Researchers at the University of South Florida have developed a novel acoustic stethoscope allowing precision in point of care and critical care technologies.

Accurate measurements of continuous heart rate, respiratory rate, blood pressure and other vital parameters using a single assessment system is now possible through this invention. For the very first time, the ability to continuously visualize and hear the sounds of the physiological blood flow during any medical procedure is now achievable.

Current conventional state-of-the-art technologies use multiple devices to provide the same information. With the use of the invented data acquisition system, signal analysis and processing framework, need for multiple assessment systems has been eliminated. Fetal monitoring in labor and delivery setting is another application of this invention.

**ADVANTAGES:**
- Measures multiple vital bio signals using a single assessment system
- Accurately obtains heart rate, respiratory rate, and blood pressure
- Provides the audio visuals of the physiological blood flow during any medical procedure
- Accelerates point of care and critical care diagnosis
- Applicable to fetal monitoring in labor and delivery

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