

## Annual Scientific Symposium Tuesday February 22, 2022

**Virtually via the Zoom Platform**  
**8:00 am to 1:00 pm**  
**Oral Presentations of Abstracts**  
**Keynote Address: Lopa Mishra, MD**

The Digestive Health Center (DHC) will host its Annual Scientific Symposium and External Advisory Board Meeting on **February 22, 2022**. This is a great opportunity to learn about the cutting-edge research being done in digestive diseases.

The day will include abstracts being presented as 5-minute presentations and a keynote address by Dr. Lopa Mishra from Feinstein Institutes for Medical Research.

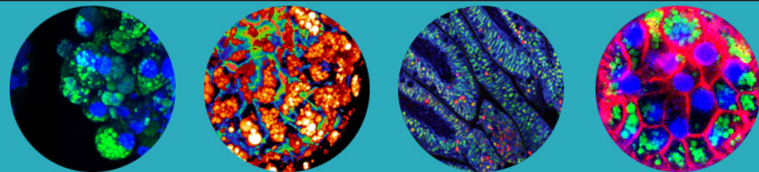
We encourage you to submit an abstract of your research related to any area of digestive disease including the following DHC research themes:

- 1) Mechanisms of Liver Disease
- 2) Digestive Disease & Immunity
- 3) Stem Cell and Organoid Modeling of Digestive Disease

To submit an abstract, visit the [DHC website](#) for the submission form. Abstracts must be submitted electronically by **Friday, January 28, 2022** to [cynthia.wetzel@cchmc.org](mailto:cynthia.wetzel@cchmc.org). Prizes will be awarded to students and trainees for the best presentations.

## Frontiers in Organoid Medicine Symposium

Frontiers in Stem Cell  
& Organoid Medicine  
**March 24-25, 2022**



The [Center for Stem Cell and Organoid Medicine](#) (CuSTOM) will host Frontiers in Stem Cell & Organoid Medicine Symposium on **March 24-25, 2022**, at Cincinnati Children's. This international symposium is co-sponsored by CuSTOM and RIKEN-BDR, as well as a number of biotechnology companies, with the goal of accelerating collaborations among those in academia and industry.

Presentations will focus on topics ranging from basic research to disease modeling to clinical and commercialization translation of iPSCs (induced Pluripotent Stem Cells) and organoid technologies. There will also be panel discussions focusing on hurdles and opportunities in transitioning organoid technologies into drug discovery platforms and tissue-based therapeutics.

Currently this event is planned for in-person attendance, however, may be converted to a hybrid/virtual model as Cincinnati Children's monitors the COVID-19 pandemic. Registration will open once the format is determined, in January 2022. For more information visit the [Symposium Website](#) or contact Olesya Rockel at [Olesya.Rockel@cchmc.org](mailto:Olesya.Rockel@cchmc.org).

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## New DHC Internal Advisory Board Members

The DHC Internal Advisory Board (IAB) consists of senior faculty and institutional leaders. The IAB ensures that the strategic objectives of the DHC are aligned with the strategic goals of Cincinnati Children's and the University of Cincinnati, College of Medicine. The DHC leadership announces the following 2 individuals have joined the IAB:



From Left to Right: Drs. Lentsch & Meinzen-Derr

- Alex Lentsch, PhD; Senior Associate Dean for Faculty Affairs and Development at the University of Cincinnati, College of Medicine and Vice Chair for Research in Department of Surgery

- Jareen Meinzen-Derr, PhD, MPH, FACE; Co-Director Center for Clinical and Translational Science and Training (CCTST)

The other IAB members are listed below:

- Kris Justus, PhD; Vice President and Associate Director Research Operations, Cincinnati Children's Research Foundation
- Rafi Kopan, PhD; Associate Director of Basic Sciences and Director, Division of Developmental Biology
- Jeffery Molkentin, PhD; Co-Director of Heart Institute and Director, Division of Molecular Cardiovascular Biology
- Susa Wells, PhD; Director Epithelial Carcinogenesis and Stem Cell Program

## EnVision 2104 Plate Reader at CCHMC Research Flow Cytometry Core



Dr. Lee Grimes in the Division of Immunobiology and the Cincinnati Children's Research Foundation Technology Forward Committee moved his PerkinElmer EnVision 2104 Multi-label Plate Reader to the Research Flow Cytometry Core (RFCC) to share with all researchers!

It provides exceptional speed, ultra-high throughput, and maximum sensitivity for all fluorescent assays. The EnVision can read 96-, 384- and

1536-well plates with temperature and shaking control. It is also equipped with a dispenser for up to 384-well plates, for volumes ranging from 2 to 475 ul (with 1 ul increment). Potential applications include: AlphaScreen® tech, Fluorescence Intensity (240-850 nm), TRF technologies (240-850 nm), Luminescence, and Absorbance.

There is no charge to use the EnVision until July 2022!

For more information contact RFCC staff member Alyssa Sproles at [alyssa.sproles@cchmc.org](mailto:alyssa.sproles@cchmc.org); 513-636-3575.

## New Leica Stellaris Confocal Microscope at UC Live Microscopy Core



The Live Microscopy Core, located in the Department of Pharmacology and Systems Physiology at the University of Cincinnati was awarded a \$10 Shared Instrumentation Grant from the National Institutes of Health (NIH) to purchase a Leica Stellaris 8 Confocal Microscope System. This new confocal system offers improvements in imaging speed, sensitivity, resolution, and detection capabilities. It can

collect fluorescence lifetime information in parallel with standard fluorescence intensity, which can be used for functional imaging, removal of autofluorescence, or separating spectrally overlapping fluorophores with varying lifetime differences. The microscope comes with full incubation control of CO<sub>2</sub>, temperature, and humidity for gentle live sample imaging.

For more information visit the [Live Microscopy Core website](#) or contact Core Manager Chet Closson at [chet.closson@uc.edu](mailto:chet.closson@uc.edu) or 513-558-5093.

Congratulations to the Core for successfully competing for the NIH \$10 grant.

## Dr. Theresa Alenghat Gave TEDx Presentation

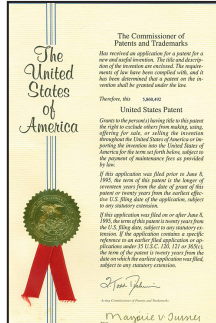


Theresa Alenghat, VMD, PhD was selected to present at the TEDx CincinnatiWomen event on October 21, 2021. TEDx is an independently organized Technology, Entertainment and Design

event. Dr. Alenghat, a faculty member in the Division of Immunobiology, was one of nine local women selected to present an 18-minute talk. She summarized her research on the microbiome (the trillions of microorganisms that normally live in the intestine) and how it impacts our health.

## Members at Cincinnati Children's Receive Patents

Since Spring 2020, the following DHC Members at Cincinnati Children's have received a patent for their digestive disease discoveries.



- Lee Denson, MD and Ardythe Morrow, PhD for Use of Glycans and Glycosyltransferases for Diagnosing/Monitoring Inflammatory Disease
- Michael Helmuth, MD for Use of Oligosaccharide Compositions to Enhance Weight Gain
- Ardythe Morrow, PhD for Inhibiting Inflammation with Milk Oligosaccharides

- Marc Rothenberg, MD, PhD for Compositions and Methods for Treating Allergic Inflammatory Conditions
- Pranavkumar Shivakumar, PhD for Compositions and Methods for Treating Neonatal Biliary Atresia
- Takanori Takebe, MD, PhD for Composition and Methods for Treating Liver Disease
- James Wells, PhD for Methods for the in vitro Manufacture of Gastric Fundus Tissue and Composition Related to Same
- Aaron Zorn, PhD and James Wells, PhD for Methods and Systems for Converting Precursor Cells into Gastric Tissues through Directed Differentiation

## New DHC Administrative Team Member



As the DHC continues to grow in membership and research core services, we are pleased to announce the addition of Sara Thompson as our new Program Coordinator.

As a temporary employee, Sara was very helpful with assisting Dr. Wetzel with excel data analysis and

completing the forms in the NIH ASSIST system for the competitive renewal submission this past summer.

Before joining Cincinnati Children's, Sara was an administrative assistant of a landscape company. She is happy to join the DHC team and looks forward to supporting the members of the center.

Please join us in welcoming Sara!

For all publications, please acknowledge the DHC as follows:

**“This project was supported in part by NIH P30 DK078392 (*insert name of core that you used*) of the Digestive Diseases Research Core Center in Cincinnati.”**

For more information regarding the DHC visit our [website](#) or contact one of the following:

Director:	Jorge Bezerra, MD	jorge.bezerra@cchmc.org
Associate Directors:	Ted Denson, MD	lee.denson@cchmc.org
	Heidi Kalkwarf, PhD, RD	heidi.kalkwarf@cchmc.org
	Aaron Zorn, PhD	aaron.zorn@cchmc.org
Center Manager:	Cynthia Wetzel, PhD	cynthia.wetzel@cchmc.org

## Seminar Series- Tuesdays at Noon, Virtually via Zoom

### See weekly e-mail announcement for link

<b>Date</b>	<b>Presenter</b>	<b>Title</b>
1/11/22	Sonya MacParland, PhD University of Toronto	“Behind The Mask: Mapping Human Liver in Health and Disease with Single Cell Resolution”
1/18/22	Karthickeyan Chella Krishnan, PhD UC: Depart of Pharmacology and Systems Physiology	“Population-Based Approaches to Understand the Role of Sex Differences and Mitochondrial Dysfunction in NAFLD”
1/25/22	Fotios Sampaziotis, MD University of Cambridge	“From Organoids to Organs: A journey of Clinical Translation”
2/1/22	Yi Zheng, PhD CCHMC: Experimental Hematology	“Rho GTPase Signaling in Intestinal Stem Cell Regulation”
2/8/22	James Wells, PhD CCHMC: Devolpment Biology	“Modeling Development and Diseases of the GI Tract Using Human PSC-Derived Organoids”
2/15/22	Ty D. Troutman, PhD CCHMC: Allergy and Immunology	“Macrophages, Genomics, and Disease”
2/22/22	DHC Annual Scientific Symposium Abstract Presentations 8:00 am to 11:30 am Keynote Address at 12:00 pm by: Lopa Mishra, MD Feinstein Institutes for Medical Research “A TGF-Beta-ALDH2 Axis regulates Obesity, Metabolic Syndrome and Cancer”	
3/1/22	Pranavkumar Shivakumar, PhD CCHMC: Gastroenterology	“Biliary Organoids: A Platform to Investigate Disease Mechanisms”
3/8/22	Chandrashekhhar Pasare, DVM, PhD CCHMC: Immunobiology	“Intestinal Epithelial Cell Sensing of Cytokine Cues: Implications for Anti-Microbial Defense and Inflammatory Damage”
3/15/22	Kathryn Wikenheiser-Brokamp, MD, PhD CCHMC: Research Pathology Core	“Technologies and Services Enabling Morphologic Studies”
3/22/22	Rajat Madan, MD, PhD UC: Depart Internal Medicine Division Infectious Disease	“Farnesoid X Receptor Signaling in Clostridiodes difficile Infection Pathogenesis”
3/29/22	Phillip Minar, MD CCHMC: Gastroenterology	“Progressing from Expert Opinion to Treat-to-Target Precision Care (T2T-PC) in Pediatric IBD”
4/5/22	Suzanne Devkota, PhD Cedars Sinai	“Uncovering A Microbial Mechanism for Creeping Fat in Crohn’s Disease”
4/12/22	Jessica Woo, MHSA, PhD CCHMC: Biostatistics and Epidemiology	“Diet Quality and Parental Feeding Styles in Relation to Early Obesity Risk”