UC San Diego Division of Gastroenterology

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UC San Diego SCHOOL OF MEDICINE

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Letter from the Chief

Dear Colleagues and Friends,



Welcome to the 1st Quarter issue of the Divisional Newsletter. In this issue, you will be introduced to our newest faculty member, Dr. Vipin Kumar PhD, and learn about the bench-to-bedside translational research program in obesity of Dr. Amir Zarrinpar. We also remember and celebrate the life and accomplishments of Dr. Martin Kagnoff, a long-time UC San Diego GI faculty member who passed in November 2014.

You will see the latest clinical offerings from the GI Motility lab and clinic. Please see the announcement that in May,

Dr. Sheila Crowe will begin a 3-year term of service to the American Gastroenterology Association culminating in the AGA Presidency.

I would also like to thank and congratulate Dr. Samir Gupta for serving as the course director for the 3rd Annual Advances in Gastroenterology and Hepatology Conference: What's New in Gastroenterology and Hepatology? We had a record attendance, and the course was very well received.

Finally, please take a moment to review the robust list of publications from our faculty covering a wide range of basic, translational, and clinical research topics in gastroenterology and hepatology. You will see from these publications that the research mission of our Division is in full gear.

All in all, the Division continues to grow and diversify. I would like to thank each and every member of our faculty, fellowship, and clinical, research and administrative staff for their efforts every day in caring for our patients, training our fellows and students, and advancing the science of gastroenterology and hepatology.

Best regards,

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William Sandborn, MD Professor and Chief, Division of Gastroenterology



Welcoming New Faculty Member

Researcher Vipin Kumar, PhD Adjunct Professor



Division of Gastroenterology, UC San Diego

Dr. Vipin Kumar joined the Division of Gastroenterology faculty as a professor of medicine on March 1, 2015.

Dr. Kumar comes to us from the Torrey Pines Institute for Molecular Studies, where he has been a professor/member and head of Laboratory of Autoimmunity since 2003. In addition, he has been a member of the Multiple Sclerosis National Research Institute since 2002 and the UC San Diego Clinical and Translational Research Institute since 2012.

Formerly, Dr. Kumar was trained at Harvard, California Institute of Technology and UCLA and held academic appointments at the La Jolla Institute for Allergy and Immunology (1997-2002) and UCLA (1993-1997).

Dr. Kumar has done pioneering work in understanding initiation, propagation and regulation of T-cell mediated autoimmune diseases. He also has made major contributions in identification as well as understanding the functional role of a major subset of sulfatide-reactive type II NKT cells in inflammation. Currently, his research focuses on identifying novel innate-like lymphocytes enriched in the liver-gut axis and uncovering the immune regulatory

mechanisms by which these lymphocytes control inflammatory diseases, autoimmune diseases and cancer.

He conducts pre-clinical and clinical investigations related to three major research areas:

- Identification and characterization of a novel population of CD8+ Treg or CD8+ suppressor cells involved in immune regulation in both murine and human systems
- Identification and characterization of glycolipid- and phospholipid-reactive type II NKT cells involved in the regulation of autoimmune and inflammatory diseases and anti-tumor immunity in both murine and human systems
- Development of computer simulations for immune regulatory networks that generate verifiable hypothesis and predictions for experimental and clinical studies

Dr. Kumar has published more than 110 articles in scholarly journals and currently holds two National Institutes of Health R01 research grants. He additionally has several awarded and pending patents.

Dr Kumar has presented many invited lectures and seminars around the world. He has served on the advisory boards for numerous national and international organizations including the NIH, the Juvenile Diabetes Research Foundation and the Arthritis National Research Foundation.

Profiles in Gastroenterological Research: From Bench to Clinic

Physician Scientist

Amir Zarrinpar, MD, PhD Assistant Adjunct Professor Division of Gastroenterology, UC San Diego Regulatory Biology Laboratory, Salk Institute for Biological Studies

UC San Diego physician-scientist Dr. Amir Zarrinpar developed his interest in being a clinician very early on. He comes from a family of doctors: his father is a general surgeon, his mother is a former family physician who is now a pathologist, and his brother is now a transplant surgeon at UCLA.



Photo: Joe Belcovson/Salk Institute.

"I really enjoyed the medical conversations over the dinner table," he said. "I really liked seeing that my parents were always students themselves, always learning something new, and I liked the respect that they got from their patients and from their peers."

His interest in research came later. One turning point was a conversation he had after class with his undergraduate mentor, Stephen Kosslyn, at Harvard. He ended up working with Kosslyn for four years and graduating from Harvard with undergraduate degrees in psychology and biology and a certificate in cognitive neuroscience.

"Stephen Kosslyn gave me an opportunity to be very independent, to come up with my own research questions. He was generous with his time and support," Zarrinpar said. "I think when you have an experience like that, you really don't want to give it up."

From Harvard, Dr. Zarrinpar came to UC San Diego for graduate studies in cognitive neurosciences research and

Dr. Zarrinpar examines how the dynamic gut microbiome affects host metabolism, with a focus on obesity and diabetes.

(Continued on page 4)

Dr. Vipin Kumar (Continued from page 2)

He has mentored many undergraduate and postdoctoral trainees, and has taught the elective graduate course in immune regulation with Dr. Maurizio Zanetti at UC San Diego for several years.

Dr. Kumar received his bachelor's degree in biology with honors from Kanpur University in India (1978); his master's degree in biochemistry at the Postgraduate Institute of Medical Education and Research, Chandigarh, India (1980); and his PhD in biochemistry from the Indian Institute of Science in Bangalore, India (1985-86). He loves hiking, running, playing tennis and reading and discussing philosophy.

Research Profile: Dr. Amir Zarrinpar, continued

completed his MD and PhD in the Medical-Scientist Training Program. He worked in Dr. Ed Callaway's laboratory using a novel technique to map out which neurons were connected to each other to make circuits of the brain. However, instead of gravitating toward psychiatry or neurology, he really enjoyed his medicine clerkship and felt a desire to do research that would more immediately impact the life and health of patients he saw every day.

He had a striking experience when he heard Ronald Evans, professor and director of the Gene Expression Laboratory at the Salk Institute, talk about the relationship between genes that are activated by exercise and metabolism.

He also recalls to this day that the first patient who died under his care was a patient with NASH cirrhosis, and the first time he ran a code as a resident was on a morbidly obese 30 year old who had gone into asystole as a result of an apneic episode in the middle of the night.

"I could see how morbid obesity was really robbing people of their health and life. That coupled with the exciting work that I was seeing and reading about made me think that metabolic research was what I really wanted to do next."

His interests drew him into the Salk Institute, where he started working in Dr. Satchidananda Panda's Regulatory Biology Laboratory. Now a collaborator in Panda's lab, Dr. Zarrinpar is exploring the links between gut signaling, the gut microbiome and obesity from a circadian perspective. He examines how factors such as eating schedules can both exacerbate and protect against or reverse obesity under various conditions.

"We've been starting to realize how important the gut microbiome itself is to insulin resistance and diabetes." Most recently, this work has led to the publication of back-toback articles in *Cell Metabolism* in early December, 2014, and press coverage that included an article in the *New York Times*, coverage on the Today Show, and a December 5 spot on Ira Flatow's "Science Friday" radio show and podcast.

In the first of the two studies, Dr. Zarrinpar and his colleagues found that mice fed multiple nutritional challenges such as high fat diet and high sucrose diet acquire metabolic problems if they are allowed to feed around the clock. However, restricting their access to food to 8-12 hours allowed them to eat the

same amount of calories but without any of the negative consequences. In fact, the researchers also showed that this restricted access to food could even reverse obesity and its negative consequences.

In the second study, they showed that the gut microbiome is an extremely dynamic environment that changes quickly (in the order of hours) in response to diet and feeding pattern. They further showed that some of the benefits of the restricted access to food could be from the result of changes that this type of feeding pattern makes in the gut microbiome.

"We've been starting to realize how important the gut microbiome itself is to insulin resistance and diabetes," Dr. Zarrinpar said. "We're seeing there's a more intimate relationship between gut microbiome and host metabolism, and it's very exciting."

Research Profile: Dr. Amir Zarrinpar, continued

"There needs to be a more concerted effort to understand metabolism altogether so that we can come up with newer and better therapies for obesity," he said. "The cause of most of the major medical problems that we're seeing in the United States and the Western world is obesity, and we really don't have many tools in the toolbox to treat it."

In fact, he recently finished a study which will be published in *Clinical Gastroenterology and Hepatology*, which shows that using personalized medicine (i.e., nutrigenetics) to make dietary recommendations did not improve weight loss outcomes. "Recommending diet and exercise is just ineffective therapy, regardless of whether it's nutrigenetically guided or not."

He considers Dr. Satchidananda Panda one of many mentors he has had along the way. "Dr. Panda really took a risk accepting someone like me who has very little background in the techniques in the lab when I first started. I am grateful for the opportunity he has given me. It has been unimaginably exciting

to get involved in this project from the ground floor." However, he names numerous other faculty members within the Division of Gastroenterology as either mentors or role models:

"Every single faculty member within the Division has taught me something new, whether it be during my training or afterwards, whether on how to take care of a challenging patient or to survive the transition to medical academia as a scientist. I am always in awe of my colleagues and their accomplishments." He credits Dr. John Carethers for drawing him into gastroenterology.

He credits Dr. John Carethers as being the person who drew him into gastroenterology. "I am forever indebted to John since he really helped me see how this particular field could be such a good fit for someone with such an unorthodox scientific background as mine."

"UC San Diego is a really great place to do research," he said. "And there are so many people, across the entire university and the San Diego Mesa, using so many different techniques; you can easily call them up, go visit their labs, and learn about their methods to apply them in your own study, or collaborate with them to gain further insight from their expertise."

One day a week, Dr. Zarrinpar sees patients at the VA San Diego Healthcare System. He also sees patients in connection with clinical trials geared toward finding better treatments for patients with obesity.

"There is a certain joy that you get in working with patients," he said. "There is the immediate gratification of helping someone. It's great to realize that the end goal is to make the research applicable to humans. And being in the clinic and working with patients always helps keep that end goal in mind.

"Also, it makes you realize what the challenges are of taking something in the lab and making it truly translatable."

And what is the family conversation like these days?

"I have a little sister who is not a physician or in medicine," he said. "It's funny when she sends an email to us with medical questions. We all respond and we all debate each other via email and texts.

"She never gets a straight answer," he grinned.

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In Memoriam

Martin F. Kagnoff, MD, January 19, 1941—November 16, 2014

Lars Eckmann Kim E. Barrett

Division of Gastroenterology, Department of Medicine, University of California, San Diego, La Jolla, California

John M. Carethers

Department of Internal Medicine, University of Michigan, Ann Arbor, Michigan Reproduced with permission from Gastroenterology, March 2014 issue. Published Online: January 22, 2015



Martin F. Kagnoff, gastroenterologist and mucosal immunologist, passed away from pancreatic cancer on November 16, 2014 at the age of 73. Known to family and friends as Marty, he had been a faculty member in the Division of Gastroenterology at the University of California, San Diego (UCSD) for more than 40 years.

Marty was a native of Vancouver, British Columbia, and later became a US citizen. After attending college in Vancouver, he matriculated at Harvard Medical School, and received his medical degree in 1965. He began his internship and junior residency at the Peter Bent Brigham Hospital in Boston but interrupted clinical training to join the US Navy as a principal investigator

and commissioned Lieutenant Commander at the Armed Forces Radiobiology Research Institute in Bethesda, Maryland. His research at the Institute was focused on investigating the effects of ionizing radiation on platelets and the intestinal tract, which sparked his interest in gastroenterology. Upon completion of his Navy commission, Marty resumed clinical training and completed a senior residency year in internal medicine at New York Hospital of Cornell University in 1970, followed by a gastroenterology fellowship at Boston University. Under the mentorship of Robert M. Donaldson and Jerry Trier, his career in mucosal immunology took off when he was among the first to establish and publish in *Gastroenterology* and *Journal of Immunology* that secretory IgA is produced locally in the intestine using organ cultures of rabbit small intestine.

In 1972, the late Henry Wheeler, founding chief of the Division of Gastroenterology at the four-year-old school of medicine at the University of California, San Diego, invited Marty to be one of the division's founding faculty members. For the first 2 years of his faculty tenure, Marty was also a visiting scientist at the Salk Institute for Biological Studies in La Jolla, California (located immediately adjacent to the UCSD campus), working with Melvin Cohn on basic immunology. He spent his entire distinguished academic career at UCSD, forging research collaborations with other brilliant researchers who had been recruited there, and made seminal observations in mucosal immunology and gastroenterology. Not only was Marty a longstanding professor in the Department of Medicine, he was also asked to join the Department of Pediatrics—because of his expertise in immunology— and held dual appointments. Marty transitioned to Professor Emeritus in 2007, but remained active in overseeing his laboratory and in directing the William K. Warren Medical Research Center for Celiac Disease, based at UCSD.

closed his laboratory in the summer of 2014 after nearly half a century of experimental studies to focus on scientific writing and his many other personal interests.

Marty was internationally known for his research contributions in the field of mucosal immunology and gastrointestinal biology, as well as for his expertise and research in celiac disease. His early work in the late 1970s examined the functions of T and B lymphocytes in the intestinal immune response to antigen feeding and the ensuing oral tolerance, as well as mechanisms of antibody-dependent cell-mediated cytotoxicity. These studies were published in a series of single-authored papers in leading journals, including Nature and Gastroenterology,^{1, 2} a rare achievement by modern standards that speaks as much to the nature of research at the time as to his superb skills. In the early 1980s, Marty expanded his interests to the pathophysiology of celiac disease, and made groundbreaking discoveries on genetic loci of the major histocompatibility complex associated with disease susceptibility, as well as the T lymphocyte responses to wheat gliadin components, that are taken for granted as facts today. He also discovered that gliadin shares sequence homology and immunological cross-reactivity with human adenoviruses, which raised the intriguing and provocative possibility that immune responses to viral infections may be important in the pathogenesis of celiac disease. The corresponding paper in the Journal of Experimental Medicine remains one of the most highly cited publications in his career.³

Ever restless and curious, Marty's research in the mid and late 1980s began to explore the regulation of intestinal IgM and IgA responses, and the cytokines that direct these responses. His group was a

leader in discovering the roles of TGFβ1 and IL-5 in IgA switching. During these studies, his team also made the surprising observation that the receptor for vasoactive intestinal peptide, long believed to be a cell surface molecule, can be found in the nuclei of intestinal epithelial cells, which was reported in Science in 1987.⁴ In another demonstration of his wide-ranging interests, his group was among the first to explore the clinical and immunological manifestations of HIV infection in the intestinal tract in the mid-1980s, at a time when AIDS was a newly-described disease with high mortality. Later work explored HIV infection and the regulation of HIV gene expression in intestinal epithelial cells.

Beginning in the early 1990s, Marty's laboratory was among the first to describe the role of intestinal epithelial cells as active participants in immune regulation. Contrary to the widely held belief at the time that these cells are exclusively barrier cells, his group showed that infection with various enteric pathogens and stimulation with diverse cytokines activates expression of an array of proinflammatory and



chemotactic mediators that can recruit immune cells to the intestinal mucosa and orchestrate their activation. For the next 2 decades, his work remained focused on the innate immune responses of the intestinal epithelium, exploring not only production of immune regulators, but also expression of antimicrobial and other immune effector molecules, and the transcriptional regulation of these responses. In particular, around the year 2000, Marty's group and collaborators began investigating (Continued on page 8)

In Memoriam: Dr. Marty Kagnoff, continued

how the transcription factor, NF-kB, controls innate immune responses and cell survival in the epithelium, which led to a series of seminal publications in *Nature Medicine*, *Proceedings of the National Academy of Sciences*, and *Cell*, among other journals.

The broad and pioneering nature of his overall research portfolio resulted in nearly 200 papers in the leading journals of gastroenterology, immunology, and other basic and clinical sciences. He also wrote and edited multiple books and reviews. His research was continuously funded by the National Institutes of Health for 40 years, including one of the longest held NIH P01 Program Project grants in NIDDK



history, a unique tribute to his outstanding contributions to mucosal immunology and to the gastroenterology discipline at large.

Marty served as the scientific father (and grandfather) of several generations of gastrointestinal researchers, having trained close to 100 students, post-doctoral fellows, and junior faculty over more than 3 decades. Many of his trainees have advanced to prominent careers and senior leadership roles in gastroenterology in the US and throughout the world. He was also tirelessly engaged in academic pursuits beyond his own laboratory research, having organized multiple major international meetings on mucosal immunology, and serving as Editor-in-Chief or Associate Editor of leading journals including Journal of Immunology, Journal of Clinical Investigation and American Journal of Physiology: Gastrointestinal and Liver Physiology - as well as on the editorial board of Gastroenterology.

Marty is survived by Marcia, his wife of over 50 years, their son Michael, an attorney in La Jolla, and their daughter Melissa, a neurologist in San Diego. He loved traveling and exploring new countries and places, having visited far and wide across the world. Hawaii had always been a special place for him and his family, and he partially resided on Kauai in his later years. His exuberant and exacting ways in approaching new challenges in science and life served as a great inspiration for many academic colleagues. A true pioneer of academic gastroenterology and research has been lost and will be sorely missed but his legacy will be with us forever.

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Events

3rd Annual "Advances in Gastroenterology and Hepatology: What's New in Gastroenterology and Hepatology?" CME Conference, January 31, 2015

The Division of Gastroenterology held its 3rd Annual "Advances in Gastroenterology and Hepatology Conference: What's New in Gastroenterology and Hepatology?" CME Conference on January 31, 2015. The course co-directors were Samir Gupta, MD, MSCS, and William Sandborn, MD.

Conference attendance grew for the third year in a row, totaling approximately 130 physicians and physician extenders, nurses, pharmacists, therapists and students.

The program featured a new format that included plenary talks by invited outside faculty; short, evidence-based updates in GI by UC San Diego faculty, and multidisciplinary case-based discussions.

The program was well received and was rated very highly on evaluations. Attendees called the conference "excellent, great, outstanding," and highlighted the case studies as particularly interesting and helpful in the learning process.

Be on the lookout for a "save the date" for next year's "Advances in GI" Conference!

UC San Diego IBD Biobank Celebrates its 100th Patient

UC San Diego Health System opened an inflammatory bowel disease biobank in June 2014. By November, the biobank had enrolled its 100th patient.



"The biobank is now reaching a size where it can be used by researchers to conduct specific studies," said William Sandborn, MD, chief of the Division of Gastroenterology and director of the Inflammatory Bowel Disease Center at UC San Diego Health System.

"We will be initiating studies that will evaluate the role of microbiome in IBD and how to optimize the selection and dosing of

various biologic therapies for IBD. We anticipate these studies will ultimately result in improved patient care."

Biobanks have become an important resource in medical research and personalized medicine. The UC San Diego IBD

The UC San Diego IBD Biobank is a regional collaboration.

biobank, a regional collaboration, is part of our effort to better understand IBD and develop new, more effective treatments.

Patients who volunteer to be part of the UC San Diego Health System IBD biobank donate DNA, blood, stool and endoscopy biopsy samples at regular intervals over time. The IBD biobank is unique in that there is also a collection of endoscopic videos, computed tomography and magnetic resonance imaging scans and digitized pathology so each patient is well characterized.

"A lot of planning and tireless work went into the IBD biobank. We are extremely confident in our efforts and the improvements that will be made in IBD," said Sandborn.

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Program Highlight

GI Motility and Physiology Program Division of Gastroenterology

Offering a truly multidisciplinary approach to GI motility and functional disorders, UC San Diego's GI Motility and Physiology Program brings together a wide range of specialists who collaborate in evaluating and treating patients using the most advanced methods.



Dr. Ravinder Mittal (professor of medicine, at left), directs the program along with Dr. David C. Kunkel, (assistant professor of medicine). Dr. Kunkel joined the gastroenterology division in September 2014.

The GI motility and physiology program at UC San Diego is unique in that it offers a wide variety of diagnostic and therapeutic approaches for patients with motility/functional disorders of the gastrointestinal tract that are difficult to diagnose and treat.

Said Dr. Kunkel, (pictured at right) "We are fortunate to have skilled experts not only in gastroenterology, but also minimally invasive 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 reduce quality of life significantly."

Among the most common disorders treated at the center are gastroesophageal reflux disease (GERD), swallowing disorders, gastroparesis, intestinal pseudo-obstruction, irritable bowel syndrome, small bowel bacterial overgrowth, diarrhea, fecal incontinence and constipation.

In his clinical and research activities, Dr. Mittal specializes in swallowing disorders, esophageal disorders, problems related to the anorectum and pelvic floor disorders. His research programs are funded by several NIH and VA grants.

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

In 2013, Dr. Kunkel received the American Neurogastroenterology and Motility Society Clinical Training Award in Motility, which he used to obtain specialized training in defecatory disorders and anorectal biofeedback. He has developed the division's anorectal biofeedback program to treat patients with pelvic floor disorders, including fecal incontinence and chronic constipation..

The UC San Diego GI Motility and Physiology Program now offers the following services: hydrogen and methane breath testing with all possible substrates including glucose, lactulose, fructose, and lactose. Breath testing can identify patients with conditions ranging from small intestinal bacterial overgrowth to lactose intolerance. Balloon expulsion testing is now included with every anorectal



GI Motility Team: Back row - Christy Dunne, RN; Kai Dechape, BS; David Kunkel, MD. Front row - Sherry Henkel, RN; Ravinder Mittal, MD; Debbie Orban, RN; Jennifer Marshall, BS.

manometry procedure, to help identify patients with constipation due to pelvic dyssynergia (poor anorectal coordination). The program has doubled the number of wireless Bravo pH recorders available, which means extended duration, 96-hour testing is now available.

The division's motility program is now the only one in San Diego County to offer the SmartPill wireless motility capsule test. This cutting-edge technology involves ingestion of a pill-sized capsule that wirelessly records the speed at which it passes through the stomach, small intestine, and colon. This test is useful in patients with conditions ranging from suspected gastroparesis to chronic constipation. Lastly, the division now offers a physician-led GI comprehensive biofeedback program, using the latest manometry catheters and the Squatty Potty stool system. All testing is performed at the La Jolla campus.

The GI Motility and Physiology Program has a completely revamped website, with detailed information for both patients and providers: <u>http://health.ucsd.edu/motility</u>

Publications

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Awards and Honors

Individual Awards



Dr. Kim Barrett has been selected by the Physiological Society of the UK as its Bayliss-Starling Prize Lecturer for 2015. This is one of The Society's most prestigious named lectures and it comes with a prize of £500. The lecture will be delivered in London at a joint meeting of the Society and the Bayliss and Starling Society and published in the *Journal of Physiology*.

Dr. Sheila Crowe (right) was elected Vice President of the American Gastroenterological Association, beginning a four-year term of service in which she will transition yearly from vice president to president elect to president (2017-2018) and finally to past president and chair of the AGA Foundation. In an announcement to the division faculty,

Dr. Sandborn said, "This is perhaps the highest honor that a physician in our specialty can receive. It is a tremendous honor for Dr. Crowe, and for our entire Division. I am so proud to have Dr. Crowe in our Division. Please join me in congratulating her on this accomplishment."

Dr. Crowe was also named in Becker's ACS as one of "the 160 Gastroenterologists to Know" in the United States.



Dr. Alan F. Hofmann, Professor Emeritus, was awarded a G. Edward Folk Senior Physiologists Award from the American Physiological Society.

Fellow **Dr. Irine Vodkin's** presentation received the top rating at the San Diego Gastroenterology Society's annual research forum.

Presentations by fellows **Wilson Kwong** and **Parambir Dulai** were rated highly as well.

In top photo, from left: Dr. Kwong, Dr. Dulai, and Dr. Vodkin.

In bottom photo: **Sheila Crowe, MD** (at left), director of research and PI of the division's training



grant, with UC San Diego's GI Fellows group at the research forum. Dr. Samuel Ho, VAMC GI Section Chief, is not pictured.



Division Publications

Kim Barrett

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Lars Eckmann

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Honors: Invited Speaker at Academic Institutions

Dr. Sheila Crowe

September 2014 – Mayo Clinic Scottsdale, AZ GI Grand Rounds "Managing Nonresponsive Celiac Disease and Other Enteropathies."

November 2014 – Mexican Digestive Week, Asociacion Mexicana de Gastroenterologica (AMG), Cancun, Mexico. State of the Art Lecture "Celiac disease versus non-celiac gluten sensitivity."

November 2014 – AMG-AGA Symposium "Helicobacter pylori infection 30 years later". "Pathophysiology of H. pylori infection and related GI disorders."

November 2014 – Best of DDW-2014 in Al Khobar and in Jeddah, Saudi Arabia. "Updates on the management of GERD and Barrett esophagus" and "Handling complications and controversies related to H. pylori infection and

Faculty in the Media; Grants Awarded

antiplatelet therapy in upper GI disorders."

January 2015 – ACG Western Postgraduate Course, Las Vegas, NV. "The 25-year-old yoga instructor with diarrhea and a fear of gluten."

January 2015 - AGA Clinical Congress, Miami, FL. "Gluten sensitive enteropathy: Mucosal or functional."

March 2015 – Emory University, Atlanta, GA. Visiting Professor, GI Grand Rounds, "GI Food Allergies and Food Sensitivities" and Internal Medicine Grand Rounds, "New developments in celiac disease and other forms of intolerance to wheat or gluten."

March 2015 – UC Irvine 7th Annual Gastroenterology and Hepatology Symposium, Anaheim, CA. "Expert updates in celiac disease and gluten intolerance."

Our Faculty in the Media

Dr. Sheila Crowe was profiled in "GI physician leader to know: Dr. Sheila Crowe of UC San Diego School of Medicine" in Becker's GI & Endoscopy, February 19, 2015.

Dr. Amir Zarrinpar was interviewed on Ira Flatow's Science Friday program and podcast to discuss his two papers published in *Cell Metabolism* in December, 2014, regarding time-restricted eating and its impact to prevent and reverse obesity and diabetes.

Grants Awarded

Parambir Dulai

American College of Gastroenterology 2015 Clinical Research Award

Study: Fecal immunochemical testing (FIT) for quantifying disease activity in ulcerative colitis: Identifying a 'FIT for purpose' clinical end-point.

Pradipta Ghosh

Translational and Clinical Cancer Research Award from Moores Cancer center for project entitled "Imaging the Metastatic Potential of Single Tumor Cells in Lung Adenocarcinoma". Award of \$50,000, March 1, 2015 through February 29, 2016.

Samuel Ho

Department of Veterans Affairs: HIV, Hepatitis, and Public Health Pathogens Program (HHPHP), Office of Public Health (OPH): VISN 22 System Redesign for standardization and improved access to care for patients with chronic hepatitis C. 1/20/2015-1/19/2019. S.B.Ho (PI) \$500,000.

Department of Veterans Affairs HSR&D Merit Review IIR: Automated Surveillance and Intervention among Patients with Liver Cirrhosis (6-1-14 - 5-31-18). S.B. Ho (co-PI); M. Matheny (PI) \$1,100,000.00.

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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.

Appreciation for Philanthropic Donors

On behalf of the GI Fellows, Program Director, Program Coordinator and Faculty of the Division of Gastroenterology, we would like to thank the following physicians for their generous donation to the training program:

David Roseman Jaime Chen Mamie Dong Spencer Fong Kip Lyche Yuko Kono Sonali Master Joseph Weiss Steven Brozinsky Horacio Jinich Norman Goldberg Kimberly Hartung Alan Hofmann John & Ellen Person Robert Penrose Thomas Savides Susan Cummings Mark Kadden Stanford Gertler

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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 Universitybased medical schools, including some with leadership and administrative positions.

GI Division Office

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GI Division at VA Medical Center

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

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