# UC San Diego Division of Gastroenterology

# UC San Diego School of Medicine

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Dear Colleagues,

As we enter the final quarter of 2014, I want to pause and reflect on a few of our collective accomplishments over this last year.



We have hired four new faculty, building both our clinical and research missions (Drs. Amir Zarrinpar, Fred Park, David Kunkel, and Vipin Kumar). Many of the Division scientists moved into state-of-the-art new space in the Biomedical Research Facility 2 building, consolidating our expertise in the science of mucosal immunology and liver fibrosis and inflammation into one research unit.

The clinical motility lab moved from Hillcrest to La Jolla and expanded the range of offered procedures to include biofeedback, Smart Pill, etc. We have recently expanded our footprint at the University Ambulatory Surgery Center

(UASC) in order to accommodate our growing endoscopy practice.

Our clinical enterprise continues to grow, and from 2010 through the present, we have seen a doubling of both outpatient clinic and endoscopy volumes. With this increase in volume has come growth and improvement in our call center activities, led by our clinic manager Kathy Bordeaux. Several members of the Division were named as San Diego Top Docs. For the second time ever (and for the second year in a row), UC San Diego GI and GI Surgery were named in the top 50 GI hospitals in the country (out of more than 1,500 hospitals assessed).

Our divisional portfolio of NIH and VA grants has held up pretty well, although sustaining federal funding remains an ongoing challenge.

Our liver transplant group is on track to have two of its best years ever over the last two years, despite the challenges of the recently instituted Share 35 organ allocation, and recently did its first living related donor transplant and its first HIV infected liver transplant patient.

These accomplishments are not the isolated work of a few individuals, but rather the result of the teamwork in the clinics, the endoscopy units, the call center, the research laboratories, and our administrative core. Together, we are really doing something worthwhile, and I would like to thank each and every member of our Divisional family for their contributions during this last year.

Best regards,

Within fundlowing

William Sandborn, MD Professor and Chief, Division of Gastroenterology

# Letter from the Chief



David C. Kunkel. MD Assistant Professor

## New Faculty Spotlight

# Welcoming Dr. David Kunkel to the UC San Diego GI Faculty

We are pleased to welcome Dr. David C. Kunkel, who joined the Division of Gastroenterology faculty on September 1, 2014.

Dr. Kunkel's area of research and specialized training is in GI motility, including high-resolution esophageal manometry, pH tests, gastric emptying, breath testing, impedance, wireless motility capsule (SmartPill), anorectal manometry and biofeedback therapy.

"David will work with Dr. Ravi Mittal to help run our GI Motility and Physiology Center and he will develop an anorectal biofeedback program for the division," said Division Chief William J. Sandborn, MD.

By bringing together a wide range of specialists who collaborate in evaluating and treating patients using the most advanced methods, the GI Motility and Physiology Center at UC San Diego provides much-needed relief to people who suffer from chronic conditions that can significantly impair quality of life. Among the most common disorders treated at the center are gastroesophageal reflux disease (GERD), swallowing disorders, gastroparesis, bloating and overgrowth syndromes, diarrhea, fecal incontinence and constipation.

"UC San Diego is one of the few places where we have a truly multidisciplinary approach to GI motility disorders," says Dr. Kunkel. "We are fortunate to have skilled experts not only in gastroenterology, but also surgery, oncology, radiology, pathology, nutrition, and speech and language therapy, all working as a team to deliver state-of the-art diagnostics and therapy for our patients with motility problems. These disorders are common and can significantly reduce quality of life."

Dr. Kunkel will work with Dr. Ravi Mittal to run the GI Motility and Physiology Center and develop an anorectal biofeedback program.

Dr. Kunkel obtained his Bachelor of Science in biology summa cum laude from the University of New Mexico in Albuquerque. After a year of study at the National Institutes of Health under an intramural research training award, he returned to the University of New Mexico and earned his medical degree in 2008.

Dr. Kunkel completed his residency in internal medicine at Cedars-Sinai Medical Center. His fellowship in gastroenterology is from the University of California, Los Angeles (UCLA) integrated training program in digestive diseases.

His past mentors include both the current president and the immediate past-president of the American Neurogastroenterology and Motility Society (ANMS), Drs. Lin Chang and Satish Rao, and also Drs. Jeff Conklin and Mark Pimentel. Last year, Dr. Kunkel was a recipient of the ANMS Clinical Training Award in Motility, which he used to obtain specialized training in anorectal biofeedback from Dr. Rao.

Dr. Kunkel has written articles for such peer-reviewed publications as *Neurogastroenterology & Motility*, *Gastrointestinal Endoscopy*, and *The American Journal of Gastroenterology*.

## Profiles in Gastroenterological Cancer: From Bench to the Clinic

Clinical Researcher Samir Gupta, MD, MSCS Associate Professor of Clinical Medicine San Diego Veterans Affairs Healthcare System Division of Gastroenterology, Department of Internal Medicine Moores Cancer Center

Dr. Samir Gupta is an Associate Professor of Clinical Medicine at UC San Diego and the San Diego VA Healthcare System, within the Division of Gastroenterology. His research work focuses on the prevention and screening of colorectal cancer and polyps.

He has been the leader of two large-scale comparative effectiveness randomized trials of strategies to boost colorectal cancer screening rates among the underserved, as well as numerous observational studies of the clinical and

molecular epidemiology of digestive system cancers and neoplasia, including colorectal, hepatocellular, and pancreatic cancer.

Dr. Gupta's work has been funded by grants through the National Cancer Institute, American Cancer Society, American Society of

Gastrointestinal Endoscopy, and the Cancer

Prevention and Research Institute of Texas, and published in nationally recognized journals such as JAMA Internal Medicine and the Journal of the National Cancer Institute.

He maintains an active role in regional, national, and international organizations and committees such as the National Comprehensive Cancer Network (colorectal cancer screening and high risk/genetic assessment guideline committee), the World Endoscopy Organization (leader, coalition to increase colorectal cancer screening among the underserved expert working party), the California Colorectal Cancer Coalition (board member), and the American Gastroenterological Association.

Clinically, Dr. Gupta practices general gastroenterology, and specializes in the management of patients with hereditary colorectal cancer syndromes and polyposis syndromes such as familial adenomatous polyposis and the serrated polyposis syndrome.

Dr. Gupta's research work focuses on the prevention and screening of colorectal cancer and polyps.



Samir Gupta, MD, MSCS



Pradipta Ghosh, MD, MBBS

### **Profiles in Gastroenterological Cancer: From Bench to the Clinic**

## Physician Scientist Pradipta Ghosh, MD, MBBS Associate Professor of Medicine

"It is amazing that I actually get paid for what I do," remarks Dr. Pradipta Ghosh, a physician-scientist who is dually trained in medicine/gastroenterology and in basic cell and molecular biology. As a graduate of the UC San Diego Physician-Scientist Training Program, Dr. Ghosh says that she is finally getting to do what she immigrated to this country for, i.e., "The best of both worlds, medicine and science."

Dr. Ghosh's research program is focused on studying the fundamental aspects of aberrant signaling that drives most human diseases, and seeks to challenge iconoclastic paradigms that have shaped the current treatment strategies in each case. "Every cell must sense and adapt to its environment," she explains, "and sensing the environmental cues is the job of receptors at the cell surface." Most diseases that afflict humans, like cancer, diabetes, organ fibrosis, infertility, aging, are driven by not one, but multiple receptors/signaling pathways. "So, why is it that we expect cure by blocking one or few at a time?", she asks. Dr. Ghosh likens the current strategies for treating multireceptor/pathway-driven diseases with single receptor/pathway blockers is like trying to kill a Hydra by cutting one head at a time. "It's time we recognize the futility of that approach."

What Dr. Ghosh refers to has been well demonstrated in the case of cancer cells. When exposed to chemotherapy/receptor blockers, cancer cells find an alternative pathway to reduce its dependency/bypass on the attacked pathway and hop onto another pathway to continue to grow, heralding what is commonly referred to as chemoresistance. "What is even more difficult is that when diseases are multi-receptor/pathway driven, we simply do not know which cell will hop onto which pathway or receptor system," she explains. "Those are just unknown unknowns."

Dr. Ghosh's group is focused on unraveling novel targets for network-based therapies to tackle those very multi-receptor diseases that so far have no cures. These targets belong to a new family of molecules, which she christened rheostats, that serve as platforms for integrating incoming multi-receptor signaling and programming the entire signaling network downstream, and not just individual pathways. A key early observation made by her group is that all of the aforementioned diseases were accompanied by dysregulation of rheostat function (either by deregulated expression, splicing, or mutations). "Right away we knew that these must be fundamentally important!"

### **Research Profile: Dr. Pradipta Ghosh, continued**

Just within the past 5 years since establishment of the Ghosh lab, her group has shown how rheostats can be targeted to essentially "hit the reset button" to flip pathologic signaling networks that drive diseases like cancer progression, organ fibrosis and diabetes to a physiologic stable state. This is of utmost importance because network-based therapies cannot be achieved by simply blocking one pathway/protein/receptor with one drug, but reshaping the network so that it lies in a new and stable region of behavior space.

"It's our hope that such a strategy will allow us to tame a Hydra and attack its torso, and not engage in the futile act of attacking one of its many heads," she says.

As for her strategy to deal with unknown unknowns, her group uses molecular engineering, a radical approach which bypasses the limitations posed by the unknowns, while allowing systematic dissection and manipulation of a given pathway. Recently, her lab has successfully engineered cell signaling using unique, custom-build biosensors that offer an exploratory approach for "understanding by building," and does not require us to rely exclusively on what is known. Ultimately, she hopes that insights gained will help access, decipher, and manipulate the cell's complex signaling code via a powerful and novel signaling platform, and allow understanding of the organizational principles of complex multi-receptor signaling systems.

Last, but not the least, Dr. Ghosh seeks to further develop the potentials of these rheostats as biomarkers and therapeutic targets for use in combating cancer and other diseases. "We have about 11 patents in the pipeline, all resulting from the disease/clinical relevance of our basic science findings," Dr. Ghosh said.

Links to all of Dr. Ghosh's publications are on the Ghosh Lab Website: http://ghoshlab.ucsd.edu

"Like most others, I too am frustrated every time I have to tell my patient that we have lost to cancer, but this time it is different. In 2013, cancer has hit me hard by affecting my mother. That has made me only more determined to take our findings to the clinics".

On being a mentor, Dr. Ghosh says she feels incredibly fortunate and proud to have a strong team of people willing to learn. As an admirer of Steve Jobs, she believes that "stay[ing] hungry and foolish" is what allowed her to succeed, and that she sees that in many (if not all) of her trainees. "I am going to be forever associated with them, my early career will be influenced by their findings/talent, if they succeed, I succeed, and any investment in them is an investment in my lab" she says. "They teach me intangibles of management that few textbooks can." In 2014, four of her trainees have secured prestigious fellowships. "For a young lab, this is incredible, and speaks highly about the talent of my trainees, as well as my commitment to enable them."

Dr. Ghosh also serves as an educator, teaching cell biology and molecular pharmacology to graduate students (in medicine, pharmacy and biomedical sciences), and GI topics to residents and fellows. She was nominated for the Kaiser award in teaching excellence in 2012.

The Ghosh lab is currently funded by two NIH R01 research grants, the Komen Foundation, AHA and the Burroughs Wellcome Fund. Several other awards are pending. In the past, funding has come from the American Gastroenterology Association, the Department of Defense, Doris Duke Charitable Foundation and the American Cancer Society.

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Nedret Copur-Dahi, MD

## **Faculty Spotlight**

Nedret Copur-Dahi, MD Associate Clinical Professor Division of Gastroenterology

Nedret Copur-Dahi, MD, Associate Clinical Professor, joined the UC San Diego Division of Gastroenterology faculty in October of 2008. She received her MD degree from Hacettepe University in Ankara, Turkey, and did her residency training at Cornell University Medical College in New York. She received her fellowship training at Tulane University School of Medicine in New Orleans, Louisiana.

She is board certified in gastroenterology. She has been active in training of UC San Diego GI fellows and in clinical research.

Dr. Copur-Dahi practices general gastroenterology. She has started the fecal microbiota transplantation for recurrent *C. difficile* infection at UC San Diego after establishing the protocol in November, 2013. She has performed multiple successful procedures.

Dr. Copur-Dahi presented on fecal microbiota transplantation at the 2011 GUTS (Gastrointestinal Universal Training Symposium) at UC San Diego in June 2011.

She also presented at the April 26-27, 2014, UC San Diego continuing medical education conference Topics and Advances in Internal Medicine, on the subject "Fecal Microbiota Transplantation for Refractory C. Difficile Colitis."

## Incoming Fellows

# Welcoming Our New Fellows for 2014

We extend a warm welcome to our four new fellows:



Parambir Dulai Dartmouth College Research



Niraj Patel UC San Diego l Clinical



Joshua Rubin UC Los Angeles Clinical



Annapoorani Veerappan Northwestern University Clinical

## Wishing the Best for the Best

Our Graduating Fellows 2014



Mike McTigue—Kaiser San Diego Ashish Shah— Advanced Endoscopy Fellowship, Columbia Wilson Kwong— Advanced Endoscopy Fellowship, UC San Diego



# Outgoing Fourth-Year Fellows Going into Private Practice

We celebrate and congratulate our two outgoing fourth-year fellows for 2014.

Both are going into private practice, Dr. Preet Bagi (Advanced IBD Fellow ) in Orange County and Dr. Imad Elkhatib (Advanced Endoscopy Fellow) in Chicago, Illinois.



L to R above: Drs. Wilson Kwong, Michael McTigue, Derek Patel (holding the 2014 Clinical Teaching Award), and Ashish Shah.

Our GI Fellows' Graduation was held on Sunday, June 22, 2014, at the Great Hall on the UC San Diego campus. Our graduating fellows were Michael McTigue, Wilson Kwong and Ashish Shah. Dr. Derek Patel received the 2014 Clinical Teaching Award.

So where will our fellows be going next year? Mike McTigue will join Kaiser San Diego, Ashish Shah will go to Columbia and do a fourth-year advanced endoscopy fellowship, and Wilson Kwong will stay at UC San Diego and do a fourth-year advanced endoscopy fellowship with Drs. Savides and Fehmi.

We want to wish Mike, Wilson and Ashish all the best for the future and to say we really enjoyed having them in the program.



Sheila Crowe, MD

## 2014 Update

# Women GIs and the UC San Diego Gastroenterology Division

By Sheila Crowe, MD

Female gastroenterologists and hepatologists continue to make up a substantial portion of the faculty and fellows in the Division of Gastroenterology at UC San Diego. This group enjoys get-togethers outside of work on a regular basis (see photograph below). The female faculty comprises specialists in hepatology (Heather Patton, Yuko Kono), interventional endoscopy (Denise Kalmaz, Mary Lee Krinsky), general GI (Nedret Copur-Dahi) and celiac disease (Sheila Crowe).

Of the group of 12 fellows this past academic year, four were women, including Shireena Desai and Irine Vodkin, who have started their third year of fellowship serving as co-Chief GI fellows in addition to Melanie Green and Laura Pace who are continuing in their training. Brigid Boland has graduated and is currently pursuing advanced IBD training at UC San Diego. We also welcome another woman, Anna Veerappan, into our fellowship training program.



Getting together at the Crowe-Ernst home July 2014. Back row from left to right: Michelle Pearlman (IM resident), Denise Kalmaz, Sheila Crowe, Irine Vodkin, Mary Lee Krinsky, Anna Veerappan, Brigid Boland. Front row: Heather Patton, Laura Pace, Shireena Desai and alumnus Erica Boettcher. Unable to attend: Yuko Kono, Nedret Copur-Dahi, Melanie Green, and another alumnus, Mamie Dong.

## 8th Annual Research Symposium Attracts 300 Attendees



From L-R: Amir Zarrinpar, Sahil Khanna, Sheila Crowe, William Sandborn, Sarah Highlander, Lars Eckmann, Karen Nelson, Peter Ernst, Jesus Rivera-Nieves, Bernd Schnabl, James Lewis, John Chang, Sam Ho.

The 8th Annual UC San Diego Gastrointestinal Research Symposium: The Intestinal Microbiome: From Bugs & Guts to the Bedside was held Friday, September 5, 2014. It was attended by 300 people.

Dr. Bernd Schnabl, who co-directed the symposium with Dr. John Chang, said, "The program and the speakers were really excellent, and the organizers received many positive comments and feedback."

The symposium included the following guest speakers.

**Dr. James D. Lewis, MD, MSCE**, Professor of Medicine and Senior Scholar, Center of Clinical Epidemiology and Biostatics, Perelman School of Medicine, University of Pennsylvania: "Interplay of diet, the gut microbiome, and health."

**Gary D. Wu, MD**, Ferdinand G. Weisbrod Chair in Gastroenterology, Perelman School of Medicine, University of Pennsylvania: "Metabolic cross-talk between the gut microbiota and its host at the mucosal interface."

**Sarkis K. Mazmanian, PhD**, Luis B. and Nelly Soux Professor of Microbiology, California Institute of Technology: "The gut microbiome and host immune regulation."

**Sahil Khanna, MBBS**, Assistant Professor of Medicine, Mayo Clinic: "Fecal microbiota transplantation: ins, outs, and whereabouts."

Karen E. Nelson, PhD, President, J Craig Venter Institute: "The human microbiome."

# **Keep in Touch**

#### Faculty, Fellows and Alumni:

Join us on Facebook by logging into your Facebook account and typing in the search menu "UCSD Gastroenterology Fellows and Alumni" and click "ask to join."

#### You can also go to http:// www.facebook.com/ groups/114277778649025

A great way for alumni to keep in touch with the GI fellows and a way for fellows to contact alumni. Includes interesting links, photos of the fellows, faculty and alumni, and division and fellowship events.

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## AGA Advocacy Day

Drs. Denise Kalmaz and Barrett Levesque Meet with Rep. Scott Peters on CMS Changes and Other GI Issues

Drs. Barrett Levesque and Denise Kalmaz participated in Advocacy Day in Washington, DC, on September 19.

They personally met with Congressman Scott Peters to discuss important issues including National Institutes of Health funding and transparency in Centers for Medicare and Medicaid Services valuation.



## Coming January 31, 2015

# Third Annual "What's New in GI and Hepatology" CME Conference



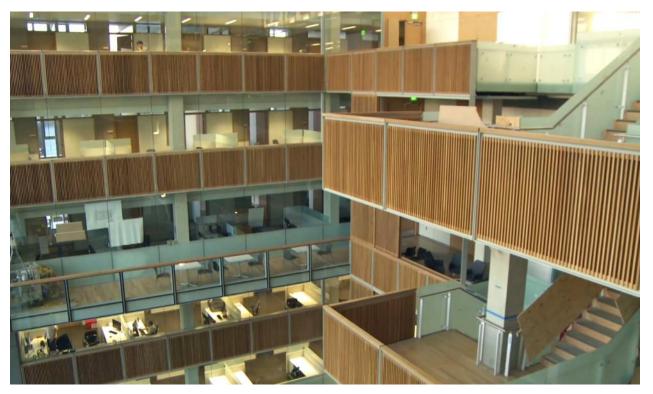
The Third Annual "What's New in GI and Hepatology CME Conference" will take place Saturday, January 31, 2015, at the US Grant Hotel in San Diego.

The course co-directors are William Sandborn, MD, and Samir Gupta, MD, MSCS.

Presented by the UC San Diego Division of Gastroenterology, the conference is an interactive one-day CME activity.

Registration is online at http://cme.ucsd.edu/ gi. 1/31/15

# Save the date



Above: View across the mezzanine of the Biomedical Research Facility 2 on the UC San Diego campus. Early in 2014, UC San Diego GI researchers in mucosal immunology, liver fibrosis and inflammation moved to this facility, which provides them with a consolidated research unit. *Photo courtesy of UC San Diego Academic Computing and Media Services.* 

## Awards and Honors



## **GI** Division Honor

UC San Diego Gastroenterology ranked #38 in the nation in the 2014-2015 US News & World Report's annual "Best Hospitals" survey.

## **Individual Awards and Honors**



William Sandborn, MD, Professor of Medicine and GI Division Chief and Thomas Savides, MD, Professor of Clinical Medicine and Clinical Service Chief were honored once again on the "San Diego's Top Doctors" list.

Thomas Savides, MD, was appointed Chief Experience Officer for UC San Diego Health Sciences.

**Pradipta Ghosh, MD, MBBS**, Associate Professor of Medicine, is PI of a new NIH/NIDDK R01 grant, DK099226 -01: G protein pathways as Novel Therapeutic and Diagnostic Targets in Liver Fibrosis.

Fellowships obtained by the Ghosh Lab: Susan G. Komen Fellowship (07/01/14 - 06/30/17); Komen Foundation for the Cure. Title: A Novel Target in Triple Negative Breast Cancers. Dr. Ghosh's Role: Primary Mentor: Dr. Ghosh; Fellow: Midde. AHA Western States Affiliates Fellowship (07/01/14 - 06/30/16); American Heart Association. Title: A Novel Molecular Mechanism for Insulin Resistance. Primary Mentor: Dr. Ghosh; Fellow: Lopez-Sanchez.

**Dr. Derek Patel** received the 2014 Clinical Teaching Award from this year's graduating gastroenterology and hepatology fellows.

**Heather Patton, MD**, Associate Clinical Professor, was inducted as a Fellow of the American Gastroenterological Association (AGA) on February 1, 2014.

**Bernd Schnabl, MD**, Associate Professor of Medicine, was appointed Associate Editor for *Digestive Diseases and Sciences*, the oldest continuously published GI journal in North America. Dr. Schnabl also received a Veterans Affairs Merit grant entitled, "The Commensal Microflora Suppresses Liver Fibrosis" starting in fall 2014.

**Amir Zarrinpar, MD, PhD**, Assistant Clinical Professor, is one of the two investigators selected as AASLD Liver Scholars for 2014. The award supports his research on the relationship of gut microbiome and time restricted feeding in steatohepatitis.

Dr. Zarrinpar also received the AGA Microbiome Junior Investigator Research Award for 2014. In addition, Dr. Zarrinpar was selected as a UC San Diego Clinical and Translational Research Institute KL2 Grant recipient – 2014 and the Larry L. Hillblom Foundation Award – 2014, both of which could not be held concurrently with the AASLD Liver Scholar Award.

# **Division Publications**

#### **Gobind Anand**

Anand G, Hutfless SM, Akshintala VS, Khashab MA, Lennon AM, Makary MA, Hirose K, Andersen DK, Kalloo AN, Singh VK. A Population-Based Evaluation of Severity and Mortality Among Transferred Patients With Acute Pancreatitis. Pancreas. 2014 Jul 23.

#### **Brigid Boland**

Boland BS, Boyle DL, Sandborn WJ, Firestein GS, Levesque BG, Hillman J, Zhang B, Proudfoot J, Eckmann L, Erst PB, Rivera-Nieves J, Pola S, Copur-Dahi N, Chang JT. Validated gene expression biomarker analysis for biopsy-based clinical trials in ulcerative colitis. Aliment Pharmacol Ther. 2014. 40 (5): 477-85.

Boland BS, Sandborn WJ, Chang JT. Update on Janus Kinase Antagonist in Inflammatory Bowel Disease. Gastroenterol Clin North Am. 2014. 43 (3): 603-617.

Boland BS, Rivera-Nieves J, Gupta S. Lower endoscopy and prevention of colon cancer. Gastroenterology. 2014; 147 (1): 245-6.

#### **Sheila Crowe**

Das S, Sarkar A, Ryan KA, Berger AT, Juncadella IJ, Bimczok D, Smythies LE, Harris PR, Ravichandran KS, Crowe SE, Smith PD and Ernst PB. Brain Angiogenesis Inhibitor 1 (BAI1) is expressed by gastric phagocytes during infection with Helicobacter pylori and mediates the recognition and engulfment of human apoptotic gastric epithelial cells. FASEB J, 28:2214-24;.2014. PMID: 24509909.

Bhattacharyya, A, Mitra S, Chattopadhyay R, Crowe SE. Oxidative stress: An essential factor in the pathogenesis of gastrointestinal mucosal diseases. Physiological Reviews. 94:329-54; 2014. PMID: 24692350

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#### Parambir Dulai

Dulai PS, Siegel CA, Colombel JF, Sandborn WJ, Peyrin-Biroulet L. Systematic review: monotherapy with antitumour necrosis factor  $\alpha$  agents versus combination therapy with an immunosuppressive for IBD. Gut 2014 Jun 26 [Epub ahead of print]

#### Lars Eckmann

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Debnath A, Shahinas D, Bryant C, Hirata K, Miyamoto Y, Hwang G, Gut J, Renslo AR, Pillai DR, Eckmann L, Reed SL, McKerrow JH. Hsp90 Inhibitors as New Leads to Target Parasitic Diarrheal Diseases. Antimicrob Agents Chemother. 2014 May 12. [Epub ahead of print] PMID: 24820073

Cao SS, Wang M, Harrington JC, Chuang BM, Eckmann L, Kaufman RJ. Phosphorylation of  $eIF2\alpha$  is dispensable for differentiation but required at a posttranscriptional level for paneth cell function and intestinal homeostasis in mice. Inflamm Bowel Dis. 2014 Apr;20(4):712-22. doi: 10.1097/MIB.000000000000010. PMID: 24577114

Dann SM, Le C, Choudhury BK, Liu H, Saldarriaga O, Hanson EM, Cong Y, Eckmann L. Attenuation of intestinal inflammation in interleukin-10-deficient mice infected with Citrobacter rodentium. Infect Immun. 2014 May;82 (5):1949-58. doi: 10.1128/IAI.00066-14. Epub 2014 Feb 24. PMID: 24566625.

Watkins RR, Eckmann L. Treatment of giardiasis: current status and future directions. Curr Infect Dis Rep. 2014 Feb;16(2):396. doi: 10.1007/s11908-014-0396-y. PMID: 24493628

#### Peter Ernst

Chang JT, Sandborn WJ, Ernst PB. Studies in human intestinal tissues: Is it time to reemphasize research in human immunology. Gastroenterology, 2014, in press.

Kurtz, CC, Drygiannakis I, Naganuma M, Feldman S, Bekiaris V, Ware CF, Ernst PB, Extracellular adenosine regulates colitis through effects on lymphoid and non-lymphoid cells. Amer. J. Physiol. 255 (Gastrointest. Liver Physiol.), 2014. In press.

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Ernst PB, Mucosal Immunology, 2014, in Principles and Practices of Infectious Disease. 8th Edition, M Blaser et al, ed. In Press.

#### Melanie Gareau

Smith CJ, Emge JR, Berzins K, Lung L, Khamishon R, Shah P, Rodrigues DM, Sousa AJ, Reardon C, Sherma PM, Barrett KE, and Gareau MG. Probiotics normalize the gut-brain-microbiota axis in immunodeficient mice. Am J Physiol Gastrointest Liver Physiol in press, 2014.

#### Pradipta Ghosh

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Alakus H, Babicky M, Ghosh P, Yost S, Jepsen K, Yang D, Samuel M, Mose E, Schwab R, Peterson M, Lowy A, Kelly F, and Harismendy O. Genome-wide Mutational Analysis Reveals Core Signaling Pathways in Mucinous Neoplasms of the Appendix. Genome Med. 2014 May 29;6(5):43. PMID: 24944587.

#### Alan Hofmann

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Wang L, Hartmann P, Haimerl M, Bathena SP, Sjöwall C, Almer S, Alnouti Y, Hofmann AF, Schnabl B. Nod2 deficiency protects mice from cholestatic liver disease by increasing renal excretion of bile acids. J Hepatol. 2014 Jun;60(6):1259-67. doi: 10.1016/j.jhep.2014.02.012. Epub 2014 Feb 19. PMID: 24560660

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#### **Denise Kalmaz**

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#### Yuko Kono

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#### **Bernd Schnabl**

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# Division Publications, Abstracts, and Presentations

pii: S0016-5085(14)00536-8. doi: 10.1053/j.gastro.2014.04.010. [Epub ahead of print] PMID: 24768331

Seki E, Schwabe RF. Hepatic Inflammation and Fibrosis: Functional Links and Key Pathways. Hepatology. 2014 Jul 26. doi: 10.1002/hep.27332. [Epub ahead of print] Review. PMID: 25066777

#### Amir Zarrinpar

Zarrinpar A, Callaway EM. Functional local input to layer 5 pyramidal neurons in the rat visual cortex. Cerebral Cortex (in press).

#### **Abstracts and Presentations**

### Sheila Crowe National and International Meeting Invited Presentations:

January 2014 – AGA Clinical Congress, Miami, FL. "Food allergy? FODMAP? Fads, facts or fiction?"

February 2014 – 2014 Canadian Digestive Diseases Week, Toronto, Canada. "Diet and Nutrition in GI Health" session. "Nutrition and the gastroenterologist – Putting science into practice".

October 2014 - ACG Annual Postgraduate Course 2014, Philadelphia, PA. "Food allergies and the GI tract: Fact or fiction?"

October 2014 – ACG Annual Meeting, Philadelphia, PA. Symposia 2B, Deciphering IBS: Understanding the Diverse Pathophysiology. "Food allergies and food sensitivities in IBS."

#### Heather Patton and Rohit Loomba

American Liver Foundation, Pacific Coast Division 2014 Liver Wellness Symposium:

Liver Disease Management and Treatment, Saturday, September 20,

#### 2014

Rohit Loomba: Nonalcoholic fatty liver disease

Heather Patton: Assessment and Management of Nutritional Status in Liver Disease

#### **DDW Presentations**

#### Yuko Kono

Joshi K, Mendler M, Gish R, Loomba R, Kuo A, Patton H, Kono Y. HCC Surveillance: An Inquiry into Current Practices in the United States. Digestive Disease Week, Annual Meeting, Chicago, May, 2014.

#### Rohit Loomba

Bazick J, Donithan M, Neuschwander -Tetri BA, Kleiner D, Brunt EM, Wilson L, Doo E, Lavine JE, and Loomba R for the NASH CRN. Clinical model for predicting NASH or advanced fibrosis in patients with diabetes and NAFLD. Poster presentation at DDW, Chicago, 2014.

Singh S, Allen AA, Wang Z, Prokop LJ, Murad MH and Loomba R. Fibrosis Progression in Nonalcoholic Fatty Liver Versus Nonalcoholic Steatohepatitis: A Systematic Review and Meta-Analysis of Paired-Biopsy Studies. Poster presentation at DDW, Chicago, 2014.

Chang M, Donithan M, Neuschwander-Tetri BA, Kleiner D, Brunt EM, Wilson L, Doo E, Lavine JE, and Loomba R for the NASH CRN. Patterns in liver histology among normoglycemic, prediabetic, and diabetic patients with NAFLD. Poster presentation at DDW, Chicago, 2014.

#### American Association for the Study of Liver Diseases (AASLD) 2014, Boston, MA

#### Alexander Kuo

Abstract: Sulkowski MS, Vargas HE, Di Bisceglie AM, Kuo A, Reddy KR, Lim JK, Morelli G, Feld JJ, Brown RS, Frazier LM, Fried MW, Nelson DR, Jacobson IM. Safety and Efficacy of Sofosbuvir (SOF) in Combination with Simeprevir (SIM) + Ribavirin (RBV) in Patients with Genotype 1: Interim Results of a Prospective, Observational Study. AASLD; Boston, Nov 7-11, 2014.

#### **Bernd Schnabl**

Poster Presentation: Chen P, Stärkel P, Turner JR, Ho SB, Schnabl B. Dysbiosis-induced intestinal inflammation activates TNFR-1 and mediates alcoholic liver disease in mice

Oral Presentation during the Basic Science Plenary Session: Mazagova M, Wang L, Anfora AT, Wissmueller M, Lesley SA, Westwater C, Brenner DA, Schnabl B. Commensal microbiota is hepatoprotective and suppresses liver fibrosis in mice.

# European Association for the Study of the Liver (EASL), London, 2014

#### **Rohit Loomba**

Oral presentation: Loomba R, Wolfsen T, Haufe W, Hooker J, Szeverneyi N, Ang B, Peterson M, Valasak M, Lin G, Gamst A, Brenner DA, Sirlin CB. Novel 3dimensional magnetic resonance elastography accurately diagnoses nonalcoholic steatohepatitis and advanced fibrosis in patients with biopsy proven nonalcoholic fatty liver disease: A prospective cohort study.

#### **Poster Presentation:**

Kim WR, Berg T, Asselah T, Flisiak R, Fung S, Gordon S, Janssen H, Lampertico P, Lau D, Bornstein J, Schall RA, Dinh P, Yee LJ, Martins EB, Lim SG, Loomba R, Petersen J and Marcellin P. APRI and FIB-4 vs histology in chronic hepatitis B patients in tenofovir

# **Division Abstracts and Presentations**

disoproxilfumarate trials.

#### **Obesity Week**

Egnatios, J., Frankwich, KA, Kenyon, ML, Rutledge, TR, Liao, PS, Herbst, KL, Zarrinpar, A (2014). "Diet Adherence Predicts Weight Loss Better than Individual Nutrigenomic Profile." Poster Presentation. Obesity Week. Boston, MA

#### World Transplant Congress

Veerappan A, VanWagner LB, Mathew JM, Huang X, Miller J, Lapin B, Levitsky J. Hepatitis B virus is associated with low rejection rates following liver transplant independent of hepatitis B immunoglobulin use. Poster presentation. World Transplant Congress (WTC) Annual Meeting, July 2014. San Francisco, CA.

## Honors: Invited Speaker at Academic Institutions

Dr. Sheila Crowe was the invited speaker at:

September 2013 – Mayo Clinic, Rochester, MN. 2013 Hugh Butt Professor in Gastroenterology GI Grand Rounds, "Food allergies and sensitivities in GI disorders," and lecture for the 22nd Annual Mayo Clinic GI and Hepatology Fellows Research Retreat "Journeys in time, space and matter: Reflections on 25 years in academic gastroenterology."

February 2014 – University of California, Irvine, Orange, CA. Distinguished Medicine Grand Rounds Speaker, "New developments in celiac disease and other forms of sensitivities to wheat or gluten." GI Fellows Rounds "GI food allergies and food sensitivities."

March 2014 – Drexel University, Philadelphia, PA. Medicine Grand Rounds, "An update on Helicobacter pylori; Pathogenesis, diagnosis and treatment." Presentation for residents and GI fellows: "New developments in celiac disease and other forms of intolerance to wheat or gluten."

June 2014 – University of Toronto, Toronto, ON, Canada. GI Research Day Keynote Speaker, "Mechanisms of H. pylori pathogenicity: A translational approach."

June 2014 – University of Texas, Southwestern, Dallas, TX. 2014 Katherine McArthur Memorial Lectureship: "Managing food intolerances: From celiac disease to other food allergies and sensitivities."

### Our Faculty in the Media

Barrett Levesque is a quoted expert in the Everyday Health online article, "Personalized Crohn's Disease Treatment: Because each person with Crohn's disease has unique needs, work closely with your doctor to find the best treatment approach for you."

#### **Grants Awarded**

#### Pradipta Ghosh

R01 DK099226-01 (PI: Ghosh) National Institutes of Health (NIH/ NIDDK)

Title: G protein pathways as Novel Therapeutic and Diagnostic Targets in Liver Fibrosis Major Goals: This study seeks to discover unique G-protein signaling complexes assembled in response to fibrogenic insult which will help decipher, access, and manipulate the stellate cell's complex signaling code, serve as attractive and effective therapeutic targets to arrest/reverse fibrogenesis, and also serve as markers for predicting liver fibrosis. Fellowships obtained by the Ghosh Lab:

Susan G. Komen Fellowship (Fellow: Midde) 07/01/14 - 06/30/17

Komen Foundation for the Cure Title: A Novel Target in Triple Negative Breast Cancers Dr Ghosh's Role: Primary Mentor

AHA Western States Affiliates Fellowship (Fellow: Lopez-Sanchez) 07/01/14 - 06/30/16 American Heart Association Title: A Novel Molecular Mechanism for Insulin Resistance Dr Ghosh's Role: Primary Mentor

#### **Bernd Schnabl**

Dr. Schnabl will receive a VA Merit grant entitled "The Commensal Microflora Suppresses Liver Fibrosis" starting in fall 2014.

#### Amir Zarrinpar

UCSD Clinical and Translational Research Institute KL2 Grant recipient – 2014 (could not hold concurrently with the AASLD Liver Scholar Award)

Larry L. Hillblom Foundation Award – 2014 (could not hold concurrently with the AASLD Liver Scholar Award)

AASLD Liver Scholar Award – 2014

AGA Microbiome Junior Investigator Research Award - 2014

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## **Division of Gastroenterology Mission Statement**



### **Organization Statement**

The UC San Diego GI Division will provide the best clinical care to those afflicted with gastrointestinal and liver diseases, investigate at the clinical and basic levels the best way to improve those diseases, and educate trainees on how to best approach the care of patients with those diseases. The UC San Diego GI Division will strive to be nationally recognized through its faculty as well as innovations that will improve the care of patients with gastrointestinal and liver diseases nationwide.

The UC San Diego GI Division was founded in 1970 by Henry Wheeler, MD, who served as its first division chief. Later, Jon I. Isenberg, MD, led the division from 1979 to 1993, followed by C. Richard Boland, MD, from 1995 to 2003, John M. Carethers, MD, from 2004 - 2009 and William J. Sandborn from 2011-present. The GI Fellowship Training Program commenced in 1974 and the NIH Training Grant was initially funded in 1976. The division has trained several local gastroenterologists in San Diego, as well as developed several academicians at University-based medical schools, including some with leadership and administrative positions.

## Making the Most of Your Charitable Gifts

Here are just a few options on how you can support UC San Diego Division of Gastroenterology:

**Option 1 –** The simplest way to donate is a *gift of cash* (including checks and credit cards). Remember if you itemize you may be able to receive a charitable deduction for 2014 for your gifts received on or before December 31<sup>st</sup>. You may contribute directly to UC San Diego GI by visiting our page at <u>http://</u> <u>www.gastro.ucsd.edu</u> and clicking on the ABOUT tab and choosing "Support Our Work" on the lefthhand column.

**Option 2** – A gift of *appreciated securities* also offers an attractive opportunity to support the Division of Gastroenterology. By contributing appreciated securities that you have held longer than 12 months, you will receive a charitable income tax deduction, in most cases for their full fair market value, and avoid any capital gains tax liability. It is important to remember that your securities must be transferred to the UC San Diego Foundation by December 31<sup>st</sup> for the 2014 tax year.

#### **GI Division Office**

9500 Gilman Drive (MC 0956) La Jolla, CA 92093 East Campus Office Building V: 858-657-5284 | F: 858-657-5022

#### UC San Diego GI Clinical Referral

| General GI               | 619-543-2347 |
|--------------------------|--------------|
| Hepatology               | 619-543-6303 |
| Interventional Endoscopy | 858-657-6882 |
| Motility                 | 619-543-6834 |
| IBD                      | 858-657-8787 |
| Celiac                   | 619-543-2347 |

#### **VA Medical Center**

Gastroenterology Section (111D) 3350 La Jolla Village Drive San Diego, CA 92161 Tel: (858) 552-8585 x2631 Fax: (858) 552-4327



Our Fellows are an important part of the Division of Gastroenterology. They are a very bright and talented group who work extremely hard at their research and clinical work. Their dedication to their field in turn is an excellent representation of this Institution and beyond.

To assist our Fellows, the Division of Gastroenterology has implemented the Fellowship Education Fund to support their Fellowship education. These funds go directly to support our Fellows in their education during their course of their tenure at UCSD. There are currently little or no funds to support such endeavors, and the Division is appealing to you as a former Fellow, former Faculty or an affiliated physician with UCSD to consider contributing with a tax-free donation to the Fellowship Education Fund.

Please complete the information below, and mail your donation in the enclosed selfaddressed, stamped envelope. We will also send you a receipt for tax purposes. Your donation is greatly appreciated.

**Note:** for tax purposes your envelope needs to be postmarked by Dec 31, 2014.

| Donor Name:               |                                      |  |
|---------------------------|--------------------------------------|--|
| Address:                  |                                      |  |
| Suggested Contribution:   |                                      |  |
| \$5,000                   | \$500                                |  |
| \$2,000                   | \$250                                |  |
| \$1,000                   | \$100                                |  |
|                           | Other                                |  |
| Make checks payable to UC | Regents (Tax ID# 95-6006144-W)<br>or |  |

DONATION

Donate online, go to http://gastro.ucsd.edu under the About tab - Support our Work.