Audible acoustic measurement and analysis techniques are being enhanced and applied to a growing array of biomedical research and clinical problems. This emerging field is of increasing importance to orthopedic and sports medicine; ear, nose, and throat diagnostics and treatment; audiology and speech-language pathology; critical care; sleep medicine; pulmonary medicine; and cardiology.

The primary goal of this symposium is to bring together a wide range of researchers, technology developers, and clinicians in order to enhance their programs through exposure to novel technologies, techniques, and applications in this diverse field.

The symposium will feature invited presentations from leaders in the fields of musculoskeletal acoustic emissions, speech and voice analysis, acoustic reflectometry and tubometry, cough detection and monitoring, acoustic plethysmography and breathing analysis, cardiac sound analysis, and snoring detection and therapy. It will also highlight poster sessions based on submissions covering all aspects of audible acoustic technologies and related physiological and clinical research. In addition, there will be networking lunches both days, and a conference dinner Monday evening. The dinner will feature a presentation and demonstration on natural soundscapes by Bernie Krause of Wild Sanctuary.

The symposium will take place on the scenic high-tech campus of Purdue University in the new Martin C. Jischke Hall of Biomedical Engineering. Located a one hour’s drive from Indianapolis and two hours from Chicago, Purdue’s West Lafayette, Indiana campus and adjacent Discovery Park provides proximity and easy access to a variety of biomedical industry clusters. Attendees will stay at the Purdue Memorial Union hotel on campus, providing easy access to the symposium, schools, and other amenities.

**Registration**

Registration is FREE. The deadline for abstract submissions is July 1, 2008, and the deadline for registration is July 15, 2008 or when registration is full.

**Speakers**

- Ozan Akkus, Purdue University: “Musculoskeletal emissions”
- Andrew Daubeckspeck, Dartmouth College: “Acoustic plethysmography”
- John Earis, University of Liverpool: “The relationship between ventilation measured by optoelectronic plethysmography and acoustic transmission”
- Mike Heine, Purdue University: “Auditory signal processing”
- Thomas Hemmerling, McGill University: “Phonometry”
- Bob Hillman, Massachusetts General Hospital: “Voice disorder monitoring”
- Jessica Huber, Purdue University: “Respiratory & laryngeal components of speech”
- Martin Kompis, University of Bern, Switzerland: “Adaptive noise reduction”
- Ronald Miles, Binghamton University: “Biologically inspired microacoustic sensors”
- Tom Royston, University of Illinois - Chicago: “The audible human project”
- Bob Shannon, House Ear Institute: “Electrical hearing restoration”
- Janet Slifka, Massachusetts Institute of Technology: “Spontaneous speech behaviors”
- Jacky Smith, University of Manchester: “Cough analysis”
- Bela Suki, Boston University: “Airway diameters & crackle amplitudes”
- Ian Wells and John Beeton, Swansea Metropolitan University: “Signal analysis of snoring”

**Monday & Tuesday, September 8 & 9, 2008**

Purdue University, West Lafayette, Indiana, USA