

# TECH TRANSFER NET

Spring 2017 Edition

Scientists and ASV JetYak - Photo by Fiamma Straneo  
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## Shark Tank Changes Underway

WHOI OTT is currently looking for mentors to help WHOI PIs perfect their pitch presentations.

As mentioned in our previous newsletters, each September OTT hosts a Shark Tank competition - also called the Translational Research Funding Program (TRFP). The objective of the TRFP is to provide funding for the production of commercial prototypes for gathering market-relevant data for commercially promising technologies.

Applicants are required to make a ten minute pitch on their technology to a panel of experienced business professionals, and the winning team is awarded money to advance their

technology. Awardees must meet their promised milestones in order to be eligible to apply again the following year.

As discussed in the newsletter last fall, our experience in the last two years has indicated Shark Tank applicants could benefit from help in formulating their value proposition and assessing the market opportunity associated with their technology. In order to improve the competitiveness of every pitch - OTT is revising the application process for 2017.

Led by OTT Mentors Stan Kovall and Rusty Warren, changes for 2017 are well underway. The preliminary application form is now available and WHOI inventors will be required to submit this in June - 3 months in advance of the final proposal package deadline.

This form will be used to match applicants with mentors and to help assess each technology's market potential. Mentors are expected to use this information to assist with

basic market research. Once a draft pitch presentation has been made-mentors are also expected to help applicants polish their pitch.

OTT is currently looking for Mentors interested in assisting with pitch presentations & market research. Volunteers will need to be registered Mentors & Champions via our website and have provided an up-to-date resume.

Details for how to apply can be found here:

<http://techtransfer.whoi.edu/new-mentor-opportunity/>

*Interested Mentors will attend a Mentor training session in August where we will go over the TRFP, as well as help Mentors to better understand WHOI's unique culture.*

*Please email Allison Nangle with any questions at [anangle@whoi.edu](mailto:anangle@whoi.edu) and visit the above link for details on how to apply.*

## Did You Know?

Each year WHOI OTT receives between one and ten applicants for proof of concept funding through the Shark Tank Competition - with applicants requesting in aggregate more than \$250k in each competition.

OTT awards up to \$75k with most of the award money coming from annual donations and a portion of WHOI's royalty stream from licensed technology.

WHOI is a not-for-profit research institution operating solely on funds from Federal grants and contracts, donations, and some corporate collaborations. WHOI has a teaching mission in addition to its basic research activities. At undergraduate level, this consists mainly of highly selective special summer programs involving a relatively small number of students. At the graduate level, WHOI participates in a Joint doctoral program in ocean studies with MIT.

Students in the graduate program often reside permanently in Boston, with some periodically coming to WHOI for extended stays. This means that WHOI has a relatively small number of in-residence students. For potential Champions and Mentors, this means that mentoring will most often involve WHOI engineers and/or principal investigators.

For more information on WHOI's educational programs, go to: <http://www.whoiedu/main/educate>

# OTT Welcomes New Staff

## Gabriel Hendricks, Patent Liaison

Gabe joined OTT in early April. He earned a Ph.D. at UMass Medical School in Biomedical Research and completed postdoctoral work at Brown University and Rhode Island Hospital, where he focused on infectious disease research, and novel anti-infective therapies. Within OTT, Gabe will be responsible for reviewing WHOI inventions to determine patentability as well as the drafting of patent applications.

## Senapathy Rajagopalan, Licensing Associate

Sena joined OTT in late April as the new Licensing Associate. Sena holds a Ph.D. in Chemistry from the University of Wisconsin Madison, and an MBA from Jones School of Business at Rice University focusing on Marketing and Finance. Sena will be responsible for drafting agreements and assessing market opportunity for various WHOI technologies.



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WHOI Compact Marine Winch. Renderings Courtesy of Joshua Eaton © WHOI

## Compact Marine Winch

### Technology Spotlight

Both commercial and research marine operations rely on winches for deployment, hauling, and retrieval of equipment and instruments. Over the years, winch design has undergone extensive advancements in control systems while structural changes have been few and far between.

WHOI engineers James Haley and Josh Eaton thought it time to incorporate mechanical advantage to build on the capabilities of innovative control systems. "The WHOI Compact Winch is the most advanced portable winch design in the world," says co-inventor James Haley. Each

component was designed and fabricated to serve multiple purposes with the goal of creating a smaller, lighter, and more compact winch, capable of outperforming its heavier and bulkier predecessors.

Currently available winches are customizable, however, they are typically built for a specific use and a particular tension member diameter and type. The WHOI Compact Winch was built for adaptability- capable of replacing any winch design currently in use- regardless of application. Because of the strength to weight ratio and the ability to spool any

*(cont. on page 4...)*

## OTT IN THE NEWS

### OCEANUS

#### [Whale-Safe Fishing Gear](#)



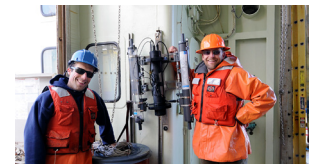
### WAVE & TIDAL ENERGY NETWORK

#### [Electromechanical Mooring Stretch Hoses](#)



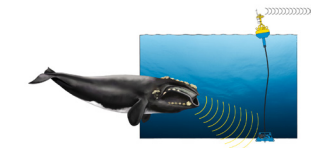
### OCEANUS

#### [New Device Reveals What Ocean Microbes Do](#)



### OCEANUS

#### [Eavesdropping on Whales](#)



## Highlighted Published Patent:

**"Environmental Monitoring Assembly And Method"**

**Inventor: Ken Buesseler**

**Publication number: US20170045628 A1    Published: February, 16, 2017**

*RadBands, in the form of bracelets, anklets, or other wearable articles, are fabricated with absorptive qualities specific for the radioisotope or other contamination of interest. RadBand technology can be worn by individuals during normal water activities to collect, transmit, and display data. These wearable articles may also have positioning devices and/or digital interfaces to enhance data collection. A proof of concept has been accomplished for radioactive cesium, and the technology is also applicable for detection of water-borne pathogens.*



WHOI Compact Marine Winch. Renderings courtesy of Joshua Eaton © WHOI

*(Technology Spotlight cont. from page 3...)*

size tension member (1/4 in to 3 in), users will have the ability to change diameters and tension member types on the fly, going from thread lay to open lay, either onsite or from a remote location.

The winch is designed to work in conjunction with a portable turntable- another Haley/Eaton innovation -eliminating the need for custom baseplates and allowing for flexibility in deck placement, movement, and application. While conventional winches are immobile once installed on deck, and require heavy equipment to turn or rotate, the WHOI Compact Winch is easily hand-rotated, a full 360 degrees, and locked into place quickly and easily with a lever positioned on the base.

The winch was built with utility in mind – creating a unit with much a smaller footprint and a higher strength to weight ratio. Featuring a frameless build, the winch motor is housed entirely within the winch drum allowing for a smaller on-deck footprint. With the open air design of the drum- air flow is permitted and the motor is force ventilated for cooling. Quick and easy maintenance is as simple as sliding the motor from the winch drum. The structure of the winch features

small loops at the top that allow for connection to machinery for movement and installation.

The winch was originally designed for moorings where high-strength, high-volume tension members must be accommodated but was designed with scalability in mind and is applicable to both marine and terrestrial applications, allowing for customization based on unique needs and challenges. The Compact Winch and Portable Turntable designs are currently protected under two pending patents and are the subject of an active licensing effort by the Tech Transfer Department.

## Upcoming Events

Upcoming Events for OTT are posted on the [News & Events](#) page of our website- please check back for additional 2017 events.



### May 2017 Annual Meeting of Board of Trustees and Joint Meetings

The Board meeting will be taking place May 17-19th. If interested in



### Shark Tank

Shark Tank 2017 will take place in September with a new application process (See page 1)



### Startup Weekend

Startup Weekend will take place at MIT and is anticipated for Sept/Oct 2017 details & confirmed dates TBD



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