Improved research in disease agents, disease symptom manifestation, and long term health effects. Due to flaws in research models, medical researches underestimate the true benefits of lifestyle factors by 90%-100% (depending on lifestyle factors) and underestimate drug side effects by more than 90% (See next section). When federal agencies and private organizations lack incentive to fund critically important research, state must fund basic researches to correct fatal flaws in foundation of medicine. If such flaws are not corrected, nothing can solve health problems.

(2) Correct inaccurate, biased and wrong conclusions in a vast of existing medical research articles. All research articles published before 1980 were largely based on reductionist model. And most disease theories, treatments methods and treatment protocols have inherited

errors. Our researches can provide hints for resolving most controversies in medical research.

(3) Disease agent testing infrastructure. Establish new testing facilities or reform existing test laboratories for new use. The idea is that anyone can submit samples for testing suspected toxic disease agents. To make the method useful, test fees must be minimum or free. The purpose of the tests is different from medical diagnosis. The tests are to find disease causes while medical diagnosis is revolved around diseases symptoms.

(4) Data publishing services. To avoid duplicating tests, test data for each test job is entered into a public server so that anyone can find them. The scope of the tests is the widest. It covers everything that could exist in U.S. households and could harm humans. The scope covers cooking pans, furniture, industrial chemicals, construction materials, paints, fruit, vegetables, processed foods, anything sold in the market, etc. The system is designed to avoid duplicate tests. By using this database, a public member can check for information on suspected toxic substances. Any one may submit a sample for a testing if no prior test data can be found from the database or the accuracy of prior tests is questioned.

(5) Disease agent surveillance. Current infectious agents and toxic agents may be searchable by prior arranged classes. This service will allow anyone to know the risks of foods and households products quickly that are on market.

(6) Dissemination of research articles on disease agent data publishing service. The current publication model of commercial publishers is largely failure.

This project may require \$100 million to \$2 billion fund, depending on desirable pace of solving the problems. Considering the goal of preventing and eliminating 90% of chronic disease incidences for future people, this price tag is a small cost. This initiative could substantially eliminate two thirds of the \$6 trillion projected future medical spending. The true impacts of this initiative are far more than those figures because each cancer patient, each mental disease patient, each stroke patient, etc. actually cause great non-economic damages that cannot be measured. One cancer patient may negatively affect the whole family, the work group, and even the whole company (if the victim is a critical figure). In the case like COVID-19, economic damages to each state and the nation are extremely high. While COVID-19 is caused by a virus, the outcome of each patient depends on his immune system (thus, the total load of toxic substances), the climate and personal life skills for adapting to the harsh climate. While the virus cannot be eliminated from the planet, the proposed initiative will alter all three factors in the equation, and will dramatically reduce the number of future deaths. A health culture can reduce the death rate to nearly zero, and thus will have no need to shut down economy repeatedly.

B. Neutralize the Undue Influences of Commercial Publishers

States cannot solve health problems by passing cure bills. Medicine is on the track of building the worst health culture, medicalization, and thus prevents and precludes real cures from nature. States must do their parts to counter the influences of money medicine. If states want to solve health crisis like the pandemic, they must fund Open Science Foundation projects, and do their parts to mitigate the effects of flawed medical science.

The reductionist treatment model was deeply flawed and tailored to drug discoveries for massive profits but not cures. Medicine does not teach how to avoid hundreds to thousands of toxic substances, but adds a few more to the patient body; medicine does not use any of a few things to avoid infection and death, but keeps drugging and vaccinating people with unreasonable risks and grossly under-disclosed side effects; medicine does not teach how to use lifestyle factors to avoid more than 90% cancers, but keeps using surgery, drugs and radiation as treatments. It did not do comparison between lifestyle measures and medical treatments.

The inability to address overwhelming problems can be traced to the fact that medical journals use revenue-generating potential as the scientific merit determining standard. This kind of publishing-for-money trade guarantees that science is an art to achieve revenue but not cures for diseases. It is time to examine articles by Nature, New England Journal of Medicine, Science, Journal of American Medical Association, etc. to see revenues roles in their published articles. Their research subject compositions are revolved around money-generating objects. Publisher's in-house review and peer reviews are established to stifle innovation and creative thinking. Their publishing practice is the most effective mechanism for maintaining flawed medicine perpetually. When a professor writes a grant application, he must select a subject sponsored by drug companies or a subject that is sponsored by an interest holder. This professor will keep promoting drugs and will have no incentive for finding cures.

Only one way to break this censor system is to separate the review process from the publishing process. The negative effect of commercial publishers is what has driven open science movement. Many people not only know the problem but actually have done great real works to change the publication practice. In a good publishing model, articles should be published by an open science foundation, but their merit may be evaluated by reviewers who have no relationship with the foundation. In this system, peer reviewers cannot control what is published and what cannot and cannot take this opportunity to advance their personal interests. This model will promote true medical science, but also present two problems. The publisher lacks fund for its business and the reviewers will lack incentive for reviewing articles.

To create a publication system that can end the systematic conflict of interest, federal governments, states and public organizations must bear all costs for publishing articles and pay reasonable fees for reviewing or editing articles. This is the only way to advance true scientific merit and force commercial publishers to pay some attention to human lives and public interest. Based on all flawed articles in the medical literature, I must say society has paid and will continue paying the biggest price in human history. This money-driven publishing model has twisted researchers mind, subject selection, data analysis, and deference for human life. It provides a strange incentive to use everything in the book rather than encouraging them to find something better. It is directly responsible for inability to correct all obvious flaws that are obvious decades ago. I therefore urge states to fund open-source publishers' operational costs so that they can survive from this new business model. I make a strong voice about it because those open science publishers provide me the only chance to disclose my research findings that would be suppressed by every commercial publisher or other publishers that follow commercial publication model.

C. Support Measures for Creating a Health Culture.

The disastrous performance of the U.S. in fighting the COVID-19 pandemic is clearly a problem in health culture. Medical commercials and drug commercials have jointly misled state residents to believe that only drugs can cure disease, and when health is gone, only drugs can do the magic jobs. If one needs drugs, only FDA approved drugs can do the magic. If one reviews FDA drug removal history, drug litigation court reports, drug study models, drug screen outcome, any tens of drug review articles, or our discoveries, one would find those statements were false. Virtually very key piece of evidence is against those claims. Our findings based on tens of thousands of research articles data show that none of the medical treatments can solve chronic diseases. Curing chronic diseases by using one or a few strong drugs is theoretically impossible. It has not happened, and will never happen except by accident.

To establish a health culture, states must do their parts to denounce junk science and limit the influences of revenue-driven commercials to the minimum. Unless one can defend the use of all flawed presumptions, medicine must be rejected as flawed science as far as it concerns treatments for chronic diseases. Most disease theories are proposed long before the evidence of multiple cause factors were known. Thus, we must assume that most theories, treatment methods, and practices are wrong, improper or at least very poor. Support for our finding can be found in the factual data in a large number of recent studies. The full factual evidence could require use of a database. When the foundation is flawed and the reductionist approach is wrong, a very high percentage of research articles have problems in various degrees.

We need to conduct a whole field literature review to re-assess their benefits and risks of drugs, and reinterpret or throw out medical articles as long as they concern treatments for chronic diseases, cancer, heart disease, mental diseases, etc. Medicine has used the single factor approach for three centuries, and has generated massive wrong findings that are relied upon by doctors and patients to the detriment of patients and society. One thing we feel luck is that medical researchers also have generated a large number of meta drug reviews which provide powerful evidence on the real role of synthetic drugs. Some medical scholars have long noted drug problem. Dr. Walter Bortz II has sent the key message that drug is the last option for health. As an insider of medicine, he could not reject the foundation of medicine, but his point is exactly same as mine. Medicine has failed to find cures in nearly a century, and nothing has been changed to make a difference now. Medicine just repeats the same kind of researches using the same flawed research models to yield similar wrong findings.

States should prohibit misleading and untruthful drug commercials. Based on my personal understanding, well known reported incidences, and numerous published studies, research fraud in drug researches must be presumed to be common. Many research arrangements present a situation where, if research findings do not advance commercial interest of the sponsor, five to ten years of research program together with many jobs of the research staff will end. This kind of pressure may force one, several or even all members to manipulate data to achieve desirable an outcome. It is even possible many of the members do not aware of conscious or unconscious alteration of data. Given this kind of conflict of interest, states

cannot blindly trust in their findings.

Thus, drug commercials are untruthful at four levels: the massive problems in the research models and methods, money-driven selection of treatment options, alternation of research data, unconscious biases with hope to get good results, and innocent errors. When such misleading commercials daily bombard state residents, they must result in grave damages that will ultimately burden states.

Based on 2019 data, the drug industry spent about \$20 billion on advertisements targeting doctors, and nearly \$6 billion on drug or disease commercials targeting consumers. The total spending for drug commercials is extremely large. The intense drug commercials have created a deeply flawed culture of using synthetic drugs to promote health. This driving force is not any less than what once promoted the popular elixirs. As we have proved, the true benefits of combination of multiple lifestyle factors is one to several orders of magnitude larger than what could be rated by clinical trials, but the true side effects of synthetic drugs are one to two orders of magnitudes larger than what is revealed in clinical trials. Our finding is simple: the only solution to population health is a good health culture. The ten to one hundred times differences in COVID-19 incidence rate between Western nations and most Asian nations is a testament to the vital role of health culture. At present, federal government and states do not place any commercials to promote public health. The only commercials occasionally for public welfare are placed by non-public organizations. However, the number of public interest commercials is negligible as compared with drug commercials.

How to counteract the undue influences of medicalization movement is really hard. It is obvious that no amount of tax dollars can effectively undo influences of drug commercials. However, states can address this problem by using its own special power and unique positions. States should provide symbolic commercial materials for their state residents on the important roles of personal lifestyle and exercise etc. States may amend state laws to promote health culture. The most important measure is to provide tax incentive to health-promoting lifestyle styles, health activities (like Japanese thin belly regulation), health promoting business activities, etc. When we are attacked by hundreds to thousands of disease agents daily, no disease can be cured unless we can avoid and mitigate exposure. Avoiding exposure to disease agents will be an essential life skill in our times. States should provide financial incentives for mitigating pollutants, toxic substances, etc. as well.

I hope state officials will spend time to seriously study this proposal and can see that past research findings have grossly misled the population in health care decisions. The collective adverse impacts of toxic substances are magnitudes higher than the impacts that were believed in the past. The degree of threats to our existence is many orders higher than what was believed in the past. There is no time to ignore this problem for another five decades. The matter is everyone's life, everyone's health, state economy, and human right to survive. The problem cannot be addressed by medicine. The past mistake was a game-ending one because massive culprit chemicals in seas and oceans will slowly disperse into every corner of the planet like the "forever chemicals". Those man-made chemicals will bring health crisis one after another. They will severely affect the life and quality of young people. There is no room for making another mistake like the clinical trials. It is a common interest for all human beings

to address the urgent problems. All potential challenges on basis of federal Constitution, federal statutes, state constitutions, state laws, corporate property rights, or personal gain/loss should yield to our common interest in survival.

D. Support Researches Vital To State Interests and Human Survival

1. States Cannot Rely on NIH, CDC, FAD, EPA, etc.

In the past, states have relied on federal research programs and this practice has been the most cost mistake. The federal research programs are distributed by NIH. NIH role is well reflected in the federal 21st Century Cures Act, which is enacted in December 2016. It authorized \$6.3 billion in funding, mostly for the National Institutes of Health. The act was supported especially by large pharmaceutical manufacturers and was opposed especially by some consumer organizations. This history plainly indicates that NIH represents drug companies but not U.S. tax payers.

Unfortunately, federal research programs implemented by NIH have failed in every key aspect for chronic diseases (Its success is found in researches in acute disease, trauma, and disease mechanisms). This failure is in bad part due to the institute structure of NIH. NIH comprises 27 institutes or centers according to human diseases or organs such as lungs, heart, eyes, kidneys, etc. While symptoms of acute diseases and accidents can be treated by focusing on affected organs or parts, nearly all chronic diseases cannot be so treated. Chronic eye diseases may be caused by problems in kidneys, lungs or heart or systemic injuries. All chronic diseases reflect problems in the whole person. They cannot be fixed by focusing only on diseased heart, diseased kidneys, or diseased skins. The attempt to fix a part for a diseased symptom will continue failing.

NIH has developed a sophisticated system for maintaining the deeply flawed medicine. It maintains and promotes flawed medicine by using its role of advising Congress, setting bad funding policies, using outside peer reviewers, relying on articles of commercial publishers, using decision-makers with same training, etc. Nearly all of its funding program specifications include conditions of following or using existing research models, existing theories, existing practices, etc. This practice implies that NIH blindly accepts flawed knowledge that researches have accepted and commercial publishers can exploit. NIH fails to include any mechanism for breaking the blockage by commercial publishers. By using outside reviewers to make funding decisions, NIH has created a funding culture that is like dividing funds according to researchers controlling powers or influences. By relying on decisions-makers, who are mainly schooled in reductionist medicine, NIH cannot promote real cures coming from nature. By ignoring this serious systematic conflict of interest in its funding policies and practices, NIH actually intensifies all revenues-generating activities in the medical system. NIH funding practices have placed a role of precluding cures for chronic diseases. Many funding problems are reflected in its funded research projects, its library's articles selection policies, articles selected in its library, its website content, etc.

NIH funding programs are adverse to patient interests, the public health, and U.S. national interest. While disease mechanism studies can advance knowledge of diseases, they cannot be directly used due to the multiple cause interactions. An extremely high percentage

of NIH funded programs actually promote drugs and drug discoveries. When the massive federal funds are used to intensify all aspects of revenue-generating activities, NIH funding activities actually preclude real cures. By receiving more federal fund, its funded activities generate more flawed research findings, more flawed treatments, and provide more incentives for using drugs. Each flawed research normally generates several media opportunities. Each of the media opportunities will disseminate flawed and inaccurate health information to the public and patients. When the media is disseminating more flawed medical knowledge, it could be more difficult for ones like me to challenge. Most ordinary people may lack required background to understand research model problems, and would have to follow the majority view. NIH researches have an effect of increasing the weight of the majority, and thus have an effect of turning flawed science into "valid science". NIH funding practice is the most important reason why a three-century mistake in medicine cannot be corrected and why a century research yields no predictable cure for chronic diseases.

The role of NIH is clearly reflected in how NIH addresses this pandemic. When the pandemic has forced the U.S. to shut down economy, NIH provides no investigator-initiated research fund. All federal emergence funds are distributed by using its established process and Congress has no slight idea how the massive fund can benefit the fight against this pandemic. By using its massive limitations and technicalities in funding requirements, NIH decision makers have predetermined what will work and what will not. Everything I have tried is outside the funded scope because NIH funds only revenue-generating medical options such as drug discovery anti viral drugs, and vaccines. NIH has this funding culture for decades and has wasted hundreds of billion dollars of tax dollars on researches in chronic diseases and cancer. It is perfectly normal to NIH insiders and people who have done regular business with it. However, it is hard for an outsider like me to imagine how incompetent such a high institution is. It trusts three peer reviewers but will not use any of 6,000 thousands research scientists or an expert panel to correctly decide foundational matters that affect our survival or the use of billions dollars.

One strange thing is that NIH runs research institutions like common law court or even more strict than a court. The judge normally uses and follows established process, but pay no attention to outcomes. Court must use an established process to maintain fairness between opposing litigants. In civil cases, outcomes do not directly affect public interest. This convention should never have been used by NIH, who's real intended beneficiaries are actually patients and public members, who are not in front of NIH. Over the years, NIH has misplaced its focus on balancing interests among grant applicants and peer reviewers, but paid no attention to the intended beneficiaries. Congress intends to use research funds to solve public health problems and find cures for diseases, but NIH distributes the fund as support for enterprise researches and employment benefits. This can be ascertained from overwhelming evidence revealed in NIH website. As I have shown, medicine promotes revenues at the expense of real cures. By focusing on drug makers, researchers, peer reviewers, etc, NIH funding activities must harm patient interest and public interest. Thus, states cannot depend on NIH funding practices to address chronic diseases. Diseases are attacking us so ruthlessly but we have missed five decades. There is no way to reform NIH in a short time window so that the people in our time can benefit from its funded researches.

Given all those serious problems in NIH, medical literature is filled with a large number of junk-science articles. The current medical literature pool (e.g. the first sphere) is largely to advance drugs, devices, radiation, and surgeries. Such medical literature also controls or influence CDC, FDA, EPA and other medical research organizations under federal agencies such as HHS, DoD, DoE, NSF, etc. Funding policies and practices of all federal agencies have the same devices and limitations to preclude, prevent, or suppress anything that is contrary to what those interest holders have promoted. Most leaders probably do not even know how the whole medical system has been hijacked by interest holders over the years to achieve revenues at the expense of precluding cures. While articles in the second sphere are growing rapidly, they have not reached the power to overcome the influences of the articles in the first sphere.

Private entities and organizations do not support researches because cure-seeking researches cannot generate revenues. Thus, important but unpopular researches on medical models, lifestyle, exercise, emotional health, avoidance of disease agents, etc. cannot get financial support from any source. Lack of funding is mainly responsible for the deeply flawed medicine and inability to address chronic diseases in the past. No one can conduct research without getting funding. I was able to do my research because I had prepared to get no funding. Extremely few people would do it. If states do not provide funding for important researches, none of the chronic diseases will have predictable cures. The biggest impacts of failure to find cures will be on patients and state economy. Poor population health will affect production efficiency, tax revenues, sales tax revenues, etc. States will have to pay more on medical spending and public welfare. In the worst cases, state economy may be shut down in response to health crisis.

Assume that NIH will change its funding practices and enter a right path to finding cures, states still cannot rely on NIH-funded researches to get maximum benefits. California, Maryland, New York, Illinois and Texas have different population health problems and environmental problems. They differ in population health conditions, industries, ecosystem, climate, population density, culture or sub-culture, etc. Health problems can affect other non-medical problems and interact with environment, ecosystem, and climate. Some problems may be very unique and require unique solutions. Even the differences in climates between those states require different strategies for fighting the pandemic. That is why states must fund certain researches that can best advance their own interests. There is no possibility that NIH funded researches can best solves all problems for all states.

States cannot expect that the medical system will reform itself in a time window without causing further damages to the human common interest. They should consider how society resisted fundamental changes brought by General Relativity, Quantum Mechanics and Helio-centric Theory. The General Relativity was developed between 1907 and 1915, but was regarded only as something of a curiosity. Even after the work was awarded with a Nobel Prize, it remained outside of mainstream of theoretical physics for more than four decades. It becomes a mainstream subject from 1960 to 1975. Similarly, when Quantum Mechanics arrived, the majority of classical physicists do NOT accept it because they are stuck on thinking in classical physics. Accepting Quantum Mechanics needs acceptance of something that has been taught to be wrong. The giocentrism had controlled world for thousands of years be-

cause everyone can actually “see” every day that Sun turns around the Earth. Aristarchus of Samos proposed a heliocentric model before 230 BC. Nicolaus Copernicus independently created his heliocentric theory before 1514, but did not publish it in 1543. He could publish it. From date of publication until about 1700, few astronomers were convinced by the Copernican system. It took more than two thousand years to have the model accepted. A large number of cancer theories were rejected only after long time delays. Human histories reflect ample examples showing how hard to make fundamental changes to science. Our approach has tension with existing laws, regulations, scientific standards, and practicing culture in medicine.

It is fair to predict that 99.9% of experts in medicine could not understand, are unwilling to entertain, and refuse to think. Financial interest, professional reputation, past training, and thinking habits all work against accepting new and better knowledge. In those historical changes, nothing like peer review and commercial publishers existed. What would be a chance for peer reviewers to understand? All peer reviewers have been taught that clinical trials are the gold standard or final arbiter of medical controversies. Draw two or three out of potentially millions of reviewers, the chance of running into a suitable reviewer is still 0.0. Even for sciences that are not controlled by money, it would take 5 to 2000 years to make fundamental changes in science. Medicine is run and controlled by money at the tag of price of more than trillions dollars just in the U.S. For that price, a large number of experts would come out to defend the flaws in the system. That amount of money can turn any poisons and street drugs into “magic cures” in the public eyes and cause some humans to ingest. As the history of elixirs revealed, people ingested elixirs even though some poets vividly described how elixirs had killed people. Changes cannot come within the medical system. States cannot trust NIH, FDA, CDC, EPA, etc. to make changes unless this huge money influences can be eliminated.

After the flaws in research models are known, future research is not what can be manipulated so easily to advance financial gains. Future research will objectively reflect reality and provide real benefits for mankind. What I am doing is improving public health, finding cures for chronic diseases, and teaching people to live a predictable life. This interest is common among all people whether they are in California, Maryland, New York Illinois or Taxes or other nations. The differences among states must be less important in the fight against the overwhelming disease agents. If we look at the big picture, all people in the planet are connected by the environment and ecosystem and share the impacts of environmental and ecological disasters. Good and objective researches will enable people see the common interest in the fight against the dispersing chemicals. If state officials have read about research findings about wildlife, the dispersion of the forever chemicals, and our findings of clinical trials flaws, they easily figure out that the degree of threat to our existence is more than a hundred times more than what was once believed in medicine. Thus, states must support health researches that are not supported by federal governments and private entities. Supporting health researches have nothing to do with politics or ideologies but our common interest for survival.

2. Urgent Research to Understand COVID-19 Vaccine Side Effects

Three vaccines, respectively made by Pfizer, Moderna, and Johnson & Johnson, have been used on the population in the U.S. The first two are mRNA vaccines while the third one is a viral vector. All of them are used on humans for the first time. Upon the first use of those first two mRNA vaccines, I disclosed an article expressing my concerns. I urge states to fund emergent researches to understand potential side effects for the following reasons.

1. All vaccines are developed on a fast track. The total development time is less than one year as compared with normal 7-10 years for conventional vaccines. There is no proof that the fast track will not cause health problems. All asserted safety is unrealistic hypothesis.

2. All researches were done by relying on clinical trials. As we have shown above, both clinical trials and side-effects determining method are deeply flawed. The true side effects may be off the real values by one to two orders. In the past, clinical trials have failed to predict future side effects in each of a large number of FDA' removed drugs. In court litigated personal injury cases, clinical trials consistently failed to predict adverse effects for nearly all litigated chemicals. Examples are Diethylstilbestrol (DES), asbestos, Roundup... Even if we assume that clinical trials were valid, we cannot trust them because those trials lasted for less than a year.

3. mRNA working mechanism depends on host cell machinery. It is argued that it must be safe because cell division is part of normal cellular activities. However, many health problems are caused by slightly disturbed balance. Genetically modified organism, DES, foreign matters, etc. cause harm by altering balances. When mRNA generates spike proteins rather than normal proteins for normal cell division in the body, it must alter the intended biological and cellular balances. This disturbance is anticipated to be very severe if the mRNA hijacks cell division machinery in diseased organs such as livers, lungs, heart, etc. When those organs have diminished normal functions, production of spike protein rather than normal required proteins cannot be a harmless problem. Their argument may be sound only for those persons who have massive surplus organ functions.

4. mRNA is very unstable and thus requires strict storage and transportation condition. Any stability problems cannot be tolerated for mRNA vaccines. Some adverse reactions may be caused by transportation problems. Most problems can be avoided if they are used in a small scale. When mRNA vaccines are used in the large scale, it would be difficult to avoid quality degradation.

5. The mRNA vaccines must be delivered to intended lymph node near the vaccination site. The ability to reach an intended target is the biggest problem. Since mRNA can be degraded in blood, mRNA particles must be coated by a lipid layer. However, there is no way to design this lipid layer accurately so that the coating is just durable enough to allow them to reach the intended target. The lipid protection must be too little or too much, and the protection times for different mRNA units must vary. This is a fundamental problem that does not need to be proved. mRNA is much smaller and can enter any kind of tissue cells by diffusion under influences of hydrodynamic pressure of blood flow. Due to their small sizes, mRNA vaccines have great penetration power. Some of them must degrade quickly while some of them

can enter into liver cells, lung cells, kidney cells, nerve cells, even brain cells, etc. The number of reported symptoms in CDC VARE database is far more than the number of symptoms reported for the COVID-19 disease. The SARS-CoV-2 virus is much larger and can enter only certain cells in respiratory track membranes, lungs, and tissues in respiratory track, etc. The idea that lipid protection can control where they go is unrealistic because lipid coating protection duration must vary and depend on personal blood properties. The most likely reality is that some particles can get nowhere and some get everywhere. Any measure on how to destroy mRNA is also an imagination. Even if mRNA is developed for John Doe specially, some mRNA copies must still find their ways to vital organs such as brain. This problem has no real solution because each vaccine is designed for a population. This explains the large number of symptoms in Central Nervous System.

6. The mRNA vaccines must add unreasonable burden on some recipients. When a person is infected by SARS-CoV-2 virus, the initial infection may be caused by various numbers of gene copies. In extremely bad cases, initial infection may be caused by exposure to a large number of gene copies. In most cases, it would take several days to show disease symptoms. The infection kinetics is slow and symptoms develop slowly based on the time for the virus to build up. However, mRNA vaccines have a huge number of copies. mRNA vaccines may contain 25 to 250 micrograms. For example, Johnson & Johnson vaccine delivers about 5×10^{10} particles. Pfizer vaccine comprises about 1273 RNA residue. The dose of 30 micrograms has about 4.5×10^{13} particles. If 1% of vaccine particles randomly enter body cells, 4.5×10^{11} will reach organs or parts. Moreover, each mRNA copy may give rise to about 10-100 proteins before being degraded. They may make more than 4.5×10^{12} spike protein. If mRNA is amplified, the vaccine may generate even more mRNA copies, and there is no way to precisely control how many copies are produced. If the mRNA particles are evenly distributed in the body, they are not a big number relative to 30 trillion body cells. However, the injection must cause the mRNA vaccines to be in a small blood pool before they are dispersed into the whole body. It is very likely the blood passing the injection site will carry vaccines in fairly high concentration. Those ballpark numbers tell that the vaccine could cause much severe adverse reaction as compared with most COVID-19 infection cases. Any argument on target delivery and controlled expression is based on unrealistic imagination and thus must be rejected. The massive symptoms in the CDC database are consistent with my prediction. Moreover, many people have vividly described in online blogs how they have changed their wellness for several days to weeks. It is very likely some of them may never restore their health.

7. I have examined original reports from vaccine report database (CDC VAER data on March 14, 2021). The report reveals the vaccines' adverse effects on the Central Nervous System: brain death, brain injury, cerebellar stroke, cerebral arteriosclerosis, cerebral artery embolism, cerebral artery occlusion, cerebral artery stenosis, cerebral artery thrombosis, cerebral atrophy, cerebral haematoma, cerebral infarction, cerebral microhaemorrhage, cerebral small vessel ischaemic disease, cerebral thrombosis, cerebral venous sinus thrombosis, cerebrovascular accident, encephalitis, paralysis, seizure, facial paralysis, Bell's palsy, headaches, nausea, vomiting, loss of consciousness, depressed level of consciousness, confusional state, disorientation, disturbance in attention, delirium, mental status changes, abnor-

mal behaviors, anxiety, depression, diplopia, lethargy, mental impairment, insomnia/sleep disorder, abnormal dreams, disorganised speech or speech disorder, communication disorder, abnormal sensation in eyes, blurred vision, visual impairment, blindness, deafness, tinnitus, burning sensation, balance disorder, gait disturbance, decreased mobility, movement disorder, muscle spasms, restlessness, tremor, vertigo, dementia, impaired work ability, etc. Many symptoms may be due to local effects on nerves and brain. Most people have multiple symptoms while the report accepts only three symptoms due to limited data fields. I have not counted and listed a large number of other symptoms unrelated to the brain.

8. If a person receives vaccine injection and is also exposed to a small number of viral copies without knowledge, the vaccine's adverse reaction and disease process will jointly burden organ functions. I believe that vaccination at the time of COVID-19 infection is the worst problem that is revealed in CDC database. COVID-19 infection and mRNA vaccine work by different mechanisms at different sites, but they both add burden to the vascular system. SARS-CoV-2 virus attacks lungs, respiratory system and digestive system, while the mRNA vaccines attach the brain, nerves, liver, kidneys, etc with much stronger impacts. The combination effect can be more deadly. I predict that vaccines may cause death of certain patients who otherwise would not. I imagine a scenario where viral infection could be very or extremely mild if one just inhales a small number of viral gene copies (several to tens of thousands), and it would take two or more days to develop enough symptoms. However, injecting vaccines at this small time window could immediately produce a much stronger adverse reaction for the reasons stated in 6. Thus, one cannot say that death is caused by the parallel COVID-19 disease. Instead, I must attribute such death to the vaccine as the primary cause of death while the COVID-19 infection may be secondary or negligible. mRNA vaccines can reach any part of the body while COVID-19 virus targets mainly cells with ACE2 receptors. Moreover, vaccine's risk can be dramatically aggravated by a large number of other lifestyle factors such as body temperature, foods, and environment factors.

9. The mRNA can enter cells in inflamed tissues and express. In addition, the increased number of immune cells circulate in blood will be preferentially caught at the diseased tissue. This is because immune cells are much larger than capillary pores. This is why some vaccinated persons experience a large number of symptoms and cause existing diseases to relapse.

10. For the time being, I ignore possible genetic modifications and epigenetic changes caused by mRNA vaccines, but still find that vaccines may raise cancer risks by influencing the CNS. In the last fifty years, medical research has generated mountains of evidence on the CNS's roles on human immune system including anti-tumor immunity. Overwhelming evidence shows that CNS controls body's biological processes and tissue integrity. The finding that psychotropic drugs are suspected carcinogens is further evidence that anything affecting the CNS can raise cancer risks. The noted vaccines' effects on the CNS are enough to show the vaccine's risks on promoting cancer. This must be true whether or not this risk can be detected by clinical trials.

11. The excessive immune cells in blood stream must be bad due to strange vascular system features (for nearly all animals). The capillary pores ($\sim 6\ \mu\text{m}$) in human body are much

smaller than most immune cells (10-20 μm). When the blood has too many immune cells, the immune cells can dramatically raise local and systemic blood pressures. A big blood pressure spike could result in heart failure. Nature partially mitigates this design flaw by raising body temperature. If the total B cells number is limited, then each type of B cells may be insufficient. I must find that the excessive non-functional B cells and other immune cells interfere with the functional B cells for fighting a given infection pathogen. From those two limits, I have to find that acquired immunity may be intended as the last line of strongest defense when all innate defense mechanisms fail to work. Keeping getting sick cannot be a good thing. Non-deadly diseases should be better controlled by innate immunity without triggering intense B cells and antibody production. Routine vaccination against mild diseases is a bad strategy even though it may incidentally benefit a patient. The adverse effects from excessive and abusive vaccinations may depend on individual person's conditions. Some persons may be able to survive from hundreds of vaccinations, but some may die from serious adverse reactions.

12. Population vaccination may alter viral selection and spreading processes. It may create a situation where a large number of people carry the virus which is mutating rapidly. Many of the infected people, who believe they are disease-free, may get close to each other and thus cross-infect each other. Some of them may get all variants. When multiple variants are present in the same person, they are more virulent. Repeated vaccination of population may promote viral evolution. This effect is very similar to use of antibiotics. In the early days, antibiotics were very effective for controlling bacteria infection. After misuse and abuse over the years, we now see that it is more and more difficult to control bacterial infection. mRNA vaccines cannot produce full immunity, and must become a selection pressure affecting viral evolution.

This human vaccine experiment is very unwise. The vaccines cannot produce durable immune, the virus quickly defeats the partial immunity, and the disease is only a mild disease with a death rate of 2-4%. Many deaths are caused by improper treatments or serious chronic diseases. I have no slight difficulty to find that the true death rate is near zero for health person if they just learn to avoid bad exposure. Whether a person falls within the risk of death of the disease can be mapped out for special care. To resolve such a grave uncertainty, different kinds of researches need to be done so that such dangerous human trial will not happen again in future. Vaccines may have benefits in a small number of people, but recipients must know real risks before they can give informed consent.

3. Establish A Health Science Framework.

Our prior studies have proved that statistical population of health properties does not exist for most research purposes, mathematical models are misused to model intensive properties, and reductionist treatments are inferior. We found that clinical trials are valid only for researches where treatment effect is much stronger than the total effects of all influencing or causal factors OR errors introduced by misused mathematical models can be tolerated. In all other situations, clinical trials introduce excessive errors and fail to detect treatment effects, or produce biased, incorrect or wrong results. Population means of health properties are generally meaningless due to (1) averaging effects of positive and negative effects on different persons, (2) failure to control related independent variables which jointly define the measured

health property, (3) failure to use proper weight for measured values for huge differences in their significance, (4) failure to address the non-linearity of health property, and (5) failure to consider multiple complex disease mechanisms, etc. In addition, statistical analysis is inherently improper because measured properties are not defined events, not extensive properties, are a product of improper averaging, and interfered by undefined factors. In a proposed research, I will develop a new science framework to conquer the COVID-19 pandemic.

4. Explore New Approach to Cancer

I further found that chronic diseases are manifestation of small departures in multiple processes attributes in distinctive personal biological pathways networks, that medicine lacks required accuracy for accurately characterizing chronic diseases, and that reductionist treatments lack force to correct departures in process attributes in human biological networks. By implication, predictable cures to cancers are adjustments to lifestyle, dietary, emotional, and environmental factors to slowly correct departures in process attributes responsible for chronic diseases. The conclusions are based on overwhelming evidence produced by tens of thousands of post-1980 research articles. Having found those problems, I propose a novel approach to conquer cancer by adjusting lifestyle factors.

5. Explore Commonalities for Chronic Diseases

Personalized medicine implies that each disease is unique in each person as to specific biological pathways. However, the diseases between different people also share common things although their commonalities are different from what medicine cares about. The commonalities are deeply hidden and cannot be detected by conducting diagnosis. For example, a large number of diseases can be traced to the following processes: (1) toxic substances, disease agents, and excessive fats or nutrition can damage cell health, cause inflammation, alter tissue structures, (2) altered tissues then slowly alter the CNS, resulting in permanent alteration in the tissue-CNS pair, (3) with time passing, the disease state is permanently recorded in the brain, and (4) the signal exchanges between the brain and diseased tissues have an effect of protecting the tissue.

We would like to know what determine the final disease manifestation. One best example is drug side effect. When the same drug is applied to a population, it can manifest as hundreds of different diseases on different persons. We can imagine that when a small population of healthy persons is exposed to constant intake of a similar daily level of lead, they may develop very different diseases. Some persons get cancer, some get chronic liver diseases, some get renal diseases, some may have systemic damages, and some may have elevated blood pressure. Thus, cutting off tumor, use of drugs to treat the liver or kidneys, and mere improved nutrition are not enough to cure the diseases. A real cure must include ceasing further intake of lead while additional measures may be used as supplemental measures. Thus, we demonstrate that cancer, chronic liver diseases, renal diseases and other systemic damages are treated in the same way. In this case, the primary cause is exposure to lead, and secondary factors that change disease manifestation is personal genetic composition, age, all other lifestyle-related factors. Among the long list factors, genetics, age cannot be altered. The historical effects of past lifestyle cannot be altered. When the only things that all patients can use are avoiding lead, change certain offending lifestyle factors, and doing exer-

cise. Whether manifested disease is a chronic disease, a diminished organ function, a mental disease, a tumor or cancer, treatment strategy is similar except that diseases vary in kinetics and practical measures.

Based on the extensive cause studies, we can say that same liver disease can be caused by exposure to different things such as infectious agents, toxins, carcinogens, and even emotion stress and chronic stress. Similar chronic liver disease may be caused by A set of factors in patient one, a B set of factors in patient two, and N set of factors in patient N. It is even possible A, B..., N are very different. This example shows that a similar disease will require different measures or avoidance on different patients. However, we predict that a complete cure to chronic diseases cannot be achieved by merely ceasing exposure to the primary cause factor. Restoration of diseased tissues would require alteration of signal exchange between the tissue and the CNS. One must learn how to facilitate the re-establishment of mind-body balance.

E. Fund Strategic Projects

States have relied upon federal funding programs in the past; the performance of federal programs is poor or failure. The practice of using massive technicalities can be traced to common law practices. This is a way to reduce burden on courts and judges and provide more ways to decide outcomes by technicalities. As reflected in NIH programs, funding program designers tend to use a large number of details, limitations, exclusions and preferences. The massive details have an effect of reducing applicant number and providing more ways to removing applicants. In designing funding specifications, designers must rely on their personal views or their knowledge of prior art. Such specifications tend to preclude disruptive game-changing ideas. For COVID-19, federal agencies focus on vaccines and drugs; and they will never find better solutions comprising health culture, better lifestyle, and improved ventilation system.

NIH predetermines that cancer can be cured only by what can be prescribed for revenues. This thinking narrows potential options to drugs, devices, radiation, and surgeries. It has the effect of excluding more than 99% of potential options under the Sun. In addition, funding specifications also require that proposed research complies with existing theories, re and practices. The research supports existing revenues, but precludes any disruptive innovation. The specifications require that each proposal must have 6 or 12 pages and satisfy many technicalities. I have shown that the research model is wrong, drug as cure is wrong, cancer theories are wrong, and current practices are developed for generating revenues. The final success for an awarded research to solve cancer is zero. NIH researches create a different kind of miracle: NIH can spend tens to hundreds of billions without incidentally hitting cure, while many cancer patients have run into something to cause their cancer reversed or healed. If NIH had randomly distributed its research fund, it would have run into cures by accident. The reason is that its funding programs have the effect of precluding predictable cures. NIH failure histories can provide best guidance for states in designing their funding programs.

The poor performance of federal funding programs can be attributed to its funding culture. I have waited for a funding opportunity for designing masks to improve their performance in preventing lung diseases. Based on my extensive study, I know that designing masks for

best performance is an extreme challenge. There is no way to build a perfect mask that is good in a dozen criteria. A federal funding program (like NIH research funding programs) would use several predetermined criteria: low airflow resistance, high particle filtration efficiency, etc. but does not use overall performance. If a newly designed mask meets all of those requirements, the mask must have very small through-holes. If this mask is worn in winter, the wearer will feel great in the first a few minutes; then water from exhaled air quickly condenses on the mask fiber networks and thus raises breathing resistance. In the inhalation phase, the mask will be sucked onto the nostril area to reduce the effective air filtration area, having an effect of choking the person; The exhalation will force air to squeeze through interface area between the mask and the face to reach the wearer's eyeglasses and produce fog on eyeglass lenses; water condensed on the mask will run onto the face to cause uncomfortable sensation. Extended exposure to the water may cause skin irritations and disease. The sucking of the mask over the nostrils in the inhalation phase choke the user, and reduced airflow resistance adds burden (e.g., a counteractive force) on the lungs in the exhalation cycle. Wearing this mask for eight hours would be a nightmare to anyone.

What is wrong with this funding practice? The nature of problems is similar to most research methods and flawed evaluation methods in medicine. The purpose of this funding project to address an extreme mask challenge. It is well known there is no solution and thousand patented models have not gained acceptance. All certified mask models have been rejected by population. The real problem is that mask performance cannot be determined by rating several criteria independently. They must be evaluated as a whole and must be evaluated when it is used on a person under the intended use condition. All single parameter such as high filtration efficiency, low airflow resistance are meaningless. What is really important is how the mask can prevent lung infection in the whole day without causing discomfort. This is a sophisticated dynamic balance involving technology, use instructions, personal skills, etc. When a concept is presented, it is hard to understand. However, it is not difficult to predict whether each of those known problems can be prevented in a particular design. This example shows why federal funded programs cannot produce intended results. There are hundreds of certified masks and respirators, but none are good for an extended use.

One measure for the pandemic is complete overhaul of the ventilation system in the U.S. because my studies have shown that the ventilation system is one main reason for difficulty to control this pandemic. This mission will be important for containing future pandemics and for reopening schools and public buildings. The measure must be very radical and needs to go beyond existing thinking. However, I can find no suitable funding program from federal agencies. Just like other programs, funding specifications for federal programs are written based on prior art knowledge and presumptions of drafters. When they use tens of features to be included or excluded, they preclude disruptive concepts. An unsolved problem will never be solved.

One reason for using a large number of desirable features and an itemized rating system may be intended to create a fair competition platform and reduce the burden on administration. This funding approach may be reasonable if the funded programs are intended to provide benefits such as awarding education grant, public welfare, unemployment benefits, economic incentives, tax credits, medical spending supports, free lotteries, etc. It should not be

used to solve a challenging problem. Over the years, federal agencies have failed to see the difference between primary beneficiaries and incidental beneficiaries. The primary beneficiaries of research programs, strategic funding programs, funding programs for addressing national emergency are not grant applicants, but the population, states and the U.S. There is no basis to concern the fairness between applicants and the burden on the reviewers. If an applicant from Texas can offer a solution for reopening Maryland schools, why should Maryland award fund to a state applicant who could not solve the problem? Here the benefits from solving the problem are much more than incidental loss from paying the fund to a foreign-state applicant. The same argument can be made why U.S. should pay its citizen applicant for failure to address national emergency. Why NIH keeps repeated flawed funding programs after it has failed for nearly a century?

Nearly all federal agencies could not focus on primary beneficiaries even when the measures to be developed under grant proposals are to address U.S. national emergency. When federal agencies have developed a culture of misplacing their focuses and priorities, their funded programs cannot solve challenging problems. It is impossible to have the culture changed in a short time. States thus cannot rely on federal programs to see all critical matters solved. To avoid failure of funding programs, I urge states to use two different grant approaches: for regular and routine tasks, states may use conventional evaluation approaches to protect state residents. For critical problems without known solutions or state emergency, states should not use features, itemized rating methods, etc. to kill their chances of finding successful solutions. They should use likelihood of success as determinant criteria.

V. CLOSING STATEMENT

Overwhelming facts show that medicine is not an art that can address chronic diseases. It was not clear until after 1980s that diseases are always caused by many factors. Thus, disease cannot be cured by using reductionist notion. Promoting revenue by using a simple medical treatment must have an effort of precluding cures. The only hope for correcting this foundational problem would be placed on federal agencies like NIH, CDC, FDA, etc. However, a careful review of their practices and their funding policies and practices show that they have stood in a wrong camp. NIH problems are found in its institution structures, funding policies, review practice, and its alignment with drug industry. We cannot rely on other federal agencies because they actually follow the policies and practices of NIH. Whatever the federal agencies do will promote drugs and medicalization, but defend flaws in the foundation of medicine. When the foundation of medicine together with overwhelming disease theories and practicing methods is deeply flawed, there is no way to fix it. When the drug industry can spend nearly \$30 billion a year, it can turn the medical system into an unstoppable revenue generating system, resulting in revenues but precluding cures.

When I found that clinical trial was deeply wrong, it immediately alerted me that the true side effects of drugs, true effects of pollutants, and true effects of man-made chemicals are grossly underestimated. Their true impacts are larger than the nominal values determined by clinical trials by one to several orders of magnitude. This is a game-ending mistake. If one examines major human disease trends in the U.S., medical spending trend in U.S., animal ex-

tinction speed on the Earth, dispersion of man-made chemicals on the planet, and animal diseases, she should expect a doomsday for mankind. The rapid rising in heart diseases, cancer incidence and cancer death rate in China is another piece of evidence that disease agents have threaten human survival. All signs reveal a brutal truth that humans are already in the line of species that are in extinct and it would take extraordinary measures to stop and reverse this process.

Medicine has failed to note the earliest signs that appear in 1980's, but runs its revenue-generating cycles to achieve maximum revenue. Due to the strange financial structure and control by interest groups, nothing will change. We have lost fifty years for early interventions. When all fundamental errors are not corrected, the U.S. can be easily driven by money to run the biggest vaccination trial in the human history. Even though reported data and personal stories have revealed vivid experiences of personal vaccine injuries, the trial continues with unstoppable momentum. Based on history histories, making fundamental changes are always extremely difficult. When medicine is driven by incentive at trillions dollars, there is absolutely no slightest hope for correcting flaws in its foundation.

By rejecting the toxicity independent action model, I see that human ability to deal with diseases is completely different from that before the industrial revolution. The biggest influencing factors for COVID-19 pandemic are toxic substances and harsh climate. When a portion of people have immune suppressed while the weather has become harsh, a good portion of the people cannot successfully counter COVID-19 infections. I must view this event as part of ecological and natural disasters. This is much stronger warning over so many disease trends. Making chemicals, dumping chemicals, environment pollution, life extinction, ecological disasters, and climate all take place by chain of events. I hope people can see that reversing those trends in this giant planet are extremely difficult and take a very long time. Mankind cannot do little or nothing and hope nothing will happen.

As a desperate attempt, I present this initiative to several states to urge them to study my findings and investigate all described problems. Time is running out. When federal agencies do not address those problems, states should take immediate actions to address chronic diseases and take measures to mitigate and reverse the effects of massive disease agents in our environment and ecosystem. If we do not take action today, we must suffer consequences tomorrow. If we do not, our children and our grandchildren will.

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Note: 30 micrograms is 30×10^{-6} grams, which is $30 \times 10^{-6} / 400,000 = 0.000075 \times 10^{-6}$ Moles = $0.000075 \times 10^{-6} \times 6.023 \times 10^{23} = 0.00045 \times 10^{17} = 4.5 \times 10^{13}$ particles.