# *In Vivo* Imaging Symposium

April 23, 2025
San Diego, CA

# Agenda

| Time (PDT) | Title | Speaker | Institute |
|---|---|---|---|
| 9:00-9:15 | **Registration** | | |
| 9:15-9:30 | Introduction | Dave Gothelf | Revvity |
| 9:30-10:00 | Lipid nanoparticle platforms for extrahepatic delivery of mRNA | Chandrabali Bhattacharya | UNLV |
| 10:00-10:30 | Tracking MASH: How dietary fats shape steatohepatitis | Alvin Chan | UCLA |
| 10:30-10:45 | Spotlight: VivoJect, ultrasound-guided injection system | Thomas Kierski | Revvity |
| **10:45-11:00** | **Break** | | |
| 11:00-11:30 | The role of laboratory animal diets in research: implications for imaging and disease modeling | Steve Yeung | Research Diets |
| 11:30 –12:00 | Bioluminescent HIV-1 and acute myeloid leukemia mouse models using the IVIS Lumina S5 | Sherry Shu | University of Pittsburgh |
| 12:00-12:15 | Spotlight: Ex vivo microstructural analysis of MPS IVA- related skeletal dysplasia using high-resolution scanning | Nidhi Nidhi | Nemours Children's Health |
| 12:15-2:00 | **Lunch & Group Discussions** | | |
| 2:00-2:30 | **Review of Discussions** | | |
| 2:30-3:00 | *In vivo* imaging tips, tricks, and FAQ | Jess Pesner | Revvity |
| 3:00-3:30 | *In vivo* microCT for bone, fat, and muscle analysis in a metabolic model" | Juan Antonio Camara Serrano | UCSF |
| 3:30-3:45 | Spotlight: Reagents for research success | Zara Mamouei<br>Nadja Ilkenhans | Revvity<br>Biolegend |
| 3:45-4:00 | Closing | Jess Pesner | Revvity |
| **4:00-6:00** | **Refreshments at Cutwater Brewery** | | |

# Speakers

**Chandra Bhattacharya**
*Assistant Professorz*
*UNLV*

Dr. Bhattacharya completed her PhD in bioorganic chemistry at Arizona State University studying carbohydrates with tumor targeting properties. After a short stent at Caltech examining the role of glycosaminoglycans in different cellular processes, she joined the Koch Institute for Integrative Cancer Research at MIT to complete her postdoctoral training as a Juvenile Diabetes Research Foundation Fellow. At MIT, she worked on the development of a novel class of supramolecular structures with promising glucose-binding properties and engineered lipid nanoparticles (LNPs) for in vivo CAR mRNA delivery to T cells, advancing adoptive T-cell cancer therapy. She is now an Assistant Professor at UNLV, where her research focuses on engineering next-generation LNP platforms that leverage carbohydrates, small molecules, and antibodies for precise organ and cell targeting.

**Alvin Chan, MD, PhD, MPH**
*Assistant Professor*
*UCLA*

Alvin Chan is an Assistant Professor in the Division of Pediatric Gastroenterology at UCLA. He earned his medical degree from the University of California, Irvine, and a Master of Public Health from the Harvard Chan School of Public Health. He completed both his pediatric residency and pediatric gastroenterology fellowship at UCLA. During fellowship, Dr. Chan pursued a Ph.D. in Molecular, Cellular & Integrative Physiology through the UCLA Specialty Training and Advanced Research (STAR) program in the jointed laboratory of Drs. Elizabeth Tarling and Thomas Vallim. His work investigates the regulatory roles of bile acids in health and disease, with a focus on how alterations in bile acid and lipid homeostasis drive the pathophysiological mechanisms underlying metabolic dysfunction-associated liver disease.

**Steve Yeung, MS**
*Director of Business Development*
*Research Diets*

Steve has been part of the lab animal diet industry for 17 years, joining Research Diets in 2014. Over the years, he has held roles as a scientist and project manager and now serves as the Director of Business Development, where he drives strategic growth, fosters key industry relationships, and expands Research Diets' global presence. He holds a master's degree in Nutritional Sciences from the University of Connecticut. Combining his knowledge in nutrition with industry experience, Steve plays a key role in advancing Research Diets' products, supporting researchers in selecting the most appropriate diets, and identifying new opportunities to enhance the company's impact on the scientific community.

**Sherry Shu, BVM, PhD**
*Research Assistant Professor*
*University of Pittsburgh*

Dr. Sherry Shu obtained her Ph.D. in 2010 at The Ohio State University where she used a bioluminescent mouse model to study HTLV-1 therapeutics under the supervision of Dr. Thomas Rosol. For her postdoctoral work, she joined Dr. Thomas Smithgall's lab at University of Pittsburgh School of Medicine to explore the role of the HIV-1 accessory protein Nef in viral pathogenesis. Currently Research Assistant Professor in the Department of Microbiology and Molecular Genetics at the School of Medicine, Dr. Shu is developing bioluminescent humanized mouse models to study acute and latent HIV-1 infection and new antiretroviral therapeutics targeting the Nef protein. She has also developed bioluminescent mouse models of acute myeloid leukemia to investigate the role of Src-family kinases as therapeutic targets.

# Speakers

**Nidhi Nidhi**
*Graduate Student*
*University of Delaware*

Nidhi is a 4th-year PhD candidate at the University of Delaware and a research assistant at Nemours Children's Hospital under Dr. Shunji Tomatsu. Her research focuses on developing novel therapeutic strategies for Mucopolysaccharidosis IVA (MPS IVA), with a particular emphasis on gene editing and skeletal disease modeling. With extensive expertise in high-resolution microCT imaging, Nidhi has established advanced ex vivo scanning protocols to assess skeletal pathology in murine models of MPS IVA. Her work provides critical insights into disease progression and therapeutic efficacy, facilitating the development of precision-based treatments for skeletal dysplasia. Nidhi's research has led to multiple publications, contributing to the broader understanding of metabolic bone disorders. Her work integrates cutting-edge imaging technologies with translational approaches to advance diagnostic and therapeutic strategies for rare skeletal diseases.

**Juan Antonio Camara Serrano, PhD, DVM**
*Research Assistant*
*Preclinical Therapeutics Core*
*UCSF*

Dr. Camara Serrano is a veterinarian with PhD in clinical imaging diagnosis. He worked as a clinician for 10 years, then moved to research, focused exclusively on preclinical imaging. Firstly, as a senior technician at the Spanish National Cancer Research Center (CNIO) followed by 5 years as an imaging core manager at Vall d'Hebron Research Institute (VHIR). He moved to California in 2021 and is currently working as a research specialist at the UCSF-Preclinical Therapeutics Core. His work is focused on imaging technologies, including the acquisition and analysis of images and the design of imaging protocols and project timelines. He is always trying to improve the image quality and the optimization of protocols for better results.

# Field Application Scientists

**Kyle Kloepping**
***Central***
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815-291-4802

Kyle received his PhD in Free Radical and Radiation Biology from the University of Iowa for his work on mitochondrial-targeted and image-guided cancer therapies. Kyle then did a postdoc at the University of Wisconsin-Madison developing new therapeutic strategies for pediatric solid tumors and breast cancer. Kyle joined the in vivo imaging team in 2017 and supports scientists with their research endeavors.

**Zach Houston**
***Northeast***
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Zach has more than 10 years experience in preclinical and translational multimodal imaging towards the development of novel biologics, chemotherapeutic and radiotherapeutics. He currently applies his expertise in bioluminescent imaging, fluorescent imaging, MRI, CT, and PET, to help researchers better understand their therapeutic area.

**Zara Mamouei**
***West***
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Zara received her PhD in biochemistry from the National University of Singapore. She then did a postdoc at UCLA to work on drug discovery and host-fungal pathogen interactions and chronic musculoskeletal infections involving bone and implants in Dr. Bernthal's lab. In 2023, Zara joined the in vivo imaging team at Revvity to support scientists with their research goals.

**Jess Pesner**
***FAS Manager***
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Jess received her PhD in organic chemistry from the University of Missouri where she synthesized fluorescent sensors for neurotransmitters. She then did a postdoc at Stanford University developing contrast agents and disease models for glioblastoma. In 2020, she joined Revvity as a Field Application Scientist and now serves as the team's manager.

**Cody Kowalski**
***Southeast***
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Cody earned his PhD in Neuroscience from Washington State University. He studied the direct effects of cannabis on the vagus nerve. He then accepted a postdoctoral position at Scripps Research Institute where he patented a novel analgesic strategy by combining approved drugs. Cody is now an in vivo imaging FAS for Revvity. In his free time, he enjoys backpacking, cycling, cooking, and designing and building electric vehicles.

## US & Canada Account Managers

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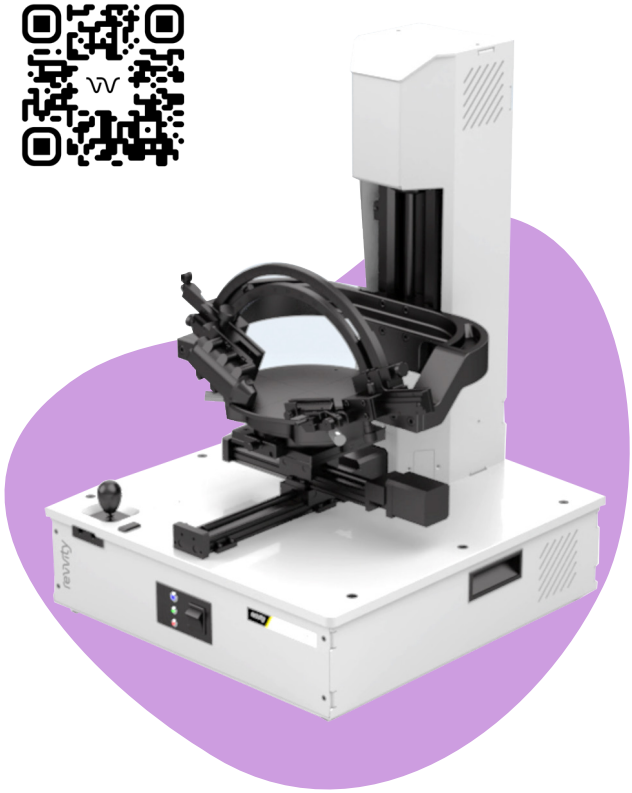

**March Webinar:**
In case you missed it! Register to watch our ***In Vivo* Imaging: Tips, Tricks, and FAQ** webinar on-demand.

Explore our portfolio of *in vivo* and other research reagents -available now for online purchase.

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## Contact us

**Field Application Scientists:** invivoimaging@revvity.com

- Access to Canvas, training resources, software
- Instrumentation grant writing support
- Help with experiment design, instrument use, data analysis

**Field Service:** uscan.service@revvity.com

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