**Example of Past STEM Research Institute Projects**

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| **Faculty Mentor** | **Project Title** | **Location**  |
| Adolfo Mendez | Searching for determinism in solar activity indices | Padron Campus |
| Alan Rodriguez-Santiago | Chemometrics of Honey | Homestead Campus |
| Christian Agametor/UM | Design of biorthogonal chemistry-based reporters to the study of post-translational modifications | University of Miami, Coral Gables FL |
| Clemente Fernandez | Leptogium spp. occurrence in Miami Dade College North Campus Forest Spots. | North Campus |
| Dahis Manzanares | Gene and Diseases | West Campus |
| Eduardo Araujo-Padrere | Peak-Ionosphere Height as A Proxy for Global Warming | Homestead Campus |
| Eric Hernandez | Volatility (Coefficient of Variation) for four stocks portfolios. | Kendall Campus |
| Giselle Dominguez | Computational study of the prepolymerization complex in sulfonamide-based polymers. | North Campus |
| Jorge Gibert | Project 2: PICT Camera Project Adding Sunshine to Increase Power | West Campus |
| Jorge Gibert | Project 3 Eye-Tracking System, Biometric Analysis Project, SOS | West Campus |
| Jose Garcia | Cardiovascular risk centered on Functional Obesity cause and effect  | West Campus |
| Juan Carlos Catala | Engineering Model | North Campus |
| Juan Morata | Biofuel Lipid extraction | Wolfson Campus |
| Juan Prieto-Valdez | Artificial Intelligence modeling of math function | Kendall Campus |
| Lourdes Gonzalez | Data Analytics: Big Data, Data Mining, and applications | Kendall Campus |
| Luis Saumell | Exploring Machine Learning Concepts and its application in Character Recognition | Kendall Campus |
| Manuel Carames | AI & Robotics | North Campus |
| Maria Monzon MedinaTrinidad ArguellesClaudia Sanchez | Vaping and Other Alternatives to Smoking: Impact on MDC Community | Various Campuses |
| Maria Monzon-MedinaTrinidad Arguelles Dahis ManzanaresEric BelokonClaudia Sanchez | Neuroscience and Mysteries of the Brain in Health and Disease | Various Campuses |
| Marisa Madison  | Identification and Characterization of Novel HIV Reverse Transcriptase Inhibitors Derived from Human Biological Fluid Exosomes | Homestead Campus |
| Miriam AbetyNelson De La Rosa | An analysis on the relationship between student's grit and perceptions about academic success and performance in mathematics | Various Campuses |
| Nelson De La Rosa | Data analysis to Simulate Trends of Attrition in Industry  | Kendall Campus |
| Norge Perez Pena | Data Analysis Strategies: Descriptive, Diagnostic, Predictive, and Prescriptive Analytics. | Kendall Campus |
| Roberto Cabezas | Mathematical Modeling in Epidemiology: Propagation of Infectious Diseases | Kendall Campus |
| Servando Munoz | Towards Carbon-Based Molecular Technology: Synthesis and Spontaneous Supramolecular Self-Assembly of Organic Nanoparticles. | Kendall Campus |
| Soumia Souchak | Propagation of Electromagnetic Waves in Periodic Media | Kendall Campus |
| Tammy Laberge | Using Environmental DNA to Understand the Microbial Biodiversity in Fresh Water and Sediment Samples from South Florida | North Campus |
| Theresa Chormanski | Strategies for Germinating and Propagating Florida Endangered Ferns | Kendall Campus |
| Trinidad ArguellesNelson De La Rosa | Using Data Analytics to Explore Careers in STEM | KendallWest |
| Trinidad ArguellesVarum RamberranEduardo Salcedo | Psychological Predictors of Telecare Adoption  | Various Campuses |
| University of Florida | Bioactivity assay of fungal strains against nematodes | University of Florida, Davie, FL |
| University of Florida | Investigating climate change impacts on grassland multifunctionality | University of Florida, Davie, FL |
| University of Florida | Physiological and molecular characterization of soil ammonia oxidizers | University of Florida, Davie, FL |