The research work of DHC Members Drs. Takanori Takebe, James Wells and Aaron Zorn was published in the October 3, 2019 issue of Nature. They along with first author, Dr. Hiroyuki Koike, and members of their research labs successfully generated a connected set of the liver, pancreas, and biliary ducts from human pluripotent stem cells (PSCs). These mini organoids were able to process bile acids as if they were digesting food. This is the first time researchers have generated an integrated organ system. This is another step closer to the long-term goal of being able to grow organ tissues for human transplantation.

IN THIS ISSUE:
• Annual Scientific Symposium
• Member’s research published in Nature
• Bezerra Becomes AASLD President
• New Subsidy at Discover Together Biobank
• New External Advisory Board Member
• FASEB- Liver Biology Conference Announcement
• Transition to Full Membership
• Member Highlights
• Upcoming Seminars

To present a poster, visit the DHC website for the abstract submission form. Abstracts must be submitted electronically by Friday, January 31, 2020 to cynthia.wetzel@cchmc.org. Prizes will be given to students and trainees for the best poster presented.

Members’ Research Published in Nature

The research work of DHC Members Drs. Takanori Takebe, James Wells and Aaron Zorn was published in the October 3, 2019 issue of Nature. They along with first author, Dr. Hiroyuki Koike, and members of their research labs successfully generated a connected set of the liver, pancreas, and biliary ducts from human pluripotent stem cells (PSCs). These mini organoids were able to process bile acids as if they were digesting food. This is the first time researchers have generated an integrated organ system. This is another step closer to the long-term goal of being able to grow organ tissues for human transplantation.

Jorge Bezerra, MD to Become 2020 AASLD President

Dr. Jorge Bezerra, DHC Director, was elected as President of the American Association for the Study of Liver Disease (AASLD), effective January 1, 2020. The AASLD President is a member of the Governing Board which is responsible for managing the affairs of the AASLD by establishing policies to prevent and cure liver diseases.

Dr. Bezerra will oversee the state-of-the-art educational program at the Annual Digestive Diseases Week (DDW) and the Liver Meetings, career development and training affairs for all members, and sponsorship of hepatology research. He will serve as President for one year. He is the fifth Pediatric Hepatologist to serve as AASLD President.

Congratulations to Dr. Bezerra on this prestigious international leadership role.
New Subsidy for Discover Together Biobank

The DHC leaders worked with Mike Pauciulo MBA, Director of the Cincinnati Children’s Discover Together Biobank, to provide its members resources to accelerate clinical studies for pediatric digestive diseases.

The Discover Together Biobank facilitates the acquisition, processing, storage, and distribution of biospecimens for research studies. Below is a partial list of services that are available the CAP-Accredited Biobank:

- PI Biobank Sample Collection
- Access to DNA, RNA, biofluids, and tissue from disease and normal human samples
- Sample/Data/ Project Tracking

Benefits for DHC Members: The DHC will provide 25% of the total charge with a subsidy limit of $1,200 per member per year.

The Biobank Facility is located in Location R Room 2543. For more information visit the Discover Together Biobank website or contact Dr. Mike Pauciulo, MBA at mike.pauciulo@cchmc.org or 513-803-3842.

New External Advisory Board Member

Dr. Lopa Mishra has joined the DHC External Advisory Board. She is currently Professor of Surgery at George Washington University and the Director of the Center for Translational Medicine.

While Dr. Mishra was at MD Anderson, she was the Associate Director of the Texas NIDDK funded Digestive Diseases Research Core Center (DDRCC).

Her research focuses on identifying key signaling pathways in liver cancer with the goal of developing new therapeutics.

Dr. Mishra will join current External Advisory Board Members: Drs. Noah Shroyer (Baylor College of Medicine), Scott Snapper (Boston Children’s Hospital), and Holger Willenbring (University of California San Francisco). Dr. Rebecca Wells (University of Pennsylvania) has stepped down from our Board since she has become the Associate Director of the their DDRCC.

FASEB Summer Research Conference 2020- Liver Biology

Liver Biology: Fundamental Mechanisms & Translational Applications
August 2-7, 2020
Astor Crowne Plaza, New Orleans

This FASEB Conference is the next iteration of a liver-focused meeting that has been held biennially since 1988. It is recognized as the premier small conference covering all aspects of basic and translational research involving the liver. The program will include the following sessions:

1. Hepatogenesis and Hepatic Architecture Establishment
2. Hepatic Plasticity & Regenerative Medicine
3. Non-Parenchymal Cell Biology, Liver Injuries and Fibrosis
4. Steatotic Liver Diseases
5. Comprehensive Analyses of Hepatocellular Carcinogenesis
6. New Technologies, Functional Screening and Target Discovery
7. Liver Immunology, Translational Research and Combinatorial Therapies
8. Metabolism, Bile Acids & Nuclear Receptors

To register visit the Symposium Website.
For more information contact the Conference Co-Director, Dr. Stacey Huppert (Associate Professor and DHC Member in the Division of Gastroenterology at Cincinnati Children’s) at Stacey.Huppert@cchmc.org.
Transition to Full Membership - Dr. John Harley

Dr. John Harley Professor and Director of the Center for Autoimmune Genomics and Etiology in the Department of Pediatrics at Cincinnati Children’s received a NIH R01 from the National Institute of Allergy and Infectious Diseases (NIAID). The title of his grant is “Genomics of Inflammatory Bowel Disease”.

Dr. Harley used preliminary data that was generated from his DHC Pilot and Feasibility Award for his R01 grant application. Congratulations to Dr. Harley for transitioning to Full Membership status in the DHC!

DHC Member Highlights

Wells Receives Paul Allen Award and a CCRF Endowed Chair

James Wells, PhD is one of five recipients of the 2019 Distinguished Investigator Awards from the Paul G. Allen (co-founder of Microsoft) Frontiers Group. Dr. Wells will receive $1.5 million over 3 years to support his research investigating how enterendocrine cells sense nutrients in food and how these cells control the absorption, usage and storage of nutrients.

Dr. Wells was also awarded a Cincinnati Children’s Research Foundation (CCRF) Chair. These awards are given to faculty who have demonstrated exceptional academic success in research, clinical care, or education and have made highly significant contributions to the institution.

Dr. Wells is Professor in the Division of Developmental Biology and is the Chief Scientific Officer of the Center for Stem Cell & Organoid Medicine at Cincinnati Children’s.

Alenghat Receives Burroughs Wellcome Fund Award

Theresa Alenghat, VMD, PhD is the recipient of the 2019 Investigators in the Pathogenesis of Infectious Disease Award from the Burroughs Wellcome Fund. Only 10 other investigators were selected to receive this award from the 150 applicant pool. This award will fund her project entitled “Dietary Regulation of Innate Intestinal Immunity”. Dr. Alenghat is Associate Professor in the Division of Immunobiology at Cincinnati Children’s.

Takebe Receives Dr. Ralph and Marian Falk Medical Research Trust

Takanori Takebe, MD received the 2019 Dr. Ralph and Marian Falk Medical Trust-Catalyst Award. This award provides one year of funding to support high-risk, high-reward research projects. The title of his project is “Novel Human Organoid Transplant Therapy Against Pediatric Liver Disease”. He is Assistant Professor in the Divisions of Gastroenterology and Developmental Biology at Cincinnati Children’s.

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, Room S6.125

<table>
<thead>
<tr>
<th>Date</th>
<th>Presenter</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/7/20</td>
<td>Aleixo Muise, MD, PhD, FRCPC</td>
<td>“Insights into the Cause and Treatment of Monogenic Forms of Very Early Onset Inflammatory Bowel Disease (VEOIBD)”</td>
</tr>
<tr>
<td></td>
<td><em>Distinct location Res. Auditorium</em></td>
<td></td>
</tr>
<tr>
<td>1/14/20</td>
<td>Patrick Tso, PhD</td>
<td>“The Gastric Regulation of the Secretion of the Incretin Hormones”</td>
</tr>
<tr>
<td></td>
<td>UC: Department of Pathology and Laboratory Medicine</td>
<td></td>
</tr>
<tr>
<td>1/21/20</td>
<td>Stacey Huppert, PhD</td>
<td>“Molecular Regulation of Hepatocyte Maturation”</td>
</tr>
<tr>
<td></td>
<td>CCHMC: Gastroenterology</td>
<td></td>
</tr>
<tr>
<td>1/28/20</td>
<td>Soona Shin, PhD</td>
<td>“Molecular Mechanism of Liver Cancer in Young Patients”</td>
</tr>
<tr>
<td></td>
<td>CCHMC: Pediatric Surgery</td>
<td></td>
</tr>
<tr>
<td>2/4/20</td>
<td>Sherry Thornton, PhD</td>
<td>“Cutting Edge Technologies for Flow Cytometry Analysis”</td>
</tr>
<tr>
<td></td>
<td>CCHMC: Research Flow Cytometry Core</td>
<td></td>
</tr>
<tr>
<td>2/11/20</td>
<td>AP Naren, PhD</td>
<td>“Personalized Model System for Individual Cystic Fibrosis Patient”</td>
</tr>
<tr>
<td></td>
<td>CCHMC: Pulmonary Biology and Gastroenterology</td>
<td></td>
</tr>
<tr>
<td>2/18/20</td>
<td>No Seminar due to Annual Digestive Diseases Research Core Centers Directors Meeting</td>
<td></td>
</tr>
<tr>
<td>2/25/20</td>
<td>DHC Annual Scientific Symposium</td>
<td>“The Many Tiers of Repair Ensure the Health of the Promethean Promise”</td>
</tr>
<tr>
<td></td>
<td>Keynote Address by: Satdarshan (Paul) Singh Monga, MD, FAASLD</td>
<td>University of Pittsburgh</td>
</tr>
<tr>
<td></td>
<td><em>Distinct location Res. Auditorium</em></td>
<td></td>
</tr>
<tr>
<td>3/3/20</td>
<td>Takahisa Nakamura, PhD</td>
<td>“RNA-mediated Immuno-metabolic Regulation in Obesity”</td>
</tr>
<tr>
<td></td>
<td>CCHMC: Endocrinology and Developmental Biology</td>
<td></td>
</tr>
<tr>
<td>3/10/20</td>
<td>Peter Roy, PhD</td>
<td>“Using the Nematode C. elegans to Identify Candidate Drugs to Treat PFIC3 Cholestatic Liver Disease”</td>
</tr>
<tr>
<td></td>
<td>University of Toronto</td>
<td></td>
</tr>
<tr>
<td>3/17/20</td>
<td>Joseph Palumbo, MD</td>
<td>“The Role of the Hemostatic System in Colitis and Colon Cancer Progression”</td>
</tr>
<tr>
<td></td>
<td>CCHMC: Hematology</td>
<td></td>
</tr>
<tr>
<td>3/24/20</td>
<td>Leah Kottyan, PhD</td>
<td>“Identification of EoE-risk Genotype and IL13-Dependent Transcriptional Regulation in the Esophagus”</td>
</tr>
<tr>
<td></td>
<td>CCHMC: Center for Autoimmune Genomics and Etiology (CAGE)</td>
<td></td>
</tr>
<tr>
<td>3/31/20</td>
<td>David Haslam, MD</td>
<td>“Microbiome Research Support in Cincinnati: The Microbial Genomics and Metagenomics Laboratory”</td>
</tr>
<tr>
<td></td>
<td><em>Distinct location Res. Auditorium</em></td>
<td></td>
</tr>
</tbody>
</table>