“In addition to our overall vision of promoting and recognizing innovative discoveries, one of our main goals is to elevate and increase the career development opportunities for our young investigators and trainees.”

Pradeep Dudeja, Ph.D., Professor

Dear Members of the APS GI-Liver section,

It is my pleasure and privilege to serve you and lead our section. We have been and still are confronted with unusual and difficult challenges at every aspect of our lives due to this ongoing COVID-19 pandemic and the current “Omicron variant”- surge. We have faced many roadblocks because of the pandemic for 2 years, including disruptions in laboratory work, no in-person meetings and limited networking opportunities. Despite all these difficulties, we have shown our resilience and worked really hard to overcome these hurdles. Now, we should all be excited to see light at the end of the tunnel as Experimental Biology (EB) 2022 is planned to be in-person meeting of APS in Philadelphia. Our APS meeting at EB 2021, while held remotely, was quite successful, proving the mantle of new technologies which have made some of these challenges less painful. We have seen great presentations and discussions by our trainees and distinguished speakers. We are proud to honor our 2021 awardees (included in this newsletter) including awards e.g., “Research Recognition Awards” and “Poster Awards” for trainees and other prestigious awards including New Investigator Award, Distinguished Research Award and Horace W. Davenport Distinguished Lectureship.

In addition to our overall vision of promoting and recognizing innovative discoveries, one of our main goals is to elevate and increase the career development opportunities for our young investigators and trainees. We are starting many new initiatives to help the careers of trainees and junior faculty members to make this APS GI-Liver section membership more rewarding for all. We have procured additional funds for awards (from Raj and Prem Goyal...
Foundation) for 4-5 additional trainee awards, and 1 additional senior lectureship award focused on better understanding of the pathophysiology of GI and liver diseases. We are also emphasizing on the initiative called “mentoring on the go” for trainees to be matched with a senior GIL member to meet at EB and are establishing a “Career Development Subcommittee” within our GI-Liver section. We are committed for additional roles for our trainees to get involved both with our programming and career development activities. Starting in 2023, we will also have the initiative of publishing yearly “State of Science” article in our field in AJP-GIL journal to keep all our members abreast of what is new and exciting in the field. We have revived the publishing of our GIL section’s newsletter to better communicate with you all to appraise you of what is expected from our section throughout the year including programming at APS meetings, recognition of awardees and career development opportunities. We are excited about our EB 2022 meeting in Philadelphia and look forward to excellent GIL sessions, trainee conference, awards and GIL banquet and great networking opportunities.

I am also thankful to our highly talented steering committee members and the subcommittee leaders for their contributions to GI-Liver programming, awards, trainee symposium and their representations on APS committees. While APS has done well with annual meetings under the umbrella of EB, 2022 happens to be the last APS meeting with EB. We have now come to a stage that we are excited about the new avenue for APS standalone “Physiology Summit” meeting in 2023, which is likely to increase more opportunities for the growth of APS, our GIL section as well as career development opportunities for all of us. I urge you all to please persuade all your physiology colleagues at your local institutions (who are not yet APS members) to the benefits of the APS membership and the role of our section in career growth of all involved in GI-Liver research. In addition to increasing the involvement of trainees in our section’s activities, we are also committed to enhancing the inclusion, equity, and diversity in all leadership roles within our sub-committees. I also urge all of you who have benefitted by serving on APS-GIL section in various roles, enjoyed state-of-the-art programming at the APS meetings, networking and from awards from the APS to please include the role of APS GIL on “Acknowledgement” slide in your talks. This is one of the ways for us to give back to APS and our section by increasing awareness of its roles and increasing the membership to APS and our section. Last but not the least, I urge you all to please continue to support your section. I wish you all a very happy and healthy new year 2022 and look forward to seeing you all in person for an outstanding EB 2022 meeting.
Contents

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7. News from members
   - Most downloaded AJP-GIL papers in 2021
8. APS-Goyal Family Charitable Foundation
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10. APS resource for trainees
    (APS Career Gateway)
11. American Physiology Summit 2023
    (APS 2023)
GI-Liver Steering Committee Members

For the full roster in the Hub, please check the link:
Recipients of the Horace Davenport Distinguished Lectureship of the APS Gastrointestinal & Liver Physiology Section

2021 Awardee
Linda Samuelson
University of Michigan, Ann Arbor
"Intestinal Stem Cells: Tissue Maintenance and Regeneration"

Distinguished Research Award of the Gastrointestinal & Liver Physiology Section (GI&L) (formerly Takeda Distinguished Research Award)

2021 Awardee
Huiping Zhou
Virginia Commonwealth University, Richmond, Va.

Recipients of the Gastrointestinal & Physiology Section New Investigator Award

2021 Awardee
Joseph Hyser
Baylor College of Medicine, Houston, Tx.

Gastrointestinal & Liver Physiology Section (GIL) Steven M. Horvath Research Recognition Award

2021 Awardee
Nathan Calzadilla
University of Illinois at Chicago
Gastrointestinal & Liver Physiology Section (GIL) Research Recognition Award

2021 Awardees
Mona Elgazzaz
Louisiana State University Health Sciences, New Orleans

Kristen Engevik
Baylor College of Medicine, Houston, Tx.

Garett Grant
University of Utah, Duchesne, Ut.

Melissa Nelson
Baylor University Medical Center, Dallas, Tx.

Aisha Qazi
University of Illinois at Chicago, Chicago

Yanyan Wang
Virginia Commonwealth University, Richmond, Va.
https://www.apsebmeeting.org/eb2022/schedule-sponsor.cfm?id=13

Saturday, April 2, 3-4:30pm
John Forte GIL Section Distinguished Abstract Plenary
Room 202B, Chairs: Karen Edelblum and Mark Frey

Sunday, April 3, 8:30-10am
Liver Diseases and Organ Crosstalk: Microbiome, Metabolites and Mechanisms
Room 201C, Chairs: Jun Sun and Melanie Gareau

Sunday, April 3, 3:30-5pm
Horace W. Davenport Distinguished Lectureship – Dr. Sean Colgan
Room 204C

Monday, April 4, 8:30-10am
Extracellular Vesicles in GI Physiology and Beyond
Room 202A, Chairs: Sarah Andres and Lauren Davey

Tuesday, April 5, 8:30-10am
Effects of Diet and Microbiota on Gastrointestinal and Liver Physiology
Room 202A, Chairs: Simon Hirota and Luis Rivera-Arce
GI & Liver Section Banquet

Where

**SPICE FINCH**
220 S 17th Street, Philadelphia, Pennsylvania

Section events are held in conjunction with the American Physiological Society (APS) annual meeting at Experimental Biology (EB), which will be held April 2–5, 2022, at the Philadelphia Convention Center. Learn more and register at apsebmeeting.org.

When

Monday, April 4, 2022
6:30PM Cocktail hour and award presentation
7:30PM Dinner
Banquet menu listed below

Tickets

$90 Faculty & Guests
$40 for Trainees (Undergraduate/Graduate Students, Postdoctoral Fellows, Lab Personnel)
$25 for GI & Liver Section Trainee Award Applicants

Deadlines
Tickets must be purchased by Friday, March 28, 2022

https://ebus.physiology.org/PersonifyEbusiness/APSSStore/Banquet

Purchase Tickets:

Tickets are only available for purchase online and are sold on a first-come, first-served basis. We encourage you to purchase your tickets early.

DIETARY RESTRICTIONS
Please contact the banquet organizer if you have dietary restrictions (e.g. allergies, vegan)

QUESTIONS?
Contact Kate Hamilton at hamiltonk1@chop.edu or Ann Marie Bocus, APS Sections Administrator, at abocus@physiology.org.
Hello from the new editorial team at
American Journal of Physiology—GI and Liver Physiology!
https://journals.physiology.org/ajpgi/edboard

We are delighted to have the opportunity to serve the APS GIL section by steering this important journal
during a period of rapid advance and rapid change in the field. Our goal over the next few years will be
to continue to push the envelope scientifically at AJP—GIL, while also exploring new ideas to grow its
audience and maximize its value to the physiology community. Particular challenge areas that we intend
to address include:

• Emphasizing how the physiology of the digestive organs influences other systems.
• Defining leading-edge technology and novel model systems.
• Engaging trainees and early-career faculty more thoroughly.
• Involving a more inclusive scientific community.
• Redoubling our focus on basic mechanism.
• Embracing social media and other new ways of science communication.

A vital research community needs a strong journal that represents the breadth of study and the best work
being done in that field. AJP—GIL has filled that role in digestive physiology for over 40 years. Our
new editorial team looks to leverage the recent APS rebranding together with a historically collegial and
engaged research community to build on this history to bring the journal forward into the future.

Mark R. Frey, Children’s Hospital Los Angeles/University of Southern California (Editor-in-Chief).
Jun Sun, University of Illinois (Deputy Editor).
Michele A. Battle, Medical College of Wisconsin.
Melanie Gareau, University of California, Davis.
Robert C. Huebert, Mayo Clinic (Rochester).
Arion Kennedy, North Carolina State University.
Daniel Poole, Monash Institute of Pharmac  eu tical Sciences.
Vijay P. Singh, Mayo Clinic (Scottsdale).
Cormac Taylor, University College Dublin.
Greetings from all of us at American Journal of Physiology-Gastrointestinal and Liver Physiology!

We would like to thank our authors, readers and editorial board for their support over this past year. Below, we’re sharing highlights from 2021, including the year’s most downloaded articles. Be sure to connect with us on social media to see what’s coming next in 2022.

**Most Downloaded Articles from 2021**

**Nrf2 expression in pancreatic stellate cells promotes progression of cancer**
Yu Tanaka, Shin Hamada, Ryotaro Matsumoto, Keiko Taguchi, Masayuki Yamamoto, Atsushi Masamune

**Dietary fat and low fiber in purified diets differently impact the gut-liver axis to promote obesity-linked metabolic impairments**
Noëmie Daniel, Laïs Rossi Perazza, Thibault V. Varin, Jocelyn Trottier, Bruno Marcotte, Philippe St-Pierre, Olivier Barbier, Benoit Chassaing, André Marette

**Amygdala microglia modify neuronal plasticity via complement C1q/C3-CR3 signaling and contribute to visceral pain in a rat model**
Tian Yuan, Albert Orock, Beverley Greenwood-Van Meerveld

**Patient personalized translational tools in cystic fibrosis to transform data from bench to bedside and back**
Kavisha Arora, Fanmuyi Yang, John Brewington, Gary McPhail, Alexander R. Cortez, Nambirajan Sundaram, Yashaswini Ramananda, Herbert Ogden, Michael Helmrath, John P. Clancy, Anjaparavanda P. Naren

**Every breath you take: Impacts of environmental dust exposure on intestinal barrier function–from the gut-lung axis to COVID-19**
Meli’sa S. Crawford, Tara M. Nordgren, Declan F. McCole
Program Overview
The following document is a proposal for the creation of an award program and lectureship in service to the American Physiological Society (APS) and its Gastrointestinal and Liver Section community through a grant from the Goyal Family Charitable Foundation (GFCF) for Raj and Prem Goyal Fund. The mission of advancing the study of gastrointestinal physiology through the exchange of scientific ideas and creation of career development program is shared by both APS and the GFCF. The two initiatives outlined below are designed to support that mission:

1. **Raj and Prem Goyal GIL Translational Research Award** - This award will be distributed to early career physiologists/students in recognition of their promising translational research in gastrointestinal and liver physiology in relation to furthering the understanding of mechanisms of disease. The Gastrointestinal & Liver Section Steering Committee will select the award recipient. This award will be presented at the GIL Section banquet during APS’ Annual Meeting. Awardees will receive the following benefits:

   - $500 travel stipend
   - Complimentary EB registration
   - Plaque recognizing awardee

Four (4) to five (5) awards will be distributed annually depending upon the volume and quality of applications received.

2. **Raj and Prem Goyal GIL Lectureship in Pathophysiology** - This award recognizes exemplary contributions of research in physiology in understanding the mechanism and treatment of gastrointestinal and liver diseases. The Gastrointestinal & Liver Section Steering Committee chooses the recipient of this award. Awardees will deliver a lecture at APS’ Annual Meeting and will be recognized at the Gastrointestinal & Liver Section banquet. Awardees will receive the following benefits:

   - $1,500 stipend
   - Complimentary EB registration
   - Plaque recognizing awardee

**Period of Support**
GFCF will support the award for at least 15 years; after which, APS and GFCF will meet to review application rates, program impact, and update award program audience and criteria, if needed.

**Grantor Benefits & Recognition** Support of the Raj and Prem Goyal Award will receive recognition on the APS Section Sponsor and APS GIL Section Award webpages.
APS-Goyal Family Charitable Foundation | Gastrointestinal & Liver Section
Award & Lectureship APS Organizational Mission Statement

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GI & Liver Newsletter

THE ABSTRACT ISSUE
APS’s annual meeting is held every spring in conjunction with the Experimental Biology (EB) meeting. Five societies (APS, AAA, ASBMB, ASIP and ASPET) jointly sponsor EB. The result is an interdisciplinary, biomedical and scientific meeting featuring a robust lineup of plenary and award lectures, symposia, oral and poster sessions and career-building activities, plus an exhibitor showcase of scientific equipment, supplies and publications.

As you all know by now, the American Physiological Society (APS) annual meeting at Experimental Biology (EB) 2022 will be held April 2–5 in Philadelphia. After two years of meeting virtually, this upcoming April we will all meet in person—finally! Additionally, this year will also be bittersweet for the APS community, after more than 25 years, the 2022 meeting will mark the end of an era, as it will be the last EB for APS. At the 2022 EB, APS will honor the past and look forward to the future. Don’t miss this opportunity to join us.

APS is looking to convene a world-class annual meeting, with top scientists, exceptional science, and a “must attend” experience that will elevate the brand of physiology globally. Based on expert opinion, it has been decided that being a part of EB may not be optimal for this purpose. Although it is possible to improve the performance of APS within the framework of EB, APS would be better able to achieve these objectives by building something new. As a result, the APS Council voted unanimously to part ways with EB following the 2022 meeting and begin the process of building a new, world-class meeting for APS.

A task force is being created to design the new meeting with guidance from an expert consulting firm and staff. APS will continue to solicit everyone’s participation at every step of this process and make sure your voice is heard. APS also wants to be sure to retain many of the positive elements of EB, including cross-disciplinary engagement and a great experience for trainees. Find out what’s in store for 2023 at the brand-new meeting of APS “Physiology 2023”.

Photo Credit: Amy Engevik, TAC Representative
Ready to submit an EB abstract?
Submit your abstract to the GIL section and apply for GIL awards
Presenting your work through a poster is a key form of disseminating information in the scientific community. In short, a poster should preferably contain a snapshot of your work and catch the attention of the audience to trigger a discussion for potential collaboration and/or thought provocation in the reader. Here are 4 important tips to make sure your abstract stands out for the EB conference.

1. Concise and clear title:
The title of your poster is of paramount importance. This should be simple and clearly indicate the work conducted in the poster. Make sure you grab the attention of the scientific community by using important key words in your title so that your poster will pop-up during the search. The EB App enables this function and everyone who is interested in similar work will surely plan to visit to your poster.

2. Always state the purpose of the study:
Stating the objective, aims or purpose of the study is an important way to gain the attention of the audience. This will put your research in context and allow readers to get an overall idea of the work conducted. Apart from that, it will also help you to ensure your poster served its purpose once you presented your work.

3. Pay attention to layout and content
The layout of the poster is another factor which attracts visitors to your poster. In general, something to keep in mind is to divide the poster into at-least three vertical sections. The first section should contain the purpose, background and methods used in your study. The mid-section should be dedicated for the results. Make sure the figures in the poster are legible from a reasonable distance and the colors used are appropriate to the overall color theme of the poster. The final section could carry-on more results and end with the conclusion. Don’t forget to include the funding sources and affiliations in this section if applicable.

4. End with a strong conclusion
The conclusive statement of the poster should highlight the impact of the work while restating the key findings. Be sure to mention the future directions of the work. This will facilitate potential collaborations with peers who share similar interests.

Things to Avoid
There are many instances where trainees re-print the accepted abstract on the poster. This makes the overall appearance of the poster very crowded and will result in loss of potential audience.

Finally, make sure to practice a summary for your poster to any visitor (a short description of your work in 10-15 seconds). This should ideally lead to a very engaging conversation which starts off with a question from your visitor. Be proud of your work and always present it with enthusiasm. Good luck!

EB Abstract Rules:

1. Authors are not permitted to submit an abstract on work that has previously been published.

2. All human and animal studies must have been performed under the proper regulations.

3. Each abstract must be sponsored by a member of a Host Society or an official Guest Society. We recommend the American Physiological Society (APS).

4. The abstract title, authors, affiliations and body of the abstract should not exceed 3000 characters excluding spaces and must contain at least 100 characters.
Want to present a poster?

Apply to these topics

Posters:
1175-APS  Alcoholic and nonalcoholic fatty liver diseases
1176-APS  Barrier function and repair
1177-APS  Effects of diet and metabolites on mucosal immunology
1178-APS  Effects of diet on GI and liver physiology
1179-APS  Gastric physiology and pathophysiology
1180-APS  Gastrointestinal cancer and metastasis
1181-APS  Gastrointestinal development
1182-APS  Gastrointestinal motility
1183-APS  Gastrointestinal nutrient sensors
1184-APS  GI hormones, peptides and receptors
1185-APS  GI and liver epithelial junctions
1186-APS  GI and liver stem cells
1187-APS  Growth factors, proliferation, differentiation and apoptosis
1188-APS  Immunology and microbiology of the gut
1189-APS  Intestinal inflammation and pathophysiology
1190-APS  Liver physiology and pathophysiology
1191-APS  Metal ion transport
1192-APS  Metabolic disease: GI and liver function
1193-APS  Microbes and nutrition
1194-APS  Microbiome of the GI tract
1195-APS  Nuclear receptors in the liver and GI tract
1196-APS  Nutrient metabolism in the gut
1197-APS  Pancreatic physiology and pathophysiology
1198-APS  Prebiotics, probiotics and gut function
Want to give an oral presentation in addition to a poster?

Apply to an APS GIL

FEATURED TOPIC:

1170-APS
Gastrointestinal and Liver Physiology and Disease (Hirota)

1171-APS
John Forte Gastrointestinal and Liver Physiology Distinguished Abstract Plenary

How to select an APS GIL Topic on the EB website
See you all at EB 2022

Check out the new APS Website:

https://www.physiology.org/

APS members work at the frontiers of science to advance our understanding of life and health. Their efforts are leading to treatments for the deadliest and most debilitating diseases affecting humans and enhancing our understanding of topics like genetics, neuroscience, obesity and sex differences. You can be part of this vibrant community.
NEW APS Career Gateway

A successful scientific career requires more than just scientific expertise. To maximize a career in science, investigators, clinicians and educators need a well-rounded professional skill set,

The **APS Career Gateway** provides physiologists professional development for every step of their career journey. Check out some of the new resources for trainees and students below:

- **Imposter Syndrome**
  What is imposter syndrome, how does it impact careers and what can we do about it?

- **Inside Grant Funding**
  Program officers and study section reviewers share their tips for securing research dollars.

- **Negotiating for a Position: Offer Letters**
  What's typically included in an academic offer letter, what to consider and how to negotiate.

- **Progressing to Postdoc**
  Tips on how best to transition from PhD to postdoc to faculty.

- **Promoting Your Research after It Is Published**
  Promoting your article can increase the visibility, impact and citations of your work.

**Enter Career Gateway**
The American Physiological Society (APS) values all members of our physiology community and hopes to use our resources to grow the next generation of physiologists. We invite you to share these upcoming trainee opportunities and resources with your students, lab assistants and postbaccalaureates.

**Graduate Physiology & Biomedical Science Program Catalog**

The Graduate Physiology & Biomedical Science Program Catalog is a resource to help you contemplate graduate school and the next step in your education and career. This online directory provides undergraduate biology and life science students and early-career physiologists with graduate program profiles that facilitate your search for the ideal institution.

**Recently Added Programs**

- **Texas A&M University**
  - Medical Physiology
  - Bryan, Texas

- **Wake Forest University**
  - Winston-Salem, North Carolina

**Access the Catalog**

**Summer Undergraduate Research Fellowship**

**Summer 2022**

Apply to participate in hands-on research in the laboratory of an established researcher and APS member for 10 weeks. Fellows have the opportunity to:

- network with other APS Summer Undergraduate Research Fellows interested in and conducting biomedical or basic research,
- explore the nature of research and the scientific process,
- investigate physiology career options and what it takes to find career success,
- learn about scientific writing and draft a meeting abstract,
- learn about common ethical issues in figure and text preparation, and
- pose their career questions to APS members.

**Apply by February 1, 2022**
We’re counting down the days to the American Physiological Society’s (APS) new world class meeting launching in 2023. Led by a diverse team of APS members, we’ve spent more than 450 hours creating an innovative, unmissable annual event for those working, learning and teaching in the biomedical sciences.

Our new plan includes:

- expanding multidisciplinary, cross-sectional programming;
- hosting new game-changer and foundational sessions; and
- designing spaces that invigorate and inspire attendees, while bringing the community together to connect.

In February 2021, Society leaders held a virtual town hall with live Q&A to share our progress and give you a first look at the new meeting.

**The GIL programming subcommittee** is now accepting proposals for Featured Topic and Symposium sessions for the APS 2023 meeting. We highly encourage both investigators and trainees to submit proposals that reflect the diverse scientific interests of the GiL section.

If you are interested in organizing a session, please contact Karen Edelblum, ke163@rutgers.edu, for more information.