## ACOUSTICS2008/3099 Vibration Effects on Laboratory Mice during Building Construction

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Laboratory animals, in particular mice, are an integral part of medical and scientific research. Genetic research involving mice can be substantially affected by disruptions to the animals' environment. A new research facility is being built in close proximity to an existing one and the work will involve both demolition and new construction. Prior to construction, a study was conducted at the research facility to establish acceptable vibration levels in the vivaria areas. The study involved an experiment using an electrodynamic shaker to determine the effect of whole-body vibration on pregnant mice. The results of that study have been published. During construction, continuous vibration monitoring was conducted and the program and instrumentation used for monitoring are described. Results are presented, which include the researchers' data on the observed effects on the mice as well as the measured vibration levels during the construction.