

# GI Research Day—Highlights

April 26, 2016—The Division of Gastroenterology hosted the GI Research Day event under the leadership of Dr. Leo Dieleman and Carrie Anne Cyre.

Supported by 8 industry sponsors, GI Research Day promotes current research projects and areas within the Division of Gastroenterology and associated departments for all GI faculty, students, residents, and fellows.

This year's keynote lecturer was Professor Rajiv Jalan from the University College London's Institute for Liver and Digestive Health, Royal Free Hospital. His talk, "Tackling the ACLF spiral" was well received by 50 attendees.

The poster adjudicators, Drs. Jalan, Dieleman, Lu, Mason, Tandon, Wine, and Abraldes, evaluated the 37 submissions presented by students, residents, advanced fellows, and staff.

Award categories for the posters and recipients are:

Best Student Basic Science Mandana Rahbari— Immunological profiling of patients with primary biliary cirrhosis against human betaretrovirus

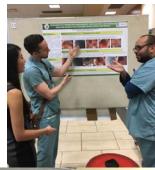
Best Student Clinical Science Janis Geary— Community-driven research to investigate traditional approaches to managing *H. pylori* infection and related disease in remote Arctic communities: A literature review

Best Resident/Fellow Basic Science Misagh Alipour—Immunoglobulin Gcoating of bacteria selectively identifies pathosymbionts in paediatric inflammatory bowel disease patients

Best Resident/ Fellow Clinical Shawn Wasilenko—Post-transplant cholestasis within 1-year predicts PSC recurrence"

Thank you to contributors, attendees, and our sponsors. A special mention is extended to the caterers and the Dieleman family who contributed their time to make this event a success.

Abstracts are available at: https://sites.google.com/ a/ualberta.ca/giresearch-day/abstracts





#### Inside this issue:

Introducing Trello-project management made easy	2
International Liver Symposium 2016—Highlights	2
neGx Conference 2016—Highlights	2
Announcing the CEGIIR "Lunch 'N' Learn" Series II	3
Welcome to our Summer Students!	3
Recent & Noteworthy CEGIIR Publications	3
Upcoming Events in the Spotlight!	4

#### Did you know?

## Evolutionary changes can lead to the loss of the stomach!

Acid secreting glands and the stomach first appeared over 450 million years ago. Since then, seahorse, lungfish, platypus, echidna, and 27% of vertebrate fish (e.g., carp) have "lost" their stomachs as well as the DNA coding for gastric function and pepsinogens. The underlying cause is attributed to changes in diet. PMID:24307675

#### by Marta Garolera Introducing Trello Molas

Whenever we want to start a new project, bring more people in or hand it over to another team, we find that having the project well planned, organized and documented, is crucial.

The free web-based tool and app Trello helps organizing and managing your projects. A project designed and prioritized thoroughly, improves management, team communication, progress tracking, and the hand-over processes.

In Trello, every project is represented on a board. Each board is organized in lists of units of work or tasks, and every task is represented by a card. Boards, lists and cards can be easily created and modified by members invited to participate in the project.

Trello offers flexibility to introduce

changes, new requirements and new team members in projects easily. This ensures that projects can be kept up-to-date and members are well-informed.

Project progress can be efficiently updated by adding comments, labels, checklists, due dates, attachments, and web links to cards. This is a practical way to update, interact, and receive feedback with your project members.

Using Trello will help develop and hone project management skills within a structured framework. These highly desirable traits are transferrable across all professions and are essential for large, complex, and lengthy projects such as research studies and theses.



associated with a task.

Time is the scarcest resource and unless it is managed nothing else can be managed. ~ Peter Drucker

How does a project get to be a year late? One day at a time. ~ Frederick Brooks

#### 2016 EASL Highlights by Dr. Juan Gonzalez-Abraldes

THE INTERNATIONAL LIVER CONGRESS™ **APRIL 13-17: BARCELONA: SPAIN** 

April 13-17, 2016—The International Liver Congress® was held in Barcelona, Spain and was attended by ~12,000 delegates from around the world.

CEGIIR investigators, Drs. Andy Mason, Aldo Montano-Loza, Dean Karvellas, Mang Ma, Puneeta Tandon, and myself, presented 12 abstracts. Reported results were obtained from conducting clinical studies (national and international), metagenomics and bioinformatics, and basic science experiments involving animal models of disease.

Cirrhosis topics included new predictive tools for assessing post-hospitalization mortality or patient prognosis upon entry to ICU, frailty assessment, the impact of inequality and economic factors on the alcohol-related cirrhosis burden.

Primary biliary or sclerosing cholangitis topics included the epidemiology of posttransplantation recurrence, bilirubin trajectory and clinical events, discovery of a gene variant associated with disease outcomes, and need for fibrosis surveillance.

I presented my lab's results (Chelsea McDougall was first author) regarding the role of propionate in circulatory abnormalities of cirrhosis

The weather was enjoyed by all; Barcelona was a paradise for the "foodies" in our group.

I am looking forward to repeating our successes at the North American meeting in Fall 2016.



### Next-Generation Sequencing Symposium "geXc" Highlights by Dr. Andy Mason

May 5, 2016—The next-generation sequencing (NGS) symposium, geXc, hosted by the Office of Research, Faculty of Medicine & Dentistry and D-Mark Biosciences and held in conjunction with The Applied Genomics Core (TAGC)-CEGIIR which offers NGS and other genomics services as well as training.

The symposium provided an overview of how NGS has revolutionized our investi-

gative approaches to the microbiome, viral discovery, cancer evolution, epigenetic modifications, genomics and phylogenetics, transcriptome studies, and many more global questions that we were unable to address 10 years ago.

The event was timely for showcasing the ongoing NGS projects at the University of Alberta, featuring TAGC and CEGIIR members.

A highlight of the symposium was Dr. Gane Wong's talk on optogenetics: light is used to control cells in living tissue (e.g., neurons) that have been genetically modified to express light-sensitive ion channels. Wong's team surveyed data from their 1,000 plants project and found multiple genes encoding proteins with optogenetic activity that helped spurn these studies to fruition.

CEGIIR CHRONICLES Page 2

# Lunch 'N' Learn



Something for everyone!

The successful "Lunch 'N' Learn" seminar series and newsletter, developed by Dr Vivian Huang and her team, will be run this summer beginning June 14th.

These fun and informal talks bring CEGIIR members up-to-date on relevant topics, such as:

- "Tips (and tricks?) for getting into medical school" presented by CEGIIR trainees who have been recently accepted into medical school: Braden Millan, Melissa Silva, and Natalie Klostermann)
- What is CEGIIR?
- Laboratory techniques—refresher & CEGIIR-specific information

- The human microbiome in health and disease
- Hepatology research and clinical
- IBD research and clinical care
- Helicobacter pylori infection and GI health

Who should attend? All CEGIIR trainees (especially summer students) and staff are invited.

**Benefits?** By attending  $\geq 80\%$  of the seminars, you will receive a CEGIIR certificate of achievement (**new** in 2016).

Where & when? The series will be held in room 7-003 Katz Building, 7th floor from 12:00-1:00 pm twice a

month. The schedule and presenters will be emailed and posted on the CEGIIR website under the "News" tab.

Is pre-registration required? No, just make sure to sign the attendance sheet if you are either a summer student or interested in obtaining a CEGIIR certificate.

What if my interests are not listed?

Make sure to complete the pre-series survey listing topics of interest or

relevancy. For surveys, please email Reed Sutton at llcegiir@ualberta.ca



## Welcome to our Summer Students by Dr. Karen Madsen, Director of CEGIIR

Inhabitants of the Katz Bldg and Zeidler Centre may have noticed a large influx of new faces wandering the laboratories and hallways lately. Indeed, at last count there were 25+ summer students which have taken up residence and I would like to take this opportunity to provide a warm welcome to them all.

As a student within CEGIIR, you have now become part of an illustrious network of trainees who are destined to become our future professors, researchers, physicians, and leaders. During the summer, you will be participating in high quality research experiences that are designed to stimulate your research interests, build professional mentoring networks, and help you explore career opportunities. During your time with us, I encourage you to actively contribute to your research environment, engage in

scholarly conversations, draw diagrams of your research on napkins during pub nights, and network with faculty, postdoctoral and clinical fellows, and graduate students. On behalf of the entire CEGIIR membership, I wish you a rewarding summer experience and am looking forward to seeing the products of your summer research at next year's Division of Gastroenterology Research Days!

## **Recent and Noteworthy Publications**

Fallone CA, Chiba N, van Zanten SV, Fischbach L, Gisbert JP, Hunt RH, Jones N, Render C, Leontiadis GI, Moayyedi P, Marshall JK. The Toronto Consensus for the Treatment of Helicobacter pylori Infection in Adults. Gastroenterology. 2016 Apr 18; Epub PMID:27102658

Fischer M, Kao D, Mehta SR, Martin T, Dimitry J, Keshteli AH, Cook GK, Phelps E, Sipe BW, Xu H, Kelly CR. Predictors of early failure after fecal

microbiota transplantation for the therapy of Clostridium difficile infection: a multicenter study. Am J Gastroenterol. 2016 May 17; Epub PMID: 27185076

Jovel J, Patterson J, Wang W, Hotte N, O'Keefe S, Mitchel T, Perry T, Kao D, Mason AL, Madsen KL, Wong GK. Characterization of the gut microbiome using 16S or shotgun metagenomics. Front Microbiol. 2016 Apr 20;7:459 PMID:27148170

Tandon P, Mourtzakis M, Low G, Zenith L, Ney M, Carbonneau M, Alaboudy A, Mann S, Esfandiari N, Ma M. Comparing the variability between measurements for sarcopenia using magnetic resonance imaging and computed tomography imaging. Am J Transplant. 2016 Apr 19; Epub PMID:27093434

For recent CEGIIR publications, click here

VOLUME 1, ISSUE 2 Page 3







#### CONTACT INFORMATION

Zeidler Ledcor Centre 130 University Campus 112th Street and 85th Avenue

Editor: Kathleen (Kat) Ismond

Phone: 780-492-3172 Fax: 780-492-7593 E-mail: kismond@ualberta.ca

"Research for Life"

We're on the web!

<a href="http://cegiir.med.ualberta.ca/">http://cegiir.med.ualberta.ca/</a>

At the Centre of Excellence for Gastrointestinal Inflammation and Immunity Research (CEGIIR), our mission is to enhance Canada's reputation in science and health by conducting high quality, leading edge research to address basic science, clinical, and patient-oriented questions in topics related to digestive diseases. The CEGIIR research infrastructure is tightly knitted with gastroenterology and hepatology adult and pediatric clinics,

surgery, and palliarapid assessment and search findings. tists, offers unique opportunities for for highly qualified utes to the academic, social, and healthcare



## Upcoming Events in the Spotlight



# STROLL for LIVER

The Canadian Liver Foundation (CLF) is hosting its annual fund-raising event "Stroll for Liver" on June 4th, 2016.

To make a donation, click here

To participate as a "stroller", click here

Confirmed **CEGIR strollers** are Filip Wysokinski, Mandana Rahbari, Gina Macintyre, and Ishwar Hosamani.

## **Upcoming CONFERENCES of interest to CEGIIR members**

Make sure to include relevant dates for abstract submission and registration and travel arrangements in your TRELLO cards!

#### **ILCA 2016**

September 9-11, 2016 Vancouver, BC Click here for more information

XXIXth International Workshop on Helicobacter and Microbiota in Inflammation and Cancer

September 15-17, 2016 Magdeburg, Germany Click here for more information Neuroinmunophysiology of the Gastrointestinal Tract International Conference

September 29-October 1, 2016
Banff, AB
Click here for more information

Click here for more information

UEG Week 2016

October 15-19, 2016 Vienna, Austria

Click here for more information

VOLUME 1, ISSUE 2