

Project Narrative

The “Whole Elephant” Approach in Making Metal Alloy for Long-term Fossil Energy Application [B] (Project Title)

A. Project Objectives:

To Nurture Innovation in the Field of the Development of Metal Alloy Suitable for Developing “advanced systems in order to effectively eliminate, at competitive costs, environmental concerns associated with the use of fossil fuel for producing electricity and transportation fuels”. Detailed mission includes:

Build a platform to bring together scientists from separate fields with a goal to make novel breakthroughs in the development of metal alloys that exhibit the property of resistance to harsh physical stress, such as high temperature, high pressure and various forms of chemical corrosion forces. Such breakthroughs contain both theoretical as well as practice elevation of scientific levels, accompanying a major breakdown of artificial barriers currently existing in the field of scientific research due to profit-driven practice and the resulted wasteful competition. The spiritual elements that have been long lost in the field of scientific investigation shall be installed through this platform to bring a catalytic force into the establishment of a new state of scientific community that are will nurture novel discoveries benefiting the future of humanity and earth environment.

Specifically, the principal investigators, Dr. John Li and Dr. Lotus King Weiss, who set an example of scientists breaking away from the old artificial boundaries of modern science, aim to bring together the most cutting edge discoveries of two separate fields of scientific investigation: the modern physics and the modern life science, to join force in the investigation of the development of metal alloys for the practical purpose of improving the existing condition of coal-based power plants, that is, to develop “advanced systems in order to effectively eliminate, at competitive costs, environmental concerns associated with the use of fossil fuel for producing electricity and transportation fuels”, as stated in the solicitation of the grant.

To accomplish such a mission:

The applicants recognize the urgent needs to bring together research groups who are competitors in the same field, with unique expertise in technical and theoretical backgrounds, but have been prevented from working together due to the existing flaw of the philosophy behind the current scientific funding system and evaluation system.

The applicants also recognize the urgent needs to bring together researchers from “separate fields”, like the blind men who are touching different parts of the ELEPHANT, and therefore, if kept isolated, would stay as a blind man. Such blindness reflects into all

fields of modern human society, to the extent that major social disharmony is developed and causing major waste of human resource. In the field of science, blind men syndrome has led to the enlargement of gaps between different fields, and therefore severely blocking the development of a complete picture of Truth which all scientists are trying to obtain, about the physical world we are living in. The lack of the understanding of the whole picture of any phenomenon naturally misleads scientists from making correct hypothesis, which is the key for the success of any scientific investigation. Innovation is therefore becoming more and more difficult, when scientists' mind is sinking into artificial frame works.

The applicants also recognize the urgent needs to bring spiritual principles into the practice of scientific investigation. Such a realization comes from the personal spiritual experience of the applicants. Both applicants, Dr. John Li and Dr. Lotus King Weiss, have been practicing an ancient Qigong practice, called, Falun Gong, also known as Falun Dafa. Here, the ancient wisdom of mind-body-spirit, the profound knowledge of the Tao, or the Law of the universe, meets the dogma, or doctrines of modern science, and the two modern scientists both have journeyed a long way in the search for a higher Truth, which has now brought them together, with an elevated vision of Science, to share with the scientific community. It is the strong belief of the applicants that only when the spiritual level of the scientific community is elevated, a new form of scientific communication can then be established to nurture innovation and bring benefits to the human world. The innovation in the field of the development of novel metal alloy which exhibits increased endurance to physical insults for increased efficiency of fossil fuel utilization is likely dependent upon a spiritual elevation of the scientists involved in this research projects in the realm of spiritual endurance, that is, being open-mind enough to establish novel collaborative network and sharing knowledge and resources.

The applicants also recognize the importance of building a platform to allow the scientists to be better understood by the general public on their journey of discovery, so that the general public will serve dual roles in the scientific investigation which bring major impacts to their daily life: they can play a more direct role in support and monitoring the research being carried out by the scientists who are being entrusted with such a large quantity of the tax dollars from their hard work. Education of the future generations of scientists can also be carried out more effectively, if such a platform is established. Since media in the format of newspapers, radio stations and television stations are the most effective way to reach out to the general public, the applicants propose the tap into community based non-profit organizations which produces these forms of media tools to allow scientists to direct meet the general public, through the platform of the Whole Elephant Institute.

B. Merit Review Criterion Discussion:

B1. Merit Discussion on Dr. Lotus King Weiss and the Whole Elephant Institute

Dr. Lotus King Weiss, the founder of the Whole Elephant Institute, holds a Ph.D. degree in Molecular, Cellular and Developmental Biology. She studied Medicine in Shanghai

Medical University in China, prior to her admission into the Ph.D. program at the University of Florida, Gainesville in 1988. In 1992, after she obtained her Ph.D. degree in Biology, she went on to carry out postdoctoral training, and subsequently became a faculty member at the Massachusetts General Hospital/Harvard Medical School, where she made consecutive novel discoveries regarding the molecular signaling mechanisms of the Transforming Growth Factor-beta family, which are the “Molecular Gods” that control the formation, homeostasis, aging and death of the physical bodies of different species. Her discoveries were reported in *Science* and *Cell* and are considered to be ground-breaking.

Her spirit of innovation brought her to examine the molecular phenomena associated with the practice of an ancient Qigong practice, called Falun Gong, also known as Falun Dafa (www.falundafa.org). In collaboration with another Biologist, Dr. Weiss carried out the data analysis of a set of experiments which directly compare the gene expression levels of the most predominant type of white blood cells (PMN, polymorphic Nuclear Cells) of Falun Dafa practitioners, with age-match and gender-match healthy control groups. To her amazement, the Falun Dafa practitioners’ cells exhibit a clear indication of shutting down the metabolic molecular machineries. This implies that human cells have the potential to reach a previously unknown state of homeostasis, which exhibits no stress response and no metabolism, an ideal condition that symbolizes immortality of a biological system. If we borrow a concept of physics to illustrate it, the data indicated that there is a way to increase the Entropy of a living system, a way to allow the system to reach perfect stability. The molecular level changes observed in Falun Dafa practitioners’ cells appear to occur at a system level, consistent with the broadly reported profound health benefits associated with the practice. Reportedly, the healing rate among Falun Dafa practitioners for many chronic diseases is higher than 90%. In the field of modern medicine, these chronic diseases, such as high blood pressure, chronic heart diseases, autoimmune diseases, or even cancer, are considered to be system diseases that can not be cured. The underlying cause of system-level diseases, according to the most frontier biological research, is a biological response, called Stress. Dr. Weiss immediately made a molecular connection between Stress response and system-level malfunction at the cellular level, based upon this finding as well as the new discoveries made in her own laboratory. Her laboratory unveiled the mystery of how the Transforming Growth Factor-beta family can control the fate of almost all type of cells in the physical body: their molecular signaling pathways work directly through the protein degradation machinery, called the proteasome system. By modulating the life span of different molecules in the cell, the Transforming Growth Factor beta family members fine-tune the molecular signaling net works that control cell growth, differentiation and death. Under Stress condition, the proteasome system is forced into a different mode of action: to rapidly degrading even house-keeping proteins, and therefore are overloaded, and unable to carry out its fine-tuning functions. This causes molecular level system breakdown and malfunction, to the degree of the accumulation of too many molecular level mistakes beyond repair and salvation.

Such a molecular phenomenon enlightened Dr. Weiss to make a step further, to make a comparison of the micro-cosmic world of molecule with the macro-cosmic world of

human society and the universe at large. She predicted that the same issue of disease state as seen at the molecular level of a cell, under stress, also manifests into the human society, which also fully exhibits stress symptoms, and also manifests into our universe, which exhibits stress state. If the healing of human disease can be achieved through a spiritual practice of mind-body-spirit, then the ultimate cure of social issues and universal issues shall also come from the microcosmic world: a change of the mind and the spirit of human being.

In the Spring of 2002, she expressed her ideas to the general public, in an open-to-public Science Forum, in a speech she delivered, entitled, “A Wake Up Call from the Microcosm”. This speech generated a shocking wave, so warmly received that was soon translated into Chinese and published on an International Chinese Language newspaper, called Dajiyuan, which is operated by volunteered Falun Dafa practitioners.

Falun Dafa was first introduced to the Chinese general public in 1992, and by July 20, 1999, the practice already attracted 100 million Chinese people, and the huge popularity of the practice somehow got onto the nerve of the former Head of the Chinese Communist Party, Jiang Zemin, who immediately viewed Falun Dafa practice to be a threat to the Communist dictatorship in China. A nation-wide crackdown was ordered on July 20, 1999 by Jiang, with a goal to completely eliminate Falun Dafa practice in China. Failing that, Jiang launched international hate campaign, and systematically demonize Falun Dafa practitioners and label Falun Dafa to be “Evil Cult” to justify the escalating increase in the application of inhumane torture methods in an attempt to “Transform” Falun Dafa practitioners.

Dr. Weiss’ work in providing the frontier scientific research data in validating to the general public, that the practice of Falun Dafa is True Science, instead of “Evil Cult”, is certainly a major threat to the foundation of the hate propaganda spread by the Chinese Communist Government. It is therefore not too surprising that Dr. Weiss and her collaborating Biologist, Dr. Lili Feng, from Baylor School of Medicine, both became heated target by the Chinese Communist Government. Under Jiang’s order, the Chinese Communist Party has been operating under the policy of “Destroy Their Name, Make Them Financially Bankrupt, and Destroy Them Physically” towards Falun Dafa practitioners. Under the deception and threat by the Chinese Communist Government, Dr. Weiss’ family members including her husband, parents and brother, all joined together to discourage her from continuing the research. At the end of 2002, she was subjected to forced divorce, and her laboratory was also forcibly shut down at the end of 2004, after a secret visit to her research institute (Benaroya Research Institute, Seattle, Washington), made by a representative from the Governor’s office at Washington State. The Governor then was Gary Locke, who soon became elected as the Secretary of Commerce, and now the American Ambassador to China, due to his close “tier” to the Chinese Communist Government.

So, a frontier research discovery in the life science field was met with persecution, on the land of America, through Chinese Communist Government and the corrupted American Elected Officials.

In 2005, after Dr. Weiss lost her research laboratory, she registered the Whole Elephant Institute, in New York State, and started to build an Education/Research Institute, in order to follow her new found vision of Life Science.

In the past seven years, Dr. Weiss has been deeply rooted in the local community to directly serve the tax payers and deliver her scientific knowledge and spiritual wisdom to them. It is her vision that modern science has a fundamental flaw in that only the material world is being examined in an isolated fashion by scientists from separated fields that lack sufficient cross talks. Such a state of scientific investigation predetermines the inability of the modern science field in making major system level breakthroughs. Such an inability can be best illustrated by the ancient metaphoric story of “The Blind Men and The Elephant”: scientists in isolated fields are just like the seven blind men, who can feel only the part of the elephant he touches, therefore, would refuse to agree with other blind men who touch other different parts of the elephant. Major innovation in any field now requires a platform, on which the “blind men” can listen and understand other “blind men”, and together search for a more complete picture of our physical world. Of course, for those who want to go beyond the boundary of being blind, a spiritual journey lays further ahead, when one searches for the Truth of oneself and the Universe.

The other major road block in scientific innovation, is the current funding mechanism for scientific investigation, and the lack of compassion and spiritual principle in scientists’ daily activities. Funding is provided to the scientists who appear to be unappreciative of the tremendous amount of trust from the general public, who are in fact living a very difficult life and gaining little benefit from these scientists who are consuming large amount of financial resource in exchange of intellectual properties gained that are beyond the grasp of the general public. Some of them become arrogant and very detached to the life needs of the general public once they are surrounded by a comfortable life style. When their research investigation yields data that start to challenge the current existing paradigms of modern science, they refuse to face the truth and instead resort to mediocrity and the learned slippery presentation for tapping into grant dollars to satisfy personal glorification of power and profit. Science laboratories are more and more like business enterprises with a profit-driven motivation and style of operation. If such a style of research operation is not rectified, the modern scientists are facing serious moral issues and therefore will not be spiritually inspired to make scientific innovation that will truly benefit the general public.

The Whole Elephant Institute recognizes the importance of the subject of research brought forth by this grant solicitation and the major impact towards the improvement of the life of the general public, if an innovation is made in the area of the development of a new metal alloy which exhibits significantly improved property in enduring high temperature, high pressure and different forces of erosion.

The Whole Elephant Institute is also in a perfect position to build platforms to nurture such an innovation to occur. Such a role, with an elevated vision, driven by pure compassion, is what the current field of modern science needs. Therefore we are

confident that our Institute can shoulder this unique role to help the Department of Energy to fulfill such an important mission for the benefit of human life and natural environment on the earth.

Merit Discussion on Dr. John Jianzhong Li from California Institute of Technology/Whole Elephant Institute

Dr. John J.Z. Li graduated from California Institute of Technology, with a Ph.D. degree specialized in the study of molten metallic liquids using the Electrostatic Levitation Method. Dr. Li has become a world leading expert in the operation of the Electrostatic Levitator (ESL) developed in his thesis adviser Dr. William Johnson's Laboratory at Caltech. This ESL equipment exhibits significant improvement in sample positioning stability. With the installation of a tetrahedral laser heating system, this ESL reduces temperature gradients of the sample, thus allows experimental conditions to be fine-tuned to examine the various properties of experimental subject, such as the thermo-physical properties, kinetic properties, TTT curve, viscosity, and volume changes with temperature alterations. Using the Caltech ESL system, Dr. Li will carry out detailed studies of different combinations of metal alloy at the molten liquid states as well as during the cooling process to obtain experimental property measurement for the understanding of the innate ability of different metals when they are put together. This system is apparently a powerful tool in the future innovation of the development of novel metal alloy which can be applied as structural materials for many critical industrial or governmental level applications.

Besides the scientific expertise Dr. John Jianzhong Li has acquired in his journey in the field of modern physics, the most outstanding ability of Dr. Li is his unique personal quality, as an Organizer for bringing people together from many different fields. During his graduate work at California Institute of Technology, he was elected to be the Chairman for the Chinese Student Association. His passion in serving the Chinese students at California Institute of Technology continues till today and has been playing a key role in safeguarding the Chinese students from mind-control and brain-washing tactics from the Chinese Communist Government. He has devoted major efforts into ending the persecution towards Falun Dafa practitioners by the Chinese Communist Party, through working closely with the International Community of Falun Dafa practitioners. Because of his being outspoken in exposing the hate propaganda from the Chinese Communist Government, Dr. Li was top-listed by the Chinese Communist Party and also suffered from family crisis due to hate propaganda and persecution infiltrated into America. Enduring emotional and physical stress of all forms, Dr. Li demonstrated the precious quality of a genuine scientist who never give in to lies, but only pursue Truth. In this regard, Dr. Li is the most qualified scientist, from the spiritual perspective, to uncover the mystery behind the art of making metal alloy with superb endurance property. His gained expertise in working with large groups of people from all over the world in his past efforts in calling upon the end of persecution towards Falun Dafa, shall be put into great use in his role in bringing scientists together from different fields, in bringing media to the scientists, and in bringing spirituality into the research teams of discovery, as planned in this proposal.

Merit Summary:

The greatest strength of the Whole Elephant Institute is the unique ability to build an international platform to bring together leading scholars from previously separated scholarly and scientific disciplines and allow the scholars to form new organic bonds to nurture the birth of novel scientific discoveries. Such a platform can be described, in a metaphoric way, as a gigantic “Elixir Furnace”, which will bring forth a new material that surpasses all current existing matter with superb ability of resistance towards high temperature, high pressure and various forms of corrosive forces. Dr. John Jianzhong Li and Dr. Lotus King Weiss will play the role of modern “Alchemist” to bring forth such a discovery, by bringing together all of the “Elements” into the “Elixir Furnace.”

C. Relevance and Outcomes/Impacts:

It is the vision of the applicants that the critical issue to be resolved in order to bring forth the income and impact as solicited in the current grant, in all three Topic Areas, is the lack of a platform to effectively utilize the intellectual resource and physical resource already made available and reached its maturity to focus on bringing forth an innovation that will greatly benefit the human society in many different aspects. Such an issue concerns many blockages due to many system level problems currently existing in the scientific research field, both at the theoretical level and at the practice level, It is for this purpose that the Whole Elephant Institute has been established and now is mature enough to should such a responsibility to nurture the birth of novel discoveries relevant to this proposal.

D. Roles of Participants:

Dr. John Jianzhong Li is the Principal Investigator who will directly carry out detailed experimentation of the studies of the various properties associated with Metal Alloy at Molten States, using the ESL system at Johnson Group in California Institute of Technology, where he is currently working as a consultant.

Dr. Lotus King Weiss and Dr. John Jianzhong Li will team up with three important Scientists in the metal alloy field:

Dr. William L. Johnson and Dr. Won-Kyu Rhim at California Institute of Technology
Dr. Robert Ritchie at University of California at Berkeley

Dr. Johnson and Dr. Rhim are currently working directly with Dr. John Li at the California Institute of Technology where Dr. Li is working as the Consultant for Dr. William Johnson’s research team. Dr. Johnson has also agreed to serve as a consultant for the proposed project and provide the ESL system for Dr. Li’s scientific investigation proposed in this project.

Dr. Robert Ritchie's laboratory has already been developing close interaction with Dr. William Johnson's laboratory. The experimental systems and equipments from these two large and highly reputable laboratories will provide the "Hardware" for the completion of this project, within the realm of modern physics.

Dr. Lotus King Weiss will also bring into this project four Scientists from the Life Science field:

Dr. Quanzhen Li, Head of the Microarray Core, Center for Immunology, University of Texas Southwestern Medical Center, Dallas, TX.

Dr. Jianxiong She, Director, Center for Biotechnology and Genetic Medicine, Medical College of Georgia, Professor and Eminent Scholar, the Center for Biotechnology and Genomic Medicine, Medical College of Georgia

Dr. Zhiping Kolouch, Ph.D., world leading scholar in the field of Traditional Chinese Medicine, Chairwoman, Department of Traditional Chinese Medicine at the Whole Elephant Institute;

Dr. Jingduan Yang, M.D., scholar in the field of holistic medicine, Founder and Director of the Dao Institute of Holistic Medicine, Chairman, Department of International Holistic Medicine at the Whole Elephant Institute

These four scientists are all leaders in their fields and will assist Dr. Lotus King Weiss to provide the most frontier life science data relevant to the design of experiments for Dr. John Jianzhong Li. Besides the modern physical approaches familiar to the Johnson and Ritchie Group, Dr. Lotus King Weiss will deliver to Dr. John Jianzhong Li the knowledge of the human body formation as what has been known through ardent efforts of the team of brilliant minds in the biology field, as well as the knowledge of human body as well as its correspondence with the universe, as enlightened by leading scholars in the field of Traditional Chinese Medicine (Dr. Zhiping Chen Kolouch) and Holistic Medicine (Dr. Jingduan Yang). The most advanced biological techniques will also be made available to Dr. John Jianzhong Li and Dr. Robert Ritchie's Laboratory, in the efforts of finding inspiration from biological systems in term of novel affinity between different metal elements. Dr. Zhiping Chen Kolouch, as an accomplished musician has unique insights in the area of music and health. The study of the nature of different metal and their ability to form novel bound at molten state will incorporate the wisdom in this field.

Dr. Lotus King Weiss and her associated team members from the field of frontier life science will be the "Software" of the proposed project.

The spiritual maturity brought forth through the practice of Falun Dafa allows the unique bond formation between these two previously separated fields, and the driving force behind this project is Compassion. It is the strong wish of the applicants that this project will lead to novel innovation and development of a new format of scientific collaboration,

thereby building the solid foundation for the success of True Science in the future human world.

E. Multiple Principal Investigators:

There are two principal investigators for the proposed project: Dr. John Jianzhong Li and Dr. Lotus King Weiss. Both are working through the Whole Elephant Institute. Both scientists will work in collaboration with teams of scientists in their own current field of discipline of modern physics and modern life science and will serve the leadership roles. Therefore all key decisions will be made by these two Principle Investigators on scientific and technical directions, after absorbing inputs from the valuable collaborators. Publications derived from the project will be made available to not only the scientific communities, but also to the general public, through the media platform of the Whole Elephant Institute. Intellectual properties will be protected in formats of patent, issued to the Whole Elephant Institute. The research teams headed by both Principle Investigators will communicate through weekly internet conferences on the platform of the Whole Elephant Institute, and important news posted on the Whole Elephant Institute websites. Discussion groups will be set up through Blogs on the Whole Elephant Institute websites. The media platform of the Whole Elephant Institute will play a key role in mediating the communication between the science team and the general public. International Conferences will be hosted in New York City, where the main campus of the Whole Elephant Institute is currently located. Research reports from the project will be made in a timely fashion through the media platform. All potential conflicts among team members will be managed by the two principal investigators in a most compassionate way, and both Principal Investigators are confident in the art of human relationship and conflict resolution. Dr. John Jianzhong Li and Dr. Lotus King Weiss have distinct roles both in scientific investigation and in administrative functions. While each Principle Investigator shoulders unique roles in the technical and scientific aspects of the research project relevant to expertise of their respective field, Dr. Lotus King Weiss will be responsible for all aspects of administrative responsibilities of this project.

F. Statement of Project Objectives (SOPO):

The “Whole Elephant” Approach in Making Metal Alloy for Long-term Fossil Energy Application [B] (Project Title)

F.I. Objectives

Use the Whole Elephant Institute as the platform to nurture the birth of innovation in the novel discovery of new metal alloy which exhibits superb resistant to high temperature, high pressure and various forms of corrosive forces.

F.II. Scope of Work

“Specifically, the principal investigators, Dr. John Li and Dr. Lotus King Weiss, who set an example of scientists breaking away from the old artificial boundaries of modern science, aim to bring together the most cutting edge discoveries of two separate fields of scientific investigation: the modern physics and the modern life science, to join force in the investigation of the development of metal alloys for the practical purpose of improving the existing condition of coal-based power plants, that is, to develop “advanced systems in order to effectively eliminate, at competitive costs, environmental concerns associated with the use of fossil fuel for producing electricity and transportation fuels”, as stated in the solicitation of the grant.

To accomplish such a mission:

The applicants recognize the urgent needs to bring together research groups who are competitors in the same field, with unique expertise in technical and theoretical backgrounds, but have been prevented from working together due to the existing flaw of the philosophy behind the current scientific funding system and evaluation system.”

As summarized above, the first step to nurture the innovation of the identification of a new metal alloy that is resistant to high temperature, high pressure and various forms of corrosive forces, is to allow an organic bond to be formed among the leading researchers in the relevant fields of study, with matured technical and intellectual assets that can be shared. The applicants believe that the lack of such a platform that helps the leading scientists to break away the old “bonds” to rigid current paradigms of physical and intellectual frame works is the key issue to be resolved in order to accomplish the mission outlined in the current solicitation of grant proposals.

To do so, the Whole Elephant Institute will directly approach the leading researchers in the field of metal alloy, and have identified to start by bringing two leading laboratories together to address the goal of this proposal: Dr. William L. Johnson’s group at California Institute of Technology and Dr. Robert Ritchie’s group at University of California at Berkeley. Dr. Lotus King Weiss will be responsible for this stage of work. Effective communication platform will be built through the Whole Elephant Institute for the two large research teams to work together to first carry out “Dry Bench” research in the proposed area, to identify key theoretical problems facing the proposed project. This work shall be carried out within the first three month of funded work.

“The applicants also recognize the urgent needs to bring together researchers from “separate fields”, like the blind men who are touching different parts of the ELEPHANT, and therefore, if kept isolated, would stay as a blind man. Such blindness reflects into all fields of modern human society, to the extent that major social disharmony is developed and causing major waste of human resource. In the field of science, blind men syndrome has led to the enlargement of gaps between different fields, and therefore severely blocking the development of a complete picture of Truth which all scientists are trying to obtain, about the physical world we are living in. The lack of the understanding of the whole picture of any phenomenon naturally misleads scientists from making correct hypothesis, which is the key for the success of any scientific investigation. Innovation is

therefore becoming more and more difficult, when scientists' mind is sinking into artificial frame works."

Although the discovery of novel quality mental alloy may be considered to be a scientific topic within the field of modern physics, a breakthrough in material science could be dependent upon a breakthrough in a separate field of studies, in this case, in the field of frontier life science. Indeed, there is no matter in the world that can be compared with the complexity of the matter that makes up the human body. The studies of the living matters of the human body have been carried out by the modern biologists and biochemists, who have very limited knowledge of the frontier knowledge in modern physics. Likewise, the recent advances made in the field of life science are not fully grasped nor recognized by most of the leading physicists. However, the initial conversation carried out between Dr. John Jianzhong Li and Dr. Lotus King Weiss, from modern physics and from modern life science field, respectively, has convinced both scientists that such a cross talk will be extremely fruitful for the future development of both fields. Furthermore, it is apparent that such a need is growing stronger within the leaders of each field. Dr. Robert Ritchie has demonstrated strong interest in understanding biological properties of bone in his work of material science. Dr. Lotus King Weiss has spent almost twenty years in the field of the study of powerful biological molecules in charge of the formation of all important tissues and organs such as the bone. Furthermore, the studies of life phenomena associated with the Qigong exercises, although with limited scientific publications, are apparently a new field of frontier life science research that can be greatly advanced when the field of modern physics and modern life science can hold hands. Based upon these experiences, the applicants will bring leading scientists from three main domains together for developing novel concepts in guiding the success completion of the proposed project. The three domains are: scientists from the field of physics, scientists from the field of life science, and scholars in the field of Traditional Chinese Medicine and Holistic Medicine. The Whole Elephant Institute will tailor into such an interest to gather leaders of these three domains. The detailed personnel in these three domains are outlined in **Part D and E** of this proposal. The work will be primarily carried out under the leadership of both principals at the platform of the Whole Elephant Institute.

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research projects in the realm of spiritual endurance, that is, being open-mind enough to establish novel collaborative network and sharing knowledge and resources.”

Most of modern life science scientists and modern physics scientists are currently overloaded with either administrative responsibilities when they become accomplished in their fields, or burdened heavily for seeking grant dollars to sustain the expensive research projects. Massive waste exists due to the lack of the spirit of sharing and collaboration. Some of the leaders of these fields are even being dragged into political agenda for seeking more power and profit, or personal glorification. In this case, many Chinese scientists who are now leaders in various fields of discipline, are fallen into the victims of the mind-control tactics from the Chinese Communist Government, on the issue of Falun Dafa. It is evident that the Chinese Communist Government has invested heavily into the luring of oversea accomplished Chinese-American Scientists to work for the political interest of the Chinese Communist Government, and force these innocent scientists to choose between profits versus conscience, in facing the facts of the inhumane persecution of Falun Dafa practitioners. The corruption of a scientist's spirit is the most destructive blow that can kill the possibility of innovation of a genuine scientist. Inspiration comes to a scientist when he or she has reached a level of spiritual maturity. This is a fact that can be validated by any genuine scientists of any field of discipline. From the health perspective, when a scientist is full of desires of pursue for personal gain, any insights of the mystery of nature will be turned into major excitement of the physical body, due to the interest of the resulted interest such an insight would bring, therefore preclude the scientist from gaining deeper insights which require rationality and calm analysis. Based upon these understandings, the Whole Elephant Institute will build a platform for the participating scientists in this project to learn the art of Cultivation, a way to elevate one's mind-body-spirit. The Whole Elephant Institute has a platform called Holistic Fitness Center, which focuses on the systematic teaching of the cultivation wisdom rooted in the five thousands of years of profound Traditional Chinese Culture. Both Principal Investigators will be in charge of this aspect of work and will carry this work through out the proposed project to ensure a most suitable academic environment for the birth of true innovation.

“The applicants also recognize the importance of building a platform to allow the scientists to be better understood by the general public on their journey of discovery, so that the general public will serve dual roles in the scientific investigation which bring major impacts to their daily life: they can play a more direct role in support and monitoring the research being carried out by the scientists who are being entrusted with such a large quantity of the tax dollars from their hard work. Education of the future generations of scientists can also be carried out more effectively, if such a platform is established. Since media in the format of newspapers, radio stations and television stations are the most effective way to reach out to the general public, the applicants propose the tap into community based non-profit organizations which produces these forms of media tools to allow scientists to direct meet the general public, through the platform of the Whole Elephant Institute.”

The Whole Elephant Institute has media platform for bringing the most frontier discoveries from science field to the general public, in formats that the general public can easily understand. Three non-profit organizations, the New Tang Dynasty Television, the Epoch Times, and the Sound of Hope Radio Station, will be important assets of the Whole Elephant Institute to report the scientific discoveries associated with this project to the general public. Such an approach can greatly enhance the understanding of the general public in the efforts and direction of the scientists involved in this project and therefore can provide the project with feedbacks and support. Such work will also be under the leadership of both principal investigators who have carried out volunteer work in all three media station and are capable of establishing fruitful collaboration. The work will be carried out throughout the funded project.

F. III. TASKS TO BE PERFORMED

Detailed tasks of the project include:

Build a team of key researchers in three domains of fields to carry out “dry bench” research so that key scientific problems identified and strategies formed to develop novel quality metal alloy for accomplishing the proposed goals.

Carry out the experiments as designed on the platform of the Whole Elephant Institute and bring together expertise comments and advices for the project to assure the successful completion of the project.

Provide the involving scientists with a spiritual platform of the “Holistic Fitness Center” with a goal of improving the standard of current scientific investigation, and develop a new community of scientists who are breaking away from old paradigms and reaching a more holistic view of the subject of interest in their research career.

Report to the general public the advances made in this field of research through the media platform to encourage feedback and support of the community towards this project.

F. IV. Project Management Plan

A. Executive Summary:

Objectives: build an organic platform to nurture the innovation of novel discovery of new metal alloy that exhibits the property of resistance of high temperature, high pressure and various forms of corrosive forces.

Project Goals and expected results:

“Specifically, the principal investigators, Dr. John Li and Dr. Lotus King Weiss, who set an example of scientists breaking away from the old artificial boundaries of modern science, aim to bring together the most cutting edge discoveries of two separate fields of scientific investigation: the modern physics and the modern life science, to join force in the investigation of the development of metal alloys for the practical purpose of

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To accomplish such a mission:

The applicants recognize the urgent needs to bring together research groups who are competitors in the same field, with unique expertise in technical and theoretical backgrounds, but have been prevented from working together due to the existing flaw of the philosophy behind the current scientific funding system and evaluation system.”

As summarized above, the first step to nurture the innovation of the identification of a new metal alloy that is resistant to high temperature, high pressure and various forms of corrosive forces, is to allow an organic bond to be formed among the leading researchers in the relevant fields of study, with matured technical and intellectual assets that can be shared. The applicants believe that the lack of such a platform that helps the leading scientists to break away the old “bonds” to rigid current paradigms of physical and intellectual frame works is the key issue to be resolved in order to accomplish the mission outlined in the current solicitation of grant proposals.

To do so, the Whole Elephant Institute will directly approach the leading researchers in the field of metal alloy, and have identified to start by bringing two leading laboratories together to address the goal of this proposal: Dr. William L. Johnson’s group at California Institute of Technology and Dr. Robert Ritchie’s group at University of California at Berkeley. Dr. Lotus King Weiss will be responsible for this stage of work. Effective communication platform will be built through the Whole Elephant Institute for the two large research teams to work together to first carry out “Dry Bench” research in the proposed area, to identify key theoretical problems facing the proposed project. This work shall be carried out within the first three month of funded work.

“The applicants also recognize the urgent needs to bring together researchers from “separate fields”, like the blind men who are touching different parts of the ELEPHANT, and therefore, if kept isolated, would stay as a blind man. Such blindness reflects into all fields of modern human society, to the extent that major social disharmony is developed and causing major waste of human resource. In the field of science, blind men syndrome has led to the enlargement of gaps between different fields, and therefore severely blocking the development of a complete picture of Truth which all scientists are trying to obtain, about the physical world we are living in. The lack of the understanding of the whole picture of any phenomenon naturally misleads scientists from making correct hypothesis, which is the key for the success of any scientific investigation. Innovation is therefore becoming more and more difficult, when scientists’ mind is sinking into artificial frame works.”

Although the discovery of novel quality metal alloy may be considered to be a scientific topic within the field of modern physics, a breakthrough in material science could be

dependent upon a breakthrough in a separate field of studies, in this case, in the field of frontier life science. Indeed, there is no matter in the world that can be compared with the complexity of the matter that makes up the human body. The studies of the living matters of the human body have been carried out by the modern biologists and biochemists, who have very limited knowledge of the frontier knowledge in modern physics. Likewise, the recent advances made in the field of life science are not fully grasped nor recognized by most of the leading physicists. However, the initial conversation carried out between Dr. John Jianzhong Li and Dr. Lotus King Weiss, from modern physics and from modern life science field, respectively, has convinced both scientists that such a cross talk will be extremely fruitful for the future development of both fields. Furthermore, it is apparent that such a need is growing stronger within the leaders of each field. Dr. Robert Ritchie has demonstrated strong interest in understanding biological properties of bone in his work of material science. Dr. Lotus King Weiss has spent almost twenty years in the field of the study of powerful biological molecules in charge of the formation of all important tissues and organs such as the bone. Furthermore, the studies of life phenomena associated with the Qigong exercises, although with limited scientific publications, are apparently a new field of frontier life science research that can be greatly advanced when the field of modern physics and modern life science can hold hands. Based upon these experiences, the applicants will bring leading scientists from three main domains together for developing novel concepts in guiding the success completion of the proposed project. The three domains are: scientists from the field of physics, scientists from the field of life science, and scholars in the field of Traditional Chinese Medicine and Holistic Medicine. The Whole Elephant Institute will tailor into such an interest to gather leaders of these three domains. The detailed personnel in these three domains are outlined in **Part D and E** of this proposal. The work will be primarily carried out under the leadership of both principals at the platform of the Whole Elephant Institute.

“The applicants also recognize the urgent needs to bring spiritual principles into the practice of scientific investigation. Such a realization comes from the personal spiritual experience of the applicants. Both applicants, Dr. John Li and Dr. Lotus King Weiss, have been practicing an ancient Qigong practice, called, Falun Gong, also known as Falun Dafa. Here, the ancient wisdom of mind-body-spirit, the profound knowledge of the Tao, or the Law of the universe, meets the dogma, or doctrines of modern science, and the two modern scientists both have journeyed a long way in the search for a higher Truth, which has now brought them together, with an elevated vision of Science, to share with the scientific community. It is the strong belief of the applicants that only when the spiritual level of the scientific community is elevated, a new form of scientific communication can then be established to nurture innovation and bring benefits to the human world. The innovation in the field of the development of novel metal alloy which exhibits increased endurance to physical insults for increased efficiency of fossil fuel utilization is likely dependent upon a spiritual elevation of the scientists involved in this research projects in the realm of spiritual endurance, that is, being open-mind enough to establish novel collaborative network and sharing knowledge and resources.”

Most of modern life science scientists and modern physics scientists are currently overloaded with either administrative responsibilities when they become accomplished in

their fields, or burdened heavily for seeking grant dollars to sustain the expensive research projects. Massive waste exists due to the lack of the spirit of sharing and collaboration. Some of the leaders of these fields are even being dragged into political agenda for seeking more power and profit, or personal glorification. In this case, many Chinese scientists who are now leaders in various fields of discipline, are fallen into the victims of the mind-control tactics from the Chinese Communist Government, on the issue of Falun Dafa. It is evident that the Chinese Communist Government has invested heavily into the luring of oversea accomplished Chinese-American Scientists to work for the political interest of the Chinese Communist Government, and force these innocent scientists to choose between profits versus conscience, in facing the facts of the inhumane persecution of Falun Dafa practitioners. The corruption of a scientist's spirit is the most destructive blow that can kill the possibility of innovation of a genuine scientist. Inspiration comes to a scientist when he or she has reached a level of spiritual maturity. This is a fact that can be validated by any genuine scientists of any field of discipline. From the health perspective, when a scientist is full of desires of pursue for personal gain, any insights of the mystery of nature will be turned into major excitement of the physical body, due to the interest of the resulted interest such an insight would bring, therefore preclude the scientist from gaining deeper insights which require rationality and calm analysis. Based upon these understandings, the Whole Elephant Institute will build a platform for the participating scientists in this project to learn the art of Cultivation, a way to elevate one's mind-body-spirit. The Whole Elephant Institute has a platform called Holistic Fitness Center, which focuses on the systematic teaching of the cultivation wisdom rooted in the five thousands of years of profound Traditional Chinese Culture. Both Principal Investigators will be in charge of this aspect of work and will carry this work through out the proposed project to ensure a most suitable academic environment for the birth of true innovation.

“The applicants also recognize the importance of building a platform to allow the scientists to be better understood by the general public on their journey of discovery, so that the general public will serve dual roles in the scientific investigation which bring major impacts to their daily life: they can play a more direct role in support and monitoring the research being carried out by the scientists who are being entrusted with such a large quantity of the tax dollars from their hard work. Education of the future generations of scientists can also be carried out more effectively, if such a platform is established. Since media in the format of newspapers, radio stations and television stations are the most effective way to reach out to the general public, the applicants propose the tap into community based non-profit organizations which produces these forms of media tools to allow scientists to direct meet the general public, through the platform of the Whole Elephant Institute.”

The Whole Elephant Institute has media platform for bringing the most frontier discoveries from science field to the general public, in formats that the general public can easily understand. Three non-profit organizations, the New Tang Dynasty Television, the Epoch Times, and the Sound of Hope Radio Station, will be important assets of the Whole Elephant Institute to report the scientific discoveries associated with this project to the general public. Such an approach can greatly enhance the understanding of the

general public in the efforts and direction of the scientists involved in this project and therefore can provide the project with feedbacks and support. Such work will also be under the leadership of both principal investigators who have carried out volunteer work in all three media station and are capable of establishing fruitful collaboration. The work will be carried out throughout the funded project.

B. Risk Management:

The Whole Elephant Institute has been a target of the persecution by the Chinese Communist Government. The successful completion of the proposed work requires an improved environment which can safeguard the normal operation of the Whole Elephant Institute. However, it is the faith of the applicants that the complete dissolution of Communist ideology is a future that no one can delay. Therefore, the applicants have full confidence to handle all potential risk factors to assure the complete success of the proposed projects.

C. Milestone Log:

The proposed projects will be carried out in three stages:

Stage I: establish the team of researchers from all three domains of scientific discipline.

Stage II: design and carry out experiments to obtain sufficient data for the innovation

Stage II: initiate the work to help to bring innovation into practice

D. Funding and Costing Profile:

The funding requested in this proposal primarily cover a small part of the salary of both investigators, a small part of salary for a project manager and some basic travel expense, as well as equipment rental and consulting fees.

E. Project Timeline:

The project will be carried out in the funded three years, as the progress natural unfolds.

F. Success Criteria at Decision Points:

Success of the project will be manifested at the level of the maturity of involved scientists in their role of collaborating with each other in carrying out the designed experiments, data analysis and publication, and ultimately, to the successful completion of the innovation in developing a novel metal alloy that fulfill the mission of this grant solicitation.