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**PRESS RELEASE**

**APDM WEARABLE TECHNOLOGIES AWARDED NIH FUNDING TO COMMERCIALIZE NOVEL BIOFEEDBACK SYSTEM**

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APDM Wearable Technologies has been awarded a National Institute on Aging SBIR Phase II grant totaling $1.6 million to commercialize a real-time biofeedback system. With this funding, APDM will develop the industry's first over-ground gait biofeedback rehabilitation system utilizing both visual and auditory biofeedback so patients can rehabilitate in a real-world setting.

Existing technology like instrumented treadmills have an entry price of $80,000, restrict patients to straight walking at a fixed speed, and alter biomechanics in a way that does not translate back to daily activity. Not only will this novel biofeedback system be a fraction of the cost, but patients will be able to walk in diverse, real-world settings at a self-selected pace, which is crucial for re-training gait for sustained results.

Over 300 patients with various types of gait disturbances will be recruited for a clinical trial to evaluate the effectiveness of the biofeedback system in a physical therapy clinic. Northwest Rehabilitation Associates will manage data collection throughout the clinical trial, Oregon Health & Science University’s (OHSU) Balance Disorder Lab will conduct scientific validation, and APDM will concentrate on technological development and analytics. After each training session, the system will provide a summary of gait training including progress and outcome for each metric, and the total exercise time. This will enable physical therapists and scientists to document the effectiveness of gait rehabilitation with objective, validated metrics and help older adults on their path to independent movement.

President of the Northwest Rehabilitation Associates and two time recipient of Clinician of the Year from the American Physical Therapy Association, Mike Studer, states “With this biofeedback system we have the ability to not only capture the true metrics of gait but also the ability to relay them back to a patient in real-time. This affords us the opportunity to capture the attention and excitement of patients seeing themselves effect an immediate change.”

**About the Collaborators**

APDM Wearable Technologies is a digital health company focused on discovering reliable and sensitive endpoints of disease progression in neurological and chronic conditions by quantifying human movement with wearable sensors. For more information, visit [www.apdm.com](http://www.apdm.com/apdm-awarded-3-new-grants-from-nih-worth-5m/)

[Northwest Rehabilitation Associates](http://www.northwestrehab.com/) is a regional leader in customer service and an emerging national + international presence in rehabilitation. With the unique combination of expert clinicians, state of the art facilities, incorporation of technology, and renowned clinical experts, they proudly serve patients in the mid-Willamette valley and beyond.

The OHSU [Balance Disorders Laboratory](http://www.ohsu.edu/xd/education/schools/school-of-medicine/departments/clinical-departments/neurology/research/horak-lab-balance/index.cfm) examines how motor signals sent to muscles and sensory information about body position interact to maintain a person's balance while standing or walking. In addition to studying how balance control is disrupted, they utilize novel balance training interventions along with state-of-the-art brain imaging to determine rehabilitation efficacy in clinical populations.

**Disclaimer**

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