



Contact: Mary Ann Dawson
901.678.159
mdawson@memphis.edu

U of M Research Foundation Receives Japanese Patent for Wound Care Dressing

May 23, 2016 - The University of Memphis Research Foundation (UMRF) has been granted a Japanese patent for "Compositions and Methods for Delivering an Agent to a Wound". The Japanese is patent No. 2012-500887. The United States patent, No. 8,993,540 for this same invention, was granted in 2015. With the patent issue last year, it was the 20th patent granted to UMRF. The biomedical technology covered by this patent was invented in the University of Memphis Herff College Of Engineering's Department of Biomedical Engineering (BME). The inventors are Dr. Warren Haggard and Dr. Joel Bumgardner, both professors of BME, and Dr. Scott Noel of Bionova Medical, who earned his PhD under Haggard's supervision.

The patent is exclusively licensed to Bionova Medical, a privately held medical device company in Germantown, Tenn. The company's flagship product, Sentrex BioSponge MPD, covered by this new patent, has received two clearances from the U.S. Food and Drug Administration for use as a local wound management device that is also compatible with Negative Pressure Wound Therapy (NPWT). With funding support from the Military Infectious Diseases Research Program (MIDRP), Drs. Haggard and Bumgardner are developing a next-generation wound dressing to prevent infection and aid in wound healing for trauma patients. The current wound dressing is a naturally sourced bio-compatible sponge material and is a commercially available product from **Bionova Medical**. Dr. Haggard's team is investigating improved versions of the technology with the added functionality to deliver both antibiotic

and anti-fungal agents directly to the wound.

The commercialized sponge, **Sentrex BioSponge™**, was launched as a wound dressing product in August 2014. Its first use occurred at the John H. Stroger, Jr. Hospital of Cook County (formerly Cook County Hospital) in Chicago, and since then it has been used in over 1100 clinical trauma cases at facilities across the country, including military treatment facilities. Used in combination with surgical debridement, irrigation, and systemic antibiotic regimens, this low-cost device is already improving treatment outcomes for extremity fractures in civilian patients. With the improvements currently in development, the next-generation sponge is expected to continue to reduce recovery time and lower healthcare costs of these traumatic injuries.

The Sentrex BioSponge MPD has been used in medical centers around the country to aid in local management of a variety of wound types. Brian Austin, CEO of Bionova Medical, said, "We appreciate the opportunity to provide physicians with a device utilizing this novel technology from the University of Memphis that helps them manage complex wounds."

Bionova, founded in 2011, is committed to providing advanced treatment options to practicing physicians. Utilized across a spectrum of specialties, including trauma, general and plastic surgery, and advanced wound care, Bionova Medical's versatile device offers a simple solution for complex wounds.

The University of Memphis Research Foundation is a 501(c) corporation that supports the research and technology transfer objectives of the U of M and its faculty and students.