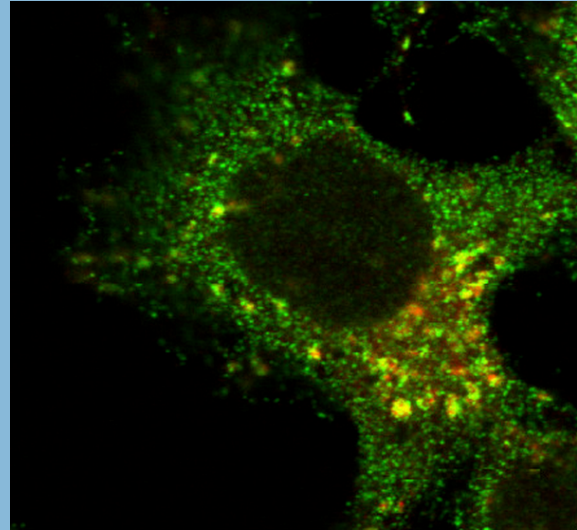




On the Inside

- A Note from the Directors
- DDRCC Symposium
- News from the DDRCC
 - New Awards & Honors
 - Charleston Imaging Symposium
 - Enrichment Series
 - Publication Highlights
- Accessing DDRCC Cores



PRMT1-modulated localization of mTOR to lysosomes in Huh7 liver cell lines. Green: mTOR; red: LAMP2. From [Yin et al., "CDK5-PRMT1-WDR24 signaling cascade promotes mTORC1 signaling and tumor growth." Cell Rep. 42\(4\): 112316 \(2023\).](#)

A Note from the Directors



Don C. Rockey
DDRCC Director

Dear All: April marks the start of Year 4 for both our P30-funded [DDRCC](#) and our P20-funded [CDLD](#). As usual, we are impressed both by how quickly the time seems to have gone by, and by how rapidly our members' research efforts have placed digestive disease research firmly on the map at MUSC. It is due to all of your energetic efforts that we look forward with optimism as



Stephen Duncan
CDLD Director

well as determination as we prepare for the competitive renewals we will submit to NIDDK and NIGMS in March of 2024. Our center self-evaluation will be especially intentional this year as we gather core usage and performance data that will be submitted with these renewal applications.

Please be on the lookout for our annual core usage survey going out in late April. This survey will evaluate not only past core usage, but will also provide an opportunity for expressing your thoughts about what cores we will support in the next phase of our center, and how we might better target cores support for the benefit of you, the members.

We look forward to our [4th Annual MUSC Digestive Disease Research Center Symposium and Retreat](#) on Friday, April 28th. We hope that this Symposium will again provide a stimulating opportunity for us to share our research accomplishments and further develop new and ongoing collaborations among our member investigators. We hope to see everyone there!

Thanks to those of you who have registered and submitted abstracts. The final deadline for abstract submission is **Friday, April 14th at 5PM**.

We'd also like to remind you again of the excellent educational opportunity afforded by the annual Charleston Workshop in Light Microscopy sponsored by our [Advanced Imaging Core](#) this coming Summer.

As part of our own ongoing work to optimize core services, we will soon be sending out another survey on Year 3 and anticipated Year 4 core usage. This year, we will include an open-ended query as to what other modified or novel core services you would find valuable going forward.

Our **7 am [Clinical / Translational](#)** and **11 am [Basic Science](#)** virtual enrichment series will continue through the beginning of June. It is not too early to submit suggestions for next year's series: [email Antonis](#) or [Don](#).

Best wishes for an exciting and productive Year 4,

Don and Steve

4th Annual MUSC DDRC Retreat and Symposium

Friday, April 28th

8AM - 12:30PM

[Register Now!](#)

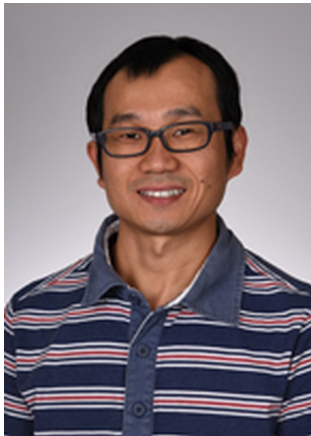
Final Abstract Deadline

April 14th

5PM

News from the DDRCC

New NIH Grant Funding: Gan Lab



[Wenjian Gan, PhD](#) (Biochemistry and Molec. Biology Dept.) was awarded a new RO1 grant from NCI:

"Characterizing and targeting PRMT5 in autophagy for cancer treatment."

RO1CA266522-01A1

06/01/2023 - 05/31/2028

\$1,709,906

Wenjian Gan, PhD

CONGRATULATIONS Dr. Gan!

MUSC Endowed Chair in Inflammatory Bowel Disease



Erin Forster, MD,
MPH

DDRC Member [Erin Forster, MD, MPH](#), Director of the Inflammatory Bowel Disease Center at MUSC, was recently appointed as the first [Marvin Jenkins Family Endowed Chair for IBD](#). As the Chair, Dr. Forster will lead the additional clinical support required to establish a patient-centered medical home for IBD. The medical home will allow for a multidisciplinary and personalized approach to the coordinated care of IBD patients.

CONGRATULATIONS, Dr. Forster!

Society Award: Jessica Hathaway-Schrader



Jessica Hathaway-Schrader, PhD

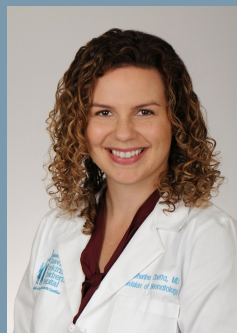
[Jessica Hathaway-Schrader, PhD](#), (Stomatology, College of Dental Medicine) is the recipient of a **2023 John Haddad Young Investigator Award** from the American Society of Bone & Mineral Research (ASBMR). This award recognizes young basic and clinical scientists in the field of bone & mineral metabolism by providing support to attend the annual Advances in Mineral Metabolism-ASBMR meeting in April, 2023.

CONGRATULATIONS, Dr. Hathaway-Schrader!

Collaboration Recognition



Mindy Engevik,
PhD

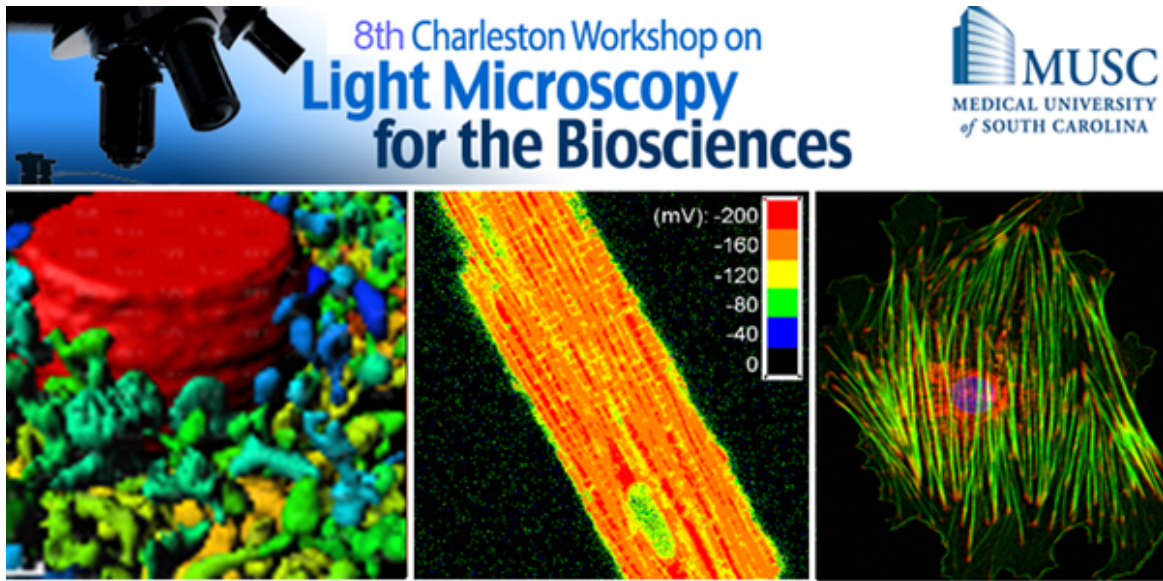


Katie Chetta,
MD

A recent article in the [MUSC Catalyst](#) highlighted a developing collaboration between DDRC members Mindy Engevik, PhD (Regen Med & Cell Biology) and Katie Chetta, MD (Pediatrics) on the causes of necrotizing enterocolitis (NEC) in premature infants. Their work together focuses on the interaction of infant feeding and intestinal microbiota with the intestinal mucosa, using intestinal organoid models.

CONGRATULATIONS Drs Engevik and Chetta!

Imaging Core Training and Educational Opportunity



Medical University of South Carolina (MUSC)
June 11-16, 2023

The **8th Charleston Workshop on LIGHT MICROSCOPY FOR THE BIOSCIENCES (LMB)** will provide a solid introduction to the concepts and practical applications of light microscopy relevant to modern cell and molecular biology under the direction of Dr. John J. Lemasters, GlaxoSmithKline Distinguished Endowed Professor at MUSC. Students will have opportunities for extensive hands-on experience with state-of-the-art equipment for optical imaging, digital image processing and deconvolution, fluorescence microscopy, confocal/multiphoton microscopy, and super-resolution microscopy guided by experienced academic and commercial faculty. Lectures and laboratory exercises will include: optics of image formation; microscope alignment; phase contrast and differential interference contrast microscopy; video and digital cameras; contrast enhancement by analog and digital image processing; principles of fluorescence and fluorescence microscopy; ion imaging and fluorescent probes, including fluorescent proteins; fluorescence resonance energy transfer; light-sheet imaging; laser scanning confocal and multiphoton microscopy; and super-resolution microscopy. Commercial faculty representing leading microscope manufacturers will make available for student use the latest and most advanced instrumentation for light microscopy, image detection, and computerized image analysis. **LMB** is designed for doctoral level scientists, pre-doctoral students, and high-level technical personnel. No prior experience with microscopy is required. All students will benefit from in-depth interaction with instructors. Students are encouraged to bring their own specimens for analysis.

The workshop qualifies for **1 course credit as DDBS 722, Light Microscopy for the Biosciences for students registered with the College of Graduate Studies.**

Course fee: \$650.00

Application deadline: [April 25, 2023](#)

For further information contact: [Li Li, Ph.D.](#), Manager, Cell & Molecular Imaging, 70 President Street, MSC 139, Charleston, SC 29425

We want to hear about your progress and achievements!

Please send your news and announcements to the DDRCC Digest via email to the [Center Manager](#).

DDRCC and CDLD Enrichment Seminar Series

We are privileged to host an outstanding series of virtual seminars this year, featuring speakers of national and international renown. All of the GI & Hepatology 7am series were recorded, and are available through Box. A few notable highlights are mentioned below. The complete collection of recorded talks are available to DDRCC and CDLD members [here](#).

DDRCC / CDLD / GI and Hepatology Grand Rounds:
Wednesday, 7am EST ([Teams](#))

April 5th

Ahmir Ahmad, MD Queen's Hospital, London

Implementation of optical diagnosis with a "resect and discard" strategy in clinical practice: DISCARD3 study.

April 12th

Thomas Werth, MD MUSC

Severe alcoholic hepatitis: treatment and when liver transplant is appropriate.

April 19th

Catherine Walsh MD University of Toronto

Update on teaching endoscopy.

April 26th

Luis Lara, MD Ohio State University Medical Center

A review of diagnosis and management of chronic pancreatitis and the role of total pancreatectomy and islet autotransplantation.

May 3rd

Andres Duarte, MD Northwestern University

Frailty in cirrhosis: current management approaches.

May 17th

Vincent Chen, MD University of Michigan

Genetics, diabetes and NAFLD: risk of incident cirrhosis.

May 24th

James Lau, MD Chinese University of Hong Kong

Acute upper GI bleeding.

May 31st

Kathryn Englehardt, MD MUSC

Gastroesophageal junction (GEJ) tumors.

DDRCC/CDLD/ RMCB Virtual Seminar Series:

Wednesday, 11 am EST (Zoom)

May 17th

Roberto Pacifici, MD Emory University School of Medicine

Gut microbiota in bone mass heritability and response to PTH.

To receive notifications for our Enrichment series seminars, please contact the DDRCC Center Manager.

Selected GI Publications by our Members

Each newsletter, we highlight a subset of the many outstanding papers published and presented by our DDRCC members. We strive to mention particularly significant primary research papers where our members were lead authors or key contributors, and to represent the broad scope of clinical, basic science and clinical-translational research interests across our membership. To assist us in these efforts, we continue to encourage you to [email Kyu](#), our center manager, about your notable publications and presentations.

While space does not allow us to list a comprehensive month-to-month list of our member publications, such a list can be found on our DDRCC website [here](#).

A complete listing of our DDRCC member publications since its inception can also be found through NCBI [here](#).

February, 2023 - March, 2023

Yin S, Liu L, **Ball LE**, Wang Y, Bedford MT, **Duncan SA**, Wang H, **Gan W**. CDK5-PRMT1-WDR24 signaling cascade promotes mTORC1 signaling and tumor growth. Cell Rep. 2023 Mar 29;42(4):112316. PubMed PMID: 36995937.

Pryce BR, Wang DJ, Zimmers TA, Ostrowski MC, **Guttridge DC**. Cancer cachexia: involvement of an expanding macroenvironment. Cancer Cell. 2023 Mar 13;41(3):581-584. PubMed PMID: 36868225.

Khalifa A, **Obeid JS**, Gregoski MJ, **Rockey DC**. Accurate Identification of Patients with Cirrhosis and Its Complications in the Electronic Health Record. Dig Dis Sci. 2023 Mar 10; PubMed PMID: 36899112.

Bajaj JS, Hassanein TI, Pylsopoulos NT, Sanyal AJ, Rahimi RS, Heimanson Z, Israel RJ, **Rockey DC**. Dosing of Rifaximin Soluble Solid Dispersion Tablets in Adults With Cirrhosis: 2 Randomized, Placebo-controlled Trials. Clin Gastroenterol Hepatol. 2023 Mar;21(3):723-731.e9. PubMed PMID: 35750249.

Forbes N, **Elmunzer BJ**, Allain T, Parkins MD, Sheth PM, Waddell BJ, Du K, Douchant K, Oladipo O, Saleem A, Cartwright S, Chau M, Howarth M, McKay J, Nashad T, Ruan Y, Bishay K, Gonzalez-Moreno E, Meng ZW, Bass S, Bechara R, Cole MJ, Jalink DW, Mohamed R, Turbide C, Belletrutti PJ, Kayal A, Kumar PR, Hilsden RJ, Buret AG, Hookey L, Heitman SJ. Effect of Disposable Elevator Cap Duodenoscopes on Persistent Microbial Contamination and Technical Performance of Endoscopic Retrograde Cholangiopancreatography: The ICECAP Randomized Clinical Trial. JAMA Intern Med. 2023 Mar 1;183(3):191-200. dPubMed PMID: 36689215; PubMed Central PMCID: PMC9871945.

Elmunzer BJ, Maranki JL, Gómez V, Tavakkoli A, Sauer BG, Limketkai BN, Brennan EA, Attridge EM, Brigham TJ, Wang AY. ACG Clinical Guideline: Diagnosis and Management of Biliary Strictures. Am J Gastroenterol. 2023 Mar 1;118(3):405-426. PubMed PMID: 36863037.

Accessing DDRC Cores

Quick Links for DDRCC and CDLD Core Use

A reminder that Full Members receive subsidized usage of our [cores](#). Below are some summary details for accessing the cores and initiating projects.

This project was supported in part by NIH P30 **DK123704** (*core facility*) at the MUSC Digestive Disease Research Core Center.

This project was supported in part by NIH P20 **GM120475** (*core facility*) at the MUSC Digestive Disease Research Core Center.

Analytical Cell Models Core:

- The DDRCC and CDLD both **fully subsidize** the use of the ACC by its members.
- For iPSC projects, please contact the Core Director, [Dr. Steve Duncan](#).
- For primary cell isolation, please contact [Dr. Don Rockey](#).

Advanced Imaging Core:

- The DDRCC and CDLD both provide **full members** with a **25% discount** on facility fees.
- For imaging projects, please contact the Core Director, **Dr. John Lemasters** and Core Manager **Li Li**.

CDLD Animal Models Core:

- The CDLD **fully subsidizes** the use of the Animal Models Core for its **Junior Investigators**.
- Other **discounts** may currently apply for DDRCC members.
- For animal projects please contact the Core Director, **Dr. Kristi Helke**.
- For gnotobiotic mouse models, please contact **Dr. Caroline Westwater**.
- For transgenic and CRISPR/Cas9 projects, please contact the TGE Director, **Dr. Fulei Tang**, or Executive Director, **Dr. Alexander Awgulewitsch**.

DDRCC Proteomics Core:

- **DDRCC full members** will receive a 50% discount from facility fees.
- For MS projects, please contact the Core Co-Director, **Dr. Lauren Ball**.

Clinical Component Core:

- The DDRCC and CDLD **fully subsidize** biostatistical consultations with the Clinical Component Core by all of its members, including biostatistical support and mentoring for its Junior Investigators and Pilot & Feasibility applicants and awardees.
- To start a project, visit the [SPARC website](#) and submit a Biostatistics, Design & Epidemiology request, and contact:
 - DDRCC Core Director, **Dr. Paul Nietert**
 - CDLD Director **Dr. Ramesh Ramakrishnan**.

CITE OUR GRANTS

FOR THE DDRCC:

P30 DK123704

FOR THE COBRE CDLD:

P20 GM120457

For queries regarding DDRCC news, membership and cores, please contact the Center Manager:

Kyu-Ho Lee, MD-PhD

Gastroenterology and Hepatology
Department of Medicine
CSB HE903B
96 Jonathan Lucas St
Charleston, SC 29425
(843) 792-1689

[Email Dr. Lee](#)

For queries regarding the COBRE in Digestive and Liver Disease, please contact the COBRE PI:

Stephen Duncan, DPhil

Department Chair
Regenerative Medicine and Cell Biology
BSB 657A MSC508
173 Ashley Ave
Charleston, SC 29425
(843) 792-9104

[Email Dr. Duncan](#)

Visit the DDRCC Website:

<https://medicine.musc.edu/departments/divisions/gastroenterology/research/labs-and-centers/ddrcc>

Visit the CDLD Website:

<https://medicine.musc.edu/departments/regenerative-medicine/cobre-digestive-liver-disease>



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