

**Financial Oversight and Management Board for Puerto Rico  
Public Meeting on Economic Development for Puerto Rico  
Education: Training the Workforce for Economic Success**

**Polytechnic University of Puerto Rico  
Dr. Ernesto Vazquez-Barquet**

**GOOD AFTERNOON DISTINGUISHED MEMBERS OF THE FINANCIAL OVERSIGHT AND MANAGEMENT BOARD FOR PUERTO RICO. MY NAME IS ERNESTO VAZQUEZ-BARQUET, PRESIDENT OF POLYTECHNIC UNIVERSITY OF PUERTO RICO. TODAY I WILL PRESENT SEVERAL INITIATIVES THAT THE UNIVERSITY DEVELOPED IN ORDER TO REVITALIZE THE PUERTO RICO WORKFORCE FOR ECONOMIC SUCCESS. BUT FIRST, FOR THE BENEFIT OF THE BOARD MEMBERS AND THE GENERAL PUBLIC, I WANT TO GIVE A SHORT OVERVIEW OF OUR UNIVERSITY.**

**POLYTECHNIC UNIVERSITY OF PUERTO RICO (PUPR) IS A PRIVATE, NON-PROFIT, COEDUCATIONAL, NONSECTARIAN INSTITUTION FOUNDED IN 1966. AT PRESENT IT IS THE LARGEST PRIVATE SCHOOL OF ENGINEERING AND ARCHITECTURE IN PUERTO RICO AND STILL THE ONLY ONE IN SAN JUAN, CAPITAL OF PUERTO RICO.**

**PUPR AS A BUSINESS IS AN EXAMPLE OF ECONOMIC SUCCESS. BACK IN THE 1960'S, THE ONLY COLLEGE OF ENGINEERING IN THE ISLAND WAS AT THE UNIVERSITY OF PUERTO RICO – MAYAGUEZ, THE PUBLIC UNIVERSITY. DUE TO THE FACT THAT MOST OF THE PUERTO RICO POPULATION LIVES IN THE METROPOLITAN AREA AND THAT THERE WAS A LACK OF ACADEMIC OFFERINGS RELATED TO THE FIELD OF LAND SURVEYING AND MAPPING, MR.**

**ERNESTO VAZQUEZ TORRES, MY FATHER, FOUNDED “LICEO TECNOLÓGICO”, THE INSTITUTION THAT HELPED CREATE POLYTECHNIC UNIVERSITY OF PUERTO RICO. TODAY, PUPR IS THE LARGEST PRIVATE HISPANIC SERVING ENGINEERING AND ARCHITECTURE SCHOOL IN THE UNITED STATES AND ITS TERRITORIES.**

**PUPR SEEKS TO DEVELOP HIGHLY QUALIFIED PROFESSIONALS WITH AN UNDERSTANDING OF GENERAL CULTURE AND WITH A SENSE OF SOCIAL RESPONSIBILITY. THE INSTITUTION STRIVES TO MAINTAIN THE ACADEMIC EXCELLENCE THAT MUST CHARACTERIZE MODERN SCIENTIFIC AND TECHNOLOGICAL UNIVERSITIES AND TO INCORPORATE IN ITS ADMINISTRATIVE STRUCTURE AND ACADEMIC PROCESSES ALL THE TECHNIQUES THAT WILL ENABLE OUR GRADUATES TO FACE SUCCESSFULLY THE DYNAMIC AND CHANGING WORLD.**

**PUPR HAS THREE (3) CAMPUSES, THE MAIN CAMPUS IS LOCATED IN SAN JUAN, PUERTO RICO, A SECOND ONE IN MIAMI AND A THIRD ONE IN ORLANDO, FLORIDA. IT OFFERS ASSOCIATE, BACHELORS, MASTERS AND DOCTORAL DEGREES THROUGH FOUR (4) COLLEGES, THE COLLEGE OF ENGINEERING, THE COLLEGE OF ARCHITECTURE, THE COLLEGE OF MANAGEMENT AND ENTREPRENEURSHIP AND THE COLLEGE OF ARTS, SCIENCE AND EDUCATION.**

**PUPR HAS BEEN CHARACTERIZED AS A VISIONARY UNIVERSITY IN PUERTO RICO, ALWAYS LOOKING FOR EDUCATIONAL DEVELOPMENT OPPORTUNITIES BASED ON THE ECONOMIC NEEDS OF THE ISLAND. FOLLOWING THIS INNOVATION SPIRIT, PUPR HAS**

**DEVELOPED SEVERAL PROGRAMS THAT WERE THE FIRST AND/OR THE ONLY ONE TO BE DEVELOPED IN THE ISLAND. AMONG THESE PROGRAMS ARE THE FOLLOWING.**

- BACHELOR OF SCIENCE IN LAND SURVEYING AND MAPPING – FIRST IN PR**
- BACHELOR OF ARCHITECTURE – FIRST IN PR**
- BACHELOR OF SCIENCE IN ENVIRONMENTAL ENGINEERING – FIRST AND ONLY IN PR**
- BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING WITH A MINOR IN AEROSPACE SCIENCE – FIRST IN PR**
- BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING – FIRST AND ONLY IN PR**
- MASTER IN ENGINEERING MANAGEMENT – FIRST AND ONLY IN PR**
- MASTER IN ENVIRONMENTAL MANAGEMENT – FIRST IN PR**
- MASTER OF SCIENCE IN MANUFACTURING ENGINEERING – FIRST AND ONLY IN PR**
- MASTER IN MECHANICAL ENGINEERING IN AEROSPACE SCIENCE – FIRST IN PR**
- MASTER IN GEOSPATIAL SCIENCE AND TECHNOLOGY – FIRST AND ONLY IN PR**
- MASTER IN LANDSCAPE ARCHITECTURE – FIRST AND ONLY IN PR**
- PHD IN ENGINEERING AND APPLIED SCIENCE – FIRST AND ONLY IN PR**

**ALL PROGRAMS AT PUPR ARE AUTHORIZED BY THE STATE LICENSING AGENCY (PUERTO RICO EDUCATIONAL COUNCIL) AND ACCREDITED BY THE MIDDLE STATES ASSOCIATION OF COLLEGES AND SCHOOLS. ALL OF OUR ENGINEERING, ARCHITECTURE, MANAGEMENT AND LANDSCAPE ARCHITECTURE PROGRAMS ARE ACCREDITED BY:**

- ✓ ACCREDITATION BOARD FOR ENGINEERING AND TECHNOLOGY (ABET),**
- ✓ THE NATIONAL ARCHITECTURAL ACCREDITING BOARD (NAAB),**
- ✓ THE INTERNATIONAL ASSEMBLY FOR COLLEGIATE BUSINESS EDUCATION (IACBE),**
- ✓ AND BY THE LANDSCAPE ARCHITECTURE ACCREDITATION BOARD (LAAB) RESPECTIVELY.**

**AS YOU CAN SEE, PUPR ALWAYS STRIVES TO ACHIEVE THE HIGHEST LEVEL OF ACADEMIC ACCREDITATION COMPARABLE TO THOSE OF THE MOST PRESTIGIOUS UNIVERSITIES IN THE WORLD.**

**POLYTECHNIC UNIVERSITY OF PUERTO RICO HAS RECEIVED EDUCATIONAL EFFORTS, AMONG THEM ARE:**

- ✓ NATIONAL CENTER OF EXCELLENCE IN CYBER DEFENSE EDUCATION BY THE NATIONAL SECURITY AGENCY AND THE DEPARTMENT OF HOMELAND SECURITY;**
- ✓ HONEYWELL SCHOOL BY HONEYWELL CORPORATION;**
- ✓ LARGEST HISPANIC MASTER DEGREE PRODUCER BY EXCELENCIA IN EDUCATION AND**

- ✓ **LARGEST PRIVATE HISPANIC SERVING ENGINEERING SCHOOL IN THE UNITED STATES AND ITS TERRITORIES BY THE AMERICAN SOCIETY OF ENGINEERING EDUCATION.**

**UNTIL NOW PUPR HAS GRADUATED OVER 10,000 ENGINEERS, 500 ARCHITECTS AND THOUSANDS OF BUSINESS ADMINISTRATORS. CURRENTLY, PUPR ANNUALLY PRODUCES APPROXIMATELY 8 PERCENT OF ALL THE HISPANIC ENGINEERS IN THE UNITED STATES AND ITS TERRITORIES. ALL OF THE ENGINEERING DEGREES OFFERED BY PUPR ARE RANKED IN THE TOP 10 OF MOST EMPLOYABLE CAREERS ACCORDING TO THE US LABOR DEPARTMENT.**

**THEREFORE, LADIES AND GENTLEMEN OF THE BOARD, POLYTECHNIC UNIVERSITY IS IN AN EXCELLENT POSITION TO ASSIST THE PUERTO RICO WORKFORCE TO ACHIEVE ECONOMIC SUCCESS. AMONG THE INITIATIVES THAT THE UNIVERSITY DEVELOPED IN ORDER TO REVITALIZE THE PUERTO RICO WORKFORCE FOR ECONOMIC SUCCESS ARE:**

- 1. PROVIDE TRAINING TO UNEMPLOYED WORKERS IN AREAS OF HIGH MARKET DEMAND SUCH AS, CYBERSECURITY, COMPUTER SKILLS, PROJECT MANAGEMENT, LEAN SIX SIGMA, SUPPLY CHAIN, INTERIOR DESIGN, ENVIRONMENTAL MANAGEMENT, OCCUPATIONAL SAFETY, PROGRAMMING AND SOFTWARE APPLICATIONS, FACILITIES AND EQUIPMENT MAINTENANCE, ENERGY MANAGEMENT, PROCESS AUTOMATION, AMONG OTHERS.**
- 2. PROVIDE SERVICES TO GOVERNMENT AGENCIES IN AREAS SUCH AS, ENVIRONMENTAL MONITORING, HIGHWAY AND**

**STRUCTURES ASSESSMENT, POWER SYSTEMS MONITORING, INFORMATICS, CYBERSECURITY, FACILITIES AND EQUIPMENT MAINTENANCE, AMONG OTHERS.**

- 3. PROVIDE HUMAN CAPITAL DEVELOPMENT OPPORTUNITIES TO MEDICAL DEVICES, PHARMACEUTICAL, AND AEROSPACE COMPANIES' EMPLOYEES INCLUDING DEGREE GRANTING PROGRAMS, PROFESSIONAL CERTIFICATION PROGRAMS, AND SHORT TRAINING PROGRAMS FOCUSED ON IMPROVING MANUFACTURING PERFORMANCE.**
- 4. ADOPT PUBLIC HIGH SCHOOLS TO DEVELOP THEM WITH SPECIALIZED CURRICULUM IN MATHEMATICS AND SCIENCE, LIBERAL ARTS OR MANAGEMENT TO SERVE AS FEEDERS TO OUR ENGINEERING, ARCHITECTURE AND MANAGEMENT UNDERGRADUATE PROGRAMS.**
- 5. DEVELOP THE ACADEMIC TOURISM INDUSTRY THROUGH ALLIANCES WITH OTHER COUNTRIES AND UNIVERSITIES OUTSIDE OF PUERTO RICO, AND/OR INCENTIVE INTERNATIONAL STUDENTS TO COME TO PUERTO RICO TO STUDY STEM CAREERS WITH US ACCREDITATIONS AT A FRACTION OF THE US COST.**
- 6. DEVELOP HIGH INDUSTRY DEMAND INNOVATION CENTERS WITH COLLABORATION BETWEEN INDUSTRY, GOVERNMENT AND ACADEMIA IN AREAS SUCH AS, PROCESS AUTOMATION, PACKAGING, AND MATERIALS TO FURTHER DEVELOP OUR ISLAND MANUFACTURING CAPABILITIES.**

**DISTINGUISHED MEMBERS OF THE FINANCIAL OVERSIGHT AND MANAGEMENT BOARD FOR PUERTO RICO THANK YOU FOR THE OPPORTUNITY TO PRESENT THE INITIATIVES THAT POLYTECHNIC**

**UNIVERSITY OF PUERTO RICO DEVELOPED IN ORDER TO  
REVITALIZE THE PUERTO RICO WORKFORCE FOR ECONOMIC  
SUCCESS. GOOD AFTERNOON.**