



Smithfield BioScience, BioCircuit Technologies to Deliver Innovative Nerve Repair Solution

Nerve Tape® will allow for suture-less surgical repair following traumatic injuries



Smithfield, VA and Atlanta, GA, Mar. 16, 2022—[BioCircuit Technologies](#), a National Institutes of Health (NIH)-funded medical device company focused on tissue repair and neural interfacing, and [Smithfield BioScience](#), a unit of Smithfield Foods delivering life-saving medical solutions from porcine-derived bioproducts, today announced the companies will produce Nerve Tape®, a medical device enabling suture-less nerve repair following traumatic injuries. The technology will allow surgeons to operate faster and achieve precise, reliable rejoining of injured nerves, simplifying the surgical process and improving patient outcomes.

Nerve Tape® is an implantable device composed of decellularized porcine small intestinal submucosa (SIS) embedded with microscale hooks for tissue attachment. It can be quickly and easily wrapped around two ends of a severed nerve to form a strong, reliable connection with distributed tension to promote regeneration. The devices will be prepared from fully traceable SIS tissue harvested from Smithfield's U.S. operations.

“Our work with BioCircuit demonstrates our expanding portfolio and the value we are creating in a variety of markets through Smithfield's vertically integrated supply chain and manufacturing expertise,” said Courtney Stanton, President of Smithfield BioScience. “By harvesting porcine bioproducts for medical applications – such as organs, mucosa, and tissues – we have the ability to improve lives through the development of innovative pharmaceuticals and medical devices like this one.”

“We look forward to working with Smithfield BioScience to bring this promising medical device solution to life,” said Michelle Jarrard, CEO of BioCircuit Technologies.

“BioCircuit is committed to developing medical technologies, such as Nerve Tape®, to

repair, monitor, and control peripheral nerves precisely and reliably. We're excited to tap into Smithfield's exceptional level of traceability and product safety in our work to empower surgeons with powerful, practical clinical tools that improve the treatment of injuries."

In parallel with establishing a commercial supply chain for Nerve Tape[®], BioCircuit is also developing non-invasive, bioelectronic devices able to tap into nerve and muscle activity to provide sensitive, high-resolution monitoring and selective, closed-loop stimulation. Useful in the fields of bioelectronic medicine, neuromodulation, neuro-prosthetics, and neuromuscular rehabilitation, this bioelectronics technology provides clinicians with the ability to diagnose health conditions earlier, precisely deliver therapies, and track outcomes over time.

Smithfield BioScience leverages Smithfield's vertically integrated platform to supply the pharmaceutical and medical device industries with a secure source of porcine-derived products fully traceable to their farms of origin. Since its inception in 2017, Smithfield BioScience has become a leading U.S. manufacturer of heparin, an essential pharmaceutical product used to prevent the formation of blood clots during certain medical procedures or in patients at risk for clots. For more information, visit smithfieldbioscience.com.

About Smithfield Foods, Inc.

Headquartered in Smithfield, Va. since 1936, [Smithfield Foods, Inc.](http://SmithfieldFoods.com) is an American food company with agricultural roots and a global reach. With more than 60,000 jobs globally, we are dedicated to producing "Good food. Responsibly[®]" and serve as one of the world's leading vertically integrated protein companies. We have pioneered sustainability standards for more than two decades, including our industry-leading commitments to become carbon negative in our U.S. company-owned operations and reduce GHG emissions 30 percent across our entire U.S. value chain by 2030. For more information, visit www.smithfieldfoods.com, and connect with us on [Facebook](#), [Twitter](#), [LinkedIn](#) and [Instagram](#).

About BioCircuit Technologies

Based in Atlanta, GA, BioCircuit Technologies develops and commercializes medical devices for tissue repair and neural interfacing. Designed for ease-of-use and reliability, these devices enhance therapeutic targeting, diagnostic precision, and surgical consistency for improved patient outcomes.

BioCircuit has received generous funding from numerous NIH grants. In addition to ongoing grant support, BioCircuit has attracted private financing, including investment from the GRA Venture Fund, Masters Capital, and Alsora Capital. For more information visit www.biocircuit.com.

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