

## Silvio Conte Digestive Diseases Research Core Center (DDRCC) Application

In June 2003 we received a grant from the National Institute of Diabetes & Digestive & Kidney Diseases (NIDDK) to support digestive health research in Cincinnati. The Cincinnati Digestive Disease Research Development Center (DDRDC) was established. We have expanded our membership from 34 to 48 members along with developing the infrastructure for the next grant submission. The current NIDDK supported DDRDC is a center which both we and NIDDK view as an intermediate step towards the goal of a larger Center grant. We will be submitting an application for a Silvio Conte Digestive Diseases Research Core Center (DDRCC) Grant from NIDDK. This will allow us to expand even further by the addition of more Research Cores and the development of an enrichment program that includes a pilot and feasibility program. Cindy Wetzel will be contacting you over the next few months for the following information:

- SUMMARY OF RESEARCH ACCOMPLISHMENTS
- GRANT SUPPORT
- NIH BIOSKETCHES

## External Advisory Board Meeting

The External Advisory Board Meeting is set for Saturday May 5, 2006. The members are Drs. Gregory Gores (Mayo Clinic), Philip Sherman (Hospital for Sick Children), and Allan Walker (Harvard Medical School). The agenda is to get their input on our DDRCC application and to review the services of the Core Facilities.

## Core Facility Announcements

### FUNDING TO USE THE LIVE MICROSCOPY CORE IS STILL AVAILABLE

The DDRDC still has \$500 grants available to our members to facilitate training to use two-photon microscopy and the first 10 hours of usage. If you are interested, please send Chip Montrose an email (mhm@uc.edu) containing: 1) Your name 2) Contact information 3) A Brief (2-3 sentence) description of what you desire to image. Please include that you are a DDRDC member.

See page 2 for introduction of new Live Microscopy Core Specialist, Chet Closson.

### CELL MANIPULATION CORE:

The table of cell lines that are available to DDRDC members can be viewed at the DDRDC website:  
<http://www.cincinnatichildrens.org/research/project/ddrdc/cores/DDRDC+Cell+Manipulation+Core+Services.htm>

To obtain one of the cell lines from the table, you will need to fill out the DDRDC

Service Request Form (located on the web site) and submit it to Reena Mourya

(Reena.Mourya@cchmc.org).

## Research Spotlight

Dr. Rothenberg and colleagues have made advances in the genetic profiling of eosinophilic esophagitis. The article entitled “Eotaxin-3/CCL26 and a uniquely conserved gene-expression profile in eosinophilic esophagitis” was the cover for the Journal of Clinical Investigation February Issue and has received national attention. Eosinophilic esophagitis (EE) is an emerging disorder with a poorly understood pathogenesis. In order to define disease mechanisms, Dr. Rothenberg and colleagues (including DDRDC members Drs. Aronow, Cohen, Hogan, Mishra, and Stringer) took an empiric approach analyzing esophageal tissue by a genome wide microarray expression analysis. EE patients had a striking transcript signature involving 1% of the human genome that was remarkably conserved across gender, age, and allergic status, and was distinct from non-EE chronic esophagitis. Notably, the eosinophil specific chemoattractant eotaxin-3 was the gene most highly induced compared to healthy individuals. Furthermore, a single nucleotide polymorphism in the human eotaxin-3 gene was associated with disease susceptibility. Thus, despite millions of SNPs in the human genome, Dr. Rothenberg’s results suggest that this complex disorder may have largely conserved disease mechanisms. This finding provides encouraging insight that relatively uniform successful pharmacological therapy may be achieved for EE.

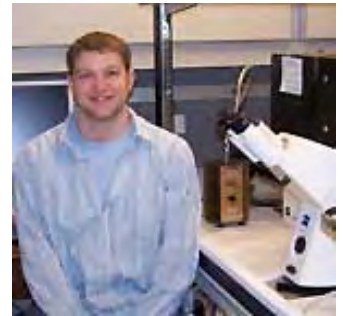


## Newly Hired Live Microscopy Core Specialist

We are pleased to welcome Chet Closson to the Live Microscopy Core of the DDRDC. Chet recently received his BS in Biomedical Engineering at Wright State University in Dayton, OH. He joined the Department of Molecular and Cellular Physiology at University of Cincinnati in December 2005. Chet is ready to help with both training of users and more detailed help with the use of the microscopes. Chet can be reached by any of the following means:

Phone: 558-3791 Email: [chet.closson@uc.edu](mailto:chet.closson@uc.edu)

Room: University of Cincinnati MSB Room 3155



## Welcome to Three New Investigators

The DDRDC is pleased to welcome three new Associate Members:

**Charles C. Caldwell, PhD** is an Assistant Professor in the Trauma, Sepsis, and Inflammation Research Group, Department of Surgery at the University of Cincinnati. Dr. Caldwell’s research centers around studying the immune response after trauma. One of his current projects is examining the IL-12 signaling pathway and the function of T lymphocytes after hepatic ischemia/reperfusion injury.

**Xinhua Lin, PhD** is an Associate Professor in the Division of Developmental Biology, Department of Pediatrics at Cincinnati Children’s Hospital Medical Center. Dr. Lin’s laboratory is interested in the cell-cell signaling mechanisms that control normal development and disease. Specifically, Dr. Lin is studying the molecular mechanisms of beta-catenin.

**Bryan Mackenzie, PhD** is an Assistant Professor in the Department of Molecular and Cellular Physiology at the University of Cincinnati. Dr. Mackenzie’s main interests are in membrane transport. He is particularly interested in the molecular mechanisms of the iron transporter DMT1.



# Upcoming DDRDC Seminars

All conferences will be held at CCHMC: Location C-4114  
(Gastroenterology, Hepatology, & Nutrition Conference Room)

Time: 7:30-8:30 am

For current information see:

<http://www.cincinnatichildrens.org/research/project/ddrdc/seminar.htm>

Conference Date	Presenter	Title/Topic
Thurs. March 2, 2006	Jeffery Rudolph, MD	Intestinal Crypt Cell Survival
Thurs. March 9, 2006	Michael Konikoff, MD Veena Venkat, MD	Journal Club
Thurs. March 16, 2006	Lynelle Boamah, MD	"An Education Program for Adolescents with Inflammatory Bowel Disease"
Thurs. March 23, 2006	Eric Sibley, MD, PhD Stanford University	"Developmental Regulation of Intestinal Lactase Gene Expression in Mice and Man"
Thurs. March 30, 2006	Rebecca Carey, MD	Mechanisms of Immune Regulation in Inflammatory Bowel Disease
Thurs. April 6, 2006	Nissa Erickson, MD	"The Role of Apoptosis in Experimental Biliary Atresia"
Thurs. April 13, 2006	Bankole Osuntokun, MD Monica Garin-Laflam, MD	Journal Club
Thurs. April 20, 2006	Shantini Gamage, PhD	" <i>E.coli</i> O157:H7 Disease: Using Normal <i>E.coli</i> as a Novel Therapy"
Thurs. April 27, 2006	Veena Venkat, MD	Biliary Atresia
Thurs. May 4, 2006	Greg Grabowski, MD	"Lysosomal Acid Lipase: From Wolman Disease to NASH"
Thurs. May 11, 2006	Bankole Osuntokun, MD	"Growth Hormone Restores Peroxisome Proliferator-Activated Receptor Gamma Expression in Murine Colitis"
Thurs. May 18, 2006	Johnathan Katz, PhD	Autoreactive T Cells in Insulin-Dependent Diabetes Mellitus
Thurs. May 25, 2006	No Conference due to DDW	
Thurs. June 1, 2006	Anil Mishra, PhD	"Eosinophilia and Gastrointestinal Diseases"

For all publications, please acknowledge the DDRDC as follows:  
**This project was supported in part by PHS Grant DK064403.**

For more information regarding the DDRDC please contact one of the following:

Mitchell B. Cohen, MD	Director	<a href="mailto:mitchell.cohen@cchmc.org">mitchell.cohen@cchmc.org</a>
Jorge A. Bezerra, MD	Associate Director	<a href="mailto:jorge.bezerra@cchmc.org">jorge.bezerra@cchmc.org</a>
Cynthia C. Wetzel, PhD	Program Manager	<a href="mailto:cynthia.wetzel@cchmc.org">cynthia.wetzel@cchmc.org</a>



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Conference Date	Presenter	Title/Topic
Thurs. June 1, 2006	Ted Denson, MD	"Mechanisms of Growth Failure & Mucosal Inflammation in IBD"
Thurs. June 8, 2006	Jill Dorsey, MD Monica Garin-Laflam, MD	Journal Club
Thurs. June 15, 2006	Monica Garin-Laflam, MD	"The Role of Uroguanylin in Radiation-Induced Intestinal Injury"
Thurs. June 22, 2006	Randy Seeley, PhD	"How Obesity Went to Our Heads: Novel Aspects of the CNS Regulation of Energy Balance"
Thurs. June 29– July 27, 2006	No Seminars	
Thurs. August 3, 2006	Anil Mishra, PhD	"Eosinophilia and Gastrointestinal Diseases"
Thurs. August 10, 2006	TBA	Journal Club
Thurs. August 17, 2006	TBA	Research Fellow
Thurs. August 24, 2006	Simon Hogan, PhD	"Eosinophils in Inflammatory Bowel Disease"
Thurs. August 31, 2006	Kathleen Campbell, MD	"Renal Complications Following Liver Transplantation"
Thurs. Sept. 7, 2006	Tim Pritts, MD, PhD	"The Intestine: An Active Participant in the Acute Inflammatory Response"

## Welcome to Three New Investigators

The DDRDC is pleased to welcome three new Associate Members:

**Thomas H. Inge, MD, PhD** is an Assistant Professor in the Division of General and Thoracic Surgery, Dept. of Pediatrics at Cincinnati Children's Hospital Medical Center. Dr. Inge is the Surgical Director of the Comprehensive Weight Management Program. His research focus is related to bariatric surgery in adolescents.

**Noah F. Shroyer, PhD** is an Assistant Professor in the Division of Gastroenterology, Hepatology and Nutrition, Dept. of Pediatrics at Cincinnati Children's Hospital Medical Center. Dr. Shroyer's research centers around intestinal secretory lineage differentiation and function. Specifically he is identifying Math1-regulated genes in the developing intestine.

**Jane E. Strasser, PhD** is an Assistant Professor in the Division of Infectious Disease, Dept. of Pediatrics at Cincinnati Children's Hospital Medical Center. Dr. Strasser is currently evaluating the impact of the normal bacteria in a healthy gut on the severity of *E. coli* O157:H7 infection. Her goal is to generate a probiotic treatment that minimizes the symptoms associated with *E. coli* O157:H7 infection.

A quarterly update on services available to members and interested investigators.

## Core Facility Announcements

### LIVE MICROSCOPY CORE:

You are able to schedule training for new users in your laboratory on confocal and two-photon microscopy with virtually no waiting. Chet Closson, manager of the Live Microscopy Core is readily available to work with you one on one to resolve any problems, help with experiments and in general to assist you with anything microscopy related. Contact Chet at phone: 558-3791 or email: chet.closson@uc.edu.

### LIVE MICROSCOPY TRAINING GRANTS ARE STILL AVAILABLE:

If your laboratory has not yet received one, 5 grants are still available to DDRDC investigators to facilitate training to use two-photon microscopy and the first 10 hours of usage. If you are interested, please send Chet Closson an email (chet.closson@uc.edu) containing: 1) Your name 2) Contact information 3) A brief (2-3 sentence) description of what you desire to image. Please include that you are a DDRDC member.

### MICROARRAY CORE:

Did you know that the Microarray Core offers more than just gene expression microarray analysis? There are **Re-Sequencing Microarrays** which can be used to determine 300,000 bp of sequence (both strands) in only one hybridization. Additionally, there are **Promoter Microarrays** where one is able to identify which promoters bind to which transcription factors. These microarrays carry 10 kb of promoter sequence from 25,500 genes. There are also **Tiling Array** sets that carry all non-repetitive genomic sequence.

The Microarray Core is advancing the field by developing new target amplification procedures for small samples. They offer **Ovation RiboSPIA** amplification which is a single round amplification system that works with as little as 5 nanograms of total RNA. Another type of amplification is the **Epicentre Two Round Amplification** that gives good data for samples as small as 50 picograms. The Epicentre Amplification is only offered on a collaboration basis. The core has a patent pending for their development of **Rolling Circle Amplification** technique. Additionally, the Microarray core is testing and optimizing published PCR based procedures for the microarray analysis of single cells (approximately 5 picograms of RNA). And finally they have been testing the use of semi-random primers for target preparation versus the traditional oligo dT primer.

For more information on any of these exciting new technologies contact Shawn Smith at phone: 636-0290 or email: shawn.smith@cchmc.org.

## External Advisory Board Meeting

On May 6 Drs. Gregory Gores (Mayo Clinic), Philip Sherman (Hospital for Sick Children), and Allan Walker (Harvard Medical School) of the External Advisory Board visited CCHMC. The core directors (Drs. Aronow, Bezerra, Potter, and Witte) gave presentations describing their core services. It was a productive meeting in which members of the External Advisory Board gave us their input on our Silvio Conte Digestive Diseases Research Core Center (DDRCC) Grant application and reviewed the services of the core facilities.

For all publications, please acknowledge the DDRDC as follows:  
**This project was supported in part by PHS Grant DK064403.**

For more information regarding the DDRDC please contact one of the following:

Mitchell B. Cohen, MD	Director	mitchell.cohen@cchmc.org
Jorge A. Bezerra, MD	Associate Director	jorge.bezerra@cchmc.org
Cynthia C. Wetzel, PhD	Program Manager	cynthia.wetzel@cchmc.org

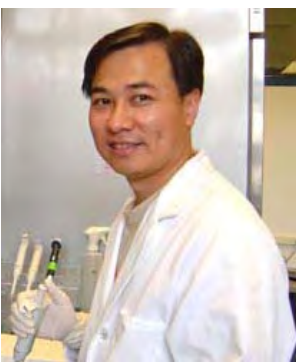


## Pilot and Feasibility Projects

The Digestive Health Center: Bench to Bedside Research in Pediatric Digestive Disease solicited applications for pilot projects to conduct basic, translational, and patient based or outcomes research broadly relating to pediatric digestive disease. The four highest ranked applications were submitted as part of our Digestive Health Center grant application in July **and if our application is successful, these projects will be funded in July 2007.** The following principal investigators were the top ranked applications: Dr. Kathleen Goss, Dr. Xiaonan Han, Dr. Bruce Trapnell, and Dr. Richard Strait.

### Kathleen Goss, PhD

Inflammatory bowel disease (IBD), including Crohn's and ulcerative colitis, is characterized by chronic, destructive inflammation of the gastrointestinal tract and impacts approximately 1 in 14,000 children in the U.S. While the molecular mechanisms by which pediatric IBD is associated with increased risk for colorectal cancer are poorly understood, the  $\beta$ -catenin/Wnt pathway is activated in most colorectal cancers and promotes intestinal tumorigenesis. Additionally, models of colitis and associated colon carcinogenesis suggest that  $\beta$ -catenin activity is upregulated in these lesions. Recent microarray analyses from pediatric Crohn's colitis biopsies demonstrated that  $\beta$ -catenin mRNA expression was significantly upregulated, and immunohistochemistry suggested that  $\beta$ -catenin is transcriptionally active in these lesions. Based on these data, Dr. Goss and her team hypothesize that  $\beta$ -catenin/Wnt pathway activation is important for maintaining the colitis phenotype and promoting colorectal cancer. They will test this hypothesis by 1) determining the expression of  $\beta$ -catenin/Wnt pathway components in pediatric colitis and rodent models, 2) identifying the mechanism by which  $\beta$ -catenin mRNA expression is regulated in colitis and 3) determining whether  $\beta$ -catenin/Wnt pathway activity is required for colitis and associated tumorigenesis.



### Xiaonan Han, PhD

Dysfunction of the epithelial barrier leading to an exaggerated adaptive immune response to the enteric flora is believed to promote chronic inflammation in Crohn's disease (CD). Colon epithelial cells (CEC), via highly regulated tight junction protein (TJP) complexes, form a dynamic barrier against bacterial activation of the mucosal immune system. Key components of the TJP complex include members of the occludin, claudin, and zonula occludin (ZO) families. In the absence of effective TJ function, bacterial antigens induce NF $\kappa$ B activation in CEC and lamina propria antigen presenting cells (APC), ultimately leading to T cell activation and recruitment. Dr. Han and his colleagues have shown that:

- 1) STAT5b activation and ZO expression are reduced in CEC in pediatric CD at diagnosis;
- 2) STAT5b deficient mice exhibit reduced ZO expression and increased susceptibility to trinitrobenzenesulfonic acid induced colitis; and
- 3) TNF $\alpha$  neutralization activates STAT5b and reduces mucosal inflammation in colitis due to IL-10 deficiency.

Therefore, Dr. Han's team hypothesize that TNF $\alpha$  disrupts the mucosal barrier by reducing STAT5b dependent expression of ZO family members. In Aim I, they will determine whether STAT5b is required for ZO expression and colonic mucosal barrier function. In Aim II, they will determine whether TNF $\alpha$  neutralization restores colonic mucosal barrier function via activation of STAT5b and up regulation of ZO expression. The proposed studies will delineate a novel pathway which may be amenable to targeted therapeutic modulation of the epithelial barrier.

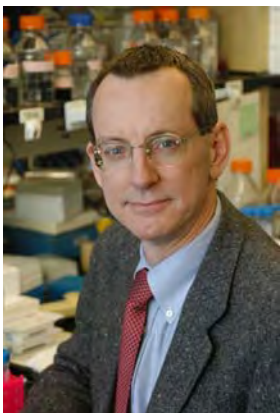
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update on services  
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### **Richard T. Strait, MD**

IgE-mediated food allergy (FA) affects 2-8% of people in the U.S. and is caused mainly by peanut, milk, and egg. FA often presents as “intestinal anaphylaxis” with abdominal cramping and diarrhea or less common as “systemic anaphylaxis” characterized by respiratory distress and vascular collapse. Dr. Strait’s proposal, built on his previous mouse anaphylaxis studies, will address two questions about FA: First, can a mouse model be used to evaluate the ability of human IgE antibodies to cause systemic and intestinal anaphylaxis? Second, does IgA, the dominant intestinal immunoglobulin and non-inflammatory inhibitor of antigen absorption, have potential to block FA related systemic and/or intestinal anaphylaxis? To answer the first question mice with human FcεRIα in place of the mouse FcεRIα chain, will be primed with antigen-specific IgE from the sera of humans with peanut and milk allergies, then orally challenged with peanut or milk and followed for the development of intestinal and systemic anaphylaxis. To evaluate IgA inhibition of FA, mice undergoing IgE-mediated, orally induced intestinal and systemic anaphylaxis will be pretreated with antigen-specific IgA i.v. and/or orally and followed for anaphylaxis severity. The results of these studies should have significant scientific and clinical implications for the evaluation and prevention of FA.



### **Bruce C. Trapnell, MD, MS**



Crohn’s disease (CD) is an inflammatory bowel disease (IBD) affecting up to 200 individuals per 100,000 in North America and Europe. The current concept of pathogenesis holds that intestinal inflammation, which appears to be T cell-mediated, develops as a secondary consequence of primary failure of mucosal innate immunity. Based on Dr. Trapnell’s preliminary data, his team hypothesizes that: 1) GM-CSF plays a critical role in modulating intestinal innate mucosal barrier function; 2) impaired GM-CSF signaling increases susceptibility to ileocolitis; and 3) abrogation of GM-CSF-stimulated neutrophil functions by anti-GM-CSF antibodies modulates the phenotype of CD. They will test these hypotheses in the following Aims: In Aim 1, they will test the hypothesis that disruption of GM-CSF signaling is associated with lamina propria mononuclear cell (LPMC) and/or neutrophil dysfunction resulting in impaired mucosal immunity and increased sensitivity to chemically-induced murine colitis. In Aim 2, they will test the hypothesis that αGM-Ab levels (below a critical threshold) inversely regulate myeloid cell functions in CD patients, and that elevated levels identify a subgroup of CD patients with neutrophil dysfunction and small bowel involvement. These data will provide new insights into the basis for impaired innate immunity in CD, and may identify a subset of patients whose disease would be best treated with GM-CSF immune stimulation.

## **Welcome to Two New Investigators**

The DDRDC is pleased to welcome two new Associate Members:

**Xiaonan Han, PhD** is an Assistant Professor in the Division of Gastroenterology, Hepatology and Nutrition, Department of Pediatrics at Cincinnati Children’s Hospital Medical Center. Dr. Han is currently working on the therapeutic effect of growth hormone and anti-TNF alpha on inflammatory bowel disease. Additionally he is identifying the mechanisms by which pediatric Crohn’s Disease causes dysfunction of the gut barrier.

**Andrew M. Lowy, MD** is an Associate Professor in the Department of Surgery at the University of Cincinnati. Dr. Lowy investigates pancreatic carcinogenesis, with particular interest in the signaling pathways that regulate progression of pancreatic cancer precursors to invasive and metastatic cancer. Specifically he is studying the role of two proteins, the RON receptor tyrosine kinase and the COX2 enzyme which are both important in the response to inflammation and the development of pancreatic cancer.



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Time: 7:30-8:30 am

For current information see: <http://www.cincinnatichildrens.org/research/project/ddrdc/seminar.htm>

Conference Date	Presenter	Title/Topic
Thurs. Aug. 31, 2006	Joseph J. Palermo, MD, PhD Washington University	"The Role of Intracellular Biofilms in E.coli Pathogenesis"
Thurs. Sept. 7, 2006	Tim Pritts, MD, PhD	"The Intestine: An Active Participant in the Acute Inflammatory Response"
Thurs. Sept. 14, 2006	Katie Moyer, MD Rebecca Carey, MD	Journal Club
Thurs. Sept. 21, 2006	Kumar Shanmukhappa, PhD	Liver Repair and Liver Cell Plasticity
Thurs. Oct. 5, 2006	Greg Tiao, MD	Virus-Cell Interaction in Pathogenesis of Biliary Atresia
Wed. Oct. 11, 2006	Jay Perman, MD University of Kentucky	"Preparing for Leadership Roles in Academic Pediatrics : The Formative Years"
Thurs. Oct. 12, 2006	Lynelle Boamah, MD	Journal Club
Thurs. Oct. 19, 2006	NASPGHAN Meeting No Conference	
Thurs. Oct. 26, 2006	Mike Leonis, MD, PhD	"Ron Over Expression and Hepatic Tumorigenesis"
Thurs. Nov. 2, 2006	Charles Caldwell, PhD	IL-12 Signaling Pathway After Hepatic Ischemia/ Reperfusion Injury
Thurs. Nov. 9, 2006	Alexander Miethke, MD Monica Garin-Laflam, MD	Journal Club
Thurs. Nov. 16, 2006	Thorsten Eismann, MD	Hepatic Mitochondrial Proteomics
Thurs. Nov. 23, 2006	No Conference due to Thanksgiving Holiday	
Thurs. Dec. 7, 2006	Kathleen Campbell, MD	"Renal Complications Following Liver Transplantation"

For all publications, please acknowledge the DDRDC as follows:  
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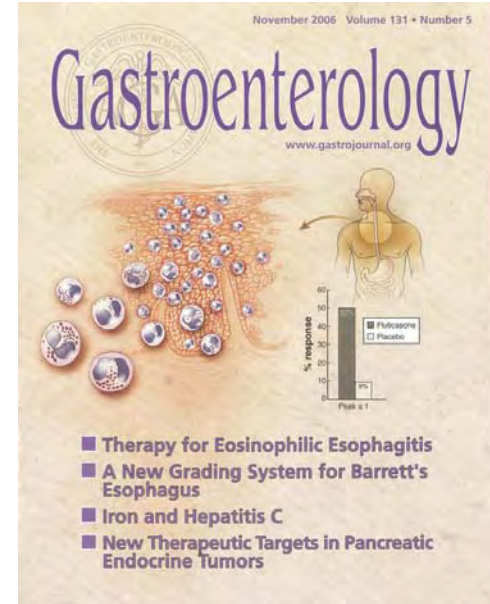
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Jorge A. Bezerra, MD	Associate Director	jorge.bezerra@cchmc.org
Cynthia C. Wetzel, PhD	Program Manager	cynthia.wetzel@cchmc.org



## Research Spotlight: Two Gastroenterology Papers from DDRDC Members

Dr. Rothenberg and colleagues have described the first randomized, double-blind, placebo-controlled study for eosinophilic esophagitis therapy. The article was published and on the cover of the November issue of *Gastroenterology*. Eosinophilic esophagitis (EE) is an inflammatory disorder characterized by the accumulation of eosinophils in the esophageal epithelium along with a wide range of clinical symptoms. Previous studies have used a topical glucocorticoid, fluticasone propionate, however these studies are limited by their retrospectivity and the lack of a placebo control group. Dr. Rothenberg's colleagues for this study were Dr. Konikoff, Dr. Noel, Dr. Blanchard, Cassie Kirby, Sean Jameson, Bridget Buckmeier, Rachel Akers, Dr. Collins, Dr. Assa'ad, Dr. Aceves, and Dr. Putman (as well as DDRDC members co-author: Dr. Cohen and participating physicians: Drs. Bates, Bezerra, and Rudolph). They were able to show that swallowed fluticasone propionate induces remission in EE, with histological improvement in approximately 50% of patients.



Another DDRDC study will be published in an upcoming issue of *Gastroenterology*. It is entitled "Novel resequencing chip customized to diagnose mutations in patients with inherited syndromes of intrahepatic cholestasis, by Dr. Bezerra and colleagues (including DDRDC member Dr. Aronow). They have developed a customized resequencing gene chip called the "Jaundice Chip" that reads the nucleotide signature for five genes known to cause the most common inherited syndromes of intrahepatic cholestasis: *SERPINA1* (gene encoding alpha1-antitrypsin), *JAG1*, *ATP8B1*, *ABCB11*, and *ABCB4*. The Jaundice Chip readout is highly accurate and mutational analysis is in 3-4 days. The development of the Jaundice Chip offers a great opportunity to translate discoveries at the laboratory bench into a tool that may enhance accurate and rapid clinical diagnosis at the bedside, and facilitate personalized treatment protocols based on the patient's genetic makeup. More about this study in the next newsletter.

## Welcome to a New Investigator

The DDRDC is pleased to welcome one new Associate Member:

**Stavra Xanthakos, MD, MS** is an Assistant Professor in the Division of Gastroenterology, Hepatology and Nutrition, Department of Pediatrics at Cincinnati Children's Hospital Medical Center. Dr. Xanthakos' primary research focus is to identify the biologic determinants of Nonalcoholic Steatohepatitis, including potential gene-environment interactions with dietary intake during childhood and adolescents. Recently, she characterized the histologic spectrum of Nonalcoholic Fatty Liver Disease in morbidly obese adolescents undergoing bariatric surgery at CCHMC in a collaborative study with Dr. Thomas Inge.

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Conference Date	Presenter	Title/Topic
Tues. Dec. 5, 2006 *distinct time & location 4:00 pm 4051 MSB	Ursula Seidler, PhD Medical School Hannover	“New Aspects of Intestinal Ion Transport Regulation by PDZ-Adapter Proteins of the NHERF Family
Thurs. Dec. 7, 2006	Xian-Ming Chen, MD Mayo Clinic College of Medicine	"MicroRNAs in TLR-Mediated Biliary Epithelial Immunity to C. Parvum"
Thurs. Dec. 14, 2006	Edwin de Zoeten, MD, PhD Children’s Hospital of Philadelphia	"Histone Acetylation and Costimulatory Molecules: Novel Immunologic Targets for the Therapy of Inflammatory Bowel Disease"
Thurs. Dec. 21& 28, 2006	No Conference due to the Holidays	
Thurs. Jan. 4, 2007	Mike Leonis, MD, PhD	Ron Over Expression & Hepatic Tumorigenesis
Thurs. Jan. 11, 2007	Brad Pasternak, MD Bella Zeisler, MD	Journal Club
Thurs. Jan. 18, 2007	Thorsten Eismann, MD	Hepatic Mitochondrial Proteomics
Thurs. Jan. 25, 2007	Thaddeus Stappenbeck, MD, PhD Washington University at St. Louis	Role and Regulation of Intestinal Epithelial Stem Cells
Thurs. Feb. 1, 2007	Michael Kennedy, PhD Miami University at Oxford	NMR-based Metabonomics
Thurs. Feb. 8, 2007	Veena Venkat, MD	Journal Club
Thurs. Feb. 15, 2007	Paula Hertel, MD Texas Children’s Hospital	Rotavirus-Associated Biliary Atresia: A Murine Model
Thurs. Feb. 22, 2007	Maria Vicario-Pere, MS, PhD CCHMC Visiting Scientist	"Segmental Studies in the Jejunum of Healthy and IBS Patients: Unraveling Stress-Related Intestinal Inflammation"
Thurs. March 1, 2007	James Heubi, MD	“Understanding Factors Impacting Human Cholesterol Absorption”
Thurs. March 8, 2007	Brad Pasternak, MD Charles Samson, MD	Journal Club

For all publications, please acknowledge the DDRDC as follows:  
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Cynthia C. Wetzel, PhD	Program Manager	<a href="mailto:cynthia.wetzel@cchmc.org">cynthia.wetzel@cchmc.org</a>

