#### **Robocentric**

The transhumanistic American high-tech corporation that advances the science, technology, and capitalism of artificial intelligence, robotics, human immortality biotech, human genetic screening and engineering biotech, neurotech, nanotech, bionic biotech, and interplanetary, interstellar, and intergalactic mass-scale outer space humanity expansion tech

This document contains the description of a science and technology research project performed at Robocentric, by Allen Young, Robocentric Chief Science and Technology Researcher, the transhumanistic Asian-American man, for advancing transhumanism.

Transhumanism is removing the human intelligence limit, removing the human manual labor limit, removing the human lifespan limit, and removing the human limit in being confined to Earth. Transhumanism is advancing artificial intelligence, robotics, biotech, nanotech, neurotech, and outer-space tech to the uttermost extremes—for enabling humans to have access to limitless human or humanlike intelligence, limitless human or humanlike manual labor, limitless human lifespan, and limitless human presence in the Universe.

# **Biophotonic Technologies for Enabling the Human Immortality Biotech and Other Biotechnologies**

A Robocentric science and technology research project description

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The transhumanistic Asian-American man who publicly promotes and advances the science, technology, and capitalism of artificial intelligence, robotics, human immortality biotech,

neurotech, nanotech, and mass-scale outer space humanity expansion tech
A workaholic who works over 80 hours almost every week
A never-married and childless college dropout
From multiple generations of failed bloodlines
Born in AD 1979

Robocentric plan to transhumanize America and the rest of the First World at Robocentric.com/Future and Robocentric.com/Plan

Robocentric science and technology research projects at Robocentric.com/Projects

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Transhumanize and posthumanize humankind—through advancing the science, technology, and capitalism of artificial intelligence, robotics, human immortality biotech, human genetic screening and engineering biotech, nanotechnology, neurotechnology, bionic biotech, and interplanetary, interstellar, and intergalactic mass-scale outer space humanity expansion tech.

—The Robocentric mission

## **Project Summary**

### **Overview**

This project is for Allen Young, the principal investigator of this project, to develop, textually specify, and publish a set of theoretical foundations in novel biophotonic technology development with applications in enabling the human immortality biotechnologies that Allen Young, the principal investigator of this project, envisions and pursues for completion and commercialization. This project establishes the biophotonic biotechnology paradigms and development strategies for enabling the next-generation biotechnological capabilities of manufacturing and replacing human body parts and whole human bodies, and directly modifying and augmenting human bodies via human genetic engineering, neurotech, and bionic biotech (i.e. the transhumanistic biotechnology capabilities). Allen Young will use existing knowledge and develop new theoretical knowledge of his own to complete this project.

## **Intellectual Merit**

This project creates new scientific and biotechnological knowledge, in a textually specified and published form, about the biophotonic technology capabilities, paradigms, and development strategies required in realizing biotechnological human immortality, other biotechnological human body capabilities increase and augmentation, and other critical biophotonic applications, that Allen Young has envisioned, documented, and published.

## **Broader Impacts**

This project is an essential part of developing the human immortality biotech, human genetic screening and engineering biotech, beneficial-biomatter mass production biotech, and neurotechnology, and commercializing these biotechnologies in America and elsewhere in the First World, as Allen Young, the principal investigator of this project, has envisioned, documented, and published in his book, *The Future: How artificial intelligence, robotics, human body biotech, and mass-scale outer space tech will alter the human reality.* 

This project leads to realizing the next-generation biotechnologies whose specifications and descriptions were envisioned, documented, and published by Allen Young—for biotechnologically creating the transhumanistic America that will be without the incurable diseases and disabilities in the human body, without the limited human lifespan, and without the old-age related human infirmness and senility: this project is instrumental in making the American human multitudes to be free of incurable diseases and disabilities in their human bodies, to be immortal by choice, to modify their own human genomes at will, and to retain their bodily human health, youth, beauty and vitality indefinitely.

This project leads to biotechnologically altering and improving the human biological design and reality, making biotechnology-made beneficial biomatter abundant on Earth and in mass-scale outer space human habitats, and enabling the outer-space biotechnological human immortality that will be immensely conducive to the interplanetary and interstellar and intergalactic mass-scale outer space humanity expansion—all for enabling the transhumanistic epoch of humankind that Allen Young has envisioned, documented, and published in his book, *The Future: How artificial intelligence, robotics, human body biotech, and mass-scale outer space tech will alter the human reality*, that Allen Young publicly promotes and pursues until its full realization.

#### **Intellectual Merit**

## Work to Be Undertaken, Objectives and Expected Significance

"Mankind is something to be surpassed."
— Friedrich Wilhelm Nietzsche, in *Thus Spake Zarathustra*, Part I, 3.

This project is for establishing a set of theoretical foundations in biophotonic technology development with applications in enabling the human immortality biotechnologies that Allen Young, the principal investigator of this project, envisions and pursues for completion and commercialization.

Allen Young, the principal investigator of this project, is a transhumanistic Asian-American man who publicly promotes and advances the science, technology, and capitalism of artificial intelligence, robotics, human immortality biotech, human genetic screening and engineering, nanotech, neurotech, bionic biotech, and interplanetary, interstellar, and intergalactic mass-scale outer space humanity expansion tech.

Allen Young advances transhumanism according to his America and First World transhumanization plan that he has envisioned, documented and published in his book, *The Future: How artificial intelligence, robotics, human body biotech, and mass-scale outer space tech will alter the human reality.* 

Successfully completing this project is an essential part of accomplishing Allen Young's paramount mission of transhumanizing America and the rest of the First World.

In this project, Allen Young develops, textually documents, and publishes one or more biophotonic biotechnology paradigms and development strategies for realizing human body part and whole human body manufacturing and replacement biotech, human body rejuvenation biotech (human cell age-reversing biotech), anti-aging or longevity human body biotech (slowaging, non-aging or ageless human cell biotech), medical and cosmetic and behavioral human genetic screening and engineering biotech, and neurotechnology that collectively enable biotechnological human immortality and other human body capabilities increase and augmentation, for eradicating all the incurable damages and disorders and diseases and disabilities in the human body, and enabling humans to extend their lives indefinitely and have the human genes and other biological human capabilities and features that they want at will.

In particular, in this project, Allen Young explores his research interests in the frontiers of photonics principles, engineering and technology that are relevant for enabling the human immortality biotech (human body part and whole human body manufacturing and replacement biotech) and other human body capabilities increase and augmentation biotechnologies (such as neurotech) that Allen Young envisions and pursues with a multidecadal commitment, and for solving other critical problems in fields of medicine, biology and biotechnology; this project establishes the biophotonic biotechnology paradigms and development strategies for enabling the next-generation biotechnological capabilities of manufacturing and replacing human body parts and whole human bodies, and directly modifying and augmenting human bodies via human genetic engineering, neurotech, and bionic biotech (i.e. the transhumanistic biotechnology

capabilities); this project explores fundamental engineering research and innovation in photonics that is required to lay the foundations for new biotechnologies far beyond those that are already mature and ready for application in medical diagnostics and therapies; this project explores the needed advances in nanophotonics, optogenetics, contrast and targeting agents, ultra-thin probes, wide field imaging, and rapid biomarker screening—for developing and commercializing transhumanistic biotechnologies in the related and subsequent projects of Allen Young and his transhumanistic American high-tech corporation, Robocentric; this project explores low cost and minimally invasive medical diagnostics and therapies using biophotonics.

The ultimate project objective is to establish a documented-and-published comprehensive and integrated theoretical paradigm for developing biophotonic technologies for applications in enabling the human immortality biotech, other human-body capabilities modification and improvement biotech such as neurotech, and other critical biophotonics applications such as medicine and biotechnological human food production.

The ultimate objective of this project is producing and publishing a book or book-series final project work product, tentatively titled "Biophotonic Technologies for Enabling the Human Immortality Biotech and Other Biotechnologies", that contains all the project results.

The one or more biophotonic biotechnology paradigms and development strategies developed, documented, and published in this project will be implemented in one or more subsequent projects by Allen Young and his transhumanistic American high-tech corporation Robocentric for creating and commercializing the biophotonic technologies that are necessary for enabling the human immortality biotechnologies, and other human body capabilities increase and augmentation biotechnologies.

This project is for biophotonics background research and technologies development planning, for eventual applications in human genetic engineering and human immortality biotech development.

Allen Young aims to achieve the following objectives in this project.

- 1. Required transhumanistic biophotonic technology capabilities identification, textual specification, and publication. Identify, textually specify, and publish the biophotonic technology capabilities required in realizing biotechnological human immortality, other biotechnological human body capabilities increase and augmentation, and other critical biophotonic applications.
  - 1.1. Design, textually specify, and publish all the technological capability requirements for the transhumanistic biophotonic technologies that can perform microscopic and nanoscopic 3D human tissue scanning including human brain structure and content scanning (via biophotonic 3D microscopy and nanoscopy), and perform fully automated exhaustive or comprehensive cell and biomolecule localization and counting over the entire human body (i.e. fully automated total human-body cell and biomolecule scanning, localization, and counting)—for human body (including human brain) manufacturing and replacement biotech and human body resurrection biotech, for microscopically and nanoscopically 3D scanning sample tissues to replicate or manufacture or synthesize that are to be modeled and designed on computer for

- biomanufacturing, and for validating microscopic and nanoscopic 3D structures of manufactured or synthesized human tissues, organs, limbs, and whole bodies.
- 1.2. Develop, textually document, and publish a comprehensive and unified paradigm that integrates the biophotonic technologies to develop with the development and use of the human immortality biotechnologies, human genetic screening and engineering biotech, neurotech, and other critical biophotonic applications.
  - 1.2.1. Identify, textually specify, and publish the biophotonic technology capabilities required in realizing **human body part and whole human body manufacturing and replacement biotech**. In particular, identify, textually specify, and publish the relevance, need, and use of one or more biophotonic technologies in developing, using, testing, and verifying human biomolecule, cell component, cell, tissue, organ, and whole-body modeler, designer, synthesizer, and replacer biotechnologies.
  - 1.2.2. Identify, textually specify, and publish the biophotonic technology capabilities required in realizing anti-aging and longevity (slow-aging or non-aging) human body biotech, human body rejuvenation (cell age reversal) biotech. In particular, identify, textually specify, and publish the relevance, need, and use of one or more biophotonic technologies in detecting and verifying all the cell and tissue age related cell and tissue outputs, cell and tissue age, and cell and tissue aging rate.
  - 1.2.3. Identify, textually specify, and publish the biophotonic technology capabilities required in realizing medical and cosmetic and behavioral human genetic screening and engineering biotech. In particular, identify, textually specify, and publish the relevance, need, and use of one or more biophotonic technologies in monitoring genetically caused human body biophysical states and state evolutions.
  - 1.2.4. Identify, textually specify, and publish the biophotonic technology capabilities required in realizing **neurotechnology** that directly and indirectly interfaces with human and nonhuman brains for neurophysical functions modification and upgrade (such as human-brain memory deletion, replacement, and addition). In particular, identify, textually specify, and publish the relevance, need, and use of one or more biophotonic technologies in detecting and verifying human-brain structures and biophysical processes.
  - 1.2.5. Identify, textually specify, and publish the biophotonic technology capabilities required in realizing **trans-evolutionary human body biotech** for creating biotechnologically created human species that transcend the bounds of evolution. In particular, specify the relevance and use of one or more biophotonic technologies in developing synthetic human-body cells, tissues, and organs that are resistant to disease-causing agents such as viruses and bacteria. Identify, textually specify, and publish the biophotonic technologies required in synthetic cell, tissue, organ, and whole body modeling, design, manufacturing, and testing.
  - 1.2.6. Identify, textually specify, and publish the photonics principles, engineering and technology that are relevant for critical problems in fields of medicine, biology and biotechnology, as required in the research grant opportunity description; explore fundamental engineering research and innovation in photonics that is required to lay the foundations for new technologies beyond those that are mature and ready for application in medical diagnostics and therapies; explore the needed advances in **nanophotonics**, **optogenetics**, **contrast and targeting agents**, **ultra-thin probes**,

wide field imaging, and rapid biomarker screening; explore low cost and minimally invasive medical diagnostics and therapies using biophotonics. First, identify, textually specify, and publish the critical biophotonic problems in fields of medicine, biology and biotechnology.

- 2. **Transhumanistic biophotonic technology paradigms and development-strategies development, textual specification, and publication.** Develop, textually specify, and publish one or more biophotonic technology paradigms and development strategies that are highly conducive to enabling biotechnological human immortality, other biotechnological human body capabilities increase and augmentation, and other critical biophotonics applications.
  - 2.1. Develop, textually specify, and publish a unified and integrated biophotonic technologies paradigm and development strategy for enabling biotechnological human immortality, other biotechnological human body capabilities increase and augmentation, and other critical biophotonics applications, that pushes the theoretical and experimental capabilities of biophotonics to the uttermost extremes. For transhumanistic biophotonic technologies development, design, textually document, and publish one or more biophotonic technology paradigms and development strategies for enabling microscopic and nanoscopic 3D human tissue and human brain structure and content scanning (biophotonic 3D microscopy and nanoscopy) and fully automated exhaustive or comprehensive cell localization and counting over the entire human body (i.e. fully automated total human-body cell scanning, localization, and counting). Explore all the different biophotonic methods and technology categories to develop the most suitable one or more biophotonic technology paradigms and development strategies for enabling biotechnological human immortality, other biotechnological human body capabilities increase and augmentation, and other critical biophotonics applications. In particular, explore using biophotonics to 3D-scan the dead and living human brains at human-brain neuron, dendrite, axion, and synapse levels for reading and digitally storing the whole human brain content and physical state on computer for use in the human immortality biotech and the human-body resurrection or recreation biotech.
  - 2.2. Develop, textually specify, and publish one or more biophotonic technology paradigms and development strategies for enabling biophotonic 3D human tissue scanner biotech, for application in human tissue, organ, limb, and whole body biomanufacturing, for scanning the tissue samples to biomanufacture and to verify the biomanufactured tissues. Consider, develop, textually specify, and publish one or more paradigms and strategies for developing one or more neurophotonic and optogenetic biotechnologies for scanning, digitizing, and remotely storing the human brain contents for the application in the human body recreation and resurrection biotechnology that can recreate living human bodies from scratch under 24 hours using digitally and remotely stored whole human genome sequences and scanned human brain contents.
  - 2.3. Develop, textually specify, and publish one or more paradigms and development strategies for **biophotonic simulation software** with light wave and particle and biomatter interactions simulation for developing biophotonic biomatter scanner devices.
  - 2.4. Consider, assess, textually document, and publish the applicability of every research topic in the grant opportunity description to enabling biotechnological human immortality, other biotechnological human body capabilities increase and augmentation,

and other critical biophotonics applications. Assess, textually document, and publish the applicability of each biophotonic method or technology category in enabling the human immortality biotech. Develop, textually specify, and publish an integrated, unified, generalized, and experimentally verifiable mathematical and computational biophotonics theory for every biophotonic method mentioned in the grant opportunity description, using all the applicable electromagnetism and quantum physics theories.

- 2.4.1. Consider, assess, textually document, and publish the applicability of **imaging in** the second near infrared window. Perform one or more researches that advances medical applications of biophotonics in the second near-infrared window (NIR-II: 1,000-1,700 nm) in which biological tissues are transparent up to several centimeters in depth, making this spectral window ideal for deep tissue imaging. Do biophotonics background research and technology development planning in NIR-II photonics; research NIR-II (wavelength range 1000 – 1700 nm) light generation, detection, and manipulation through emission, transmission, modulation, signal processing, switching, amplification, and sensing. Develop, textually specify, and publish an integrated, unified, generalized, and experimentally verifiable multiscale, multilayer, and four-dimensional (three dimensions of space and one dimension of time) mathematical and computational second near-infrared window biophotonics theory, using all the applicable electromagnetism and quantum physics theories, for mathematically and computationally modeling, explaining, and predicting the electromagnetic wave and photon interactions with living and dead human biomatter in the second near-infrared window for all the different types of human subcellular components, cells, extracellular matrices, tissues, and organs. Mathematically predict, textually document, and publish what will be seen when a piece of unfrozen fresh meat bought from a grocery store is scanned with a second-near-infrared-window biophotonic 3D tissue scanner at microscopic and nanoscopic levels.
- 2.4.2. Consider, assess, textually document, and publish the applicability of macromolecule markers. Research innovative methods for labeling of macromolecules, novel compositions of matter, methods of fabrication of multicolor probes that could be used for marking and detection of specific pathological cells, and pushing the envelope of optical sensing to the limits of detection, resolution, and identification.
- 2.4.3. Consider, assess, textually document, and publish the applicability of **low coherence sensing at the nanoscale**. Research low coherence enhanced backscattering (LEBS), N-dimensional elastic light scattering, and angle-resolved low coherence interferometry for early cancer detection (dysplasia).
- 2.4.4. Consider, assess, textually document, and publish the applicability of **neurophotonics**. Research photon activation of neurons at the interface of nanomaterials attached to cells, and development and application of biocompatible photonic tools such as parallel interfaces and interconnects for communicating and control of neural networks.
- 2.4.5. Consider, assess, textually document, and publish the applicability of microphotonics and nanophotonics. Research development and application of novel nanoparticle fluorescent quantum-dots; research sensitive, multiplexed, high-

- throughput characterization of macromolecular properties of cells; research nanomaterials and nanodevices for biomedicine.
- 2.4.6. Consider, assess, textually document, and publish the applicability of **optogenetics**. Research employing light-activated channels and enzymes for manipulation of neural activity with temporal precision; research utilizing nanophotonics, nanofibers, and genetic techniques for mapping and studying in real-time physiological processes in organs such as the brain and heart.
- 3. Project results productization and commercialization strategy development, textual documentation, and publication. Develop, textually specify, and publish one or more strategies for productizing and commercializing the scientific and technological results of this project, for starting—during and/or immediately after completing this project—rapid commercialization of the technologies addressed by this project.

This project integrates biophotonic technology development and use with the human immortality and other human body capabilities enhancement biotechnologies development and commercialization, at the most foundational scientific and technological paradigmatic level.

The transformative nature of this project is considering, restricting, normalizing, and pursuing biophotonic technologies development within the context of enabling the human immortality biotechnologies (via human body part and whole human body manufacturing and replacement biotech and anti-aging human body biotech) and other human body capabilities augmentation biotechnologies (via human genetic screening and engineering, human cell engineering, and neurotechnology).

The significance of this project is the development, textual specification, and publication of an integrated, unified, generalized, and experimentally verifiable biophotonic technologies paradigm and development strategy that serves as an essential component in enabling the development and commercialization of the human immortality biotechnologies (namely the antiaging, age-reversing, and ageless human cell biotechnologies, and human body part and whole human body manufacturing and replacement biotechnologies), and other human body capabilities enhancement biotechnologies (namely the medical and cosmetic and behavioral human genetic engineering biotechnologies, synthetic human cell and tissue biotechnologies, and neurotechnogy).

The ultimate significance of this project is enabling the human immortality biotechnologies and other human body capabilities augmentation biotechnologies.

# **Relationship to Other Works**

This project creates an overt, pronounced, and conspicuous paradigm shift in biophotonic technology development, toward applying all the existing knowledge and new knowledge to be created in biophotonic technology development to enabling the human immortality biotechnologies (the human body part and whole human body biomanufacturing and replacement biotech, the human-body resurrection or recreation biotech, the human body aging retardation or stoppage biotech, and the human body age reversal biotech) that Allen Young, the principal investigator of this project, has envisioned, textually documented, and published. This project

extends the existing knowledge in biophotonic technology development toward enabling the human immortality biotechnologies.

This project differentiates itself from other biophotonic technology development works, by uniquely integrating biophotonic technology development with human immortality biotech development, and other human body capabilities increase and augmentation biotechnologies development.

All the work Allen Young does, including this project, is for achieving his publicly stated goal of transhumanizing the human species according to his plan specified in his book, *The Future:* How artificial intelligence, robotics, human body biotech, and mass-scale outer space tech will alter the human reality—The Robocentric master plan for building the transhumanistic future of humankind.

Transhumanism is removing the human intelligence limit, removing the human manual labor limit, removing the human lifespan limit, and removing the human limit in being confined to Earth. Transhumanism is advancing artificial intelligence, robotics, biotech, nanotech, neurotech, and outer-space tech—for enabling humans to have access to limitless human or humanlike intelligence, limitless human or humanlike manual labor, limitless human lifespan, and limitless human presence in the Universe.

This project, along with Allen Young's other biotech projects, contributes to achieving Allen Young's publicly stated goal of developing and commercializing human body part and whole human body manufacturing and replacement biotechnologies, medical and cosmetic and behavioral human genetic engineering biotechnologies, and neurotechnologies for eradicating all the incurable diseases and disabilities in the human body, for enabling individual human beings to extent their lifespans and retain their health and youth indefinitely as long as they want, and for genetically and neurotechnologically improving and augmenting human body capabilities.

In particular, this project provides the theoretical foundations for enabling the biomatter-scanning technological capabilities that are needed in developing and commercializing the transhumanistic biotechnologies that Allen Young has envisioned, documented, and published, and will continue to publicly promote and pursue until their full completion and commercialization.

#### **General Plan of Work**

The ultimate objective of this project is producing and publishing one or more books that contain all the project results with all the answers, relevant information, paradigms, models, process specifications, and further research and development (R&D) plans, that achieve all the project objectives. As such, the entire project focus is on producing and publishing the final work-product book(s); all the work in this project is centered on achieving this ultimate project objective.

Allen Young, the principal investigator (PI) of this project, will perform this project according to the following process.

- 1. Create in writing the outline(s) of the book(s), while considering all the factors, concerns, and questions to be answered in this project. Do whatever needed background research online while writing out the book outline(s), taking notes of all the necessary third-party information and its sources, and of all Allen Young, the principal investigator's own ideas.
- 2. Develop all the necessary concepts and models, design and perform all the required thought experiments, and answer all the questions, all in writing, as the book contents that achieve all the project objectives and provide the expected significance. Also, regularly produce and publish online audiovisuals, using the completed or in-progress book contents, to inform and share with the public the project progress.
- 3. Review and complete all the book contents.
- 4. Publish the book(s).

#### **Success Criterion and Benefits**

Allen Young, the principal investigator of this project, does not know exactly what results will have been produced at the conclusion of this project, since this is a research project that will produce **never-before-existed knowledge**; but he is confident that he will manage to achieve all the project objectives.

Allen Young, the principal investigator of this project, will determine this project to be a success when all the textually specified objectives earlier are accomplished to Allen Young's satisfaction.

When this project gets successfully completed, it will yield the **benefit** of having textually specified novel biophotonic technology paradigms and development strategies published in one or more books, that will be used in developing and commercializing a portfolio of biophotonic technology products for **3D-scanning human and nonhuman biomatter at microscopic and nanoscopic levels**, and **otherwise biophotonically probing microscopic biomatter at microscopic and nanoscopic levels**, with applications in human immortality biotech, human genetic screening and engineering, nanotech, neurotech, human-food production biotech, biomedical research, and public health.

# **Broader Impacts**

## **Removal of Human Biological Limitations**

The ultimate application of this project's results is biotechnologically **removing the human biological limitations** of being unable to cure many damages and disorders and diseases and disabilities in the human body, having a limited lifespan, and being unable to modify one's own genes.

This project leads to enabling the human multitudes in America and elsewhere in the First World to have health, youth, beauty, and desirable human genes on demand through biotechnological advances in human immortality biotech and human genetic screening and engineering biotech—which in turn will create far greater individual human life experiences, national economies, and growth and expansion of humanity.

Allen Young, the principal investigator of this project, pursues developing and commercializing interplanetary, interstellar, and intergalactic mass-scale outer space humanity expansion technologies, as specified in his book, *The Future*; in tandem with Allen Young's endeavor in

advancing artificial intelligence, robotics, mass-scale outer space tech, this project's essential contributions to enabling human immortality biotech and human genetic engineering biotech will bring the Transhumanistic Revolution that will enable the Homo Sapiens species to massively expand into outer space at astronomical scales as immortal, intelligent, and trans-evolutionary biological beings.

This project leads to biotechnologically enabling humans to be immortal, and bypassing the natural human genetic selection and creating biotechnologically modified or created synthetic human beings with bioengineered and biomanufactured human genes, molecules, cell components, cells, tissues, organs, organ systems, and whole bodies.

This project leads to developing and commercializing human body part and whole human body manufacturing and replacement biotechnologies, medical and cosmetic and behavioral human genetic screening and engineering biotechnologies, and neurotechnologies for eradicating all the incurable damages and disorders and diseases and disabilities in the human body, for enabling individual human beings to extent their lifespans and retain their health and youth indefinitely as long as they want, and for genetically and neurotechnologically improving and augmenting human body capabilities, in America and elsewhere in the First World.

This project leads to achieving the following biotechnological accomplishments, in America and elsewhere in the First World.

- Thoroughly removing all the human biological limitations, and satisfying all the human biological desires on their bodies and all the human needs to improve the human biological reality.
- Satisfying the human desire and need to end the unnecessary and unhelpful human suffering from the incurable damages and disorders and diseases and disabilities in the human body.
- Satisfying the human desire and need to extend human youth and lifespan—for increasing the human life-qualities, productivity, experiences, and creativity.
- Satisfying the human desire and need to improve the human body via human genetic screening and engineering, neurotechnology, and bionic biotech—for greater human-body health, aesthetic, capacity, capability, and productivity on Earth and outer space.
- Biotechnologically broadening the human biological capabilities, possibilities, and prosperity for the human multitudes.
- Eliminating all the incurable damages and disorders and diseases and disabilities in the human body, and enabling the human multitudes to live their lives with healthy, youthful, beautiful, and long-living human bodies.
- Creating the biotechnological human reality in which human beings no longer have their biological limitations of incurable damages and disorders and diseases and disabilities, and aging and dying.

In particular, this project contributes to providing the necessary biomatter microscopic and nanoscopic 3D-scanning and other biophotonic biomatter probing capabilities in developing and commercializing the transhumanistic biotechnologies envisioned by Allen Young.

This project is an essential part of achieving Allen Young's aim of creating an unlimited human biological choice for the human multitudes by developing and commercializing the following biotechnologies that eradicate all the incurable damages and disorders and diseases and disabilities in the human body, old human age, and involuntary human deaths, and enable the human multitudes to have unlimited health, youth, longevity, and beauty in their human bodies, in America and elsewhere in the First World.

- Human body part and whole human body design, manufacturing and replacement biotechnologies that make the incurable damages and disorders and diseases and disabilities in the human body, and human deaths, obsolete, and make biological human suffering and limitations a thing of the past.
- Medical, cosmetic, and behavioral human genetic engineering technologies that enable the human multitudes to get rid of the undesirable human genes in their bodies, and selectively have the most desirable human genes in their bodies.
- Human body anti-aging, longevity, and anti-disease biotechnologies that enable the human multitudes to live their lives with healthy and youthful human bodies indefinitely.

One major goal Allen Young has in advancing biotech is to develop and market the human body part and whole human body manufacturing and replacement biotechnologies and the human genetic screening and engineering biotechnologies that Allen Young envisions, that eradicate all the incurable damages and disorders and diseases and disabilities in the human body, that enable human beings to retain their health and youth and beauty indefinitely, that require the scanner, computational-modeler, designer, synthesizer, and replacer human-body biotechnologies that Allen Young envisions and pursues. Allen Young aims to develop and commercialize robotic scanner human-body biotechnologies, that can exhaustively, thoroughly, and completely probe human-body matter at macroscopic, microscopic and nanoscopic levels, and digitize and store the scanned human-body matter structure (the overall form or organization) and compositions (the proportions of different parts) on computer for computational human-body modeling, analysis, simulation, and prediction; Allen Young envisions the scanner human-body biotechnologies that can identify and record the size and type and 3D location of every biological cell in an entire human body, count the number of human-body cells for every type of humanbody cell in an entire human body, and identify and record the atomic and subatomic structure and composition of every type of biological cell in the human body, for the purpose of developing other types of biotechnologies for human health and longevity. Allen Young aims to develop and commercialize computational-modeler human body biotechnologies, that can quantify, model, analyze, simulate, and predict the number or count of every type of cell and tissue, and all the statistical 3D locations and physical state evolutions of every biomolecule, cell component, cell, tissue, and organ in a human body—at the molecular, atomic, and subatomic levels, for developing other types of biotechnologies such as anti-aging human biotech, human longevity biotech, human health biotech, human medical biotech, human body part and whole human body manufacturing and replacement biotech, human life-protection biotech, human resurrection biotech, cosmetic, medical, and behavioral human genetic engineering biotech, neurotechnology, and bionic biotech. Allen Young aims to develop and commercialize designer human-body biotechnologies, that allow humans to design biomatter and lifeforms down to the cellular, molecular, atomic, and subatomic levels for synthesizing or manufacturing the human

biomatter and lifeforms that are designed on computer. Allen Young aims to develop and commercialize **synthesizer human-body biotechnologies**, that can manufacture every type of human-body molecule, genome, cell component, cell, microorganism, tissue, organ, and whole human body, for medical and human-longevity applications. Allen Young aims to develop and commercialize macroscopic, microscopic, and nanoscopic **robotic replacer human-body biotechnologies**, that can replace any and every existing human body part with a manufactured human body part, for curing any and every damage and disease and disability in the human body, rejuvenating old living human bodies, and enabling indefinite human body longevity or lifespans. Allen Young aims to build a **large-scale**, **mass-market biotech economy** with a large number of biotech equipment, biotech service, and synthetic biomatter consumers, for increased biotech equipment, biotech service, and synthetic biomatter production and use in healthcare, human food production, households, businesses, manufacturing, construction, and services.

This project contributes to developing and commercializing one or more scanner biotech products for the human body part and whole human body manufacturing and replacement biotechnologies and the human genetic screening and engineering biotechnologies development.

This project contributes to developing the biotechnological capabilities to 3D-scan and otherwise biophotonically probe living and dead biomatter at microscopic and nanoscopic levels.

Allen Young advances and publicly promotes human body biotech in tandem with advancing artificial intelligence (AI) and robotics, for the purpose of researching, developing, and commercializing AI-enabled robotic human-body part and whole-human body scanner, modeler, synthesizer, and replacer biotechnologies, with the particular applications in medical, anti-aging, and longevity human body biotechnologies. As such, this project contributes to advancing biomedical, biomanufacturing, and bioreplacement AI and robotics.

This project contribute to benefiting the public, consumers, businesses, industries, and institutions, initially in America and elsewhere in the First World, and then eventually in developing nations—through playing an essential part in advancing and commercializing human body biotechnologies and nonhuman biotechnologies for creating unlimited human biological options, indefinitely extending individual human lifespans, and mass-manufacturing and mass-marketing nonhuman biomatter that are useful to and desired by human beings such as human foods.

This project leads to ending the unnecessary and tragic human suffering caused by incurable damages and disorders and diseases and disabilities in the human body: This project leads to rendering every damage and disease and disability in the human body curable with human body biotech, and enabling humans to retain their youth and live as long as they want, so that humans can be more productive as human beings, and live fuller and longer human lives.

This project advances human body biotech for evolving scientific, technological and commercial scope, complexity, and sophistication in biotechnological human biology evolution and expansion, and for biotechnologically increasing the scopes, complexities, and sophistications in human biological possibilities, actions, experiences, and prosperity.

This project contributes to obsoleting the human suffering from the incurable damages and disorders and diseases and disabilities in the human body, obsoleting the human beings becoming old and infirm and senile, and obsoleting the human life being too short. This project contributes to advancing the human body biotechnology that enables humans to enjoy health, youth, beauty, and longevity, as long as they want; this project contributes to advancing, embracing, and using human body biotech, for making humans healthy, youthful, beautiful, and long-living creatures not just on Earth, but more importantly in outer space as well.

This project contributes to developing and commercializing the following types of human body biotechnologies for increasing human health, youth, longevity, and capability that remove the unnecessary, burdensome, and detrimental limitations in the human body: 'anti-aging human biotech', 'human longevity biotech', 'human health biotech', 'human medical biotech', 'human body part and whole human body manufacturing and replacement biotech', 'human life-protection biotech', 'human resurrection biotech', 'medical, cosmetic, and behavioral human genetic screening and engineering biotech', 'neurotechnology', and 'bionic biotech'.

Allen Young has been developing a science, named *Unified Humanity Science*, that quantifies, models, analyzes, simulates, and predicts how the different types of outwardly observable human behaviors are caused at the human-body organic, tissular, cellular, subcellular, molecular, atomic, and subatomic levels; Allen Young will continue to work on completing this science sometime in the future, hopefully within the next 10 to 20 years, by AD 2032 to AD 2042. This science will facilitate advancing artificial intelligence, robotics, human body biotech, and mass-scale outer space tech, even and especially while still in development.

This integrated human-body science will be used to quantify, model, analyze, simulate, and predict how the living human body—at the organic, tissular, cellular, subcellular, molecular, atomic, and subatomic levels—perform sensory information reception and processing, rational and emotional reasoning, linguistic processing, and motor action planning and execution.

This integrated human-body science will be used to quantify, model, analyze, simulate, and predict how the living human bodies will operate in long-term or permanent mass-scale outer space human habitats with millions of human beings living in each mass-scale outer space human habitat.

This project is an integral part of Allen Young's integrated human body and behavior science development.

This project is an essential part of developing and commercializing a science that Allen Young has been working on, that aims to completely map all of the outwardly observable human behaviors to their underlying human-body biophysical causes at the human-body organic, tissular, cellular, subcellular, molecular, atomic, and subatomic levels.

In tandem with advancing artificial intelligence, robotics, human body biotech, and mass-scale outer space tech for commercialization, Allen Young develops and markets this science that maps the outwardly observable human behaviors such as human motor actions and speeches, to their biophysical causes in the human body components at organic, tissular, cellular, subcellular, molecular, atomic, and subatomic levels—for statistically quantifying, modeling, analyzing, simulating, and predicting how the human body operates at the organic, tissular, cellular, subcellular, molecular, atomic, and subatomic levels, and applying the organic, tissular, cellular, subcellular, molecular, atomic, and subatomic human-body biophysical structures, compositions, processes and state evolutions knowledge gained to creating artificial intelligence and robotics technologies with humanlike capabilities, and to advancing human body biotech for medical, anti-aging, and human-longevity applications.

Due to the coverage and the involved subject areas of this project, this project is an essential component in completely finding out how the living human body operates—as a biophysical system at the organic, tissular, cellular, subcellular, molecular, atomic, and subatomic levels—across the entire living human-body biophysical system over its entire lifetime.

As Allen Young details in the "Robocentric Unified Humanity Science paradigm" part of his book, *The Future*, this science that Allen Young develops is for completely mapping all the human behaviors to their causative human body parts down to the human-body organic, tissular, cellular, subcellular, molecular, atomic, and subatomic levels.

By providing the paradigmatic foundations for 3D-scanning and otherwise biophotonically probing human biomatter at microscopic and nanoscopic levels, this project enables reading living and dead human biomatter at microscopic and nanoscopic levels, which is required in gaining the complete scientific understanding of all the biophysical human-body causes of all the human behaviors, down to the human-body organic, tissular, cellular, subcellular, molecular, atomic, and subatomic levels.

This project leads to transforming the human biological reality for the entire American and other First World human multitudes via advancing human body biotech.

This project contributes to developing and commercializing biomedical human body biotechnologies such as human-body part and whole human body manufacturing and replacement bio-robotics technologies, anti-aging human biotech, and human longevity biotech that will enable humans to live longer, fuller, more productive, and more meaningful human lives with richer and better human experiences, in America and elsewhere in the First World.

# **Biotechnological Transhumanization of U.S. Military**

Allen Young, the principal investigator of this project, has founded and currently leads Robocentric, a transhumanistic American high-tech business that publicly promotes and advances the science, technology, and capitalism of artificial intelligence, robotics, human immortality biotech, human genetic engineering, nanotechnology, neurotechnology, bionic biotech, and interplanetary, interstellar, and intergalactic mass-scale outer space humanity expansion tech.

This project makes essential contributions to the following Robocentric's endeavor of biotechnologically advancing the U.S. military capabilities.

Robocentric plans and executes being a military human-body biotech supplier to the U.S. military and the U.S. ally militaries.

Robocentric plans and executes providing the following military human-body biotech products to the U.S. military and the U.S. ally militaries.

Anti-aging human biotech for the U.S. soldiers to keep their body young and agile.

Human genetic engineering biotech for the U.S. soldiers to make them stronger, more agile, and more intelligent genetically-engineered superhuman soldiers.

Neurotechnology in the brains of the U.S. soldiers for faster information processing and utilization.

Bionic biotech for the U.S. soldiers for more physical capability.

Human body part and whole human body manufacturing and replacement services for the U.S. soldiers for removing war-related human body damages such as lifelong handicaps and disabilities caused by losing limbs, spinal cord injuries, paraplegia, and genetic and nerve damages from toxic chemicals and radioactive materials such as Agent Orange and depleted uranium.

Human brain content engineering on the U.S. soldiers for instantly injecting knowledge into American human soldier brains, and removing war-related human brain damages and psychological problems such as PTSD (Post-Traumatic Stress Disorder).

Making the U.S. soldiers immortal through providing U.S. soldier resurrection services, using remotely stored human body data (whole genome sequence and brain contents) and whole human-body manufacturing biotech.

## **About Robocentric**

Robocentric is an American high-tech corporation that publicly promotes and advances the science, technology, and capitalism of artificial intelligence, robotics, human immortality biotech, and interplanetary, interstellar, and intergalactic mass-scale outer space humanity expansion tech.

Building Robocentric—for advancing artificial intelligence, robotics, human immortality biotech, and interplanetary, interstellar, and intergalactic mass-scale outer space humanity expansion tech via R&D and commercialization—is a multidecadal commitment of Allen Young.

NOTICE Robocentric Biotech is not a conventional bioscience laboratory or R&D facility or biomedical research institution: Rather, Robocentric Biotech is a sensor, scanner, modeler, designer, synthesizer, and replacer biotech R&D and commercialization business with a long-

term (multidecadal) aim of developing and commercializing its own human immortality biotechnologies. Robocentric does not breed or produce laboratory animals, such as laboratory mice, for developing its biotech. Robocentric doesn't do genetically engineered plant and animal production unless it is for testing its own genetic engineering biotech. Robocentric doesn't do testing on live animals except for clinical trials for testing its own human or nonhuman disease cure or for testing its own sensor and scanner biotech. Robocentric Biotech's main strategy is developing and commercializing its own biomatter synthesizer biotechnologies for biomanufacturing biochemicals, biomolecules, monomers, polymers, cell components, cells, tissues, organs, organ systems, whole bodies, consumer and industrial biomaterials and pseudobiomaterials such as artificial cells and tissues and cell-like systems, and bioelectronic devices: Robocentric Biotech's key focus is developing and commercializing its own biomatter synthesizer technologies, not breeding animals and plants, not performing incremental bioscience researches. Robocentric performs testing on live and dead animal and plant biomatter (such as cells, tissues, and organs), only when it is absolutely necessary for developing and testing its own biotechnologies. Robocentric Biotech is led by Allen Young, a college dropout.

Read *The Future*, the book written by Allen Young, the transhumanistic Asian-American man, that explains how Allen Young and his transhumanistic American high-tech corporation, Robocentric, advance AI, robotics, human immortality biotech, and mass-scale outer space humanity expansion tech. Visit Robocentric.com/Future to learn how AI, robotics, human immortality biotech, and mass-scale outer space humanity expansion tech will alter the human reality! Be special: Be in the know in advancing transhumanism by visiting Robocentric.com/Future and reading *The Future*!

Robocentric needs investors for advancing AI, robotics, human immortality biotech, and mass-scale outer space humanity expansion tech! Allen Young, the transhumanistic Asian-American man, a college dropout, Robocentric CEO is currently working on commercializing the AI and robotics technologies that he has developed. Robocentric is seeking investors for bringing the next-generation AI and robotics technologies to the market. Investing in Robocentric comes with unconditional remaining investor money return via share buyback at the purchase price. Visit Robocentric.com/Investors for more info and to invest in Robocentric!

In order to advance the science and technology and capitalism in artificial intelligence, robotics, human immortality biotech, and mass-scale outer space humanity expansion tech—for doubling the American national annual GDP to US\$50 trillion and beyond by fully robotizing the American national economy on Earth, and sextupling the American national annual GDP to US\$150 trillion and beyond by fully transhumanizing the American national economy on Earth and in outer space—Robocentric, the transhumanistic American high-tech corporation, performs a number of its own science and technology research projects under Allen Young's leadership. Visit Robocentric.com/Projects to learn about the transhumanistic science and technology researches that Robocentric performs under Allen Young's leadership, before making the decision to invest in Robocentric at Robocentric.com/Investors.

If you're an investor, visit Robocentric.com/PitchDeck to learn about Robocentric's overall business plan for advancing transhumanism in America and elsewhere in the First World.

Advancing artificial intelligence, robotics, human immortality biotech, and mass-scale outer space humanity expansion tech needs your support. You can support advancing AI, robotics, human immortality biotech, and mass-scale outer space tech by investing in Robocentric through purchasing one or more Robocentric stocks at Robocentric.com/Investors. You can provide support by making one or more donations at Robocentric.com/Donation. You can provide support by purchasing one or more merchandise items at Robocentric.com/Merchandise.

If you want to contact Allen Young, the transhumanistic Asian-American man, Robocentric CEO, for business related issues or investing in Robocentric for advancing AI, robotics, human immortality biotech, and mass-scale outer space humanity expansion tech, visit Robocentric.com/Contact.

Allen Young, the transhumanistic Asian-American man, Robocentric CEO, is looking for people to work with! Currently, Allen Young is working on getting the initial funding for Robocentric, so there's no immediate open positions. But in the future, there will be. If you're interested in working on advancing AI, robotics, human immortality biotech, and/or mass-scale outer space humanity expansion tech, visit Robocentric.com/Jobs.

If you want to know more about Allen Young, the transhumanistic Asian-American man, Robocentric CEO, who publicly promotes and advances the science, technology, and capitalism of artificial intelligence, robotics, human immortality biotech, human genetic screening and engineering biotech, nanotechnology, neurotechnology, bionic biotech, and interplanetary, interstellar, and intergalactic mass-scale outer space humanity expansion tech, visit Robocentric.com/Bio for Allen Young's biosketch and autobiography.

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