

\$300k NIH Grant to Explore AirCradle™ Feasibility Addition to Burt®

Expanding Functionality of Barrett's Burt® Platform to Improve Grasping of Real Objects During Recovery from Neurological Injury such as Stroke

NEWTON AND CHARLESTOWN, MA, USA, September 28, 2021

/EINPresswire.com/ -- Today [Barrett](#) announced the awarding of a grant from the National Institutes of Health (NIH) to extend the use of the Burt® robotic system for occupational therapists to handle real-world objects in the performance of Activities of Daily Living. Barrett, a leader in medical robots, designs and manufactures some of the world's most advanced robots for use across the globe. This NIH award will be shared with Mass General Brigham affiliate [Spaulding](#) Rehabilitation Hospital to explore the feasibility of extending the Burt® technology to support people with stroke and other neurological deficits such as traumatic brain injury and spinal-cord injury.



Artist concept of a Burt® robotic platform allowing easy reach of real-world objects.

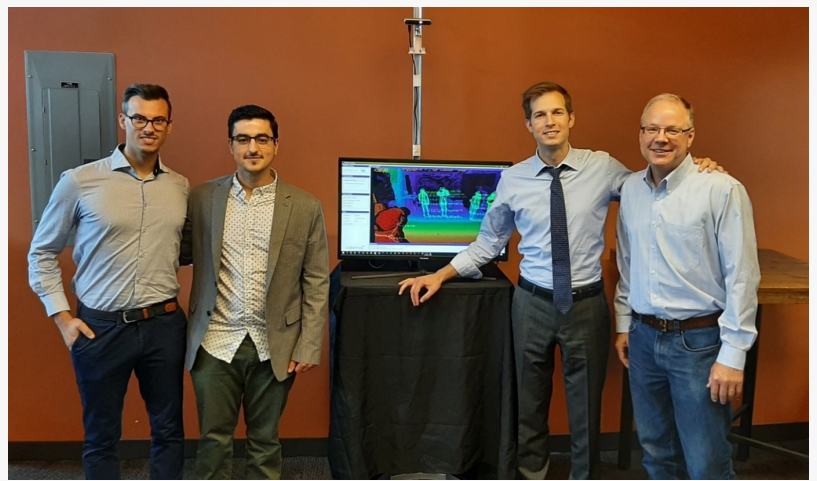
According to Congressman Jake [Auchincloss](#), "With a \$300,000 grant from the Small Business Innovation Research program, Barrett Technology will have the tools needed to innovate medical advancements. This funding will provide support as Barrett creates the future of robot-assisted stroke rehabilitation."

In the days and weeks after a neurological injury, it is critical for a professional therapist to apply intense and sustained rehabilitation. The need for patients to receive these treatments creates many challenges for providers. So, Barrett designed Burt®, an advanced robotic platform designed to help make rehabilitation fun (or at least less tedious than weights and rubber bands) by negating gravity while gamifying therapy – anything from air hockey to solitaire – while

quantifying progress.

However, the Burt® system does not yet allow the easy grasping of real-world everyday objects for reach-and-grasp activities of daily living in combination with its games.

To address this issue, Barrett will create an augmented-reality system with a specialized cuff to cradle the patient's arm without preventing the ability to grasp real objects. One of the subtle-but-critical needs is for quick donning of the cuff. Therapists bill in 15-minute increments, so a setup time exceeding two minutes is unacceptable.



From left to right, Spaulding researcher Dr. Federico Parisi, Barrett Engineer Dr. Alexandros Lioulemes, Congressman Jake Auchincloss, and Barrett CEO Bill Townsend, who will lead the effort.

Barrett's development team is legendary! "I've provided software tools to literally millions of product development professionals and met thousands -- but Barrett's team stands out. I have every confidence that Barrett will demonstrate creative feasibility of this AirCradle™ add-on to Burt®." said Jon Hirschtick, Executive VP at PTC and former founder of SolidWorks and Onshape.

“

I've provided software tools to literally millions of product development professionals and met thousands -- but Barrett's team stands out. ”

*Jon Hirschtick, EVP at PTC &
Founder of SolidWorks and
Onshape*

According to Barrett founder and CEO, Bill Townsend, "Development of AirCradle fits nicely into Barrett's product roadmap. NIH's award of this highly competitive grant reflects the tremendous need for this type of technology and will ultimately assist recovery for a huge population of survivors of stroke, traumatic brain injury, spinal-cord injury, and other forms of neural injury."

About Congressman Jake Auchincloss

Representative Jake Auchincloss is serving his first term in Congress, where he is a member of the Transportation & Infrastructure Committee and Vice Chairman of the Financial Services Committee. His areas of focus include infrastructure, housing, the life sciences, and energy policy.

Jake was born and raised in Newton, Massachusetts, the son of a surgeon and scientist. They taught him to be a lifelong learner. From the moment he could read, he loved American history.

After graduating from Harvard College, Jake joined the Marines. He commanded infantry in Afghanistan and special operations in Panama. He's now a major in the reserves. When he returned home, Jake continued service as a three-term city councilor in Newton. His favorite part of being a city councilor was constituent services and communication. While serving in the public sector on nights and weekends, Jake led product development at both a Fortune 100 insurance company and a cybersecurity startup. He has degrees in economics and finance from Harvard College and MIT Sloan. Jake lives in Newtonville with his wife, Michelle; their son, Teddy; and their Labrador Retriever, Donut. He and his wife are expecting a daughter in August. For more information, visit <https://auchincloss.house.gov>.

About Barrett Technology

Barrett, through its Barrett Medical division, is developing robots that help people recover from stroke and other neurological injuries including deficits after cancer surgery, traumatic brain injury, spinal-cord injury, and even Covid brain fog. These technologies have future uses across a broad spectrum including sports training, sports refinement, sports medicine, and networked exercise equipment. Today, Barrett is shipping its FDA-registered Burt® product across the United States and China and plans to begin expanding into other countries. For more information, visit www.barrett.com.

About Spaulding Rehabilitation Network

A member of the Mass General Brigham Health System, the Spaulding Rehabilitation Network includes Spaulding Rehabilitation Hospital, with a main campus in Charlestown the 3rd ranked rehabilitation hospital in the country by U.S. News & World Report, along with Spaulding Rehabilitation Hospital Cape Cod, Spaulding Hospital Cambridge, Spaulding Nursing and Therapy Center Brighton, and over 25 outpatient sites throughout Eastern Massachusetts. An acclaimed teaching hospital of Harvard Medical School and home to the Department of Physical Medicine and Rehabilitation, Spaulding is recognized as the top residency program in the U.S. in the 2020/2021 Doximity Residency Navigator. Spaulding also was recognized by the 2021 Disability Equality Index as a "Best Places to Work for Disability Inclusion." For more information, visit www.spauldingrehab.org.

###

William Townsend
Barrett Technology, LLC
+1 617-252-9000

[email us here](#)

Visit us on social media:

[Facebook](#)

[Twitter](#)

[LinkedIn](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/552160428>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2021 IPD Group, Inc. All Right Reserved.