
For Immediate Release:
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Hairpin Technologies Announces U.S. Patent Office Denial Of All 4 Petitions Filed by Benitec Biopharma Against Cold Spring Harbor Laboratory's Short Hairpin RNA (shRNA) Patents

USPTO Action Supports Validity of the shRNA Patent Portfolio Represented by Hairpin Technologies

Ronkonkoma, NY; April 7, 2016: Hairpin Technologies announced today that the U.S. Patent & Trademark Office has denied all 4 petitions filed by Benitec Biopharma Ltd seeking to invalidate Cold Spring Harbor Laboratory (CSHL) patents covering short hairpin RNA (shRNA). Invented at CSHL by Dr. Gregory Hannon and his team, shRNA is a versatile research tool used in functional genomics and drug discovery which can be used to silence target gene expression to help elucidate biological function and identify novel drug targets. The technology is particularly useful in determining the role of specific genes in disease, allowing researchers to observe what happens when these genes are turned off. In addition to determining how these genes function, shRNA may also help scientists identify and validate novel drug targets for which new pharmaceuticals can be developed.

"We are happy with the result, but are not surprised," said Dr. Bruce Stillman, President and Chief Executive Officer of the Laboratory. "CSHL vigorously defended its patents against these challenges. Dr. Gregory Hannon and his team, through their pioneering work at CSHL, are recognized around the world for having developed shRNA to knock down gene expression in mammalian cells. Benitec's claims to the contrary were rejected by the Patent Office. We look forward to enhancing our shRNA licensing program with this well-deserved confirmation by the Patent Office of CSHL's key role in this technology."

The shRNA technology is already commercially available from a number of authorized distributors with existing non-exclusive license agreements from CSHL and Hairpin Technologies to make, market and sell shRNA. Pharmaceutical and biotechnology companies of all sizes, as well as contract research organizations which utilize shRNA, are also required to obtain a non-exclusive license from CSHL for approved access to the relevant intellectual property.

Established in March 2015, Hairpin Technologies maintains the sole authority to negotiate and execute license agreements with potential licensees for all non-therapeutic uses of the relevant U.S. and international patents covering the shRNA technology. The company leads ongoing marketing, corporate outreach and out-licensing efforts on behalf of CSHL, and it recently executed commercial distributor licenses with Sigma-Aldrich and Life Technologies/Thermo-Fisher, as well as commercial end-user licenses with Biogen, Epizyme, GlaxoSmithKline, Johnson & Johnson, and ORIC Pharmaceuticals, surpassing \$1M in licensing revenue within the first year of operations.

About Cold Spring Harbor Laboratory

Celebrating its 125th anniversary in 2015, Cold Spring Harbor Laboratory has shaped contemporary biomedical research and education with programs in cancer, neuroscience, plant biology and quantitative biology. Home to eight Nobel Prize winners, the private, not-for-profit Laboratory employs 1,100 people including 600 scientists, students and technicians. The Meetings & Courses Program hosts more than 12,000 scientists from around the world each year on its campuses in Long Island and in

Suzhou, China. The Laboratory's education arm also includes an academic publishing house, a graduate school and programs for middle and high school students and teachers. For more information, visit www.cshl.edu

About Hairpin Technologies: Hairpin Technologies Inc. was founded in 2015 to expand the commercial distribution and research use of short hairpin RNA (shRNA), a versatile biomedical research and drug discovery tool invented at Cold Spring Harbor Laboratory (CSHL). As the exclusive licensing agent of CSHL, the mission of Hairpin Technologies is to negotiate and execute license agreements with manufacturers, distributors and end-users of the shRNA technology, which is protected by a robust portfolio of U.S. and international patents. In this capacity, Hairpin Technologies leads ongoing marketing, corporate outreach and out-licensing efforts to identify and engage potential licensees on behalf of CSHL. For more information, visit www.hairpintechnologies.com.