

Qualitative ECG Training for Preclinical Research



Overview

ECGs are central to preclinical cardiac safety, and building in-house expertise ensures confident interpretation and efficient collaboration across teams.

Electrocardiography is essential for cardiac safety assessment in preclinical studies. Automated tools quantify intervals, but qualitative interpretation — recognizing arrhythmias, conduction abnormalities, repolarization changes, and artifacts — depends on human expertise. Despite its importance, structured training in this skillset has been limited.

This four-day course, led by [Stacy Hosking, DVM, MS, DACVIM \(Cardiology\)](#), addresses that gap. It provides a systematic foundation in qualitative ECG analysis, combining comparative electrophysiology, species-specific data, and applied case review. Participants leave with a reproducible workflow and the ability to make consistent, defensible assessments.

Training Highlights

- Standardize internal practices: Give staff a stepwise approach to ECG interpretation that reduces variability.
- Clarify when escalation is needed: Participants learn which findings can be managed internally and which require expert review.
- Build internal capability: Allow teams to triage findings, flag true abnormalities, and distinguish artifacts without defaulting every trace to a cardiologist.
- Align with regulatory expectations: Support the qualitative interpretation called for in ICH S7 and related safety pharmacology standards.

Build your ECG training experience!

With structured content and expert instruction, this program delivers lasting value to teams involved in ECG review. Course fees are tailored to team size and format to keep the training flexible and accessible.

Training Agenda

Day 1 - Foundations:

- Electrophysiology, conduction physiology, and systematic ECG workflow.
- Artifact recognition and correction.

Day 3 - Complex Abnormalities:

- AV blocks and ventricular arrhythmias.
- ST-T and QT interval abnormalities.
- Electrolyte-driven ECG changes.

Day 2 - Normals & Sedation Effects:

- Species-specific ECGs and expected variants.
- Effects of anesthesia on rhythm and conduction.
- Introduction to atrial arrhythmias.

Day 4 - Application & Safety Relevance:

- Baseline arrhythmia incidence across species.
- Myocardial infarction models and drug-induced cardiotoxicity with qualitative endpoints.
- Final applied workflow and case-based review.

Participants complete the course with a certificate of completion and a comprehensive 400+ page workbook containing stepwise workflows, species-specific examples, and case discussions — a lasting resource for continued practice. The program establishes a shared framework that reduces reviewer variability and strengthens team decision-making.

Your Instructor

Stacy L. Hosking, DVM, MS, DACVIM (Cardiology)

Dr. Hosking is a board-certified veterinary cardiologist with over 20 years of experience across clinical practice, preclinical safety pharmacology, and cardiovascular imaging. She has led cardiac endpoint evaluation and investigator training within global research organizations and is recognized for making complex cardiac electrophysiology approachable through structured courses, lectures, and workshops.



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