Persaio™ is an active noise cancellation system for use in fMRI research. The system eliminates the need for the creation of special scan sequences, generally utilized to obtain clear vocal response data, by seamlessly integrating with standard scans.

Employing a single MR-compatible microphone and the Repetition Time (TR), Persaio utilizes patent-pending technology to reduce scanner noise dramatically, allowing researchers to hear their participants’ speech clearly. The unaltered audio and the noise-cancelled audio can be played or recorded.

Persaio works with electrical and optical TR pulses. Persaio is designed with an integrated, high-quality optical microphone. However, it can be used with pre-existing MR patient microphones.

* Optimized for EPI scan sequences

Features:
- Scanner sound amplitude is reduced by up to 30 dB in real-time (up to 40 dB via post-processing)
- Visual indicator that the participant is speaking
- Real-time, sub-millisecond, output can be used to obtain vocal response times
- Recording to a PC over USB for later analysis or speech recognition
- Adaptive algorithm compensates for changes in acoustic environment (e.g., positional changes of participant)