Short communication

# Normal audiogram but poor sensitivity to brief sounds in mice with

tremors, and dystonic postures. Consequently, they dragged their hind limbs as they moved about (Sprunger et al., 1999).

The medJ mice and the phenotypically normal mice tested for comparison, were produced by crossing two congenic lines, C57BL/6J-$med^J/+$ and C3HeB/FeJ-$med^J/+$. They had one copy of the resistant Scnm allele, which they received from the C3HeB/FeJ parent (Buchner et al., 2003). Thus, the medJ mice were $med^J/med^J$, while the phenotypically normal mice (hereafter referred to as control mice) were either heterozygous for the $med^J$ mutation ($med^J/+$), or homozygous wild types ($+/+$). In other words, all of the mice were from the same homogeneous F1 background and differed only with respect to the $med^J$ mutation. Three mice (animals A, B, and C) were homozygous medJ. Their detection thresholds for brief sounds were compared to those of two control mice (animals D and E) of the same F1 genetic background. All subjects were experienced in auditory tests, and the determination of thresholds for short-duration tones reported here was conducted immediately following their audiograms for longer duration sounds. Thus, these mice were young adults at the time of testing. The procedures were approved by the Animal Care and Use Committee of the University of Toledo.

### 2.2. Acoustic apparatus

Pure tones at 16 kHz, the frequency of best hearing for mice,

## 4. Discussion

Psychoacoustics. Birkhauser, Basel, pp. 73–87.
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Kearney, J.A., Buchner, D.A., De Haan, G., Adamska, M., Levin, S.I., Furay, A.R., Albin, R.L., Jones, J.M., Montal, M., Stevens, M.J., Sprunger, L.K., Meisler, M.H., 2002. Molecular and pathological effects of a modi er gene on de ciency of the sodium channel Scn8a (Na(v)1.6). Hum. Mol. Genet. 11 (22), 2765–2775.