

NATIONAL INSTITUTE FOR UNDERSEA VEHICLE TECHNOLOGY

OUR COMPETITIVE ADVANTAGE

OUR REGION:

Southern New England is home to a high concentration of strategic naval assets, including naval installations, Electric Boat, 600 supply chain companies, naval laboratories, and naval colleges.

OUR TRACK RECORD:

The NIUVT partners have longstanding research relationships with the Navy and established collaborative relationships with Electric Boat and the regional supply chain.

OUR RESEARCH ENTERPRISE:

Together, UConn and URI have 70 outstanding research faculty that can support naval technologies in areas from underwater shock to human factors.

OUR TECHNOLOGY TRANSFER RESOURCES:

Resources such as the UConn Tech Park, the Connecticut Manufacturing Simulation Center, the URI Dynamic Photomechanics Laboratory, and the URI Next Generation Sensing Technology Laboratory offer an established infrastructure to transition NIUVT research to the naval supply chain, OEMs, and naval vehicles and platforms.

OUR WORKFORCE DEVELOPMENT INFRASTRUCTURE:

URI and UConn are the major suppliers of engineering graduates to the naval industry in the Southern New England region. We offer education and training programs at undergraduate, graduate, and professional levels to meet the region's need for highly skilled next generation workforce.



VISIT US ONLINE:
NIUVT.US

WHO WE ARE

The National Institute for Undersea Vehicle Technology (NIUVT) is a university-industry partnership that collaborates with the Navy to advance the capabilities of the next generation US undersea fleet by training innovative workforce and by accelerating the research, development, and transition of key enabling technologies.

OUR MISSION

NIUVT is focused on institutionalizing the numerous research, technology transfer, and workforce development activities in undersea vehicle technology that the University of Connecticut (UConn), the University of Rhode Island (URI), and Electric Boat (EB) have been successfully conducting for years, by:

1. Conducting basic and applied **RESEARCH** on undersea vehicle technologies of strategic importance to the Navy through collaborative partnerships between the universities and industry;
2. Accelerating and facilitating **TECHNOLOGY TRANSITION** by ensuring relevant research can be more easily pulled into the shipbuilding industries; and
3. Supporting the **WORKFORCE DEVELOPMENT** of a technically competent and innovative next generation workforce through Navy-focused undergraduate STEM education and opportunities for engineers to obtain advanced degrees related to their work.

CURRENT RESEARCH AREAS

- Acoustics, Sensors, and Signal Processing
- Advanced Materials and Structures
- Advanced Manufacturing Processes
- Cybersecurity
- Human Factors
- Marine Hydrodynamics
- Propulsion Enabling Technologies
- Structural Integrity, Vibration, and Control
- Systems Engineering/Modeling
- Unmanned Underwater Vehicles
- Underwater Energy Systems
- Underwater Shock

NIUVT LEADERSHIP



Erik Brine, Executive Director
Phone: 843-469-0234
Email: erik.brine@niuvt.us



Richard Christenson, Ph.D., Co-Director, Professor
Civil & Environmental Engineering Dept., University of Connecticut
Phone: 860-486-2270; Email: richard.christenson@uconn.edu

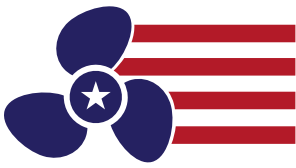


Arun Shukla, Ph.D., Co-Director, Simon Ostrach Professor
Mechanical, Industrial and Systems Engineering Dept., University of Rhode Island
Phone: 401-874-2283; Email: shuklaa@uri.edu

FOR MORE INFORMATION CONTACT:

Erik Brine
NIUVT Executive Director
Phone: 843-469-0234; Email: erik.brine@niuvt.us

Mike Shelton
NIUVT Administrative Program Support
Phone: 860-486-8714; Email: mike.shelton@niuvt.us



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RESEARCH CAPABILITIES

NIUVT leverages extensive laboratory, faculty, and education infrastructure at UConn and URI to offer outstanding research capabilities for Navy-relevant research. NIUVT has identified 12 current technical areas directly related to undersea vehicle technologies of strategic importance to the Navy. The partners have a rich history of research and collaboration with the Navy in these areas, and NIUVT has the expertise and laboratory facilities to support technology advancements for transition to the next generation US undersea fleet.

TECHNOLOGY TRANSITION

NIUVT fosters an environment where Navy-relevant basic and applied research can be guided by Navy priorities and pulled into the design and manufacturing process by EB and the 600 naval-related companies in the supply chain. While research is NIUVT's core activity, the most highly leveraged activity is the transition of technology advancements into major DoD acquisition programs. Effectively transitioning research results is critical to provide a significant and positive impact on naval capabilities. Members of the NIUVT team are conducting basic and applied research hand in hand with industry partners to ensure that a path to transition exists.

TECHNOLOGY TRANSITION MECHANISMS INCLUDE:

- Highly collaborative research on naval focus topics
- SBIR/STTR opportunities
- Technical training of workforce
- Naval undersea supply chain consortia

WORKFORCE DEVELOPMENT

UConn and URI contribute hundreds of graduates to the Navy and naval industries. As of 2017, UConn and URI have approximately 1400 alumni working at EB and NUWC, and they annually provide approximately 125 engineers and 75 interns to EB.

NIUVT PROVIDES A RANGE OF OPPORTUNITIES TO EDUCATE AND TRAIN ENGINEERS FOR THE NAVAL WORKFORCE, INCLUDING:

- An undergraduate concentration in naval science and technology
- Senior design projects sponsored by industry
- M.S. and Ph.D. programs with naval science and technology focus
- Graduate research assistantships
- Professional master's degree

NAVY STEM COALITION

Recognizing the region's need to scale up the naval science and engineering workforce, URI and UConn teamed up to create a major regional workforce initiative directed to undergraduates. The Southeast New England Naval STEM Coalition leverages resources at the two campuses and draws on industry and navy partners to deliver naval-relevant training.

FOUNDING PARTNERS

IN COOPERATION WITH NUWC DIVISION NEWPORT

UConn

THE
UNIVERSITY
OF RHODE ISLAND

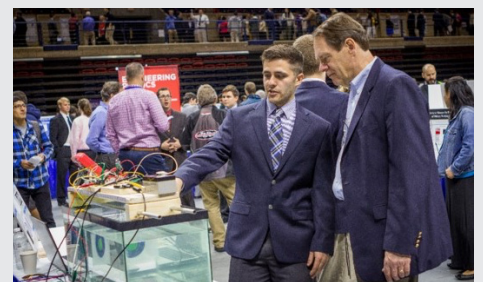
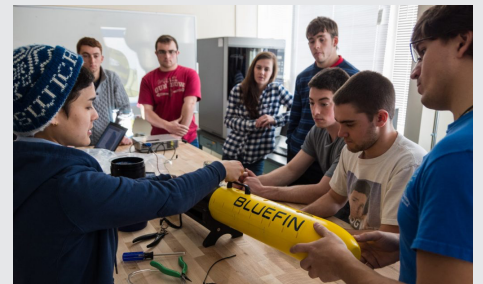
GENERAL DYNAMICS
Electric Boat



NIUVT supports the Southern New England Naval Ecosystem. Our region is home to:

- 600 naval supply chain companies
- Electric Boat
- Naval Submarine Base -- New London
- Naval Undersea Warfare Center
- Naval War College
- UConn Marine Sciences, Avery Point
- UConn Main Campus, Storrs
- URI Main Campus, Kingston
- URI Graduate School of Oceanography, Narragansett Bay

The NIUVT will leverage these major naval resources to enhance performance, introduce new technologies, and reduce costs associated with the design and construction of the next generation and next platform of undersea vehicles.



NIUVT
University of Connecticut Storrs Campus
159 Discovery Drive U 5279, Storrs, CT 06269