

SCHOLARS UNIVERSITY -- THE WORLD'S FIRST INCLUSIVE SCHOLARSHIP UNIVERSITY IN AFRICA FOR THE EXPONENTIAL ADVANCEMENT AND PEACE OF HUMANITY

WEBSITE: <https://www.scholarsuniversity.org>
EMAIL ADDRESS: chancellor@scholarsuniversity.org

ABSTRACT

Africa faces seemingly intractable challenges such as poverty that also threaten to overwhelm the developed world as hordes of poorly educated Africans desperately attempt to flee the continent. Yet our educational institutions have consistently failed to build adequate human capital with the capacity to effectively tackle these challenges. In this paper we introduce Scholars University, an inclusive scholarship university in Africa with a mission to create prosperity and reduce suffering through high quality education. Designed to attract the very best students and lecturers by providing fully funded merit-based scholarships and a living monthly stipend to all accepted students and orienting and supporting students with resources towards job creation and the establishment of their own Scholars Universities after graduation while providing competitive remuneration to lecturers with the opportunity to partner with the University and receive a fair share of revenues generated, Scholars University will lead to exponential advancement and peace in Africa and beyond. We demonstrate how Scholars University enables capacity building for inclusive sustainable development and show that Scholars University and by extension a network of Scholars Universities is an effective solution to the disheartening crisis of poverty and backwardness currently plaguing Africa. Furthermore, we disclose the foundational structure, current status including the acquisition of over 130 hectares of land, public private partnership with Amalem Community, the need for funding from United States Agency for International Development (USAID) and outline plans for sustainable operation of Scholars University. Crucially, we demonstrate clearly that Scholars University's activities constitute a focus under USAID/Nigeria's Country Development Cooperation Strategy (CDCS) for 2020-2025. More specifically, we show that Scholars University helps achieve USAID/Nigeria's goal of a healthier, more educated, prosperous, stable, and resilient Nigeria, particularly (directly and immediately) through **Development Objective 1 (DO1)** – Broadened and inclusive economic growth – and **Development Objective 2 (DO2)** – A healthier, better educated population and additionally over extended time-frames through **Development Objective 3 (DO3)** – Accountable, inclusive, and responsive governance strengthened – as well as through the **Special Objective (SpO)** – Greater stability and early recovery advanced in targeted states – via job creation, research and development, high quality education, philanthropic activities and humanitarian services.

Keywords: United States Agency for International Development (USAID), USAID/Nigeria Country Development Cooperation Strategy (CDCS) for 2020-2025, Amalem Community, Scholars University, Public Private Partnership, Sustainable Development Goals, Capacity Building, Inclusive Sustainable Development, Community Development Initiative, Inclusive Education, Health, Prosperity, Broadened and Inclusive Economic Growth, Reduction of Suffering, Poverty Alleviation, Exponential Advancement, Peace

1. INTRODUCTION

There is currently avoidable but widespread suffering and poverty in Africa and many other parts of the world. According to recent World Bank estimates [1], approximately 10% of the world's population live in extreme poverty, subsisting on less than \$1.90 a day. Thus hundreds of millions of people are regularly deprived of basic human needs such as adequate nutrition, education, shelter and sanitation. A significant portion (56%) of those living in extreme poverty reside in Africa, particularly sub-Saharan Africa. Nigeria was recently reported to have the highest number (over 86 million) of extremely poor people of any country in the world. This already dire situation is exacerbated by conflict, political upheaval, diseases, natural disasters and the devastating effects of climate change.

Even many of those who escape the dehumanizing deprivations of extreme poverty are subject to chronic financial stress and worrying debt profiles. Many live pay check to pay check without financial security.

Additionally, no one is immune to universal threats such as diseases, natural disasters, potential annihilation by events and phenomena originating in outer space, small and large scale warfare -- including nuclear and biological warfare, cyber threats, the ill effects of criminal activities and social vices perpetrated by external agents, natural ageing and death. All and sundry -- young and old, rich and poor -- face these universal challenges with varying degrees of severity.

Beyond the aforementioned sources of human suffering, there are many unanswered questions and desirable outcomes that humanity generally aspires to. These include the creation of a more secure, peaceful, inclusive and just society and a better understanding of the universe -- including its origins and destiny -- and our place within it. Other aspirations include the attainment of Artificial General Intelligence (AGI) that could afford humanity the opportunity to delegate most activities that entail high levels of drudgery and danger to artificial machines and algorithms as well as achieve dramatic gains in efficiency and productivity in all activities for the service of the common good.

It is obvious that the challenges confronting humanity are multifaceted and any proffered solution must be robust and sustainable to have any chance of being effective.

A key requirement of any effective solution is the ability to build human capacity to create innovative solutions through the development of adequately skilled human capital. This can best be achieved through effective education.

There is no gainsaying the fact that all levels of education are important and interdependent in the quest to tackle the numerous challenges confronting humanity. However, we will focus our attention on tertiary or higher education because that is the level at which the results of education typically have the greatest impact on human capacity building with the farthest reaching consequences for sustainable development.

Martin A. Trow (Trow, 2005, 2007) [2] reflected on the transition from elite to mass to universal access in higher education based on his earlier classification of higher education into three distinct forms, namely:

“(1) elite – shaping the mind and character of a ruling class; preparation for elite roles; (2) mass – transmission of skills and preparation for a broader range of technical and economic elite roles; and (3) universal – adaptation of the ‘whole population’ to rapid social and technological change.” (Trow, 2005, 2007) [2].

In the context of this paper, we define an inclusive elite university as one that conforms broadly with the structure (selective admission, small class sizes, personalized instruction) of the elite form described by Trow [2] but in contrast offering inclusivity by basing selective admission primarily on merit and not economic or social status and providing roles that encompass a broader range of technical and economic elite roles.

The remainder of this paper is organized as follows. Section 2 introduces Scholars University, an inclusive scholarship university in Africa founded to create prosperity and reduce suffering and advance humanity through high impact capacity building for inclusive sustainable development. In Section 3, the foundational faculties and departments at the establishment of Scholars University are briefly discussed. Section 4 demonstrates how a network of Scholars Universities can achieve exponential advancement for humanity. In Section 5, funding and sustainability issues are discussed. A clear demonstration of how Scholars University’s activities constitute a focus under USAID/Nigeria’s Country Development Cooperation Strategy (CDCS) for 2020-2025 particularly through **Development Objective 1 (DO1)** –

Broadened and inclusive economic growth – and **Development Objective 2 (DO2)** – A healthier, better educated population – and additionally over extended time-frames through **Development Objective 3 (DO3)** – Accountable, inclusive, and responsive governance strengthened – as well as through the **Special Objective (SpO)** – Greater stability and early recovery advanced in targeted states – via job creation, research and development, high quality education, philanthropic activities and humanitarian services appears in **Section 6**. Section 7 lists expected outcomes for the first 5 years of operation. Section 8 describes the current status of Scholars University while Section 9 presents concluding remarks.

2. CAPACITY BUILDING FOR INCLUSIVE SUSTAINABLE DEVELOPMENT

Scholars University is an inclusive university with a mission to create prosperity and reduce suffering through high quality education. Designed to build high impact human capital for sustainable development, Scholars University will attract a carefully selected and limited number of the very best students and lecturers and bring them together in an environment that fosters creativity, innovation and the passion to advance humanity by effectively tackling the challenges confronting humanity. Students will be selected through a rigorous, merit-based and highly competitive selection process. Admission will be based strictly on merit with a small percentage of slots reserved for the host community. All accepted students will be offered fully funded merit-based scholarships and paid a monthly living stipend while all lecturers will be competitively remunerated and given the opportunity to partner with

Scholars University in the generation and fair sharing of revenue from intellectual property rights, products and consultancy and other services. Students will also be supported with the resources they need to launch profitable businesses and create jobs. Scholars University is an inclusive university in the sense that any student from any part of the world can compete for admission and attendant scholarship on the basis of merit without regard to financial or social status.



Figure 1: Scholars University logo with symbolism depicting high quality education as the source of sustainable growth and development.

The offer of fully funded scholarships and generous monthly stipend will incentivize the very best students to compete for admission into Scholars University while the pool of highly talented, exceptionally brilliant and strongly motivated students, competitive remuneration, partnership and fair sharing of revenues will attract the very best lecturers to Scholars University.

Lecturers will be provided with the resources and incentives – in the form of partnership and a fair share of revenues from intellectual output – to carry out high impact research, create innovative products and services and train exceptionally

resourceful elite students drawn inclusively on the basis of merit from all walks of life and all social and economic strata and fully equipped with the technical, social and entrepreneurial skills and resources required to bring unprecedented and sustainable development to humanity, including job creation for all strata of society. This is how Scholars University builds capacity for inclusive sustainable development.

3. FOUNDATIONAL FACULTIES AND DEPARTMENTS

Scholars University will commence with two main faculties or divisions, namely, the Faculty of Sciences and the Faculty of Agriculture. All students will be given extensive training in leadership and entrepreneurship and provided with resources to launch profitable businesses and create jobs. Scholars University will expand to accommodate additional fields of study in the future.

Faculty of Sciences

Departments under the Faculty of Sciences include Computing Sciences (Computer Science, Software Engineering, Cyber Security), Astronomical Sciences and Longevity Studies.

Computing Sciences

Computers and associated algorithms, software and systems are ubiquitous in, and continue to make inroads into, all aspects of modern society.

In the office, computers and associated software and systems are used to create, edit, store, print and exchange documents, create, process, store and exchange vast amounts of actionable business information using modern databases and related systems and to support virtually all business

operations including general-purpose communications and electronic commerce.

The robots and other systems used in automated factories and processing facilities depend on computers for their operations.

Space exploration vehicles such as National Aeronautics and Space Administration's (NASA's) Sojourner, Spirit, Opportunity and Curiosity Mars Rovers leverage computers for communication and exchange of commands and science data.

On the social scene, computers, algorithms and software power social media platforms like Facebook, Instagram, Twitter, and so on, used by billions of people around the world.

The Internet – based on computers, algorithms and software – facilitates efficient research through search engines like Google, information presentation through web browsers, information exchange through file transfers, electronic commerce, general-purpose communications, video conferencing permitting virtual meetings which constitute a critically important medium of communication in the face of pandemics such as the current coronavirus crisis, and many other activities, including those yet to be invented.

Computers systems routinely assist doctors and other health professionals in the diagnosis of diseases and treatment planning and evaluation as well as the generation and maintenance of reliable medical records.

Drug discovery, testing, vaccine trials and critically important experiments in biological and health sciences are aided by the use of computers systems.

Governance – through electronic voting and information-based decision making – and

population statistics are routinely enhanced through the use of computer systems.

With the advent of cloud computing allowing high performance computing resources to be requested on demand at reasonable cost and the increasing affordability of Internet connectivity, it is now practical for even small, resource-constrained teams and individuals working from remote parts of the world to carry out impactful research and make significant contributions to sustainable development. Schadt, E., Linderman, M., Sorenson, J. *et al.* [3] explain how modern information-driven biological research involving large amounts of data is enabled by computer systems, including cloud computing in Computational solutions to large-scale data management and analysis. (Schadt, E. *et al.*, 2010) [3].



Figure 2: Computer Systems. Cloud Computing Permits Affordable and Remote Access to High Performance Computing Resources.

Artificial Intelligence (AI) systems (computational systems that perform tasks typically requiring human intelligence) are widely used in medical diagnosis, autonomous or self-driving vehicles, intelligent video surveillance, computer vision, brain-computer interfaces, speech recognition and natural language processing, personal assistants, a wide range of pattern recognition tasks including facial recognition and an ever increasing array of application domains. Aspects of the progress in AI has been enabled by

advances in deep learning artificial neural networks – computational constructs modelled loosely on the human brain with multiple processing layers. LeCun, Y., Bengio, Y. & Hinton, G. [4] provide an overview of this topic in Deep learning. (LeCun, Y et al., 2015) [4].

Many exciting unsolved problems remain in the Computational Sciences. One of these is the creation of Artificial General Intelligence (AGI) allowing a computer system to exhibit the robust intelligence of a human being (or higher) thus permitting a wide range of mundane or hazardous tasks to be delegated to machines. Ben Goertzel et al. [5] lay out the issues concerning AGI in Ben Goertzel Cassio Pennachin (Eds.) Artificial General Intelligence (2007) [5]. Another unsolved problem is the creation of a practical brain-computer interface (BCI) permitting effective brain-to-brain communication.

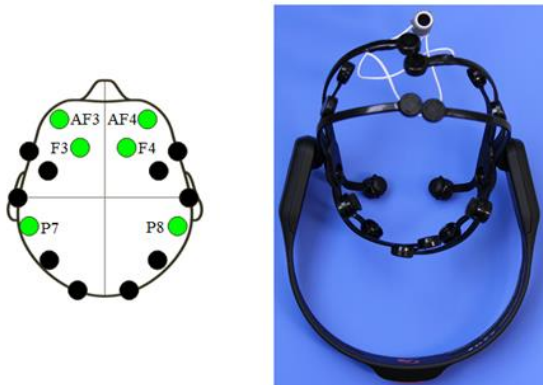


Figure 3: Brain-computer Interface (BCI) Setup Based on Electroencephalography (EEG) Signals.

This can provide unprecedented insights into human nature and psychology, enable more effective communication generally, conflict resolution and peace as well as allow those who are unable to communicate for a variety of medical reasons to do so. Frank E. Ekpár [6] introduced a nature-inspired signal processing system (Frank E. Ekpár, 2019) [6] that suggests practical ways to achieve brain-to-brain communication.

Virtual, augmented and mixed reality (including aspects of the Metaverse) can be leveraged to enhance our interaction with our environment and improve lives significantly. Frank E. Ekpár [22] invented a system for the creation of interactive virtual tours system (Frank E. Ekpár, 2009) [22] with wide-ranging applications in virtual, augmented and mixed reality.

Quantum Computing holds out the promise of providing practical solutions to problems that would require an inordinate amount of computational resources and time to tackle using traditional computing. IBM and Google are some of the organizations investigating Quantum Computing. Google's Sycamore quantum processor recently performed what is described as a record-breaking simulation of a chemical reaction (Google AI Quantum and Collaborators, 2020) [7].

These examples illustrate the ubiquity of computer systems and the primacy of Computing Sciences in the development of society.

Lecturers in the Department of Computing Sciences at Scholars University will carry out cutting edge research in these or other topics of interest, develop products and services and instruct and supervise students. Students can also receive instruction, carry out research in these or other topics of interest and develop products and services in collaboration with lecturers and/or through exchange programs between Scholars University and other universities.

Astronomical Sciences

From time immemorial, humanity has aspired to understand our at once amazing and perplexing universe and our place within it.

Today, more than ever before, we have the tools to chip away at our ignorance and appreciate the immensity of the universe while gaining insights regarding our putative role in it. Ground and space based telescopes peer into the skies -- revealing the secrets of the cosmos. For example, the Event Horizon Telescope [8] uses a collection of ground-based telescopes designed to function as a virtual Earth-sized telescope leveraged by an international collaboration to capture images of black holes. The Event Horizon Telescope Collaboration reported the First M87 Event Horizon Telescope Results (The Event Horizon Telescope Collaboration, 2019) [9] in March 2019. The 2020 Nobel Prize in Physics was awarded to Roger Penrose, Reinhard Genzel and Andrea Ghez for the discovery that black hole formation is a robust prediction of the general theory of relativity and for the discovery of the supermassive compact object at the center of our galaxy [20]. The Event Horizon Telescope captured the first image of the black hole believed to lurk at the center of our home Milky Way galaxy, Sagittarius A* [21], in May 2022.

The iconic Hubble Space Telescope, launched in 1990 by the United States National Aeronautics and Space Administration (NASA) has deepened our understanding of the universe.



Figure 4: NASA's Hubble Space Telescope.



Figure 5: NASA's Hubble Space Telescope Image of the NGC 2775 Galaxy.

The James Webb Space Telescope (JWST) was launched on December 25, 2021 and boasts vastly improved sensitivity compared to the earlier Hubble Space Telescope. Operating primarily in the infrared spectrum, JWST is expected to help us study the earliest and farthest galaxies to form in the universe as well as examine the atmospheres of exoplanets (with the possibility of discovering tell-tale signals that may indicate the presence of life) in addition to a wide array of other science goals.

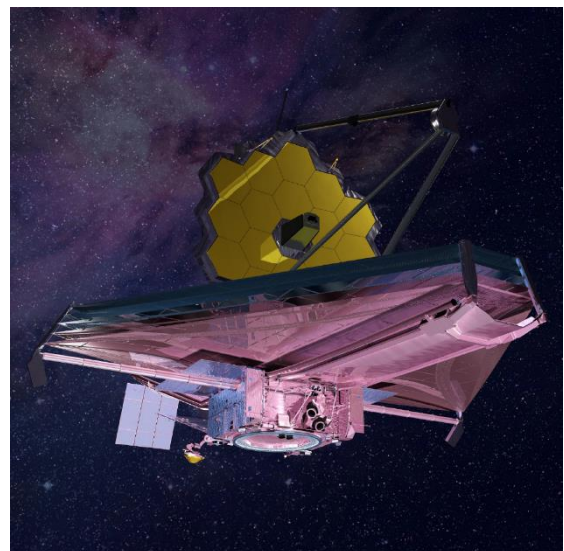


Figure 6: NASA's (ESA and CSA Collaboration) James Webb Space Telescope.

Data collected by the Hubble Space Telescope such as Version 1 of the Hubble Source Catalog (Whitmore et al., 2016) [10] is accessible to researchers around the world.

Other space agencies that may make data accessible and are open to collaboration include the Japan Aerospace Exploration Agency (JAXA) and the European Space Agency (ESA).

The data collected from space and ground based telescopes and other astronomical tools can be mined by researchers for scientific discoveries and to ascertain the probability and impact of collisions of objects in space with the Earth as well as detect other hazards such as Gamma Ray Bursts.

Other areas of interest in Astronomical Sciences include the quest for the colonization of mars and the outer solar system, the Search for Extra Terrestrial Intelligence (SETI) and long-term plans for interstellar travel including projects such as the United States Defence Advanced Research Projects Agency (DARPA) and NASA's 100 year Starship.

Lecturers and students at Scholars University can leverage the data collected from these instruments – as well as collaborations with researchers and space agencies – and the enormous computing power of modern computing, including cloud computing, to carry out research, make impactful scientific discoveries and create innovative solutions to many of humanity's challenges.

Longevity Studies

For most people, it is desirable to live very long, possibly forever, in excellent health. Unfortunately, the twin evils of disease and ageing (and consequently death) are

currently inescapable. While many diseases can be treated or cured using the tools of modern medical science, ageing has proven immune to the concerted efforts of humanity to conquer it. We note that there are those who are of the opinion that ageing and death are integral parts of human life and should not be tampered with but even such individuals cannot deny the enormous pain, suffering and loss occasioned by ageing and death. The causes of ageing are not yet well understood and there are currently no proven remedies. Molecular biologists consider the shortening of telomeres – structures found at the ends of the chromosomes that contain our genes – to be indicative of ageing as explained by Maria A. Blasco [11] in a review of the relevant literature. (Maria B., 2007) [11]. Other researchers consider ageing to be an engineering problem that can be solved by dismantling the mechanisms that lead to the gradual degradation of, or damage to, the cells of the body or repairing such damage or degradation.

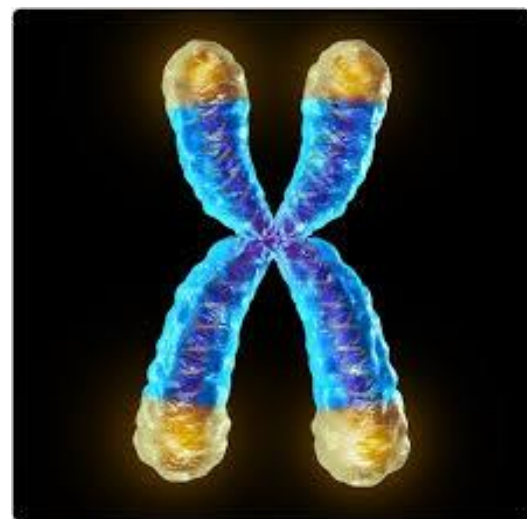


Figure 7: Artist Rendering of Telomeres (in brown) at the Ends of a Chromosome.

This engineering approach to ageing considers it a disease to be cured using the tools of medical science and specifically

through Strategies for Engineered Negligible Senescence – SENS. This and related approaches are described by Aubrey de Grey (Aubrey De Grey, 2005) [12], Ben Zealley and Aubrey D.N.J. de Grey (Ben Zealley et al., 2012) [13], Aubrey D.N.J. de Grey and Michael Rae (Aubrey De Grey et al., 2007) [14] and Ritmann B. E. and Schloendorn J. (Ritmann et al., 2007) [15].

The Nobel Prize in Chemistry 2020 was awarded to Emmanuelle Charpentier and Jennifer A. Doudna [16] for the development of a method for genome editing. Aspects of this work related to clustered regularly interspaced short palindromic repeats (CRISPR)/CRISPR-associated (Cas) systems are described in (Martin Jinek et al., 2012) [17] and could potentially lead to effective methods to slow down, halt or reverse ageing.

Lecturers and students at Scholars University can evaluate the current approaches to ageing and help deliver new and effective approaches.

Faculty of Agriculture

The fields of study or departments in the Faculty of Agriculture include Ecological Agriculture, Fisheries and Aquaculture, Agricultural Economics and Soil Science and Land Management.



Figure 8: Ecological Agriculture.

The Ecological Agriculture program is aimed at developing practices and systems that lead to efficient and sustainable utilization of agricultural resources even in the face of environmental and other constraints such as climate change. Fred Magdoff explores the principles, practices and constraints involved in Ecological Agriculture (Fred Magdoff, 2007) [18].

Other programs in the Faculty of Agriculture will examine sustainable soil science and land management, fisheries and aquaculture and agricultural economics principles and best practices.

Students will gain a deep appreciation for and a robust ability to provide solutions to agricultural problems as Agriculture is critical to the growth and stability of a healthy, peaceful and prosperous modern society.

4. EXPONENTIAL ADVANCEMENT: SCHOLARS UNIVERSITY NETWORK

A key feature of Scholars University is the orientation of students towards establishing their own Scholars Universities after graduation and the provision of resources to support this vision. Since these graduates are the very best of the best by design, Scholars University will enable exponential advancement in society as these high impact graduates churn out other high impact graduates and create jobs for all strata of society – leading to a virtuous cycle and positive feedback loop in development. Let us consider the simplified scenario in which each student graduates 4 years after admission and the first Scholars University admits 100 exceptional students each year. Let us suppose further that each graduate establishes their own Scholars University immediately after graduation and that they each admit 100 students each year. Then after 4 years of operation, that is,

4 years after take-off, there will be 100 high impact graduates – from the first Scholars University. After 8 years of operation, each of these 100 high impact graduates would have produced 100 high impact graduates – giving a total of 10,500 high impact graduates – 10,000 (that is 100×100) from the first 100 graduates' Scholars Universities and an additional 400 (making a total of 500 including the first 100) from the first Scholars University. Consequently, after only 8 years of operation and with only 100 exceptional students admitted into each Scholars University each year, there will be 10,500 high impact graduates poised to dramatically transform society for the better in this scenario. If we consider the ideal situation where all 10,000 high impact second generation graduates go on to establish their own Scholars Universities, then after only 12 years of operation and with only 100 exceptional students admitted into each Scholars University each year, there will be 1,000,000 (one million) high impact graduates from the second generation alone – and well over 1,000,000 altogether -- fully equipped to bring about the exponential advancement of humanity. This exponential growth in the number of high impact graduates will lead to exponential advancement in society. Figure 9 illustrates this exponential advancement.

In practice, even if only a fraction of graduates go on to establish their own Scholars Universities and do so years after graduation, the outcome will still be exponential advancement in society.

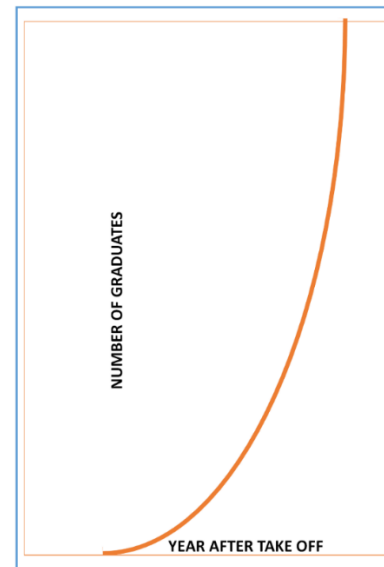


Figure 9: Exponential Growth in the Number of High Impact Graduates with Corresponding Exponential Advancement in Society.

5. FUNDING AND SUSTAINABILITY

Funding for the take-off and maintenance of operations at Scholars University comes from a broad range of sources (in order to mitigate risk) including rent from insured real estate, profits from a diverse portfolio of business investments, the founder's personal savings and the goodwill of the host community of Amalem (already used to acquire over 130 hectares of land -- with an estimated market value of over US\$ 1.48 million -- on which to site Scholars University), grants – such as this being requested from the United States Agency for International Development (USAID), revenues from royalties on intellectual property, products and services created by faculty (which will be shared fairly with the faculty as partners in revenue generation) and returns on capital investments and endowment funds. The businesses Scholars University has created and invested in and some of which are currently ongoing

include Information and Communications Technology (ICT) products and services – virtual, augmented, and mixed reality including aspects of the Metaverse, portal access management services, transportation network services, custom software, and so on --, sustainable agriculture – fish farming, poultry farming, oil palm plantation farming, and so on --, sustainable agribusiness – oil palm processing plants, cassava processing plants, water extraction and purification plants, and so on, real estate – insured and affordable housing units for rent, and so on.

6. FOCUS UNDER USAID/NIGERIA'S COUNTRY DEVELOPMENT COOPERATION STRATEGY (CDCS) FOR 2020-2025

USAID/Nigeria's Country Development Cooperation Strategy (CDCS) for 2020-2025 is aimed at advancing toward the goal of a healthier, more educated, prosperous, stable, and resilient Nigeria by partnering with the Nigerian government, civil society, and the private sector.

As explained under the RESULTS FRAMEWORK section of USAID/Nigeria's CDCS for 2020-2025 [19]:

“The goal focuses on increasing Nigeria's self-reliance by addressing challenges across the humanitarian-development-peace continuum. It addresses conflict, and instability to strengthen good governance, build inclusive economic growth, and deepen the relationship between citizens and the state. USAID/Nigeria will make progress towards this goal through three Development Objectives (DO) and one Special Objective (SpO) that prioritize

the core approaches needed to advance Nigeria's self-reliance:

DO1: Broadened and inclusive economic growth

DO2: A healthier, better educated population

DO3: Accountable, inclusive, and responsive governance strengthened

SpO: Greater stability and early recovery advanced in targeted states

The results framework leverages USAID/Nigeria's comparative advantages, Nigeria's vibrant private sector, and demographic shifts to advance the country's stability and progress toward self-reliance.”

(Excerpt from the USAID/Nigeria Country Development Cooperation Strategy (CDCS) for 2020-2025).

Scholars University's activities constitute a focus under USAID/Nigeria's Country Development Cooperation Strategy for 2020-2025 especially (directly and immediately) through **Development Objective 1 (DO1)** -- Broadened and inclusive economic growth and **Development Objective 2 (DO2)** – A healthier, better educated population and additionally over extended time-frames through **Development Objective 3 (DO3)** – Accountable, inclusive, and responsive governance strengthened – as well as through the **Special Objective (SpO)** – Greater stability and early recovery advanced in targeted states – via job creation, research and development, high quality education, philanthropic activities and humanitarian services

More specifically, Scholars University, as a public private partnership involving both the public Host Community and private sector participation, seeks to partner with USAID in advancing toward the goal of a healthier, more educated, prosperous,

stable, and resilient Nigeria through three Development Activities (DA) as outlined below.

Development Activity 1 (DA1): Broadened, inclusive, immediate, direct and sustainable employment in Scholars University's broad range of business ventures designed to sustain the activities of the University. Scholars University provides direct, immediate broad-based and inclusive employment to a wide variety of skilled workers in a wide range of fields including, but not limited to, Information and Communications Technology (ICT) products and services in areas such as virtual, augmented and mixed reality (including aspects of the Metaverse), software development, portal access management services and transportation network services, sustainable agriculture (fish farming, poultry farming, oil palm plantation farming) and agribusiness (cassava processing, palm oil processing), sustainable water purification and processing, insured and affordable real estate development and capital investment. Furthermore, the intellectual output and products and services from our Research and Development investments (one third of our annual budget) will create jobs and help address seemingly intractable challenges for broadened and inclusive economic growth and all-round advancement in Nigeria, Africa and the whole world.

Development Activity 2 (DA2): Impartation of advanced technical and entrepreneurship skills and provision of resources to Scholars University graduates for the sustainable creation of a broad range of jobs for inclusive employment of workers from all strata of society and for the provision of services including health services to society. Scholars University also serves the public by awarding fully funded

merit-based scholarships to all accepted students (the brightest from all walks of life) from around the world and training them into high impact positive change makers using the best lecturers. These high impact graduates, supported with resources such as seed funding and networking resources through Scholars University, then go on to create a broad range of inclusive employment opportunities for all strata of society and advance society.

Development Activity 3 (DA3): Orientation of, and provision of resources to outstanding Scholars University graduates for the establishment of their own Scholars Universities for a positive feedback loop and virtuous cycle leading to exponential broadened and inclusive economic growth and advancement through the recursive activation of **DA1** to **DA3**.

Scholars University graduates will be oriented and provided with enabling resources towards establishing their own Scholars Universities for a virtuous cycle and positive feedback loop leading to exponential broadened and inclusive economic growth and a healthier, better educated population. This is because with every new Scholars University established, this process of generating broadened and inclusive economic growth and nurturing a healthier, better educated population is repeated while the first and any subsequent Scholars Universities continue to relentlessly advance these same goals.

From the foregoing, it is evident that Scholars University's activities constitute a focus under USAID/Nigeria's Country Development Cooperation Strategy for 2020-2025 and in particular help directly and immediately achieve **Development Object 1 (DO1)** – Broadened and inclusive economic growth and **Development Objective 2 (DO2)** – A healthier, better educated population – through **Development Activities 1 to 3 (DA1 to DA3)** as outlined above and within an

extended time-frame can help achieve **Development Objective 3 (DO3)** – Accountable, inclusive, and responsive governance strengthened – as well as through the **Special Objective (SpO)** – Greater stability and early recovery advanced in targeted states – via job creation, research and development, high quality education, philanthropic activities and humanitarian services.

7. EXPECTED OUTCOMES (5-YEAR PLAN AND BEYOND)

Scholars University will be self-sustaining five (5) years after commencing operations – independently generating more than enough revenue to cater for all expenses (projected at US\$ 3 million per annum), carry out capital investments and build an endowment fund for future expansion. Accumulated (over the initial 5-year period) Internally Generated Revenue (IGR) at the end of the fifth year is projected at US\$ 28 million. Please refer to the SUPPORTING INFORMATION AND ATTACHMENTS section for details.

After 5 years of operation, Scholars University will directly create hundreds of inclusive jobs spread across a broad range of economic activities corresponding to the business investments designed to sustain the operations of the University.

Within the first decade of operation (with the multiplier effect from Scholars Universities established by graduates of the first Scholars University and subsequent Scholars Universities), these Development Activities will directly create tens of thousands of inclusive jobs across a broad range of economic spheres. The exponential economic growth and advancement enabled by the unique design of the Scholars University project will

directly create millions of inclusive jobs across a broad range of economic activities within the second decade of operation.

By the 5-year mark, Scholars University will be produce at least 25 high impact graduates with the capacity to create employment opportunities for all strata of society, with some of these exceptional graduates ultimately going on to build their own Scholars Universities – leading to exponential advancement – and at least 25 additional, similarly exceptional, motivated and capable graduates each year afterwards.

The first sets of students are expected to concentrate on specific areas of study including Computing Sciences – (1.) Computer Science, (2.) Software Engineering, (3.) Cyber Security and Astronomical Sciences – (1.) Astronomy, (2.) Astrophysics, (3.) Exoplanets, (4.) Astrostatistics, (5.) Data Science, Agricultural Science – (1.) Ecological Agriculture, (2.) Agricultural Economics, (3.) Fisheries and Aquaculture, (4.) Soil Science and Land Management, and so on. With the subsequent expansion of our program offerings, Scholars University will produce high impact graduates in other fields of human endeavour including, but not limited to, the Health Sciences and Humanities.

Furthermore, Scholars University will employ at least 50 full-time staff members – 20 academic and 30 non-academic – by the fifth year of operation.

Beyond the first 5 years of operation, rent from insured and well maintained real estate will reliably and sustainably provide revenue for the bulk of the core operating expenses while part of the profits from the other business investments will be used to expand our real estate holdings. Consequently, we can reliably sustain and expand operations into the future.

8. CURRENT STATUS: ESTABLISHMENT OF SUPPORTING COMPANIES, PUBLIC PRIVATE PARTNERSHIP WITH HOST COMMUNITY AND LAND ACQUISITION

We have established and are already operating businesses in the form of limited liability companies that will support and sustain the activities of Scholars University in the long term. These companies include Imatronics Limited and Scholars Real Estate Ltd. Imatronics Limited specializes in information and communications technology (ICT) products and services including virtual, augmented, mixed reality (including aspects of the Metaverse) products and services, software development, transportation network services and portal access management services. Scholars Real Estate Ltd is aimed at providing real estate products and services including insured affordable apartments for rent. The revenue from these ongoing businesses (as well as other supporting businesses we set up in the future) is to be used to run and sustain Scholars University. We have also acquired title to over 130 hectares (equivalent to approximately 1.2 km by 1.1 km) of land in Amalem Community in Abua, Rivers State of Nigeria with an estimated market value of over US\$ 1.48 million at a steep discount thanks to the goodwill of the Host Community towards us. Furthermore, we have formed a public private partnership between Amalem Community (the public partner and Host Community) on one hand and Scholars University Ltd (the private partner) on the other hand. In furtherance of this public private partnership, we have signed a Deed of Partnership and Memorandum of Understanding (MOU)

outlining the benefits of the establishment of Scholars University to Amalem Community and highlighting the responsibilities of Scholars University Ltd and Amalem Community. This arrangement demonstrates the confidence the Host Community reposes in Scholars University and ensures the success of the project as it is in the best interest of the Host Community of Amalem Community that Scholars University is built and sustained.

9. CONCLUSION

We have introduced Scholars University, an inclusive scholarship university with a mission to create prosperity and reduce suffering through high quality education and demonstrated that Scholars University builds capacity for inclusive sustainable development. Furthermore, we have shown clearly how Scholars University's activities constitute a focus under USAID/Nigeria's Country Development Cooperation Strategy (CDCS) for 2020-2025 and more specifically, that Scholars University helps achieve USAID/Nigeria's goal of a healthier, more educated, prosperous, stable, and resilient Nigeria particularly (directly and immediately) through **Development Objective 1 (DO1)** – Broadened and inclusive economic growth – and **Development Objective 2 (DO2)** – A healthier and better educated population – and additionally over extended time-frames through **Development Objective 3 (DO3)** – Accountable, inclusive, and responsive governance strengthened – as well as through the **Special Objective (SpO)** – Greater stability and early recovery advanced in targeted states – via job creation, research and development, high quality education, philanthropic activities and humanitarian services and shown how Scholars University can take off and sustain operations indefinitely with

the help of grant funding from USAID. We have also demonstrated how the creation and ongoing operation of supporting businesses (Imatronics Limited and Scholars Real Estate Ltd) and the formation of a public private partnership between Amalem Community (the Host Community) and Scholars University ensures the success of the project and shown that we have acquired over 130 hectares of land in Amalem Community in Abua for use by Scholars University. It is clear from the foregoing that Scholars University is an effective, long-term and sustainable solution to the problem of poverty and backwardness in Africa and beyond and helps achieve USAID/Nigeria's goal of a healthier, more educated, prosperous, stable, and resilient Nigeria by creating, within a broad range of economic sectors, millions of sustainable jobs within the first two decades of operation. Through a network of Scholars Universities founded by supported graduates of the first and subsequent Scholars Universities, exponential advancement and peace can be achieved and sustained for humanity.

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SUPPORTING INFORMATION AND ATTACHMENTS

PLEASE NOTE: Evidence (in the form of the Deed of Conveyance and associated Site Plan) of acquisition of 130 hectares (equivalent to approximately 1.2 km x 1.1 km) of land with an estimated market value of over US\$ 1.48 million as well as a Deed of Partnership for the Public Private Partnership between Amalem Community and Scholars University is attached at the end of this section.

1. PROPOSED ESTIMATED COST (FIVE-YEAR REVENUE PROJECTION FOR SUSTAINABILITY – TABLE 2 -- FOLLOWS COST BREAKDOWN)

US\$ 50 MILLION (spread over 5 years) – Fifty Million United States Dollars (spread over 5 years).

SOURCES: US\$ 25 Million out of US\$ 28 Million Internally Generated Revenue and US\$ 25 Million from Grant Funding.

2. BRIEF COST BREAKDOWN – TABLE 1

TABLE 1: BRIEF COST BREAKDOWN

All amounts are in Million United States Dollars (US\$ 1,000,000) unless otherwise indicated.

S/No.	Description	Cost (Million US\$)	Duration (Years)
1	Construction of facilities (Lecture halls / classrooms, conference halls, administration buildings, research and development laboratories, library, clinic, renewable [solar] energy and backup power plant, waste treatment plant, perimeter fence, drainage system and internal road network, mini-parks and gardens, and so on).	20	1-2
2	Maintenance of facilities and Miscellaneous Expenditure.	5	5
3	Research and Development (including expenditure on travel for conferences, seminars, publication of research results and acquisition of intellectual property such as patents).	5	5
4	Business Investments. These include investments (on already acquired Scholars University land where applicable) in insured real estate (including insured low cost housing units for rent in cities and urban areas), Information and Communications Technology (ICT) businesses such as virtual/augmented/mixed reality products and services and transportation network services and web portals, construction and maintenance	15	5

	of fish farms, poultry farms, water extraction and purification plants, oil palm plantations, and so on.		
5	Salaries and Scholarship Stipends. 50 staff members – 20 academic and 30 non-academic staff salaried on average at US\$ 1,000 per month for a total of US\$ 50,000 per month or US\$ 600,000 per year or US\$ 3 million in 5 years. 25 students in each class for a maximum of 100 students in the 4-year undergraduate program paid monthly scholarship stipends of about US\$ 300 each per month. That amounts to at most US\$ 300 (stipend per month) x 12 (months per year) x 4 (number of years – admissions and classes start 1 year after commencement of construction at the earliest) x 100 (number of students) or at most US\$ 1,440,000. The cost of other staff remuneration such as transportation, accommodation and security for principal officers take up the balance of at least US\$ 560,000.	5	5
	TOTAL	50	5

FIVE-YEAR REVENUE PROJECTION: SUSTAINABILITY PLAN -- TABLE 2

SUMMARY

Annual Budget Required to Sustain Scholars University's 4-Year Undergraduate Program with 25 Students per Class and 50 Staff Members:

US\$ 3 MILLION.

Internally Generated Revenue (IGR) Accumulated at the End of the Initial Five Years:

US\$ 28 MILLION.

Amount Requested in Grant Funding over the Initial Five Years:

US\$ 25 MILLION.

Cost of Establishing Scholars University over the Initial Five Years:

US\$ 50 MILLION.

Surplus Revenue by Year 5:

US\$ 3 MILLION.

TABLE 2: FIVE-YEAR REVENUE PROJECTION: SUSTAINABILITY PLAN

All amounts are in Million United States Dollars (US\$ 1,000,000) unless otherwise indicated.

S/No.	Source of Revenue	Year 1	Year 2	Year 3	Year 4	Year 5
1	Information and Communications Technology (ICT) Business (Virtual/Augmented/Mixed Reality/Aspects of the Metaverse)	0.00	1.00	1.50	1.50	2.00
2	Information and Communications Technology (ICT) (Portal Access Management)	0.00	0.00	0.50	0.75	1.00
3	Information and Communications Technology (ICT) Business (Transportation Network)	0.00	0.50	1.00	1.50	1.50
4	Insured affordable housing units (rental) – 25 to 40 units each with 20 self-contained or 16 one-bedroom or similar affordable apartments for rent	0.00	0.40	0.60	0.70	0.80
5	Fish Farm (200-400 fish ponds with an average of 1,000-5,000 or more Catfish or Crocker fish each) (1-2 hectares)	0.00	1.00	1.50	1.50	2.00
6	Poultry Farm (40,000 to 100,000 or more birds in a mixture of layers and broilers -- Intensive) (2-5 hectares)	0.00	1.00	1.50	1.50	1.50
7	Oil Palm Plantation (20 hectares) (Revenue from palm oil, palm kernel oil, and so on)	0.00	0.00	0.00	0.00	0.05
8	Water Extraction and Purification Plants (2 hectares)	0.00	0.30	0.30	0.30	0.30
9	Intellectual Property Output from Faculty (Revenue from royalties on intellectual property is difficult to predict reliably)	-	-	-	-	-
	TOTAL	0.00	4.20	6.90	7.75	9.15

3. PROPOSED DURATION OF ACTIVITY

5 YEARS

4. ANY PROPOSED "COST-SHARING OR MATCHING" (SEE 2 CFR 200.306)

NONE.

1. BRIEF DESCRIPTION OF APPLICANT’S PREVIOUS WORK AND EXPERIENCE, BOTH FUNCTIONALLY AND GEOGRAPHICALLY

CHIEF BARRISTER LEONARD EDUM ADOKI (PARAMOUNT RULER OF AMALEM COMMUNITY – REPRESENTING AMALEM COMMUNITY – PUBLIC PARTNER)

I am Chief Barrister Leonard Edum Adoki, the Paramount Ruler of Amalem Community, Abua, and I represent Amalem Community as the Public Partner in this Public Private Partnership.

DR. FRANK EDUGHOM EKPAR (FOUNDER AND CHANCELLOR OF SCHOLARS UNIVERSITY – REPRESENTING SCHOLARS UNIVERSITY LTD – PRIVATE PARTNER)

I am Dr. Frank Edughom Ekpar, the Founder and Chancellor of Scholars University and I represent Scholars University as the Private Partner in this Public Private Partnership.

In 2022 in Abua, Nigeria, I founded Human Prosperity Foundation, a non-profit foundation designed to champion community development and educational advancement.

Earlier in 2020 in Abua, Nigeria, I founded Scholars University, the world’s first inclusive scholarship university in Africa with a mission to create prosperity and reduce suffering through high quality education.

Although born and raised in rural sub-Saharan Africa and compelled by poverty to hawk farm produce in the village and attend resource-starved primary and secondary schools, I benefited from fully funded merit-based scholarships from the Japanese and Hungarian Governments and went on to obtain a doctorate degree in Systems Science and Engineering and to contribute to humanity through inventions, software products and services, academic publications and other intellectual output. I rose above the circumstances of my birth and upbringing through hard work and faith. My journey validates the premise on which Scholars University is founded and demonstrates the inclusiveness of the approach to capacity building adopted by Scholars University.

Using my personal savings and the goodwill of the people of Amalem, Abua, I acquired over 130 hectares (equivalent to approximately 1.2 Km x 1.1 Km) of land with an estimated market value of over US\$ 1.48 million for Scholars University. I paid a fraction of the estimated market value of over US\$ 1.48 million with a promise – enshrined in a Memorandum of Understanding

(MOU) I signed with the community -- to reserve a percentage of scholarship and non-academic job slots for the people of Amalem, Abua when Scholars University commences operations. This achievement required excellent negotiation skills, management of a diverse team of real estate experts, legal experts, negotiators and communicators as well as available resources.

I have also negotiated and signed a Public Private Partnership with our Host Community, Amalem Community, Abua, for the firm establishment of Scholars University. This Public Private Partnership is enshrined in the attached Deed of Partnership between Amalem Community, Abua and Scholars University. This achievement required excellent negotiation skills and prudent management of a diverse team of legal experts, negotiators and communicators.

Much earlier in 2009 in Fukushima, Japan, I founded and launched the Universal Education Initiative to help make high quality education universally accessible by giving out free licenses to standard editions of my software products to educational institutions around the world. Licenses worth over US\$ 1 million were issued between 2009 and 2010. The beneficiaries of this initiative include the Michlalah Jerusalem College in Jerusalem, Israel represented by Yossi Klein, currently the Chief Technology Officer (CTO) and the New Media Coordinator at the time I issued the free licenses (including licenses to Imatronics Interactive Video) in 2010.

I am an inventor, educator, philanthropist (through Human Prosperity Foundation, Scholars University, the Universal Education Initiative and other channels) and entrepreneur and I have carried out and disseminated pioneering research and subsequently developed commercial products that enable the creation of distortion-free interactive virtual tours and 360-degree panorama / virtual reality environment navigation systems for use in Virtual Reality, Augmented Reality, Mixed Reality, aspects of the Metaverse and related applications. These inventions have expanded the application domains for immersive virtual reality and are described in United States Patent Number 7,567,274, United States Patent Number 6,671,400 and Japan (Counterpart) Patent Number 3,650,578. Furthermore, my award-winning software products -- including Imatronics Panorama Express and Imatronics Interactive Video -- have been purchased and used by reputable organizations all over the world including, but not limited to, the British Broadcasting Corporation (BBC) and the United States Pacific Northwest National Laboratory (PNNL). These products and inventions were developed, conceived and patented while I resided in Japan and required excellent management of international teams of developers, designers, legal experts, marketers and available resources.

Apart from the aforementioned United States and Japan patents and commercial applications, I have also published my research -- in topics including Brain-Computer Interfaces, Computer Vision, Artificial Intelligence including Artificial Neural Networks, Virtual and Augmented Reality -- in peer-reviewed academic journals and presented results at peer-reviewed

international conferences. Aspects of my research can be accessed via my Google Scholar profile located at <https://scholar.google.com/citations?user=ono3o3oAAAAJ&hl=en>.

I have also played global leadership roles including serving as Session Chair at peer-reviewed international conferences organized by the Institute of Electrical and Electronics Engineers (IEEE) and serving as a reviewer for articles submitted to academic journals such as the IEEE Transactions on Industrial Informatics.

My research has been recognized with numerous awards including elevation to Senior Member grade (available to fewer than 8% of members at the time) in the IEEE in 2007 for significant contributions to Computer Science/Engineering, first prize at the 4th Hungarian National Youth Scientific and Innovation Competition (a premier national youth Science and Innovation contest in Budapest, Hungary) in 1995, third prize at the 7th European Union Contest for Young Scientists (a European contest in Newcastle-upon-Tyne, United Kingdom featuring the best young scientists in Europe who have already won national contests) in 1995, first prize at the Scientific Student Workshop Conference at the Technical University of Budapest, Hungary in 1995, honourable mention at the First Step to Nobel Prize in Physics International Competition in 1993 and several highly competitive merit-based scholarship and fellowship awards between 1994 and 2007.

Educated on three continents, I am familiar with several languages and cultures around the world including English, Japanese, Hungarian and Abuan. I hold a doctorate degree in Systems Science and Engineering and a master's degree in Computer Science and Electronics from the University of Toyama (formerly known as Toyama University), Japan as well as a bachelor's degree in Computer Engineering from the Budapest University of Technology and Economics (formerly known as Technical University of Budapest), Hungary.

I am passionate about leveraging high quality education for the exponential advancement and peace of humanity.

SUPPORTING DOCUMENTS AND ATTACHMENTS

- 1.** Deed of Partnership for Public Private Partnership between AMALEM COMMUNITY and SCHOLARS UNIVERSITY.
- 2.** Deed of Conveyance (and associated Site Plan) granting permanent and irrevocable title to over 130 hectares (equivalent to approximately 1.2 Km x 1.1 Km) of land in Amalem, Abua with an estimated market value of over US\$ 1.48 million to SCHOLARS UNIVERSITY LTD.
- 3.** Certificate of Incorporation of SCHOLARS UNIVERSITY LTD.
- 4.** Doctorate Degree from Toyama University, Japan.
- 5.** Master's Degree from Toyama University, Japan.
- 6.** Bachelor's Degree from the Technical University of Budapest, Hungary.
- 7.** Certificate of Reviewer Recognition from IEEE.
- 8.** Letter from IEEE announcing Elevation to Senior Member Grade.
- 9.** European Union Contest for Young Scientists Award Certificate.
- 10.** Hungarian National Youth Science and Innovation Competition Award Certificate.
- 11.** Scientific Student Workshop Conference at Technical University of Budapest Award Certificate.
- 12.** Honourable Mention at First Step to Nobel Prize in Physics International Competition.