**Autonomic Neuropathy Diagnosis Device**

*Technology #20160414*

**Sweat Detector Quantifies Autonomic Neuropathy**

A wearable sweat detector improves the ability to diagnose, localize and quantify autonomic neuropathy, common in diabetics. The detector is a paper garment that can be folded around different body parts. It uses paper microfluidics technology to create small islands containing sweat detectors that provide both qualitative and quantitative estimation of the sweat produced by a patient.

**Improved Paper Microfluidics**

Current methods for diagnosing autonomic neuropathy require placing patients in a high temperature room (sauna) and covering the patient’s body with a powder (usually starch). Such methods are time and labor intensive and only done in a few major medical centers. This method is easier, less labor intensive and more acceptable. In addition, it has improved paper’s ability to detect water (and sweat) drops with higher resolution, leading to more accurate information on both the size and location of the sweat produced.

**BENEFITS AND FEATURES:**

- Diagnoses, localizes and quantifies autonomic neuropathy
- Easy, less labor intensive and more acceptable
- Improves ability for paper to detect water/sweat (higher resolution)

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• Accurate information on size and location of sweat produced

APPLICATIONS:

• Autonomic neuropathy
• Diabetics
• Athletic clothing
• Rehabilitation

Phase of Development - Prototype development

Interested in Licensing?
The University relies on industry partners to scale up technologies to large enough production capacity for commercial purposes. The license is available for this technology and would be for the sale, manufacture or use of products claimed by the issued patents. Please contact Kevin Nickels to share your business needs and technical interest in this technology and if you are interested in licensing the technology for further research and development.

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