

2016 Pilot and Feasibility Recipients

The Digestive Health Center (DHC) is pleased to announce the recipients of its 2016 Pilot & Feasibility grants. We received a large number of competitive applications and faced a difficult task to select 3 recipients.

Below we introduce the awardees:

- Theresa Alenghat, PhD, VMD
- Sandip Bhattacharyya, PhD
- Takahisa Nakamura, PhD

See page 2 for a description of their research programs.

Request for Pilot & Feasibility Applications



The DHC is accepting applications for pilot projects to conduct basic, translational, patient based, or outcomes research broadly relating to pediatric digestive disease. Funds are intended to allow investigators to collect preliminary data sufficient to support an application for independent research through traditional NIH mechanisms. Funding for projects will range from \$40,000 to

\$50,000.

Eligible applicants must have a faculty appointment.

DHC membership is not required.

Applications are due **Monday December 5, 2016 at 5:00 pm**. Forms and submission guidelines are available on the [website](#). For questions contact Aaron Zorn, PhD, Pilot and Feasibility Program Director at aaron.zorn@cchmc.org or Cindy Wetzel, PhD, DHC Manager at cynthia.wetzel@cchmc.org.

IN THIS ISSUE:

- 2016 Pilot and Feasibility Recipients
- Request for Pilot and Feasibility Applications
- New Associate Director
- Annual Scientific Symposium
- Transition to Full Membership
- 2016 Balistreri Lecture
- DHC Competitive Renewal Submission
- DHC Member Highlights
- New DHC Member
- Upcoming Seminars

Ted Denson, MD Joins DHC Leadership



We are pleased to welcome back Dr. Lee (Ted) Denson as an Associate Director of the DHC overseeing the Enrichment Program which includes the weekly seminar series and annual scientific symposium.

Dr. Denson is Professor and Di-

rector of Research in the Division of Gastroenterology, Department of Pediatrics. He is the Director of the Schubert-Martin IBD Center and leads physician-scientists studying Inflammatory Bowel Disease. Dr. Denson has been a long standing member of the DHC and was one of the recipients of the first DHC Pilot and Feasibility funding cycle.

Save the Date - Annual Scientific Symposium

The DHC will host its Annual Scientific Symposium and External Advisory Board Meeting on **Tuesday February 28, 2017**. The day will include a poster session and keynote address by Dr. Stephen Duncan from Medical University of South Carolina. Abstracts are due **Friday February 3, 2017**.

This is an outstanding opportunity to present your digestive disease related work. Prizes will be given to students and trainees for the best poster presented at the meeting. Stay tuned for more details.



2016 Pilot and Feasibility Recipients Continued

Below is a description of the Pilot and Feasibility recipients' research programs.



Theresa Alenghat, PhD, VMD; Cincinnati Children's, Dept. of Pediatrics; Division of Immunobiology

"Role of HDAC3 in Coordinating Intestinal Regulation of Metabolic Health and Disease"

Dr. Alenghat will determine how histone deacetylase 3 (HDAC3) in intestinal epithelial cells regulates cellular and systemic metabolism.



Sandip Bhattacharyya, PhD; Cincinnati Children's, Dept. of Pediatrics; Center for Prevention of Pre-term Birth

"Novel Roles of TAK1 Ubiquitination in Driving Inflammation in Colitis"

Dr. Bhattacharyya will determine the role of E3 ligase-mediated ubiquitination of TGF- β activated Kinase 1 (TAK1) in colitis.



Takahisa Nakamura, PhD; Cincinnati Children's, Dept. of Pediatrics; Divisions of Endocrinology and Developmental Biology

"Role of Argonaute-2 in Selective Hepatic Insulin Resistance"

Dr. Nakamura's application is the first renewal that the DHC has funded. He will continue to investigate the role of hepatic Argonaute-2 in the regulation of mitochondrial function and lipid metabolism in obesity.

Transition to Full Membership - Drs. Palumbo and Kottyan



Dr. Joseph Palumbo, Division of Hematology, Department of Pediatrics at Cincinnati Children's, received an NIH R01 award from the National Cancer Institute. The title of his grant is "Coagulation Factors as Modifiers of the Colon Cancer Microenvironment". Dr. Palumbo

used preliminary data from his DHC Pilot and Feasibility Award for this R01 grant application.



Dr. Leah Kottyan, Center for Autoimmune Genomics and Etiology, Department of Pediatrics at Cincinnati Children's received her first NIH R01 from National Institute of Diabetes and Digestive Kidney Diseases (NIDDK). The title of her grant is "Mechanisms of Genetic

Risk at 2p23 for Eosinophilic Esophagitis".

Congratulations Drs. Palumbo and Kottyan for transitioning to Full Membership status in the DHC.

2016 William and Rebecca Balistreri Lecture



Dr. James Boyer will be the 2016 William and Rebecca Balistreri Lecturer for Translational Research in Hepatology.

Dr. Boyer is the Ensign Professor of Medicine and Emeritus Director of the Liver Center at Yale University. He is the founding Director of the Liver Center at Yale University which was established in 1984. Both the Cincinnati DHC and the Yale Liver Center are part 2 of the 17 Diges-

tive Diseases Research Core Centers in the nation funded by the National Institute of Diabetes and Digestive Kidney Diseases (NIDDK).

Dr. Boyer's research focuses on the study of the mechanisms responsible for bile formation and cholestasis.

Dr. Boyer will present his research on Tuesday October 25 as part of the DHC Seminar Series.

Dr. Boyer will also participate in "Balistreri Rounds", an opportunity to discuss a complex liver patient case on Wednesday October 26 at 7:30 am.

DHC NIH Competitive Renewal Submitted



Our Silvio O. Conte Digestive Diseases Research Core Center competitive renewal application comprising over 1,000 pages was submitted on July 7 and will be reviewed later this year. We thank all the DHC members for their prompt response in providing us with

their research summaries, description of collaborations, grant funding, and NIH biosketch,

The DHC leadership was able to showcase the high quality of research being done by our members, the state-of-the-art services by our research cores, and the rich scientific environment at Cincinnati Children's and the University of Cincinnati.

DHC Member Highlights and New DHC Member

Rothenberg Honored with Bunning Chair



Marc Rothenberg, MD, PhD is the first recipient of the Denise and Dave Bunning Chair for Allergy and Immunology. The Chair is in honor of the Bunnings who have been generous supporters of Dr. Rothenberg's research on the diagnosis and treatment of eosinophilic esophagitis. Dr. Rothenberg is the Division Director of Allergy and Immunology at Cincinnati Children's.

Waltz Receives Research Service Award

Susan Waltz, PhD received the inaugural University of Cincinnati, College of Medicine Faculty Research Award. The award recognizes faculty who serve on the various internal research regulatory and safety committees and internal review panels.



Dr. Waltz is a Professor in the Department of Cancer Biology at the University of Cincinnati.

Tso Receives Research Mentor Award



Patrick Tso, PhD was selected to receive the Obesity Metabolism and Nutrition Research Mentor Award from the American Gastroenterological Association (AGA). The award is given to an AGA member who has committed themselves to training the next generation of research scientists.

He is a Professor in the Department of Pathology and Laboratory Medicine at the University of Cincinnati and is the Director of the NIDDK funded Cincinnati Mouse Metabolic Phenotyping Center.

Takebe Receives New York Stem Cell Foundation Award

Takanori Takebe, MD was selected to receive an Innovator Award for Early Career Investigators in Translational Stem Cell Research from the New York Stem Cell Foundation for his innovative research of



engineering digestive organs in a dish. Dr. Takebe is the only recipient that is not from an institution in the state of New York. He is an Assistant Professor in the Divisions of Gastroenterology and Developmental Biology at Cincinnati Children's.

New DHC Member

Sandip Bhattacharyya, PhD is an Assistant Professor in the Center for Prevention of Preterm Birth at Cincinnati Children's. His research focuses on the characterization of TAK1-interacting E3 ligases that may regulate the inflammation pathogenesis in Inflammatory Bowel Disease.



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 (*insert name of core that you used*) of the Digestive Disease Research Core Center in Cincinnati."

Seminar Series- Tuesdays at Noon, Room S6.125

Date	Presenter	Title
9/13/16	Frank Anania, MD, FACP Emory University	“Blue Skies and Molars:Tales of Discovery in a Liver Disease Laboratory”
9/20/16	Alison Weiss, PhD UC: Dept Molecular Genetics, Biochemistry, and Microbiology	“iHIOs: Finally, a Human Model for Necrotizing Enterocolitis”
9/27/16	David Witte, MD Meredith Taylor CCHMC: DHC Morphology Core	“Pathology Research Core: Lesser-known Services, Myths and Expecting the Impossible”
10/4/16	Steve Potter, PhD CCHMC: DHC Gene Analysis Core	“Latest Technologies for Single Cell Studies”
10/11/16	Jeremy Goettel, PhD Boston Children’s Hospital	“Humanized Mice as a Translational Platform Towards Precision Medicine”
10/18/16	Sandip Bhattacharyya, MSc, PhD CCHMC: Center for Prevention of Preterm Birth	“Activation of TAK1: A Driver of Intestinal Inflammation”
10/25/16 <i>*distinct location Res. Auditorium</i>	James Boyer, MD Yale University	“Novel Mechanisms of Bile Acid Induced Liver Injury - the Role of the Innate Immune System”
11/1/16	Takahisa Nakamura, PhD CCHMC: Endocrinology and Developmental Biology	“Role of Hepatic RNA Silencing in the Pathogenesis of Obesity and in Metformin’s Action”
11/8/16	Theresa Alenghat, PhD CCHMC: Immunobiology	“Role of HDAC3 in Coordinating Intestinal Regulation of Metabolic Health and Disease”
11/15/16	No Seminar due to AASLD Meeting	
11/22/16	No Seminar due to the Holiday	
11/29/16	Stacey Huppert, PhD CCHMC: Gastroenterology	“Building a Functional Biliary System from Hepatocytes”
12/6/16	Senad Divanovic, PhD CCHMC: Immunobiology	“Immunopathogenesis of Non-Alcoholic Fatty Liver Disease”
12/13/16	Geoffrey Preidis, MD, PhD Baylor University	“Modeling the Gastrointestinal, Liver and Metabolic Complications of Early-life Undernutrition”

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

Annual Scientific Symposium Tuesday February 28, 2017

Poster Session: 9:30 to 11:45 am

Location S Room 1.203 and 1.204

Keynote Address: Stephen Duncan, DPhil

Location R Room 3381 (Research Auditorium) 12:00 pm

The Digestive Health Center (DHC) will host its Annual Scientific Symposium and External Advisory Board Meeting on February 28, 2017. The day will include a poster session and keynote address by Dr. Stephen Duncan from Medical University of South Carolina. Building on the success of previous years, the poster session will feature work related to any area of digestive disease, including the four DHC themes:

- 1) Liver Disease and Modeling
- 2) Digestive Disease and Immunity
- 3) Digestive Disease and Obesity
- 4) Translational Embryology (of the Digestive System)

You do not have to be a member of the DHC to submit an abstract. Prizes will be given to students and trainees for the best poster presented. Visit the [DHC website](#) for the abstract submission form and instructions. Abstracts must be submitted electronically by Friday February 3, 2017 to cynthia.wetzel@cchmc.org.

Hosting the 2017 Midwest DDRCC Alliance Meeting

The DHC will host the Midwest Digestive Diseases Research Core Centers (DDRCC) Alliance Meeting on Monday February 27, 2017 the day before our Annual Scientific Symposium.

The Midwest DDRCC Alliance includes the following 6 centers: Cincinnati, Case Western Reserve University, Mayo Clinic, University of Chicago, University of Michigan, and Washington University in St. Louis.

The Midwest DDRCC Alliance holds a rotating annual meeting that is attended by Pilot and Feasibility Awardees and Center Directors. The main focus of the meeting is to provide a forum for the Pilot and Feasibility Awardees to present their research in order to receive feedback and career mentoring.

Dr. Peter Perrin, the NIH representative who oversees all the DDRCCs will be attending the Midwest DDRCC Alliance meeting. The Midwest DDRCC Alliance meeting attendees will participate in the DHC Annual Scientific Symposium on the following day.

We invite all DHC members and their research staff to attend the presentations by these emerging investigators in digestive disease research on Monday February 27. Detailed information will be sent in a future e-mail message.

IN THIS ISSUE:

- Annual Scientific Symposium
- Hosting Midwest DDRCC Alliance Meeting
- Recent Changes at NIH
- Transition to Full Membership
- Study Design and Biostatistical Analysis Support
- DHC Member Highlights
- New DHC Members
- Upcoming Seminars



Summary of Some Recent Changes at NIH

The National Institutes of Health (NIH) will update their policies and procedures regarding how they manage grant applications and funding. Below is a summary of some recent changes.



NIH RPPR and Competitive Renewals

The NIH is replacing the Final Progress Report (FPR) with the Final Research Performance Progress Report (Final RPPR) through a new eRA Commons module effective January 2017. In order to increase public transparency, NIH will no longer accept the progress report that is included in competitive renewal applications (Type 2 applications) as the RPPR for the final year of the grant funding period.

NIH requests Principal Investigators to submit an "Interim-RPPR" while their renewal application is under review. In the event that the renewal application is funded, NIH will treat the "Interim-RPPR" as the annual performance report for the final year of the previous competitive segment. If the renewal application is not funded, the "Interim-RPPR" will be treated by NIH as the Final RPPR.

Scientific Rigor and Transparency

Remember to address scientific rigor and transparency in your NIH grant applications. NIH is asking reviewers to include comments in their critiques on the following 4 areas:

- Scientific Premise- refers to the scientific

foundation to support the application

- Scientific Rigor- pertains to proposed research (i.e. statistical procedures, data analysis, etc.)
- Consideration of Relevant Biological Variables- includes sex, age, source, weight, and genetic strain
- Plan for Authentication of Key Biological and/or Chemical Resources- examples include cell lines, specialty chemicals, antibodies, etc, not standard laboratory reagents

Scientific Premise, Scientific Rigor, and Consideration of Relevant Biological Variables all need to be addressed in the Research Strategy Section of the application while Authentication of Key Biological and/or Chemical Resources is a separate one page or less attachment.

Web Browsers

All federal agencies were mandated to move to 'https only' secure connection for all websites. As of November 30, 2016, only the following web browsers will ensure you have the best experience when using NIH eRA commons, Application Submission System & Interface for Submission Tracking (ASSIST), and Internet Assisted Review (IAR):

- Internet Explorer 11.x
- Mozilla Firefox 49.x
- Google Chrome 54.x

For more information visit the NIH Office of Extramural Research [website](#).

Transition to Full Membership - Drs. Nakamura and Takebe



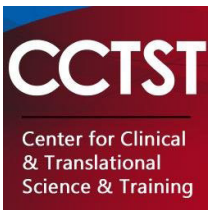
Dr. Takahisa Nakamura of the Divisions of Endocrinology and Developmental Biology, Department of Pediatrics at Cincinnati Children's, received his first R01 grant from the National Institute of Diabetes and Digestive Kidney Diseases (NIDDK). The title of his grant is "Role of Hepatic RNA Silencing in Insulin Resistance and Obesity". Dr. Nakamura used preliminary data from his DHC Pilot and Feasibility Award for this R01 grant application.



Dr. Takanori Takebe of the Divisions of Gastroenterology and Developmental Biology, Department of Pediatrics at Cincinnati Children's, received the New York Stem Cell Foundation Robertson Stem Cell Investigator award entitled "Clinical Translation of Organ Bud Transplant Therapy".

Congratulations to Drs. Nakamura and Takebe for transitioning to Full Membership status in the DHC.

Need Help with Study Design and Statistical Analysis Plan



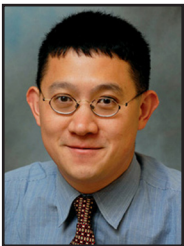
Investigators needing help with study design, developing a statistical analysis plan, or statistical analysis of preliminary data for an extramural grant proposal can request assistance through the Center for Clinical & Translational Science & Training (CCTST). To be eligible to receive this

service you must be: 1) CCTST member, 2) faculty member, and 3) submitting a grant proposal for extramural funding.

Investigators will receive a 1-hour consultation with a methodologist who will determine your statistical needs and eligibility for a voucher. To obtain assistance visit the [CCTST Research Central website](#).

DHC Member Highlights and New DHC Members

Way Receives HHMI Faculty Scholar Award



Sing Sing Way, MD was named a 2016 Faculty Scholar by the Howard Hughes Medical Institute (HHMI), the Simons Foundation, and the Bill & Melinda Gates Foundation. Dr. Way is one of 84 Faculty Scholars to receive this inaugural award that is given to early-career scientists who have great potential to make unique contributions to their field. Dr. Way is a member in the Division of Infectious Diseases at Cincinnati Children's.

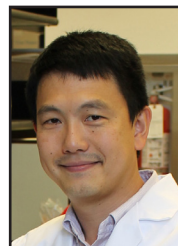
Zucker's New Role at AASLD

Stephen Zucker, MD has been appointed as the Chair of the Ethics Committee of the American Association for the Study of Liver Diseases (AASLD) starting January 2017 for a 3 year term. The purpose of the Ethics Committee is to advise the AASLD Governing Board in the evaluation of ethical issues relating to the activities of the AASLD. Dr. Zucker is a Professor in the



Department of Internal Medicine, Division of Digestive Diseases at the University of Cincinnati.

New DHC Members



Akihiro Asai, MD, PhD is an Instructor in the Division of Gastroenterology, Hepatology, and Nutrition at Cincinnati Children's. He will use induced pluripotent stem cell derived liver cells and organoids to study the mechanisms that cause pediatric cholestatic disorders.

Shailendra Patel, BM, ChB, DPhil is Professor and Director of the Division of Endocrinology, Diabetes and Metabolism, Department of Internal Medicine at the University of Cincinnati. Dr. Patel's research focuses on rare genetic disorders that effect sterol trafficking.



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 (*insert name of core that you used*) of the Digestive Disease Research Core Center in Cincinnati."

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

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Aaron Zorn, PhD

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Center Manager:

Cynthia Wetzel, PhD

cynthia.wetzel@cchmc.org

Seminar Series- Tuesdays at Noon, Room S6.125

Date	Presenter	Title
1/10/17	Thaddeus Stappenbeck, MD, PhD Washington University at St. Louis	"Microbial Control of Wound Repair"
1/17/17	Ardythe Morrow PhD CCHMC: Neonatology	"Sweet and Sour Influence of FUT2 Oligosaccharides in Pediatric Digestive Diseases"
1/24/17	Christian Hong, PhD UC: Dept Molecular & Cellular Physiology	"Interconnected Network of Circadian Rhythms and Cell Cycle in Mouse Enteroids"
1/31/17	Xueguang Sun, PhD CCHMC: DNA Sequencing Core	"Next Generation Sequencing Services at CCHMC"
2/7/17	Matthew Flick, PhD CCHMC: Experimental Hematology & Cancer Biology	"Coagulation-dependent Mechanisms of Pancreatic Ductal Adenocarcinoma"
2/14/17	Patricia Fulkerson, MD, PhD CCHMC: Allergy & Immunology	"Eosinophil Progenitors in Eosinophilic Esophagitis"
2/21/17	Stephen Zucker, MD UC: Dept Internal Medicine Division of Digestive Diseases	"Utility of Bile Acids in the Prevention of Intestinal Tumorigenesis: Is FXR the Key?"
2/28/17	DHC Annual Scientific Symposium Keynote Address by: Stephen Duncan, DPhil Medical University of South Carolina "Using iPSCs to Identify New Purposes for Old Drugs in the Treatment of Metabolic Liver Disease" *Distinct Location: Research Auditorium	
3/7/17	Diego Perez-Tilve PhD UC: Dept Internal Medicine Division of Endocrinology, Diabetes and Metabolism	"Circadian Control of Metabolism by the Central Melanocortin System"
3/14/17	Eitaro Aihara, PhD UC: Dept Molecular & Cellular Physiology	"Consequences of Imperfect Gastric Epithelium after Ulcer Healing"
3/21/17	Luis FZ Batista, PhD Washington University at St. Louis	"Generation of Stem Cell Derived Hepatocytes as a Platform to Study the Role of Telomerase Dysregulation in Liver Disease and Cancer"
3/28/17	Kasper Hoebe, PhD CCHMC: Immunobiology	"New Molecular Pathways Controlling T Cell Quiescence and Preventing Colitis"
4/4/17	Artem Barski, PhD CCHMC: Allergy & Immunology	"Analysis of Chip-Seq and RNA-Seq Data with BioWardrobe"
4/11/17	Kevin Hommel, PhD CCHMC: Behavioral Medicine and Clinical Psychology	"Using Health Technology to Improve Self-Management in Pediatric IBD"

Highlights from the Annual Scientific Symposium



Poster Winners
from Left to Right:
Rie Ouchi, PhD;
Holly Poling; Jayati
Chakrabarti, PhD;
Leila Valanejad, PhD;
Nina Bertaux-Skeirik,
and Katie Sinagoga

IN THIS ISSUE:

- Highlights from Scientific Symposium
- Midwest DDRCC Alliance Meeting
- Research Published in High Impact Journals
- ORCID Identifier
- Member Highlights
- New DHC Member
- Upcoming Seminars

The Digestive Health Center (DHC) held its Annual Scientific Symposium on Tuesday, February 28. Stephen Duncan, DPhil from Medical University of South Carolina presented the keynote address “Using iPSCs to Identify New Purposes for Old Drugs in the Treatment of Metabolic Liver Disease”. Posters were displayed by 39 researchers which represented 9 Divisions in the Department of Pediatrics and 6 Departments within the University of Cincinnati, College of Medicine. Additionally, there were 10 posters displayed highlighting research core services. Prizes were awarded for the best presented posters:

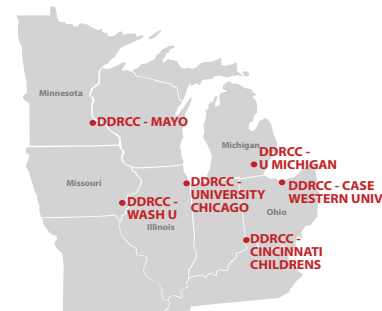
First Place: Katie Sinagoga (Graduate Student, Cincinnati Children’s, Developmental Biology, member of Dr. Jim Well’s lab) for “Distinct Roles for the mTOR Pathway in Postnatal Morphogenesis, Maturation, and Function of Pancreatic Islets”.

Tie for Second Place: Nina Bertaux-Skeirik (Graduate Student, University of Cincinnati, Molecular and Cellular Physiology, member of Dr. Yana Zavros’ lab) for “Patient-Derived in Vitro and in Vivo Organoid Models of Gastric Cancer”. Leila Valanejad, PhD (Research Fellow, Cincinnati Children’s, Pediatric Surgery, member of Dr. Nick Timchenko’s lab) for “PARP1-Dependent Chromosomal Domains Determine the Development of Aggressive Hepatoblastoma by Activating Multiple Pathways of Cancer”.

Tie for Third Place: Jayati Chakrabarti, PhD (Research Scientist, University of Cincinnati, Molecular and Cellular Physiology, member of Dr. Yana Zavros’ lab) for “Hedgehog Signaling Regulates PDL-1 Expression in Gastric Cancer Cells to Induce Tumor Proliferation”. Rie Ouchi, PhD (Research Fellow, Cincinnati Children’s, Gastroenterology member of Dr. Taka Takebe’s lab) for “In Vitro Human NAFLD Model Using Human iPSC Derived Liver Organoids”. Holly Poling (Research Assistant, Cincinnati Children’s, Pediatric Surgery, member of Dr. Michael Helmuth’s lab) for “Mechanically Induced Enterogenesis of Human Intestinal Organoids in Vivo”. See Page 2 for more highlights from the Annual Scientific Symposium.

Cincinnati Hosted the 2017 Midwest DDRCC Alliance Meeting

The DHC hosted the Midwest Digestive Diseases Research Core Centers (DDRCC) Alliance Meeting on Monday February 27, 2017. The Midwest DDRCC Alliance holds a rotating annual meeting among the 6 centers (see map to right) that is attended by Pilot and Feasibility Awardees and Center Directors. Pilot and Feasibility Awardees from the 6 centers presented their work and received feedback on their projects and career mentoring. All attendees, including Dr. Peter Perrin, the NIH representative who oversees all the DDRCCs, enjoyed visiting our center.



Photos and Highlights from Annual Scientific Symposium Continued

We would like to specially thank Jill Soldano for her superb planning and her team comprising of Ruth Castle, GiGi DiPuccio, Joan Kasten, and Angie Vickers for their assistance hosting the Annual Scientific Symposium and the Midwest Digestive Diseases Research Core Centers Alliance Meeting.

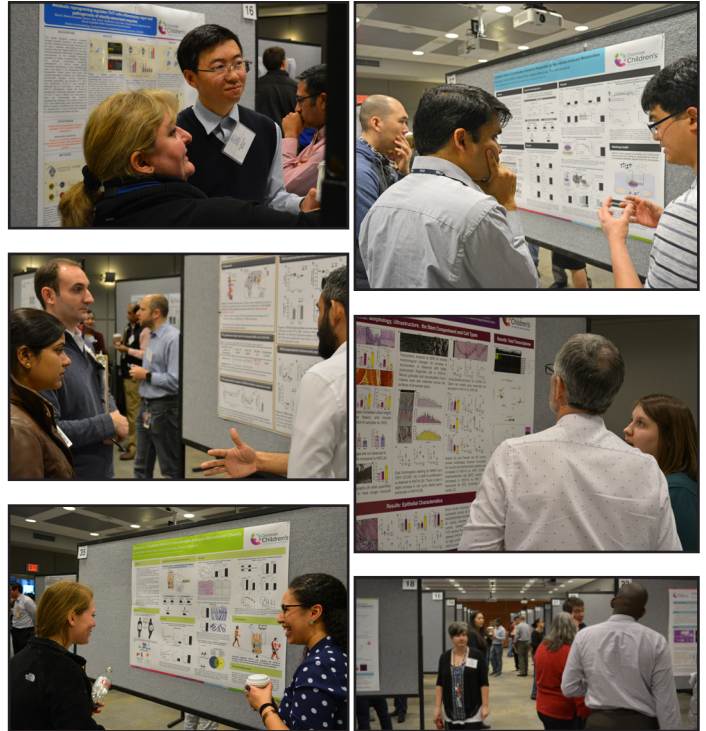


Left to Right: Ruth Castle, Joan Kasten, Jill Soldano, GiGi DiPuccio, and Angie Vickers.

We also thank those who reviewed posters:

Drs. Alenghat, Asai, Divanovic, Flick, Gandhi, Haslam, Heubi, Hoebe, Hogan, Hommel, Hong, Huppert, Kottyan, Liu, Madan, Minar, Mohanty, Montrose, Nakamura, Naren, Patel, Perez-Tilve, Rosen, Shata, Shin, Shivakumar, Steinbrecher, Timchenko, Wang, Way, Wen, and Yin.

Thanks to the judges and outstanding organizers!



Member's Research Published in The Lancet

THE LANCET

The collaborative, multicenter RISK Stratification study of DHC Associate Director and DHC member Dr. Lee (Ted) Denson was published online in *The Lancet* on March 1.

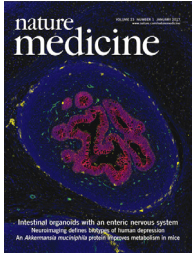
The Risk Stratification and Identification of Immunogenetic and Microbial Markers of Rapid Disease Progression in Children with Crohn's Disease (RISK) was designed as a prospective study to derive a risk-stratification model characterizing the natural progression of newly diagnosed Crohn's disease in pediatric patients.

The research team identified a gene expression signature in the fibrosis process leads to the development of fibrostenosis and a gene expression

signature in the inflammatory response results in the development of penetrating disease. The RISK study also discovered patients that receive early anti-TNF α therapy prevented penetrating complications.

The Crohn's & Colitis Foundation funded the RISK study and the DHC grant subsidized the RNA-Seq experiments. The study spanned over 3 years and enrolled 1,800 patients of which 913 were part of the published study. The patients were from 25 institutions located in the United States and 3 institutions located in Canada. Many of the institutions in the United States are home to one of the 17 Silvio O. Conte Digestive Diseases Research Core Centers funded by NIDDK.

Members' Research Highlighted on Nature Medicine Cover



The research work of DHC Members Drs. Max Mahe (previous Pilot & Feasibility Recipient), Michael Helmrath and James Wells was featured on the cover of January issue of *Nature Medicine*. The research team used human plu-

ripotent stem cells to generate human intestinal tissues with a functional enteric nervous system (ENS). They were able to use the intestinal tissue to study Hirschsprung's disease, a severe intestinal nerve disorder. This study represents another major step towards generating healthy intestine for transplant into a patient.

Members' Research Published in Nature

DHC members, Drs. Eitaro Aihara, Marshall (Chip) Montrose, and James Wells' research was published in the January 12 issue of *Nature*. The research group used direct differentiation of human pluripotent stem cells to generate gastric organoids containing corpus/fundus type of epithelium. They showed that the Wnt/ β -catenin signalling was key factor in the specification of the fundic domain during gastric development. The

resulting human fundic gastric organoids contained chief cells and parietal cells capable of secreting acid in response to histamine. Two years ago, Drs. Yana Zavros and Wells used a similar approach to generate antral gastric organoids. Now researchers can generate both parts of the human stomach to study gastric function and disease.



Distinguish Yourself with ORCID



ORCID (Open Researcher Community ID) provides you a digital identifier that distinguishes you from every other researcher, even those with the same name. ORCID is a non-profit organization supported by the fees from research organizations that in-

clude publishers and professional associations. Your unique ORCID identifier can be used with your name when you submit publications, grants, patents, etc. to ensure you receive credit for your scholarly activities. Registration takes 30 seconds. To obtain your ORCID identifier visit the [ORCID website](http://orcid.org).

DHC Member Highlights and New DHC Member

Yacyshyn is Named to Editorial Board

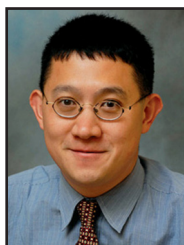


Bruce Yacyshyn, MD was named to the editorial board of *Inflammatory Bowel Diseases*, the official journal of the Crohn's & Colitis Foundation. Dr. Yacyshyn is a Professor in the Department of Internal Medicine, Division of Digestive

Diseases at the University of Cincinnati.

Way Receives Research Achievement Award

Sing Sing Way, MD received the Cincinnati Children's Research Achievement Faculty Award. In the past year he has been recognized by his peers for his outstanding research program by



receiving the E. Mead Johnson Award, the NIH Director's Pioneer Award, the inaugural Gale and Ira Drukier Prize in Children's Health Research, and was appointed as a Faculty Scholar by the Howard Hughes Medical Institute (HHMI), the Simons Foundation, and the Bill & Melinda Gates Foundation. Dr. Way is a member in the Division of Infectious Diseases at Cincinnati Children's.

New DHC Member

Sujit Mohanty, PhD, MVSc, DVM is an Instructor in the Division of Pediatric General and Thoracic Surgery, Department of Surgery, at Cincinnati Children's. His research focuses on investigating the molecular mechanisms of liver and biliary injury with special emphasis on biliary atresia.



Seminar Series- Tuesdays at Noon, Room S6.125

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3/28/17	Kasper Hoebe, PhD CCHMC: Immunobiology	“New Molecular Pathways Controlling T Cell Quiescence and Preventing Colitis”
4/4/17	Artem Barski, PhD CCHMC: Allergy & Immunology	“Analysis of Chip-Seq and RNA-Seq Data with BioWardrobe”
4/11/17	Kevin Hommel, PhD CCHMC: Behavioral Medicine and Clinical Psychology	“Using Health Technology to Improve Self-Management in Pediatric IBD”
4/18/17	Anna Peters, MD CCHMC: Gastroenterology	“Control of Cholangiocyte Proliferation by Innate Lymphoid Cells”
4/25/17	William Balistreri, MD CCHMC: Gastroenterology	“Viral Hepatitis - Does the “C” Stand for Cure....?”
5/2/17	Jenny Tong, MD Duke University	“Metabolic Regulation by Ghrelin in Mice and Men”
5/9/17	No Seminar due to Digestive Disease Week Annual Meeting	
5/16/17	Justin Wheeler, MD CCHMC: Gastroenterology	“Blame the Hormones? Hormone Signaling and Male Gender Predominance in Eosinophilic Esophagitis”
5/23/17	M. Raphaelle Jean, MD, MPH CCHMC: Gastroenterology	“Creating a Process to Obtain Hepatitis B Serology Among Patients Treated with Infliximab at a Large Urban Children’s Hospital”
5/30/17	Ana Catalina (Cata) Arce-Clachar, MD CCHMC: Gastroenterology	“The Role of TGR5 Signaling in Gender Specific Sclerosing Cholangitis Phenotype in the Mdr2 -/- Model”

For all publications, please acknowledge the DHC as follows:

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

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