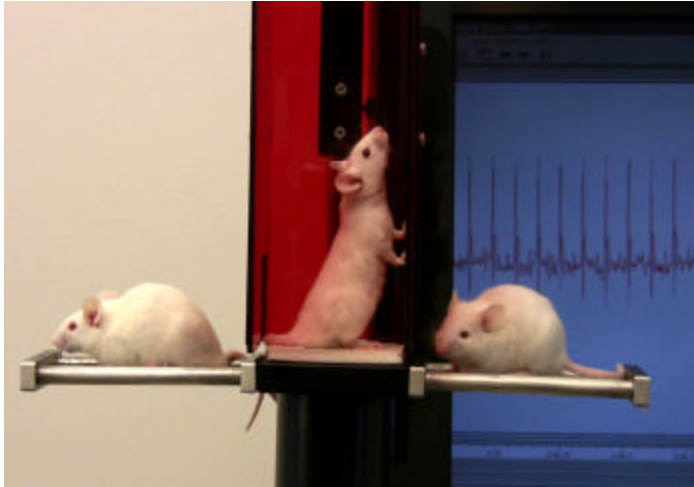




# Mouse Specifics, Inc.

## Conscious Lab Animal ECG System



Three conscious mice atop the ECGenie instrumentation. The signal is detected passively through the paws of the center subject, as the other two acclimatize.

### ECGenie<sup>®</sup>

The ECGenie™ is a rapid non-invasive solution for recording electrocardiograms (ECGs) in conscious mice, rats, and guinea pigs. Applications include arrhythmia detection, health monitoring, and drug screening in fragile transgenic and knockout animals as young as 6 days old.

ECGenie™ records the cardiac electrical signals at 2 kHz to provide optimal fidelity in describing the rapid ECG interval durations in mice (e.g., a QRS interval duration of ~8 ms). The typical laboratory setting easily accommodates the footprint of the entire system. This includes the shielded acquisition platform, analog input and bioamplification, and direct connection to Windows and MacOS computers.

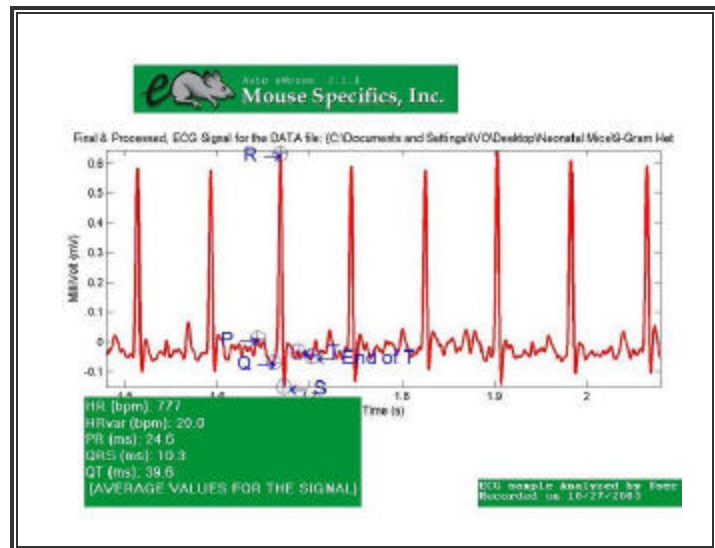
The instrument is based on patented technology for non-invasively detecting cardiac electrical activity through the animals' paws. The size and spacing of disposable footplate electrodes facilitate contact between the electrodes and the paws to provide a lead II ECG in laboratory animals. EzCG analyses software, provided by Mouse Specifics, analyzes the signals to assess animal health, cardiac diseases, and drug toxicity.

### ECGenie<sup>®</sup> features:

- "Quick-connect" interchangeable platforms for mice and larger rodents
- Disposable footplate electrodes
- High-pass and low-pass filtering
- SCSI and USB interface for connection to Windows and MacOS computers

### EzCG Analyses software features:

- Interpretation of ECGs from conscious moving mice, rats, and guinea pigs
- Published algorithms for heart rate and P Q R S T interval durations
- Custom inclusion of client-specific algorithms, including QTc
- HTML and text formatted output for multiple spreadsheet applications



Analysis of electrocardiograms is quick and easy with EzCG.

### Publications and Applications:

• **NO Anesthetic** • **NO Implants** • **NO Surgery**

1. *Cardiac anomalies in b-glucuronidase (GUSB) null mice are corrected by non-ablative neonatal marrow transplantation.* PNAS 101:603-8; 2004.
2. *Metabolic and cardiovascular effects of hyperthyroidism are largely independent of beta-adrenergic stimulation.* Endocrinology 145:2767-2774; 2004.
3. *Identifying new mouse models of cardiovascular disease: a review of high-throughput screens of mutagenized and inbred strains.* J Appl Physiol. 94:1650-9; 2003.

"...better data from every mouse."

www.MouseSpecifics.com