**Background**

Current estimates put the annual occurrence of chronic wounds at approximately 9 million worldwide. These include pressure ulcers caused by venous disease. This disease occurs when the circulatory system valves responsible for controlling blood flow from the foot to the heart are damaged. This disruption in blood flow can cause high pressure build up in veins leading to swelling in the leg. In addition it restricts the supply of oxygen, carried by blood, to the wound site. An uninterrupted supply of oxygen is critical for wound healing. There is an unmet need for a device for treating pressure ulcers which can provide reliable and appropriate wound care.

**Technology**

Developed by UMass Medical School Professor Dr. Raymond Dunn, the technology is comprised of composition and methods for treating pressure ulcers. The device allows a treating physician to monitor and adjust the pressure at a wound site, to more accurately treat and facilitate healing of, for example, a pressure ulcer while providing adequate wound care. Pressure ulcers can be varied with respect to open sores and the location of the wound. Thus, proper fixation methods provided by monitoring the pressure measurement devices which allow adjustment of the compressive forces applied by the malleolar pad provides favorable outcomes for the patient and the physician.

**Application**

Medical Device for wound management, especially pressure ulcers

**Salient Features and Competitive Advantages**

- **Unique Design:** provides a measure of the compression force and a determination of the pressure applied, qualities desirable for a device for pressure ulcer care
- **Accelerates Wound Healing:** controlled pressure counteracts the vein pressure thereby increasing oxygen absorption, increasing the availability of oxygen to the wound site.
- **Form fitting:** The pad is designed to conform to the normal shape of the body region where the pad is placed.
- **Broad Applicability:** Can be used in multiple pressure ulcer sites for example occipital region or in the sacrum. In addition the pad can also be used to treat skin graft sites
- **Market Potential:** The market for products for management of venous stasis is estimated to surpass $3 billion (2016).

**Business Opportunity**

UMass OTM is seeking statements of interest from parties interested in licensing and/or sponsoring collaborative research to further develop, evaluate, or commercialize this technology.

Technology includes all Material and associated Intellectual Properties.

**Address**

Kevin Lehman, PhD  
Licensing Officer  
Phone: (508) 856-5494  
Fax: (508) 856-1482  
E-mail: Kevin.Lehman@umassmed.edu