Welcome from the Dean

The annual University of Florida College of Medicine Celebration of Research affords me the opportunity to say Thank You. Thank you for the late nights, the papers written and reviewed, the grant proposals that have been funded and those that will be resubmitted, the patience that you have shown with the varied hurdles placed in the pathway of research. But most importantly, thank you for the passion that you employ to move the boundary of science knowledge forward. Your research vision and the work of your research teams are appreciated and valued. The discoveries and inventions that result from the basic, translational, population and clinical research at our university are transforming medicine. Thank you for your dedication to creating a healthier future for all. The College of Medicine stands proudly behind your efforts.

Michael L. Good, MD
Dean, UF College of Medicine
Slow down and smell the roses

The 2018 Celebration is already here. Where did the year go? 2017 was indeed another remarkable year of continued growth and progress for research within the College of Medicine, and 2018 is already off to a great start. We have all been running and seem a bit out of breath. Now it is time to slow down and appreciate the breadth and depth of the College of Medicine’s research endeavors and recognize how our research is directed at fundamental, timely, and significant areas of human health. The rows of research posters that will fill the floor of the Exactech Arena at the Stephen C. O’Connell Center remind me of the rows in a garden. While it will be impossible to visit all 500+ posters (I have tried and failed), I suggest that we slow down and enjoy our time visiting with students, postdocs, and faculty colleagues. The science reflected on these posters are our “roses” — let’s appreciate them.

Stephen P. Sugrue, PhD
Senior Associate Dean for Research Affairs
UF College of Medicine
Yang Shi, PhD  The Shi Lab is interested in epigenetic mechanisms that control gene expression and other chromatin template-based nuclear events. Yang Shi’s research and his team’s landmark discovery of histone demethylases redefined histone methylation as a steady yet revocable process. The Shi Lab has since focused on how epigenetic changes can propagate from one generation to another, as well as the molecular mechanisms which ensure stability and reversibility of epigenetic information. His studies have shed light on how chemical modifications (e.g. methylation) are put onto chromatin, how modifications (i.e. histone and DNA methylation) are removed and how combinatorial modifications of chromatin are recognized by effector proteins. Most importantly, his studies highlight the means by which chromatin modifications translate into specific biological processes and thus impact human health.

Yang Shi joined Harvard Medical School as an assistant professor in 1991 and was appointed a Professor of Pathology in 2004. He is currently a Professor of Cell Biology. He is also the Merton Bernfield Professor of Neonatology in the Division of Newborn Medicine at Boston Children’s Hospital. Yang Shi received his PhD from New York University and postdoctoral training at Princeton University.
Yujiang Shi, PhD (UF ’00) Dr. Shi’s research explores the biological functions and clinical implications of the histone demethylases, studying how the epigenetic machinery is regulated by cellular factors and metabolic signals, with the goal of identifying and characterizing these novel epigenetic players to better understand the mechanisms regulating chromatin in health and disease. In 2004, Dr. Shi isolated and characterized the first histone lysine specific demethylase, LSD1. This discovery ended the 40-year-long debate of the reversibility of histone methylation and also led to a paradigm shift in the field of chromatin biology. His research group has also identified novel histone and DNA demethylation enzymes and shown their biological functions in cancer and neurological disorders, discovered 5hmC as an emerging epigenetic hallmark of cancer, and revealed a critical role for TET2 in cancer development. Collectively, his findings have transformed our understanding of the dynamics of the epigenome and its regulation, as well as its relevance and impact in the advancement of human health.

Yujiang Shi joined the faculty of Harvard Medical School as assistant professor in 2005. He is currently an Associate Professor in the Division of Endocrinology, Diabetes & Hypertension at Brigham and Women’s Hospital and Harvard Medical School. Yujiang Shi received his PhD from the University of Florida College of Medicine and postdoctoral training at Harvard Medical School with Dr. Yang Shi.

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1. Modified cross-linking, ligation, and sequencing of hybrids (qCLASH) identifies KSHV microRNA targets in endothelial cells. Lauren Gay, Sunantha Sethuraman, Merin Thomas, Peter Turner, Rolf Renne

2. Polynucleotide phosphorylase regulates quorum sensing as well as biofilm formation via a novel rhlI-targeting sRNA in Pseudomonas aeruginosa. Ronghao Chen, Xueying Wei, Yuding Weng, Yongxin Jin, Zhihui Cheng, Weihui Wu, Shouguang Jin

3. Putrescine dependent expression of sigma factor σ54 (rpoN) is mediated through Ntr system in Escherichia coli. Young-Sik Kim, Jong-Ho Lee, Shouguang Jin

4. PA5470 counteracts antimicrobial effect of azithromycin by releasing stalled ribosome in Pseudomonas aeruginosa. Jing Shi, Yiwei Liu, Yongxin Jin, Fang Bai, Zhihui Cheng, Weihui Wu, Shouguang Jin

5. Thymosin β4, a novel biologic therapy for post-traumatic osteoarthritis. Omar Awan, Reuben Judd, Ann Chauffe, Michael Bubb

6. The bactericidal effects of synovial fluid. Samy Gabriel, Michael Bubb, Reuben Judd

7. Oral delivery of Ang-(1-7) bioencapsulated in plant cells improves insulin sensitivity and renal injury in diabetic mice. Tao Du, Kang Xu, Ping Zhu, Amrisha Verma, Zhiyong Fu, Qiuhong Li

8. Optic Atrophy 1 (OPA1) gene expression in human eyes with diabetic retinopathy and age-related macular degeneration. Amrisha Verma, Ping Zhu, Tuhina Prasad, Qiuhong Li

9. Reduced Optic Atrophy 1 (OPA1) gene expression in diabetic mouse retina: Implication of mitochondrial dynamics in the pathogenesis of diabetic retinopathy. Amrisha Verma, Ping Zhu, Tuhina Prasad, Qiuhong Li

10. Transfection efficiency and cellular toxicity of different transfection reagents for human retinal and non-retinal cells. Amrisha Verma, Qiuhong Li

11. Oral delivery of recombinant probiotics expressing Angiotensin-(1-7) improves glucose tolerance and insulin level in diabetic mice. Kang Xu, Tao Du, Ping Zhu, Zhijing Liang, Amrisha Verma, Tuhina Prasad, Qiuhong Li
12. Persistent hypercatecholaminemia drives hematopoietic progenitor cell mobilization following trauma. Getasha Doobay, Elizabeth Miller, Tyler Loftus, Kolenkode Kannan, Philip Efron, Alicia Mohr

13. Systemic regulation of bone marrow stromal cytokines following severe trauma. Elizabeth Miller, Tyler Loftus, Kolenkode Kannan, Jessica Plazas, Philip Efron, Alicia Mohr


15. A study of magnetic susceptibility anisotropy in white matter using rat’s spinal cord. Guita Banan, Thomas Mareci

16. 3D mapping of perivascular network using MRI. Magdoom Kulam, Michael King, Joshua Yarrow, Malisa Sarntinoranont, Thomas Mareci

17. Identification of macrophage reservoirs through tropism of HIV-1 envelopes. Carla Mavian, Viviane Machado, Thaissa Cordeiro, Labelle Barrios, Aubrey Morales, Mark Sharkey, Mario Stevenson, Marco Salemi


20. Intravitreal delivery of the AAV2quad+T-V/smCBA-sGFP-TatNrf2mer in two models of RPE oxidative damage. Brianna Bowman, Alfred Lewin, Cristhian Ildefonso


23. Use of nano-computed tomography for quantitative, 3D-imaging of hearts. Natalia Pereira, Mustafa Hashimi, Hideko Kasahara

24. Electrical inhibition (EI) of preterm uterine electrical and mechanical activity. Kathryn Patrick, Jeffrey Karsdon, Frederick Naftolin, Neil Euliano, Anthony Gregg
25. **Tick-tock, tick-tock: Clock gene expression is altered in sleep apnea.** Meaghan Holzworth, Muna Canales, Richard Berry, Rebecca Beyth, Michelle Gumz

26. **Co-regulation of renal sodium transport genes by the circadian clock protein Per1 and Aldosterone.** Sarah Masten, Brian Cain, Charles Wingo, Michelle Gumz

27. **Cosinor analysis reveals non-dipping hypertension in mixed background strain mice lacking the circadian clock protein Per1.** Amber Miller, Kristen Solocinski, I. Jeanette Matheny, Charles Wingo, Michelle Gumz

28. **Phosphorylation of Krüppel-associated Box (KRAB)-associated protein (KAP)-1 via ATM impairs its ability to restrain Epstein-Barr virus lytic activation.** Xiaofan Li, Eric Burton, Sumita Bhaduri-McIntosh

29. **Transcriptional activator STAT3 functions via KRAB-KAP1 transcriptional repressors to promote persistence of Epstein-Barr virus.** Xiaofan Li, Eric Burton, Siva Koganti, Sumita Bhaduri-McIntosh

30. **ADAMTS-7: A new regulator in alcoholic liver fibrosis.** Adam Bria, Junmei Zhou, Bryon Petersen, Liya Pi

31. **Hierarchical control of HNF4a and YAP1 determines CTGF/CCN2 enriched microenvironments critical for murine liver regeneration during acute injury.** Junmei Zhou, Xiaowei Sun, Marda Jorgensen, Adam Bria, Qi Cao, Daniel Gibson, Andrew Bryant, Liya Pi

32. **Deregulation of T helper cell pathways in the basal plate of the placenta is associated with preeclampsia.** Jessica Jackson, Belen Rabaglino, Martha Campbell-Thompson

33. **Islet microvasculature alterations induced by B-cell loss.** Lith Nasif, Joseph Canzano, Elizabeth Butterworth, Martha Campbell-Thompson

34. **Elucidation of an H-K-ATPase type 2 associated aldosterone escape mechanism.** Oliver Shore, Luciana Morla, I. Jeanette Matheny, Charles Wingo

35. **The RECLAIM trial (Rescuing Endstage Cardiac Failure Lifespan by Administration of Intravenous MPC/MSC).** Keith March, Carl Pepine, Eileen Handberg, Ruxandra Sava

36. **Modeling T1D: iPSC-derived moDCs display the same cell-surface markers as primary moDCs.** Lucas Armitage, Katherine Santostefano, Melanie Cash, Jing Chen, Naohiro Terada, Alexi Savinov, Todd Brusko, Clayton Mathews, Mark Wallet

38. CRISPR/Cas9 knockout of USP18 enhances type I IFN responsiveness and restricts HIV-1 infection in macrophages. Jared Taylor, Melanie Cash, Katherine Santostefano, Mahito Nakanishi, Naohiro Terada, Mark Wallet


40. Microbiome analysis of cholesteatoma by gene pyrosequencing. David Karnani, Joshua Weiss, Patrick Antonelli, Carolyn Dirain

41. NanoCT analysis of lower urogenital tract development. Julia Bittencourt, Brooke Armfield, Edward Stanley, Martin Cohn

42. Hedgehog signaling initiates genital tubercle development. Alexandra Carroll, Brooke Armfield, Martin Cohn

43. Sexually dimorphic skin growth in the dewlap of anole lizards. Margaret Johnson, Bonnie Kircher, Martin Cohn

44. Growing apart: Characterizing the development of sexual dimorphism. Bonnie Kircher, Martin Cohn

45. A mouse model for environmentally-induced birth defects of the reproductive system. Kelsey Lewis, Martin Cohn

46. Sexually dimorphic digit development in Anolis sagrei. Griffin McNamara, Bonnie Kircher, Martin Cohn

47. The effects of the endocrine disruptor vinclozolin on the sexually dimorphic 2D:4D ratio. Lindsey North, Kelsey Lewis, Martin Cohn

48. A new method for shell-less culture of chicken embryos. Darius Ramkhalawan, Rajendhran Rajakumar, Martin Cohn

49. Expression of a set of cranial neural crest regulatory genes in developing mouse teeth. Emily Woodruff, Alyssa Mangino, Jonathan Bloch, Martin Cohn

50. An efficient resampling method for order-restricted gene-trait association analysis. Yeonil Kim, Yueh-Yun Chi, Fei Zou
51. Algorithms to predict arboviral infections using clinical and demographic information from febrile patients in an area with coincident outbreaks of Dengue, Chikungunya and Zika. Jacob Ball, Maha El Badry, Taina Telisma, Sarah White, Sonese Chavannes, Marie Gina Anilis, Xinguang Chen, Mattia Prosperi, Eben Kenah, Yang Yang, Derek Cummings, John Lednicky, J. Glenn Morris Jr, Valery Madsen Beau de Rochars

52. A cyclic AMP dependent pathway regulates intestinal oxalate secretion. Jonathan Whittamore, Marguerite Hatch

53. Insulin-like growth factor axis collectively identifies pre-type 1 diabetes. Melanie Shapiro, Clive Wasserfall, Andrew Schultz, Sean McGrail, Michael Haller, Desmond Schatz, Mark Atkinson, Todd Brusko

54. Costimulatory molecules CD226 and TIGIT impact CD8+ T cell activity and function during type 1 diabetes. Wen-I Yeh, Howard Seay, Brittney Newby, Clayton Mathews, Todd Brusko

55. Stress-inducible retinal neuroprotective pathways and microglial phenotype depend on Toll-like receptor 2. Robert Browning, Marcus Hooper, Clayton Santiago, John Ash


57. Genetic loss of the metabolic sensor AMPK results in an accelerated aging of the retina. Lei Xu, Lena Phu, Abraham Bell, John Ash

58. Cardiac dysfunction in older sepsis patients. Robert Mankowski, John Petersen, John Larocca, Scott Brakenridge, Stephen Anton, Christiaan Leeuvenburgh, Lyle Moldawer, Frederick Moore


60. Protection from lethal flu infections: Lessons from a systemic lupus mouse model. Georges Abboud, Seung-Chul Choi, Anton Titov, Wei Li, Laurence Morel
61. CTCF boundary remodels chromatin domain and drives aberrant HOX gene transcription in acute myeloid leukemia. Huacheng Luo, Fei Wang, Haoli Li, Bowen Yan, Qinghua Du, Shi Chen, Jie Zha, Amin Sobh, Christopher Vulpe, Leylah Drusbosky, Christopher Cogle, Iouri Chepelev, Bing Xu, Stephen Nimer, Jonathan Licht, Yi Qiu, Baoan Chen, Mingjiang Xu, Suming Huang

62. The effects of a ketogenic diet on a murine model of MPS IIIB. Joseph DeCosmo, Alex McNally, Coy Heldermon

63. ATG plus recombinant probiotic expressing proinsulin prevents type 1 diabetes in NOD mice. Olivia Bailey, Clive Wasserfall, Amanda Posgai, Sean McGrail, Clayton Mathews, Andrea Lin, Mark Atkinson

64. No compensatory increase in non-β hormone expressing cells in the pancreatic duct glands in type 1 diabetes. Shweta Kulkarni, Mark Atkinson, Alexandra Butler

65. Untargeted metabolomic analysis in naturally occurring canine diabetes mellitus identifies similarities to human type 1 diabetes. Allison O’Kell, Timothy Garrett, Clive Wasserfall, Mark Atkinson

66. Exocrine pancreatic function as a novel biomarker in pre-T1D. James Ross, Clive Wasserfall, Daniel Perry, Kieran McGrail, Amanda Posgai, Todd Brusko, Desmond Schatz, Michael Haller, Mark Atkinson

67. Co-regulation of alternative splicing by MBNL and RBFOX. Melissa Hale, Stacey Wagner, Hailey Olafson, Sunny Ketchum, Ona McConnell, Jared Richardson, Amy Mahady, Adam Struck, Eric Wang, Andy Berglund

68. Shaken or stirred: Small molecule cocktails are a viable therapeutic approach for myotonic dystrophy type 1. Jana Jenquin, Masayuki Nakamori, Andy Berglund


70. A SOCS1 peptide alleviates inflammation and associated damage to barrier properties of ARPE-19 cells. Chulbul Ahmed, Howard Johnson, Alfred Lewin


75. Estradiol enhances leptin response in male rats. Isabelle Côté, Sara Green, Drake Morgan, Christy Carter, Nihal Tümer, Philip Scarpace

76. Inhibiting late sodium current attenuates isoproterenol-induced transient inward current and delayed afterdepolarizations in ventricular myocytes. Yejia Song, Nesrine El-Bizri, Sridharan Rajamani, Luiz Belardinelli

77. Hyaluronan-CD44 signaling promotes development of PD-L1+ macrophages in tumor microenvironment. Paul Ramon Dominguez Gutierrez, Sergei Kusmartsev

78. A mouse model of Angelman syndrome imprinting defects. Michael Lewis, Deb Morse, James Resnick

79. Mechanotransduction of adipose derived stem cells on polyacrylamide hydrogels. Peter Vonu, Hulan Shang, Dan Stewart, Chelsey Simmons, Adam Katz

80. Functional analysis of β-globin locus control region hypersensitive site 2-associated proteins and noncoding RNA. Aishwarya Gurumurthy, Paul Wassel, Shaleen Thakur, Mir Hossain, Jared Stees, Kate Gavrilo, Jörg Bungert

81. Patient derived stem cells serve as a model for investigating polymorphisms in hypertension. Natalie Fredette, Eliyah Malik, Katherine Santostefano, Naohiro Terada

82. Mammalian Dicer directly cleaves 5’-extended m7G-capped microRNA precursors. Peike Sheng, Christopher Fields, Tianqi Wei, Tongjun Gu, Oralia Kolaczkowski, Bryan Kolaczkowski, Mingyi Xie

83. The effects of calcium supplementation to oral rehydration solution in a cholera toxin induced secretory diarrhea mouse model. Lieqi Tang, Sam Cheng, Johnathan Fraebel
84. Calcium sensing receptor and toll-like receptor 4 interaction in cultured Caco-2 human intestinal epithelial cells: A mechanistic study of bacteria-nutrient interaction in the gut. Jane Harrell, Sam Cheng

85. Examining the pathogenicity of variants of uncertain significance in Factor I from transplant candidates: An approach to better understand complement regulators and their role in atypical hemolytic uremic syndrome. Laura Cline, Anuja Java, John Atkinson

86. Investigating metabolic changes caused by oncolytic myxoma virus in SFxL glioblastoma cells. Mukundan Ragavan, Masmudur Rahman, D. Grant McFadden, Matthew Merritt

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89. Experimental designs for Multi-OMIC studies. Funda Ogut, Jeremy Newman, Lauren McIntyre

90. Salt-sensitive 129Sv mice display urinary exosomal differences. Lauren Liu, Kubra Tuna, Kevin Chacko, Victor Sanchez, Whitney Schramm, Hamzah Ahmed, Abdel Alli

91. Comparing profiles of urinary exosomes from diabetic hypertensive db/db mice and wild type mice. Whitney Schramm, Kubra Tuna, Kevin Chacko, Victor Sanchez, Hamzah Ahmed, Lauren Liu, Abdel Alli

92. Mal protein negatively regulates renal ENaC activity by increasing phospholipase C membrane expression. Kubra Tuna, Qiang Yue, Zinah Ghazi, Otor Al-Khalili, Douglas Eaton, Abdel Alli

93. Contemporary use and outcomes of neoadjuvant chemotherapy prior to radical cystectomy. Kevin Campbell, Jennifer Kuo, Long Dang, Bruce Stechmiller, Shahab Bozorgmehri, Michael Blute, Paul Crispen

94. Evaluation of the timing of adjuvant mitomycin C following nephroureterectomy for urothelial carcinoma of the upper tract. Blake Noennig, Shahab Bozorgmehri, Russell Terry, Mohit Gupta, Brandon Otto, Michael Blute, Li-Ming Su, Paul Crispen

95. Pioglitazone improves hepatic mitochondrial function in a mouse model of nonalcoholic steatohepatitis. Srilaxmi Kalavalapalli, Nishanth Sunny, Fernando Bril, Ariana Vergara, Alejandra Vargas, Kenneth Cusi
96. Heterotypic interaction of endothelial and adipose pericyte-like cells induces expression of angiostatic factor Activin A through notch signaling pathways. Stephanie Merfeld-Clauss, Hongyan Lu, Tom Jones, Dongni Feng, Keith March, Dmitry Traktuev

97. A novel small compound identified by molecular docking for the treatment of alpha-1 antitrypsin deficiency associated liver disease. Xiaojuan Zhang, Kien Pham, Danmeng Li, Susana Restrepo, Austin Bracey, Chen Liu, David Ostrov

98. Reduction of both planktonic and biofilm bacteria in a pig skin explant model by a topical LAE formulation. Xinxin Zhu, Hongen Zhang, Qingping Yang, Daniel Gibson, Gregory Schultz

99. A rat model to study the role of gut bacteria in the regulation of urinary calcium. Raghav Pai, Pedro Espino-Grosso, Ryan Chastain-Gross, Paul Ramon Dominguez Gutierrez, John Asplin, Saeed Khan, Benjamin Canales

100. YoaA, a putative helicase in bacteria involved in repairing blocks to DNA replication. Yasmin Ali, Margaret Hibnick, Una Milovanovic, Leslie Morris, Nikila Ojili, Sneha Sathish, Linda Bloom

101. Identification and validation of murine gammaherpesvirus 68 miRNA targets. Whitney Bullard, Mehmet Kara, Sunantha Sethuraman, April Feswick, Shreya Nirmalan, Alim Esemenli, Erik Flemington, Rolf Renne, Scott Tibbetts

102. Alum pretreatment affects IL-10 and pAKT and improves survival from murine neonatal sepsis. Russell Hawkins, Jaimar Rincon, Steven Raymond, Ricardo Ungaro, James Wynn, Lyle Moldawer, Shawn Larson

103. Measurement of spontaneous neutrophil migration from whole blood of human neonates with and without ex vivo LPS stimulation. Steven Raymond, Russell Hawkins, Tyler Murphy, Jaimar Rincon, Julie Stortz, Felix Ellett, Lyle Moldawer, Daniel Irimia, Shawn Larson

104. Adjustments of multi-sample U-statistics to right censored data and confounding covariates. Yichen Chen, Somnath Datta

105. Differential network analysis based on next-generation sequencing data. Tyler Grimes, Somnath Datta

106. HSV-1 miRNAs H1/H6 and H8 differentially modulate viral replication in a cell-type specific manner. Enrico Barrozo, Sanae Nakayama, David Bloom
107. Effect of tympanic membrane microbiome on tympanoplasty success. Wayne Dell, Carolyn Dirain, David Karnani, Allen Tate, Sanjeev Balamohan, Varun Varadarajan, Patrick Antonelli


110. Stromal extracellular vesicle delivering tumor suppressive miR-145 contributes to pancreatic cancer cell death. Song Han, Michael Gerber, Dongyu Zhang, Mark Beveridge, Jose Trevino, Lyle Moldawer, Steven Hughes

111. Multifunctional RNA-nanoparticles to enhance and track dendritic cell vaccines. Adam Grippin, Brandon Wummer, Elias Sayour, Adam Monsalve, Tyler Wildes, Kyle Dyson, Jon Dobson, Duane Mitchell

112. RNA-engineered T cells as a tool to deliver cytokines to intracranial tumors. Fernanda Pohl-Guimaraes, Catherine Flores, Changlin Yang, Jeffrey Drake, Elias Sayour, Jianping Huang, Duane Mitchell

113. Hematopoietic stem cell-derived dendritic cells promote rejection of malignant glioma. Tyler Wildes, Bayli DiVita, David Damiani, Catherine Flores, Duane Mitchell

114. Tracking T-cell immune reconstitution after adoptive cellular therapy targeting recurrent medulloblastoma and PNETs using deep T-cell receptor (TCR) repertoire sequencing. Oleg Yegorov, Yanina Yegorova, Anjelika Dechkovskaia, Jianping Huang, Sri Gururangan, Duane Mitchell

115. Clinical utility of post-chemoradiation therapy restaging with MRI for stage II-III rectal cancer patients. Mahmoud Aryan, Nathan Burriss, Thom George, Steven Hughes, Sanda Tan, Atif Iqbal

116. Outcomes after transanal excision or transabdominal resection for stage I rectal cancer patients. Nathan Burriss, Mahmoud Aryan, Tyler Loftus, Thom George, Steven Hughes, Sanda Tan, Atif Iqbal

118. Treatment-resistant slow-cycling cells support metabolic heterogeneity and adaptability in glioblastoma. Lan Hoang-Minh, Changlin Yang, Florian Siebzehnrubl, Kyle Dajac, Nicholas Andrews, Michael Schmoll, Timothy Garrett, Jianping Huang, Elias Sayour, Duane Mitchell, Matthew Sarkisian, Brent Reynolds, Loic Deleyrolle


120. Cancer associated mutations in histone genes destabilize nucleosome structure, alter gene expression and stimulate neoplastic growth. Richard Bennett, Aditya Bele, Rajarshi Gosh, Eliza Small, Behnam Nabet, Xiaoxiao Huang, Jon Oyer, Christine Will, Adrian Grzybowski, George Schatz, Tao Yu, Vadim Backman, Greta Bauer, Alex Ruthenberg, Tanmay Lele, Jan Liphardt, Jonathan Licht

121. UTX/KDM6A loss enhances the malignant phenotype of multiple myeloma and sensitizes cells to EZH2 inhibition. Teresa Ezponda, Daphné Dupéré-Richer, Christine Will, Eliza Small, Nobish Varghese, Tej Patel, Behnam Nabet, Relja Popovic, Jon Oyer, Marinka Bulic, Yupeng Zheng, Xiaoxiao Huang, Mrinal Shah, Manuela Occhionorelli, Giovanni Tonon, Neil Kelleher, Jonathan Keats, Jonathan Licht


123. Interplay between oncogenic signaling pathways and epigenetic modifiers in the development of Acute Myeloid Leukemia. Camille Jacques, Richard Bennett, Daphné Dupéré-Richer, Jianping Li, Sayantan Maji, Aditya Bele, Alberto Riva, Sharon Norton, Crissandra Piper, Jonathan Licht

124. Generation of a multiple myeloma mouse model using constitutively active IL-6 receptor. Sharon Norton, Jianping Li, Crissandra Piper, Catalina Troche, Daphné Dupéré-Richer, Sanyantan Maji, Aditya Bele, Xiaoxiao Huang, Camille Jacques, Richard Bennett, Jonathan Licht

125. The role of NSD2 mutation in therapy resistance in childhood acute lymphoblastic leukemia. Jianping Li, Catalina Troche, Daphné Dupéré-Richer, Alok Swardoop, Alberto Riva, Crissandra Piper, Marta Kulis, Sanyantan Maji, Aditya Bele, Xiaoxiao Huang, Camille Jacques, Sharon Norton, Richard Bennett, Jonathan Licht
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130. βArrestin2 mediates renal cell carcinoma tumor growth through modulating cell cycle progression. Jude Masannat, Hamsa Thayele Purayil, Yushan Zhang, Wanju Kim, Iqbal Mahmud, Yehia Daaka

131. Oncolytic virotherapy for SCLC: Priming immunity for more effective checkpoint inhibition. Patrick Kellish, Daniil Shabashvili, Masmudur Rahman, Mary Reinhard, D. Grant McFadden, Frederic Kaye, Maria Zajac-Kaye

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133. Basic FGF mimetic (FGF-P) as a multi-potential mitigation agent for radiation-induced gastrointestinal syndrome. Zhenhuan Zhang, Steven Zhang, Lori Rice, Amy Zhang, Harmut Derendorf, Hardikkumar Chandasana, Ing-orn Prasanchaimontri, Mohammad Akbar, Kate Casey-Sawicki, Paul Okunieff, Steven Swarts


135. Aggressive surgical resection of glioblastoma and incidence of hospital-acquired conditions. Logan Cope, Rachel Freedman, Dimitri Laurent, Patricia Sacks, Maryam Rahman
136. Aggressive surgical treatment of high grade glioma does not lead to an increase in Patient Safety Indicators. Rachel Freedman, Logan Cope, Tricia Sacks, Dimitri Laurent, Joseph Abbatematteo, Paul Kubilis, Maryam Rahman

137. Immunomodulation with temozolomide to improve efficacy of immune checkpoint inhibition for the treatment of glioblastoma. Aida Karachi, Farhad Dastmalchi, Changlin Yang, Jianping Huang, Duane Mitchell, Maryam Rahman

138. Recent trends in reimbursement for neurosurgeons practicing in the United States. Patricia Sacks, Matthew Decker, Carl Brophy, Paul Kubilis, Maryam Rahman

139. Interleukin-8 secretion due to leukemia induced endothelial-cell activation promotes AML expansion and chemoprotection. Jesse Terrell, Vindhya Vijay, Amy Meacham, Leylah Drusbosky, Gerard Madlambayan, Christopher Cogle

140. Personalized therapy design for Early T-Cell Precursor Acute Lymphoblastic Leukemia (ETP-ALL) using computational biology modeling with in vitro validation. Madeleine Turcotte, Raphael Bossé, Kimberly Hawkins, Amy Meacham, Vindhya Vijay, Girish Chinnaswamy, Manju Sengar, Ansu Kumar, Shwetha K, Anisha Kamath, Anjana Nair, Karthik Raju, Taher Abbasi, Shireen Vali, Christopher Cogle, Leylah Drusbosky


143. Imaging evaluation of the liver following transarterial radioembolization for primary and secondary hepatic malignancies: Exploring the utility of hepatocyte-specific MRI. Jaime Fields, Anthony Sorrentino, Altan Ahmed, Joseph Grajo
144. Using Aorta-Lesion-Attenuation-Difference (ALAD) on preoperative contrast-enhanced CT scan to differentiate between malignant and benign renal tumors. Joseph Grajo, Russell Terry, Justin Ruoss, Blake Noennig, Jonathan Pavlinec, Shahab Bozorgmehri, Michael Blute, Paul Crispen, Li-Ming Su


146. Quantifying subclinical cardiac radiation toxicity in breast cancer patients. Walter O’Dell, Shruti Siva Kumar, Eric Zeng, Alexandria Waler, Christopher Klassen, Julie Bradley

147. Anatomic modeling and visualization of the kidney and its associated major vessels in patients with kidney cancer. Sneh Parekh, Li-Ming Su, Walter O’Dell

148. Reduction of p21 gene expression is linked to AML chemoresistance. Qinwei Chen, Bowen Yan, Suming Huang, Bing Xu, Yi Qiu

149. Epigenetic regulation in chemoresistant colon cancer. Bihan Wang, Alta Johnson, Suming Huang, Yi Qiu

150. Epigenetic drugs selectively target a population of AML cells which is positive for CD123 cell surface marker and is chemoresistant. Bowen Yan, Koji Shimada, Ming Tang, Haoli Li, Suming Huang, Yi Qiu

151. DAXX promotes de novo lipogenesis in triple-negative breast cancer. Iqbal Mahmud, Timothy Garrett, Daiqing Liao

152. Strategy to enhance DC migration for increased efficacy of dendritic cell vaccine immunotherapy. Farhad Dastmalchi, Aida Karachi, Hassan Azari, Duane Mitchell, Maryam Rahman

153. Targeting DNA replication as a therapeutic strategy for Acute Myeloid Leukemia with DNMT3A mutations. Kartika Venugopal, Daphné Dupéré-Richer, Jonathan Licht, Olga Guryanova


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155. Sex differences in risk factors for marijuana use among middle-aged and older adults. Shawnta Lloyd, Sadaf Milani, Micah Johnson, Linda Cottler, Catherine Striley
156. Better knowledge of Alzheimer’s disease among Hispanic compared to non-Hispanic community members. Sadaf Milani, Linda Cottler, Catherine Striley


158. Self-reported adherence to antiretroviral therapy in persons living with HIV was a poor predictor of viral suppression. Emma O’Halloran Leach, Huiyin Lu, Robert Cook

159. Sphenopalatine ganglion: Block, radiofrequency ablation and neurostimulation – a systematic review. Kwo Wei David Ho, Rene Przkora, Sanjeev Kumar

160. ALS-linked mutations in Matrin-3 alter its fluid phase transition. Ryan Mulligan, Jared Richardson, Christina Moloney, Alexandra Coomes, James Thomas, Maurice Swanson, Andy Berglund, Jada Lewis, David Borchelt, Edgardo Rodríguez-Lebrón

161. The 5'UTR of ATXN1 is alternatively spliced and post-transcriptionally regulates Ataxin-1 expression. Rachna Manek, Tiffany Nelson, Edgardo Rodríguez-Lebrón

162. Cardiac auscultation though clothing: The truth behind the taboo. Joseph LaGrew, Delaney LaGrew, Juanito Abrigo, Megan Koenig, Talles Sidriono, Terrie Vasilopoulos, Nikolaus Gravenstein

163. It is high time we routinely screen health literacy during the preoperative anesthesia evaluation. Nikolaus Gravenstein, Basma Mohamed, Mariel McLaughlin

164. Heat transfer during leg warming with intermittent pneumatic compression. Abigail Schirmer, Christopher Varga, Leshawn Richards, Nikolaus Gravenstein

165. Clinical and ethical challenges in the care of the parturient patient with florid psychosis. Danielle Epstein, Jacqueline Hobbs, Dikea Roussos-Ross

166. Tracking and trending the wellness of your program and institution: Harnessing the best of residency management software for annual program evaluation. Diana Morris, Sony Kuruppacherry, Lynne Meyer, Lisa Dixon, Jacqueline Hobbs

167. Severe nephrolithiasis and hyperammonemia associated with topiramate: Case reports and review of the literature. (Susan) Zhong Ye-Bates, Louis Solomon, Jacqueline Hobbs

169. A prospective, multicenter, randomized, double-blind, placebo-controlled study to evaluate the safety and efficacy of preoperative antithrombin supplementation in patients undergoing high-risk cardiac surgery with cardiopulmonary bypass. Peter Jiang, Bruce Spiess

170. Starting a new psychodynamic psychotherapy resident teaching clinic: Wellness for patients, residents, and supervisors. Gary Kanter, Kathleen Burns

171. A single center retrospective analysis of port catheter insertion and subsequent complications in cancer patients: A quality improvement initiative. W. Paul Skelton, Aaron Franke, Samantha Welniak, Raphael Bossé, Martina Murphy, Jason Starr


174. Hypertension quality improvement initiative at the mobile outreach clinic. Michael Dangl, Jonathan Harrell

175. Improvement in medical student robotic surgical skills and perception of surgery as career choice with a focused robotic training lab. Tiffany Miller, Ann-Marie Carpenter, George Sarosi, Steven Hughes, Sandra Tan, Atif Iqbal


177. Evaluation of GATA-3 and estrogen receptor expression in pancreatic neuroendocrine tumors by immunohistochemistry. Joanna Chaffin, Ashwini Esnakula, Michael Feely, Jinping Lai, Ashwin Akki, Xiuli Liu, David Hernandez Gonzalo

179. Impact of cessation of reflex immunohistochemical staining for Helicobacter pylori on gastric biopsy turnaround time. Maira Gaffar, Danielle Harrell, Jennifer Reppucci, Zhongbo Jin, Gregory Olsen, Ashwini Esnakula, David Gonzalo, Jesse Kresak, Xiuli Liu, Michael Feely

180. IgG4-related sclerosing sialadenitis presenting as a submandibular mass clinically suspicious for malignant neoplasm. Maira Gaffar, Brian Boyce, Anthony Mancuso, Larry Fowler, Jinping Lai

182. Unique genetic alterations present in co-existing SCC and BCC at the nasal vestibule. Zhongbo Jin, Kimberly Newsom, Brian Boyce, Petr Starostik, Jinping Lai

183. A case series of unique airway management in patients with micrognathia. Rhae Battles, Sonia Mehta

184. Community food security assessment of a small city in northern Florida. Andrew Davis, Erik Black

185. Four extremity weakness after lower lumbar transforaminal epidural injection of steroids: Reality or fiction? Juan Mora, Rene Przkora

186. Systematic review of randomized controlled trials evaluating patient controlled analgesia for the management of acute pain in the emergency department. Ivan Samcam, Linda Papa, Sagar Patel


188. How safe is immunosuppression maintenance 1 year after renal allograft failure? Alejandra Mena-Gutierrez, Shahab Bozorgmehri, Kawther Alquadan, Alfonso Santos, Tezcan Ozrazgat-Baslanti, Karl Womer, Michael Casey


192. Ethical dilemmas at the intersection of mental illness and the criminal justice system: A case study. Jessica Khan, Rajiv Tandon


194. Mobile device accuracy for step counting across age groups. Alexandra Lee, Yi Guo, Jiang Bian, Matthew Gurka, Alice Parish, Megan Smith, Thomas Buford, François Modave

195. Evaluation of tissue expansion for breast reconstruction. Brooke Porter, Bruce Mast

196. Just the FACTS: The development of The Florida Annotated Gold Standard Corpus for Translation Science in Hypertension. Nathan Boire, Rebecca Henderson, Selja Seppälä, Chloe Herring, William Hogan, Carl Pepine, Amanda Hicks

197. Developing an LGBTQ communication skill building intervention for oncologists: A Florida Academic Cancer Alliance initiative. Julia Seay, Matthew Schabath, Merry-Jennifer Markham, Matthew Schlumbrecht, Luisa Duarte, Gwendolyn Quinn, Amanda Hicks


199. Prevalence of Staphylococcus aureus antibiotic resistance in subjects with atopic dermatitis and a control population at the University of Florida Department of Dermatology outpatient clinic. Mary Bohannon, Lymaries Velez, Anna De Benedetto

200. Atopic dermatitis with an area of sparing at a graft harvest site. Reesa Lendry, Jennifer Nicole Harb, Anna De Benedetto

201. Protease-Activated Receptor 2 activation reduces Claudin-1 expression and tight junction function in primary human keratinocytes. Peter Nadeau, Mason Henehan, Anna De Benedetto

202. CT-based morphometric analysis of sarcopenia in septic ICU patients. Matthew Booth, Juan Mira, Tyler Loftus, Scott Brakenridge
203. Medical student participation in a state physician health program: Perspectives from successful former participants in one state. Nicole Vesely, Lisa Merlo

204. Promoting Resilience in Medicine: The effects of a mind body elective to improve medical student wellness. Michelle Williams, Lisa Merlo

205. Baseline hypertension knowledge and blood pressure self-management skills of emergency department patients. Sean Patrick Bliven, Muhammad Abdul Baker Chowdhury, Meenakshi Balakrishnan, Donna Carden

206. A systematic review and meta-analysis of therapeutic agents to treat vasoplegia. Savannah Liddell, William Yang, Penelope Reynolds

207. Retrospective validation of the HEART pathway for acute coronary syndrome risk stratification: Are ECG and troponin necessary? Jeffrey Chapa, Jared Freitas, Liam Rawson, Emily Welch, Michael Marchick, Brandon Allen

208. An analysis of the intermediate HEART score population: Test or admit? Jared Freitas, Jeffrey Chapa, Liam Rawson, Emily Welch, Brandon Allen, Michael Marchick

209. Predictors of the need for endotracheal tube repositioning after rapid sequence intubation in the ED. Justin Hall, Jeremy Smith, Paul Campbell, Erin Suggs, Michael Marchick, Lars Beattie

210. Direct vs. video laryngoscopy: Examination of 1st attempt success rate as well as adverse outcomes following ED rapid sequence intubation. Jeremy Smith, Justin Hall, Erin Suggs, Paul Campbell, Michael Marchick, Lars Beattie

211. Using body mass index to predict number of attempts and post-intubation hypotension in rapid sequence intubation. Erin Suggs, Justin Hall, Paul Campbell, Jeremy Smith, Michael Marchick, Lars Beattie

212. Use of blood transfusions in pediatric cancer patients at the Hospital Infantil Robert Reid Cabral from July 2016 to July 2017. Ellery Altshuler, Michael Lauzardo

213. Role of patient perspective in prevention of low acuity emergency department visits. Julie Gibson, Lisa Chacko

214. MAPPing underserved populations in Alachua County. Joseph Guernsey, Lisa Chacko, Laura Guyer
215. Associations between pain modulation and hippocampal volumes in older adults with musculoskeletal pain. Brandon Apagueno, Andres Gonzalez, Ronald Cohen, Yenisel Cruz-Almeida

216. Deficits in endogenous pain inhibition predict deficits in functional ambulatory performance during complex walking tasks in older adults with musculoskeletal pain. Lorraine Hoyos, Joseph Riley III, Roger Fillingim, David Clark, Yenisel Cruz-Almeida


218. Cerebellar white matter volume is associated with clinical and experimental pain in older individuals with musculoskeletal pain. Rachna Sannegowda, Desiree Lussier, Natalie Ebner, Yenisel Cruz-Almeida

219. Part man, part machine: Left ventricular assist device patients’ emergency department utilization. Mohammad Al-Ani, Sarah Gul, Travis Murphy, Brandon Allen, Mustafa Ahmed

220. Case report: Abnormal capnogram. Alberto Bursian, Daniel Hernandez

221. Retrospective analysis among Veterans’ Affairs patients evaluation for spinal cord stimulation (SCS) therapy. Timothy Vollmer, Alberto Bursian, Jackie Redding, Cynthia Garvan, Stephanie Lewis, Egle Bavry

222. Current cognitive impairment in a patient with a history of delirium: A preoperative dilemma. Franchesca Arias, Alberto Bursian, Josh Sappenfield, Catherine Price

223. Association between peer norms and household access with nonmedical prescription opioid use among adolescents in south central Kentucky. Kathleen Egan, Eric Gregory, Amy Elliott, Linda Cottler


225. An intersectional approach to disparities in the juvenile justice system: White children are twice as likely as black girls to be referred for substance use disorder assessment. Micah Johnson, Amy Elliott, Shawnta Lloyd, Linda Cottler

226. Sex differences in sources and routes of non-medical prescription opioid use in youth. Vicki Osborne, Catherine Striley, Linda Cottler
227. Current use of alcohol and marijuana among people with anxiety, depression, both or neither. Ayodeji Otufowora, Yiyang Liu, Shivani Khan, Catherine Striley, Varma Deepthi, Linda Cottler

228. Prescription opioid use and at-risk drinking among middle aged and older women: Results from a cross-sectional study of community members. Mirsada Serdarevic, Kelly Gurka, Catherine Striley, Krishna Vaddiparti, Linda Cottler

229. Do individuals with gambling problems have different health problems than others? Findings from a diverse community sample. Nathan Smith, Shawnta Lloyd, Linda Cottler

230. Cannabis use increases cocaine dependence in female cocaine users but does not increase its progression speed. Yiyang Liu, Micah Johnson, Barry Setlow, Linda Cottler

231. Exploring the less common pathogens of infectious diarrhea. Steven Toffel, Lymaries Velez, Elizabeth Tremblay, Kairav Shah, Kenneth Rand, Jena Auerbach, Kathryn Potter, Stacy Beal

232. A five-year review of skin infections in hematopoietic stem cell transplant patients. Lymaries Velez, Steven Toffel, Elizabeth Tremblay, Kairav Shah, Jena Auerbach, Kenneth Rand, Kathryn Anne Potter, Stacy Beal

233. Clinical manifestations, management, and diagnostic techniques used in hematopoietic stem cell transplant patients with skin infections: A five-year review. Lymaries Velez, Steven Toffel, Elizabeth Tremblay, Kairav Shah, Jena Auerbach, Kenneth Rand, Kathryn Anne Potter, Stacy Beal


236. Prevalence and risk factors of acute kidney injury in common urologic procedures. Shahab Bozorgmehri, Scott Gilbert, Robert Cook, Rebecca Beyth, Tezcan Ozrazgat-Baslanti, Azra Bihorac, Muna Canales
237. Renal recovery is a major determinant of chronic critical illness and long-term mortality. Tezcan Ozrazgat-Baslanti, Quran Wu, Zhongkai Wang, Amir Motaie, Gabriela Ghita, Larysa Sautina, Mark Segal, Azra Bihorac

238. Association between nephrotoxic drugs and acute kidney injury in hospital patients. Arsenios Tsokas, Farnaz Babaie, Tezcan Ozrazgat-Baslanti, Azra Bihorac, Panos Pardalos, Petar Momcilovic

239. Application of a standardized protocol for the treatment of pediatric asthma patients. Elyse Chaviano, Denise McIntyre, Elizabeth LeFave, Bahareh Keith

240. Modifying sexual partner selection of adolescent girls to reduce STD risk: A pilot study. Eric Richardson, Stephanie Staras

241. Increased prefrontal cortical activity during walking is associated with greater dual-task costs after stroke. Sudeshna Chatterjee, Christina Albert, Emily Fox, Janis Daly, Dorian Rose, Evangelos Christou, Kelly Hawkins, Dana Otzel, Katie Butera, David Clark

242. The ‘UPfront Walking Study’ design and methods: Combining tDCS and neurorehabilitation to treat age-related deficits of mobility and cognition. Sudeshna Chatterjee, Adam Woods, Dorian Rose, Ronald Cohen, David Clark


244. Barriers and strategies for specialty care access through federally qualified health centers: A scoping review. Andrew Davis, Agatha Formoso, Yumiko Nakamura, Maude Laberge

245. Using the social determinants of health to identify mental health needs and barriers to care in Alachua County. Joanne Alfred, Kiarash Rahmanian, Rebecca Friedmann, Laura Guyer

246. Deep learning approaches to perioperative ultrasound imaging. Sarah Stern, Patrick Tighe

247. A comparison of prognostic scoring systems in pediatric open globe injuries. Carleigh Bruce, Casey Beal

248. Ontology of cancer related social-ecological variables. Dharani Balasubramanian, Jamillah Khan, Jiang Bian, Yi Guo, William Hogan, Amanda Hicks
249. Accumulation of mitochondrial DNA deletions accelerates age-related hearing loss in mice. Mi-Jung Kim, Suraiya Haroon, Karessa White, Dalian Ding, Hyo-Jin Park, Chul Han, Kevin Boyd, Isabela Caicedo, Kaitlyn Evans, Richard Salvi, Paul Linser, Marc Vermulst, Shinichi Someya

250. GSTA4 plays an essential role in reducing cisplatin-induced hearing loss in female mice. Hyo-Jin Park, Mi-Jung Kim, Karessa White, Chul Han, Maria Ticsa, Kevin Boyd, Isabela Caicedo, Aaron Gomez, Shinichi Someya

251. Vaccinations of patients with end-stage renal disease – Nephrology versus primary care. Samuel Phen, Amir Kazory, Tezcan Ozrazgat-Baslanti, Shahab Bozorgmehri, Maryam Sattari

252. Identifying the characteristics associated with Antiretroviral Therapy (ART) initiation among HIV positive cohorts eligible for ART in Haiti. Justin Kim, Shannan Rich, Chris Delcher


254. Cancer screening practices and healthy behavioral choices of people living with HIV/AIDS are different by biological gender and years since HIV diagnosis. Akemi Wijayabahu, Zhi Zhou, Robert Cook, Babette Brumback, Nicole Whitehead, Lusine Yaghjyan

255. Which comes first following musculoskeletal trauma, depression and anxiety symptoms or narcotic abuse? Sunny Gupta, Sharareh Sharififar, Laura Zdziarski-Horodyski, Terrie Vasilopoulos, Heather Vincent, MaryBeth Horodyski, Kalia Sadasivan, Jennifer Hagen

256. Pre-injury depression and anxiety in patients with orthopedic trauma and their treatment. Edward Haupt, Heather Vincent, Andrew Harris, Terrie Vasilopoulos, Robert Guenther, Sharareh Sharififar, Jennifer Hagen

257. Arthroscopic suture-anchor biceps tenodesis in the bicipital groove is a reduced morbidity method of tenodesis significant complication risk. Edward Haupt, Kevin Farmer, Kevin O’Keefe

258. PROMIS outcome measures and mental health in orthopaedic trauma patients during early recovery. Heather Vincent, Laura Zdziarski-Horodyski, Jennifer Hagen, Matthew Patrick, Kalia Sadasivan, Robert Guenther, Terrie Vasilopoulos, Sharareh Sharififar, MaryBeth Horodyski
259. The effect of concussion on subsequent musculoskeletal risk in high school athletes. Alex Nusbickel, Ashley Zapf, Brady Tripp, Terrie Vasilopoulos, Daniel Herman

260. Celiac artery coverage during TEVAR. Sarah Gray, Martin Back

261. “THINK DELIRIUM”: A multidiciplinary assessment, intervention, and educational program. Milankumar Nathani, Bruce Bassi, Stephen Welch, Joseph Thornton, Michelle Rossi, Colleen Campbell, Kimberly Jones, Uma Suryadevara


263. Validation of AAA patient reporting in national administrative and clinical outcomes databases. Suniah Ayub, Salvatore Scali, Thomas Huber, Adam Beck, Javairiah Fatima, Scott Berceli, Gilbert Upchurch, Dean Arnaoutakis, Martin Back, Kristina Giles


266. Is participation in CenteringPregnancy associated with decreased postpartum depression in black women? Amelia Watson, Amie Goodin, Autumn Prieto, Dikea Roussos-Ross


268. Histologic patterns of anti-PD-1 therapy-induced liver injury. Dongwei Zhang, Xianzhong Ding, Michael Feely, Lindsay Yassan, Lindsay Alpert, Consuelo Soldevila-Pico, John Hart, Xiuli Liu, Jinping Lai

269. Perineal carcinoma cuniculatum: Histology review of 38 cases. Dongwei Zhang, Raul Gonzalez, Michael Feely, Hwajeong Lee, Kavita Umrau, Daniela Allende, Dipti Karamchandani, Michael Zaleski, Jingmei Lin, Maria Westerhoff, Xuchen Zhang, Lindsay Alpert, Jinping Lai, Xiuli Liu
270. Clinical outcome of perineal carcinoma cuniculatum in a cohort of 38 cases. Dongwei Zhang, Raul Gonzalez, Michael Feely, Kavita Umrau, Hwajeong Lee, Daniela Allende, Dipti Karamchandani, Michael Zaleski, Jingmei Lin, Maria Westerhoff, Xuchen Zhang, Lindsay Alpert, Jinping Lai, Xiuli Liu

271. Expanding measurement-based care to inpatient psychiatric facilities: Pilot study of PHQ-9 changes during depression treatment with and without ECT. Tessy Korah, Deborah Morrison, Dana Mason, Almut Winterstein, Maria Bolshakova, Megan McBride, Regina Bussing


273. Skin cancer awareness in solid organ transplant recipients: Patient survey study. Kathryn Anne Potter, Navid Farahbakhsh, Maria Isabel Longo


277. Analysis of outcomes in adolescents and young adults with pilonidal disease. Mackenzie Abraham, Steven Raymond, Atif Iqbal, Shawn Larson, Moiz Mustafa, Sandra Tan, Janice Taylor, Saleem Islam


279. Effectiveness of 3D modeling in the decision-making process prior to heart surgery. Frank Han, Karl Reyes, Dalia Lopez-Colon, John Forder, Mark Bleiweis, Curt DeGroff, Arun Chandran
280. Single center experience with CT diagnosis of pulmonary embolus in Fontan patients. Ryan Boggs, Tavenner Dibert, Dalia Lopez-Colon, Nancy Quinn, Jennifer Co-Vu, Arun Chandran

281. To like or not to like? How families use social media and the internet to learn about their child’s congenital heart disease. Ryan Boggs, Natalie Weiner, Dalia Lopez-Colon, Jennifer Co-Vu

282. A case of markedly atypical pulmonary venous drainage in hypoplastic left heart syndrome. Tavenner Dibert, Frank Han, Arun Chandran, Giri Venkata, Jennifer Co-Vu

283. To the hospital and back: Improving transitions of care and reducing readmissions in a general internal medicine clinic. Brandon Herndon, Ryan Nall

284. The role of student-run free clinics and LGBTQ health education based on a needs assessment of LGBTQ health disparities in North Central Florida. Erika Wert, Ryan Nall


286. Characterization of adult obesity in Florida using the OneFlorida Clinical Research Consortium. Stephanie Filipp, Michelle Cardel, Jaclyn Hall, Rebecca Essner, Dominick Lemas, David Janicke, Steven Smith, Joseph Nadglowski, Troy Donahoo, Rhonda Cooper-DeHoff, David Nelson, William Hogan, Elizabeth Shenkman, Matthew Gurka


288. Improving patient education at discharge through comics. Giuliano De Portu, Colleen Cowdery


290. Assessing LGBT competency among cancer care providers at the University of Florida/UF Health Cancer Center. Brian Ramnaraign, Merry-Jennifer Markham
291. Acromioclavicular joint injuries: What are we measuring? Christian Reintgen, Erik Gerlach, Kelly Mamelson, Brad Schoch, Joseph King

292. GRACE Marketplace/Dignity Village Grace grows farm-to-table garden project study: Self-reported negative health outcomes within the homeless population. Victoria Bouillon, Kia Rahmanian, Karla Shelnutt, LaToya O’Neal, Shenary Cotter

293. Identifying variably methylated regions (VMRs) associated with Alzheimer’s disease: A genome-wide DNA methylation study in postmortem brains. Zhiguang Huo, Yun Zhu, Lei Yu, Jingyun Yang, David Bennett, Jinying Zhao

294. Childhood trauma, metabolites, and major depression: Findings from a monozygotic discordant twin study. Yun Zhu, Emily Fowler, Tamara Bacus, Peter Roy-Ryrne, Eric Strachan, Jinying Zhao

295. Does having prior rotator cuff surgery affect outcomes in reverse shoulder arthroplasty? Maharsh Patel, William Stone, Aimee Struk, Kevin Farmer, Thomas Wright, Joseph King

296. Prevalence and outcomes of secondary glaucoma in HSV/HZV compared to primary open-angle glaucoma. Keyana Vyas, Kaihan Fakharr, Sonal Tuli

297. Comparison of hemodialysis arteriovenous fistula blood flow rates measured by Doppler ultrasound and phase-contrast magnetic resonance imaging. Yong He, Yan-Ting Shiu, Daniel Pike, Prabir Roy-Chaudhury, Alfred Cheung, Scott Berceli

298. Distinct lipid mediator profile associated with arteriovenous fistula maturation. Jared Rozowsky, Kyle Staton, Kerri O’Malley, Matt Spite, Scott Berceli

299. Flow and pressure boundary condition estimation toolbox for TEVAR patients. Rosamaria Tricarico, He Yong, Adam Beck, Scott Berceli

300. Metabonomic signatures and nitric oxide pathway perturbations of end stage renal disease patients. Kyle Staton, Jared Rozowsky, Eoin Quinlivan, Christopher Kuppler, Sarah Gray, Timothy Garrett, Scott Berceli

301. Shift from contractile to synthetic vascular smooth muscle phenotype is associated with greater intimal hyperplasia following AVF creation. Kyle Staton, Scott Berceli, Jared Rozowsky, Qiongyao Hu, Sarah Barbey, Sarah Gray
302. Neurophysiological changes impacting hand function after arteriovenous hemodialysis fistula placement. Kyle Staton, Scott Berceli, Paul Kubilis, Sarah Barbey, Alexis Hall, Thomas Huber, Salvatore Scali


305. Achieving stone free status following ureteroscopy using a dissolution agent. Michele Dill, Rachel DeNapoli, Steven Arce, Victoria Bird


307. Thermodynamics of kidney stone dissolution agents and toxicity profile on transitional epithelial cells. Noa Grooms

308. Update on prostate cancer immunotherapy: Review of the literature of PROSTVAC phase II and III clinical trials. Hasan Jhaveri, Victoria Bird


312. A health and nutrition intake questionnaire for the calcium oxalate stone former based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). Tanya Pereira, Victoria Bird

313. Durability testing for colorimetric pH diagnostic device for urease producing bacteria within an enclosed catheter system. Jordynn Tyndall, Victoria Bird
314. **Prostate cancer risk reduction associated with decreasing BMI during the 4-5th decade of age.** Kai Wang, Xhinguang Chen, Mattia Prosperi, Travis Gerke, Victoria Bird

315. **Assessment of acute kidney injury risk in patients undergoing PCNL.** Nitin Sharma, Shahab Bozorgmehri, Tezcan Ozrazgat-Baslanti, Amir Motaei, Brandon Otto, Azra Bihorac, Vincent Bird

316. **Clinical and metabolic characterization of uric acid stone formers: Are medical strategies effective?** Nitin Sharma, Shahab Bozorgmehri, Vincent Bird

317. **Outcomes in patients with known contrast allergy undergoing contrast-enhanced endourological procedures.** Paula Domino, Lawrence Caruso, Susan Ford, Justin Dersch, Nitin Sharma, Vincent Bird

318. **Text4Fit: Development of a healthcare text messaging program to improve medication adherence in overweight and obese adolescents recruited from three diverse clinical settings.** Serena Martin, Rebeccah Mercado, Kristin Dayton, Dipankar Gupta, Lindsay Thompson

319. **A better chance at a healthy start: Optimizing an existing prenatal risk screener for improved prediction of adverse birth outcomes.** Diana Montoya-Williams, Melissa Bright, Silvio Martinez, Rebeccah Mercado, Scott Lorch, Lindsay Thompson

320. **The effects of anxiety and depression in emergency department patients.** Alexander Zirulnik, Blaire Banfield, Emmett Martin, Matthew Ryan

321. **Creativity declines with advancing stage of medical education: Can creativity be taught?** Timothy Stoddard, Adam Katz

322. **An essential role of the iron-sulfur cluster assembly enzyme isu-1 in the aging and stress responses of Caenorhabditis elegans.** Yi Sheng, Kaitlyn Casey, Rui Xiao

323. **Preliminary findings: Evaluating the neurophysiological benefits and self-assessment of positive affect training in individuals with chronic knee pain.** Harold Rocha, Jeffrey Schmidt, John Marks, Adam Woods, Roland Staud, Roger Fillingim, Andreas Keil, Kimberly Sibille

324. **Teaching translational research to high school students.** Julie Bray, Margaret Fettis, Andrea Lin, Gabriel Fernandez-Bueno, Julie Bokor, Mary Jo Koroly
325. The HEART score does not perform well as a predictive tool for major adverse cardiac events in patients with renal dysfunction. Liam Rawson, Jeffrey Chapa, Jared Freitas, Emily Welch, Michael Marchick, Brandon Allen

326. Disparities in ED recidivism rates by demographics in evaluation of low-risk chest pain patients. Emily Welch, Michael Marchick, Brandon Allen

327. β1-adrenoceptor polymorphisms associated with post-operative arrhythmias in children after congenital cardiac surgery. Leanne Dumeny, Marut Chantra, Taimour Langaee, Benjamin Duong, Daniel Zambrano, Frank Han, James Humma, Jonathan Dacosta, Tommie Lovato, Connie Mei, Julie Johnson, Mark Bleiweis, Larisa Cavallari


329. Surveying the POSNA landscape – What can we learn from society survey studies? Brendan Williams, Andres Guerrero, Steven Frick, Laurel Blakemore


332. Is school report card distribution a marker for physical abuse timing? Samantha Cresoe, Lucia Gonzalez, Melissa Bright

333. Bad grades may cost children more than just a decreased GPA: A retrospective review of calls to the Department of Children and Families hotline and time series analysis. Lucia Gonzalez-Llanos, Samantha Cresoe, Melissa Bright

334. Aggressive sexual behavior in sexually abused and sexually trafficked adolescents. Alexis Santos, Melissa Bright

335. Improving hepatitis C virus screening rates in internal medicine clinic. Seth Daly Stennis, Lazarus Mramba, Vanessa Garcia, Maryam Sattari

337. Brief reactive psychosis and mania induced by epidural steroid injection in an elderly female. Daniel Pietras, Tessy Korah

338. Contraception options counseling assessment for bias from healthcare workers on community patients. Diana Halloran, Sarah O’Conner

339. Considerations for scoring the Clock Drawing Test for impairment of geriatric patients in the perioperative setting: A comparison of three common scoring criteria. Kristen Woodward, Mitchell Zhang, Bailey Frei, Shawna Amini, Patrick Tighe, Christopher Giordano, Catherine Price

340. Methylene blue as a potential therapeutic agent in decompensated hemorrhagic shock. Cory Jackson, Christopher Giordano

341. Extensions to reality: A systematic review of head-mounted and vibrotactile displays in anesthesia. Chase Lewellen

342. High fractional inspired oxygen, friend or foe? Ralph Michel, Albert Robinson, Christopher Giordano

343. The practice of handling non-sterile items using a sterile towel compromises the operative field. Abigail Schirmer, Courtney Swan, Monika Oli, Steven Hughes, Terrie Vasilopoulos, Sana Chaudhry, Nikolaus Gravenstein, Christopher Giordano

344. Renal graft preservation: Preliminary studies on tissue oxygenation. Stephen Tapia-Ruano, Jiepei Zhu, Christopher Giordano, Kenneth Andreoni, Bruce Spiess, J. Travis Parsons

345. Safety and feasibility of memantine administration during partial hospitalization treatment for alcohol use disorder. William Greene, Lisa Merlo, Ben Lewis, Sara Jo Nixon

346. Geographic variation of out-of-hospital cardiac arrest outcomes exist in Alachua County, FL. Scott Cohen, Sarah Gul, Torben Becker, Karl Huesgen, Joseph Tyndall


348. Prognostic value of serum lactate in OHCA patients presenting to the emergency department. Sarah Gul, Scott Cohen, Matt Drabin, Joseph Tyndall, Karl Huesgen
349. Understanding adverse birth outcomes in Florida through maternal risk factors and geographic distribution. Roland Estrella, Chris Delcher, Magda Francois, Matt Gurka, Jiawei Li, Cara McDonnell, Diana Montoya-Williams, Meredith Mowitz, Sachita Shrestha, Mildred Maldonado-Molina


351. Impact of sex and ethnicity on underuse of cardiovascular stress testing in the outpatient setting. Anthony Barrios, Dhruv Mahtta, David Winchester

352. Evidence-based nutritional and pharmacological interventions targeting chronic low-grade inflammation in middle-aged and older adults: A systematic review and meta-analysis. Carlo Custodero, Robert Mankowski, Stephanie Lee, Todd Manini, Marco Pahor, Stephen Anton

353. Vitamin D supplementation is associated with a reduction in self-reported falls among older adults – D-SAFE Feasibility Study. Madison Goetze, Robert Mankowski, Christiaan Leeuwenburgh, Marco Pahor, Stephen Anton


355. Effects of a dietary restriction and exercise program on central adiposity in older women with obesity. Luria Melo de Lima Scher, Christy Karabetian, Todd Manini, Donovan Lott, Michael Perri, Stephen Anton


357. Effects of a system-wide application of comprehensive pre-dialysis education program on home dialysis therapies. Colin Hinkamp, Emma Segal, Teri Martinez, Michelle Thomas, Shahab Bozorgmehri, Tezcan Ozrazgat-Baslanti, Ashutosh Shukla

358. The impact of a pre-health program on underrepresented and disadvantaged high school students. Xiomara Brioso, Sachoya McDonald, Ciara Styles, Annaless Williams, Donna Parker
359. Early post-operative pain scores correlate with long-term functional outcomes after total shoulder arthroplasty. Benjamin Judkins, Braden Jones, Thomas Wright


364. Investigating lupus psychosis versus late onset schizophrenia. PhuongTam Nguyen, Jonathan Browning, Laura Rodriguez-Roman


366. Association between dynapenia and subsequent serious fall injuries in older adults. Anoop Balachandran, Boya Lin, Todd Manini

367. Hearing sensitivity is associated with metabolic efficiency in older adults. Kevin Boyd, Scott Griffiths, Shinichi Someya, Todd Manini

368. Activity-related pain and metabolic cost during daily tasks in younger, middle, and older adults. Duane Corbett, Amal Wanigatunga, Nick Wawrzyniak, Eileen Handberg, Vincenzo Valiani, Christopher Janelle, Todd Manini

369. Assessment of physical activity intensity using wrist accelerometer data. Matin Kheirkhahan, Amal Wanigatunga, Duane Corbett, Vincenzo Valiani, Sanjay Ranka, Todd Manini

370. Variability of cerebral blood flow and heart rate is associated with fatigue ratings in individuals with chronic fatigue syndrome. Jeff Boissoneault, Janelle Letzen, Michael Robinson, Roland Staud

372. Proximal tibial resorption in a modern total knee prosthesis. Justin Deen, Terry Clay, Dane Iams, MaryBeth Horodyski, Hari Parvataneni


374. Clinical outcomes of children with sickle cell disease hospitalized for fever. Michael Massari, Vandy Black

375. Do Asian and Hispanic American women differ in their risk of depression? Findings from a longitudinal analysis of the Study of Women’s Health Across the Nation (SWAN) data. Bin Yu, Xinguang Chen


378. Activity and circadian rhythm of sepsis patients in the intensive care unit. Anis Davoudi, Duane Corbett, Tezcan Ozrazgat-Baslanti, Azra Bihorac, Scott Brakenridge, Todd Manini, Parisa Rashidi

379. Biomechanical comparison of three fixation techniques for scapular spine fractures. Zohair Zaidi, Cong Chen, Matthew Patrick


381. Trabeculectomy is more likely to lower intraocular pressure than glaucoma drainage devices in patients with glaucoma. Mary Wilson, Alissa Meyer, Aaron Webel, Nicole Rosenberg, Cooper Rodgers, Mark Sherwood


384. Long term outcomes of laparoscopic excision of endometriosis. Martin Laguerre, Brittany Arkerson, Matthew Robinson, Nash Moawad

385. The normalized constant score strongly correlates with patient-reported outcome measures following primary shoulder arthroplasty. Martin Laguerre, Brendan Williams, Rowan Michael, Aimee Struk, Brad Schoch, Thomas Wright, Joseph King

386. Correlation of multiple patient reported outcome measures across follow-up in patients undergoing primary shoulder arthroplasty. Rowan Michael, Brendan Williams, Martin Laguerre, Aimee Struk, Brad Schoch, Thomas Wright, Joseph King


389. Tagging RNA-binding proteins in synapses using a promiscuous biotin ligase (BirA). Ryan Hildebrandt, Katie Moss, Lance Denes, Gary Bassell, Eric Wang

390. Investigating the molecular basis of sleep dysregulation in Myotonic Dystrophy. Belinda Pinto, Fangke Xu, Ona McConnell, Ravi Allada, Eric Wang

391. Brain arterial dilatation and lysosomal storage dysfunction. Harsh Shah, Roy Alcalay, Jose Gutierrez

392. Behavioral and biochemical characterization of C9orf72 knockout mice as a model of dystonia. Fangfang Jiang, Yuning Liu, Fumiaki Yokoi, Yuqing Li

393. Selective ablation of dopamine receptor 2 on striatal cholinergic interneuron in mice leads to motor deficits similar to other dystonia mouse models. Yuning Liu, Fumiaki Yokoi, Yuqing Li

394. Abnormal firing of Purkinje cells contributes to the pathogenesis of dystonia. Yuning Liu, Hong Xing, Fumiaki Yokoi, Huanxin Chen, Steven Roper, Yuqing Li
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407. Wild-type and ALS linked mutant Matrin 3 cause striking muscle pathology in transgenic mice. Mariela Cabrera, Christina Moloney, Srut Rayaprolu, David Borchelt, Jada Lewis

408. IL-10 expression leads to early mortality without affecting dopaminergic neurons in a mouse model of alpha synucleinopathy. Samuel Cockey, Emily Koller, Mieu Brooks, Todd Golde, Benoit Giasson, Paramita Chakrabarty

409. Developing mouse model of tauopathy using AAV-mediated somatic brain transgenesis. Emily Koller, Elsa Gonzalez De La Cruz, Kathrine Gaines, Kevin Strang, Daniel Ryu, Xuefei Liu, Cara Riffe, Todd Golde, Benoit Giasson, Paramita Chakrabarty

410. Understanding brain alterations following inflammatory challenge. Kristen Ibañez, Luis Colon-Perez, Edward Ofori, David Vaillancourt, Todd Golde, Marcelo Febo, Paramita Chakrabarty

411. Screening for Alzheimer’s disease therapies using novel cultured brain slice models. Cara Croft, Brittany Woody, Kaitlyn Rewis, Pedro Cruz, Kevin Strang, Daniel Ryu, Benoit Giasson, Todd Golde

412. Can we cure stress with an antibody? Hunter Futch, Zino Kuhn, Yona Levites, Brenda Moore, Christopher Janus, Todd Golde

413. Brain slice culture models of CNS targeted gene expression. Kaitlyn Rewis, Cara Croft, Pedro Cruz, Todd Golde

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427. Lateral entorhinal cortex inactivation does not inhibit object-place associative memory. Leah Truckenbrod, Abbi Hernandez, Sara Burke
428. Morphological constancy of olfactory sensory neuron cilia in rodents. Dana Shively, Cedric Uytingco, Kirill Ukhanov, Jeffrey Martens

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431. A role for F-actin in olfactory sensory neuron cilia disassembly and shortening. Chao Xie, Cedric Uytingco, Lian Zhang, Jeffrey Martens


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470. Gene therapy improves lifespan and cardiorespiratory function in a rat model of Pompe disease. Lauren Duncanson, Lauren Vaught, Bhuvna Mahajan, A. Gary Todd, Barry Byrne, Darin Falk

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476. Local expression of a soluble TLR4 decoy receptor ameliorates intracerebral hemorrhage outcomes. Damian Hernandez, Jenna Leclerc, Paramita Chakrabarty, Abdullah Ahmad, Ishwarya Satyavarapu, Pedro Cruz, Todd Golde, Sylvain Doré

477. Genetic deletion of haptoglobin ameliorates intracerebral hemorrhage-induced brain damage. Jenna Leclerc, Chris Li, Stacy Jean, Sylvain Doré

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479. Protective effects of the lipophilic DADMDFT iron chelator against brain hemoglobin toxicity. Bo Ma, Kristina Goodwin, Jason Day, Lei Liu, Sylvain Doré

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484. Confounding effect of torticollis on the impairment of motor coordination in a mouse model for manganism. Genesys Giraldo, Mitchell Knutson, Christopher Janus


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487. Mitochondrial structural defects in Barth syndrome patient-derived fibroblasts. Manashwi Ramanathan, Silveli Suzuki-Hatano, Katherine Santostefano, Naohiro Terada, Barry Byrne, W. Todd Cade, Peter Kang, Christina Pacak

488. AAV-mediated TAZ gene replacement restores function and improves aberrant proteomic profiles in Barth Syndrome. Silveli Suzuki-Hatano, Madhurima Saha, Skylar Rizzo, Rachael Witko, Bennett Gosiker, Manashwi Ramanathan, Meghan Soustek, Michael Jones, Peter Kang, Barry Byrne, W. Todd Cade, Christina Pacak

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490. AAV-mediated gene delivery to treat Xeroderma Pigmentosum – Cockayne Syndrome (XP-CS) in vivo. Rachael Witko, Skylar Rizzo, Mughil Sriramvenugopal, Silveli Suzuki-Hatano, Peter Kang, Christina Pacak

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493. Truncation of Alpha-synuclein increases amyloid formation. Zachary Sorrentino, Kimberly-Marie Gorion, Kevin Strang, Niran Vijayaraghavan, Benoit Giasson

494. Distinct abilities of tau mutants to drive seeded and non-seeded aggregation. Kevin Strang, Cara Croft, Zachary Sorrentino, Paramita Chakrabarty, Todd Golde, Benoit Giasson

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507. Enhancing effects of cannabis smoke exposure on working memory performance. Barry Setlow, Shelby Blaes, Caitlin Orsini, Toneisha Stubbs, Shandera Ferguson, Sara Heshmati, Shannon Wall, Marcelo Febo, Adriaan Bruijnzeel, Jennifer Bizon
