SUNDAY
OCTOBER 22
AALAS Foundation Silent Auction & “Boot Up for Research” Contest
9:00 AM–5:00 PM, CC, North Foyer
Career Center
2-4pm Veterinarian Job Fair sponsored by ACLAM, APV and ASLAP (see mobile app for companies participating)
8:00 AM–5:00 PM, CC, 254B
Exhibit Hall Exhibitor Set-Up
7:30 AM–7:00 PM, CC, Exhibit Hall BC
First Aid
7:30 AM–8:00 PM, CC, Exhibit Hall Level between Escalators and Room 150
Mothers Room
7:30 AM–7:00 PM, CC, Exhibit Hall Level between Escalators and Room 150
Poster Sessions set-up by presenting author
2:00 PM–5:00 PM, CC, Inside Exhibit Hall
Registration
7:30 AM–7:00 PM, CC, East Registration
Speaker Ready Room
12:00 PM–5:00 PM, CC, 252A
Technician Fun Fair
1:00 PM–5:00 PM, CC, North Foyer
SPECIAL EVENTS
Opening General Session / General Membership Meeting
5:00 PM–6:30 PM, CC, Ballroom G
Welcome Reception
6:30 PM–8:00 PM, CC, Ballroom A
MEETINGS & EVENTS
District 8 Council
2:00 PM–5:00 PM, CC, 251A
Emergent Leadership Forum Luncheon (Invitation only; RSVP required)
12:00 PM–1:00 PM, Hyatt, Park City
Emergent Leadership Forum (Invitation only; RSVP required)
7:30 AM–3:50 PM, Hyatt, Juniper
Facilitators Meeting
3:00 PM–3:30 PM, CC, 250C

TECHNICAL TRADE PRESENTATIONS – ADVANCEMENTS IN DATA COLLECTION AND REPRODUCIBILITY

TRACK 1

Modernizing In Vivo Study Management with Benchling
1:00 PM – 1:20 PM/Room: 151G
Speaker: Andrew I Smith
Moderator: Johnny Truong
One of the biggest challenges in preclinical research is the poor reproducibility of animal data, which is currently at 11%. Most facilities rely on spreadsheets and legacy software for study management. This software is hard to set up and navigate and silos data - complicating information sharing between teams and exacerbating the reproducibility crisis. Benchling Studies is a cloud-based study management software developed by scientists as an efficient and user-friendly way to design, manage, and report on in vivo studies. The software solution helps scientists and technicians connect their in vivo data, instruments, and workflows to the rest of their upstream and downstream R&D teams. This reduces non-productive time and increases the amount of research to advance new drugs into the clinic.
This Technical Trade Presentation is sponsored in part by Benchling.

Dosing by Infusion: Best Practices for Using Implantable Pumps
1:20 PM – 1:40 PM/Room: 151G
Speaker/Moderator: Samantha Bazzell
Are you still injecting? Consider dosing by infusion and avoid the animal stress response and plasma fluctuations associated with frequent injections and other common dosing methods. ALZET Osmotic Pumps are a proven tool in preclinical studies, providing continuous, controlled drug delivery over extended periods. This presentation will provide an overview of the benefits and applications of ALZET Osmotic Pumps and best practices for their effective use. Participants will learn key considerations for effective chronic dosing & tips for the successful use of implantable pumps.
This Technical Trade Presentation is sponsored in part by ALZET® Osmotic Pumps/DURECT Corporation.

Low Stress, Spot On, Introducing Fluispotter: A Wearable Blood Collection Device for Large Animals
1:40 PM – 2:00 PM/Room: 151G
Speaker: Shelly Carballo
Moderator: Candace A Rohde-Johnson
Until now, serial blood collection - especially in large animals - required physical restraint or tethering. The Fluispotter is a new, wearable blood sampling device that is compatible with species such as rabbits, dogs, pigs, and primates. Implantation of the catheter is minimally invasive and can be done under light anesthesia. The Fluispotter weighs 70g and is light enough to be worn, therefore
allowing animals to be unrestrained, tethered, unaware of sampling, and even socially housed. As with other methods of automated blood collection, the Fluispotter can improve transplantability and reproducibility. This is achieved through sampling from animals with reduced stress, combining study protocols to incorporate both pharmacokinetics (PK) and pharmacodynamics (PD) in a single animal, and collecting samples from unrestrained animals at any time. The Fluispotter provides freedom from labor-intensive manual restraint and collection and improved ergonomics and safety associated with large animal blood collection. This presentation will review studies and publications by researchers who have refined their studies using the Fluispotter in large animal models and will outline the simple steps and materials needed to incorporate Fluispotter volumetric dried blood spot sampling into your study.

This Technical Trade Presentation is sponsored in part by BASi Research Products.

Maximizing Catheter Patency in Research Studies
2:00 PM – 2:20 PM/Room: 151G
Speaker: Steven C Denault
Moderator: Merryl Cramer
Animal research frequently requires repeated access to the circulatory system for intravenous administration, blood sampling, continuous infusions, and more. To facilitate access for both the animal and the researcher, many animals are implanted with indwelling catheters. These catheters require trained access and careful maintenance to maintain patency. When properly implanted, accessed, and maintained, a well-made catheter can be kept patent for months. Not only will this save time and money, but more importantly this can reduce animal use, generate more robust data, and allow cross-over study workflow. This presentation will go through the pros and cons of maintaining a vascular catheter for maximum patency in mice, rats, pigs, dogs, and primates.

This Technical Trade Presentation is sponsored in part by BASi Infusion Technologies.

Digitalize Your Day: Modern Study Management for Collaborative Efficiency
2:20 PM – 2:40 PM/Room: 151G
Speaker: Austin A Lanham
Moderator: Austin A Lanham
In vivo, research has a process problem. According to an industry survey, one-third of research institutions still use some type of legacy data capture and management tools. Forward-thinking research organizations are taking advantage of the benefits of modern technology to streamline their research and improve efficiency by implementing cross-functional, collaborative digital solutions. Using case studies from customers who have successfully digitalized their studies with the Climb study management platform, this session will highlight the real-life results organizations are achieving in their research output and vivarium study operations.

This Technical Trade Presentation is sponsored in part by RockStep Solutions.

Use of a QR Code Mini Tag for Identification of Mice in an Automated Colony Management System
2:40 PM – 3:00 PM/Room: 151G
Speaker: Steve Sansing
Moderator: Maria Cariglia
To keep up with the growing complexity of managing GEMS animals, many labs are looking at automated systems to maintain data integrity and efficiency in breeding and generating study cohorts. We have continued to look at various identification methods which help us ensure the correct animals are shipped, mated, and euthanized. We evaluated current identification methods which are available to achieve this level of quality, meet our IACUC standards, and are also cost-effective. Our current facility uses an Internet Colony Management application (ICM™) which drives our colony management and embryology services. This is a web-based application where technicians input data using tablets, RFID, and keypads to manage our breeding operation. In collaboration with RapID Lab, a mini tag was developed to fit our operation needs. This ear tag has a QR code as well as comes in a variety of ten colors. The current size of the mini tag, which is 3.5mm, enables us to identify a mouse at a minimum d12 pre-weaning. We have incorporated the QR functionality into our current system and the various colors provide the technicians with a secondary method of identification, helping to efficiently identify the correct animal. Integrating this mini tag into our colony management system has reduced errors and increased efficiency. This presentation will go through the attributes of the RapID Lab mini tag and show how this can be incorporated into a colony management system for mice to fully automate data collection for a breeding operation and maintain the highest level of animal and sample integrity. The target audience is research and operation facility managers/supervisors, research directors, researchers, and technicians.

This Technical Trade Presentation is sponsored in part by Charles River.

Best Practices and Technology for Improving Animal Study Reproducibility
3:00 PM – 3:20 PM/Room: 151G
Speaker: Jens Ibsen
Moderator: Daniel Tran
The goal of the Reproducibility Project: Cancer Biology was to replicate studies from high-impact cancer biology papers and concluded that there are significant opportunities “to improve the transparency, sharing, and rigor of preclinical research to advance the pace of discovery.” The Project found that up to ~90% of studies were not reproducible. The difficulty across the field of in vivo research in generating results with a high level of integrity, detail, and reproducibility consistently underscores the need to critically examine, improve, and standardize processes for animal study conduct. Researchers must understand the factors contributing to poor data quality and irreproducible study results and implement effective “Best Practices” and software technology for data integrity, study conduct, and scientific rigor. Researchers attending this presentation will gain an understanding of some success factors, practical approaches, and study workflow software approaches to make animal studies more reproducible.

This Technical Trade Presentation is sponsored in part by Studylog Systems, Inc.

Digital Lab Assistants & the Vivarium of the Future
3:20 PM – 3:40 PM/Room: 151G
Speaker: Steve McCoy
Moderator: Michael Evans
Learn how digital lab assistants improve data quality & reduce contamination for in vivo experiments and operations. In this presentation, Labvoice will profile applications of its digital lab assistants in biotech, pharma vivaria, and in vivo labs as a means of hands-free data collection & guiding technicians and research assistants through various processes such as cage checks, dosing calculations, and more. Further, Steve will highlight the ability to create a real-time audit of processes performed and the impact to biosafety & biosecurity.

This Technical Trade Presentation is sponsored in part by Labvoice.
One Size Fits All, But Not When It Comes to Managing a Vivarium
3:40 PM – 4:00 PM/Room: 151G
Speaker: Mat D Sanderson
Moderator: Leo Herlin
All vivariums revolve around caring for the animals and collecting research data, but the way each vivarium is run can vary greatly, and the data collection requirements can be even greater. We know that the processes differ between vivariums, so why should you be forced to use a specific process as defined by a software supplier? During this fun presentation, we will share examples of our analysis process and how the same data can be collected in different methods, depending on your requirements, but still maintaining consistent and accurate data. Topics covered will include ordering animals from internal or external sources and easily and accurately collecting data in real time. The target audience is technicians, veterinary care staff, vivarium managers, and researchers.

This Technical Trade Presentation is sponsored in part by Brain & Software International.

Better Disaster Resiliency: The Use of Reusable and Disposable IVC Caging
1:00 PM – 1:20 PM/Room: 150G
Speaker: Sarah Rovezzi
Moderator: Scott Hoy
An indispensable takeaway from the recent global pandemic is that disasters and disruptions in laboratory animal facilities happen. The COVID-19 crisis and other natural disasters forced Vivarium staff to reimagine their business continuity plans to include every possible setback. Infrastructure failures, catastrophic weather incidents, fires, diseases, epidemics, cyberattacks, and civil unrest are all potential threats that could cause loss of facility utilities, supply shortages, and personnel shortages. So, when a disaster strikes, long-term or temporarily shutting down your cage-wash operations, are you prepared to handle the impact? Our presentation will explain the advantages of being able to utilize recyclable, retrofittable, single use caging for better disaster resiliency. Knowing how quickly circumstances change, the flexibility to use disposable caging and reusable caging can be paramount for your research. Learn how prominent facilities have quickly pivoted from enduring unforeseen downtime back to being fully operational with the simple implementation of disposable caging as a part of their emergency preparedness planning.

This Technical Trade Presentation is sponsored in part by Allen-town, LLC.
**Transitioning from Ethylene Oxide to Chlorine Dioxide Gas Sterilization**

1:20 PM – 1:40 PM/Room: 150G  
Speaker: Kevin Lorcheim  
Moderator: Emily Lorcheim  
Ethylene oxide has been used for decades as a gaseous sterilization method for devices and tools. While steam can be a quick method for simple instruments, complex devices often require a gaseous method of sterilization, such as ethylene oxide. However, in recent years ethylene oxide has come under fire by the EPA, FDA, and other regulatory bodies due to its safety. Ethylene oxide has been listed as a carcinogen and many sterilization facilities that utilize ethylene oxide have been forced to shut down due to emissions concerns. Ethylene oxide sterilization also has the potential to leave harmful residues such as ethylene oxide, ethylene chlorohydrin, and ethylene glycol. All these issues show the need to utilize safer methods of gas sterilization, such as chlorine dioxide gas sterilization. Chlorine dioxide gas is a non-carcinogenic method of sterilization that is also non-explosive at use concentrations, unlike ethylene oxide. Chlorine dioxide gas sterilization cycles are simple to operate and have shorter cycles than typical ethylene oxide cycles. Aeration occurs within the chamber, and immediately thereafter, the product can be handled due to its benign potential residuals. The chlorine dioxide gas process does not require an increase in temperature during the cycle, which allows for greater material compatibility for temperature-sensitive devices. Chambers are easily able to be implemented within a facility, and if sterilization chambers already exist within a facility, they could be simply converted to become operational with chlorine dioxide gas. Overall, chlorine dioxide gas is an ideal option for those looking to eliminate ethylene oxide gas sterilization from their facility and for those seeking to bring sterilization in-house. This presentation will detail considerations on why a transition away from ethylene oxide may be necessary, the potential benefits of chlorine dioxide sterilization to a facility and its research, and how to properly implement the technology.

*This Technical Trade Presentation is sponsored in part by ClorDiSys Solutions, Inc.*

**Things to Know: Installing Large Autoclaves in Existing Buildings**

1:40 PM – 2:00 PM/Room: 150G  
Speaker: David Larson  
Moderator: Perry L Spires  
Ever tried to move a large autoclave into an operating facility in Philadelphia, NYC, Los Angeles, or even Salt Lake City? Installing large and heavy autoclaves in existing buildings often creates ingress issues. Ingress, defined as going in or entering, a large autoclave, can cause a variety of issues stemming from existing building limitations such as doorway dimensions, elevator dimensions and weights, hallway dimensions, and building access. In this talk, we will share the creative solutions we’ve learned in our decades of installing autoclaves. We’ll cover a different autoclave manufacturing process for existing buildings that you might not be familiar with, yet.

*This Technical Trade Presentation is sponsored in part by Beta Star Life Sciences Equipment.*

**How Can Your Animal Facility Benefit from More Precise Humidification Control?**

2:00 PM – 2:20 PM/Room: 150G  
Speaker: Patrick Johnson  
Moderator: Perry L Spires  
This presentation will review how more precise humidification control within an animal facility can be beneficial. During the presentation, we will review the current legislation regarding humidification control, acknowledge the benefits of more precise humidification control and understand that both improved animal welfare and a reduction in energy consumption are of major benefit.

*This Technical Trade Presentation is sponsored in part by Scanbur.*

**Doubling Scientifically Useful Animals With Limited Cage Space**

2:20 PM – 2:40 PM/Room: 150G  
Speaker: Jessie Janeczek  
Moderator: Cindy A Buckmaster  
Transnetx has executed case studies with global academic leaders focusing specifically on eliminating unnecessary animal waste, improving cage space utilization, and maximizing efficiencies within research laboratories. The data collected from these studies has helped leading research institutions increase the number of experimental animals by up to 40% and, where needed, reduced cage space by 30%. This session would benefit Animal Program Leaders and staff, IACUC, and laboratory staff and scientists.

*This Technical Trade Presentation is sponsored in part by Transnetx Inc.*

**Video Automation to Improve Daily Cage Inspections**

2:40 PM – 3:00 PM/Room: 150G  
Speaker: Zachary Wright  
Moderator: Daryl Reynolds  
Automating daily cage inspections with a video-based system boosts productivity, reduces costs, improves animal welfare, and increases job satisfaction. Learn how SwiftSENSE reduces in-person cage inspection labor using AI and remote cage inspection. We’ll share results from studies done with our video-based monitoring system. We’ll also discuss other real-world examples of institutions that have used our video-based monitoring system, including need-based cage changes, litter detection, and detecting mouse visual acuity automatically. Ready to boost animal health and save money?

*This Technical Trade Presentation is sponsored in part by Swift-SCIENCE.*

**Reimagining Decontamination: Unique Approaches to IVC Decontamination with Hybrid Hydrogen Peroxide Technology**

3:00 PM – 3:20 PM/Room: 150G  
Speaker: Elizabeth McQuade  
Moderator: Rich E Apolinar  
Decontamination of Individual Ventilation Caging (IVC) racks is a critical task for animal laboratory science facility managers. To effectively decontaminate the racks, a variety of steps must be taken, including proper cleaning and disinfection of the cages. Traditional methods of IVC sterilization involve heat in either dry or steam form. While effective, these methods can be detrimental to polycarbonate surfaces and require extensive use of utilities. Facilities also face increased labor due to the multi-step process and possible challenges with aging sterilizers no longer in use which monopolize much-needed laboratory space. This has left the industry wanting a more efficient and materially compatible method of decontamination without sacrificing 6-log repeatable efficacy. This presentation investigates the feasibility of using a lower consequence, low-concentration hybrid hydrogen peroxide technology for IVC rack decontamination, where success was measured not only by 6-log efficacy, but also by the ease of use, resource sustainability, and reduction in downtimes to...
improve contamination control strategies. To achieve these goals and maximize potential cost savings, two facilities tested alternative decontamination methods for their animal housing systems using 7% hybrid hydrogen peroxide technology. Join us to learn lessons from one facility’s journey to implement proper IVC decontamination within individual cages and discover key factors for successful 6-log efficacy and sustainability using the tested technology. We will explore how another facility implemented in-place decontamination of its IVC rack to prevent cross-contamination and increase labor efficiency. Come see how the results of these studies present laboratories with diverse and efficacious alternatives to traditional heat methods, offering greater ease of use, material compatibility, and efficacy while lowering vivarium costs through a sustainable approach to IVC decontamination. This presentation is ideal for facility directors, biosafety officers, and laboratory technicians in charge of maintaining the integrity of the research environment.

.This Technical Trade Presentation is sponsored in part by CURIS System.

Pathogenic Biofilm and Research Facilities
3:20 PM - 3:40 PM/Room: 150G
Speaker: Stephanie M Cormier
Moderator: Donna Monroe
Many research facilities deal with biofilm in animal drinking water systems, but surface biofilms can also have lingering effects on animal research. In this technical trade presentation, Senior Biosafety Consultant Stephanie Cormier will explain the impacts environmental biofilm can have on research outcomes, the historical difficulties of killing and removing this environmental biofilm, and the methods that have shown to be effective so far. Pathogenic Biofilms can lead to increased pathogenesis for bacteria like E. coli, data inconsistencies in gut microbiota, differences in prognoses of hereditary diseases, wasted hours tracking down biofilm-related diseases’ source, and effects on biofilm- or plaque-related research. Participants will learn about the role of pathogenic bacteria in forming environmental biofilm and some methods that have proven successful at killing and removing environmental biofilm. The target audience for this talk is researchers and animal care staff concerned about biofilm’s effects on research models.

This Technical Trade Presentation is sponsored in part by Quip Laboratories.

Room Air vs. 100% O2: Considerations for Anesthetic Delivery
3:40 PM - 4:00 PM/Room: 150G
Speaker: Kathy Garner
Moderator: David Poldiak
Many researchers report using 100% oxygen (room air) as a carrier gas, as well as limited differences between room air and 100% O2. Here, we discuss the benefits and risks of using room air vs. 100% O2 in order for researchers to make an informed decision regarding carrier gases. We will also go over the features of the SomnoFlo low-flow anesthetic vaporizer, especially how its ability to use room air or oxygen can provide researchers with more freedom to make the carrier gas decision that is right for them.

This Technical Trade Presentation is sponsored in part by Kent Scientific Corporation.