

Patricia Davies is a professor of Mechanical Engineering at Purdue University. She became Director of the Ray W. Herrick Laboratories in 2005, which is a laboratory of over 100 graduate students and around 20 faculty focused on graduate student research with an emphasis on technology transfer. She also has a courtesy appointment in Psychological Sciences. Her research in vibrations and acoustics includes signal processing, nonlinear system identification, sound perception, and the impact of noise on people. A theme in her research is bridging the gap between experimental results and predictions from models based on current understanding of human, mechanical and/or material behavior. Applications include effects of transportation noise (sleep disturbance, annoyance), HVAC &R systems, diesel engines, seat-occupant systems, and energetic materials. Her research is sponsored by government agencies and industry. She is a member of a group of engineering and psychology professors at Purdue who conduct research on how people perceive and are affected by machines and engineered systems, and how to integrate that knowledge into engineered system design. Dr. Davies served as President of the Institute of Noise Control Engineering 2008-2010 and is a Fellow of that society. In Fall 2016, she received the Per Brüel Gold Medal for Noise Control and Acoustics from the ASME.