VIRON MMI
Molecular Medicine Institute

"Endowment Supporting Education & Research in the Arts & Sciences"
Brief Presentation: https://youtu.be/0z8cnnVwrMI

Education & Research in the Arts and Sciences are the basic pillars for societal progress. They serve as the vehicle to foster understanding, critical thinking and creativity, promoting peace and prosperity globally.

The Molecular Medicine Institute (MMI) is a charitable research and education foundation, with the vision to progress our fundamental understanding of the 'rules of life' via 'convergence research' to benefit humanity. The mission of the MMI is to conduct transforming research and education through collaboration with leading academic and research institutions, dedicated to bring education and research opportunity in the US and globally. To achieve this, the MMI has established an **"Endowment Supporting Education & Research in the Arts & Sciences" [https://www.vironinstitute.com/vision-mission].** The framework for this endowment will enable the support of academic programs from school through college levels, for doctoral and post-doctoral programs both in the fundamental and translational sciences, the support of education, art and literature at every level, and the support of our national academies such as the National Academy of Arts & Sciences and the National Academy of Science.

The conventional approach in supporting education and research in the arts and sciences, has primarily relied on **public funding** and **private philanthropy**. Although this approach has worked well in the past centuries, it is constantly faced with uncertainties, either due to a loss of available public funding or a shift in focus of private philanthropy.

To overcome the limitations associated with complete reliance on **public funding** and **private philanthropy,** the **"Endowment for the Support Education & Research in the Arts & Sciences"** will be generated using a robust business model platform, where leading scholars in the Sciences will serve as consultants to help progress the translation and commercialization of new and novel invention and discoveries to benefit society. In the process, **participating consultants will receive remuneration for their expert consultation as honorariums**, a portion of which

will be used to help established the "Endowment to Support Education & Research in the Arts & Sciences".

Background

In a 2024 report on R&D in the US by the Board of the National Science Foundation, the executive summary states that:

- In 2022, the United States performed an estimated **$885.6 billion** in research and development (R&D). The **business sector** was the largest R&D funder with **$672.9 billion**, or **76%** of total U.S. R&D. In comparison, the **federal government** funded **18%** of U.S. R&D **($159.8 billion**) as the second-largest source. Of the $159.8 billion dollars, **40% went to basic research**, **30% to higher education**, and **29% to intramural R&D**.

1. Companies across various sectors, especially pharmaceuticals, are increasingly outsourcing R&D activities to reduce cost, access specialized expertise, and accelerate development. University researchers and novel spin off companies have become especially attractive.

2. It is important to note that academic spin-offs initiated by academic scientists to commercialize technologies that originate from their inventions and discoveries often financially underperform in comparison to corporate spin-offs, despite **frequently leading in technological and scientific advancements**. This underperformance by most academic spinoffs has been attributed to result from a number of issues, namely: **(a)** Academic founders tend to prioritize non-economic goals, and are often faced with **(b)** commercial challenges such as limited exposure to the private sector, difficulty in recruiting commercial expertise, lack of essential business and financial knowledge skills, and importantly the lack of resources.

3. M&A: Since 2020, yearly acquisitions in the **life sciences** has been between **$250 billion to $450 billion**. (https://www.mckinsey.com/capabilities/m-and-a/our-insights/life-sciences-primed-for-an-increase#/)

Our Approach

1. Establish a 10-member Board of Directors composed of leading business and financial experts, educationists, scientists and artists, to oversee the **"Endowment Supporting Education & Research in the Arts & Sciences".**

2. Establish expert **'consulting consortia'** by recruiting global leaders in each required field.

3. The foundation will help companies identify academic experts for their R&D investments, and in doing so, receive a negotiable portion of such investments as a fee.

4. The foundation will help in the acquisition of spin-offs initiated by academic scientists to commercialize product and technologies that originate from their inventions and discoveries for a negotiable portion of equity.

5. The foundation will also make investments in spin-offs initiated by academic scientists to commercialize product and technologies for a negotiable portion of equity.

6. The endowment is open to the establishment of partnership with other such non-profit foundations and organizations with similar goals and objectives. A negotiable membership fee will be requested from participating institutions.

7. **Foundation consultants will receive a negotiable portion of a successful transaction they are involved in.**

These activities by the foundation will help: **(a)** Generate revenue for the endowment for supporting its mission. **(b)** Accelerate the translation of high-quality, novel and safe products for societal use. **(c)** Establish the freedom to support new programs in the Arts and Sciences to benefit society without any major constraints.

Leadership

The endowment leaders come from a broad range of expertise in education and research in the arts and sciences such as business, medicine, education, technology and communications. Our board of directors are guided by the endowment's mission to help support at every level, education and research in the arts and sciences to benefit society.

Board of Directors: "Endowment for the Support Education & Research in the Arts & Sciences"

1. **Bhanu P. Jena, Ph.D., Chair, Board Member**
   As chair of the endowment, Prof. Bhanu P. Jena shapes and approves objectives and strategies, advocates for the endowment issues, and sets the foundation's overall direction.
   Bio: https://www.jenalaboratory.com/biography

2. **Guillermo Marmol, MBA., CEO, Board Member**
   As CEO of the endowment, Mr. Guillermo Marmol promotes the objectives and strategies of the endowment, and helps in achieving its overall goals.
   Bio: https://www.porosome.com/management-team/guillermo-marmol-mba

3. **Joachim Frank. Ph.D., President Scientific Research, Board Member**
   Bio: https://biology.columbia.edu/content/joachim-frank

4. **Richard J. Roberts. Ph.D., President Scientific Research, Board Member Bio:** https://royalsociety.org/people/richard-roberts-12188/

5. **Andrew Lo, Ph.D., President Business & Finance, Board Member**
   Bio: https://mitsloan.mit.edu/faculty/directory/andrew-w-lo#about

6. **Robert Flaumenhaft, MD., Ph.D., President Health & Medicine, Board Member**
   Bio: https://hemostasis.bidmc.org/people/robert-flaumenhaft-md-phd/

7. **Patricia A. Graham, Ph.D., President Education, Board Member**
   Bio: https://www.gse.harvard.edu/directory/faculty/patricia-albjerg-graham

8. **Howard E. Gardner, Ph.D., President Education, Board Member**
   Bio: https://www.gse.harvard.edu/directory/faculty/howard-gardner