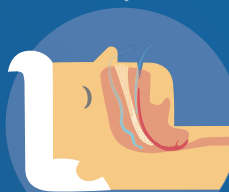


# The PAT<sup>®</sup> Signal

Peripheral Arterial Tone



zzz Sleep Onset



a. Muscle Tone Decreases  
b. Airway Collapses



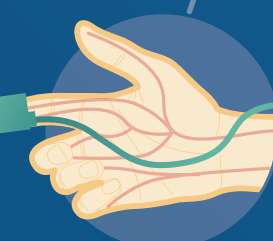
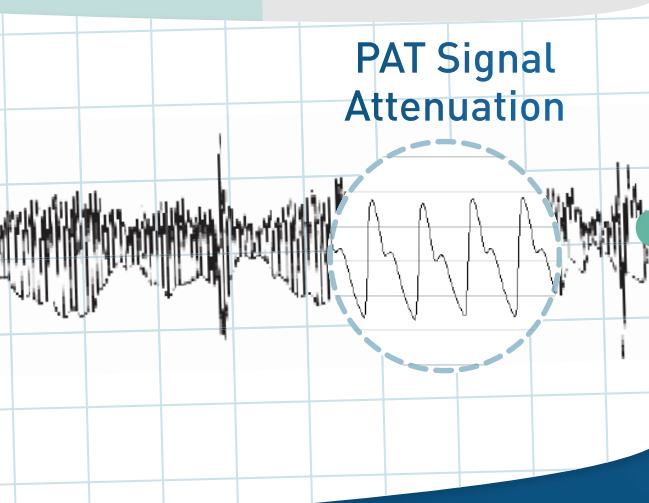
Respiratory Cessation



Fight or Flight Response



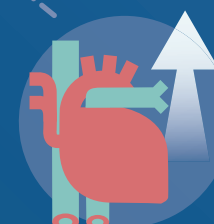
Sympathetic Activation



Digital Arteries Constriction



Blood Pressure



Heart Rate



# WatchPAT<sup>TM</sup>

## Home Sleep Testing Made Simple

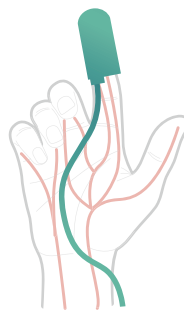
Powered by the PAT<sup>®</sup> technology



### Innovative Technology

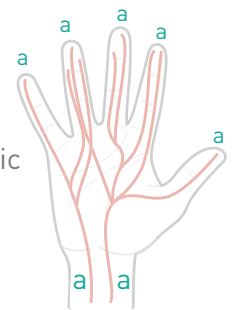
The PAT biosensor applies a uniform pressure field around the fingertip

- Enables optimal signal quality
- Creates a precise measurement environment without any confounding influences (such as venous blood pooling)



### The Finger – Unique Physiology

- High vascular density
- Tremendous blood flow changes
- Only alpha adrenergic receptor pathways: a surrogate of sympathetic nervous system activation
- Convenient site for measurement



### Sleep Stages with the WatchPAT

- Sleep Stages classification based on unique signatures in the PAT amplitude and heart rate
- Sleep/Wake differentiation uses data from the wrist Actigraph and additional WatchPAT channels

	PAT Amplitude	PAT Amplitude Variability	HR Variability
Light Sleep	High	High	High
Deep Sleep	High	Low	Low
REM	Low	Very High	Very High



Easy, Accurate and Reliable



Clinically Validated



90% Correlation to In-Lab PSG\*



Measures Total Sleep Time (TST) and Sleep Architecture

\*Yalamanchali S, Farajian V, Hamilton C, Pott TR, Samuelson CG, Friedman M. Diagnosis of obstructive sleep apnea by peripheral arterial tonometry: meta-analysis. JAMA Otolaryngol