The APSA 50th Anniversary Meeting is a golden opportunity to be with your community – the practicing surgeons, students, colleagues, vendors and luminaries – who have brought pediatric surgery to this point and who are forging the path to the future. The Program and Anniversary Committees have created a super-charged event featuring our usual high-quality research, techniques and services along with innovative new sessions, your colleagues’ artistic talents and more than 400 presenters.

- **JPS TEC Talks.** Top Educational Content covering topics of particular interest
- **PED Talks - Pediatric surgery, Education, Disruption.** Three sessions exploring artificial intelligence, robotics and gun violence as public health issue
- **APSA’s Past: Roundtable and Lunch.** Hear from surgeons who helped shape our profession
- **Jay and Margie Grosfeld Presidential Symposium.** A series of presenters who shine a light on the patients and communities we serve
- **Industry Symposium.** Cutting-edge medicine for pediatric surgeons presented by Biostage
- **Future of APSA: Future of Research, Education and Clinical Surgery.** How do we evolve and continue to best serve our patients
- **Robert Gross Debate.** A lively debate between pediatric surgeons arguing pros and cons of important issues
- **Tour of the John F. Kennedy Library & Museum.** Explore the legacy of President Kennedy during this optional afternoon event. *Due to the popularity of this event pre-registration is required.*

The program begins Sunday, May 19, at Noon and concludes with the President’s Banquet on Wednesday, May 22.
Educational Objectives

The APSA Annual Meeting is designed to provide comprehensive continuing education in the field of pediatric surgery. APSA strives to bring together the world’s leading pediatric surgery authorities to present and discuss the most recent clinical and basic science research efforts. This meeting covers the breadth of pediatric surgery and is intended to acquaint attendees with the latest research findings, clinical discoveries and trends that influence the day-to-day practice of pediatric surgery. The topics at these sessions have been selected by the Program and Education Committees and approved by the APSA Board of Governors. Topic selection is based on previous meeting attendee surveys, committee feedback regarding learning needs, and member requests from surveys and journal articles about what is relevant to their practices. The scientific sessions consist of basic science research and practical clinical presentations. “Quickshot” presentations are shorter and meant to provide snapshots of important basic science and clinical research endeavors. The poster sessions provide young investigators an opportunity to share preliminary research or to inform the membership about additional topics that may be of interest.

As a result of attending the sessions, attendees will be able to:

- Discuss the current level of evidence supporting current approaches to common pediatric surgical clinical problems.
- Explain the basic science foundations of pediatric surgical diseases.
- Describe the similarities and differences between practice in the United States and other countries in their approaches to the optimization and regionalization of pediatric surgical care.
- Identify and discuss the advantages and pitfalls of social media and medicine and make social media work in support of excellent patient care.

Who Should Attend

The APSA Annual Meeting regularly attracts more than 800 attendees who span the pediatric surgery arena from academia to government and private practice. Pediatric surgeons, pediatric surgical specialists in academic and community practice, pediatric surgical nurses and physicians in related disciplines and surgical residents interested in pediatric surgery are encouraged to attend.
Invited Speakers

Visit the APSA website to learn more about our Invited Speakers

Jay and Margie Grosfeld Presidential Symposium
Tuesday, May 21, 2019 | 11:30 a.m. – 1:30 p.m.

Social Determinants of Health Workshop
Wednesday, May 22, 2019 | 10:45 a.m. – 12:15 p.m.

Adam J. Foss, Esq.
Founder and Executive Director
Prosecutor Impact
Boston, MA

Adam J. Foss is a former Assistant District Attorney in the Juvenile Division of the Suffolk County District Attorney’s Office (SCDAO) in Boston, MA, and a fierce advocate for criminal justice reform and the importance of the role of the prosecutor in ending mass incarceration. Mr. Foss believes that the profession of prosecution is ripe for reinvention requiring better incentives and more measurable metrics for success beyond simply “cases won”, leading him to found Prosecutor Impact - a non-profit developing training and curriculum for prosecutors to reframe their role in the criminal justice system.

PED TALK | Pediatric surgery, Education, Disruption #1: Artificial Intelligence
Monday, May 20, 2019 | 11:30 a.m. – Noon

Michael C. Muelly, MD
Product Manager, Google Cloud Healthcare & Lifesciences

Dr. Muelly leads provider productivity/telehealth on Google Cloud’s Healthcare & Lifesciences team with the goal of enabling providers to deliver outstanding patient care efficiently. He works on real-world deployment strategies for AI tools in healthcare and solving challenges to unlock the power of data for patients. Prior to his current role at Google, he worked as a machine learning researcher in the Google AI (Healthcare) group. Prior to Google, Dr. Muelly was a full-time radiologist and researcher at Stanford University. He continues on the radiology faculty at Stanford University and practices diagnostic radiology specializing in body MRI.

He co-founded companies to enable radiology in the cloud and a network security solutions provider in the past. Dr. Muelly completed a residency in diagnostic radiology and his subspecialty fellowship in body MRI at Stanford University. Prior to that he completed an internship in general surgery at Penn State Hershey Medical Center, obtained his MD and attended graduate school in engineering physics at the Pennsylvania State University, and completed his BS in mathematics and computer science at the University of Pittsburgh.
PED TALK | Pediatric surgery, Education, Disruption #2: Robotics  
Monday, May 20, 2019 | 3:15 p.m. – 3:45 p.m.

Marc Raibert, PhD  
*Chief Executive Officer*  
*Boston Dynamics*  
*Waltham, MA*

Marc Raibert is founder and CEO of Boston Dynamics, a company that creates some of the world’s most advanced dynamic robots, such as BigDog, Atlas, Spot and Handle. These robots are inspired by the remarkable ability of animals to move with agility, dexterity, perception and intelligence. A key ingredient of these robots is their dynamic behavior, which contributes to their effectiveness and versatility in the real world.

Before starting Boston Dynamics, Raibert was Professor of Computer Science and Robotics at MIT and Carnegie Mellon. While at CMU and MIT Raibert founded the Leg Laboratory, a lab that helped establish the scientific basis for highly dynamic robots and that set the stage for the work done at Boston Dynamics. Raibert is a member of the National Academy of Engineering.

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PED TALK | Pediatric surgery, Education, Disruption: #3 Gun Violence as a Public Health Issue  
Wednesday, May 22, 2019 | 3:30 p.m. - 4:00 p.m.

Joseph Sakran, MD  
*Associate Chief, the Johns Hopkins Hospital*  
*Division of Acute Care Surgery and Director EGS*  
*Baltimore, MD*

Dr. Sakran is an assistant professor of surgery, director of emergency general surgery and associate Chief of the Division of Acute Care Surgery at the Johns Hopkins Hospital. As a former victim of gun violence, Joe spends a significant portion of his time as a clinician, researcher and advocate with a primary goal of reducing firearm death and disability in America. To this end, he recently founded the organization @ThisIsOurLane, a platform to help unite healthcare providers and deliver one strong voice in ending gun violence. Dr. Sakran completed a one-year educational sabbatical at the Harvard Kennedy School of Government where he developed a unique skill set within public policy, economics and leadership development. In 2017, Joe was selected by *Becker’s Hospital Review* as one of Healthcare’s Leaders under 40. He is a sought after national and international speaker and holds numerous national roles in surgical organizations. Beyond medicine, Joe serves as a Board Director for the Brady Campaign and recently was selected to join the Presidential Leadership Scholars program.
Future of APSA  
Wednesday, May 22, 2019 | 12:45 p.m. – 2:00 p.m.

Jo Shapiro, MD  
Associate Professor, Otolaryngology  
Department of Surgery, Brigham and Women’s Hospital  
Harvard Medical School  
Boston, MA

Dr. Jo Shapiro is a surgeon in the Department of Surgery at the Brigham and Women’s Hospital (BWH) in Boston and an Associate Professor of Otolaryngology at Harvard Medical School. She launched the BWH Center for Professionalism and Peer Support in 2008 and served as its director through 2018. During that time the Center supported and collaborated with multiple institutions, nationally and internationally, to enhance clinician wellness by supporting teamwork and respect and mitigating clinician burnout. She currently serves on the Ethics and Professionalism Committee of the American Board of Medical Specialties and recently completed her terms as that Committee’s chairperson. Dr. Shapiro is committed to global health medical education and training. She was appointed Honorary Professor of Professional Behavior and Peer Support in Medicine through the academic track at Groningen University Medical Center in The Netherlands. She serves as Visiting Professor and Otolaryngology Residency Program Advisor for Mbarara University of Science and Technology in Uganda. She was also a member of the Israeli Commission for Higher Education International Committee for the Evaluation of Medical Schools in Israel.
CME

Accreditation
The American Pediatric Surgical Association (APSA) is accredited with commendation by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. These live activities have been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education.

APSA designates this live activity for a maximum of 25 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Disclaimer: These materials and all other materials provided in conjunction with CME activities are intended solely for purposes of supplementing CME programs for qualified health care professionals. Anyone using the materials assumes full responsibility and all risk for their appropriate use. APSA makes no warranties or representations whatsoever regarding the accuracy, completeness, currentness, noninfringement, merchantability or fitness for a particular purpose of the materials. In no event will APSA be liable to anyone for any decision made or action taken in reliance on the materials. In no event should the information in the materials be used as a substitute for professional care.

Important Dates

Early Registration Discount Deadline: ended on March 18, 2019
Hotel Reservation Deadline: April 17, 2019
Advance Online Registration Deadline: April 30, 2019

Join the Party! #APSA50 @APSASURGEONS
Thank You to Our Supporters

APSA thanks the *Journal of Pediatric Surgery* for its support of the 2019 *Journal of Pediatric Surgery* Top Educational Content (TEC) Talks and transcription of the annual meeting technical sessions.

**Institutional Diamond Supporters**

Our thanks to these pediatric surgical departments at the following children’s hospitals for their leadership at the societal and national levels.

Boston Children’s Hospital
Children’s Hospital Los Angeles
Children’s Hospital of Wisconsin
Children’s Mercy Kansas City
St. Louis Children’s Hospital

C.S. Mott Children’s Hospital
Nationwide Children’s Hospital
Riley Children’s Health
Seattle Children’s Hospital

Thank You to Our Exhibitors

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<thead>
<tr>
<th>PLATINUM EXHIBITOR</th>
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<th>NON-PROFIT EXHIBITORS</th>
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<td>Biostage</td>
<td>Applied Medical Technology, Inc.</td>
<td>PediatricSearch Partners</td>
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<td>SILVER EXHIBITOR</td>
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<td>Bolder Surgical/JustRight Surgical</td>
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<td>Microsurgery Instruments, Inc.</td>
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<td>Sanford Health</td>
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Join Our Party

**Exhibit and Support Opportunities**

See and be seen at APSA’s 50th Anniversary Meeting! Exhibit and support opportunities offer excellent visibility for your company, provide direct access to a target audience of decision makers and underscore your involvement in the pediatric surgery field.

Learn about the wide range of ways to participate in our celebration. For details, visit [www.eapsa.org](http://www.eapsa.org) or contact Andrea Ward, [award@eapsa.org](mailto:award@eapsa.org), +1-847-686-2282
Special Events and Programs

**Stop the Bleed Community Outreach**

*DATE: Saturday, May 18*

The APSA Trauma Committee is planning to give back to the local Boston community with Stop the Bleed training. More details will be available soon.

**Companion Program**

*COST: $340*

The Companion Program offers activities designed to encourage connecting with others, seeing old friends and making new ones. In addition to complimentary tickets to the Welcome Reception and the President’s Reception and Banquet, the Companion Program includes exclusive access to a Companion Hospitality Suite Monday through Wednesday, 8:00 – 10:00 a.m. A continental breakfast will be served each day (a $45/day value!) and a professional concierge will be on hand to assist companions with making plans in the Boston area. Registered companions must present their badge for admittance.

*Companion registration is now a separate transaction and is no longer part of the APSA attendee registration. Remind your APSA member to register you separately or register now. View step-by-step registration instructions.*

**Annual Fundraiser Benefiting Ronald McDonald House Charities© Boston Harbor**

It’s a tradition for APSA to help the local Ronald McDonald House. Please donate generously to help the children and families who come to the Ronald McDonald House Charities© Boston Harbor, the beneficiary of this year’s fundraiser. Donations can be made during online registration, and look for the collection bins at the APSA registration desk and at the hospitality breakfasts when on site in Boston. Thank you for making a big difference in little lives!

Ronald McDonald House at Boston Harbor (RMHBH), formerly called Home Away Boston, is an alliance between Ronald McDonald House Charities of Eastern New England (RMHC of ENE) and Home Away Boston. They currently have 12 apartments; 11 for families and 1 community space where families come together for meals and family programs.

**Welcome Reception**

*DATE: Sunday, May 19*

*TIME: 7:00 - 9:00 p.m.*

*LOCATION: APSA Exhibit Hall and 3rd and 4th Floors*

*COST: One ticket is included in each APSA 50th Anniversary Meeting full and companion registration. Additional tickets are $75 USD per person and are available during registration and on site in Boston.*

Get ready for a “Taste of Boston” New England clambake! The buffet dinner will also include non-seafood items if that’s not your cup of tea. It’s a great opportunity to expand your network and catch up with colleagues you may only see a few times a year.
Benjy Brooks Society Meeting

**DATE:** Sunday, May 19  
**TIME:** 9:00 - 11:00 a.m.; social 9:00 - 10:00 a.m., brunch 10:00 - 11:00 a.m.  
**LOCATION:** Grand Ballroom Salons H-J, 4th Fl.  
**COST:** $65 USD per person; brunch is included

Discuss issues that women are currently facing in the pediatric surgery arena and talk about the society’s future. All are welcome.

John F. Kennedy Presidential Library & Museum Tour

**DATE:** Tuesday, May 21  
**TIME:** 2:00 – 5:30 p.m.  
**LOCATION:** John F. Kennedy Presidential Library & Museum  
**COST:** $30 USD per person and includes private luxury motor coach transportation, admission, self-guided tour, and boxed lunch.

*NOTE: due to the popularity of this event pre-registration is required.*

A Visit to the John F. Kennedy Library—a Moving Celebration of the Leadership and Legacy of John F. Kennedy

APSA is proud to present to meeting attendees and their family members a visit to the JFK Library during the free afternoon. This trip to one of the most-visited sites in Boston includes private luxury motor coach transportation, admission, self-guided tour and boxed lunch. The cost for APSA meeting attendees and their family members is $30 USD per person, a 60% discount over regular fees.

At the JFK Library & Museum, you will view a 17-minute film introducing John F Kennedy, “the candidate,” and browse the self-guided exhibits of John F. Kennedy, “the President.” In the museum, you will enter the recreated world of the Kennedy Presidency for a first-hand experience of John F. Kennedy’s life, legacy and leadership. See events of the 1960’s through President Kennedy’s eyes and narrated in his voice; relive the time during the Kennedy Presidential Campaign, the Kennedy & Nixon debates, the Kennedy Presidency and the Cuban Missile Crisis; and experience his optimism and wit and be inspired by the hope and idealism that captivated America.
Residents Reception
**DATE:** Monday, May 20  
**TIME:** 5:30 - 6:30 p.m.  
**LOCATION:** Regis, 3rd Fl.  
**COST:** Complimentary for general surgery residents, fellows and students attending the APSA 50th Anniversary Meeting

Build your network and get insider knowledge on the pediatric surgery field. Interact with current fellows, program directors and pediatric surgeons who practice in both academic and private practice. Light refreshments will be served.

President’s Reception and Banquet
**DATE:** Wednesday, May 22  
**TIME:** 6:00 - 11:00 p.m.  
**LOCATION:** Reception is in the Grand Ballroom Foyer, 4th Fl. and the Banquet is in Grand Ballroom A-F, 4th Fl.  
**COST:** One ticket is included in each APSA 50th Anniversary Meeting full and companion registration. Additional tickets are $150 USD per person and are available during registration and on site in Boston.

Wrap up the APSA meeting in style! Celebrate your profession and honor the year’s award recipients. Attendees will savor a wonderful dinner customized by the Marriott Boston Copley Place chef especially for the President’s Banquet. Then get your groove on with dance hits from local favorite Soul of Boston. Your ticket includes dinner and limited complimentary wine service during dinner.
General Information

Program Book
There are a variety of ways to get the details you need and make the most of your time at the APSA 50th Anniversary Meeting:

- An electronic PDF of the Program Book will be available to attendees in advance of the meeting. You can access it from your tablet or mobile device or print out a copy to bring with you to Boston.
- During online registration only, you can order a printed copy of the Program Book, which will be included in your registration materials in Boston.
- You can order a printed copy direct from Lulu.com, which you can ship to yourself and bring to the meeting. The link to order the book will be available closer to the meeting.

Hotel Accommodations
All educational sessions will take place at the Boston Marriott Copley Place.

Conference Hotel
Boston Marriott Copley Place
110 Huntington Avenue
Boston, MA 02116 USA
Phone: +1-617-236-5800
Fax: +1-617-236-5885
Toll-Free Reservation Center:
+1-888-236-2427
(identify yourself as an APSA meeting attendee)

Visit the APSA website to learn more about hotel reservations, car rental and parking, babysitting services, hotel amenities, dining options in the hotel as well as local options and more.

QUESTIONs? If you have any questions regarding accommodations and travel, contact APSA headquarters at +1-847-686-2237 or email eapsa@eapsa.org.
Meeting App

All meeting registrants will have access to a web-based app to help you easily plan for and navigate the APSA 50th Anniversary Meeting. The meeting app is complimentary to all attendees and contains full abstracts, schedules, presenters, social media threads and more!

Registration

Participation in the APSA 50th Anniversary Meeting is limited to registered delegates.

Full registration for the APSA 50th Anniversary Meeting includes admission to all educational and scientific sessions, exhibits, poster display, daily continental breakfasts, refreshment breaks, luncheons, Welcome Reception, President’s Reception and Banquet, meeting educational materials and a downloadable app.

All meeting participants, presenters, board members and officers and other speakers must register for the meeting. APSA Past Presidents receive complimentary registration and should contact Andrea Ward for details at award@eapsa.org.

Registering for the APSA 50th Anniversary Meeting

Early registration discount deadline was March 18, 2019.

Advance online registration deadline is April 30.

Companion Program registration is a separate transaction and not part of the APSA attendee registration. Registration for the Companion Program requires creating an APSA account. Visit the APSA website for instructions.

Online
Visit the registration page to register online

Fax
Faxed registrations qualify as paid registrations only when credit card information is included. Fax the registration form and complete credit card information to +1-847-686-2253. If you fax a registration form with credit card information, do not mail an additional copy. Visit the registration page to download a registration form.

Mail
Visit the registration page to download a registration form.

Send payment and registration form to:
American Pediatric Surgical Association
One Parkview Place – 17W110
22nd Street, Suite 800
Oakbrook Terrace, IL 60181

Payment
All registration forms must be accompanied by check or credit card information – VISA, MasterCard, American Express or Discover. Make checks payable, in U.S. funds, to the American Pediatric Surgical Association. No registrations will be processed without full payment.
Fees

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<tr>
<th>Registration Categories</th>
<th>Through April 30 &amp; On Site</th>
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<tbody>
<tr>
<td>APSA 50th Anniversary Meeting Registration</td>
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<tr>
<td>APSA Member</td>
<td>$755 USD</td>
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<tr>
<td>Physician Nonmember</td>
<td>$855 USD</td>
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<tr>
<td>Resident/Fellow/Student*</td>
<td>$425 USD</td>
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<tr>
<td>Nurse/Allied**</td>
<td>$375 USD</td>
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<tr>
<td>APSA Past President</td>
<td>(complimentary)</td>
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<tr>
<td>Companion Full Registration***</td>
<td>$340 USD</td>
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<tr>
<td>Optional Events</td>
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<tr>
<td>Benjy Brooks Meeting</td>
<td>$65 USD</td>
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<tr>
<td>John F. Kennedy Presidential Library and Museum Tour / Includes Box Lunch</td>
<td>$30 USD</td>
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<td>Printed copy of program book</td>
<td>$10 USD</td>
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<td>Additional Tickets</td>
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<tr>
<td>Additional APSA Welcome Reception Tickets</td>
<td>$75 USD</td>
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<tr>
<td>Additional President's Banquet Tickets</td>
<td>$150 USD</td>
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* Forward verification of your student/resident/fellow status to mpetrulla@eapsa.org
** Registration for APSA Annual Meeting only; APSNA registration is by separate subscription
***Includes access to the accompanying person's Hospitality Suite, the Welcome Reception and the President's Banquet.

Confirmation of Registration
Attendees who include an e-mail address on their registration form will receive an e-mail confirmation/receipt within 24 hours of registering online. Allow up to two weeks if registering by mail or fax. If you do not receive a confirmation two weeks after registering, e-mail APSA headquarters. All registrants must pick up their badges at the APSA Pre-Registration Desk when they arrive at the Boston Marriott Copley Place.

Cancellation of Registration
Cancellations and Refunds: Notification of cancellation must be submitted in writing. Cancellations received by April 15, 2019, will be subject to a $75 cancellation fee. Cancellations between April 16 and May 3, 2019, will be refunded 50% of the registration fee. No refunds will be issued after May 3, 2019. Substitutions are allowed at any time, but must be submitted in writing and must be of the same member status. No telephone registrations will be accepted. Payment in U.S. dollars only.
# Program in Detail

## Saturday, May 18

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>7:00 a.m. – 5:00 p.m.</td>
<td>APSA Board Meeting</td>
<td>Regis, 3rd FL</td>
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<tr>
<td>2:00 p.m. – 6:00 p.m.</td>
<td>Registration Desk Open</td>
<td>Registration Desk A&amp;B, 4th FL</td>
</tr>
<tr>
<td>2:00 p.m. – 6:00 p.m.</td>
<td>Speaker Ready Room Open</td>
<td>Orleans, 4th FL</td>
</tr>
<tr>
<td>2:30 p.m. – 6:30 p.m.</td>
<td>Program Directors Meeting</td>
<td>Grand Ballroom Salons H-J, 4th FL</td>
</tr>
<tr>
<td>6:30 p.m. – 10:00 p.m.</td>
<td>Publications Committee Meeting and Dinner</td>
<td>Regis, 3rd FL</td>
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## Sunday, May 19

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tr>
<td>6:00 a.m. – 8:00 p.m.</td>
<td>Nursing Mothers Room</td>
<td>Boston University, 3rd FL</td>
</tr>
<tr>
<td>6:30 a.m. – 5:00 p.m.</td>
<td>Registration Desk Open</td>
<td>Registration Desk A&amp;B, 4th FL</td>
</tr>
<tr>
<td>6:30 a.m. – 6:30 p.m.</td>
<td>Speaker Ready Room Open</td>
<td>Orleans, 4th FL</td>
</tr>
<tr>
<td>7:00 a.m. – 10:00 a.m.</td>
<td>Committee Meetings</td>
<td>View the Ancillary Meetings List on the APSA website</td>
</tr>
<tr>
<td>9:00 a.m. – 11:00 a.m.</td>
<td>Benjy Brooks Society Brunch and Meeting</td>
<td>Grand Ballroom Salons H-J, 4th FL</td>
</tr>
<tr>
<td>11:00 a.m. – 11:45 a.m.</td>
<td>New Member Rehearsal</td>
<td>Salons A-F</td>
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<tr>
<td>11:00 a.m. – 3:30 p.m.</td>
<td>Exhibitor Set-up; Poster Set-up</td>
<td>APSA Exhibit Hall</td>
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<tr>
<td>Noon – 12:30 p.m.</td>
<td>President’s Welcome</td>
<td>Salons A-F</td>
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## Plenary Education Session

12:30 p.m. – 2:00 p.m.

**Colorectal Malformations and Diseases - Anorectal Malformations (ARM); Hirschsprung Disease (HD)**  
*Moderator:* Marc A. Levitt, MD  
**Anorectal Malformations (ARM)**  
Belinda Dickie, MD, Michael D. Rollins, MD, Donald B. Shaul, MD, Richard J. Wood, MD, Caitlin A. Smith  
**Hirschsprung Disease (HD)**  
Jacob C. Langer, MD, Casey M. Calkins, MD, Megan K. Fuller, MD, Megan M. Durham, MD, Timothy C. Lee, MD  
**Tributes: Lester Martin and Orvar Swenson**  
Grace Z. Mak, MD
<table>
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<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>2:00 p.m. – 2:15 p.m.</td>
<td>Refreshment Break</td>
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<tr>
<td>2:15 p.m. – 2:35 p.m.</td>
<td>APSA’s Past: Key Factors in the Establishment of Pediatric Surgery and APSA -Who Did It and How</td>
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<td>James A. O’Neill, Jr., MD, Vanderbilt Children’s Hospital, Nashville, TN</td>
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<td>Tribute: H. William Clatworthy, Jr.</td>
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<tr>
<td>2:35 p.m. – 3:05 p.m.</td>
<td>New Member Induction</td>
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<tr>
<td>3:15 p.m. – 4:45 p.m.</td>
<td>CONCURRENT SCIENTIFIC SESSIONS</td>
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### Scientific Session 1: Gastrointestinal Surgery

**Moderators:** Samuel M. Alaish, MD; Christopher P. Gayer, MD

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**S1**

**SHORT-TERM OUTCOMES IN PEDIATRIC INTESTINAL FAILURE PATIENTS WITH CULTURE-PROVEN SMALL BOWEL BACTERIAL OVERGROWTH**

Jamie Knell, MD; Christopher Duggan; Sam M. Han, MD; Charles R. Hong; Enju Liu; Heather Riley; Lissette Jimenez; Alexandra N. Carey; Biren P. Modi, MD; Tom Jaksic, MD

1. Center for Advanced Intestinal Rehabilitation and Department of Surgery, Boston Children’s Hospital and Harvard Medical School, Boston, MA, USA
2. Center for Advanced Intestinal Rehabilitation and Department of Gastroenterology, Hepatology and Nutrition, Boston Children’s Hospital and Harvard Medical School, Boston, MA, USA
3. Department of Gastroenterology, Hepatology and Nutrition, Boston Children’s Hospital and Harvard Medical School, Boston, MA, USA
4. Department of Surgery, Boston Children’s Hospital and Harvard Medical School, Boston, MA, USA

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**S2**

**CHRONIC LYMPHATIC REMODELING IMPAIRS CHOLESTEROL HOMEOSTASIS AFTER SMALL BOWEL RESECTION**

Emily J. Onufre, MD, MPH; Rafael Czpepielewski; Li-hao Huang; Cathleen Courtney; Kristen M. Seiler; Gwendalyn Randolph; Brad W. Warner

1. Washington University in St. Louis, MO, USA
2. Washington University in St. Louis, St. Louis, MO, USA
3. Washington University in St. Louis, Saint Louis, MO, USA
4. Saint Louis Children’s Hospital, St. Louis, MO, USA
S3

A COMPARISON OF SMOFLIPID AND INTRALIPID IN THE EARLY MANAGEMENT OF INFANTS WITH INTESTINAL FAILURE

Cameron Casson, MD1, Van Nguyen2, Nandini Channabasappa1, Pritha Nayak1, Julia Panczuk3, Kaitlin Berris4, Hannah Piper, MD3

1University of Texas Southwestern, Dallas, TX, USA, 2Children’s Health Dallas, Dallas, TX, USA, 3University of British Columbia, Vancouver, BC, Canada, 4BC Children’s Hospital, Vancouver, BC, Canada

Tribute: Morton Woolley
Michael Mallicote, MD

S4

ENDOLUMINAL FUNCTIONAL IMAGING AND DILATION: EARLY EXPERIENCE WITH ENDOSCOPIC IMPEDANCE-BASED MEASUREMENTS AND DILATIONS IN PEDIATRIC PATIENTS

Jordan S. Taylor, MD1, James Wall, MD2

1Stanford University, Stanford, CA, USA, 2Stanford University, Stanford, CA, USA

S5

TISSUE ENGINEERING CAN RESTORE ESOPHAGEAL CONTINUITY IN LONG GAP ESOPHAGEAL DEFECTS BY USING A CELLSPAN ESOPHAGEAL IMPLANT

Christine Finck, MD1, Todd Jensen2, Heather Wanczyk2, William Fodor2, Tina Roffidal1, Sumati Sundaram3, Karissa Paquin1, Jeff Bouchard4, Eyone Jones5

1Connecticut Children’s Medical Center, Hartford, CT, USA, 2University of Connecticut Health, Farmington, CT, USA, 3Biostage, Holliston, MA, USA, 4Biosatge, Holliston, MA, USA, 5Connecticut Children’s Medical Center, Hartford, CT, USA

S6

ASSESSING THE BENEFIT OF REOPERATIONS IN PATIENTS WHO SUFFER FROM FECAL INCONTINENCE AFTER REPAIR OF THEIR ANORECTAL MALFORMATION

Devin R. Halleran, MD1, Hira Ahmad, MD2, Alejandra Vilanova-Sánchez, MD3, Patrick Stallings1, Nisha Ganesh1, Alessandra Gasior1, Richard J. Wood, MD2, Marc A. Levitt, MD1

1Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA, 2Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA, 3University Hospital La Paz, Madrid, Spain

S7

INTRAOPERATIVE INDOCYANINE GREEN LASER ANGIOGRAPHY (SPY™) AND ITS VALUE IN PREDICTING THE VASCULAR SUPPLY OF TISSUES NEEDED TO PERFORM CLOACAL, ANORECTAL MALFORMATION AND HIRSCHSPRUNG RECONSTRUCTIONS

Rebecca M. Rentea, MD1,2, Devin R. Halleran, MD1, Alejandra Vilanova-Sanchez1, Hira Ahmad, MD1, Kate McCracken1, Geri Hewitt, MD1, Victoria Alexander1, Laura Weaver1, Caitlin A. Smith1,3, Richard J. Wood, MD1, Marc A. Levitt, MD1

1Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA, 2Children’s Mercy Hospital-Kansas City, Kansas City, MO, USA, 3Seattle Children’s Hospital, Seattle, WA, USA
S8

GASTROINTESTINAL MORBIDITY IN ADULTS FOLLOWING REPAIR OF SIMPLE NEONATAL GASTROCHISIS
Gillian R. Goddard, MD1, Justine Marchix, PhD1, Meghan Hall Rauen, MA2, Mary L. Brandt, MD3, Michael A. Helmrath, MD1
1Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA, 2Avery’s Angel’s Gastrochisis Foundation, Raleigh, NC, USA, 3Baylor College of Medicine, Houston, TX, USA

S9

DESIGNING A SAFER GASTROSTOMY DEVICE, THE QUEST TO PREVENT G TUBE DISLODGEMENT
Luis I. Ruffolo, MD1, Theresa Foito2, Marsha Pulhamus2, Anna McGuire, MD1, Derek Wakeman, MD1
1University of Rochester Medical Center, Rochester, NY, USA, 2Golisano Children’s Hospital, Rochester, NY, USA, 3University of Rochester Department of Surgery, Rochester, NY, USA

S10

ENDOSCOPIC CLOSURE OF GASTROCUTANEOUS FISTULA: MODIFIED TECHNIQUE WITH OVER-SCOPE CLIP
Jordan S. Taylor, MD1, Julia M. Chandler, MD, MS2, Katherine I. Portelli2, James Wall, MD2
1Stanford University, Stanford, CA, USA, 2Stanford University, Stanford, CA, USA

Scientific Session 2: Basic Science, Chest, IBD

3:15 p.m. – 4:45 p.m.

Moderators: Samir R. Pandya, MD; Kasper Wang, MD

S11

ACCESS TO AN ONLINE VIDEO ENHANCES THE CONSENT PROCESS, INCREASES KNOWLEDGE, AND DECREASES ANXIETY OF CAREGIVERS WITH CHILDREN SCHEDULED FOR INGUINAL HERNIA REPAIR - A RANDOMIZED CONTROLLED TRIAL
Friederike Book1, Jan Gödeke1, Alicia Poplawski2, Oliver J. Muensterer, MD, PhD1
1Pediatric Surgery, University Medicine of the Johannes Gutenberg University Mainz, Mainz, Rheinland-Pfalz, Germany, 2Institute of Medical Biostatistics, Epidemiology and Informatics (IMBEI), University Medicine of the Johannes Gutenberg University Mainz, Mainz, Rheinland-Pfalz, Germany

S12

CELLULAR TRAFFICKING ACROSS THE BLOOD-BRAIN BARRIER FOLLOWING IN UTERO HEMATOPOIETIC CELLULAR TRANSPLANTATION
Matthew T. Grant, MD, MPhil, Jesse D. Vrecenak, MD
Washington University in St. Louis, Saint Louis, MO, USA

S13

SYSTEMIC FETAL GENE EDITING AS A TREATMENT FOR CYSTIC FIBROSIS
Adele Ricciardi, PhD1, Christina Barone1, Rachael Putman1, Elias Quijano1, Anisha Gupta1, James Farrelly1, Valerie Luks2, Richard Nguyen1, Mark Saltzman1, Peter Glazer1, Marie Egans1, David H. Stitelman, MD1
1Yale University, New Haven, CT, USA, 2Pearlmans School of Medicine, Philadelphia, PA, USA, 3Yale School of Medicine/Yale University, New Haven, CT, USA
**S14**

**IN UTERO LIVER-DIRECTED LENTIVIRAL GENE THERAPY CURES A PIG MODEL OF HEREDITARY TYROSINEMIA TYPE 1**

Clara Nicolas, Kari Allen, Lori Hillin, Caitlin VanLith, Zeji Du, Robert Kaiser, Raymond Hickey, Joseph Lillegard, MD  

*Mayo Clinic, Rochester, MN, USA*

**S15**

**COMPARATIVE OUTCOMES OF RIGHT VERSUS LEFT CONGENITAL DIAPHRAGMATIC HERNIA: A MULTICENTER ANALYSIS**

Alexey Abramov, MD1, Rebecca Herman2, Weijia Fan3, Julia Wynn4, Ariela Zenilman2, Gudrun Aspelund, MD5, Kenneth S. Azarow, MD, Timothy Crombleholme, MD7, Robert Cusick, MD8, Melissa Danko, MD9, Foong-Yen Lim, MD10, Mahmoud Elfiky, MD11, David McCulley12, George B. Mychaliska, MD13, Douglas Potoka, MD14, David Schindel, MD15, Samuel Soffer16, Amy J. Wagner17, Brad W. Warner, MD18, Vincent P. Duron, MD19  

1Morgan Stanley Children's Hospital/New York-Presbyterian Hospital, New York, NY, USA, 2Columbia University, NYP-MSCHONY, New York, NY, USA, 3Columbia University Mailman School of Public Health, New York, NY, USA, 4Columbia University, NYP-MSCHONY, New York City, NY, USA, 5Maria Ferrari Children’s Hospital, Valhalla, NY, USA, 6Oregon Health & Science University, Portland, OR, USA, 7Fetal Care Dallas, Dallas, TX, USA, 8Children’s Hospital and Medical Center, Omaha, NE, USA, 9Vanderbilt Children’s Hospital, Nashville, TN, USA, 10University of Wisconsin, Madison, WI, USA, 11University of Michigan, Ann Arbor, MI, USA, 12Children’s Hospital of Pittsburgh, Pittsburgh, OH, USA, 13UT Southwestern Medical Center, Children’s Medical Center, Dallas, TX, USA, 14Zucker School of Medicine at Hofstra/Northwell, Cohen Children’s Medical Center at Northwell Health, New Hyde Park, NY, USA, 15Children’s Hospital of Wisconsin, Madison, WI, USA, 16Washington University in St. Louis, St. Louis, MO, USA

**S16**

**THE INCIDENCE OF NEUROPATHIC PAIN AFTER INTERCOSTAL CRYOABLATION DURING THE NUSS PROCEDURE**

Michael J. Zobel, MD1, Clifton Ewbank2, Roberto Mora3, Olajire Idowu, MD4, Sungchoon Kim, MD5, Benjamin E. Padilla, MD6  

1University of California, San Francisco, Los Angeles, CA, USA, 2University of California, San Francisco Benioff Children’s Hospital Oakland, San Francisco, CA, USA, 3University of California, San Francisco, San Francisco, CA, USA, 4UCSF Benioff Children’s Hospital Oakland, San Francisco, CA, USA, 5UCSF Benioff Children’s Hospital Oakland, Oakland, CA, USA

**S17**

**AVOIDANCE OF UNNECESSARY BRONCHOSCOPY IN CHILDREN WITH SUSPECTED FOREIGN BODY ASPIRATION THROUGH THE USE OF COMPUTED TOMOGRAPHY**

Alexander T. Gibbons, MD, MS1, Alejandra M. Casar Berazaluce, MD2, Rachel Hanke, MD3, Tracey Mehlman, Allison Person, Michael Rubin, Todd Ponsky, MD4  

1Akron Children’s Hospital, University Heights, OH, USA, 2Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA, 3Cincinnati Children’s Hospital Medical Center, Akron, OH, USA

*Tribute: Eric W. Fonkalsrud*  
Howard C. Jen, MD
S18

POUCHOGRAPH PRIOR TO ILEOSTOMY REVERSAL AFTER ILEAL POUCH ANAL ANASTOMOSIS IN PEDIATRIC PATIENTS: IS IT USEFUL IN THE SETTING OF ROUTINE EUA?

Michael D. Traynor, MD, Nicholas P. McKenna, Elizabeth B. Habermann, Ryan M. Antiel, MD, MS, Christopher R. Moir, MD, Denise B. Klinkner, MD, Michael B. Ishitani, MD, D. Dean Potter, MD

*Mayo Clinic, Rochester, MN, USA*

S19

FERTILITY AND SEXUAL FUNCTION IN WOMEN FOLLOWING PEDIATRIC ILEAL POUCH ANAL ANASTOMOSIS

D. Dean Potter, MD, Christopher R. Moir, MD, Courtney Day, W. Scott Harmsen, John Pemberton

*Mayo Clinic, Rochester, MN, USA*

S20

TRANSANAL MINIMALLY INVASIVE COMPLETION PROCTECTOMY WITH ILEAL POUCH ANAL ANASTOMOSIS IN ULCERATIVE COLITIS

Scott S. Short, MD, Katie Russell, Zachary Kastenberg

*Primary Children’s Hospital, The University of Utah, Salt Lake City, UT, USA*

**Scientific Session 3: Oncology (basic science and clinical), Global, Anesthesia/Analgesia**

3:15 p.m. – 4:45 p.m.

*Moderators:* Barrie S. Rich, MD; David H. Rothstein, MD

S21

SACRAL NERVE STIMULATOR PLACEMENT: A NOVEL SURGICAL NAVIGATION TOOL FOR COMPLEX ANATOMY

Alejandra M. Casar Berazaluce, MD, Irene Isabel P. Lim-Beutel, MD, John M. Racadio, MD, Jason S. Frischer, MD

*Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA*

*Tribute:* Raymond A. Amoury

Robert M. Dorman, MD

S22

NERVE-DERIVED SIGNAL ASSIST TISSUE REPAIR BY MANDIBULAR SKELETAL STEM CELLS

R. Ellen Jones, MD\(^1\), Ankit Salhotra\(^2\), Ryan Ransom\(^2\), Ava Carter\(^3\), Kiana Robertson\(^2\), Derrick Wan\(^2\), Michael Longaker\(^2\)

\(^1\)UTSW, Stanford, Palo Alto, CA, USA, \(^2\)Hagel Laboratory for Pediatric Regenerative Medicine, Stanford University School of Medicine, Stanford, CA, USA, \(^3\)Stanford University School of Medicine, Stanford, CA, USA
S23

TRIPTOLIDE INHIBITS DVL2 EXPRESSION AND DOWN-REGULATES B-CATENIN AND MYC TARGET GENES IN HUMAN NEUROBLASTOMA

Min Huang, MD1, Jordan S. Taylor, MD2, Jasmine Zeki3, Nathan Sumarsono1, Bill Chiu, MD3

1Department of Pediatrics, Stanford University School of Medicine, Stanford, CA, USA, 2Stanford University, Stanford, CA, USA, 3Stanford University, Stanford, CA, USA

S24

PIM KINASES MEDIATE CISPLATIN RESISTANCE IN HEPATOBLASTOMA

Raoud Marayati, MD, Laura L. Stafman, MD, PhD, Adele P. Williams, MD, Jerry E. Stewart, BS, Karina J. Yoon, PhD, Jamie M. Aye, MD, Elizabeth A. Beierle, MD

University of Alabama at Birmingham, Birmingham, AL, USA

S25

DIFFERENTIAL EXPRESSION OF HUMAN ENDOGENOUS RETROVIRUS- K IN HEPATOBLASTOMA

David F. Grabski, MD, Monika Sharma, Laurie Gray, Sara French, David Rekosh, Marie-Louise Hammarskjold, Sara K. Rasmussen, MD

University of Virginia, Charlottesville, VA, USA

S26

CYTOREDUCTIVE SURGERY (CRS) AND HYPERTHERMIC INTRAPERITONEAL CHEMOTHERAPY (HIPEC) IN PEDIATRIC-TYPE MALIGNANCIES: CLINICAL CHARACTERISTICS OF LONG-TERM SURVIVORS

Brian Arrinza Coakley, MD1, Gideon Sandler, MD2, Lianchun Xiao3, Peter Anderson4, Winston Huh5, Cynthia Herzog1, Andrea Hayes-Jordan, MD6

1The Mount Sinai Health System, New York, NY, USA, 2Westmead Hospital & The Children’s Hospital at Westmead, Sydney, Australian Capital Territory, Australia, 3MD Anderson Cancer Center, Houston, TX, USA, 4The Cleveland Clinic, Cleveland, OH, USA, 5MD Anderson Cancer Center, Houston, TX, USA, 6The University of North Carolina, Chapel Hill, NC, USA

S27

ESSENTIAL SURGERY AND ANESTHESIA PACKAGE FOR CHILDREN AT THE FIRST-LEVEL LEVEL HOSPITAL: GUIDELINES FROM THE GLOBAL INITIATIVE FOR CHILDREN’S SURGERY

David F. Grabski, MD1, Emmanuel Ameh2, Doruk E. Ozgediz, MD3, Stephen W. Bickler, MD4

1University of Virginia, Charlottesville, VA, USA, 2Division of Pediatric Surgery, Department of Surgery, National Hospital, Abuja, Federal Capital Territory, Nigeria, 3Yale School of Medicine, New Haven, CT, USA, 4Division of Pediatric Surgery, Department of Surgery, University of California, San Diego, San Diego, CA, USA

S28

COMPARISON OF UGANDAN AND NORTH AMERICAN PEDIATRIC SURGERY FELLOWS’ OPERATIVE EXPERIENCE: OPPORTUNITIES FOR GLOBAL TRAINING EXCHANGE

Christopher R. Reed, MD1, Nasser Kakembo2, Phyllis Kisa2, Monica Langer, MD3, Gustavo Villalona4, Doruk E. Ozgediz, MD5, Tamara N. Fitzgerald, MD6

1Duke University Medical Center, Durham, NC, USA, 2Makerere University, Durham, NC, USA, 3Northwestern University, Chicago, IL, USA, 4Saint Louis University, Saint Louis, MO, USA, 5Yale School of Medicine, New Haven, CT, USA, 6Department of Surgery, Duke University Medical Center, Durham, NC, USA
S29

RANDOMIZED TRIAL INVESTIGATING THE IMPACT OF DRUG DISPOSAL BAG PROVISION ON THE RATE OF POSTOPERATIVE OPIOID DISPOSAL IN PEDIATRIC SURGICAL PATIENTS

Amy E. Lawrence, MD¹, Alex Carsel², Karen Leonhart², Calista M. Harbaugh, MD³, Jennifer F. Waljee, MD, MPH⁴, Daryl McLeod, MD, MPH¹, Patrick Walz, MD¹, Peter C. Minneci, MD, MHSc¹, Katherine J. Deans, MD, MHSc¹, Jennifer N. Cooper, MS, PhD⁴

¹Nationwide Children’s Hospital, Columbus, OH, USA, ²The Research Institute at Nationwide Children’s Hospital, Columbus, OH, USA, ³University of Michigan, Ann Arbor, MI, USA, ⁴The Research Institute at Nationwide Children’s Hospital, Columbus, OH, USA

S30

FEASIBILITY OF SPINAL ANESTHESIA IN INFANTS UNDERGOING ADVANCED LAPAROSCOPIC AND THORACIC SURGERY

Elizabeth Soukup, Amanda DuBois, Jessica Bland, MD, Charles Eastwood, MD

Elliot Hospital, Manchester, NH, USA

4:00 p.m. – 9:00 p.m. Exhibit Hall Open; Poster Viewing
4:30 p.m. – 5:30 p.m. Wine and Cheese Reception

5:15 p.m. – 6:15 p.m. CONCURRENT QUICK SHOT SESSIONS

Quick Shots 1: Gastrointestinal Surgery

5:15 p.m. – 6:15 p.m.

Moderators: Andreas H. Meier, MD; Biren P. Modi, MD

Q1

SURGERY IN CHILDREN WITH VERY EARLY ONSET INFLAMMATORY BOWEL DISEASE

Aimee G. Kim, MD, Jeremy Adler, Ronald B. Hirschl, MD, Samir K. Gadepalli, MSc, MD, MBA

University of Michigan, Ann Arbor, MI, USA

Q2

EFFECTS OF PARENTAL ACTIVATION IN CHILDREN WITH INTESTINAL FAILURE

Chinwendu Onwubiko, MD, PhD¹, Michelle C. Shroyer, MPH¹, J. Skyler Graham, BS², Linda Wilkinson, MSN, CRNP¹, David P. Galloway, MD², Gretchen P. Jackson, MD, PhD², Colin A. Martin, MD¹

¹Children’s of Alabama, University of Alabama at Birmingham, Birmingham, AL, USA, ²Vanderbilt University Medical Center, Nashville, TN, USA, ³University of Alabama at Birmingham, Children’s of Alabama, Birmingham, AL, USA
**Q3**

OUTCOMES AND BURDEN OF DISEASE IN ADOLESCENTS WITH NEONATAL ONSET SHORT BOWEL SYNDROME

Sam M. Han, MD\(^1\), Jamie Knell, MD\(^1\), Owen Henry, BS\(^2\), Charles R. Hong\(^1\), Grace Y. Han\(^1\), Steven J. Staffa\(^3\), Biren P. Modi, MD\(^1\), Tom Jaksic, MD\(^1\)

\(^1\)Center for Advanced Intestinal Rehabilitation and Department of Surgery, Boston Children’s Hospital and Harvard Medical School, Boston, MA, Boston, MA, USA, \(^2\)Department of Surgery, Boston Children’s Hospital and Harvard Medical School, Boston, MA, Boston, MA, USA

**Q4**

DOES FOLLOWING A MANAGEMENT ALGORITHM FOR ADHESIVE SMALL BOWEL OBSTRUCTION DECREASE THE INCIDENCE OF BOWEL LOSS?

Brittany L. Johnson, MD\(^1\), Giovanni A. Campagna\(^2\), Adam M. Vogel, MD\(^1\); Bindi J. Naik-Mathuria, MD\(^1\)

\(^1\)Texas Children’s Hospital, Houston, TX, USA, \(^2\)Baylor College of Medicine, Houston, TX, USA, \(^3\)Texas Children’s Hospital, Houston, TX, USA

**Q5**

LIPOCALIN-2 INCREASES INTESTINAL PERMEABILITY AND REDUCES ADAPTATION THROUGH CHANGES IN THE GUT MICROBIOME IN SHORT BOWEL SYNDROME

Ailan Zhang, MD, PhD\(^1\), Menghan Wang\(^1\), Elizabeth O’Hare\(^1\), Thomas Prindle\(^2\), William Fulton\(^1\), Chhinder Sodhi\(^2\), David J. Hackam, MD\(^3\), Cynthia Sears\(^1\), Samuel M. Alaish, MD\(^4\)

\(^1\)Johns Hopkins University, Baltimore, MD, USA, \(^2\)Johns Hopkins Children’s Center, Baltimore, MD, USA, \(^3\)Johns Hopkins Childrens Center, Baltimore, MD, USA, \(^4\)Johns Hopkins University, Baltimore, MD, USA

Tribute: E. Ide Smith

Jamie Knell, MD, Sam M. Han, MD

**Q6**

MORE IS LESS: THE ADVANTAGES OF PERFORMING COMBINED LAPAROSCOPIC CHOLECYSTECTOMY AND ERCP FOR PEDIATRIC CHOLEDOCHOLITHIASIS

Kristin Gee, MD\(^1\), R. Ellen Jones, MD\(^2\), Cameron Casson, MD\(^3\), Lorrie S. Burkhalter\(^4\), David Troendle\(^5\), Bradley Barth\(^5\), Alana Beres, MD\(^5\)

\(^1\)Children’s Hospital Los Angeles, Los Angeles, CA, USA, \(^2\)UTSW, Stanford, Palo Alto, CA, USA, \(^3\)University of Texas Southwestern, Dallas, TX, USA, \(^4\)Children’s Medical Center, Dallas, TX, USA, \(^5\)University of Texas Southwestern, Children’s Medical Center, Dallas, TX, USA

**Q7**

NORMALIZATION OF SERUM LIPASE LEVELS VERSUS RESOLUTION OF ABDOMINAL PAIN: A COMPARISON OF PRE-OPERATIVE MANAGEMENT IN CHILDREN WITH BILIARY PANCREATITIS

Kristin Gee, MD\(^1\), David Rosenberg\(^2\), Eugene Kim, MD\(^1\)

\(^1\)Children’s Hospital Los Angeles, Los Angeles, CA, USA, \(^2\)University of Illinois College of Medicine, Chicago, IL, USA
Q8

IS BILIARY DYSKINESIA SUFFICIENT TO ACCEPT THE RISKS OF ELECTIVE CHOLECYSTECTOMY IN THE PEDIATRIC POPULATION?

Lilly Bayouth, MD1, Laurie Driscoll2, Kari Beasley1, Danielle Walsh1, David Rodeberg, MD2, Shannon Longshore2

1Vidant Medical Center, East Carolina University, Greenville, NC, USA, 2East Carolina University, Greenville, NC, USA

Q9

PAIN RESOLUTION AND GLYCEMIC CONTROL IN PEDIATRIC PATIENTS AFTER TOTAL PANCcreateCTOMY WITH ISLET CELL AUTOTRANSPLANTATION FOR CHRONIC PANCREATITIS

Natalie Fillman, MD1, Mark Kijek1, Justyna Golebiewska1, Piotr Bachul1, Monica Para1, Lindsay Basto1, Laurencia Perea1, Karolina Golab1, Ling Jia Wang1, Martin Tibudan1, John Fung1, Jeffrey Matthews2, Piotr Witkowski2, Mark B. Slidell1

1University of Chicago, Chicago, IL, USA, 2University of Chicago, Chicago, IL, USA

Q10

TEMPORARY GASTRIC ELECTRICAL STIMULATION IN CHILDREN WITH GASTROPARESIS PREDICTS LONG-TERM SUCCESS

Neha Malik1, Christopher Jolley1, Saleem Islam, MD2

1University of Florida COM, Gainesville, FL, USA, 2University of Florida College of Medicine, Gainesville, FL, USA

Q11

MANAGEMENT OF CHOLEDOCHAL CYST BY ISOPERISTALTIC HEPATICOJEJUNOSTOMY WITHOUT ROUX-EN-Y

Abdul Hanif1, Jaglul Gaffer Khan, MD1, Kaniz Hasina, Nazmus Sakib, Mahbubul Alam, MD, Syed Abdull Adi, MD

1Dhaka Medical College & Hospital, Dhaka, Dhaka, Bangladesh

Q12

IMPLEMENTATION OF A PEDIATRIC ENHANCED RECOVERY PATHWAY DECREASES NARCOTIC UTILIZATION AND SHORTENS TIME TO FULL FEEDING

Michael R. Phillips, MD1, Gregory S. Maves2, M Concetta. Lupa1, Sara L. Pittenger1, Lyla Hance1, Sean E. McLean, MD1, Andrea Hayes-Jordan, MD1, William T. Adamson, MD1

1The University of North Carolina, Chapel Hill, NC, USA, 2Nationwide Children’s Hospital, Columbus, OH, USA

Q13

COST-EFFECTIVENESS ANALYSIS OF THE SURGICAL MANAGEMENT OF INFANTS UNDER 1 YEAR OF AGE WITH FEEDING DIFFICULTIES

Yangyang R. Yu, MD, MS1, Megan E. Cunningham, MD2, Annalyn S. Demello2, Eric H. Chiou3, Panagiotis Kougiias4, David E. Wesson2, Mary L. Brandt, MD4, Monica E. Lopez, MD4

1Baylor College of Medicine; Texas Children’s Hospital, Houston, TX, USA, 2Texas Children’s Hospital, Houston, TX, USA, 3Texas Children’s Hospital, Houston, TX, USA, 4Baylor College of Medicine, Houston, TX, USA
Q14

RACIAL AND ETHNIC DISPARITIES IN THE USE OF EPIDURAL ANALGESIA IN CHILDREN UNDERGOING MAJOR ABDOMINAL SURGERY

Jonathan K. Chica, MD1, Jonathan Rodean2, Marisa A. Bartz-Kurycki1, Pascal Owusu-Agyemang3, Kuojen Tsao, MD1, Mary T. Austin, MD1

1McGovern Medical School at The University of Texas Health Science Center at Houston, Houston, TX, USA, 2Children’s Hospital Association, Lenexa, KS, USA, 3The University of Texas MD Anderson Cancer Center, Houston, TX, USA

Quick Shots 2: Thoracic and Colorectal Surgery

5:15 p.m. – 6:15 p.m.

Moderators: Michael J. Goretsky, MD; Moderator: Drew A. Rideout, MD

Q15

USE OF AUTOLOGOUS BLOOD PATCH IN PEDIATRIC PATIENTS WITH A PERSISTENT AIR LEAK

Liese C. Pruitt, MD1, Stephen J. Fenton, MD2, Scott S. Short, MD3

1University of Utah, Salt Lake City, UT, USA, 2University of Utah, Philadelphia, PA, USA, 3Primary Children’s Hospital, The University of Utah, Salt Lake City, UT, USA

Q16

MINIMIZING VARIANCE IN PEDIATRIC SURGICAL CARE THROUGH IMPLEMENTATION OF A SPONTANEOUS PNEUMOTHORAX MANAGEMENT PROTOCOL: A MULTI-INSTITUTION STUDY

Aaron J. Cunningham, MD1, Claire Ostertag-Hill1, Minna M. Wieck, MD2, Katrine M. Lofberg, MD3, Kenneth S. Azarow, MD4, Marilyn W. Butler, MD5, Nicholas A. Hamilton, MD6, Mubeen A. Jafri, MD7, Sanjay Krishnaswami1, Elizabeth A. Fialkowski1

1Oregon Health & Science University, Portland, OR, USA, 2University of Chicago, Chicago, IL, USA, 3Phoenix Children’s Hospital, Phoenix, AZ, USA, 4Randall Children’s Hospital at Legacy Emanuel, Portland, OR, USA, 5Oregon Health & Science University, Portland, OR, USA, 6Randall Children’s Hospital at Legacy Emanuel, Portland, OR, USA

Q17

EVALUATING PATIENT COMPLIANCE OF PECTUS CARINATUM ORTHOSES WITH TEMPERATURE SENSOR

Elissa Port1, Katherine King1, Bryan Malas1, Catherine Hunter, MD2, Marleta Reynolds, MD1

1Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, USA, 2Northwestern University/Lurie Children’s Hospital, Chicago, IL, USA

Q18

ANESTHETIC EXPOSURE AND NEURODEVELOPMENTAL OUTCOMES IN TERM INFANTS WITH ESOPHAGEAL ATRESIA AND TRACHEOESOPHAGEAL FISTULA

Priscilla Pl Chiu, MD PhD, Nupur Gupta, Jason JT. Mayne, Priscilla Pl Chiu, MD PhD

The Hospital for Sick Children, Toronto, ON, Canada
Q19

SUCCESSFUL TREATMENT OF FLOYD TYPE I TRACHEAL AGENESIS WITH TRACHEALIZATION AND ESOPHAGOTRACHEOPLASTY USING 3D-PRINTED EXTERNAL BIORESORBABLE SPLINT
Anthony Tsai1, Morgan K. Moroi1, Joseph B. Clark1, Andrea Les1, Barry Fell1, Thomas Samson1, Dino Ravnic1, Scott J. Hollister1, Glenn E. Green3, Robert E. Cilley, MD2, Peter Dillon, MD1
1Division of Pediatric Surgery, Penn State Children’s Hospital, Hershey, PA, USA, 2Division of Pediatric Cardiac Surgery, Penn State Children’s Hospital, Hershey, PA, USA, 3Division of Pediatric Otolaryngology, University of Michigan, Ann Arbor, MI, USA, 4Division of Plastic Surgery, Penn State Children’s Hospital, Hershey, PA, USA, 5Wallace A. Coulter Department of Biomedical Engineering, Georgia Institute of Technology, Atlanta, GA, USA, 6Penn State Milton S. Hershey Medical Center, Hershey, PA, USA

Q20

CERIUM OXIDE NANOPARTICLE CONJUGATED WITH MICRORNA-146a TREATS LUNG INJURY BY DECREASING REACTIVE OXYGEN SPECIES IN BLEOMYCIN INDUCED MURINE MODEL OF PULMONARY FIBROSIS
Sarah A. Hilton, MD, MSHS1, Carlos Zgheib1, Hanan Elajaili1, Lindel C. Dewberry, MD1, Maggie Hodges1, Junyi Hu1, Junwang Xu1, Sudipta Seal1, Eva Nozik-Grayck1, Kenneth W. Liechty, MD3
1University of Colorado, Aurora, CO, USA, 2University of Central Florida, Aurora, CO, USA, 3University of Colorado School of Medicine; Colorado Fetal Care Center, Children’s Hospital Colorado, Aurora, CO, USA

Q21

NATURAL EXCRETION OF ENDOLOURINAL SPRINGS AFTER SPRING-MEDIATED INTESTINAL LENGTHENING
Genia Dubrovsky, MD1, Anne-Laure Thomas, MS2, Shant Shekherdimian3, James C.Y. Dunn, MD4, Jordan S. Taylor, MD5
1UCLA David Geffen School of Medicine, Los Angeles, CA, USA, 2Stanford University School of Medicine, Stanford, CA, USA, 3UCLA, Los Angeles, CA, USA, 4Stanford University, Stanford, CA, USA, 5Stanford University, Stanford, CA, USA

Tribute: William B. Kiesewetter
Marcus Malek, MD

Q22

THE DUAL-STAGED PATHWAY FOR CLOSURE IN CLOACAL EXSTROPHY: SUCCESSFUL EVOLUTION IN COLLABORATIVE SURGICAL PRACTICE
John Jayman, BS1, Jason Michaud1, Mahir Maruf1, Matthew Kasprenski1, Rachel Davis1, Bruce Trock2, Paul Sponseller2, John P. Gearhart1
1Johns Hopkins School of Medicine, Baltimore, MD, USA, 2Johns Hopkins Medical Institutes, Baltimore, MD, USA

Q23

SUCTION RECTAL BIOPSY IS SAFE AND ACCURATE IN PREMATURE INFANTS
Devin R. Halleran, MD1, Haley Lehmkuhl1, Hira Ahmad, MD1, Peter Baker2, Richard J. Wood, MD1, Marc A. Levitt, MD1, Jeremy G. Fisher, MD2
1Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA, 2Nationwide Children’s Hospital, Columbus, OH, USA, 3Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA

26
Q24

VARIABILITY OF THE TRANSITION ZONE (TZ) LENGTH IN HIRSCHSPRUNG DISEASE (HD)
Hemanshoo Thakkar, MBBS, BSc, Simon Blackburn, Joe Curry, Paolo De Coppi, Stefano Giuliani, Neil Sebire, Kate Cross

1Specialist Neonatal and Paediatric Surgery, Great Ormond Street Hospital for Children, London, UK, London, England, United Kingdom, 2UCL Institute of Child Health, Great Ormond Street Hospital, London, England, United Kingdom

Q25

FACTORS PREDICTING THE NEED FOR VAGINAL REPLACEMENT AT THE TIME OF THE DEFINITIVE RECONSTRUCTION OF A CLOACAL MALFORMATION
Alejandra Vilanova-Sánchez, MD, Devin R. Halleran, MD, Carlos A. Reck-Burneo, MD, Kate McCracken, Geri Hewitt, MD, Alessandra Gasior, Laura Weaver, Hira Ahmad, MD, Allison Akers, Jordon Jaggers, Marc A. Levitt, Richard J. Wood, MD

1University Hospital La Paz, Madrid, Spain, 2Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA, 3Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA, 4Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA

Q26

LONG-TERM IMPACT OF A BOWEL MANAGEMENT PROGRAM IN TREATING FECAL INCONTINENCE IN PATIENTS WITH ANORECTAL MALFORMATIONS
Richard J. Wood, MD, Alejandra Vilanova-Sánchez, MD, Devin R. Halleran, MD, Carlos Reck-Burneo, MD, Yuri V. Sebastiao, PhD, Hira Ahmad, MD, Onnalisa Nash, Kristina Booth, Casey Trimble, Pooja Zahora, Cheryl Baxter, Sarah Driesbach, Andrea Wagner, Stacie Leeper, Alessandra Gasior, Marc A. Levitt, MD

1Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA, 2University Hospital La Paz, Madrid, Spain, 3Center for Surgical Outcomes Research, Nationwide Children’s Hospital, Columbus, OH, USA, 4Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA

Q27

REAL-TIME MAGNETIC RESONANCE IMAGING AND CYSTOSCOPY TO AVOID MISPLACEMENT AND ROOF IN ANORECTAL MALFORMATION CORRECTIVE SURGERY
Matthew W. Ralls, MD, Karen Speck, Maria Ladino-Torres, Peter Mackie, MD, Marcus D. Jarboe, MD

1University of Michigan, Ann Arbor, MI, USA, 2C.S. Mott Children’s Hospital, Ann Arbor, MI, USA

Q28

LAPAROSCOPIC MORGAGNI HERNIA REPAIRS WITH AN INTUITIVELY-CONTROLLED ARTICULATING INSTRUMENT
Mercedes Pilkington, MD, Christa N. Grant, MD, James D. Geiger, MD

1University of Michigan, Ann Arbor, MI, USA, 2Penn State Hershey Children’s Hospital, Hershey, PA, USA
Quick Shots 3: Oncology (basic science and clinical)  

Salons H-J

5:15 p.m. – 6:15 p.m.

Moderators: Roshni Dasgupta, MD; Moderator: Dave R. Lal, MD, MPH

Q29

PEDIATRIC CLEAR CELL SARCOMA OF THE KIDNEY: A REPORT FROM THE NATIONAL CANCER DATABASE
Veishi Shaun Siow1, Xilin Chen2, Stephen Strotmeyer, Jr.3, Marcus Malek, MD4

1Children’s Hospital of Pittsburgh, Pittsburgh, PA, USA, 2University of Pittsburgh, Pittsburgh, PA, USA, 3University of Pittsburgh, Pittsburgh, PA, USA, 4UPMC Children’s Hospital of Pittsburgh, Pittsburgh, PA, USA

Q30

COMPlications following nePhron-sparing surgerY for wilms tumor
Hannah R. Spieg1, BS, MD Candidate1, Rachel Brennan1, Zhaohua Lu1, Joseph M. Gleason2, Andrew J. Murphy1, Andrew M. Davidoff, MD1

1St. Jude Children’s Research Hospital, Memphis, TN, USA, 2University of Tennessee Health Science Center, Memphis, TN, USA

Q31

3D PRINTING FOR THE SURGICAL PLANNING OF NEPHRON-SPARING SURGERY FOR BILATERAL WILMS TUMOR
Joshua N. Honeyman, MD1, Darshit Thakrar2, Shawn Gottschalk2, Michael Magnetta2, Rajeev Chaudhry2, Stefan Scholz, MD2, James Cooper2, Marcus Malek, MD2, Kelly Austin, MD2

1UPMC Children’s Hospital of Pittsburgh, Providence, RI, USA, 2UPMC Children’s Hospital of Pittsburgh, Pittsburgh, PA, USA

Q32

OUTCOMES AFTER LOCAL THERAPY FOR LIVER METASTASES IN PATIENTS WITH FAVORABLE HISTOLOGY WILMS TUMOR: A SINGLE INSTITUTION STUDY
Todd E. Heaton, MD, MPH, Michael V. Ortiz, MD, James A. Saltsman, MD, Neerav Shukla, Michael P. LaQuaglia, MD, Rachel Kobos, MD, Peter G. Steinherz, Suzanne L. Wilden

Memorial Sloan Kettering Cancer Center, New York, NY, USA

Q33

RENOVASCULAR HYPERTENSION IN CHILDREN: SURGICAL MANAGEMENT AND OUTCOMES AT A SINGLE CENTER INTERDISCIPLINARY PROGRAM
Stephanie Kim, MD1, Deborah R. Stein2, Michael A. Ferguson3, Diego Porras4, Gulraiz Chaudry2, Michael N. Singh2, Leslie Smoot2, Heung Bae Kim, MD2, Khashayar Vakili2

1Boston Children’s Hospital, Brighton, MA, USA, 2Boston Children’s Hospital, Boston, MA, USA
Q34

PERIOPERATIVE OUTCOMES AFTER HEPATECTOMY IN CHILDREN: A NSQIP ANALYSIS

Alan F. Utria, MD,1 Anthony Rauschenbach,1 Paolo Goffredo,1 Naina Bagrodia,1 Graeme Pitcher,1 Imran Hassan1

1University of Iowa, Iowa City, IA, USA,2 UIHC, Iowa City, IA, USA

Q35

PROGRESSIVE ACCUMULATION OF MUTATIONS ASSOCIATED WITH HEPATOCELLULAR CARCINOMAS IN PATIENTS WITH CONGENITAL PORTOSYSTEMIC SHUNTS

Athanasios Tyraskis, MBBS1, Claudio de Vito, MD2, Alberto Quaglia3, Nigel D. Heaton3, Richard Thompson4, Mark Davenport5

1Dept. Paediatric Surgery, King’s College Hospital, London, England, United Kingdom,2 Dept. Histopathology, King’s College Hospital, London, England, United Kingdom,3 Dept. Histopathology, King’s College Hospital, London, England, United Kingdom,4 Institute of Liver Studies, King’s College Hospital, London, England, United Kingdom,5Dept. Paediatric Surgery, King’s College Hospital, London, England, United Kingdom

Q36

PRIMARY MESENCHYMAL TUMORS OF THE LIVER IN CHILDREN: A POPULATION-BASED ANALYSIS OF A RARE PEDIATRIC TUMOR

Thuy Tran1, Bethany Slater2

1University of Illinois at Chicago- MGH, Chicago, IL, USA,2 University of Chicago, Chicago, IL, USA

Q37

ZIKA VIRUS AS AN ONCOLYTIC TREATMENT FOR HEPATOBLASTOMA

Joseph Mazar, PhD, Peter Phelan, Jeanne Brooks, Kenneth Alexander, Tamarah Westemoreland

Nemours Children’s Hospital, Orlando, FL, USA

Tribute: William K. Sieber

Dave R. Lal, MD, MPH

Q38

CONSOLIDATED CANCER CARE DOES NOT PROVIDE BENEFITS FOR SURVIVAL OR READMISSION RATES IN CHILDREN WITH METASTATIC NEUROBLASTOMA

Harold J. Leraas, MD, MHS, MA1, Brian Ezekian2, Aaron M. Tarnasky3, Christopher R. Reed, MD1, Sarah Jane Commander2, Tamara N. Fitzgerald, MD2, Henry E. Rice, MD1, Elisabeth T. Tracy4

1Duke University Medical Center, Durham, NC, USA, 2Duke University Department of Surgery, Durham, NC, USA, 3Duke University School of Medicine, Durham, NC, USA, 4Department of Surgery, Duke University Medical Center, Durham, NC, USA
Q39

IMPACT OF MYCN STATUS ON RESPONSE OF HIGH-RISK NEUROBLASTOMA TO NEOADJUVANT CHEMOTHERAPY
David Yanishevski, BS, Candidate for MD, M. Beth McCarville, Mikhail Doubrovin, Xiwen Zhao, Zhaohua Lu, Sara Federico, Wayne L. Furman, Andrew J. Murphy, Andrew M. Davidoff, MD, Hannah Spiegl
St. Jude Children’s Research Hospital, Memphis, TN, USA

Q40

DEPLETION OF PULMONARY ALVEOLAR MACROPHAGES INHIBITS METASTATIC OUTGROWTH IN A MOUSE MODEL OF OSTEOSARCOMA
Caroline W. Maloney, MD, PhD¹, Michelle P. Kallis, MD², Morris Edelman³, Marc Symons⁴, Bettie Steinberg⁵, Samuel Soffer⁶
¹Zucker School of Medicine at Hofstra/Northwell, Cohen Children’s Medical Center at Northwell Health, New Hyde Park, NY, USA, ²Zucker School of Medicine at Hofstra/Northwell, Cohen Children’s Medical Center at Northwell Health, New York, NY, USA, ³Hofstra Northwell School Of Medicine, New Hyde Park, NY, USA, ⁴Northwell Health Feinstein Institute for Medical Research, New Hyde Park, NY, USA

Q41

RISK OF STRUCTURAL RECURRENCE IN PEDIATRIC PAPILLARY THYROID MICROCARCINOMA: DOES MICROCARCINOMA DEFINE A VERY LOW RISK GROUP?
David J. Worhunsky, MD¹, Kayleigh Herrick-Reynolds², Glenda Callendar¹, Catherine Dinauer¹, Emily R. Christison-Lagay, MD¹
¹Yale School of Medicine, New Haven, CT, USA, ²Walter Reed Medical Center, Bethesda, MD, USA

Q42

PROPHYLACTIC PREOPERATIVE PLATELET TRANSFUSION FOR THROMBOCYTOPENIC PEDIATRIC PATIENTS LEADS TO HIGHER POSTOPERATIVE PLATELET TRANSFUSION VOLUMES WITHOUT REDUCED RISK OF BLEEDING
Donavon J. Hess, MD, PhD, Mackenzie Moore, Daniel A. Saltzman, MD, Robert D. Acton, MD, Bradley J. Segura
University of Minnesota, Minneapolis, MN, USA

6:15 p.m. – 7:00 p.m. Free Time
7:00 p.m. – 9:00 p.m. Welcome Reception

APSA Exhibit Hall and 3rd and 4th Floors

Tribute: Rowena Spencer; C. Everett Koop
Matthew Hornick, MD
### Monday, May 20

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:00 a.m. – 7:00 a.m.</td>
<td>Committee Meetings</td>
<td>View the Ancillary Meetings List on the APSA website</td>
</tr>
<tr>
<td>6:00 a.m. – 7:00 a.m.</td>
<td>Continental Breakfast</td>
<td>Grand Ballroom Foyer, 4th FL</td>
</tr>
<tr>
<td>6:00 a.m. – 8:00 p.m.</td>
<td>Nursing Mothers Room</td>
<td>Boston University, 3rd FL</td>
</tr>
<tr>
<td>6:00 a.m. – 5:30 p.m.</td>
<td>Speaker Ready Room Open</td>
<td>Orleans, 4th FL</td>
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<tr>
<td>6:30 a.m. – 5:00 p.m.</td>
<td>Registration Desk Open</td>
<td>Registration Desk A&amp;B, 4th FL</td>
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<tr>
<td>7:00 a.m. – 8:15 a.m.</td>
<td>Business Meeting</td>
<td>Salons A-F</td>
</tr>
<tr>
<td><strong>Brandeis Scholar Update - Marion C.W. Henry, MD, MPH</strong></td>
<td><strong>Tribute: Dale G. Johnson</strong></td>
<td>Katie W. Russell, MD</td>
</tr>
<tr>
<td>8:00 a.m. – 2:00 p.m.</td>
<td>Exhibit Hall Open; Poster Viewing</td>
<td>Exhibit Hall</td>
</tr>
</tbody>
</table>

### JPS Top Educational Content (TEC) Talks

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:15 a.m. – 9:30 a.m.</td>
<td><strong>Moderators:</strong> Craig W. Lillehei, MD; Charles L. Snyder, MD</td>
</tr>
<tr>
<td><strong>Tribute: Judson Randolph</strong></td>
<td>Mikael Petrosyan, MD; Philip C. Guzzetta, Jr., MD</td>
</tr>
<tr>
<td><strong>TEC Topic Review</strong></td>
<td>David Powell</td>
</tr>
<tr>
<td><strong>Pediatric Cervical Spine Management</strong></td>
<td>Aaron Jensen</td>
</tr>
<tr>
<td><strong>Fertility Preservation</strong></td>
<td>Erin Rowell</td>
</tr>
<tr>
<td><strong>Antibiotic Stewardship</strong></td>
<td>Shawn Rangel</td>
</tr>
<tr>
<td><strong>Surviving Sepsis</strong></td>
<td>Samir Gadepalli</td>
</tr>
<tr>
<td>9:30 a.m. – 10:15 a.m.</td>
<td>Refreshment Break</td>
</tr>
</tbody>
</table>
Plenary Scientific Session 1

10:15 a.m. – 11:30 a.m.

Moderators: Erin E. Rowell, MD; Joseph P. Vacanti, MD

2018 Foundation Scholar
Catherine Hunter, MD
Defining the Role of ROCK in Necrotizing Enterocolitis

S31

INDIVIDUAL HUMAN MILK OLGOSACCHARIDES PREVENT EXPERIMENTAL NECROTIZING ENTEROCOLITIS VIA DIVERGENT TRANSCRIPTOMIC RESPONSES

Richard Y. Wu, MD(c), PhD, Bo Li, PhD, Hiromu Miyake, MD, Marissa Cadete, Shaiya Robinson, Kathene C. Johnson-Henry, Abdallah Ahmed, Agostino Pierro, MD, Philip M. Sherman
The Hospital for Sick Children, Toronto, ON, Canada

Tribute: Thomas V. Santulli
Brian T. Craig, MD, Erin E. Rowell, MD

S32

SUTURELESS VS SUTURED ABDOMINAL WALL CLOSURE FOR GASTROCHISIS: OPERATIVE CHARACTERISTICS AND EARLY OUTCOMES FROM A MULTI-INSTITUTIONAL CONSORTIUM

Jason D. Fraser, MD, Katherine J. Deans, MD, MHSc, Mary E. Fallat, MD, Michael A. Helmrath, MD, Rashmi Kabre, MD, Charles M. Leys, MD, MSCi, Shawn D. St. Peter, MD, on behalf of the Midwest Pediatric Surgery Consortium

1Children’s Mercy Kansas City, Kansas City, MO, USA, 2Nationwide Children’s Hospital, Columbus, OH, USA, 3Norton Children’s Hospital, Louisville, KY, USA, 4Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA, 5Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, USA, 6University of Wisconsin School of Medicine & Public Health, Division of Pediatric Surgery, Madison, WI, USA

S33

CHANGING THE PARADIGM FOR MANAGEMENT OF PEDIATRIC PRIMARY SPONTANEOUS PNEUMOTHORAX: A SIMPLE ASPIRATION TEST PREDICTS NEED FOR OPERATION

Charles M. Leys, MD, MSCi, Ronald B. Hirschl, MD, Jonathan Kohler, Linda Cherney-Stafford, Nicholas Marka, Mary E. Fallat, MD, Samir K. Gadeppalli, MSc, MD, MBA, Jason D. Fraser, MD, Julia Grabowski, MD, Daniel J. Ostlie, MD, on behalf of the Midwest Pediatric Surgery Consortium

1University of Wisconsin School of Medicine & Public Health, Division of Pediatric Surgery, Madison, WI, USA, 2University of Michigan, Ann Arbor, MI, USA, 3University of Wisconsin, American Family Children’s Hospital, Madison, WI, USA, 4University of Wisconsin, Madison, WI, USA, 5Norton Children’s Hospital, Louisville, KY, USA, 6Children’s Mercy Kansas City, Kansas City, MO, USA, 7Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, USA, 8Phoenix Children’s Hospital, Phoenix, AZ, USA
S34

THORACOSCOPY OR THORACOTOMY FOR THE MANAGEMENT OF METASTATIC OSTEOSARCOMA - A PEDIATRIC SURGICAL ONCOLOGY RESEARCH STUDY

John Doski, MD,1 Zishaan Farooqui, MD, PhD,2 Andrew J. Murphy,3 Israel Fernandez-Pineda,4 Andrew M. Davidoff, MD,5 Sanjeev Vasudevan,5 Todd E. Heaton, MD, MPH,6 Michael P. LaQuaglia, MD,5 Nelson Piche,6 Jennifer H. Aldrink, MD,7 Marcus Malek, MD,8 Timothy B. Lautz, MD,9 Richard D. Glick, MD,10 Barrie S. Rich, MD,10 Rebecka Meyers, MD,11 Scott S. Short, MD,12 Andreana Büttner, MD,13 Reto Baertschiger, MD,14 Todd M. Jenkins,15 Roshni Dasgupta, MD15

1San Antonio, San Antonio, TX, USA, 2Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA, 3St. Jude Children’s Research Hospital, Memphis, TN, USA, 4Texas Children’s Hospital, Houston, TX, Houston, TX, USA, 5Memorial Sloan Kettering Cancer Center, New York, NY, USA, 6St. Justine, Montreal, PQ, Canada, 7Nationwide Children’s Hospital, The Ohio State University College of Medicine, Columbus, OH, USA, 8UPMC Children’s Hospital of Pittsburgh, Pittsburgh, PA, USA, 9Ann & Robert H. Lurie Children’s Hospital of Chicago, Northwestern University, Chicago, IL, USA, 10Cohen Children’s Medical Center at Hofstra/Northwell, Manhasset, NY, USA, 11Primary Children’s Hospital, The University of Utah, Salt Lake City, UT, USA, 12Primary Children’s Hospital, The University of Utah, Salt Lake City, UT, USA, 13Children’s Hospital, London Health Sciences Centre, Western University, London, Ontario, Canada, 14Dartmouth, Dartmouth, NH, USA, 15Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA

S35

UNDERSTANDING THE VALUE OF TUMOR MARKERS IN PEDIATRIC OVARIAN NEOPLASMS

Amy E. Lawrence, MD1, Mary E. Fallat, MD2, Geri Hewitt, MD3, Paige Hertweck, MD2, Amanda Onwuka, PhD1, Peter C. Minneci, MD, MHSc1, Katherine J. Deans, MD, MHSc1, Jennifer H. Aldrink, MD2, Midwest Pediatric Surgery Consortium1

1Nationwide Children’s Hospital, Columbus, OH, USA, 2Norton Children’s Hospital, Louisville, KY, USA, 3Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA

S36

CLINICAL APPROPRIATENESS OF PEDIATRIC BENIGN BREAST DISEASE MANAGEMENT

Maggie L. Westfal, MD, MPH1, Ya-Ching Hung, MD MPH2, David Chang, PhD, MPH, MBA, Numa Perez, MD2, Cassandra M. Kelleher, MD3

1Massachusetts General Hospital, Charlestown, MA, USA, 2Massachusetts General Hospital, Boston, MA, USA, 3MassGeneral Hospital for Children, Boston, MA, USA

S37

DEVELOPMENT AND IMPLEMENTATION OF A COMPETENCY-BASED CURRICULUM IN PEDIATRIC SURGERY

Calista M. Harbaugh, MD, Meredith Barrett, MD, Gurjit Sandhu, MD, Ronald B. Hirschl, MD

University of Michigan, Ann Arbor, MI, USA

PED Talk - Pediatric surgery, Education, Disruption #1: Artificial Intelligence

Salons A-F

11:30 a.m. – 12:00 p.m.

Moderator: James D. Geiger, MD

Tribute: Robert J. Izant, Jr.

Cory N. Criss, MD

Artificial Intelligence

Michael C. Muelly, MD, Stanford University
12:00 p.m. – 12:30 p.m.  
**Box Lunch Pick-up**  
**Grand Ballroom Foyer A-F, 4th FL**

**Roundtable Discussion: History of APSA and North American Pediatric Surgery**  
12:30 p.m. – 1:45 p.m.  
*Moderators:* Diana Farmer, MD; Kristen A. Zeller, MD; Don K. Nakayama, MD  
*Panel:* Kathryn D. Anderson, MD, Arnold G. Coran, MD, Dick G. Ellis, MD, Lucian L. Leape, MD, Alberto Pena, MD  
*Tribute:* M. Judah Folkman  
Kristen A. Zeller, MD  

1:45 p.m. – 2:15 p.m.  
**Refreshment Break**  
**Exhibit Hall, 3rd Floor**

**Case Debates and Controversies: Can’t we Agree on ANYTHING?**  
2:15 p.m. – 3:15 p.m.  
*Moderators:* Mac Harmon, MD; Todd A. Ponsky, MD  
*Tribute:* Marc I. Rowe  
Rachel Hanke, MD  

**PED Talk - Pediatric surgery, Education, Disruption #2: Building Dynamic Robots**  
3:15 p.m. – 3:45 p.m.  
*Moderator:* Thomas M. Krummel, MD  
*Tribute:* Arnold G. Coran  
Marcus D. Jarboe, MD  

**Building Dynamic Robots**  
Marc Raibert, PhD  

4:00 p.m. – 5:30 p.m.  
**BREAK-OUT SESSIONS**

**Quality: Jumpstart QI at your Institution - Launch of the APSA QSC QI Toolkit**  
4:00 p.m. – 5:30 p.m.  
*Moderators:* Loren Berman, MD; Mehul V. Raval, MD  
*Tribute:* Lucian L. Leape  
Danielle B. Cameron, MD, MPH  

*Tribute:* Timothy J. Campbell  
Sanjay Krishnaswami, MD
S40

DECREASING SURGICAL SITE INFECTIONS IN PEDIATRIC STOMA CLOSURES

Hira Ahmad, MD1, Devin R. Halleran, MD2, Andrew B. Nordin, MD3, Preeti Jaggi, MD4, Brian D. Kenney, MD5, Laura Weaver1, Julie Zipfel1, Richard J. Wood, MD2, Marc A. Levitt, MD2

1Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA, 2Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA, 3University at Buffalo, Buffalo, NY, USA, 4Emory University and Children’s Healthcare of Atlanta, Atlanta, GA, USA, 5Department of Pediatric Surgery, Nationwide Children’s Hospital, Columbus, OH, USA

S41

ENHANCED RECOVERY AFTER SURGERY PROTOCOL FOR PEDIATRIC LAPAROSCOPIC CHOLECYSTECTOMY PROMOTES SAFE AND EARLY DISCHARGE

Andrew Yeh1, Gabriella Butler2, Kelly Austin, MD2, Mihaela Visoiu2, Marcus Malek, MD2

1University of Pittsburgh Medical Center, Pittsburgh, PA, USA, 2UPMC Children’s Hospital of Pittsburgh, Pittsburgh, PA, USA

S42

AN EVIDENCE-BASED GUIDELINE FOR POST-APPENDECTOMY ANALGESIA: OPIOID-FREE FOR MOST

Mollie R. Freedman-Weiss, MD1, Alexander S. Chiu1, David J. Worhunsky, MD1, Alefteria Manchisi2, M. Isabel T. Maldonado2, Lisa M. Sagnella3, Michael G. Caty, MD4, Robert A. Cowles, MD5, Doruk E. Ozgediz, MD1, Emily R. Christison-Lagay, MD1, Daniel G. Solomon, MD1, David H. Stitelman, MD5

1Yale School of Medicine, New Haven, CT, USA, 2Yale New Haven Hospital, New Haven, CT, USA, 3Yale University, New Haven, CT, USA, 4Yale University School of Medicine, New Haven, CT, USA, 5Yale School of Medicine/Yale University, New Haven, CT, USA

S43

LESSONS LEARNED FROM APPLYING A PLAN-DO-STUDY-ACT FRAMEWORK TO IMPROVING ANTIBIOTIC STEWARDSHIP FOR CLEAN CASES WITHOUT FOREIGN BODIES


Boston Children’s Hospital, Boston, MA, USA

S44

REDUCTION OF OPIATE USE IN INFANTS UNDERGOING GASTROINTESTINAL SURGERY

David F. Grabski, MD, Rick Vavoliza, Daniel Levin, Sara K. Rasmussen, MD, Jonathan Swanson, Eugene D. McGahren, Jeffrey W. Gander, MD

University of Virginia, Charlottesville, VA, USA

Advocacy

4:00 p.m. – 4:45 p.m.

Moderators: Kathryn D. Bass, MD; Marion C.W. Henry, MD, MPH
Tribute: Barbara A. Barlow  
J. Leslie Knod, MD

STOP THE BLEED: TEACHING THE NEXT GENERATION – ONE STUDENT AT A TIME
Adil J. Malek, MD1, Emily Nes, MD1, Hayden W. Stagg2, Kayla R. Cehand3, Danny Little, MD2
1Texas A&M - Baylor Scott & White Health, Temple, TX, USA, 2Texas A&M - McLane Children’s Medical Center, Temple, TX, USA, 3McLane’s Children’s Hospital - Baylor Scott & White Health, Temple, TX, USA

A MULTICENTER EVALUATION OF A FIREARM SAFETY INTERVENTION IN THE PEDIATRIC OUTPATIENT SETTING
Brendan T. Campbell1, Shefali Thaker2, Mary E. Fallat, MD3, Elizabeth McClure4, Joseph V. Sakran, MD5, Isam W. Naas, MD6, Susan Ziegfeld6, Peter Mackie, MD7, Marie Snodgrass8, Marc Levy9, Bindi J. Naik-Mathuria, MD10, Annalyn S. Demello11, Stephanie Jones12, Jennifer Watters13, Peter Burke14, Lisa Allee15, Robert W. Letton, MD14, Deborah A. Kuhls14, Eileen M. Bulger, MD14, Ronald M. Stewart14
1American College of Surgeons Committee on Trauma, Chicago, IL, USA, 2Connecticut Children’s Medical Center, Middletown, CT, USA, 3Norton Children’s Hospital, Louisville, KY, USA, 4University of Louisville, Louisville, KY, USA, 5Johns Hopkins, Baltimore MD, USA, 6Johns Hopkins, Baltimore, MD, USA, 7C.S. Mott Children’s Hospital, Ann Arbor, MI, USA, 8C.S. Mott Children’s Hospital, Ann Arbor, MI, USA, 9Arnold Palmer Hospital, Orlando, FL, USA, 10Texas Children’s Hospital, Houston, TX, USA, 11Texas Children’s Hospital, Houston, TX, USA, 12University of Nevada, Las Vegas, NV, USA, 13St. Charles Medical Center, Bend, OR, USA, 14American College of Surgeons, Committee on Trauma, Chicago, IL, USA, 15Boston, MA, USA

Global Pediatric Surgery  
Salon G  
4:45 p.m. – 5:30 p.m.  
Moderators: Tamara N. Fitzgerald, MD; J. Ted Gerstle, MD

Erik N. Hansen, MD

2019 Travel Fellows Presentations  
Santosh Mahalik, MD, All India Institute of Medical Sciences, Bhubaneswar, India  
Tunde Sholadoye, MD, Admadu Bello University Teaching Hospital, Kaduna, Nigeria

Publication: Academic Pediatric Surgery in the Era of Social Media and Electronic Publication  
Salons H-J  
4:00 p.m. – 5:30 p.m.  
Moderators: Mary J. Edwards, MD; Todd A. Ponsky, MD

Tribute: Edward A. Free  
Alejandra M. Casar Berazaluce, MD

An Editor’s Perspective on Authoring Manuscripts  
George W. Holcomb, MD
## Developing an Academic Portfolio in 2019
Sundeep G. Keswani, MD

**Tribute: Robert T. Soper**
Numa Perez, MD, Maggie L. Westfal, MD, MPH

**The Digital Disruption of Academic Medicine: Paddle or Perish**
Todd A. Ponsky, MD

**Social Media 3.0: What is Your Twimpact Factor?**
Benedict C. Nwomeh, MD

<table>
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<tr>
<th>Time</th>
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<tbody>
<tr>
<td>5:30 p.m. – 6:30 p.m.</td>
<td>Residents Reception</td>
<td>Regis, 3rd FL</td>
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### Tuesday, May 21

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>6:00 a.m. – 7:30 a.m.</td>
<td>Committee Meetings</td>
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<tr>
<td>6:00 a.m. – 8:00 p.m.</td>
<td>Nursing Mothers Room</td>
<td>Boston University, 3rd FL</td>
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<tr>
<td>6:30 a.m. – 11:00 a.m.</td>
<td>Exhibit Hall Open; Poster Viewing</td>
<td>Exhibit Hall</td>
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<tr>
<td>6:30 a.m. – 7:30 a.m.</td>
<td>Continental Breakfast</td>
<td>Exhibit Hall, 3rd Floor</td>
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<tr>
<td>6:30 a.m. – 2:30 p.m.</td>
<td>Registration Desk Open</td>
<td>Registration Desk A&amp;B, 4th FL</td>
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<tr>
<td>6:30 a.m. – 2:00 p.m.</td>
<td>Speaker Ready Room Open</td>
<td>Orleans, 4th FL</td>
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### Outcomes and Systematic Reviews

**Salons A-F**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>7:30 a.m. – 8:30 a.m.</td>
<td>Moderator: Adam B. Goldin, MD</td>
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<tr>
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<td>Tribute: W. Hardy Hendren</td>
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<td></td>
<td>Brendan Lovasik, MD</td>
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### BREAK-OUT SESSIONS (8:45 a.m. – 9:45 a.m.)

**Oncology**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>8:45 a.m. – 9:45 a.m.</td>
<td>Moderator: Roshni A. Dasgupta, MD; Peter F. Ehrlich, MD, MSC</td>
<td>Salons A-F</td>
</tr>
<tr>
<td></td>
<td>Tribute: H. Biemann Othersen</td>
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<tr>
<td></td>
<td>Elisabeth T. Tracy, MD; Christa N. Grant, MD</td>
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</table>
OPTIMIZATION OF IMAGE-GUIDED PERCUTANEOUS CORE NEEDLE BIOPSY FOR INITIAL DIAGNOSTIC MANAGEMENT OF NEUROBLASTOMA: A PEDIATRIC SURGICAL ONCOLOGY RESEARCH COLLABORATIVE STUDY
Richard E. Overman, MD1, Tanvi Kartal1, Benjamin T. Many, MD2, Rachel Jones1, Timothy B. Lautz, MD1, Jerry Xiao1, Dave R. Lal, MD, MPH3, Roshni Dasgupta, MD3, Misty Trout3, Jana Lewis3, Jennifer H. Aldrink, MD6, Sara Mansfield, MD6, Scott S. Short, MD7, Rebecka Meyers, MD8, Bindi J. Naik-Mathuria, MD9, Sanjeev Vasudevan9, Jacob Davidson10, Andrew Williams10, Andreaana Bütter, MD10, Erika A. Newman, MD1
1C. S Mott Children’s Hospital, University of Michigan, Ann Arbor, MI, USA, 2Ann & Robert H. Lurie Children’s Hospital of Chicago, Northwestern University, Chicago, IL, USA, 3Ann & Robert H. Lurie Children’s Hospital of Chicago, Northwestern University, Chicago, IL, USA, 4Medical College of Wisconsin, Milwaukee, WI, USA, 5Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA, 6Nationwide Children’s Hospital, The Ohio State University College of Medicine, Columbus, OH, USA, 7Primary Children’s Hospital, The University of Utah, Salt Lake City, UT, USA, 8Primary Children’s Hospital, The University of Utah, Salt Lake City, UT, USA, 9Texas Children’s Hospital, Houston, TX, USA, 10Children’s Hospital, London Health Sciences Centre, Western University, London, Ontario, Canada

IMAGING APPEARANCE OF NONGERMINOMA PEDIATRIC OVARIAN GERM CELL TUMORS DOES NOT DISCRIMINATE BENIGN FROM MALIGNANT HISTOLOGY
Deborah Billmire, MD1, Bryan Dicken, MD2, Frederick Rescorla, MD3, Jonathan Ross4, Jin Piao, MD5, Li Huang6, Mark Krailo6, Furqan Shaikh7, Farzana Pashankar, MD8, Lindsay Frazier, MD9
1Indiana University, Indianapolis, IN, USA, 2University of Alberta, Edmonton, AB, Canada, 3Indiana University, IN, USA, 4Case Western Reserve University, Cleveland, OH, USA, 5Children’s Oncology Group, Monrovia, CA, USA, 6Children’s Oncology Group, Monrovia, CA, USA, 7University of Toronto, The Hospital for Sick Children, Toronto, ON, Canada, 8Yale School of Medicine, New Haven, CT, USA, 9Harvard University, Dana Farber Cancer Institute, Boston, MA, USA

USE OF INDOCYANINE GREEN AS A DIAGNOSTIC ADJUNCT AT TIME OF PULMONARY METASTASECTOMY FOR HEPATOBLASTOMA
Alexander Bondoc, MD1, Meera Kotagal1, Roshni Dasgupta, MD1, Maria Alonso1, James Geller1, Gregory Tiao1
1Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA, 2Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA

Trauma
Salon G
8:45 a.m. – 9:45 a.m.
Moderators: John K. Petty, MD; Jeffrey S. Upperman, MD

Tribute: Peter K. Kottmeier
Robert T. Russell, MD, MPH

Head and Neck Operative Trauma
Regan F. Williams, MD

Firearm Conversations with Patients and Families
John K. Petty, MD
Thoracic Operative Trauma
Mitchell R. Price, MD

Abdomen and Pelvis Operative Trauma
Vincent P. Duron, MD

S51
UNINTENTIONAL PEDIATRIC FIREARM INJURIES: EXPANDING THE FOCUS FOR PREVENTION
Robert J. McLoughlin, MD, Clark Murray, MD, Shauna Rice, Michael P. Hirsh, MD, Muriel Cleary, MD, Jeremy T. Aidlen, MD
University of Massachusetts Medical School, Worcester, MA, USA

S52
TOYGUNS, REAL DANGER – AN UPDATE ON PEDIATRIC INJURY PATTERNS RELATED TO BB AND AIR GUNS
Robert J. McLoughlin, MD, Alyssa E. Stetson, Jonathan Green, MD, Michael P. Hirsh, MD, Muriel Cleary, MD, Jeremy T. Aidlen, MD
University of Massachusetts Medical School, Worcester, MA, USA

Practice
Salons H-J
8:45 a.m. – 9:45 a.m.
Moderators: John C. Bleacher, MD; Barry M. Newman, MD

Getting Paid for Your Value - How to Get What You Are Worth in Our Current Treacherous Environment

Tribute: Dick G. Ellis
Chip K. Uffman, MD

Overview of Current State of Payment
Barry M. Newman, MD

Negotiating as if Your Livelihood Depends on It
J. Duncan Phillips, MD

Presentations by Three Practicing Pediatric Surgeons - How They Made This Work in Differing Practice Situations
Marcene R. McVay Gillam, MD – Academic Practitioner
Ravindra K. Vegunta, MD – Employed Pediatric Surgeon, Non-academic
Ala Stanford, MD – Private Practice Pediatric Surgeon

9:45 a.m. – 10:15 a.m. Refreshment Break
9:45 a.m. – 10:15 a.m. Exhibit Hall, 3rd Floor
10:15 a.m. – 11:15 a.m.  BREAK-OUT SESSIONS

**Fetal Diagnosis and Treatment**  
Salons A-F

**Moderators:** Shinjiro Hirose, MD; Rony Marwan, MD

**Tribute:** Alfred A. de Lorimier  
Niti Shahi, MD; Laura Galganski, MD

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**S53**  
**WHEN ULTRASOUND AND FETAL MRI YIELD DISCORDANT PROGNOSIS IN PRENATAL CDH: WHERE LIES THE TRUTH?**  
Aimee G. Kim, MD, Gabriella A. Norwitz, Maria Ladino-Torres, Deborah R. Berman, Jeannie Kreutzman, Marjorie C. Treadwell, George B. Mychaliska, MD, Erin E. Perrone, MD  
*University of Michigan, Ann Arbor, MI, USA*

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**S54**  
**SURVIVAL FOLLOWING FETAL INTERVENTION FOR IN UTERO RENAL FAILURE**  
Stefanie Riddle, MD1, William Polzin, MD2, Foong-Yen Lim, MD3, Alexander Bondoc, MD4, Donna Claes1, Pramod Reddy5, Gregory Tiao1, Brian Vanderbrink1, Paul Kingma3  
1*Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA*, 2*Cincinnati Fetal Center, Cincinnati, OH, USA*, 3*Cincinnati Children’s Hospital Medical Director, Cincinnati, OH, USA*

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**S55**  
**THE IN-UTERO DIAGNOSIS OF CHOLEDOTAL CYST: CAN POSTNATAL IMAGING PREDICT WHO MIGHT BENEFIT FROM EARLY INTERVENTION?**  
Elizabeth Cochran, MD1, Stefanie P. Lazow, MD2, Natalie Frost, MD3, Patricia Santiago-Munoz, MD4, Lorrie S. Burkhalter5, James Davis, MD6, Kim Aimee7, Erin E. Perrone, MD2, Terry L. Buchmiller, MD2, David H. Stitelman, MD2, David Schindel, MD2  
1*University of Texas Southwestern Medical School, Dallas, TX, USA*, 2*Boston Children’s Hospital, Boston, MA, USA*, 3*Dell Children’s Austin, Austin, TX, USA*, 4*University of Texas Southwestern Medical Center, Dallas, TX, USA*, 5*Children’s Medical Center, Dallas, TX, USA*, 6*Pediatric Surgical Group, Dallas, TX, USA*, 7*University of Michigan, Ann Arbor, MI, USA*, 8*Yale School of Medicine/Yale University, New Haven, CT, USA*, 9*UT Southwestern Medical Center, Children’s Medical Center, Dallas, TX, USA*

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**Critical Care**  
Salon G

**Moderators:** Alexander Feliz, MD; Samir K. Gadepalli, MSc, MD, MBA

**Tribute:** Arvin I. Philippart  
Mary K. Arbuthnot, MD, Natalie A. Drucker, MD
S46
OPERATIVE TIMING IN CONGENITAL DIAPHRAGMATIC HERNIA PATIENTS RECEIVING ECMO, PART I: REPAIR ON ECMO IMPROVES SURVIVAL
Duy T. Dao, MD1, Carmen M. Burgos, MD2, Matthew T. Harting, MD, MS3, Kevin P. Lally, MD4, Pamela A. Lally, MD5, Hong-An T. Nguyen, MD5, Jay M. Wilson5, Terry L. Buchmiller, MD1
1Boston Children’s Hospital, Boston, MA, USA, 2Karolinska Institutet, Stockholm, Sweden, 3McGovern Medical School at the University of Texas Health Science Center at Houston, Houston, TX, USA, 4McGovern Medical School at The University of Texas Health Science Center at Houston, Houston, TX, USA, 5Department of Pediatric Surgery, University of Texas McGovern Medical School, Houston, TX, USA, 6Boston Medical Center, Boston, MA, USA, 7The University of Texas Health Science Center at Houston, Houston, TX, USA

S47
OPERATIVE TIMING IN CONGENITAL DIAPHRAGMATIC HERNIA PATIENTS RECEIVING ECMO, PART II: REPAIR EARLY ON ECMO IMPROVES SURVIVAL
Duy T. Dao, MD1, Carmen M. Burgos, MD2, Matthew T. Harting, MD, MS3, Kevin P. Lally, MD4, Pamela A. Lally, MD5, Hong-An T. Nguyen, MD5, Jay M. Wilson5, Terry L. Buchmiller, MD1
1Boston Children's Hospital, Boston, MA, USA, 2Karolinska Institutet, Stockholm, Sweden, 3McGovern Medical School at the University of Texas Health Science Center at Houston, Houston, TX, USA, 4McGovern Medical School at The University of Texas Health Science Center at Houston, Houston, TX, USA, 5Department of Pediatric Surgery, University of Texas McGovern Medical School, Houston, TX, USA, 6Boston Medical Center, Boston, MA, USA, 7The University of Texas Health Science Center at Houston, Houston, TX, USA

Procedures on ECMO
Sabina M. Siddiqui, MD

Thromboelastography
Adam M. Vogel, MD

S45
THE USE OF THROMBOELASTOGRAMS IN CONGENITAL DIAPHRAGMATIC HERNIA NEONATES ON EXTRACORPOREAL MEMBRANE OXYGENATION
Ryan C. Phillips, MD1, Niti Shahi2, Ryan C. Phillips, MD3, Sarah A. Hilton, MD, MS4, Claire Levek3, Jason Gien, MD1, John P. Kinsella, MD3, Steven L. Moulton, MD2, Kenneth W. Liechty, MD3, Ahmed I. Marwan, MD2
1University of Colorado School of Medicine, Aurora, CO, USA, 2Children's, Aurora, CO, USA, 3University of Colorado School of Medicine, Denver, CO, USA, 4University of Colorado, Aurora, CO, USA, 5University of Colorado School of Medicine; Colorado Fetal Care Center; Children’s Hospital Colorado, Aurora, CO, USA

Opioid Reduction: The Opioid Crisis and Our Role to Affect Change
Salons H-J

10:15 a.m. – 11:15 a.m.

Moderators: Mehul V. Raval, MD; Kurt F. Heiss, MD

Tribute: Robert G. Allen
Erica Hodgman, MD, Eunice Y. Huang, MD

Empowering Pediatric Surgeons to Combat the Opioid Epidemic Using Evidence-based Strategies
Kurt F. Heiss, MD, Lorraine Kelley-Quon, MD, Mehul V. Raval, MD
S56
A FOCUSED EDUCATIONAL INTERVENTION FOR HIGH-RISK OPIOID PRESCRIBING PATTERNS
Katherine Barsness, MD, MS, Hehui Quan, MS, Renee Manworren, PhD, MS, Christine State, DHA, Leah Harris, MD
Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL, USA

S57
A SINGLE EDUCATIONAL INTERVENTION MAY NOT BE SUFFICIENT TO CHANGE OPIOID PRESCRIBING PRACTICES FOR SOME SURGEONS
Megan E. Cunningham, MD1, Celia D. Flores, PA-C1, Huirong Zhu, PhD1, Monica E. Lopez, MD2, Adam M. Vogel, MD1, Mehul V. Raval, MD1, Sohail R. Shah, MD, MSHA2
1Texas Children’s Hospital, Houston, TX, USA, 2Baylor College of Medicine, Houston, TX, USA, 3Ann & Robert H. Lurie Children’s Hospital of Chicago; Surgical Outcomes and Quality Improvement Center, Northwestern University Feinberg School of Medicine, Chicago, IL, USA

S58
OPIOIDS ARE OVERPRESCRIBED AND CAN BE ELIMINATED FOR A NUMBER OF CHILDREN’S OPERATIONS
Calista M. Harbaugh, MD, Gracia Vargas, Courtney L. Streur, G. Ying Li, Aaron L. Thatcher, David A. Zopf, Lauren A. Bohm, Ronald B. Hirschl, MD, Jennifer F. Waljee, MD, MPH, Samir K. Gadeballi, MSc, MD, MBA
University of Michigan, Ann Arbor, MI, USA

S59
FACTORs AFFECTING NARCOTIC MANAGEMENT FOR INJURED CHILDREN AFTER HOSPITAL DISCHARGE: A PROSPECTIVE SURVEY OF PARENTS
Anna Delamerced1, Hale Wills2
1Warren Alpert Medical School of Brown University, Providence, RI, USA, 2Hasbro Children’s Hospital / Brown University, Providence, RI, USA

11:00 a.m.  Exhibit Dismantle; Poster Dismantle  APSA Exhibit Hall

Jay and Margie Grosfeld Presidential Symposium
Salons A-F
11:30 a.m. – 1:30 p.m.
Moderator: Ronald B. Hirschl, MD
Adam J. Foss, Esq, Victor Garcia, MD, Erika A. Newman, MD
Tribute: Jay L. Grosfeld
Ronald B. Hirschl, MD
Tribute: Louise Schnaufer
Ronald B. Hirschl, MD

2:00 p.m. – 5:30 p.m.  JFK Library Tour
by separate registration
### Wednesday, May 22

<table>
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<td>6:00 a.m. – 7:00 a.m.</td>
<td>Committee Meetings</td>
<td>View the Ancillary Meetings List on the APSA website</td>
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<tr>
<td>6:00 a.m. – 7:00 a.m.</td>
<td>Continental Breakfast</td>
<td>Grand Ballroom Foyer, 4th FL</td>
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<td>6:00 a.m. – 8:00 p.m.</td>
<td>Nursing Mothers Room</td>
<td>Boston University, 3rd FL</td>
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<td>6:00 a.m. – 4:00 p.m.</td>
<td>Speaker Ready Room Open</td>
<td>Orleans, 4th FL</td>
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<tr>
<td>6:30 a.m. – 4:00 p.m.</td>
<td>Registration Desk Open</td>
<td>Registration Desk A&amp;B, 4th FL</td>
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### Plenary Scientific Session 2

**Moderators**: Ronald B. Hirschl, MD; Kathleen van Leeuwen, MD

#### S60

**EXTENDING THE ‘WINDOW OF TOLERANCE’: REGULATORY T CELLS PERMIT LATE GESTATION IN UTERO HEMATOPOIETIC CELL TRANSPLANTATION**

John S. Riley, MD, MS¹, Lauren McClain², John Stratigis², Barbara Coons², Nicholas Ahn², Haiying Li², Alan W. Flake, MD², William H. Peranteau, MD²

¹Hospital of the University of Pennsylvania, Philadelphia, PA, USA, ²Children’s Hospital of Philadelphia, Philadelphia, PA, USA

**Tribute**: J. Alex Haller, Jr.
Seth D. Goldstein, MD, MPhil

**Tribute**: James A. Talbert
Kevin Johnson, MD

#### S61

**IN UTERO AAV-BASED GENOME-EDITING TO CURE A MOUSE MODEL OF HUMAN HEREDITARY TYROSINEMIA TYPE 1**

Clara Nicolas, Caitlin VanLith, Kari Allen, Zeji Du, Rebekah Guthman, Robert Kaiser, Raymond Hickey, Joseph Lillegard, MD
Mayo Clinic, Rochester, MN, USA

#### S62

**MINIMIZING VARIANCE IN PEDIATRIC SURGICAL CARE THROUGH IMPLEMENTATION OF A COLON BUNDLE: A MULTI-INSTITUTION STUDY**

Aaron J. Cunningham, MD¹, Pavithra Rao¹, Arjun Ashok¹, Sanjay Krishnaswami³, Nicholas A. Hamilton, MD², Mubeen A. Jafri, MD¹, Kenneth S. Azarow, MD¹, Marilyn W. Butler, MD¹, Elizabeth A. Fialkowskii¹

¹Oregon Health & Science University, Portland, OR, USA, ²Oregon Health & Science University, Portland, OR, USA, ³Randall Children’s Hospital at Legacy Emanuel, Portland, OR, USA, ⁴Randall Children’s Hospital at Legacy Emanuel, Portland, OR, USA
S63

DECREASING POST-OPERATIVE COMPLICATIONS IN SURGICALLY PLACED GASTROSTOMY TUBES: A QUALITY IMPROVEMENT INITIATIVE
Kate B. Savoie, MD, MS1, Sarah Hastie2, Margaret Holston3, Brenda Ruth3, Luke Vohsing3, Ruth Seabrook3, Tria Shadeed3, Maria Haghnazari3, Elizabeth Theado3, Mary Gossard3, Karen A. Diefenbach, MD3
1Department of Pediatric Surgery, Nationwide Children’s Hospital, Columbus, OH, USA, 2Nationwide Children’s Hospital, Columbus, OH, USA

S64

PEDIATRIC TRAUMA VENOUS THROMBOEMBOLISM PREDICTION ALGORITHM OUTPERFORMS CURRENT ANTIMOBILE PROPHYLAXIS GUIDELINES: A MULTICENTER PILOT STUDY
Aaron J. Cunningham, MD1, Nicholas A. Hamilton, MD2, Sanjay Krishnaswami1, Martin A. Schreiber, MD2, Mubeen A. Jafri, MD3
1Oregon Health & Science University, Portland, OR, USA, 2Oregon Health & Science University, Portland, OR, USA, 3Randall Children’s Hospital at Legacy Emanuel, Portland, OR, USA

Fetal Mechanisms of Liver and Bile Duct Repair: A Link to the Prenatal Origins of Biliary Atresia
Amar Nijagal, MD

S65

SEXUAL FUNCTION AND FERTILITY IN FEMALES AFTER SURGERY FOR HIRSCHSPRUNG DISEASE
Joseph R. Davidson, MBBS, MA, MRCS1, Kristiina Kyrklund, MD3, Mikko Pakarinen1, Simon Eaton, PhD3, Paolo De Coppi1, Joe Curry1
1Specialist Neonatal and Paediatric Surgery, Great Ormond Street Hospital for Children, London, England, United Kingdom, 2Department of Paediatric Surgery, New Children’s Hospital, University of Helsinki and Helsinki University Hospital, Finland, Helsinki, Uusimaa, Finland, 3Department of Paediatric Surgery, UCL-Great Ormond Street Institute of Child Health, London, England, United Kingdom

S66

ULTRASOUND-GUIDED EPIGASTRIC HERNIA REPAIR
Mercedes Pilkington, MD, Matthew W. Ralls, MD, Ronald B. Hirschl, MD, Marcus D. Jarboe, MD
University of Michigan, Ann Arbor, MI, USA

8:30 a.m. – 9:30 a.m. BREAKOUT SESSIONS
Research: Necrotizing Enterocolitis Salon G
8:30 a.m. – 9:30 a.m.
Moderators: David J. Hackam, MD; Agostino Pierro, MD
Tribute: Julius Lister
David J. Hackam, MD
S69

HUMAN BREAST MILK-DERIVED EXOSOMES IN THE PROTECTION AGAINST EXPERIMENTAL NECROTIZING ENTEROCOLITIS

Courtney Pisano, DO, MS, Mostafa Elbahrawy, MD, Aidan Farrell, Gail E. Besner, MD, Jeffrey Galley, Yijie Wang, David Brigstock

Nationwide Children’s Hospital, Columbus, OH, USA

S70

THE ETIOLOGY OF NECROTIZING ENTEROCOLITIS: INFECTIOUS OR INFLAMMATORY?

Rita D. Shelby, MD, MS1, Lauren Mashburn-Warren2, Jason Navarro2, Natalie Tengberg1, Michael Bailey2, Steven D. Goodman2, Gail E. Besner, MD1

1Nationwide Children’s Hospital, Ohio State University, Columbus, OH, USA, 2Nationwide Children’s Hospital, Columbus, OH, USA

S71

IS ILEUS A CAUSE AS OPPOSED TO A CONSEQUENCE OF NEC? REVERSAL OF INTESTINAL DYSMOTILITY REDUCES THE SEVERITY OF EXPERIMENTAL NEC THROUGH INCREASED NEURON SIGNALING

Mark L. Kovler, MD1, Mitchell R. Ladd1, William Fulton1, Yuukihiro Yamaguchi1, Thomas Prindle1, Sanxia Wang1, Chhinder Sodhi1, David J. Hackam, MD2

1Johns Hopkins Children’s Center, Baltimore, MD, USA, 2Johns Hopkins Childrens Center, Baltimore, MD, USA

S72

TETRAHYDROBIOPTERIN AMELIORATES EXPERIMENTAL NECROTIZING ENTEROCOLITIS BY REDUCING THE OXIDATIVE STRESS

Shogo Seo, Hiromu Miyake, MD, Mashriq Alganabi, Maarten Janssen Lok, Joshua S. O’connell, MD, Carol Lee, Bo Li, PhD, Agostino Pierro, MD

The Hospital for Sick Children, Toronto, ON, Canada

S73

MITOCHONDRIAL DNA IS ELEVATED IN PLASMA OF INFANTS WITH NECROTIZING ENTEROCOLITIS AND ACUTE ABDOMEN

Georgina Navoly1, Claire Deakin1, Haris Achilleos2, Tim Scorrer3, Mark Peters1, Nigel J. Hall, MD4, Simon Eaton, PhD5

1UCL Great Ormond Street Institute of Child Health, London, England, United Kingdom, 2UCL Great Ormond Street Institute of Child Health, London, England, United Kingdom, 3Queen Alexandra Hospital, Portsmouth, England, United Kingdom, 4Southampton Children’s Hospital, Southampton, England, United Kingdom, 5Department of Paediatric Surgery, UCL-Great Ormond Street Institute of Child Health, London, England, United Kingdom

Scientific Session 4: Practice, Education, Trauma

8:30 a.m. – 9:30 a.m.

Moderators: Erin M. Garvey, MD; David M. Notrica, MD
S74

IS IT ENDOMETRIOSIS?
Rachel Hanke, MD1, Andrew de Fazio, MD2, Todd Ponsky, MD3, Ceana Nezhat, MD4
1Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA, 2New York Presbyterian Brooklyn Methodist Hospital, Brooklyn, NY, USA, 3Cincinnati Children’s Hospital Medical Center, Akron, OH, USA, 4Nezhat Medical Center, Atlanta, Georgia, USA

S75

EXPLORING THE GENDER GAP: LETTERS OF RECOMMENDATION TO PEDIATRIC SURGERY FELLOWSHIP
Arika L. Hoffman, MD1, Rachel Ghoubrial1, Melanie McCormick1, Praise Matemavi1, Robert Cusick, MD1
1University of Nebraska Medical Center, Omaha, NE, USA, 2University of Minnesota Medical Center, Minneapolis, MN, USA, 3Children’s Hospital and Medical Center, Omaha, NE, USA

S76

ASSESSMENT OF OPERATIVE AUTONOMY AND READINESS FOR INDEPENDENT PRACTICE AMONG PEDIATRIC SURGERY FELLOWS
Benjamin Zendejas, MD, MSc1, Craig W. Lillehei, MD1, Brian C. George, MD2, Biren P. Modi, MD1
1Boston Children’s Hospital, Boston, MA, USA, 2University of Michigan, Ann Arbor, MI, USA, 3Center for Advanced Intestinal Rehabilitation and Department of Surgery, Boston Children’s Hospital and Harvard Medical School, Boston, MA, USA

Tribute: Keith W. Ashcraft
Charlene Dekonenko, MD, Robert M. Dorman, MD

Tribute: Thomas M. Holder
Robert M. Dorman, MD

S77

ARTIFICIAL INTELLIGENCE AND VISUAL RECOGNITION IN COMPUTER-AIDED DIAGNOSIS: A PROOF OF CONCEPT FEMUR FRACTURE MODEL
Alejandra M. Casar Berazaluce, MD1, Alexander T. Gibbons, MD, MS2, Rachel Hanke, MD3, Todd Ponsky, MD3
1Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA, 2Akron Children’s Hospital, University Heights, OH, USA, 3Cincinnati Children’s Hospital Medical Center, Akron, OH, USA

S78

PREDICTORS OF DISPARITIES IN PEDIATRIC MORTALITY FROM MOTOR VEHICLE CRASHES AMONG US COUNTIES
Ali A. Mokdad, MD, MS1, Samir R. Pandya, MD2, Lindsey Wolf4, Mark Ryan1, Faisal Qureshi, MD4
1University of Texas Southwestern, Dallas, TX, USA, 2University of Texas Southwestern Medical Center, TX, USA, 3Brigham and Women’s Hospital, Boston, MA, USA, 4UT Southwestern Medical Center, Dallas, TX, USA
TIMING OF NUTRITIONAL ASSISTANCE BENEFIT DISTRIBUTION IS ASSOCIATED WITH RATES OF ADMISSION FOR CHILD ABUSE AND NEGLECT: AN INTERSTATE ANALYSIS OF 3574 ADMISSIONS

Emily R. Christison-Lagay, MD¹, Andrea Asnes, MD², Daniel G. Solomon, MD³

¹Yale School of Medicine, New Haven, CT, USA, ²Yale University School of Medicine, New Haven, CT, USA, ³Yale University School of Medicine, New Haven, CT, USA

New Technology

8:30 a.m. – 9:30 a.m.

Moderators: Sean J. Barnett, MD; Nam Nguyen, MD

Tribute: David Tapper
Robert Sawin, MD

ULTRASOUND-GUIDED INGUINAL HERNIA REPAIR

Marcus D. Jarboe, MD, Maria Ladino-Torres, Ronald B. Hirschl, MD
University of Michigan, Ann Arbor, MI, USA

SMALL SURGERIES, BIG SMILES: REDUCING SEDATION THROUGH VIRTUAL REALITY

Julia M. Chandler, MD, MS¹, Jordan S. Taylor, MD², Katherine I. Portelli¹, John R. Austin¹, Thomas J. Caruso, MD¹, Samuel T. Rodriguez, MD¹, Gary E. Hartman¹, Stephanie D. Chao, MD¹

¹Stanford University, Stanford, CA, USA, ²Stanford University, Stanford, CA, USA

INTESTINAL STEM CELLS AND EZH2 ARE INVOLVED IN THE PATHOGENESIS OF NEONATAL INTESTINAL INJURY

Adam E. Minich¹, Bo Li, PhD², Carol Lee², Hiromu Miyake, MD², Marissa Cadete², Agostino Pierro, MD²

¹The Hospital for Sick Children, Concord, ON, Canada, ²The Hospital for Sick Children, Toronto, ON, Canada
**Q44**

**SHORT-CHAIN FRUCTO-OLIGOSACCHARIDES PROVIDE INTESTINAL PROTECTION AGAINST EXPERIMENTAL NECROTIZING ENTEROCOLITIS**

Haitao Zhu, MD, Richard Y. Wu, MD(c), PhD, Bo Li, PhD, Mashriq Alganabi, Maarten Janssen Lok, Carol Lee, Jia Liu, Kathene C. Johnson-Henry, Philip M. Sherman, Agostino Pierro, MD

*The Hospital for Sick Children, Toronto, ON, Canada*

**Q45**

**REMOTE ISCHEMIC CONDITIONING REDUCES THE INJURY ASSOCIATED WITH EXPERIMENTAL INTESTINAL ISCHEMIA/REPERFUSION**

Hiromu Miyake, MD, Shogo Seo, Carol Lee, Bo Li, PhD, Agostino Pierro, MD

*The Hospital for Sick Children, Toronto, ON, Canada*

**Q46**

**PHARMACOLOGIC TOLL-LIKE RECEPTOR (TLR4) INHIBITION IN TRAUMATIC BRAIN INJURY ATTENUATES NEUROINFLAMMATION AND IMPROVES COGNITIVE OUTCOMES BY PROMOTING MONOCYTE INFILTRATION**

Young Chun, MD1, Jose Alonso-Escalante2, Bruno Soares1, William Fulton1, Chhinder Sodhi3, David J. Hackam, MD4, Isam W. Nasr, MD5

1Johns Hopkins University, Baltimore, MD, USA, 2Allegheny General Hospital, Pittsburgh, PA, USA, 3Johns Hopkins Children’s Center, Baltimore, MD, USA, 4Johns Hopkins Childrens Center, Baltimore, MD, USA, 5Johns Hopkins, Baltimore, MD, USA

**Q47**

**HUMAN HEPATIC PROGENITOR CELLS GENERATE TISSUE ENGINEERED LIVER COMPRISSED OF MAJOR HEPATIC CELL TYPES IN A 3-MONTH MURINE MODEL**

Anthony I. Squillaro, MD, MPH, Alexa M. Fode, Laura-Marie A. Nucho, Samuel M. Zuber, David F. Chang, Christopher R. Schlieve, Tracy C. Grikscheit, MD

*Children’s Hospital Los Angeles, Los Angeles, CA, USA*

**Q48**

**AUTOLOGOUS TRANSPLANTATION OF SKIN-DERIVED PRECURSOR CELLS IN A PORCINE MODEL**

Anne-Laure Thomas, MS1, Jordan S. Taylor, MD2, Nhan Huynh3, Genia Dubrovsky, MD4, Jean Paul Chadarevian5, Angela Chen6, Samuel Baker6, James C.Y. Dunn, MD7

1Stanford University School of Medicine, Stanford, CA, USA, 2Stanford University, Stanford, CA, USA, 3Stanford University, Palo Alto, CA, USA, 4UCLA, Los Angeles, CA, USA, 5UCLA, Los Angeles, CA, USA, 6Stanford University, Palo Alto, CA, USA, 7Stanford University, Stanford, CA, USA

**Q49**

**IDENTIFICATION OF A NOVEL CIRP RECEPTOR AND ITS ROLE IN SEPSIS**

Naomi-Liza Denning, MD1, Monowar Aziz2, Jose Prince, MD3, Ping Wang4

1Cohen Children’s Medical Center at Hofstra/Northwell, New Hyde Park, NY, USA, 2Center for Inflammation and Immunology, Feinstein Institute for Medical Research, Manhasset, NY, USA, 3Cohen Children’s Medical Center at Hofstra/Northwell, Manhasset, NY, USA
Q50
FETAL ENZYME REPLACEMENT AND STEM CELL TRANSPLANTATION RESCUE BRAIN MICROGLIA IN MURINE MUCOPOLYSACCHARIDOSIS TYPE 7
Quoc-Hung Nguyen, MD, Bowen Wang, Carlo Eikani, Lucas Smith, Jeremy Shea, Russell Witt, Saul Villeda, Tippi Mackenzie
UCSF, San Francisco, CA, USA

Tribute: Jens G. Rosenkrantz
Christina Feng, MD

Q51
ASSOCIATION OF BLOOD COMPONENT RATIOS WITH 24-HOUR MORTALITY IN INJURED CHILDREN RECEIVING MASSIVE TRANSFUSION
Jonathan I. Groner, MD1, Brianna M. Mills1, Saman Arbabi, MD2, Eileen M. Bulger, MD3, Monica S. Vavilala1, Jonathan I. Groner, MD1, Lynn G. Stansbury2, John R. Hess4, Frederick P. Rivara2, Elissa K. Butler, MD1
1Nationwide Children’s Hospital, Columbus, OH, USA, 2University of Washington, Harborview Injury Prevention and Research Center, Seattle, WA, USA, 3American College of Surgeons, Committee on Trauma, Chicago, IL, USA, 4University of Washington, Department of Laboratory Medicine, Seattle, WA, USA

Q52
SECONDARY OVERTRIAGE IN A PEDIATRIC LEVEL ONE TRAUMA CENTER
Andrew B. Nordin, MD1, Aleksander D. Nordin2, Brian D. Kenney, MD3, Rajan K. Thakkar4, Karen A. Diefenbach, MD4
1University at Buffalo, Buffalo, NY, USA, 2Baylor University, Waco, TX, USA, 3Department of Pediatric Surgery, Nationwide Children’s Hospital, Columbus, OH, USA, 4Nationwide Children’s Hospital, Columbus, OH, USA

Q53
DOWNWARD TRENDS IN PANCREATECTOMY OF MODERATE AND SEVERE BLUNT PANCREATIC TRAUMA IN CHILDREN
David M. Notrica, MD1, Bethany L. Sussman1, Lois W. Sayrs, MD1, Brenna McElenny2, Tanner Ellsworth1, Justin Lee1, Kate Davenport1
1Phoenix Children’s Hospital, Phoenix, AZ, USA, 2University of Arizona College of Medicine, Phoenix, AZ, USA

Q54
POST-DISCHARGE OUTCOMES IN PEDIATRIC TRAUMA: AN EXAMINATION OF SURGICAL PEDIATRIC PATIENTS AT AN URBAN TRAUMA CENTER AFTER A PENETRATING INJURY
Gabriel Siegel, BS1, Aaron Katrikh1, Timothy C. Lee, MD2, Daniel Webster1, Connor Wakefield1, Justin Mis3, Jennifer Poirier3, Matthew Kaminsky, MD1, Ami Shah1
1Rush Medical College, Chicago, IL, USA, 2Rush Medical College, Chicago, IL, USA, 3Rush Medical College, Chicago, IL, USA
IDENTIFYING POPULATIONS AT RISK FOR CHILD ABUSE: A NATIONWIDE ANALYSIS
Hallie J. Quiroz, MD, Joshua P. Parreco, Brent A. Willobee, Anthony Ferrantella, MD, Chad M. Thorson, Rishi Rattan, Juan E. Sola, Eduardo A. Perez

THE EFFECT OF A TEDDYBEAR HOSPITAL PROJECT ON CHILDREN'S ANATOMICAL KNOWLEDGE, ANXIETY, AND MEDICAL STUDENT PROFESSIONALISM
Julia E. Mildenberger, Rafael Cámara, Oliver J. Muensterer, MD, PhD

Quick Shots 5: Fetal Basic Science, Neonatal, Fetal Clinical

9:30 a.m. – 10:30 a.m.

Cord Blood Micrornas as Novel Predictors of Severity in Congenital Diaphragmatic Hernia
Quoc-Hung Nguyen, MD, Idit Kosti, Ishan Paranjpe, Carlo Eikani, Marina Sirota, Tippi Mackenzie
UCSF, San Francisco, CA, USA

Delayed ECMO Decannulation in Patients with Congenital Diaphragmatic Hernia: Is It Safe to Leave Cannulas in Place?
Mercedes Pilkington, MD, George B. Mychaliska, MD, Marcus D. Jarboe, MD, Meghan A. Arnold, MD, Ronald B. Hirschl, MD, Samir K. Gadepalli, MSc, MD, MBA
University of Michigan, Ann Arbor, MI, USA

Low Postnatal CRI Values Are Associated with the Need for ECMO in Newborns with CDH
Ryan C. Phillips, MD, Ryan C. Phillips, MD, Niti Shahi, Jason Gien, MD, Kenneth W. Liechty, MD, Ahmed I. Marwan, MD, John P. Kinsella, MD, Jane Mulligan, Steven L. Moulton, MD
University of Colorado School of Medicine, Denver, CO, USA, University of Colorado School of Medicine, Aurora, CO, USA, Childrens, Aurora, CO, USA, University of Colorado School of Medicine; Colorado Fetal Care Center, Children’s Hospital Colorado, Aurora, CO, USA, Flashback Technologies Inc., Louisville, CO, USA
Q60

SURGICAL MANAGEMENT OF GASTROESOPHAGEAL REFLUX DISEASE IN PATIENTS WITH CONGENITAL DIAPHRAGMATIC HERNIA: SYNCHRONOUS LADD’S SURGERY MAY BE PROTECTIVE

Heron D. Baumgarten, MD, MPH1, Zoya Butt2, Robin C. Cook1, Audrey A. Foster1, Dana L. Bartholomew2, Lisa M. Herkert3, Samantha E. Adams2, Natalie E. Rintoul1, William H. Peranteau, MD2, Holly L. Hedrick, MD2, Thane A. Blinman, MD2

1University of Virginia, Children’s Hospital of Philadelphia, Charlottesville, VA, USA, 2Children’s Hospital of Philadelphia, Philadelphia, PA, USA

Q61

AMNIOTIC FLUID STEM CELL EXOSOMES PROMOTE FETAL LUNG MATURATION IN AN IN VIVO MODEL OF CONGENITAL DIAPHRAGMATIC HERNIA

Louise Montalva, MD1, Rebeca Lopes Figueira2, Lina Antounians1, Karina Miura1, Lourenço Sbragia Neto, MD2, Augusto Zani1

1The Hospital for Sick Children, Toronto, ON, Canada, 2Ribeirao Preto Medical School, University of Sao Paulo - USP, Ribeirão Preto, Sao Paulo, Brazil

Tribute: Fred Arcari

Q62

PREDICTING THE NEED AND BENEFIT OF DESCENDING AORTOPEXY IN ADDITION TO POSTERIOR TRACHEOPEXY FOR THE SURGICAL TREATMENT OF TRACHEOBRONCHOMALACIA

Wendy Jo Svetanoff, MD1, Benjamin Zendejas, MD, MSc2, Sigrid Bairdain, MD2, C. Jason. Smithers2, Leah Frain3, Gary Visner2, Christopher W. Baird2, Sanjay P. Prabhu2, Russell Jennings, MD2, Thomas E. Hamilton, MD2

1Boston Children’s Hospital, Brookline, MA, USA, 2Boston Children’s Hospital, Boston, MA, USA

Q63

EFFECTS OF INTRAOPERATIVE TEMPERATURES ON POSTOPERATIVE INFECTIONS IN INFANTS

Ruchi Amin, MD, Sarah Walker, MD, Marjorie J. Arca, MD, Ankur Datta, MD

Medical College of Wisconsin, Milwaukee, WI, USA

Q64

IN UTERO TREATMENT WITH PLACENTAL MESENCHYMAL Stromal CELLS PRODUCES AMBULATION IN THE OVINE MODEL OF MYELOMENINGOCELE – SELECTION OF THE OPTIMAL CELL DONOR

Laura Galganski, MD1, Priyadarshini Kumar1, Melissa Vanover1, Christopher Pivetti1, Jamie Anderson1, Lee Lankford1, Zachary Paxton3, Karen Chung1, Mennatalla Hegazi1, Kaeli Yamashiro2, Aijun Wang1, Diana Farmer, MD1

1University of California, Davis, Sacramento, CA, USA, 2University of California, Davis, Sacramento, CA, USA

Q65

REPEAT DOSING IN THE RETINOIC ACID MODEL OF TRANSMAMNIOTIC STEM CELL THERAPY FOR SPINA BIFIDA

Sarah A. Tracy, MD1, Alexander V. Chalphin, MD2, Stefanie P. Lazow, MD2, Ina Kycia, MD2, Christopher Chan1, Adam Finkelstein2, David Zurakowski2, Dario O. Fauza, MD2

1Boston Children’s Hospital, Boston, MA, USA, 2Boston Children’s Hospital, Boston, MA, USA
Q66

A COMPARISON BETWEEN PLACENTAL AND AMNIOTIC MESENCHYMAL STEM CELLS IN TRANSAMNIOTIC STEM CELL THERAPY FOR EXPERIMENTAL GASTROSCHISIS

Alexander V. Chalphin, MD¹, Sarah A. Tracy, MD², Stefanie P. Lazow, MD¹, Ina Kycia, MD¹, David Zurakowski¹, Dario O. Fauza, MD¹

¹Boston Children’s Hospital, Boston, MA, USA, ²Boston Children’s Hospital, Boston, MA, USA

Q67

DEVELOPMENT OF A UTERINE TONE MONITORING DEVICE FOR FETAL SURGERY

Saif I. Al-Juboori, PhD¹, Irina Marii², Ahmed I. Marwan, MD³

¹University of Colorado Denver- Anschutz Medical Campus, Aurora, CO, USA, ²University of Colorado Denver- Anschutz Medical Campus, Golden, CO, USA, ³University of Colorado School of Medicine; Colorado Fetal Care Center, Children’s Hospital Colorado, Aurora, CO, USA

Q68

ADHERENCE TO AND OUTCOMES OF A UNIVERSITY-CONSORTIUM GASTROSCHISIS PATHWAY

Daniel A. DeUgarte, MD, MS¹, Hanmin Lee, MD², Yigit S. Guner, MD³, Karen M. Kling, MD⁴, Payam Saadai⁵, Cherry Uy⁶, Kara L. Calkins¹, Jae Kim⁷, Katelin Kramer², Leslie Lusk², Catherine Rottkamp⁵

¹University of California, Los Angeles, Los Angeles, CA, USA, ²University of California, San Francisco, San Francisco, CA, USA, ³Department of Surgery, Division of Pediatric Surgery, University of California Irvine Medical Center, Orange, CA, USA, ⁴Division of Pediatric Surgery, Department of Surgery, University of California, San Diego, San Diego, CA, USA, ⁵University of California, Davis, Sacramento, CA, USA, ⁶University of California, Irvine, Irvine, CA, USA, ⁷University of California, San Diego, San Diego, CA, USA, ⁸(UCFC), San Francisco, CA, USA

Q69

UMBILICAL ACCESS IN LAPAROSCOPIC SURGERY IN INFANTS LESS THAN 3 MONTHS OF AGE: A SURVEY OF THE AMERICAN PEDIATRIC SURGICAL ASSOCIATION

Matthew P. Landman, MD, MPH, Deborah Billmire, MD

Indiana University, Indianapolis, IN, USA

Q70

SURGICAL MANAGEMENT OF ACUTE AORTOILIAC THROMBOSIS IN A NEONATE

Bryan V. Dieffenbach, MD, Bharath Nath, Heung Bae Kim, MD

Boston Children’s Hospital, Boston, MA, USA

Quick Shots 6: Clinical, Education and Innovation

Salons A-F

9:30 a.m. – 10:30 a.m.

Moderators: Aaron M. Lipskar, MD; Kenneth C. Walters, MD
Q71
TRENDS IN THE USE OF SURGICAL ANTIBIOTIC PROPHYLAXIS IN GENERAL PEDIATRIC SURGERY: ARE WE MISSING THE MARK FOR BOTH STEWARDSHIP AND INFECTION PREVENTION?
Seema Anandalwar, MD, MPH, Carly Milliren, Dionne Graham, PhD, Mark Kashtan, MD, MPH, Jonathan L. Hills-Dunlap, MD, MPH, Shawn J. Rangel, MD, MSCE
Boston Children's Hospital, Boston, MA, USA

Q72
COST-EFFECTIVE METHODS OF OPTIMIZING ANTIBIOTIC STEWARDSHIP IN PEDIATRIC NON-COMPLICATED APPENDICITIS
Angie M. Kao, MD, Sean Maloney, Tanushree Prasad, Thomas Schmelzer, MD, Daniel Bambini, MD, Andrew Schulman, Graham Cosper, MD
1 Carolinas Medical Center, Charlotte, NC, USA, 2 Levine Children's Hospital, Charlotte, NC, USA

Q73
OBESITY-RELATED DISPARITIES IN MANAGEMENT AND OUTCOMES OF CHILDREN WITH APPENDICITIS: IMPLICATIONS FOR TREATMENT DELAY, RADIATION STEWARDSHIP, AND INFECTION PREVENTION
Boston Children's Hospital, Boston, MA, USA

Q74
QUANTIFYING THE EFFECT OF RESIDENT EDUCATION ON PATIENT COSTS AND OUTCOMES IN PEDIATRIC APPENDICITIS
Mark V. Mazziotti, MD, MEd, Brittany L. Johnson, MD, Megan E. Cunningham, MD, Sara C. Fallon, MD, Sohail R. Shah, MD, MSHA, Monica E. Lopez, MD
1 Baylor College of Medicine, Houston, TX, USA, 2 Texas Children's Hospital, Houston, TX, USA

Q75
CHILDREN'S SURGICAL VERIFICATION: DEVELOPMENT OF A QUALITY AND SAFETY TOOL TO EVALUATE PEDIATRIC SURGICAL CARE AND TEACH THE SURGICAL QUALITY PROCESS
Erik Gregory. Pearson, MD, Emily Weinschreider, Heather Shininger, Kelly Kogut
1 Sunrise Children's Hospital, Las Vegas, NV, USA, 2 Sunrise Children's Hospital, Las Vegas, NV, USA

Q76
COMPLICATIONS WHILE AWAITING ELECTIVE INGUINAL HERNIA REPAIR IN INFANTS: NOT AS COMMON AS YOU THOUGHT
Anthony Ferrantella, MD, Juan E. Sola, Joshua P. Parreco, Brent A. Willobbee, Hallie J. Quiroz, MD, Emily L. Ryon, Clara Reyes-Miranda, Rishi Rattan, Chad M. Thorson, Eduardo A. Perez
1 University of Miami Miller School of Medicine, Miami, FL, USA, 2 University of Miami Miller School of Medicine - Department of Surgery, Miami, FL, USA, 3 Department of Pediatric Hospital Medicine, Nicklaus Children's Hospital, Miami, FL, USA
Q77

LAPAROSCOPIC ASSISTED VERSUS OPEN VP SHUNT PLACEMENT IN CHILDREN - AN OUTCOMES STUDY USING THE ACS-NSQIP PEDIATRIC DATABASE

Michael R. Arnold, MD, 1, Mark Van Poppel, 1, Scott Wait, 2, Caroline Reinke, 1, Sarah Jernigan, MD, 2, Andrew Schulman, 3

1 Carolinas Medical Center, Charlotte, NC, USA, 2 Carolinas Neurosurgery and Spine Associates, Charlotte, NC, USA, 3 Levine Children’s Hospital, Charlotte, NC, USA

Q78

EXCISION VERSUS PIT PICKING IN MODERATE AND SEVERE PILONDIAL DISEASE

Hajar R. Delshad, MS, PA-C, 1, Owen Henry, BS, 2, David P. Mooney, MD, MPH, 3

1 Boston Children’s Hospital, Harvard Medical School, Boston, MA, USA, 2 Department of Surgery, Boston Children’s Hospital and Harvard Medical School, Boston, MA, USA, 3 Boston Children’s Hospital, Harvard Medical School, Boston, MA, USA

Q79

PILONDIAL PIT AND SINUS EXCISION WITH TREPHTINATION AND CURETAGE IN ADOLESCENTS AND YOUNG ADULTS

Michelle P. Kallis, MD, 1, Charlotte Kvasnosky, MD, 2, Barrie S. Rich, MD, 3, Aaron M. Lipskar, MD, 4

1 Zucker School of Medicine at Hofstra/Northwell, Cohen Children’s Medical Center at Northwell Health, New York, NY, USA, 2 Zucker School of Medicine at Hofstra/Northwell, Cohen Children’s Medical Center at Northwell Health, New York, NY, USA, 3 Cohen Children’s Medical Center at Hofstra/Northwell, Manhasstt, NY, USA, 4 Zucker School of Medicine at Hofstra/Northwell, Cohen Children’s Medical Center at Northwell Health, New Hyde Park, NY, USA

Tribute: Alexander H. Bill

Yan Shi, MD

Q80

TRAINEE AUTONOMY IN THE OPERATING ROOM: WHAT DO PARENTS KNOW AND WANT TO KNOW?

Calista M. Harbaugh, MD, 1, Beth A. Fischer, MD, 2, Amy E. Lawrence, MD, 2, Devin R. Halleran, MD, 3, Loren N. Thomas, 4, Rylee Kim, 1, Katherine J. Deans, MD, MHS, 2, Peter C. Minneci, MD, MHS, 2, Gurjit Sandhu, MD, 1, Ronald B. Hirschl, MD, 1

1 University of Michigan, Ann Arbor, MI, USA, 2 Nationwide Children’s Hospital, Columbus, OH, USA, 3 Center for Colorectal and Pelvic Reconstruction, Nationwide Children’s Hospital, Columbus, OH, USA

Q81

A NOVEL COMBINED CAUTERY-SUCTION DEVICE: THE FIRST PRODUCT OF A SURGICAL DEVICE INNOVATION FELLOWSHIP

Gabriel Jose Ramos-Gonzalez, MD, 1, Alexander Yang, BE, 2, Kyle Wu, MD, 2, Robert Crum, MD, 3, Heung Bae Kim, MD, 1

1 Boston Children’s Hospital, Boston, MA, USA, 2 Harvard Medical School, Boston, MA, USA
Q82

A NOVEL, SPRAYABLE AND BIO-ABSORBABLE SEALANT FOR WOUND DRESSINGS

Lung Lau, MD1, John Daristotle2, Priya Srinivasan1, Xiaofang Wu1, Mousumi Basu1, Peter Kofinas2, Anthony Sandler, MD2

1Sheikh Zayed Institute for Pediatric Surgical Innovation, Children’s National Medical Center, Washington, DC, USA, 2University of Maryland, College Park, MD, USA

Q83

ANSWERING THE QUESTIONS: EARLY RESULTS FROM APSA’S ExPERT ROGRAM

Charles L. Snyder, MD1; Janice Taylor, MD, MEd2; Craig W. Lillehei, MD3; David Powell, MD4; Steven Lee, MD, Marjorie J. Arca, MD5; Elizabeth A. Beierle, MD6; Erik Skarsgard, MD, Saleem Islam, MD, Robert Cusick, MD7

1Children’s Mercy Hospital, Kansas City, MO, USA, 2University of Florida, Gainesville, FL, USA, 3Boston Children’s Hospital, Boston, MA, USA, 4Stanford University, Palo Alto, CA, USA, 5Medical College of Wisconsin, Milwaukee, WI, USA, 6University of Alabama at Birmingham, Birmingham, AL, USA, 7Children’s Hospital and Medical Center, Omaha, NE, USA

Q84

INCREASING ACCEPTANCE OF INTERNET-BASED EDUCATIONAL PROGRAMS BY PEDIATRIC SURGEONS

Janice Taylor, MD, MEd1; Charles L. Snyder, MD2; David Powell, MD3

1University of Florida, Gainesville, FL, USA, 2Children’s Mercy Hospital, Kansas City, MO, USA, 3Stanford University, Palo Alto, CA, USA

10:30 a.m. – 10:45 a.m. Refreshment Break Grand Ballroom Foyer, 4th FL

10:45 a.m. – 12:15 p.m. BREAKOUT SESSIONS

Social Determinants of Health Workshop  Salons A-F

Adam J. Foss, Esq, Victor Garcia, MD, Marion C.W. Henry, MD, MPH, John K. Petty, MD

Tribute: Harvey E. Beardmore

Ethics  Salon G

10:45 a.m. – 11:30 a.m.

Moderators: Patrick J. Javid, MD; Deborah S. Loeff, MD

Tribute: Aviva L. Katz

Mindy B. Statter, MD, MBE

Tribute: John Raffensperger

Marko Rojnica, MD, MBA
S80

SURGERY AT THE END OF LIFE: A NATIONAL MULTICENTER CASE SERIES FROM CHILDREN’S HOSPITALS
Ryan M. Antiel, MD, MS1, Michael D. Traynor, MD2, Matt Hall2, Thane A. Blinman, MD3, Michael L. Nance, MD3, Pirooz Eghtesady4, Sandi Lam5, Chris Feudtner3
1Mayo Clinic, Rochester, MN, USA, 2Children’s Hospital Association, Lenexa, KS, USA, 3Children’s Hospital of Philadelphia, Philadelphia, PA, USA, 4Washington University, Saint Louis, MO, USA, 5Texas Children’s Hospital, Houston, TX, USA

S81

TIMING OF RECONSTRUCTIVE SURGERY FOR PATIENTS WITH DISORDERS/DIFFERENCES OF SEX DEVELOPMENT (DSD): PRELIMINARY ANALYSIS OF STAKEHOLDER VIEWS ON SUCCESSFUL OUTCOMES
Kathleen van Leeuwen, MD1, Erica M. Weidler1, Melissa Gardner2, Tara Schafer-Kalkhoff3, Alison S. Baskin2, Kristina I. Suorsa3, Meilan M. Rutter3, David E. Sandberg2
1Phoenix Children’s Hospital, Phoenix, AZ, USA, 2Department of Pediatrics and Communicable Diseases, University of Michigan Medical School, Ann Arbor, MI, USA, 3Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, USA

S82

ETHICAL ASPECTS ON ORGAN PROCUREMENT FROM CHILDREN BORN WITH ANENCEPHALY
Oliver J. Muensterer, MD, PhD
Pediatric Surgery, University Medicine of the Johannes Gutenberg University Mainz, Mainz, Rheinland-Pfalz, Germany

Industry Symposium

10:45 a.m. – 11:30 a.m.
Moderator: Karen A. Diefenbach, MD

Presented by Biostage

Education: Understanding the ABCs on the MOCs and How the APSA Education Library Can Keep You in the Know

11:30 a.m. – 12:15 p.m.
Moderators: Eunice Y. Huang, MD; Moderator: Steven L. Lee, MD

Tribute: Edward S. Tank
Julia S. Shelton, MD, Romeo C. Ignacio, Jr., MD, Brian A. Jones, MD

Childhood Obesity

11:30 a.m. – 12:15 p.m.
Moderators: Joy Collins, MD; Mark L. Wulkan, MD

Tribute: Frank G. DeLuca
Charlotte Kvasnovsky, MD

Weight Bias
Stephanie Walsh, MD
### Motivational Interviewing
Kanika A. Bowen-Jallow, MD

### Access to the Obese Abdomen - Tips and Tricks for Laparoscopic Procedures
Jason D. Fraser, MD

### Overall Perioperative Care of the Obese Pediatric Patient
David A. Lanning, MD

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<td>12:15 p.m. – 12:45 p.m.</td>
<td>Box Lunch Pick-up</td>
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### Future of APSA

**12:45 p.m. – 2:00 p.m.**

*Moderator:* Roshni A. Dasgupta, MD

**Tribute: R. Peter Altman**
Steven Stylianos, MD

**Peer Support: Mitigating the Emotional Stresses of Adverse Events**
Jo Shapiro, MD, *Department of Surgery, Brigham and Women’s Hospital, Associate Professor, Otolaryngology, Harvard Medical School*

Katherine J. Deans, MD, MHSc, Michael A. Helmrath, MD, James Wall, MD

### Robert E. Gross Debate: Munk-style Debate

**2:15 p.m. – 3:20 p.m.**

*Moderator:* Jacob C. Langer, MD

Douglas C. Barnhart, MD, Cathy A. Burnweit, MD, Andrea Hayes-Jordan, MD, Jacob C. Langer, MD, Daniel J. Ostlie, MD

**Tribute: Robert E. Gross and Robert M. Filler**
Priscilla P.L. Chiu, MD, PhD

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<td>3:20 p.m. – 3:30 p.m.</td>
<td>Research Awards</td>
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<td>Winners of the Folkman, Innovation, Quality Safety and Value in Surgery and Quick Shots awards will be announced</td>
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**PED Talk - Pediatric surgery, Education, Disruption: #3**

**Gun Violence as a Public Health Issue**

3:30 p.m. – 4:00 p.m.

*Moderator:* Marion C.W. Henry, MD, MPH

**Tribute: Jessie L. Ternberg**
Emily J. Onufer, MD, MPH

**Gun Violence as a Public Health Issue**
Joseph V. Sakran, MD
Associate Chief, the Johns Hopkins Hospital, Division of Acute Care Surgery and Director EGS

4:00 p.m. – 6:00 p.m.  **Free Time**

**6:00 p.m. – 7:00 p.m. President’s Reception**

Grand Ballroom Foyer, 4th FL

**Tribute: E. Thomas Boles**
Rita D. Shelby, MD, MS, Pamela Mar, MD, Courtney Pisano, DO, MS

**7:00 p.m. – 11:00 p.m. President’s Banquet**

Salons A-F

Presentation of the Distinguished Service, Robert E. Gross Excellence and the inaugural Humanitarian Service Awards

**Tribute: Benjy Brooks**
Mary L. Brandt, MD

**Tribute: William E. Ladd**
Don K. Nakayama, MD

11:00 p.m.  **Meeting Concludes**

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**Poster Display**

Sunday, May 19, 3:00 p.m. – Tuesday, May 21, 11:00 a.m.

Exhibit Hall

**P1**

3-YEAR PROSPECTIVE ANALYSIS OF AN ULTRASOUND SCORING SYSTEM FOR PEDIATRIC APPENDICITIS TO REDUCE RADIATION EXPOSURE

Anna McGuire, MD¹, Christopher Gitzelmann, MD², Colleen Davis, MD, MPH³, Johan Blickman, MD, PhD⁴, Kori Wolcott, RN, BSN⁵, Walter Pegoli, MD², Derek Wakeman, MD², James Sanders, MD⁵

¹University of Rochester Medical Center, Rochester, NY, USA, ²University of Rochester Department of Surgery, Rochester, NY, USA, ³University of Rochester Department of Emergency Medicine, Rochester, NY, USA, ⁴University of Rochester, Rochester, NY, USA, ⁵University of Rochester Department of Orthopedic Surgery, Rochester, NY, USA
P2

CEFTRIAXONE PLUS METRONIDAZOLE VS. CEFOXITIN IN THE MANAGEMENT OF UNCOMPlicated APPENDICITIS IN CHILDREN: A PROPENSITY MATCHED COMPARATIVE EFFECTIVENESS STUDY
Boston Children’s Hospital, Boston, MA, USA

P3

NATIONWIDE READMISSION ANALYSIS OF CHILDREN UNDERGOING NONOPERATIVE MANAGEMENT OF ACUTE APPENDICITIS
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P4

VARIABILITY, OUTCOMES AND COST ASSOCIATED WITH THE USE OF PARENTERAL NUTRITION IN CHILDREN WITH COMPLICATED APPENDICITIS
Mark Kashtan, MD, MPH, Dionne Graham, PhD, Jonathan L. Hills-Dunlap, MD, MPH, Seema Anandalwar, MD, MPH, Shawn J. Rangel, MD, MSCE
Boston Children’s Hospital, Boston, MA, USA

P5

A NSQIP ANALYSIS OF POST-OPERATIVE ANTIBIOTIC UTILIZATION IN UNCOMPlicated APPENDICITIS
Charlene Dekonenko, MD, Robert M. Dorman, MD, Janelle Noel-MacDonnell, MD, Tolulope A. Oyetunji, MD
Children’s Mercy Kansas City, Kansas City, MO, USA

P6

WHAT’S IN YOUR CPG?: ANALYSIS OF PRACTICE VARIATION TO PRIORITIZE COMPARATIVE EFFECTIVENESS RESEARCH IN THE POSTOPERATIVE MANAGEMENT OF COMPLICATED APPENDICITIS
Boston Children’s Hospital, Boston, MA, USA

P7

THE INCOMPLETE EVALUATION OF ABDOMINAL PAIN IN ADOLESCENT FEMALES: WE NEED TO DO BETTER
Amy E. Lawrence, MD1, Yuri V. Sebastiao, PhD2, Emma Hostetler1, Karen Leonhart3, Geri Hewitt, MD4, Peter C. Minneci, MD, MHSc5, Katherine J. Deans, MD, MHSc1
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59
P8

ENTEROCOLITIS COMPLICATING HIRSCHSPRUNG DISEASE: THE ROLE OF (C-159t codon) POLYMORPHISM BIOMARKERS IN THE CLINICAL FOLLOW UP
Mohammed J. Aboud, MD
Ministry of Health, Al Diwaniya, Al Qadisiyah, Iraq

P9

MULTI-INSTITUTIONAL REVIEW OF BOWEL MANAGEMENT STRATEGIES IN CHILDREN WITH ANORECTAL MALFORMATIONS AND HIRSCHSPRUNG DISEASE
Katherine J. Baxter, MD1, Jose Garza2, Michael D. Rollins, MD3, Kaylea Drake4, Ron W. Reeder4, Richard J. Wood, MD5, Jeffrey Avansino, MD6, Casey M. Calkins, MD7, Megan M. Durham, MD8
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P10

ENTEROCOLITIS EPISODES IN CHILDREN WITH HIRSCHSPRUNG DISEASE: RESULTS FROM THE PEDIATRIC COLORECTAL AND PELVIC LEARNING CONSORTIUM
Michael D. Rollins, MD1, Kaylea Drake2, Ron W. Reeder3, Richard J. Wood, MD3, Jeffrey Avansino, MD4, Megan M. Durham, MD5, Casey M. Calkins, MD6, Brian T. Bucher, MD7, on behalf of the Pediatric Colorectal and Pelvic Learning Consortium8
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P11

COMPARISON OF POST-OPERATIVE PAIN CONTROL MODALITIES FORPECTUSEXCAVATUM REPAIR
Charlene Dekonenko, MD1, Robert M. Dorman, MD1, Yara Duran1, David Juang, MD1, Pablo Aguayo, MD1, Jason D. Fraser, MD1, Tolulope A. Oyetunji, MD1, Charles L. Snyder, MD1, George W. Holcomb, MD1, Daniel L. Millsapgh, MD1, Shawn D. St. Peter1
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P12

ENHANCED RECOVERY® PROTOCOL FOR THE MINIMALLY INVASIVE NUSS REPAIR
Maria Tecos1, Spencer Bright2, Elizabeth Lyden1, Jessica Goeller1, Brian Jones, MD1, Robert Cusick, MD1, Stephen Raynor1
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P13

PARENT PERCEPTIONS OF POSTOPERATIVE PAIN MANAGEMENT AFTER OPIOID REDUCTION PROGRAM IN PEDIATRIC PATIENTS
Dalya M. Ferguson, MD, Elisa I. Garcia, Nutan B. Hebballi, Kuojen Tsao, MD
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P14

TRANS-INCISIONAL VERSUS LAPAROSCOPIC-GUIDED RECTUS SHEATH BLOCK FOR PEDIATRIC SINGLE-INCISION LAPAROSCOPIC CHOLECYSTECTOMY: A PROSPECTIVE, RANDOMIZED TRIAL
Jeremy D. Kauffman, MD1, Cristen N. Litz, MD2, Sandra M. Farach, MD2, JoAnn C. DeRosa2, Anh Thy H. Nguyen2, Ernest K. Amankwah, MD2, Raquel Gonzalez, MD2, Paul D. Danielson, MD2, Nicole M. Chandler, MD2
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P15

LONG-TERM FOLLOWUP OF PEDIATRIC OPEN AND LAPAROSCOPIC INGUINAL HERNIA REPAIR
Albert J. Chong, MD, MPH1, Florencia Belenisksi, MD2, Sani Yamout, MD2, Sora Ely, MD3, Helene Fevrier, MPH2, Lisa Herrinton, PhD2
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P16

NATIONAL TRENDS IN FUNDOPICATION FOR INFANTS DEMONSTRATE DECLINING OPERATIVE RATES AND SIGNIFICANT INTER-HOSPITAL VARIABILITY
James M. Prieto, MD1, Matthew T. Brigger, MD2, Karen M. Kling, MD3, Timothy J. Fairbanks, MD1, Stephen W. Bickler, MD1, Nicholas C. Saenz, MD3, Sneha I. Nicholson4, David A. Lazar, MD5
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P17

LONG-TERM ANALYSIS OF GASTROINTESTINAL DISEASE BURDEN IN PATIENTS WITH A HISTORY OF NEC
Adil J. Malek, MD1, Lea Mallett2, Lauren Sager2, Hayden W. Stagg3, Lena Perger, MD4
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P18

FILLING THE GAP: OBJECTIVE DATA TO GUIDE PEDIATRIC SURGERY APPLICANTS WHO FAIL TO MATCH ON THE FIRST ATTEMPT
S Christopher Derderian, MD, Michael Benge, Frederick Karrer, MD, Jonathan Roach
Children’s Hospital Colorado, Denver, CO, USA
P19

THE PEDIATRIC SURGERY CASE-MIX ENGINE: A NOVEL ANALYTIC TOOL TO ASSIST THE MAINTENANCE AND DEVELOPMENT OF PEDIATRIC SURGICAL FELLOWSHIP PROGRAMS

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P20

NIH FUNDING FOR PEDIATRIC SURGEON-SCIENTISTS

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P21

SPECIALIZATION IN PEDIATRIC SURGERY: RESULTS OF A SURVEY TO THE AMERICAN PEDIATRIC SURGICAL ASSOCIATION

Barrie S. Rich, MD¹, Gail E. Besner, MD², Samir K. Gademalli, MSc, MD, MBA¹, Mehul Raval, MD, Jared Silverberg, David H. Rothstein, MD⁴

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P22

IMPLEMENTATION OF INTENTIONAL STRATEGIES AIMED TO REDUCE THE INFLUENCE OF IMPLICIT BIAS IN PEDIATRIC SURGERY FELLOW SELECTION AND RECRUITMENT: A PILOT PROJECT

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P23

SURGEON AND HOSPITAL VOLUME FOR INDEX NEONATAL PEDIATRIC SURGERY CASES IN U.S. CHILDREN’S HOSPITALS

Liese C. Pruitt, MD, David E. Skarda, Douglas C. Barnhart, MD, Brian T. Bucher, MD

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P24

EVOLUTION OF PUBLICATIONS IN JOURNAL OF PEDIATRIC SURGERY (JPS)—A 20-YEAR ANALYSIS

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P25

A NOVEL MODEL OF US METROPOLITAN PEDIATRIC SURGEON DENSITY

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P26

THE EVIDENCE ON EVIDENCE-BASED MEDICINE DECISION MAKING AMONG PEDIATRIC SURGEONS

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P27

SCREENING FOR INTIMATE PARTNER VIOLENCE IN THE PEDIATRIC SURGERY CLINIC: A FEASIBILITY STUDY

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P28

SOCIAL SCREENING IN PEDIATRIC SURGERY CLINICS WITHIN A TERTIARY CHILDREN’S HOSPITAL

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P29

PEDIATRIC OBESITY IN THE USA: LOWER SOCIOECONOMIC STATUS MAY LEAD TO INADEQUATE TREATMENT

Numa Perez, MD1, Cornelia Griggs2, Sahael Stapleton1, Fatima Stanford1, Janey Pratt1, David Chang, PhD, MPH, MBA1, Cassandra M. Kelleher, MD1

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P30

WHEN PRIMARY REPAIR IS NOT ENOUGH: A COMPARISON OF SYNTHETIC PATCH VERSUS MUSCLE FLAP REPAIR FOR LARGE CONGENITAL DIAPHRAGMATIC HERNIA

Emrah Aydin, Heather R. Nolan, MD, Jose Peiro, Patricia Burns, Beth A. Rymeski, MD, Foong-Yen Lim, MD

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P31

NECROTIZING ENTEROCOLITIS FOLLOWING GASTROSCHISIS REPAIR: AN UPDATE
Rachel Schlueter, MD1, Shahab Abdessalam, MD2, Stephen Raynor3, Robert Cusick, MD1

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P32

COMPUTED TOMOGRAPHY REDUCTION IN PEDIATRIC TRAUMA PATIENTS
Elaa Mahdi, MD, MPH1, Nicole Toscano1, Robert M. Dorman, MD1, Colleen Davis, MD, MPH2, Anne Brayer3, James Sanders, MD1, Mitchell Chess1, Christopher Gitzelmann, MD2, Walter Pegoli, MD2, Derek Wakeman, MD2

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P33

VALIDATION OF THE PEDIATRIC RESUSCITATION AND TRAUMA OUTCOME (PRESTO) SCORE IN INJURED CHILDREN IN A SOUTH-AFRICAN QUATERNARY TRAUMA CENTRE
Rubesh S. Hassam1, Etienne St-Louis, MD, MSc2, Tarek Razek3, Robert Baird4, Dan Poenaru3, Timothy C. Hardcastle1

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P34

TREPHINATION FOR PEDIATRIC PILONIDAL DISEASE RESULTS IN FEWER WOUND COMPLICATIONS AND SIMILAR RECURRENT COMPARED TO WIDE EXCISION
James M. Prieto, MD1, Kyle D. Checci, MD2, Karen M. Kling, MD3, Romeo C. Ignacio, MD4, Stephen W. Bickler, MD5, Nicholas C. Saenz, MD1, Timothy J. Fairbanks, MD1, Sneha I. Nicholson1, David A. Lazar, MD4

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P35

MANAGEMENT OF PERSISTENT LOW SUSPICION CERVICAL LYMPHADENOPATHY IN PEDIATRIC PATIENTS
Michelle P. Kallis, MD1, Barrie S. Rich, MD2

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P36
NON-INVASIVE EVALUATION OF VARICES AND MONITORING PORTAL HYPERTENSION USING 2D SHARE WAVE ELASTOGRAPHY IN CHILDREN WITH EXTRAHEPATIC PORTAL VEIN OBSTRUCTION
Rustam Zafardjanovich Yuldashev, MD, PhD1, Makhmud Muslimovich. Aliev, MD2, Ilkhom Shakhaydarov1, Fozil Yuldash2
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P37
WHO WAS THE FIRST WOMAN PEDIATRIC SURGEON IN THE USA?
Megan T. Vu1, Elizabeth D. Anderson1, Kelly P. Schultz1, Marion CW Henry, MD, MPH1, Sara C. Fallon, MD1, Mary L. Brandt, MD1
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P38
SURGERY ACCELERATES METASTASIS THROUGH ALTERATION OF MACROPHAGE FUNCTIONAL PHENOTYPE IN A MOUSE MODEL OF OSTEOSARCOMA
Michelle P. Kallis, MD1, Caroline W. Maloney, MD, PhD2, Marc Symons2, Bettie Steinberg3, Samuel Soffer2
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P39
ENHANCER OF ZESTE 2 MODULATES THE NOTCH PATHWAY IN NEUROBLASTOMA
Adele P. Williams, MD, Raoud Marayati, MD, Laura L. Stafman, MD, PhD, Jamie M. Aye, MD, Jerry E. Stewart, BS, Elizabeth A. Beierle, MD, Colin Quinn
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P40
NITROFEN-MEDIATED PULMONARY ARTERY ENDOTHELIAL CELLULAR DYSFUNCTION IS ATTENUATED BY MESENCHYMAL STROMAL CELL-DERIVED EXTRACELLULAR VESICLES: IMPLICATIONS FOR CONGENITAL DIAPHRAGMATIC HERNIA
Siqin Zhaorigetu1, Henry Bair1, Vikas Gupta1, Kevin P. Lally, MD2, Scott Olson1, Charles S. Cox, MD1, Matthew T. Harting, MD, MS1
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P41
ABERRANT expression of periostin in an ex vivo human lung organoid model of congenital diaphragmatic hernia
Guihua Jiang1, Juan Biancotti1, Kenneth Ho1, Allen Liu1, Marc Hershenson1, Shaun Kumisaki2, Shaun M. Kunisaki, MD, MSc2, Jason Spence, PhD
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P42
PRETERM NEONATES HAVE PERSISTENT NEUTROPHIL VELOCITY AND TRANSCRIPTOMIC CHANGES THAT FAIL TO RESOLVE AS THEY REACH TERM CORRECTED GESTATIONAL AGE
Russell B. Hawkins, MD1, Steven L. Raymond1, Ricardo Ungaro2, Maria-Cecilia Lopez2, Lyle L. Moldawer3, James L. Wynn3, Shawn D. Larson, MD3
1University of Florida COM, Gainesville, FL, USA, 2University of Florida, Gainesville, FL, USA, 3University of Florida College of Medicine, Gainesville, FL, USA

P43
EXAMINATION OF THE ROLE OF MYOCARDIN-RELATED TRANSCRIPTION FACTORS IN INTESTINAL ANASTOMOTIC HEALING
Paul McGaha, MD, Cullen McCarthy, Noah Rozich, James Griffith, Jeremy Johnson, William Berry
University of Oklahoma Health Science Center, Oklahoma City, OK, USA

P44
INCREASED CHOLANGIOCYTE DIFFERENTIATION OF PROMININ-1 HEPATIC PROGENITOR CELLS IN EXPERIMENTAL BILIARY ATRESIA
Elaa Mahdi, MD, MPH, Michael Fenlon, Jiabo Xu, Alison Glazier, Calvin Lee, Nicolas Malkoff, Kasper Wang, MD
Children's Hospital Los Angeles, Los Angeles, CA, USA

P45
INTESTINAL RE-ENDOTHELIALISATION: MEOANGIOBLAST PROMOTES REGENERATION OF A STABLE AND ORGANISED VASCULATURE IN A WHOLE TISSUE ENGINEERED ORGAN
Paolo De Coppi, Professor 1, Alessandro F. Pellegata2, Federico Scottoni2, Susanna Eli2, Simone Russo3, Dipa Natarajan4, Carlotta Camilli5, Aslan Gjinovci5, Simon Eaton, PhD6, Giulio Cossu7, Paolo De Coppi8

P46
EFFECT OF PLASMA TREATMENT ON CELLULAR MIGRATION ON A POLYURETHANE SYNTHETIC SCAFFOLD
Ishna Sharma, MD1, Alex Blanchette2, Heather Wanczyk2, William Fodor3, Todd Jensen1, Eyone Jones1
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**P47**

**ROCK1 INHIBITOR IS PROTECTIVE AGAINST ADHERENS JUNCTION DISRUPTION IN NECROTIZING ENTEROCOLITIS**

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**P48**

**CITRULLINE EFFECTIVELY REDUCES THE RATE AND SEVERITY OF NECROTIZING ENTEROCOLITIS COMPARED TO SODIUM HYDROSULFIDE IN THE PREMATURE PIGLET MODEL**

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**P49**

**CNP-MIR146A DECREASES DISEASE ACTIVITY INDEX IN A MURINE DSS COLITIS MODEL**

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**P50**

**WEIGHT LOSS AFTER SLEEVE GASTRECTOMY IN MICE INVOLVES A LEPTIN-DEPENDENT BUT FXR-INDEPENDENT MECHANISM**

Monica D. Chow, MD¹, Andrew Wassef, BA², Bo Kong, PhD², Laura Armstrong, PhD², Justin Schumacher, PharmD, PhD², Daniel Rizzolo, BS², Jianliang Shen, MS¹, Ragui Sadek, MD³, Grace Guo, MBBS, PhD¹, Yi-Horng Lee, MD⁴

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