

Ben Pourbabai

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To Whom It May Concern:

I would like to apply for the position of President of University of Central Florida.

The highlights of my academic career include:

At New York University (NYU), as an Assistant Professor, I taught business analytics and information systems in the Department of Information, Operations and Management Sciences at Leonard N. Stern School of Business.

At the University of Maryland at College Park (UMCP), as an Associate Professor, I taught technology management, innovation and technology-focused entrepreneurship in Dingman Center for Entrepreneurship and business analytics and information systems at Robert H. Smith School of Business; taught systems engineering in the A. James Clark College of Engineering; and served as Director of the Center for Production, Operations Management, and Engineering (CPOME).

At Tilburg University (Catholic University of Brabant at Netherlands), as a Full Professor, I taught in TiasNimbas Business School, and contributed to developing the executive technology management program through collaboration with my Dutch colleagues.

At US Department of Transportation (DOT), I served as the Chief Scientific and Technology Officer at Federal Aviation Administration (FAA); directed the FAA Academy¹; taught in the Academy; led development of the executive education program as a high priority initiative within the Academy through the Center for Management and Executive Leadership; and managed the agency's six national centers of R&D excellence.

I appreciate the opportunity to apply for this position and am available should you have any questions or require further information.

Sincerely,

Ben Pourbabai

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Enclosure

¹ **FAA Academy** is a post graduate university at US Department of Transportation's Federal Aviation Administration (FAA) and is accredited by North Central Association (NCA) of Colleges and Schools.

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Administrative Vision:

During my career, I have served in the higher education, the federal government, and the private sector in different executive capacities; have liaised and collaborated effectively with the relevant stake holders in government, private sector, NGOs, and higher education community; and have recognized political realities and the governing mandates.

I do believe that strength of any organization is a function of abilities and resourcefulness of its employees. As a result, during my career, I have contributed to creating an agile workforce; recruited, trained, and retained technical and scientific staff, and promoted those with innovative and entrepreneurial abilities for leadership positions; and when necessary, have delegated responsibilities to qualified members of my team, and have empowered them to excel and gain visibility to advance their careers; have protected and promoted under-represented minorities; have contributed to developing policies and strategies for creating and maintaining an inclusive multicultural working environment to welcome under-represented minorities; have proposed and implemented strategies to recruit and to retain under-represented minorities; initiated corrective actions and introduced individual development and training plans for the under-performing employees; and have had constructive engagements with the staff regarding their performances; and have made the difficult decisions.

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Academic Vision:

1- Achieving Academic Excellence:

To achieve academic excellence in the higher education, the relevant stake holders ought to contribute to developing innovative and entrepreneurial strategies and policies for:

- Enhancing quality of the academic programs through all available means including: modernizing the curricula; gradually embracing emerging and evolving academic disciplines and sub disciplines; gradually abandoning outdated academic disciplines and sub disciplines; and gradually lifting the barriers among some academic disciplines and sub disciplines;
- Creating a student-centered learning environment;
- Empowering junior faculty (through coaching and guidance) to teach more effectively;
- Continuously evaluating teaching performance in class rooms;
- Empowering students (through coaching and guidance) to study more effectively;
- Continuously evaluating the learning outcomes through reliance on independent and discreet performance assessments² methodologies;
- Empowering younger scholars (through coaching and guidance) to engage in scholarly collaborative initiatives (including basic research and R&D), and to learn how to apply for grants and how to publish more effectively;
- Continuously evaluating productivity and quality of scholarly initiatives;
- Attracting, recruiting, and retaining promising students, faculty, and staff;
- Creating a state of art physical education infrastructure;
- Creating a state of art virtual education infrastructure;
- Embracing emerging and evolving e-education technologies³;
- Welcoming under-represented minority students, faculty, and staff; and creating an “unbiased” and “inclusive” multicultural working environment (where under-represented minorities would be recognized just like anyone else, and not be stereotyped as a member of an under-represented minority class);

² Reliance on students’ evaluations, grades, or public domain on-line teaching evaluation tools might be misleading and undesirable. Administrators ought to “discreetly” assess the learning outcomes through reliance on the relevant stake holders (including asking well respected professors in the same field to assess the teaching performance), and the emerging teaching assessment technologies, to improve the teaching quality and the quality of the academic programs.

³ **E-education** (cyber-education, digital education, etc.) refers to information, networking, and automation technologies and cognitive sciences that facilitate creation, modification, and improvement of learning functions, processes, and outcomes. E-education is rapidly gaining popularity among students, teachers, and administrators. Increasing popularity of virtual education among students is partly influenced by the enormous flexibilities (e.g., abilities to choose when, where, and how frequently to access the teaching materials) that are gained by the students.

E-education technologies are likely: 1) to create synergy in higher education, and facilitating removal of some barriers among some aspects of every academic discipline including science, engineering, business, and medicine (as well as removal of some barriers among some aspects of various sub-disciplines); 2) to contribute to emergence and evolution of new academic disciplines and sub-disciplines, and elimination of some outdated academic disciplines and sub-disciplines; 3) to contribute to emergence and evolution of robotic teachers, virtual learning platforms, and global virtual education platforms; 4) to contribute to emergence and evolution of virtual classrooms and campuses; 5) to contribute to emergence and evolution of recruitment and tenure practices; 7) to create opportunities to recruit students, faculty, and staff globally; and 8) to intensify competition among universities staff globally.

- Creating a safe⁴ learning and working environment; and
- Generating revenue through all available means including entrepreneurial initiatives.

Academic excellence would ultimately translate into improving the university's global visibility, recognition, popularity, increased enrollment, and higher revenue streams.

2- Generating Revenue:

In the future, the higher education's landscape is likely to evolve dramatically due to:

- Emerging and evolving e-technologies⁵ including e-education
- Emerging and evolving academic disciplines and sub-disciplines
- Emerging and evolving competition among global universities through reliance on robust e-education infrastructures
- Emerging and evolving cost of operations
- Emerging and evolving patterns of: global economy; geopolitics; demographics; and globalization

As a result, the relevant stake holders ought to consider proactively envisioning, developing, and implementing entrepreneurial revenue-generating policies and strategies to empower the university to achieve academic excellence while meeting its evolving financial obligations through all available means.

2.1. Generating Revenue through Creating a Robust e-Education Infrastructure:

E-education is rapidly gaining popularity among students, teachers, and administrators.

Increasing popularity of the e-education among students is partly influenced by the enormous flexibilities (e.g., abilities to choose when, where, and how frequently to access the teaching materials) that are gained by the students.

⁴ Creating a safe learning environment can be achieved through: 1) proactively addressing safety and security vulnerabilities of the physical infrastructure in the case of emergencies; and 2) proactively addressing safety and security vulnerabilities of the university's cyber infrastructure while safeguarding the privacy of students, faculty, and staff.

⁵ **E-technologies** are also recognized as **information and networking technologies**, or **digital technologies**, or **cyber technologies**, or **virtual technologies**, or **intelligent and autonomous technologies**, or **automation technologies**.

A sample of e-technologies includes: data mining, data management, pattern recognition, and deep learning technologies; machine learning technologies; machine intelligence technologies; automation technologies; virtual cognition technologies; automated decision making technologies; robotics technologies; intelligent and autonomous technologies; cybernetics technologies; smart product, smart structure and smart infrastructure technologies; virtual games; e-service technologies; e-medicine technologies; e-agriculture technologies; e-learning and education technologies; e-art technologies; e-reality technologies; e-mathematics technologies; e-transportation technologies (including driverless vehicle technologies, unmanned or pilotless aerial vehicle technologies, unmanned or pilot-less naval vehicle technologies); e-energy technologies; e-law technologies; e-environment technologies; e-government technologies; e-surveillance and e-reconnaissance technologies; biometrics technologies; human-features recognition technologies; e-intelligence-gathering technologies; e-law-enforcement technologies; e-weapons technologies; e-warfare technologies; e-battlefield technologies. These technologies and the corresponding derivative-technologies have also contributed to creating new products and services.

E-education technologies are still at their infancy. The emerging and evolving e-education technologies are gradually going to become affordable and will provide significant revenue-generating opportunities.

To generate significant revenue through a global e-education infrastructure, a customized e-education infrastructure (and the digital content for the relevant digital-academic products and programs) ought to be envisioned, developed, and implemented, to empower the university to offer degreed and non-degreed digital-academic programs and services to the global student population in different languages.

2.2. Generating Revenue through R&D⁶

Some ideas, inventions, and technologies could change the future, the society, and the status quo, and some ideas, inventions and technologies could generate significant revenue for the contributors and the university.

The intellectual and imaginative capacities of some gifted members of the faculty, the students, and the staff are priceless and ought to be more effectively managed by knowledgeable executives to generate revenue for the university.

Therefore, the relevant members of the faculty, the students, and the staff ought to be encouraged, be incentivized, and be assisted to choose to participate in R&D and innovative entrepreneurial initiatives, to generate revenue for the university.

2.3. Generating Revenue through Technology Development & Commercialization⁷:

Presently many universities have limited their involvements in technology commercialization to developing, patenting, and transferring technologies to the private sector. In effect, these universities have allowed the private sector to benefit immensely by commercializing the university's intellectual assets.

However, the revenue that is generated through technology licensing and transfer is insignificant when it is compared with potential revenue that could be gained through university-sponsored commercialization process that includes ownership of the resulting technologies and startup companies. Therefore, universities ought to explore feasibility of developing and commercializing technologies either independently or through collaboration and partnership with the private sector.

⁶ There are significant differences between basic research and R&D initiatives. **Basic research initiatives** are funded through grants; the initiatives have almost unlimited scope; often there are no requirements for neither proof of concept nor prototyping; researchers are free to explore and discover; there are no expectations except involvement of the researchers in the proposed initiatives; and researchers are free to discuss and publish their contributions. However, **R&D initiatives** might be funded through different funding strategies; often either proof of concept or prototyping is expected; the budget and the schedule are strictly monitored and managed; the initiatives do have specific scopes and deliverables; participants might be required to sign non-disclosure agreements to protect either proprietary outcomes or sensitive information; and participants might be required to neither disclose nor publish their contributions.

⁷ **University-sponsored R&D, Technology Development & Commercialization:** Presently many universities have limited their involvements in technology commercialization to developing, patenting, and transferring technologies to the private sector. In effect, these universities have allowed the private sector to benefit immensely by commercializing the university's intellectual assets. However, the revenue that could be generated through technology licensing and transfer is significantly less than the potential revenue that could be gained through the university-sponsored commercialization process (that includes ownership of the resulting technologies and startup companies). Therefore, universities ought to explore feasibility of developing and commercializing technologies either independently or through collaboration and partnership with private sector.

2.4. Emerging Funding & R&D Opportunities:

E-technologies are evolving rapidly, and have already resulted in creating new derivative-technologies, products, and services in every business and government sectors. E-technologies are continuously evolving. The change process and the rate of change are greatly influenced by rapid advances in computing technologies and the processing speed. As a result, e-technologies and the corresponding derivative-technologies, products, and services are continuously upgraded and enhanced. E-technologies are dual-use⁸ and have multiple applications in civilian and defense sectors.

Presently, both private sector and federal government provide:

1. Funding opportunities for basic research⁹ in science, engineering, and business corresponding to development of e-technologies (and corresponding derivative technologies, products, and services).
2. Funding opportunities for R&D¹⁰ for creating and prototyping viable e-technologies (and corresponding derivative technologies, products, and services).
3. Funding opportunities for e-technology transfer and commercialization, and creating new business ventures and startup companies for development of e-technologies (and corresponding derivative technologies, products, and services).
4. Funding consulting opportunities for providing strategic support to relevant stake holders in government, private sector, and NGOs for envisioning policies and strategies to optimally utilizing e-technologies (and corresponding derivative technologies, products, and services), while minimizing the cost and the corresponding potential risks, vulnerabilities, and liabilities.
5. Funding opportunities for basic research for investigating and assessing potential risks, vulnerabilities, and liabilities of e-technologies (and corresponding derivative technologies, products, and services), and the e-transformation¹¹ process.

⁸ Dual-use technologies have both civilian and non-civilian applications.

⁹ Scholars and scientists who choose to be involved in basic research are free; 1) to choose their desired research domains; 2) to choose what to investigate; 3) to choose to investigate a desired topic independently or collaboratively; 4) to choose how to investigate; 5) to choose what quantitative and qualitative scientific methodologies to employ during the investigation process; 6) to choose what type of data and information to gather during the investigation process; 7) to choose what part of data and information to select and use during the investigation process; 8) to choose how to interpret the data and the information during the investigation process; 9) to choose how to proceed during the investigation process; 10) to choose to allow independent supervision of the investigation process by third parties or not; 11) to choose when to abandon the investigation process; 12) to choose what and how to report the desired outcomes to the scientific community; and 13) to choose when to report the desired outcomes to the scientific community. As a result, the basic research outcomes from different scholars who have engaged in a comparable scientific investigation may be different. However, engaging in R&D is a vastly different than engaging in basic research. For brevity, it might suffice to suggest that almost none of the freedoms that are enjoyed by scholars and scientists who may choose to engage in basic research are offered to those who are tasked to participate in sponsored-R&D initiatives.

¹⁰ **United States' research infrastructure** has two components. The first component that is in public domain, focuses on basic research, has a relatively limited budget (even though it is in the \$ multi-billion range), has almost unlimited scope, and the outcomes are rarely classified. The second component that is not necessarily in public domain, focuses on research and development (R&D) of novel systems, technologies, processes, and prototypes, has almost unlimited budget, has a relatively limited scope, and the outcomes are often classified.

¹¹ **E-transformation** process (as a minimum) will impact other derivative technologies, products, and services; education sector; business and service sector; government sector; environment; safety and security; public health; social behavior; living and working space and environment; energy consumption and sector; labor market and employment patterns; transportation sector; law enforcement; economy, global finance, and financial sector; national security; demographic; globalization; and society.