DHC Newsletter

Bench-to-Bedside Research in Pediatric Digestive Disease

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Cincinnati DHC Digestive Health Center

Cincinnati Children's

University of Cincinnati

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Highlights from the Annual Scientific Symposium

Poster Winners from Left to Right: Liz Maier, Laura Runck, Nina Bertauz-Skeirik, Celine Lages, and Julie Caldwell.

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The Digestive Health Center (DHC) held its Annual Scientific Symposium on Tuesday February 25. Dr. Brent Polk from Children's Hospital of Los Angeles presented the keynote address "TNF & IBD:The Secret Virtuous Life of TNF". A total of 48 posters were displayed by researchers from Cincinnati Children's and University of Cincinnati. There were also 10 posters highlighting core services. We thank all those who presented their work. Prizes were awarded for the best posters:

First Place: **Julie Caldwell, PhD** (Research Associate, Cincinnati Children's, Allergy and Immunology, member of Dr. Marc Rothenberg's lab) for "CDH26: a Functional Integrin-Binding Cadherin Involved in Eosinophilic Gastrointestinal Disorders".

Second Place: **Celine Lages, PhD** (Research Associate, Cincinnati Children's: Gastroenterology, member of Dr. Alex Miethke's lab) for "Myeloid Dendritic Cells Maintain Th17 Lymphocyte Responses During the Obstructive Phase of Experimental Biliary Atresia".

Tie for Third Place: **Nina Bertauz-Skeirik** (Graduate Student, University of Cincinnati, Department of Molecular and Cellular Physiology, member of Dr. Yana Zavros' lab) for "CD44 Marks a Population of Gastric Progenitor Cells and Plays a Functional Role in H. Pylori-Induced Epithelial Proliferation". **Liz Maier** (Research Assistant, Cincinnati Children's, Gastroenterology, member of Dr. Sean Moore's lab) for "Murine Weanling Undernutrition Reveals Sexual Dimorphisms In Weight Faltering, Small Intestinal Transcriptome, and Fecal Dysbiosis". **Laura Runck** (Research Assistant, Cincinnati Children's, Developmental Biology, member of Dr. Geraldine Guasch's lab) for "Defining the Molecular Abnormalities in Cloaca Malformation: Similarities Between Mouse and Human"

See Page 2 for more highlights from the Annual Scientific Symposium.

Jeff Gordon, MD Visit- Saturday April 26, 2014

Dr. Jeff Gordon from Washington University in St. Louis, will be the inaugural Albert B. Sabin Lecturer. He will give the keynote address entitled "The Human Gut Microbiota and Childhood Nutrition: Looking at Human Development From a Microbial Perspective" at the Medical Scientist Training Program (MSTP) Spring Retreat on **Saturday April 26**. The retreat will take place from 8:00 am to 2:30 pm at CCHMC in location S Rooms 1.203-204. Dr. Gordon's talk will start at 9:00 am and then there will be presentations by current MSTP students followed by lunch and an awards celebration. For more information contact Andrea DeSantis at desantaa@ucmail.uc.edu.

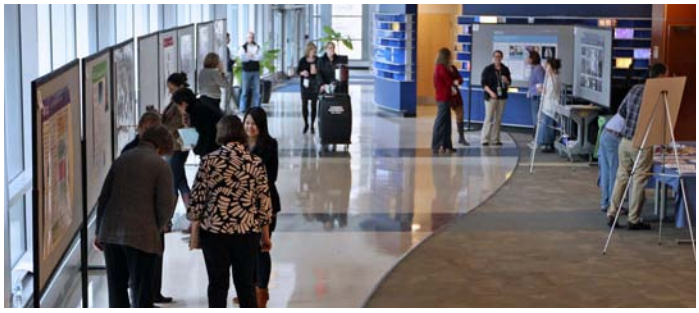
Photos and Highlights from Annual Scientific Symposium Continued

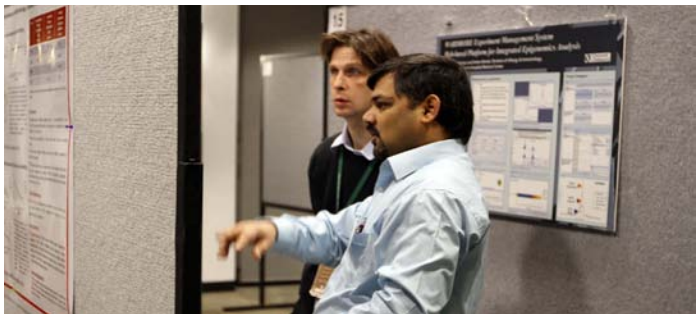
We would like to specially thank: Jill Soldano, Talithia Bankston, Corlynn Raleigh, and Cheryl Holly, for their superb organizational efforts and assistance with the Annual Scientific Symposium.

We also thank those who reviewed posters:

Drs. Chougnet, Denson, Divanovic, Fulkerson, Gandhi, Guasch, Han, Helmrath, Hildeman, Hoebe, Hogan, Hommel, Huppert, Kohli, Martin, Miethke, Nakamura, Perez-Tilve, Sasaki, Shata, Shivakumar, Steinbrecher, Wang, Woo, Worrell, Yin, Zavros, and Zingarelli.

Above: Left to Right Talithia Bankston, Corlynn Raleigh, Jill Soldano, and Cheryl Holly.
Below: Staff entering poster scores.





Thanks to the judges and outstanding organizers!

Easy Method to Analyze ChiP-Seq Data

Many investigators are using Chip-Seq to identify transcription factor binding sites or histone modification sites. Staff from the Bioinformatics Core will analyze your data, but if you would prefer to perform the data analysis yourself the Core recommends using Galaxy. Galaxy is a user friendly, web-based platform that will allow you to identify differential binding sites and binding motifs. Users without any programming experience can easily set parameters to analyze the data. Your input data can either be a fastq or bam file. Data analysis can be performed on the Galaxy Cloud so your computer will not slow down during these computational intensive analyses. Visit the Galaxy website for online tutorials.

Galaxy is developed by the Nekrutenko lab at Pennsylvania State University and the Taylor lab at Johns Hopkins University.

For additional information contact Dr. Rebekah Karns at rebekah.karns@cchmc.org or 636-1005.

DHC Member Highlights and New DHC Member

Rothenberg Awarded Fellow of AAAS

Marc Rothenberg, MD was named a Fellow of the American Association for the Advancement of Science (AAAS) at the annual meeting. AAAS fellowship status is given to distinguished individuals for their scientific efforts in advancing their field of studies. Dr. Rothenberg is the Division Director of Allergy and Immunology at Cincinnati Children's and is the world expert in pediatric eosinophilic disorders.

Hostetter Voted President Elect of APS

Peggy Hostetter, MD has been elected as the next president of the American Pediatric Society (APS). She will be president-elected for one year before becoming the president in May 2015. Dr. Hostetter is the Division Director of Infectious Diseases at Cincinnati Children's.

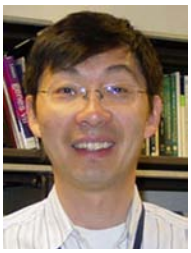
Hershey and Way Elected to ASCI

Gurjit Hershey, MD, PhD and Sing Sing Way, MD were selected as new members of the prestigious American Society for Clinical Investigation (ASCI). Dr. Hershey is the Division Director of Asthma Research and Dr. Way is a member in the Division of Infectious Diseases at Cincinnati Children's. They will be joining one of the nation's oldest and most respected medical honor societies. Other DHC members who are members of ASCI include Drs. Jorge Bezerra, Fred Finkelman, Peggy Hostetter, Chris Karp, Marc Rothenberg, Arnold Strauss, and Jeff Whitsett.

Kohli and Woo Elected to SPR

Rohit Kohli, MD and Jessica Woo, MHSA, PhD were selected as new members of the Society for Pediatric Research (SPR). Dr. Kohli is a member of the Gastroenterology Division and Dr. Woo is a member of Biostatistics and Epidemiology Division at Cincinnati Children's. Currently there are 21 DHC members who have been elected to the Society for Pediatric Research.

Bezerra and Zheng Receive Mentoring Award



Jorge Bezerra, MD and Yi Zheng, PhD received the Cincinnati Children's Mentoring Achievement Faculty Award. Dr. Zheng is the Division Director of Experimental Hematology and Cancer Biology and Co-Director of Cancer and Blood Diseases Institute. Dr. Bezerra is a member of the Gastroenterology Division and DHC Director.

Ulrich-Lai New DHC Member

Yvonne Ulrich-Lai, PhD is an Assistant Professor in the Department of Psychiatry and Behavioral Neuroscience at the University of Cincinnati. She studies how the consumption of palatable foods alter the brain to confer both emotional and physiological stress relief.

We congratulate these DHC Members on their outstanding accomplishments.

For all publications, please acknowledge the DHC as follows:
"This project was supported in part by PHS Grant P30 DK078392 (include the name of the core that you used of the Digestive Disease Research Core Center in Cincinnati)."

Seminar Series- Tuesdays at Noon, Room S6.125

Date	Presenter	Title
03/25/14	William Ridgway, PhD UC: Dept. Internal Medicine Division of Immunology	"Murine Models of Primary Biliary Cirrhosis"
04/01/14	Rodney Newberry, MD Washington University in St. Louis	"A New Role for Goblet Cells in Mucosal Immunology: Barrier Maintenance and Regulated Antigen Delivery"
04/08/14	Eileen King, PhD DHC Biostatistical Core	"Data Coordinating Center Capabilities for Multi-Center Clinical Research Studies"
04/15/14	Ada Silos-Santiago, MD, PhD Ironwood Pharmaceuticals	"Guanylate Cyclase-C/cGMP: An Emerging Pathway in the Regulation of Visceral Pain"
04/22/14	Yael Haberman, MD CCHMC: Gastroenterology	"Host Ileal APOA1 and DUOX2 Co-Expression Modules are Associated with Microbial Shifts and Clinical Outcomes in Treatment Naive Pediatric Crohn's Disease"
04/29/14	James Squires, MD CCHMC: Gastroenterology	"Bedside to Bench and Back to Bedside Again: Clinical and Translational Advancements in Biliary Atresia"
05/06/14	No Seminar Due to Digestive Disease Week Meeting	
05/13/14	Alexandra Menchise, MD CCHMC: Gastroenterology	"Initiation of Murine Sclerosing Cholangitis Involves Effector Lymphocytes and Regulatory T Cells
05/20/14	Bryan Mackenzie, PhD UC: Dept Molecular & Cellular Physiololgy	"Iron Imports 2014"
05/27/14	Sandra Wright, MD CCHMC: Gastroenterology	"Heritability of Serum GM-CSF Antibody Levels in Pediatric Crohn's Disease"
06/03/14	Artem Barski, PhD CCHMC: Allergy and Immunology	"Epigenetic Regulation of T Cell Function"

For more information regarding the DHC visit our **website** or contact one of the following:

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