## Wednesday, May 17

## 4:00PM Research Seminar:

### Department of Pediatrics and College for Public Health & Social Justice

## The Opioid Epidemic and Youth

***Education Union Auditorium - Medical Campus***

Guest Speaker: **Sharon Levy, MD, MPH**

## Thursday, May 18

## Research Symposium

***Learning Resource Center (LRC) - Medical Campus***

***07:30 AM Breakfast***

**07:45 Welcome: *Robert W. Wilmott, MD***
IMMUNO Professor and Pediatrics Chair

**Opening Remarks: *Kevin Behrns, MD***
Vice President for Medical Affairs and
Dean of the SLU School of Medicine

**Introduction: *Joyce Marie Koenig, MD***
Professor, Pediatrics, Molecular Microbiology & Immunology;
Director, Pediatric Science Days 2017

***PLATFORM SESSIONS - Pitlyk A***

**1. Basic Sciences**
Moderator: Adriana Montano, PhD (Medical Genetics)

**8:00 Treatment of Acute Leukemia by Small Molecule Modulation of the G Protein Estrogen Receptor, Gper (Gpr30)**
*C. DeLeon, M. Wilhelm, C. Arnatt*

**8:15 Preserved Gut Microbial Diversity Accompanies Upregulation of TGR5 and Hepatobiliary Transporters in Bile Acid Treated Animals on Parenteral Nutrition** *A. Jain*

**8:30 Controlling T Cell Development and Function via Innate Toll-Like Receptor Signaling for Autoimmune Therapy** *X. Liu, K. Ye, Y. Wang, X. Zhong, L. Li, A. Opejin, E. Hsueh, H. Luo, T. Wang, D. Hawiger, G. Peng*

**8:45 Mucopolysaccharidosis IVA: Cardiovascular Disease and Outcomes After Enzyme Replacement Therapy** *A. Montaño, V. Wall, N. Movsesyan, D. Dengel, N. Evanoff, R. Garrett, K. Christensen, D. Boylan, S. Braddock, Q. Gan, R. Wang*

**9:00 Enteral Iron Supplementation Increases Erythropoiesis in Preweanling Wild Type and TMPRSS6 Knockout Mice** *R. Bharathi, N. Parrow, P. Prasad, R. Verhaeghe, F. Ali, E. Vaicikauskas, R. Fleming*

**9:15 PO and ID BCG Vaccination in Humans Induce Distinct Mucosal and Systemic Immune Response and CD4+ T Cell Transcriptomal Molecular Signatures** *M. Xia, D. Hoft, G. Zhang, A. Blazevic, J. Tennant, C. Kaplan, G. Matuschak, T. Dube, H. Hill, L. Schlesinger, P. Andersen, V. Brusic*

**9:30 Characterization of a Mycobacteria-Specific T Memory Cell with a Naive Phenotype** *J. Yuan, C. Eickhoff, A. Blazevic, D. Hoft, S. Chatterjee*

***9:45 – 10:00 AM Coffee Break***

**2. Clinical**
Moderator: Noah Hillman, MD (Neonatology)

**10:00 Surfactant Plus Budesonide Effects on Lung Injury and Maturation in Preterm, Fetal Lambs** *TB Kothe, E. Royse, M. Kemp, M. Saito, H. Usuda, S. Watanabe, G. Musk, A. Schmidt, A. Jobe, N. Hillman*

**10:15 The Cost and Resource Burden of Infections with Rhinovirus/Enterovirus, Influenza, and Respiratory Syncytial Virus in Children** *J. Fine, A. Bray-Aschenbrenner, H. Williams, J. Werner*

**10:30 Inclusive Development of a Clinic to Community Model to Identify and Address Food Insecurity Within a Pediatric Clinical Setting** *E. Barnidge, G. LaBarge, J. Arthur, K. Krupsky*

**10:45 Individual Health Plan - A Simplfying Tool for Medically Complex Children** *S. Stricklin, E. Bergamini, D. Halloran, A. Tanios*

**11:00 A Xenograft Model of Facioscapulohumeral Muscular Dystrophy** *S. Tai, J. Oliva, M. Campbell, F. Sverdrup*

**11:15 Improving HPV Vaccination Rates in the Adolescent Population** *R. Han, S. Kopsky, S. Rohe, S. Heaney*

**11:30 Activation of a Cell Intrinsic Immune Response in Progeria** *E. Cybulla, R. Kreienkamp, G. Bedia-Diaz, S. Graziano, A. Vindigni, S. Gonzalo*

***11:45 AM Symposium Luncheon (Provided for Registrants Only)***

**3. Outcomes/Epidemiology/Other**
Moderator: Robert Fleming, MD (Neonatology)

**12:45 Life Satisfaction as a Predictor of Alcohol, Tobacco, and Marijuana Use in School-Aged Children** *D. Lew, H. Xian*

**1:00 Charge Syndrome: The Importance of Inner Ear MRI and CHD7 Testing for Diagnosis as the Dysmorphology is Not Always Obvious** *M. Hefner*

**1:15 Maternal Attitudes on Consent for Neonatal Delivery Room Studies** *M. Strand, C. Miller, R. Carriere, C. Carter, K. Mathews*

**1:30 Evaluation of Text Messaging as an Educational Method to Improve Healthcare Utilization** *E. Fisher, B. McEnery, A. Ladley, A. Patel, R. Forman, D. Thakkar, A. Waltos, J. Arthur, C. Kim, M. Broom*

**1:45 Poverty and Preconception Health Care: What are the Barriers?** *P. Xaverius, D. Scharff, M. Dorsey*

**2:00 Dental Visits in Women at Various Levels of Risk for Unintended Pregnancy** *B. Tobo, P. Xaverius, L. Hinyard, M. Vaughn, M. Schootman*

**2:15 A New Classification of Three-Dimensional Printing Technologies: Systematic Review of 3DP for Patient-Specific Craniomaxillofacial Surgery** *C. Jacobs, A. Lin*

***2:30 – 2:45 PM Coffee Break***

***Award presentation for Best Trainee and Best Overall Presentation at 4:00 pm in Pitlyk Auditorium.***

***2:45 – 4:00 PM POSTER PRESENTATIONS***

Facilitators:
Robert Brooker, MD (Neonatology)
Aaron Miller, MD (Infectious Disease)
Anthony Scalzo, MD (Toxicology)
Barbara Whitman, PhD, MSW (Pediatrics)

1. **Twenty-One Year Trends in the Treatment of Pediatric Acute Severe Asthma by Pediatric Emergency Medicine and Critical Care Program Directors** *R. Azmeh, J. Leipzig, J. Rodrigues, A. McLaughlin, K. MacKrell, R. Han, E. Boakye, P. Buchanan, M. Dykewicz, B. Becker*
2. **Clinical Tool to Predict Prolonged Hospital Stay in Pediatric Patients with Appendicitis** *F. Badru, Y. Puckett, N. Piening, E. Chang, G. Spinner, J. Greenspon, C. Fitzpatrick, G Villalona, D. Vane, K. Chatoorgoon*
3. **Imaging for Acute Appendicitis at Non-Pediatric Centers Exposes Children to Excess Radiation** *F. Badru, Y. Puckett, N. Piening, A. To, P. Xu, C. Fitzpatrick, K. Chatoorgoon, G. Villalona, J. Greenspon*
4. **Complicated Appendicitis Outcomes in Children: Timing of Appendectomy and Complications** *F. Badru, Y. Puckett, N. Piening, J. Greenspon, K. Chatoorgoon, C. Fitzpatrick, G. Villalona*
5. **Imaging Review of Interrupted Aortic Arch: A Pictorial Review** *J. Bassuner, M. Moritz, N. Parkar, S. Farmakis*
6. **Enhancing Morning Report at a Pediatric Academic Institution** *J. Buehler, E. Bergamini, M. Shildz, P. Buchanan, D. Halloran, A. Tanios*
7. **Donor Management Goals Used by High-Performing Organ Procurement Organizations During Pediatric Organ Donor Management** *M. Clark, R. Ream, E. Armbrecht*
8. **Determinants of Decision-Making of Illicit Drug Screens in Pregnant Women and Differences by Race** *I. Faust, A. Schroeder, S. Malik, P. Xaverius, D. Halloran*
9. **The Relationships of Early Class Start Times on Sleepiness and Driving Behaviors in a Teenage College Student Population** *J. Fry, N. Weaver*
10. **When the Well Child Doesn't Show for the Well Visit** *A. Hamilton, G. LaBarge*
11. **A Vegan Diet Causing Intensive Care Unit Admission** *A. Heard, A. Tanios*
12. **Charge Syndrome Clinical Database Project (CSCDP): ENT Findings are Common and Affect Development** *M. Hefner*
13. **Parent Opinions on Venipuncture and Patient Distress in Children with Neuridevelopmental Disorders** *J. Heithaus, J. Smith, K. Twyman*
14. **Characteristics of Parental Refusal of Newborn Vitamin K** *I. Hopewood, H. Williams, C. Sallee, D. Halloran*
15. **Energy Flow in Youth Baseball Players in Relation to Pitching Performance and Efficiency** *J. Howenstein, K. Kipp, M. Sabick*
16. **Reality Unraveled Through Camera Lenses: Environment as a Key Issue Surrounding Infant Mortality in St. Louis City** *V. Kakarla, A. Niyigena, P. Xaverius, D. Kiel, E. Banard*
17. **Improving Food Insecurity Screening Methods in a Primary Care Setting** *L. Lambeth, K. Krupsky, J. Arthur*
18. **Hypoglycemia and Altered Mental Status- An Atypical Presentation** *N. Le, J. Gerard, A. Scalzo*
19. **Prospective Evaluation of Guardian & Staff Satisfaction with the Use of an Emergency Department Subcutaneous Rehydration Clinical Practice Guideline** *N. Le, J. Gerard, A. Nakanishi*

*(Posters - Continued)*

20. **Evans Syndrome, Systemic Lupus Erythematosus, and Neurofibromatosis: An Unusual Combination in Pediatric Case** *A. Lindley, A. Dalrymple, L. Dolatshahi*
21. **Three Cases of Severe Infantile Kawasaki Disease and Review of Extra-Cardiac Sequelae** *C. Maguire*
22. **Utility of Chest Radiographs in Pediatric Patients Presenting to a Pediatric Emergency Department with Acute Asthma Exacerbation and Chest Pain** *C. Majerus, J. Gerard, T. Tredway*
23. **Cryogel Scaffolds from Patient-Specific 3D-Printed Molds for Personalized Tissue Engineered Bone Regeneration in Pediatric Cleft-Craniofacial Defects** *K. Hixon, A. Melvin, A. Lin, A. Hall, S. Sell*
24. **Clinical Variance in Two Sisters with Complex Congenital Heart Disease and Cardiomyopathy Sharing a Homozygous Variant in the Cap2 Gene** *S. Mitchell, R. Bradshaw, C. Reddy, S. Al-Jureidini, S. Braddock, M. Willing, L. Cerny*
25. **Early vs. Late 23 Week Gestation Neonatal Outcomes** *B. Montavon, E. Armbrecht, M. Al-Hosni*
26. **Translating Bystander Models for the Prevention of Child Maltreatment** *G. Mujal, M. Taylor, N. Weaver*
27. **Pediatric Traumatic Aortic Dissection** *I. Oriaifo, N. Qureshi*
28. ***Bartonella* Endocarditis in a Child with Tetralogy of Fallot Complicated by PR3-ANCA Positive Serology, Autoimmune Hemolytic Anemia, and Acute Kidney Injury** *M. Parimi, J. Williams*
29. **Functional Consequences of N-Lobe Specific Mutations in the Transferrin Binding Site** *N. Parrow, Y. Li, P. Prasad, E. Vaicikauskas, F. Ali, Y. Ginzburg, S. Rivella, R. Fleming*
30. **Normal APTT in Children with Mild Factor XI Deficiency** *J. Puetz, C. Hugge, K. Moser*
31. **Aneurysms Here. Aneurysms There. Aneurysms Everywhere.** *S. Rohe, E.Rohe, M. King*
32. **The Great Mimicker** *S. Rohe, C. Sallee*
33. **Interventional Procedure for Limb Ischemia Present at Birth in the Neonate** *R. Salamo, B. Tallman, K. Pereira W. Waruingi*
34. **Antibiotic Duration for Complicated Appendicitis Prior to Interval Appendectomy in Children** *F. Badru, S. Saxena, N. Piening, Y. Greenspon, K. Chatoorgoon, C. Fitzpatrick, D. Vane, G. Villalona*
35. **Leveraging Trauma Services to Prevent Community Violence: Needs Assessment Among Area Hospitals for Violence Intervention Program Implementation** *N. Weaver, M. Mancini, N. White, S. Ford-Glanton, C. Schafer, M. Taylor*
36. **Pediatric Juxta-Epiphyseal Phalangeal Fractures are Distinct from Salter-Harris Fractures and More Frequently Need Operative Fixation** *K. Xu, A. Posorske, A. Lin, C. Plikaitis*
37. **Feeding Tube PH Measurements in Extreme Preterm Infants** *N. Yun, E. Ambrecht, M. Al-Hosni*
38. **Clinical Outcome of Fetuses and Newborns with Alloimmunization Who Received Intrauterine Transfusion in SSM/St. Louis** *ML Noisette, L. Dolatshahi*
39. **BCG-Specific T Cells Render Cross-Protective Immunity Against Nontuberculous Mycobacteria** *F. Hamzabegovic, C. Eickhoff, D. Hoft, G. Abate*
40. **TEXT4PEDS** *C. Brownsworth, T. Kaniecki, M. Broom*

**Congratulations to all Presenters & Mentors!**

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## Friday, May 19

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### 7:30 AM
### Interdepartmental Grand Rounds: Focus on Pediatric Vaccine Development

**Department of Internal Medicine and Molecular Microbiology & Immunology and Department of Pediatrics**

*Pitlyk Auditorium A, Learning Resource Center*

Guest Speaker: **Ofer Levy, MD, PhD**

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### 9:00 AM - 10:30 AM
### Academic Roundtable

*Mund Conference Room, SSM CGCH*
(By Registration Only)

Moderated by: **Ofer Levy, MD, PhD and Sharon Levy, MD, MPH**

Drs. Ofer Levy and Sharon Levy will jointly facilitate an informal discussion of issues related to academic career development and relate these to their own career paths.

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**We thank the following for their valued and continued support of Pediatric Science Days**

**SSM Health Cardinal Glennon Children's Hospital**
***Steven Burghart, President***

**The 2017 Pediatric Science Days are hosted by the Saint Louis University Department of Pediatrics in partnership with the Department of Internal Medicine and Molecular Microbiology and Immunology.**

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# 11th Annual Pediatric Science Days

## May 17 - 19, 2017

## Department of Pediatrics

## Saint Louis University

SAINT LOUIS UNIVERSITY
EST. 1818

## Visiting Professors

### Ofer Levy, MD, PhD

Associate Professor of Pediatrics,
Harvard Medical School;
Director, Precision Vaccines Program,
Boston Children's Hospital

### Sharon Levy, MD, MPH

Associate Professor of Pediatrics,
Harvard Medical School;
Director, Adolescent Substance Abuse Program