

Maritime Innovations Conference: Connecting, Training & Advancing

November 30, 2016

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Directors Welcome

Welcome to the Umass Dartmouth Center for Innovation and Entrepreneurship's 3rd Maritime Innovations Event. Today we have brought together leading edge marine technology companies, governmental agencies, and universities for a day of programming aimed at providing an overview of trends in the industry, with a focus on the Arctic, and a showcase of startup companies to discuss their new technologies. And, of course, we want to extend our special thanks to all of our sponsors for making this event possible. For more information about how we can help your company, please visit: www.umassd.edu/innovate, or contact me at tstapleton@umassd.edu -

Toby Stapleton, Director, CIE



Our Passion

The Center for Innovation and Entrepreneurship provides the infrastructure to help early-stage companies grow and mature. The primary objective of the Center is to provide an environment where technology companies will develop into employers located in Southeastern Massachusetts. By

attracting these companies to the Umass Dartmouth Center for Innovation and Entrepreneurship we hope to facilitate the economic growth of the region.



Maritime Innovation Conference

November 30th, 8:30AM-7:00PM

Agenda

8:30	Registration & Networking
9:00	Welcome - Toby Stapleton, Assistant Vice Chancellor & Director , UMass Dartmouth Center for Innovation & Entrepreneurship
9:10	Opening Remarks, Dean Steve Lohrenz, UMass Dartmouth School of Science and Marine Technology
9:30	Keynote Speaker: Paul M Brett, Head School of Ocean Technology, Fisheries and Marine Institute of Memorial University
10:00	Network and Coffee Break
10:30	Panel Discussion: Arctic, What are the needs today?

Moderator: Jose A. Vazquez, New Stone Soup VT, LLC

- The Honorable Ralf Horlemann, Consul General, German Consulate in Boston: Germany's interest in the Arctic.
- Denis Hains, Director General, Canadian Hydrographic Service (CHS) and Hydrographer General of Canada at Fisheries and Oceans Canada: Canadian Arctic Requirements.
- Commander Scott Hale, U.S. Coast Guard, Arctic Policy Coordination: US Coast Guard Arctic Strategy
- Dr. William S. Weiss, Naval Undersea Warfare Center, Newport, Rhode Island member on U.S. Navy Task Force Climate Change: U.S. Navy Arctic Roadmap
- Rich Hansen, Surface Branch Chief, U.S. Coast Guard Research & Development Center, New London,
 Connecticut. U.S. Coast Guard Arctic Requirements
- 11:30 Elevator Pitches (8 Marine Technology Firms will deliver a 5 minute elevator pitch)
 - Protonex
 - Ocean Sonics
 - MetOcean
 - 4Deep
 - Enginuity
 - DSA
 - Sealite
 - Geoforce Group Limited
- **12:10** Lunch, buffet

Speaker, Matthew Morrissey, Vice President, Massachusetts Deepwater Wind

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- 1:15 Workshop: "Doing Cross-Border Business"
 - Maryanne Burke, Senior International Trade Specialist, US Commercial Service
 - Nancy Lowd, Senior International Trade Specialist, Massachusetts Export Center
 - Jim Kirk, Business Development Manager, Ocean Server Technologies
 - Padraic O'Flaherty, Lotek Wireless Fish & Wildlife Monitoring
- 2:15 Network and Coffee Break
- **2:30** Panel: Arctic, Ongoing work and market gaps?

Moderator: Carolyn Kirk, Deputy Secretary, Massachusetts Executive Office of Housing and Economic Development

- Dr. Frederick Lasserre, Professor Universite Laval: Arctic Shipping Implications and Arctic Net.
- Dr. Richard B. Coffin, Chair, Department of Physical and Environmental Sciences, Texas A&M University –
 Corpus Christi. Methane Hydrates Research in the Arctic
- Robert O'Malley, iXblue: Navigation gaps in the Arctic.
- Dr. Pamela Neubert, Senior Associate, Stantec: Ongoing environmental work in the arctic.
- **3:30** Elevator Pitches (8 Marine Technology Firms will deliver a 5 minute elevator pitch)
 - Boston Engineering
 - Littoral Power Systems
 - Riptide
 - Seaformatics
 - Navsim
 - Lotek
 - Open Water Power

4:15 Signing of the MOU between the Umass Dartmouth Center for Innovation and Entrepreneurship (CIE) and the Centre for Ocean Ventures and Entrepreneurship (COVE), Halifax, Nova Scotia

- Premier McNeil, Nova Scotia
- Carolyn Kirk, Deputy Secretary, Massachusetts Executive Office of Housing and Economic Development
- Jim Hanlon, CEO, Institute for Ocean Research Enterprise
- Toby Stapleton, Director Umass Dartmouth Center for Innovation and Entrepreneurship
- 5:00 Networking Reception, Open Bar (wine/beer) with hot, delicious, Hor d'oeuvres

Bios (Alphabetical Order)



Paul Brett is the Head School of Ocean Technology at the Fisheries and Marine Institute of Memorial University in St. Johns NL Canada.

The Marine Institute's School of Ocean Technology (SOT) is charged with the responsibility of developing and delivering education and training and applied research and development programs in various aspects of ocean technology. The School is committed to developing and delivering education and training programs to meet the needs of the ocean sector (industry, academia and government) in Canada, and beyond.

Within this regional cluster of Ocean Technology capability, the Marine Institute fills two critical roles through the School of Ocean Technology. It delivers education and training programs for individuals seeking employment within the sector and it also works with industry to develop new ocean technology products and services. We fill these roles within four primary areas: Ocean Instrumentation, Ocean Observation, Ocean Mapping, Underwater Intervention (Vehicles and Diving)

Mr. Brett holds a Master of Science (Geography) from Memorial University of Newfoundland, as well as an undergraduate degree in Education (post-secondary), Physics, and Geography. Paul is a specialist in Geographic Information Systems (GIS) and remote sensing, he has widespread experience working with synthetic aperture radar (SAR), multispectral imaging, Multi-beam sonar, side scan sonar, and geographic information systems application and development. Most of his career has been involved in oceanography and oceanographic research, with a keen interest in ocean exploration. He has sailed on numerous research vessels tasked with the above goals.



Maryanne Burke, Global Marine Technology Leader, Senior International Trade Specialist, US Commercial Service, International Trade Administration, US Department of Commerce

As Senior International Trade Specialist for the U.S. Department of Commerce's International Trade Administration (ITA) and U.S. Commercial Service, Ms. Burke assists U.S. businesses expand their international sales to remain competitive in the global marketplace. Ms. Burke is also ITA's Marine Technology Team Leader and coordinates trade leads, trade shows and strategic direction for the agency's involvement in this sector. Before coming to the U.S. Commercial Service Boston office in 2010, Ms. Burke worked in ITA offices in Washington DC where she investigated U.S. antidumping and countervailing duty cases to determine whether foreign companies sold products in the United States in violation of U.S. trade law.

Prior to her work at the U.S. Department of Commerce, Ms. Burke studied at the Université Paris - Dauphine Business School in Paris, France and worked in the marketing department of French firm GeoPost, S.A. Ms. Burke holds a Bachelor of Arts in Political Science from the Catholic University of America and graduated with an M.B.A. from American University in Washington DC while concurrently working in the consular section of the Embassy of Ireland.



Richard Banks Coffin Full Professor, Chair Department of Physical and Biological Sciences, Texas A&M University Corpus Christi, July 2014 – Present. Founder-President Strategic-Carbon LLC 2011- Present.

EDUCATION

NSF funded Postdoctoral Fellow (Mar. 1986 - Dec. 1987) Gordon College, Wenham, MA. (Advisor: Richard T. Wright)

Ph.D., Oceanography (Sep. 1982 - June 1986), University of Delaware. (Advisor: Jonathan H. Sharp)

M.S., Microbiology (Sep. 1978 - May 1980), University of New Hampshire (Advisor: Galen Jones)

B.A., Microbiology (Sep. 1973 - June 1977), University of New Hampshire.

BACKGROUND

Isotope geochemistry is applied to determine key ecosystem cycles. Work has focused on soil groundwater systems, estuaries, coastal and deep ocean water column and sediment. Field work has been global with recent priorities on Navy harbors through the US, the Arctic Ocean and coastal regions off Chile, New Zealand, Canada, Norway, Japan and the US. During these field efforts contribution has been through working as leader or co-leader of planning, execution and interpretation. Work has addressed environmental assessment, energy exploration and field technology development. Examples of success include providing a 25 million dollar cost savings plan for harbor remediation in Liepaja Latvia and focusing methane hydrate energy exploration sites off the coasts New Zealand, Alaska, Texas and Chile providing 10-30 million dollar savings at each potential drill site.



Mr. Denis Hains is the Director General, Canadian Hydrographic Service (CHS). The position also carries the title of Hydrographer General of Canada.

Mr. Hains began his career at CHS in the Québec Regional office. He eventually went on to become the CHS Director for Québec Region. He worked at Natural Resources Canada (NRCan) as Director, Canadian Geodetic Survey, before returning to the CHS to serve as acting Director General and Dominion Hydrographer in early 2000s.

This assignment was followed by the Director General, Integrated Business Management Services position at the Canadian Coast Guard. He then returned to NRCan, as Director, Earth Observation and GeoSolution Division, and then as Director, Canadian Geodetic Survey. This is where he stayed until he accepted his most recent post of Director General, CHS in early 2014.

Mr. Hains holds a Bachelor of Science Degree in Geodesy from Laval University in Québec City, Canada and he is a member of the Québec Land Surveyor Corporation as well as the Canadian Hydrographic Association. He is the Co-Chair of the US Canada Hydrographic Commission and the 2016 Chair of the Arctic Regional Hydrographic Commission of the International Hydrographic Organization.



Commander Scott C. Hale currently serves as the Acting Senior Arctic Policy Advisor at Coast Guard Headquarters in Washington, DC. In this role, he leads the execution of the Coast Guard's Arctic Strategy and its Implementation Plan. He and his staff coordinate cross-programmatic initiatives to advance the Strategy and represent the Coast Guard in numerous interagency policy groups.

Prior to this assignment, CDR Hale served as the Senior Reserve Officer at Coast Guard Sector Delaware Bay in Philadelphia, Pennsylvania. He was responsible for advising the command on Reserve issues, including all aspects of training and readiness for 230 members charged with supporting the active duty Coast Guard during peacetime and surge operations. CDR Hale joined the Coast Guard as a Direct Commission Lawyer and served as an assistant legal officer at the Seventh Coast Guard District in Miami, Florida. After leaving active duty, CDR Hale joined the Office of the Associate Chief Counsel, U.S. Customs and Border Protection, also

in Miami, Florida, where he served for six years. During this time, CDR Hale was a Reservist assigned to the Office of the Staff Judge Advocate at U.S. Southern Command. He served as the first Coast Guard JAG Officer at USSOUTHCOM and advised the Combatant Commander on diverse counterdrug and homeland security matters.

CDR Hale is currently on a one-year military leave of absence from his civilian employer, the U.S. Drug Enforcement Administration. He works in the Office of the Chief Counsel and specializes in administrative, civil, and criminal asset forfeiture issues as well as search and seizure matters. Commander Hale graduated from the University of Michigan with a Bachelor of Science degree in Environmental Policy. He received a Juris Doctor degree from Wayne State University School of Law in Detroit, Michigan. He is a member of the Michigan and Florida Bar Associations. Individual military awards include the Defense Meritorious Service Medal, Coast Guard Commendation Medal (4) with the Operational Distinguishing Device, Joint Service Achievement Medal, Coast Guard Achievement Medal, Global War on Terrorism Expeditionary Medal, Global War on Terrorism Service Medal, and the Coast Guard 9/11 Service Medal.



Jim Hanlon, Chief Executive Officer, Institute for Ocean Research Enterprise (IORE) -Halifax, NS

Jim is a 30-year veteran of the ocean tech industry, having worked in design, marketing and management for companies in Canada and New England. His career has spanned the aerospace and defence sectors as well as the marine environmental monitoring field. Over the years, Jim has worked in senior management positions with several large publicly traded multinationals but has also sampled the waters of the entrepreneurial well as an owner in two separate ocean tech companies that have successfully grown and been purchased by multinationals.

Until February of 2012, Jim was the President of Ultra Electronics Maritime Systems in Halifax. He and his partners sold their company to Ultra in May of 2008. Ultra Electronics Marine Systems is one of the oldest continuously operating electronics design and manufacturing operations in Canada and the largest electronics product design company in Atlantic Canada. In May of 2012, Jim assumed the role of CEO of the Halifax Marine Research Institute, now re-named the Institute for Ocean Research Enterprise, a not- for-profit company established to foster collaborative ocean research among universities, government labs and private companies. Jim's personal passion is innovation and its impact on the competitiveness of the ocean tech industry. Jim holds a Bachelor of Electrical Engineering degree from The Nova Scotia Technical College (now Dalhousie University). He also has an MBA in marketing from Saint Mary's University in Halifax and he is a registered professional engineer in Nova Scotia. Jim is married with 3 adult children and enjoys sailing.



Richard Hansen, US Coast Guard R&D Center. Mr. Hansen is the Surface Branch Chief at the United States Coast Guard's Research & Development Center, which is located in New London, CT. He is responsible for overseeing all programs and project work at the R&D Center under Port Security, Law Enforcement, Weapons of Mass Destruction, Vessel Technology, and Alternative Energy areas. He also is coordinating the Center's Arctic related projects including areas such as Search & Rescue, Oil Spill Recovery, and Communications. Mr. Hansen previously researched underwater capabilities, remote imaging and fire protection at the R&D Center. Prior to the Coast Guard, he worked for the U.S. Navy in submarine silencing and construction. Mr. Hansen has a Bachelor's Degree in Mechanical Engineering from Northeastern University and a Master's Degree in Fire Protection engineering from Worcester Polytechnic Institute.

Dr. Ralf Horlemann has served Germany's Foreign Service for more than two decades and has a rich experience in



international security policy, transatlantic relations and Asian affairs. He took up his position as Consul General of Germany to New England in July 2015.

During various assignments at headquarters and abroad, Dr. Horlemann has made major contributions to formulating and developing Germany's policy in conflict prevention and management. Between 1998 and 2002 he was instrumental in founding the Berlin Center for International Peace Operations (ZIF) and most recently played an important role in further developing ZIF to a fully-fledged deployment organization for civilian experts in international peace operations. Dr. Horlemann has also worked on Asian affairs on several occasions over the past 20 years, including as Consul in Hong Kong and Head of the German Interest Section to Pyongyang, North Korea, as well as during various postings to the Federal Foreign Office, where he covered East and South Asian Affairs. From 2002 to 2005 he was responsible for Transatlantic Relations and Asian Affairs as Counsellor to

the German Embassy in Washington, D.C.. Between 2009 and 2012, he served as the Head of the Energy Division at the German Embassy in Moscow, i.a. covering Arctic affairs.



Carolyn A. Kirk, Deputy Secretary, Executive Office of Housing and Economic Development for the Commonwealth of Massachusetts Carolyn A. Kirk joined the Administration of Governor Charlie Baker and Lieutenant Governor Karyn Polito in January of 2015 and serves as the Deputy Secretary of the Executive Office of Housing and Economic Development.

In this position, Kirk leads operational management and shares policy responsibility for the Executive Office of Housing and Economic Development, the Office of Consumer Affairs and Business Regulation, the Department of Housing and Community Development, the Mass. Office of Business Development and its ancillary agencies of Mass. Travel and Tourism, the Mass. Marketing Partnership, and the Mass. Office of International Trade and Investment. In addition, Kirk is responsible for economic planning and growth in the Maritime economic sector, and serves on the

Seaport Economic Council along with the Lieutenant Governor.

Prior to her appointment with the Baker/Polito administration, in 2007 Kirk was the first woman popularly elected as Mayor of the City of Gloucester. Kirk went on to win three subsequent general municipal elections and never lost a ward or a precinct in any of her contests and served as Mayor for seven years. —**Continued**-

Kirk's administration invested over \$100million in infrastructure thus laying the groundwork for future economic growth. The first-ever business class hotel is under construction in the city in a long sought after waterfront location adjacent to downtown. A new \$40 million elementary school, the first one to be built in 60 years and for which Kirk led the effort, is also under construction in the city. Mayor Kirk's professional career spans over 25 years. She is a long-time management consultant and her clients have included many of the Top 20 banks in the US, along with Fortune 500 companies. She and her husband Bill Kirk have two children, Sam, 18 and Baylee, 15.

A graduate of the Boston College class of 1984, Mayor Kirk was born and raised in Clinton, NY and moved to Massachusetts to attend college. She moved to Gloucester in 1988 where she still resides, and was drawn to the diversity and beauty of the city.



Jim Kirk is the Sales and Marketing Manager for OceanServer Technology with over 20 years' experience in business development and marketing. Prior to his work as sales and marketing manager, he was the sales manager at IntraServer Technology acquired by LSI Logic back 2000. At LSI Logic Jim focused on developing channel sales and worked closely with key OEM accounts on

successful new product launches. Jim holds a master of business administration degree from the University of Massachusetts and bachelor's degree from Saint Michael's College.



Frédéric Lasserre holds a Master of Commerce (ESC Lyon, 1990), an MBA (York U., Toronto, 1991), a DEA in Geopolitics (U. Paris VIII, 1992) and a Ph.D. in Geography (U. Saint-Étienne, France, 1996).

He worked as a consultant with the European Observatory of Geopolitics (OEG, Lyon, France) on the political and economic transformations of Central and Eastern Europe after the fall of the Berlin Wall, then as a foreign language instructor in Japan, then as Advisor in International Affairs on Asian Desks at the Quebec Ministry of Trade and Industry; and then with Investissement Québec, the Crown corporation responsible for the promotion of foreign investment in Quebec.

He is Professor since 2001 in the Department of Geography at Laval University (Quebec), and researcher at the Hydro-Québec Institute in environment, development and society (IEDS). He also acted as Project Director with the ArcticNet research

network. He is also researcher with the Institut québécois des Hautes études internationales (IQHEI), and associated researcher with the Raoul Dandurand Chair in Strategic and Diplomatic studies (University of Quebec in Montreal).

With his book L'éveil du dragon. Les défis du développement de la Chine au XXIe siècle (Presses de l'Université du Québec) [The awakening of the dragon. The challenges of development in China in the 21st century], he won the HEC Best Business Book Award 2006. He conducted extensive research in the field of water management and on Arctic geopolitics, and published 17 books and over 90 refereed articles. He chairs the Conseil québécois d'Études géopolitiques (CQEG) at Laval University.



Steven E. Lohrenz is Dean and Professor of the School for Marine Science and Technology (SMAST) at the University of Massachusetts Dartmouth. Prior to becoming Dean of SMAST, Steve served as Chair of The University of Southern Mississippi (USM) Department of Marine Science, located at the NASA John C. Stennis Space Center. He received a B.A. in biology and chemistry from the University of Oregon (1978) and a Ph.D. in biological oceanography (1985) from the Massachusetts Institute of Technology-Woods Hole Oceanographic Institution Joint Program. **—Continued**-

He is a Contributing Editor for Marine Ecology Progress Series. He is President of the Board of Directors of the Northeast Regional Association Coastal Ocean Observing System and Vice Chair of the Board of Trustees of the Consortium for Ocean Leadership. He has served on numerous scientific advisory groups and currently is a member of the NASA Geostationary Coastal and Air Pollution Events (GEO-CAPE) Satellite Mission Science Working Group (2011-present), NASA Carbon Monitoring System Science Team (2012-present), and the Massachusetts Ocean Science Advisory Council (2011-present). His research extends across various themes of including climate change impacts on land-ocean interactions, phytoplankton ecology and physiology, and biogeochemical cycling of carbon and other elements in ocean systems.

His current work also includes applications of optics and remote sensing in the study of biological and biogeochemical patterns and processes in aquatic environments and linkages to terrestrial systems. He has authored or co-authored more than 85 papers in refereed literature and participated in more than 50 research cruises.



Nancy Lowd, Senior International Trade Advisor, Massachusetts Export Center South Coast & Cape Region. Nancy is senior international trade advisor for the Massachusetts Export Center, part of the Small Business Development Center Network. She is based in New Bedford and covers the South Coast and Cape Region. She has more than 20 years of experience in all aspects of international business, specializing in international marketing. Nancy has worked with companies of all sizes, including Fortune 500 and emerging growth companies, as well as government agencies and universities.

Nancy began her career in Washington DC, where she was an economist for the International Trade Administration, and also worked on US - Canadian trade policy. She then joined the Massachusetts Port Authority as Director of Project Export, a small business export development program, and was also responsible for developing international trade between New England and Asia. Nancy was Vice President of International Marketing and Sales for Ziff-Davis Events, a leading integrated media company, and a part of The Softbank Corporation, the global Internet and information services conglomerate. Prior to serving as VP of International Marketing and Sales she was Vice President of European operations and oversaw ZD's expansion throughout Europe. She developed and managed global marketing partnerships with leading IT vendors such as Microsoft, IBM, BT, France Telecom, and others.

Prior to joining ZD, Nancy was a management and marketing consultant, developing US market entry and expansion strategies for European and Asian companies. Nancy is a graduate of the University of New Hampshire and also holds a Master's Degree from the Johns Hopkins University School of Advanced International Studies (SAIS). She is on the faculty of the Carroll School of Management at Boston College.



Premier Stephen McNeil, Premier Nova Scotia. Premier McNeil attributes his core values and strong commitment to public service to his large, close-knit family. Stephen is the 12th of 17 siblings who were born and raised in Nova Scotia's beautiful Annapolis Valley. Before becoming involved in politics, Stephen graduated from Nova Scotia Community College and put down roots in Bridgetown, where he owned and operated a small business for 18 years. He was inspired to serve his community by his late mother, Theresa, who was the first female sheriff in Canada. Stephen was elected to the Legislative Assembly to serve the people of Annapolis in 2003. After winning re-election in 2006, he became leader of the Nova Scotia Liberal party in 2007. Stephen served as leader of the official opposition for four years before being elected Premier on Oct. 8, 2013. —Continued-

In his election-night speech, Stephen said he was inspired by the families he met while campaigning across the province. "You have told me about your hopes and dreams for a Nova Scotia where your children and grandchildren can prosper. I share that dream," he said. Stephen lives in the Annapolis Valley with his wife Andrea. They have two grown children, Colleen and Jeffrey.



Matthew A. Morrissey is Vice President of Massachusetts for Deepwater Wind, where he manages the company's development efforts in the Commonwealth. Mr. Morrissey has been involved in executive leadership positions in the offshore wind industry since 2007.

As the founding Managing Director of Offshore Wind: Massachusetts, Mr. Morrissey spearheaded the successful efforts to include offshore wind in the Commonwealth's energy portfolio, resulting in a bill signed into law August 2016.

After selling a Boston-based knowledge management software company he cofounded, Mr. Morrissey returned to his home city of New Bedford, MA, which is

the number one fishing port in America. Under Mr. Morrissey's leadership as Executive Director of the New Bedford Economic Development Council for seven years, New Bedford led all similar size cities from around New England in new growth and private capital investment. Mr. Morrissey founded the New Bedford Wind Energy Center where he worked with key local leaders and state officials to attract public investment in the development of the New Bedford Marine Commerce Terminal, the first offshore wind terminal in the nation. Mr. Morrissey has a degree in English literature from University of Massachusetts Dartmouth, and is a graduate of Harvard's highly competitive Advanced Management Development Program in Real Estate. Mr. Morrissey is the fifth generation of his family born and raised in the Port City of New Bedford, Massachusetts.



Pamela Neubert, PhD, Stantec US National Technical Lead, Marine Science. Pamela is a program manager, benthic marine ecologist, and invertebrate taxonomist with expertise in ecological impact assessment. She has 20 years of experience working in estuarine to deep-sea habitats designing and implementing field programs, directing these programs, and analyzing resulting data. Pamela has served as Principal Investigator on oceanographic surveys and has managed international teams to provide scientifically defensible ecological data to meet a variety of US and international permitting requirements. Pamela serves as Stantec's U.S. National Technical Lead for Marine Science and maintains a Guest Investigator appointment at

the Woods Hole Oceanographic Institution in the Marine Policy Center. She is currently serving as a scientific reviewer for the North Pacific Research Board. She was President of the New England Estuarine Research Society, on the Coastal and Estuarine Research Federation Governing Board, the National Program Committee for Restore Americas Estuaries and the Implementation Committee for the National Community on Ecosystem Restoration conference. She has served as a Chairperson for women's leadership committees, has participated on science panels for the National Science Foundation and the U.S. Office of Naval Research and has organized sessions and given presentations at numerous conferences. These opportunities allow Pamela to interact with a large community of

people interested in managing, monitoring, restoring, and protecting coastal and offshore marine habitats.



Padraic O'Flaherty has been working in the innovation environment for 20+ years. He earned an undergraduate degree in physics and engineering from St. F.X.U. and an MBA from Memorial University. Padraic has a variety of experience, starting with Industry Science and Technology Canada, followed by experiences primarily in marketing and sales of both start up and established companies. **—Continued**-

Industry experience includes biotechnology, conservation science products, environmental services (hazardous waste management and site remediation), health care products and GIS software. Padraic is currently an account manager focused on marine applications with Lotek Wireless Inc., servicing the Americas and the Far East (China, Japan and Korea). He is a past president of the Newfoundland Environmental Industries Association (NEIA) and previously a director and secretary of the Newfoundland Labrador Association of Technology Industries (NATI).



Robert O'Malley, IXBlue. Rob is a technology enthusiast, with an eye for innovation and passion for helping customers solve problems and optimize solutions. Robert holds a degree in Ocean Engineering from the University of Rhode Island, and in 2007 began his career as a Subsea Project Engineer for Technip USA, located in Houston, TX. Over the next four years Robert worked on projects for Shell, BP, Chevron, Marathon Oil, and W&T Offshore, among others, and ran qualification programs to push deep-water and high-pressure limits of flexible pipeline technology in the Gulf of Mexico. In 2011 Robert joined iXBlue, a leading international supplier of products and solutions for navigation, positioning and imaging in various applications, both Civilian and Government. After leveraging his Oil & Gas experience to expand iXBlue's footprint Houston, Robert transitioned focus to Naval Defense and Unmanned Systems and is today leading initiatives to bring novel sensors and software to the

UxV community in support of advanced autonomy.



Toby Stapleton is the Assistant Vice Chancellor and Director of the UMass Dartmouth Center for Innovation and Entrepreneurship (CIE). The CIE is a technology incubator in a 60,000 square foot facility, located in Fall River, MA, that provides physical space to start-ups and access to a prototype laboratory, machine shop, environmental chemistry laboratory, and a life sciences laboratory. The CIE is currently supporting 21 companies and has, over, the last 15 years, graduated more than 45 companies which have combined sales revenue of more than \$200Million and have created more than 230 jobs. In addition to having over 20 years of professional experience, serving in roles such as the President/CEO of the International Trade Assistance Center, Inc. and as Marketing Director for the US Cranberry Industry, Toby has been a founder or co-founder of 4 start-ups and he is

currently the Chair of the Southern New England Entrepreneurs Forum (SNEEF) and serves as a mentor, and on the board of, Entrepreneurship for All (EforAll) Southcoast. He holds a BA from Bryant University, an MBA from Suffolk University, and is currently pursuing a PhD at the University of Massachusetts Dartmouth.



JOSE A. VAZQUEZ, President, New Stone Soup VT, LLC. Jose Vazquez is a native of Alexandria, Virginia. A 1982 graduate of the U.S. Naval Academy, he served twenty years in the United States Navy prior to joining the Federal Government as a civilian from 2002 - 2015. He was promoted to the Senior Technical executive rank in 2008.

In 1989 Mr. Vazquez received a Masters of Science degree in Applied Science from the Naval Postgraduate School in Monterey, California. Mr. Vazquez served in a number of assignments while on active duty in the U.S. Navy, including: second in command of an Aegis cruiser, and leading the U.S. Navy's international relations with Canada, Latin America, and the Caribbean Nations.

In 2002 Mr. Vazquez joined the Office of Naval Research (ONR) and served as the first Director for the Office of Naval Research Global's Latin America office in Santiago,

Chile. While at ONR he directed 25 Science Advisors that provided support to the senior military commanders of the U.S. Navy and Marine Corps. He also served as the Director of Tech Solutions, an innovative, transformational business process focused on rapidly delivering technology to Sailors and Marines. —**Continued**-

Mr. Vazquez joined the Department of Homeland Security, Science and Technology Directorate in September 2006. While at DHS he initiated, and led, *Virtual USA®* information sharing programs, and regional demonstration pilots that transformed interoperability between, Federal, State and local first responders and law enforcement personnel. He was instrumental in developing the Directorate's first responders technology and development program, and transformed it into a successful operating activity that develops and transitions innovative technologies for the Nation's emergency response community. Mr. Vazquez developed the first Federal government communities of practice platform, the *First Responder Communities of Practice*, which provides a secure social media collaboration portal for over 8,000 first responders. Jose joined the New Stone Soup VT, LLC team in June 2015, a strategic consulting firm that develops innovative solutions to National Security technology problems.



William Weiss, PhD. Dr. Weiss has worked at the Naval Undersea Warfare Center twice, going back to 1979. His B.A. in Environmental Science from Middlebury College, M.S. in Computer Science from Columbia University, and Ph.D. in Computer Science from the University of Connecticut was a perfect fit for him to participate in studies with the Navy Task Force Climate Change when it was formed in 2009. He contributed to the construction of the U.S. Navy Arctic Roadmap and the Naval Arctic Capabilities Based Assessment. In 2012, he and two co-workers from the Naval Undersea Warfare Center went on a NASA sponsored expedition to an iceberg filled fjord in Greenland. They ran an unmanned, undersea glider across the

mouth of the fjord, collecting CTD data for three days. They deployed an advanced Navy sonar to image the underwater part of an iceberg in the fjord. They matched the sonar imagery to visible light imagery being simultaneously taken of the above water part of the iceberg. The result was a complete map of a circumnavigated iceberg, above and below the water. Dr. Weiss maintains his interest in the arctic and looks forward to his future northern endeavors.















