

On-Site Expert Instruction: Pressure-Volume Loops



Overview

Our customizable Pressure-Volume Loop (PV Loop) training provides a tailored experience designed specifically around the expertise and needs of your research team. Available in both 1-day and 2-day formats, this training is ideal for labs utilizing admittance or conductance methodologies. The course comprehensively covers open- and closed-chest approaches, advanced surgical techniques, foundational and advanced PV theory, and much more.

Structured around the latest consensus guidelines published in the *American Journal of Physiology* – *Heart and Circulatory Physiology*, our training ensures your laboratory adheres to current best practices and standards in rodent PV loop research.

Training Highlights

- Convenient on-site instruction—our expert comes directly to your lab.
- Customizable course structure based on your experience and research objectives.
- Instruction for both admittance and conductance PV loop methodologies.
- Comprehensive training on open-chest and closed-chest approaches.

- Review of PV loop theory, equipment optimization, and data collection techniques.
- Expert instruction on microsurgical techniques and optimal surgical configurations.
- → Volume calibration, occlusion procedures, and advanced data analysis methods.
- Immediate enhancement of research capability, efficiency, and accuracy.

Pricing starting at \$4,795

Pricing is USD. Total training cost is subject to travel, training duration, number of participants, and customizations.

Training Experience

One-Day Format:

A single training day begins with a review of objectives and introduction to your existing PV Loop setup, followed by a seminar on ideal surgical approaches and data collection best practices. After lunch, participants shift to hands-on demonstrations involving either open-chest, closed-chest, or both depending on your lab's primary goals and protocols.

Two-Day Format:

Day one combines comprehensive seminars with guided practice on the closed-chest procedure. Day two starts with a recap, then moves to the open-chest procedure and concludes with a customized session. This allows your team to focus on additional skills such as surgical techniques, data analysis, or any other high-priority topic.

Your Instructor

Oliver Wearing, PhD

Dr. Oliver Wearing is a cardiovascular physiologist with deep expertise in pressure-volume (PV) loop science. He has spent over a decade refining PV loop techniques for preclinical models, generating high-resolution cardiac function data across a range of physiological and pathological states. Oliver is highly skilled in microsurgery, vascular catheterization, and telemetry, and is recognized for consistently generating high-quality, reproducible hemodynamic data.



This training program is built for ADInstruments and Millar users.







Endpoint Preclinical is a leading consulting network of over 25 experts dedicated to advancing preclinical research for CROs, pharmaceutical companies, biotech firms, medical device manufacturers, and academic labs. We blend world-class surgical expertise, advanced analytics, and regulatory insights to accelerate projects from early discovery through regulatory approval.

