

**UCI** 趙Chao Family  
Comprehensive Cancer Center

# 2024 Scientific Retreat

Hilton Waterfront Beach Resort  
Huntington Beach, CA



# 01

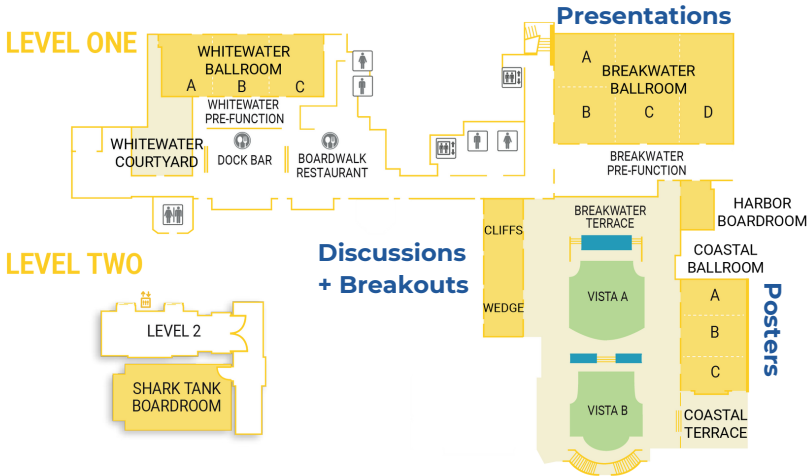
---

## Contents

- 01** Table of Contents
- 02** Location
- 03** Retreat Agenda AM
- 04** Lunch & Discussions
- 05** Breakout Sessions
- 06** Retreat Agenda PM
- 07** Poster Session
- 08** Notes & Ideas

**WiFi**  Hilton Meetings  
 Scientific2024

# 02 Location



## The Waterfront Beach Resort

### A Hilton Hotel

2110 Pacific Coast Highway | Huntington Beach, CA

714.845.8000 | WATERFRONTRESORT.COM

# 03

## Agenda AM

8:00 am Registration & Continental Breakfast Vista Lawn

8:35 am **Director's Welcome & Overview**

Richard Van Etten, MD, PhD

9:30 am **Science & Policy Presentations**

**Advancing Tobacco Policy Research to Reduce Disparities**

Denise Payán, PhD

**3D Spheroid DNA-Encoded Library Screening Technology:  
Hit Finding on the STING Pathway**

Brian Paegel, PhD

**How do Statins Trigger AML Cell Death?**

David Fruman, PhD

10:15 am **Coffee Break**

10:30 am **Clinical Presentations**

**Adding Pitavastatin to Venetoclax-based Therapy for  
Leukemias: An Experience in Drug Repurposing**

Elizabeth Brem, MD

**Biliary Exosomes Unveil XP07 and SLK as Targetable  
Oncogenic Drivers in Cholangiocarcinoma**

Reed Ayabe, MD, PhD

**Chemoprevention Clinical Trials at UCI: Past, Present, Future**

Jason Zell, DO

11:15 am **CHOC Presentations**

**Pegaspargase Therapy in Acute Lymphoblastic Leukemia:  
Drug Monitoring and Toxicity**

Van Huynh, MD

**Regulatory T Cells in GVL and GVHD Post-Allogenic Stem  
Cell Transplant for High-Risk Acute Leukemia**

Rishikesh Chavan, MD

11:35 am **Cultural Awareness and Humility in Research**

Ursula Worsham, EdD

11:35 am **Pre-Lunch Announcement**

# 04

## Lunch & Discussions

12:00 pm Lunch, Optional Discussion & Posters

Vista Lawn



Cliffs

**Community Think Tank (Optional)**

Office of COE & Community Members

**Join us to engage with COE leaders on your projects**

- Consult with community experts
- Collaborate and network
- Prepare for new NCI community engagement expectations
- Strengthen the community relevance of your research
- Get support for community-centered research



Wedge

**Trainee Voices (Optional)**

Ursula Worsham, EdD | AD for EDI

Edward Nelson, MD | AD for CRTEC

Claudia Benavente, PhD | Deputy AD for CRTEC

**We want to hear from you. Your experience matters.**

- Join us to share your lived experience at UC Irvine
- Your input helps us improve and create new programs
- What do you need to succeed at UC Irvine?
- How can the cancer center help you succeed?
- We look forward to hearing from you!

# 05

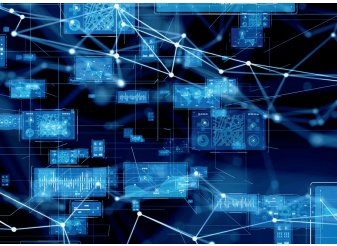
## Breakout Sessions

**1:30 pm**    **Pre-Breakout Session Announcement**

Marian Waterman, PhD

**1:45 pm**    **Concurrent Breakout Sessions**

Select one to attend



### Breakwater

#### **The Future Scope of AI and Machine Learning in the CFCCC**

Anand Ganesan, MD, PhD & Brian Paegel, PhD

Join us to discuss integration of AI into cancer research, focusing on applications in imaging and drug discovery.

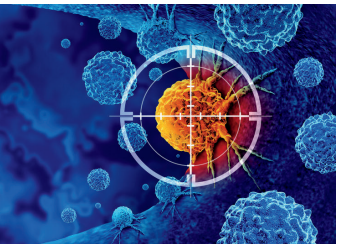


### Wedge

#### **Using Implementation Science to Accelerate Impact: Insights from Digital Health**

Stephen Schueller, PhD

Join us to discuss the values of Implementation Science, a growing area of interest in Cancer Control with particular focus on Digital Health



### Cliffs

#### **Tumor Immunology & Novel Therapeutic Approaches**

Angela Fleischman, MD, PhD & John Lowengrub, PhD

Join us to discuss collaborative grants with a focus on tumor immunology and novel cancer therapeutics. Come with your ideas!

**2:45 pm**    **Coffee Break**

# 06

## Agenda PM

**3:00 pm**    **Office of Community Outreach & Engagement (COE)**  
Sora Park Tanjasiri, DrPH

**3:15 pm**    **Shared Resources Showcase**



### **Transgenic Mouse Facility**

Shimako Kawauchi, PhD

TMF provides services for making, breeding, genotyping, importing and preserving genetically-modified mice and embryonic stem cells.



### **Optical Biology Core**

Rahul Warrior, PhD

OBC is a matrix of four cores including: 1. Self-Use Facility; 2. Laboratory of Fluorescence Dynamics; 3. Non-Linear Optical Microscopy; and 4. Flow Cytometry Facility.



### **Genomics Research & Technology**

Suzanne Sandmeyer, PhD

GRT Hub provides emerging and state-of-the-art genomics technologies and training.



### **Mass Spectrometry Facility**

Felix Grun, PhD

MS is a matrix of three cores: 1. High-end MS; 2. Nutrient Metabolism & Disease Lab; 3. Chemistry MS



### **In Vivo Functional Onco-Imaging**

Gultekin Gulsen, PhD

IVFOI offers expertise and training in cutting-edge imaging instrumentation and analysis.



### **Experimental Tissue Resource**

Delia Tifrea, PhD, MBA

ETR supplies tissues/fluids, offers histology, immunohistochemistry, pathology services, and more.



### **Biostatistics Shared Resource**

Min Zhang, MD PhD <sup>2</sup>

BSR provides biostatistical expertise for the experimental design and analysis of basic, translational, clinical and population-based cancer research.



### **Biobehavioral Shared Resource**

Michael Hoyt, PhD

BBSR offers expertise and services in planning, conducting and disseminating translational behavioral research.

# 06

## Agenda PM

### 4:00 pm ⚡ Poster Flash Talks

**09: Bye TAC: Bypassing an E3 Ligase for Target Protein Degradation**

Cody Loy | PI: Darci Trader, PhD

**26: Relationship Between Cytokines, Brain Derived Neurotrophic Factor, and Cognitive Impairment in Adolescent and Young Adult Cancer Patients**

Julia Trudeau | PI: Alexandre Chan, PharmD, MPH

**64: Feasibility Study on the Effect of a Methionine-Reduced Diet on Serum Levels in Patients with Solid Tumors**

Zhaohui Arter, MD | PI: Peter Kaiser, PhD

**06: Targeting of Mitochondrial Protein Magmas Enhances Sensitivity to GBM Treatment**

Javier Lepe | Daniela Bota, MD, PhD

**36: Empower Latinx: Empowering Hispanic Patient's Lung Cancer Screening Uptake**

Mahnur Bharucha | PI: Gelareh Sadigh, MD

**58: A Phase 1 Study of the Combination of Pitavastatin (Pita) with Gemcitabine and Nab-paclitaxel in Patients with Unresectable Pancreatic Adenocarcinoma (uPDAC)**

Jennifer Valerin, MD, PhD

### 4:30 pm Concurrent Poster Session, Reception & Awards

#### Poster Session & Judging

Coastal

#### Reception & Awards

Breakwater Terrace

Your feedback is important to us.

Take the survey!





- 01 Optimal Acoustic-Electric Parameters for Shear-Induced Delivery of mRNA-CAR to T-cells**  
Mahnoor Mirza, Graduate Student
- 02 Three-dimensional Isotropic Imaging of Live Suspension Cells Enabled by Droplet Microvortices**  
Braulio Cardenas Benitez, Graduate Student
- 03 Dual targeting of mitochondrial Lon peptidase 1 and chymotrypsin-like protease by small molecule BT317, as potential therapeutics in malignant gliomas**  
Shashi Jain, Postdoctoral Scholar
- 04 Neuroprotective effects of N-acetylcysteine against cisplatin-induced cognitive impairments in an ovarian cancer rat model**  
Naomi Lomeli, Postdoctoral Scholar
- 05 Targeting TRIM11 is a potential therapeutic strategy for malignant gliomas**  
Kaijun Di, Research Assistant
- 06 ⚡ Targeting of Mitochondrial Protein Magmas Enhances Sensitivity to GBM Treatment**  
Javier Lepe, Graduate Student
- 07 Exploring PARP Inhibitors as a Potential Treatment for Chemotherapy-Induced Cognitive Deficits in Ovarian Cancer Models**  
Dahlia Ordaz, Graduate Student
- 08 Development of Immunoproteasome Substrate Labeling Assays (iSLAy)**  
Juan Dantis, Graduate Student
- 09 ⚡ ByeTAC: Bypassing an E3 Ligase for Targeted Protein Degradation**  
Cody Loy, Graduate Student
- 10 Miniaturized Tumor Organoids Maintain Drug Sensitivity Stratification**  
Aarthi Namasivayam, Graduate Student
- 11 Cell-Based Drug Screening in Microfluidic Droplets For Personalized Cancer Therapies**  
Kayla Gee, Graduate Student
- 12 Synergistic effect of fibrin glue released BLM-PCI and radiation therapy**  
Sophia Laurel, Undergraduate

- 13 **Computational Modeling Protein-DNA Machinery in Epigenetic and Genetic Regulation for Cancer Therapy**  
Jin Yu, Assistant Professor
- 14 **Sorting to enrich for chemotherapeutic-resistant glioma cells based on unique membrane properties**  
Vi Dang, Graduate Student
- 15 **Combined Treatment with Anti-PD1 and Anti-CTLA-4 for Melanoma induces Cognitive Dysfunction and Neuroinflammation**  
An Do, Research Assistant
- 16 **Protecting Synaptic Integrity Using Catalpol Can Reverse Doxorubicin - Induced Decline in Cognitive Functions.**  
Anh Le, Research Assistant
- 17 **Microglia-selective Deletion of Complement C1q Provides Neuroprotection Against Cranial Radiation-Induced Cognitive Decline in a Mouse Glioma Model**  
Robert Krattli, Staff Research Associate
- 18 **Targeting C5aR1 Signaling to Mitigate Chemotherapy-Induced Cognitive Impairments (CRCI) and Neuroinflammation**  
Shreya Madan, Graduate Student
- 19 **Adenosine kinase: a node of circadian (dys) function in irradiated cancer brain?**  
Arya Vagadia, Laboratory Assistant
- 20 **Neuroprotective impact of Riluzole on increasing BDNF and reversal of cancer-related cognitive impairments.**  
Sanad El-Khatib, Laboratory Assistant
- 21 **Adenosine Augmentation to Protect the CNS Against Organophosphate Exposure**  
Kelly Nguyen, Staff Research Associate
- 22 **Stopping chemobrain in its tracks: Stem cell-derived extracellular vesicles ameliorate breast cancer chemobrain**  
Casey Hudson, Graduate Student
- 23 **Neuropsychiatric Symptoms Associated with Marijuana Use Among Cancer Survivors: An Analysis of the NIH All of Us Research Program**  
Carolyn Nguyen, Graduate Student
- 24 **Accelerated Epigenetic Ageing within Adult and Young Adult Cancer Patients Predicts Cancer-Related Cognitive Impairment: A Prospective, Longitudinal Study**  
Michael Sayer, Postdoctoral Scholar
- 25 **Real-world impact of acupuncture on analgesics and healthcare resource utilization in breast cancer survivors with pain**  
Ding Quan Ng, Graduate Student

- 26 ⚡ **Relationship Between Cytokines, Brain-Derived Neurotrophic Factor, and Cognitive Impairment in Adolescent and Young Adult Cancer Patients**  
Julia Trudeau, Graduate Student
- 27 **The Power of Peers: How Social Influence Shapes Depression-Driven Behaviors in Young Cancer Survivors**  
Anamara Ritt-Olson, Associate Professor
- 28 **A preliminary analysis on lung cancer incidence and visceral adipose tissue among postmenopausal women from the DXA cohort of the Women's Health Initiative**  
Wendy Lazouras, Graduate Student
- 29 **Impact of Immune Related Adverse events on Survival in Cancer Patients Receiving Immune Checkpoint Inhibitors**  
Kane Stalians, Graduate Student
- 30 **Trends in Immune Checkpoint Inhibitor Use Based on Primary Cancer Type and Presence of Metastasis**  
Katelyn Dang, Graduate Student
- 31 **Policy implementation matters: A systematic review of studies assessing implementation of US state and local flavored tobacco sales restriction policies**  
Ana Herrera, Postdoctoral Scholar
- 32 **Patient-reported Barriers and Preferred Interventions to Improve Lung Cancer Screening Uptake**  
Axs Avenido, Undergraduate
- 33 **Is Electronic Medical Record Smoking History Reliable in Identifying Patients Eligible for Lung Cancer Screening**  
Victoria Nguyen, Junior Specialist
- 34 **Assessing Providers' Knowledge about and Barriers to Lung Cancer Screening**  
Stephanie Jia, Graduate Student
- 35 **Decoding Public Preferences in Breast Cancer Screening Cost Sharing**  
Kevin Dao, Resident Physician
- 36 ⚡ **Empower Latinx: Empowering Hispanic Patient's Lung Cancer Screening Uptake**  
Mahnur Bharucha, Junior Specialist
- 37 **Does self-scheduling improve screening mammography completion rates? A retrospective analysis.**  
Gilleen Cortes, Resident Physician
- 38 **Interventions to Improve Lung Cancer Screening**  
Richard Echeverria, Junior Specialist
- 39 **Prevalence of Health-related Social Needs and Association with Imaging Appointment Cancellations Among Patients with Cancer**  
Angelica Gordon, Resident Physician

- 40 **Assessing key domains of health-related quality of life using National Institute of Health (NIH) PROMIS measures in young-adult (YA) cancer survivors in Southern California**  
Dalia Kagramanov, Postdoctoral Scholar
- 41 **Skin protective behaviors and perceived risk of skin cancer by race and ethnicity**  
Saba Sohail, Graduate Student
- 42 **Integrating Latino Cultural Values in Behavioral Interventions for Young Adult Testicular Cancer Survivors**  
David Zoeter, Associate Specialist
- 43 **The Impact of HPV on Oropharyngeal Cancer Tumor Microenvironment and Survival**  
Esther Lam, Graduate Student
- 44 **Intense monitoring of JAK2V617F and Wild-type hematopoiesis during IFN $\alpha$  exposure to dissect mechanism of action**  
Eli Soyfer, Graduate Student
- 45 **Leveraging clonal competition between CHIP and aggressive clones as a novel therapeutic approach**  
Kalei Guillermo, Graduate Student
- 46 **Impaired Interleukin-10 Receptor Signalling Reduces Hematopoietic Stem Cell Stemness and Leads to Inflammation Induced Exhaustion**  
Lucas Wadley, Graduate Student
- 47 **Overcoming Heterogeneity in Pancreatic Cancer by Targeting Ref-1 and Mitochondrial Metabolism**  
Taryn Morningstar, Graduate Student
- 48 **Uncovering HIF-2 $\alpha$ 's role in inflammation and precursor lesion formation in pancreatic cancer**  
Sabrina Calderon, Graduate Student
- 49 **Targeting the epithelial-stromal cell crosstalk in metastatic pancreatic cancer**  
Rima Singh, Graduate Student
- 50 **Targeting UHRF1's proteasomal destruction as a novel approach for small cell lung cancer treatment**  
Yijun Gu, Graduate Student
- 51 **Targeting UHRF1 for osteosarcoma therapeutics.**  
Danny Martinez, Graduate Student
- 52 **Pitavastatin potentiates mitochondrial dysfunction and venetoclax cytotoxicity in acute myeloid leukemia cells.**  
Ian Wong, Graduate Student
- 53 **Regulatory T cells modulate microglia function in breast cancer brain metastasis**  
Isam Adam, Graduate Student

- 54 **Investigating novel aspects of hypoxia in breast cancer metastasis**  
Hannah Savage, Postdoctoral Scholar
- 55 **Targeting the immune metastatic microenvironment in systemic breast cancer**  
Jacob Insua Rodriguez, Postdoctoral Scholar
- 56 **Interruption of the intratumor CD8:Treg crosstalk improves the efficacy of PD-1 immunotherapy**  
Shannon Geels, Graduate Student
- 57 **Identifying Critical Immunological Features of Tumor Control and Escape Using Mathematical Modeling**  
Rachel Sousa, Graduate Student
- 58 ⚡ **A Phase 1 Study of the Combination of Pitavastatin (Pita) with Gemcitabine and nab-paclitaxel in patients with Unresectable Pancreatic Adenocarcinoma (uPDAC)**  
Sophie Hasson, Research Assistant & Tanvi Chichili, Medical Student
- 59 **Type 2 innate lymphoid cells fuel breast cancer development by inhibiting anti-cancer immunity**  
Pascal Naef, Postdoctoral Scholar
- 60 **Defining healthy and breast tumor-associated neutrophils at a whole-organism, single-cell resolution**  
Alex Hsu, Graduate Student
- 61 **The Ratio of Alternatively Spliced KRAS Isoforms Plays a Role in The Tumorigenesis of Colorectal Cancer**  
Harika Pulipelli, Graduate Student
- 62 **Identification of genes that alter cancer cell sensitivity to DNA damage/OXPHOS inhibition using CRISPR screening**  
Xiangduo Kong, Project Scientist
- 63  **$\alpha$ -Ketoglutarate drives differentiation in colorectal cancer and sensitizes 5-FU induced cell death**  
Qi Fan, Graduate Student
- 64 ⚡ **Feasibility Study on the Effect of a Methionine-Reduced Diet on Serum Levels in Patients with Solid Tumors**  
Zhaohui Arter, Fellow Physician
- 65 **Second-Site Rescue Mutants as Tools to Uncover Reactivation Mechanisms of p53 Cancer Mutants**  
Fiona Law, Graduate Student
- 66 **The Role of Melanocyte Stem Cells In Basal Cell Carcinoma Tumor Regression**  
Gavin Long, Graduate Student
- 67 **Loss of XIST lncRNA unlocks stemness and cellular plasticity in ovarian cancer**  
Ikrame Naciri, Postdoctoral Scholar
- 68 **AGC-family kinases STK38/L positively regulate YAP by targeting the LATS1-MOB1 complex**  
Jeongmin An, Postdoctoral Scholar

# 08

---

## Notes & Ideas



**UCI** 趙Chao Family  
Comprehensive Cancer Center

[cfccadmin@hs.uci.edu](mailto:cfccadmin@hs.uci.edu)

[cancer.uci.edu](http://cancer.uci.edu)

200 South Manchester Ave., Suite 400, Orange, CA 92868