



Lyme Disease Association, Inc.

PO Box 1438, Jackson, New Jersey 08527

888-366-6611 www.LymeDiseaseAssociation.org 732-938-7215 (Fax)

STATEMENT BY LDA PRESIDENT PAT SMITH ON TICK STIK

May 5, 2022– With 476,000 people in the US being diagnosed and treated for Lyme disease annually, it is heartening to know that there are individuals who are working on solutions to many aspects of this devastating disease. It is especially so when some of them are our young people, youth who have the potential to solve some of the many problems of Lyme by examining them from a fresh perspective.

An example of this begins with Delaney Dixon, a middle schooler, who contracted Lyme disease and experienced some of the issues associated with determining if she were bitten by a tick—the inability to examine herself for ticks without help—leading to her frustration and embarrassment with the tick check process. Discussing the problem with her family, she found they were supportive, approached it from a scientific perspective, and conceived of a device whereby individuals could search their own bodies looking for tick attachments or signs of a tick bite. The family then decided a tick removal component was essential to be added.

To obtain the required engineering skills, Delaney’s dad then contacted Binghamton University to see if it could help more precisely develop the device enough to market to the public. The project became one of the University’s senior engineering projects for 2021-22 school year. A team of three seniors, Jung Wok Oh, Justin Adamczak, and Salvatore Mezzatesta began meeting in video conferences with the Dixons in brainstorming sessions. Other personnel from the University then became involved in other aspects of the project.

This entire process has led to the creation of a device called “Tick Stik,” a tick removal device plus a camera on a flexible wand that can potentially capture images that could then be shown on a cell phone--images which might include an attached tick, perhaps a deer tick which transmits Lyme disease, or one of the half dozen or more other ticks that transmit 18+ tick-borne diseases (TBD) now found in the U.S.

If an attached tick is observed on an inaccessible area on the body by an individual and there is no one to help with the removal, one of the goals of the device is to allow an individual to self-remove the tick, which may be able to transmit more than one disease with one bite. Early removal decreases the risk of infection with a TBD. Perhaps the camera might not reveal a tick but might reveal an *erythema migrans* rash (EM), which can be one of the signs of Lyme disease—the most common EM rash is known as the classic bull’s eye rash.

The endeavor to perfect this device has become a consummate example of teamwork, essentially, a middle schooler and her family and three University students and their advisor, along with guidance from other University staff. The enthusiasm, dedication, and intellect exhibited by this group to solve a problem which can help thousands of people avoid developing Lyme or another tick-borne disease or can lead to an early diagnosis, lends hope for many who spend significant amounts of time in the outdoors for recreation or work. Tick-borne diseases may one day become a scourge of the past.

May is Lyme Disease Awareness Month. The Lyme Disease Association Inc, (LDA) a national non-profit dedicated to raising funds to educate, to perform research, and to support patients for over 31 years, congratulates all who have had the foresight to be involved in this project, and LDA is pleased as part of its mission to spread the word not only about Tick Stik itself, but also about the fact that creative ideas to help people often come from the grass roots and from our youth, partnering with others to move these ideas into fruition. Today, the LDA is awarding certificates of appreciation to the students. Thank you all for your efforts!

I am sorry I could not personally be with all of you today to celebrate your accomplishments on this important project.

Pat Smith, President, Lyme Disease Association Inc.

WWW.LymeDiseaseAssociation.org

President@LymeDiseaseAssociation.org