Applicant: BluSource Energy Inc.
Knowledge Partner: Jennifer Franck, PhD, Brown University
Location: Bristol
Industry: Marine/Shipbuilding/Engineering
Recommended Funding: $50,000

Innovation Project:

BluSource Energy partnered with Brown University on the development of the Leading Edge Oscillating Foil (LEOF), a new technology to harvest tidal energy. BluSource built the LEOF prototype and test vessel, which was successfully tested on the Cape Cod canal in 2016. BluSource has determined that the oscillating foil could readily be repurposed for marine propulsion. Early tests indicate that the LEOF can produce significantly higher thrust/hp ratios than conventional axial propellers and can have major implications to reduce power requirements for marine vessels. Continued work with Brown University will focus on the silent operation and high efficiency of electric powered oscillating foils for the propulsion of automated underwater vehicles (AUVs) and specialized military craft.

Applicant: Medley Genomics, Inc.
Knowledge Partner: Murray Resnick, MD/PhD, Rhode Island Hospital
Location: Providence
Industry: Life Sciences/data analytics
Recommended Funding: $50,000

Innovation Project:

Medley Genomics is developing novel approaches to define genomic heterogeneity is disease. Our first product focuses in oncology where we are commercializing technology developed at Brown to use genetic analysis tools to assess the complex heterogeneity found in tumors. Precision medicine is an integral component of oncology care today, assisting physicians in determining the best treatment for their patient. This novel software approach allows for superior identification of the underlying biology of the tumor, thus decreasing the chance of treatment resistance and tumor progression. Funds will be used to partner with Rhode Island Hospital to acquire and analyze key data from primary and metastatic tumors to validate the software in a clinical setting.

Applicant: NanoDe Therapeutics, Inc.
Knowledge Partner: Hongchauan Yu, PhD, Rhode Island Hospital, Orthopaedics Department
Location: Barrington

Industry: Pharmaceutical manufacturing
Recommended Funding: $50,000

Innovation Project:

NanoDe Therapeutics, Inc. (NanoDe) is a development stage company dedicated to developing delivery of RNAi (RNA Interference) therapeutics, thereby creating more effective drugs. NanoDe is founded on a novel, next generation platform nucleic acid delivery technology termed NanopiecesTM (NP) developed at Rhode Island Hospital and Brown University. NP overcomes the challenge of delivering therapeutics to dense, difficult-to penetrate tissues such as cartilage, brain, and solid tumor. Working with Rhode Island Hospital, NanoDe will learn how to best optimize the physical attributes of the NP to achieve the highest efficacy and minimal toxicity of the RNAi therapeutics, thereby developing the first disease-modifying drugs to treat rare bone cancer, post-traumatic osteoarthritis, and other challenging indications.

Applicant: Pet Tech LLC
Knowledge Partner: Kunal Mankodiya, Biosensing Laboratory, University of Rhode Island
Location: Providence
Industry: Data analytics/IoT
Recommended Funding: $50,000

Innovation Project:

Operating at the intersection of the tech and pet industries, **Pet Tech, LLC** is developing smart home technologies driven by the combination of internet-of-things (IoT), artificial intelligence (AI), data-mining, and robotics. Pet Tech will work with the Biosensing Laboratory at the University of Rhode Island to hone technical specifications for the company's Pet Rover device to support the development of the core embedded systems module for navigation and control commands.

Applicant: T-Time Productions LLC
Knowledge Partner: David Johnson, Game Design and Development, New England Institute of Technology
Project Term: 4/2017-10/2017
Location: Pawtucket
Industry: Media Production/Edtech
Recommended Funding: $30,000

Innovation Project:

T-Time Productions is designing and prototyping a racial, ethnic and gender relevant digital subscription-based curricula to support academic excellence in the increasingly diverse K-12 population. The company has developed a pilot product "Third and Long" which explores the history of the Civil Rights Movement and racial integration through the prism of pro football. With this

funding T-Time will work with New England Institute of Technology to enhance the product design and to increase student engagement via animation, gamification and translation for ELL students

Applicant: Vacuum Processing Systems, LLC
Knowledge Partner: Geoff Bothun, University of Rhode Island Chemical Engineering
Project Term: 6/2017-5/2018
Location: East Greenwich
Industry: Medical device
Recommended Funding: $50,000

Innovation Project:

Vacuum Processing Systems has developed a process to clean and sterilize a variety of items from medical devices to orthopedic implants to pharmaceutical equipment. The main barrier to adoption is FDA validation. Electron microscopy and X-ray spectroscopy instrumentation available at the University of Rhode Island (URI) will allow the company to evaluate the capability of their process to clean both internal and external surfaces of complex devices at a higher level than current techniques. Testing at URI will also provide manufacturers with a "roadmap" of testing that should be performed in order to prove safety and efficacy levels needed to receive FDA approval for use of the system with their products.