



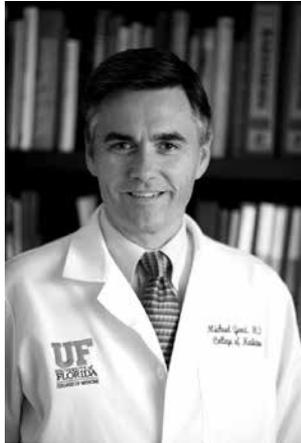
UNIVERSITY OF FLORIDA  
COLLEGE OF MEDICINE

Celebration of Research  
March 31 - April 1, 2014

**UF**  
UNIVERSITY *of*  
FLORIDA



## Welcome to the College of Medicine 2014 Celebration of Research!



The UF COM Celebration of Research is a wonderful opportunity for us to reflect on the strength of our research programs and appreciate the breadth, quality, and merit of the science conducted within the College. This event reminds us that it is through discovery and the impact of our research that we improve the quality of human life, and in doing so, advance the College of Medicine and the University of Florida.

This year brings us back to the Stephen C. O'Connell Center. With this space, we are delighted to be able to include research posters from some of our collaborators in other areas of campus. Totalling almost 400, the research posters on display tonight highlight the cutting-edge interdisciplinary research of our faculty, postdocs, and students. We also have a number of resource groups from across campus that are here tonight to share how they support research at UF. More than ever, this event affords us a unique opportunity to visit with old friends, meet new colleagues, exchange ideas, and develop new collaborations and synergies.

As you browse through the posters and informational booths, please be sure to engage in conversation with the presenters and join me in thanking them for supporting and promoting research at the UF College of Medicine.

Michael L. Good, MD  
Dean, College of Medicine

## Schedule of Events

### **March 31, 2014**

5:30pm – 8:30pm

Poster Session

Stephen C. O'Connell Center

### **April 1, 2014**

12:00 noon

Keynote Speaker

#### **Jeffery W. Kelly, PhD**

Lita Annenberg Hazen Professor of Chemistry

Chairman, Department of Molecular and Experimental Medicine

The Scripps Research Institute

*"Biological and Chemical Approaches to Adapt  
Proteostasis to Ameliorate Protein Misfolding Diseases"*

C1-017, Communicore Building, HSC

\* Sponsored by the Joseph and Leila Applebaum Visiting Professorship

### **April 3, 2014**

9:30am – 11:30am

Medical Guild Competition

CGRC Auditorium

## Keynote Speaker

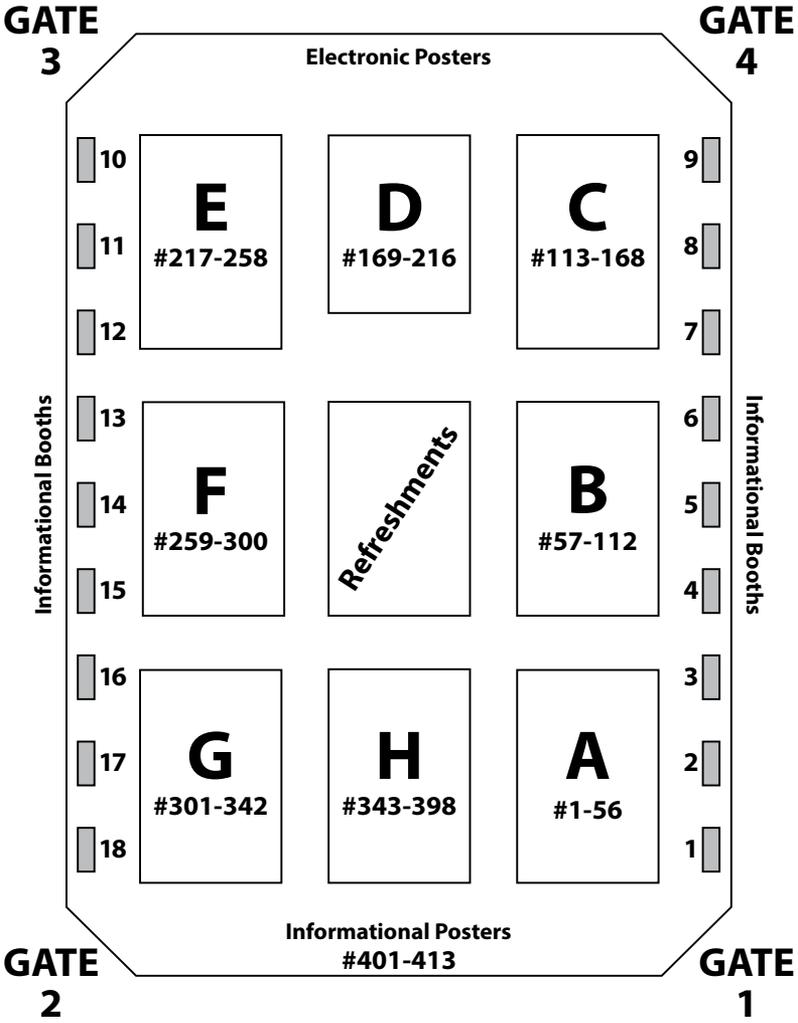


**Jeffrey W. Kelly, Ph.D.**, is the Lita Annenberg Hazen Professor of Chemistry in the Department of Chemistry and the Chairman of the Department of Molecular and Experimental Medicine at the Scripps Research Institute. Kelly also served as Vice President of Academic Affairs and Dean of Graduate Studies at Scripps for nearly a decade. His research is focused on uncovering protein folding principles and on understanding the etiology of protein misfolding and/or aggregation diseases and using this information to develop novel therapeutic strategies. He has 290+ publications and has received several awards, including The American Chemical Society Ralph F. Hirschmann Award in Peptide Chemistry (2012), The Biopolymers Murray Goodman Memorial Prize (2012), The Protein Society

Emil Thomas Kaiser Award (2011), The American Peptide Society Rao Makineni Lectureship (Award; 2011), The American Peptide Society Vincent du Vigneaud Award (2008), The American Chemical Society Arthur C. Cope Scholar Award (2001), State University of New York at Fredonia Alumni Distinguished Achievement Award (2000), The Protein Society–Dupont Young Investigator Award (1999) and The Biophysical Society National Lecturer (Award;1999).

Kelly cofounded FoldRx Pharmaceuticals based on his discovery of Tafamidis—approved by the European Medicines Agency in 2011 and the Japanese authorities in 2013 to treat familial amyloid polyneuropathy. This first-in-class drug is the first pharmacologic agent that halts neurodegeneration in a human amyloid disease. Tafamidis or Vyndaqel also provides the first pharmacologic evidence that the process of amyloidogenesis causes the degeneration of post-mitotic tissue. He also cofounded Proteostasis Therapeutics, a company using small molecules to alter the protein homeostasis network to ameliorate several aggregation-associated degenerative diseases (e.g. Parkinson's) as well as loss-of-function diseases (Cystic Fibrosis). In 2012 Kelly Cofounded Misfolding Diagnostics, Inc., a San Diego company focusing on the early diagnosis of degenerative diseases.

# FLOOR PLAN



## **Table #      Informational Booths**

1	Advanced Magnetic Resonance Imaging & Spectroscopy Facility
2	Powell Gene Therapy Center
3	Animal Care Services
4-5	Research Administration & Compliance
6	UF Center for Smell and Taste
7-9	Clinical & Translational Science Institute
10	College of Engineering Research Service Centers
11	Health Science Center Libraries
12	Office of Postdoctoral Affairs
13	Howard Hughes Medical Institute Science for Life
14	Medical Journal Society
15	Interdisciplinary Program in Biomedical Sciences
16	Interdisciplinary Center for Biotechnology Research
17	Electron Microscopy Core Facility
18	Molecular Pathology Core

## **Poster #      Informational Posters**

401	UF Research Computing
402	Southeast Center for Integrated Metabolomics
403	UF Center for Addiction Research & Education
404	Wellness in Parkinson Disease
405-409	Institute for Child Health Policy (IChP)
410	UF Health Sports Performance Center
411	Center for Structural Biology Research Resources
412	UF CPET: Professional Development for Secondary Science Teachers
413	GenitoUrinary Development Molecular Anatomy Project (GUDMAP)

## POSTER TITLES

### ELECTRONIC POSTERS

**Identification of musculoskeletal injury predictors in recreational obese and non-obese runners.** Laura Zdziarski, Cong Chen, Cindy Montero, MaryBeth Horodyski, Heather Vincent

**The biomechanic sex differences during a lacrosse throw.** Laura Zdziarski, Cong Chen, Cindy Montero, Heather Vincent, MaryBeth Horodyski

**Comparison of cannulated screws with FiberWire or steel wire for patella fracture fixation: A pilot study.** Tony Bryant, Christopher Anderson, Christopher Stevens, Bryan Conrad, Heather Vincent, Kalia Sadasivan

**Multifidus muscle cross sectional area after resistance exercise is related to pain reduction but not improvement in ambulatory activity in obese older adults with chronic back pain.** Heather Vincent, Amanda Seay, Kevin Vincent, Robert Hurley, Steven George

**Effect of upper extremity motion in runners at different speeds.** Jason Zaremski, Cong Chen, Leslie Barnes, Kevin Vincent, Heather Vincent

**The Florida Concussion Legislation: A preliminary view of the impact on concussion evaluations.** Jason Zaremski, Brady Tripp, MaryBeth Horodyski, Heather Vincent

### AGING

**1. Effects of a dietary restriction plus exercise program on central adiposity in obese older women.** Christy Karabetian, Todd Manini, Donovan Lott, Stephen Anton

**2. GABAergic signaling alterations contribute to impaired working memory in aged F344 rats.** Cristina Bañuelos, B. Sofia Beas, Joseph McQuail, Ryan Gilbert, Barry Setlow, Jennifer Bizon

**3. GABA(B) receptor signaling and behavioral flexibility in aging.** B. Sofia Beas, Cristina Bañuelos, Ryan Gilbert, Barry Setlow, Jennifer Bizon

- 4. Neurochemical and circuit specific synaptic markers in aged hippocampus: Comparisons among glutamatergic, GABAergic and cholinergic synapses.** Joseph McQuail, Michael Siegel, Shane Burstiner, Michelle Nicolle, Jennifer Bizon
- 5. Effects of a one-year physical activity program on serum C-terminal Agrin Fragment (CAF) concentrations among mobility-limited older adults.** Irina Bondoc, Shannon Cochrane, Thomas Buford
- 6. Association of objectively-measured physical activity with cardiovascular risk in mobility-limited older adults.** Jodi Fitzgerald, Lindsay Johnson, Don Hire, Walter Ambrosius, Stephen Anton, Timothy Church, John Dodson, Anthony Marsh, Mary McDermott, Joe Nocera, Daniel White, Veronica Yank, Marco Pahor, Todd Manini, Thomas Buford
- 7. Textured shoe insoles relieve the attentional demand of walking in older adults.** Sarah Ring, Evangelos Christou, John Williamson, Leilani Doty, David Clark
- 8. Enhanced expression of estrogen receptor alpha with gene therapy extends the therapeutic window.** Linda Bean, Asha Rani, Ashok Kumar, Thomas Foster
- 9. Assessing age-related cognitive decline and consolidation deficits in Fisher 344 rats using the spatial water maze.** Michael Guidi, Asha Rani, Ashok Kumar, Thomas Foster
- 10. Dissociating oxidative damage and memory: NMDAR-redox regulation of memory during normal aging.** Ashok Kumar, Wei-Hua Lee, Asha Rani, Thomas Foster
- 11. Things look up with aging.** Anouchka Douyon, Adam Falchook, Nick Milano, Kenneth Heilman
- 12. Changes of vertical and horizontal pseudoneglect with aging.** Nicholas Milano, Anouchka Douyon, Adam Falchook, Kenneth Heilman
- 13. Association between physical function and risk of dementia.** Sunil Swami, Suzanne Satterfield, Tamara Harris, Caterina Rosano, Gregory Tranah, Michael Miller, Stephen Kritchevsky, Jeff Williamson, Kristine Yaffe, Anne Newman, Marco Pahor, Todd Manini
- 14. Association of anxiety and self-efficacy with either traditional or task-specific exercise interventions in pre-clinically disabled.** Amal Wanigatunga, Torrance Higgins, Michael Marsiske, Kelly Naugle, Todd Manini

**15. Quantitative proteomic analysis of differentially expressed proteins in humans brains with Alzheimer's disease related to oxidative stress.** Benito Minjarez, Luz Valero, Manuel Sanchez del Pino, Raul Mena, Pedro Fernandez-Funez, Juan Pedro Luna-Arias, Diego Rincon-Limas

**16. Effect of aging on vascular reactivity and histomorphology of the basilar artery in rats.** Nihal Tümer, Hale Toklu, Judy Muller-Delp, Sehkar Oktay, Payal Ghosh, Kevin Strang, Michael Delp, Philip Scarpace

**17. The roles of glutathione reductase in age-related hearing loss.** Chul Han, Mi-Jung Kim, Karessa White, Logan Walker, Diego Rielo, Paul Linser, Shinichi Someya

**18. Mitochondrial thioredoxin and hearing loss.** Mi-Jung Kim, Logan Walker, Karessa White, Chul Han, Paul Linser, Shinichi Someya

**19. The roles of mitochondrial isocitrate dehydrogenase in age-related hearing loss.** Karessa White, Mi-Jung Kim, Logan Walker, Chul Han, Paul Linser, Shinichi Someya

**20. Novel method of testing mechanical hyperalgesia is sensitive to treatment effects in patients with fibromyalgia syndrome.** Hailie Guelfi, Danielle Grossman, Yesenia Lucas, Michael Robinson, Roland Staud

## CANCER

**21. Vestibular apparatus dysfunction after external beam radiation therapy for head and neck cancers.** Niranjan Bhandare, William Mendenhall, Christopher Morris, Patrick Antonelli

**22. Dose-volume implications of the volumetric dose prescription to HRCTV-D90 and the traditional prescription method (point a) for target volumes of clinical significance using image-guided brachytherapy for the treatment of cervical cancer.** Niranjan Bhandare, Anamaria Yeung

**23. A comparison of the early toxicities of MammoSite and intraoperative radiotherapy.** Niranjan Bhandare, Christiane Shaw, Lisa Spiguel, Stephen Grobmyer, Judith Lightsey

- 24. The effect of preexisting hypertension on parameters for radiation-induced optic neuropathy.** Niranjan Bhandare, Vitali Moiseenko, William Song, Christopher Morris, William Mendenhall
- 25. TRIM29 is silenced by DNA hypermethylation in breast tumors, and suppresses cells' invasive behavior by repressing TWIST1 expression.** Lingbao Ai, Wan-Ju Kim, Merve Alpay, Stratford May, Erin Siegel, Kevin Brown
- 26. Oxidative stress shapes breast cancer phenotype through chronic activation of ATM-dependent signaling.** Merve Alpay, Lindsey Backman, Lingbao Ai, WanJu Kim, Muzaffer Dukel, Kevin Brown
- 27. Chimeric antigen receptor-modified T cells targeting multiple myeloma.** Yuchen Liu, Jan Moreb, Lung-Ji Chang
- 28. Chimeric antigen receptor-modified T cells targeting pediatric leukemia.** Sushmita Nair, Yuchen Liu, William Slayton, Lung-Ji Chang
- 29. Activation of a subset of growth factor associated genes in cetuximab-sensitive colorectal cancer GEO cells with KRAS mutation.** Wenyin Shi, Dietmar Siemann, Yao Dai
- 30. Identification of cis-acting regulatory regions in osteosarcoma tumor initiating cells Oct4 reporter.** Maria Guijarro, Elham Nasri, Ali Zarezah, Emma Hyddmark, Margaret White, Padraic Levings, Steve Ghivizzani, C. Parker Gibbs
- 31. Modulation of osteosarcoma tumorigenicity through treatment with epigenetic modifiers.** Emma Hyddmark, Padraic Levings, Maria Guijarro, Elham Nasri, Ali Zarezadeh, Margeret White, Steve Ghivizzani, C. Parker Gibbs
- 32. Differential miRNA expression In osteosarcoma tumor-initiating cells and their reverted progeny.** Elham Nasri, Padraic Levings, Maria Guijarro, Ali Zarezadeh, Emma Hyddmark, Margaret White, Steven Ghivizzani, C. Parker Gibbs
- 33. Forced induction of differentiation in osteosarcoma tumor initiating cells.** Margaret White, Padraic Levings, Emma Hyddmark, Ali Zarezadeh, Elham Nasri, Maria Del Valle Guijarro Barrigon, Glyn Palmer, Steve Ghivizzani, C. Parker Gibbs
- 34. Proteasome inhibitors induce differentiation, cell cycle arrest and apoptosis in osteosarcoma.** Ali Zarezadeh, Padraic Levings, Elham Nasri, Maria Guijarro, Emma Hyddmark, Margaret White, Steven Ghivizzani, C. Parker Gibbs

- 35. VEGFR inhibitors enhance progression of glioblastoma by upregulating CXCR4 in a TGF $\beta$ R signaling-dependent manner.** Kien Pham, Defang Luo, Dietmar Siemann, Brian Law, Brent Reynolds, Parvinder Hothi, Gregory Foltz, Jeffrey Harrison
- 36. Development of novel therapies for pediatric medullary thyroid cancer.** Laura Adamson, Linda Nhon, Arun Srivastava, Scott Rivkees, Jacqueline Hobbs
- 37. Phase II study of consolidative involved-node proton therapy in patients with hodgkin lymphoma: Early outcomes.** Bradford Hoppe, Stella Flampouri, Zhong Su, Robert Zaiden, Sacide Ozdemir, William Slayton, Eric Sandler, Nam Dang, John Lynch, Zuofeng Li, Nancy Mendenhall
- 38. hSETD1A/B histone methyltransferases regulate metastasis and associate with poor overall survival in breast cancer.** Tal Salz, Christine Pampo, Frederic Kaye, Dietmar Siemann, Yi Qiu, Suming Huang
- 39. Radiation therapy for sinonasal undifferentiated carcinoma.** Kaitlin Christopherson, John Werning, Robert Malyapa, Christopher Morris, William Mendenhall
- 40. Factors impacting long-term local control in non-metastatic medulloblastoma.** Kaitlin Christopherson, Ronny Rotondo, Julie Bradley, David Pincus, John Fort, Christopher Morris, Nancy Mendenhall, Robert Marcus, Daniel Indelicato
- 41. Stereotactic proton therapy for pediatric supratentorial ependymoma: Early clinical outcomes.** Daniel Indelicato, Ronny Rotondo, Julie Bradley, Philip Aldana, Eric Sandler, Nancy Mendenhall, Robert Marcus
- 42. Pediatric proton therapy: Patterns of care in 2012 across the United States.** Daniel Indelicato, Andrew Chang
- 43. Splicing factor ISY1 regulates the base excision DNA repair pathway.** Aruna Jaiswal, Brian Reinert, Elizabeth Williamson, Yuehan Wu, Satya Narayan, Robert Hromas
- 44. Orphan nuclear receptor NR4A2 exhibits oncogenic activity in lung cancer cells.** Chunxia Cao, Min Zhang, Ruli Gao, Zirong Chen, Yumei Gu, Chengbin Hu, Maria Zajac-Kaye, Frederic Kaye
- 45. Identification and anticancer activity of a novel class of KAT inhibitors.** Heng Yang, Christie Pinello, Jian Luo, Dawei Li, Yunfei Wang, Lisa Zhao, Stephan Jahn, S. Adrian Saldanha, Peter Chase, Jamie Planck, Kyla Geary, Haiching Ma, Brian Law, William Roush, Peter Hodder, Daiqing Liao

**46. Comparison of early morbidities of MammoSite and intraoperative radiation therapy.** Niranjana Bhandare, Christiane Shaw, Lisa Spiguel, Stephen Grobmyer, Judith Lightsey

**47. A strategy to combine traditional Chinese medicine with recombinant adenovirus-based gene therapy to treat human liver cancer in vitro.** Zifei Yin, Lina Wang, Meng Wang, Changquan Ling, Chen Ling

**48. MOF acetylates lysine specific demethylase 1 (LSD1) to suppress epithelial-to-mesenchymal transition and tumor invasion.** Huacheng Luo, Anitha Shenoy, Qingsong Cai, Ming Tang, Yue Jin, Lihua Jin, David Reisman, Robert Casero, Jianrong Lu

**49. Epithelial-to-mesenchymal transition imparts pericyte-like characteristics to tumor cells to uphold vascular-integrity and promote tumor-growth.** Anitha Shenoy, Ming Tang, Yue Jin, Huacheng Luo, Qingsong Cai, Christine Pampo, Brian Law, Dietmar Siemann, Lung-Ji Chang, Jianrong Lu

**50. Different mechanisms exploited by oncolytic MYXV and VACV to enter target cells.** Winnie Chan, Grant McFadden

**51. Manipulation of host signaling pathways by Myxoma virus regulates viral replication and tropism in human cancer cells.** Masmudur Rahman, Eugenie Bagdassarian, Mohamed Ali, Grant McFadden

**52. Treating diffuse infiltrative pontine glioma through magnetically mediated energy delivery using EGFR-targeting magnetic nanoparticles.** Ana Bohorquez, Francisco Delgado, Ulises Bautista, Nafis Noman, David Johnson, Michael King, Thomas Mareci, Paul Carney, Carlos Rinaldi

**53. Identification of the mitochondrial-binding site on the amino-terminal end of hexokinase II.** Nadezda Bryan, Kevin Raisch

**54. Using high-content screening to identify novel anti-tumor agents targeting the translocation of hexokinase II from the mitochondria to the cytoplasm.** Susanne Heynen-Genel, Nadezda Bryan, Kevin Raisch

**55. Anti-metastatic efficacy of the small molecule Cathepsin L inhibitor KGP94 in a human prostate cancer model.** Dhivya Sudhan, Dietmar Siemann

**56. Novel targeting methods for pancreatic cancer.** Andrea Knowlton, Daniel Delitto, Jose Trevino, Gregory Hudulla, Shannon Wallet

- 57. A genetically engineered mouse model of CRTCl-MAML2-induced mucoepidermoid carcinoma.** Zirong Chen, Shuibin Lin, Jian-liang Li, Yumei Gu, Maria Hurtado, Sergei Zolotukhin, Tao Sun, Frederic Kaye, Lizi Wu
- 58. Thymidylate synthase cooperates with oncogenic KRAS to markedly accelerate pancreatic cancer progression in a novel KrasG12D/+ mouse model.** Rony Francois, Akbar Nawab, Lidia Kulemina, Min Chen, Mary Reinhard, Frederic Kaye, Maria Zajac-Kaye
- 59. Deregulated thymidylate synthase promotes tumorigenicity in pancreatic neuroendocrine tumors.** Kyungah Maeng, Hye Seung Lee, Min Chen, Maria Zajac-Kaye
- 60. Myxomaviral serpin Serp-1 inhibits pancreatic cancer growth in mice.** Donghang Zheng, Hao Chen, Alexandra Lucas
- 61. Epigenetic control of mitochondrial fusion proteins is linked to Sorafenib response in HCC patients.** William Puszyk, Jane Dong, Frank Zhao, Roniel Cabrera, Chen Liu
- 62. Regulation of Glypican 3 in hepatocellular carcinoma.** Thu Le Trinh, William Puszyk, Hui-Jia Dong, Keith Robinson, Chen Liu
- 63. Expression of glutamine synthetase in cirrhosis and potential use as a marker for early liver cancer diagnosis.** Lizette Vila Duckworth, Tania Zuluaga Toro, Xiaomin Lu, Chen Liu
- 64. Comparison of C-met immunoreactivity in surgically treated gastroesophageal adenocarcinoma using two commercially available antibodies.** Ahmad Alkhasawneh, Ellie Chan, Tania Zuluaga Toro, Xiaomin Lu, Steven Hughes, Thomas George, Lizette Vila Duckworth
- 65. An unusual case of systemic inflammatory myofibroblastic tumor with successful treatment with ALK-inhibitor.** Sanjivini Jacob, John Reith, Angerika Kojima, William Williams, Chen Liu, Lizette Vila Duckworth
- 66. Quantitative analysis of infiltrating T and B lymphocytes in hepatocellular carcinoma compared to non-tumor liver.** Michael Feely, Elaine Salazar, Xiaomin Lu, Chen Liu, Lizette Vila Duckworth
- 67. Studying metastasis in a model organism.** Denis Titov, Brian Brenner, Jordan Reuters, Weihong Pan, Lei Zhou

**69. Voice rehabilitation after total larygectomy and postoperative radiation therapy.** Niranjana Bhandare, Christopher Morris, William Mendenhall

**70. Effect of pre-existing hypertension on dose parameters for radiation-induced optic neuropathy.** Niranjana Bhandare, Vitali Moiseenko, William Song, Christopher Morris, William Mendenhall

**71. Evidence of efficacy from RT following surgery for oral cavity squamous cell carcinoma.** Michael Herman, Roi Dagan, Robert Amdur, Christopher Morris, John Werning, Mikhail Vaysberg, William Mendenhall

**72. Squamous cell carcinoma of the lip: A retrospective analysis of the University of Florida Experience.** Tyler Hollen, Christopher Morris, Jessica Kirwan, Robert Amdur, John Werning, Mikhail Vaysberg, William Mendenhall

**73. Preliminary results of a pilot study of proton therapy for the treatment of regional lymphatics in breast cancer patients.** Julie Bradley, Roi Dagan, Meng Ho, Natalie Xu, Christopher Morris, Zuofeng Li, Nancy Mendenhall

**74. Proton therapy for prostate cancer: An analysis of rectal toxicity outcomes at University of Florida Proton Therapy Institute (UFPTI).** Rovel Colaco, Bradford Hoppe, Randal Henderson, Romaine Nichols, Christopher Morris, Zuofeng Li, Curtis Bryant, William Mendenhall, Nancy Mendenhall

**75. Offering and enrolling patients in outcomes tracking or clinical trials.** Shayna Rich, Nancy Mendenhall

**76. Engineering RNA nanoparticle vaccines to target glioblastoma multiforme.** Elias Sayour, Christina Pham, Gabe De Leon, Luis Sanchez-Perez, Catherine Flores, Duane Mitchell

**77. Personalized immunotherapy for the treatment of glioblastoma.** Gabriel De Leon, Duane Mitchell

**78. Novel role for enhancing immunotherapy against pediatric brain tumors using hematopoietic stem cells.** Catherine Flores, Christina Pham, Duane Mitchell

**79. Developmentally regulated antigens for immunologic targeting of medulloblastoma subtypes.** Christina Pham, Yanxin Pei, Catherine Flores, David Snyder, Darell Bigner, John Sampson, Robert Wechsler-Reya, Duane Mitchell

- 80. Targeting mitotic exit with hyperthermia or APC/C inhibition to increase paclitaxel efficacy.** Serena Giovinnazzi, Dhruv Bellapu, Viacheslav Morozov, Alexander Ishov
- 81. Anti-breast cancer activity of novel bi-isoquino imidazolium-derivatives.** Aruna Jaiswal, Dimitri Hirsch-Weil, Sukwon Hong, Satya Narayan
- 82. Dynamic acetylation of TAF9 regulates the recruitment and assembly of TFIID complex during gene transcription.** Wei Jian, Suming Huang, Yi Qiu
- 83. Class IIb HDAC6 regulates gene transcription and enucleation during erythroid differentiation.** Xuehui Li, Yurong Yang, Peng Ji, Yi Qiu
- 84. HDAC1 regulates GATA-1 activity through direct interaction with GATA-1.** Bowen Yan, Tao Yang, Suming Huang, Yi Qiu
- 85. Epithelioid leiomyosarcoma of the skin: A morphologic variant with potential pitfall in diagnosis.** Karen Fritchie, Margot Peters, Lawrence Gibson, Wonwoo Shon
- 86. Malignant melanoma of the nail unit: A fluorescence in situ hybridization (FISH) analysis of 7 cases.** Ryan Romano, William Sukov, Wonwoo Shon
- 87. ERG expression in chondrogenic bone and soft tissue tumors.** Karen Fritchie, Andrew Folpe, Wonwoo Shon
- 88. Triptolide mitigates radiation-induced pneumonitis through the inhibition of TNF- $\alpha$  and KC.** Shanmin Yang, Mei Zhang, Zhenhuan Zhang, Liangjie Yin, Steven Zhang, Lurong Zhang, Paul Okunieff
- 89. Radiation affects the responsiveness of bone marrow to G-CSF.** Zhenhuan Zhang, Mei Zhang, Wenlong Lv, Luqiang Huang, Liangjie Yin, Shanmin Yang, Jinsheng Hong, Deping Han, Chun Chen, Amy Zhang, Sadasivan Vidyasagar, Steven Swarts, Paul Okunieff, Lurong Zhang
- 90. Mitochondrial DNA methyltransferase 1 overexpression in breast cancer.** Steven Zhang, Steven Swarts, Mei Zhang, Amy Zhang, Zhenhuan Zhang, Shanmin Yang, Chaomei Liu, Paul Okunieff
- 91. Treatment of small-cell carcinoma of the bladder with chemotherapy and radiation after transurethral resection of bladder tumor.** Curtis Bryant, Long Dang, Scott Gilbert, Bruce Stechmiller, Christopher Morris, Robert Zlotecki

## GENETICS

- 92. Epigenetic effects of prenatal ethanol exposure: Genome-wide DNA methylation profiling in a mouse model for fetal alcohol syndrome.** Jason Brant, Alberto Riva, Michael Paiva, Reyna Cristina Colli Dula, Nancy Denslow, Marieta Heaton, Thomas Yang
- 93. Bioengineering of the adeno-associated virus (AAV) vectors for dendritic cell (DC)-based immunotherapy.** Jheel Pandya, Kellee Britt, George Aslanidi
- 94. Ancient origin of chaperonin gene paralogs involved in ciliopathies.** Krishanu Mukherjee, Luciano Brocchieri
- 95. Measures of sequence diversity for sizing taxon sampling.** Hye Won Lee, Luciano Brocchieri
- 96. Computational gene prediction and translation analysis for gene identification in the human pathogen *Pseudomonas aeruginosa*.** Steve Oden, Anna Picca, Ying Zhang, Shouguang Jin, Silvia Tornaletti, Luciano Brocchieri
- 97. B-cell depletion is protective against anti-AAV capsid immune response: A human subject case study.** Manuela Corti, Melissa Elder, Darin Falk, Lee Ann Lawson, Barbara Smith, Sushrusha Nayak, Thomas Conlon, Kirsten Erger, Emmanuelle Lavassani, Phil Doerfler, Roland Herzog, Barry Byrne
- 98. Manufacturing of multiple AAV vectors in a single production step.** Phillip Doerfler, Nathalie Clement, Barry Byrne
- 99. Generating a gene therapy vector for myotubular myopathy.** Angela McCall, Denise Cloutier, Jeffrey Kelley, Meghan Soustek, Darin Falk, Nathalie Clement, Barry Byrne
- 100. A mouse model of human congenital heart disease: High incidence of diverse cardiac anomalies and ventricular noncompaction produced by heterozygous *Nkx2-5* homeodomain missense mutation.** Hassan Ashraf, Lagnajeet Pradhan, Eileen Chang, Ryota Terada, Nicole Ryan, Laura Briggs, Rajib Chowhury, Yukiko Sugi, Hyun-Joo Nam, D. Woodrow Benson, Robert Anderson, Hideko Kasahara
- 101. Microarray analysis of genes expressed in the developing urethral tube.** Brooke Armfield, Ashley Seifert, Zhengui Zheng, Emily Merton, Cecilia Lopez, Henry Baker, Martin Cohn

**102. FGF-mediated cell adhesion regulates epithelial tubulogenesis.** Marissa Gredler, Martin Cohn

**103. Androgen regulates vaginal migration.** Christine Larkins, Martin Cohn

**104. Sexually dimorphic fin development: Implications for the evolution of intercourse.** Katherine O'Shaughnessy, Randall Dahn, Martin Cohn

**105. Intrapleural delivery of AAV9 improves lysosomal organization and diaphragmatic contractile function in Pompe disease.** Jessica McElroy, Gary Todd, Bumsoo Ahn, David Fuller, Barry Byrne, Leonardo Ferreira, Darin Falk

**106. Intramuscular administration of AAV9 improves neuromuscular pathology in Pompe disease.** Gary Todd, Jessica McElroy, Robert Grange, David Fuller, Glenn Walter, Barry Byrne, Darin Falk

**107. Targeting AAV to osteosarcoma tumor-initiating cells.** Yuan Lu, Damien Marsic, Padraic Levings, Chen Ling, Kim VanVliet, Mavis Agbandje-McKenna, Arun Srivastava, Sergei Zolotukhin, Steven Ghivizzani

**108. Exploring the capacity of local self-complimentary AAV mediated delivery of equine IL-1Ra to block the symptoms and progression of osteoarthritis in an equine model.** Rachael Watson, Ted Broome, Eric Gibbs, Andrew Smith, David Nickerson, Patrick Colohan, Steven Ghivizzani

**109. Methods of non-viral gene delivery significantly inhibit rAAV-based viral-mediated transduction.** Yuanhui Zhang, Yuan Wang, Lina Wang, George Aslanidi, Changquan Ling, Arun Srivastava, Chen Ling

**110. Restoration of olfactory function using gene therapy.** Jeremy McIntyre, Jeffrey Martens

**111. Gene therapeutic restoration of olfaction in Bardet-Biedl syndrome.** Corey Williams, Jeremy McIntyre, Jeffrey Martens

**112. pH-induced equilibrium shift between closed and open E. coli  $\beta$ -sliding clamp revealed.** Farzaneh Tondnevis, Lauren Douma, Richard Gillilan, Linda Bloom, Robert McKenna

**113. Evaluation of apoptosis in HEI-OC1 cells treated with gentamicin with and without the mitochondria-targeted antioxidant MitoQ.** Armon Jadidian, Patrick Antonelli, Carolyn Ojano-Dirain

**114. Molecular genetics of spinocerebellar ataxia type 8 (SCA8): RAN proteins and RNA foci.** Fatma Ayhan, Tao Zu, Laura Ranum

**115. Identification of novel spectrin, beta, non-erythrocytic 2 (SPTBN2) mutations in a large patient cohort.** Tyisha Hathorn, Karen Armburst, Damaris Lorenzo, Alfredo Brusco, Christopher Gomez, Rebekah Jobling, Grace Yoon, Sankarasubramon Subramony, Laura Ranum

**116. RAN proteins and RNA foci from antisense transcripts in C9ORF72 ALS and frontotemporal dementia.** Yuanjing Liu, Tao Zu, Monica Bañez-Coronel, Tammy Reid, Jada Lewis, Sankarasubramon Subramony, Juan Troncoso, Laura Ranum

**117. Male-specific Fruitless isoforms have different regulatory roles conferred by distinct zinc finger DNA binding domains.** Justin Fear, Justin Dalton, Simon Knott, Bruce Baker, Michelle Arbeitman, Lauren McIntyre

**118. De novo assembly and allele specific expression in a non-model species.** Brad Barbazuk, Lucas Boatwright, Sixue Chen, Sheldon Lawrence, Alison Morse, Doug Soltis, Pam Soltis, Mi-Jeong Yoo, Lauren McIntyre

**119. A framework for the analysis of allelic imbalance.** Michelle Arbeitman, Daniel Campo, George Casella, Justin Fear, Rita Graze, Alison Morse, Luis Novelo, Sergey Nuzhdin, Matt Salomon, John Tower, Lauren McIntyre

**120. An analysis of the short read aligners BWA-MEM and Bowtie.** Felicia New, Alison Morse, Justin Fear, Trey Polvadore, Lauren McIntyre

**121. Quality assessment in RNA-seq.** Trey Polvadore, Justin Fear, Alison Morse, Michelle Arbeitman, Felicia New, David Bloom, Sergey Nuzhdin, Patrick Concannon, Lauren McIntyre

**122. Whole exome sequencing of radiation sensitive patients reveals novel/rare MCM2 mutations.** Xiangfei Liu, Sharon Teraoka, Jocyndra Wright, Patrick Concannon

**123. Genetic imprinting mechanisms at the Prader Willi and Angelman syndrome locus.** Michael Lewis, Jason Orr Brant, Joseph Kramer, R. Stanford Williams, James Resnick

**124. Investigating the role of DNA replication in the establishment and persistence of recombinant adeno-associated viral vector genomes.** Jennifer Lyles, Magalie Penaud-Budloo, Philippe Moullier, Richard Snyder

**125. Testing protein sequestration to pathogenic repeats in RNA-mediated disease.** Marianne Goodwin, Apoorva Mohan, Maurice Swanson

**126. Targeted delivery and suppression of human liver tumorigenesis by optimized recombinant AAV3 vectors in a murine xenograft model.** Yuanhui Zhang, Yuan Wang, Yuan Lu, George Aslanidi, Changquan Ling, Chen Ling, Arun Srivastava

**127. Transduction of primary human hepatocytes *in vitro* and in humanized murine livers *in vivo* by recombinant AAV3 vectors.** Chen Ling, Yuan Wang, Yuanhui Zhang, Koen Vercauteren, Lieven Verhoye, Yuan Lu, George Aslanidi, Li Zhong, Guangping Gao, Changquan Ling, Philip Meuleman, Arun Srivastava

**128. Exome sequencing to find disease mutations: Not as simple as it sounds.** Hua Li, Stephen Kingsmore, Margaret Wallace

**129. Novel SCN9A mutations in a patient with partial pain insensitivity.** Chad Moskowitz, Roland Staud, Margaret Wallace

**130. Caffeine induces both short-term and long-term effects on gene expression and DNA methylation in the mouse heart.** Xiefan Fang, Ryan Poulsen, Christopher Wendler

**131. In utero caffeine exposure leads to trans-generational changes in adult cardiac morphology.** Ryan Poulsen, Xiefan Fang, Christopher Wendler

## HEALTH OUTCOMES

**132. Preoperative socioeconomic and clinical variables predict number of complications after surgery.** Tezcan Ozrazgat-Baslanti, Paulette Blanc, Charles Hobson, Azra Bihorac

**133. Computer algorithms are superior to physician assessment of the risk for postoperative complications when applied in interactive software.** Sahil Puri, Dmytro Korenkevych, Tezcan Ozrazgat-Baslanti, Ryan Cobb, Petar Momcilovic, Daisy Zhe Wang, Azra Bihorac

**134. Prediction of single procedure success rate using S.T.O.N.E. nephrolithometry surgical classification system with strict criteria for surgical outcome.** Arash Akhavein, Carl Henriksen, Vincent Bird

**135. Parents of pediatric hematology-oncology patients' use of the internet or mobile applications in finding health information.** Xiomara Martinez, Carolyn G. Carter

**136. Pilot study: Can an educational intervention increase HPV vaccination in female college students?** Marielle Gross, Cuc Tran, Kayla Sutherland, Alexis Santos, Alexandra Lee, Robert Amdur, Jacqueline Castagno

**137. Patient intake triage versus linear intake at UF Equal Access Clinics.** Amanda Sacino, Jonathan Shuster, Kamil Nowicki, Joseph Gibney, Ku-Lang Chang

**138. Hepatic failure in a neonate with systemic a enterovirus infection.** Laura Schoeneberg, Martha Douglas-Escobar

**139. Neonatal fulminant liver failure and hemophagocytic lymphohistiocytosis.** Apisadaporn Thambundit, Diemel De La Cruz, Sandra Sullivan, Martha Douglas-Escobar

**140. Real-time determinations of total resistance, endotracheal tube resistance, and airway resistance.** Nawar Al-Rawas, Michael Banner, Neil Euliano, A. Daniel Martin, Carl Tams, Babette Brumback, Andrea Gabrielli

**141. Breathing asynchrony algorithm for assessing asynchrony during non-invasive ventilation (NIV).** Carl Tams, Michael Banner, Neil Euliano, A. Daniel Martin, Nawar Al-Rawas, Paul Stephan, Sean Kiley, Andrea Gabrielli

**142. Fetal heart rate monitoring: A comparison of three methods.** Tammy Euliano, Shalom Darmanjian, Teresa Lyles, Neil Euliano, Anthony Gregg

**143. An intern academic rotation: Description and evaluation.** Tammy Euliano, Julianne Veal

**144. Photoplethysmography and heart rate variability for the diagnosis of preeclampsia.** Cristina Salazar, Shalom Darmanjian, Teresa Lyles, Neil Euliano, Anthony Gregg, Robert Egerman, Tammy Euliano

**145. Photoplethysmography and heart rate variability for the prediction of preeclampsia.** Lauren Silva, Kelly Brennan, Shalom Darmanjian, Teresa Lyles, Neil Euliano, Anthony Gregg, Robert Egerman, Tammy Euliano

- 146. Using podcasting as an educational tool.** Destiny Chau, Meriem Bensalem-Owen, Terrie Vasilopoulos, Brenda Fahy
- 147. Informed consent for multiple related procedures.** Susan Ford, Dietrich Gravenstein, Terrie Vasilopoulos, F. Kayser Enneking, Brenda Fahy
- 148. Podcast medical student EEG instruction model.** Tezcan Ozrazgat-Baslanti, Jean Cibula, Terrie Vasilopoulos, Destiny Chau, Meriem Bensalem-Owen, Brenda Fahy
- 149. Outcomes and declining use of iliac conduit in endovascular management of aortic pathology.** Fernando Carlo, Salvatore Scali, Thomas Huber, Alyson Waterman-Pugh, Adam Beck, Robert Feezor
- 150. HPV prevalence and persistence in asymptomatic men by next generation pyrosequencing.** Li Yin, Jiqiang Yao, Jin Yao, Kaifen Chang, Brent Gardner, Amanda Lowe, Fahong Yu, Xinrui Zhang, Danelle Smith, Anna Giuliano, Maureen Goodenow
- 151. Concordance between self-reported substance use and toxicology among HIV-infected and uninfected at risk youth.** Sharon Nichols, Amanda Lowe, Xinrui Zhang, Patricia Garvie, Sarah Thornton, Bruce Goldberger, Wei Hou, Maureen Goodenow, John Sleasman
- 152. Measuring quality in pediatrics: Florida's early experience with the CHIPRA core measurement set.** Hua Wang, Kimberly Baker, Caprice Knapp
- 153. A mixed simulator of ethnic variability to propofol during sedation and analgesia.** Samsun Lampotang, Jason Jendrusch, David Lizdas, Nikolaus Gravenstein, Dwayne Ham, Ben Lok, John Quarles
- 154. Association of non-steroidal anti-inflammatory drugs with adverse cardiovascular outcomes in women: Results from the Women's Health Initiative.** Anthony Bavry, Fridtjof Thomas, JoAnn Manson, Karen Johnson, Barbara Howard, Matthew Allison, Mark Hlatky, Marian Limacher
- 155. Identification of Trichosanthin-encoding gene as a therapeutic extraneous gene for human liver cancer gene therapy.** Yuanhui Zhang, Yuan Wang, Lina Wang, George Aslanidi, Arun Srivastava, Changquan Ling, Chen Ling
- 156. Improving quality of patient care in hypertension.** Ryan Noonan, John Malaty

**157. Does cervical dystonia in Parkinson disease respond differently to Onabotulinum toxin type A compared to other causes of cervical dystonia?** Valerie Rundle-Gonzalez, Michael Okun, Ramon Rodriguez-Cruz, Aparna Wagle-Shukla, Irene Malaty

**158. Case report: An independent elder with rapid-onset coma.** Jindong Xu, Anthony Yachnis, Irene Malaty

**159. Team-based learning instruction for responsible conduct of research positively impacts ethical decision-making.** Wayne McCormack, Cynthia Garvan

**160. Sex differences in drug use: Characterizing the problem using treatment seeker.** Lauren Hoffman, Ben Lewis, Sara Jo Nixon

**161. The mediation of alcohol induced attentional deficits by sensory gating.** Alfredo Luis Sklar, Sara Jo Nixon

**162. Preventable errors in hospitalized Parkinson's disease patients.** Daniel Martinez-Ramirez, Caroline Mignacca, Irene Malaty, Valerie Rundle-Gonzalez, Michael Okun

**163. Is aspirin beneficial for all patients with chronic stable coronary artery disease?** Anthony Bavry, Yan Gong, Eileen Handberg, Rhonda Cooper-DeHoff, Carl Pepine

**164. On the effect of finite magnetic relaxation on the magnetic particle imaging performance of magnetic nanoparticles.** Rohan Dhavalikar, Carlos Rinaldi

**165. Insurance status influences the incidence of reportable quality metrics in brain tumor patients: A nationwide inpatient sample study.** Jorge Gil, Kristopher Hooten, Rolando Lovaton Espadin, Dan Neal, Maryam Rahman

**166. Health disparities and stroke: The prevalence of patient safety indicators and hospital acquired conditions using the nationwide inpatient sample database.** Sasha Vaziri, Kyle Fargen, Dan Neal, Spiros Blackburn, Brian Hoh, Maryam Rahman

**167. Trends in rectal cancer from 2001 to 2011 and stage at presentation based on race, gender, and payer status using the national cancer database.** Khayree Butler, Christiana Shaw, Sanda Tan

**168. Omental flaps for coverage of sacral or gluteal defects – a useful and potentially under-utilized tool.** Ahsan Raza, Alex Cuenca, Dhruv Singhal

**169. Management of open abdominal aortic aneurysm repair in a patient with end-stage COPD.** Julia DeLoach, Steven Robicsek

**170. Lateral ventricle volume asymmetry predicts midline shift and 6-month outcome in severe traumatic brain injury.** Arnold Tóth, Ilona Schmalfluss, Shelley Heaton, Andrea Gabrielli, Julia Hannay, Linda Papa, Gretchen Brophy, Kevin Wang, András Büki, Attila Schwarcz, Ronald Hayes, Claudia Robertson, Steven Robicsek

**171. Lateral ventricle volume asymmetry is related to Spectrin Breakdown Product (SBDP145) levels in severe traumatic brain injury.** Arnold Tóth, Ilona Schmalfluss, Shelley Heaton, Andrea Gabrielli, Julia Hannay, Linda Papa, Gretchen Brophy, Kevin Wang, András Büki, Attila Schwarcz, Ronald Hayes, Claudia Robertson, Steven Robicsek

**172. Conventional vs quantitative approach in assessing post-traumatic ventriculomegaly and its relation to 6-month outcomes in severe traumatic brain injury.** Arnold Tóth, Ilona Schmalfluss, Shelley Heaton, Andrea Gabrielli, Julia Hannay, Linda Papa, Gretchen Brophy, Kevin Wang, András Büki, Attila Schwarcz, Ronald Hayes, Claudia Robertson, Steven Robicsek

**173. Impact of respiration-correlated image quality on tumor motion reconstruction in 4DCBCT: A phantom study.** Soyoung Lee, Bo Lu, Sanjiv Samant

**174. Increase in national quality database metrics following implementation of a standardized tumor board note template.** Trevan Fischer, Dan Delitto, Lisa Spiguel, Christiana Shaw

**175. Health risk behaviors of medicaid recipients diagnosed with chronic mental and physical illness.** Kimberly Case, Dena Stoner, Keith Muller, Martin Wegman, Jill Herndon, Elizabeth Shenkman

**176. Wellness goal setting and attainment among individuals with co-occurring physical and mental illness.** Martin Wegman, Kim Case, Jill Herndon, Keith Muller, Elizabeth Shenkman

**177. The impact of Medicaid managed care and home and community-based alternatives on quality of care for adults with disabilities.** Martin Wegman, Jill Herndon, Jason Lee, Garth Graham, I-Chan Huang, Kim Case, Keith Muller, Elizabeth Shenkman

**178. Pain after total knee arthroplasty and spinal fusion: A comparison of two anesthetic paradigms via a social network analysis of perioperative teams.** Catherine Dietrich, Russell Bernard, Roger Fillingim, Patrick Tighe

**179. Pain after total knee arthroplasty: A social network analysis of perioperative teams.** Catherine Dietrich, Russell Bernard, Roger Fillingim, Patrick Tighe

**180. Validation of the Human Patient Simulator pulmonary model implementation using a simplified reference standard.** Hillary Wehry, Rujuta Munje, Willem van Meurs, Johannes van Oostrom

**181. IMAGe Association: Report of two cases in siblings with adrenal hypoplasia.** Katherine Phillips, May Arroyo, Lizette Vila Duckworth

**182. Mixed reality simulation to teach important patient safety behaviors.** Andrew Robb, Andrew Cordar, Casey White, Samsun Lamptong, David Lizdas, Benjamin Lok, Adam Wendling

**183. Variation in the diagnosis of acute coronary syndrome and use of cardiac catheterization between cardiology faculty.** Nayan Agarwal, Lucas Burke, Carsten Schmalfluss, David Winchester

**184. Quality of cardiovascular care in patients subjected to inappropriate myocardial perfusion imaging.** John Brandt, Andrew Kitchen, Ryan Meral, Daniel Nguyen, Raman Dusaj, Leslee Shaw, Rebecca Beyth, David Winchester

**185. Elevated troponin: How well does it predict a diagnosis of acute coronary syndrome?** Lucas Burke, Nayan Agarwal, Carsten Schmalfluss, David Winchester

**186. Diagnostic yield of noninvasive cardiovascular testing in a low risk chest pain unit population.** David Winchester, Carla Schmidt, Brandon Allen, Thomas Payton

**187. Electronic error-reporting system in radiation oncology.** Rohan Deraniyagala, Steve Ritz, Chihray Liu, Linda Allen, Christopher Morris, Anamaria Yeung

**188. Reducing errors in radiation treatment through the implementation of electronic safety checklists.** Julie Greenwalt, Kathryn Mittauer, Chihray Liu, Rohan Deraniyagala, Christopher Morris, Anamaria Yeung

**189. Synoptic report generators for hematopathology: Development of a system embedded within the anatomic pathology laboratory information system (APLIS) that integrates morphology, flow cytometry, immunohistochemistry and molecular genetics.** Ahmad Alkhasawneh, John Ross, Christopher Carter, Samer Al-Quran, Ying Li, Robert Allan

**190. Traversing and labeling interconnected vascular tree structures from 3D medical images.** Walter O'Dell, S. Tirumalai Govindarajan, Ankit Salgia, Satya Hedge, Sreekala Prabhakaran, Ender Finol, R. James White

**191. Surveillance imaging for early detection and treatment of breast cancer metastases in high-risk patients.** Walter O'Dell, Karen Daily, Coy Heldermon, Stephen Staal, Roi Dagan, Julie Bradley, Judith Lightsey, David Wymer, Rebecca Beaulieu, Paul Okunieff

## **IMMUNOLOGY, HEMATOLOGY, AND STEM CELLS**

**193. Effects of dietary omega-3 polyunsaturated fatty acids on growth and immune response of weanling pigs.** Qizhang Li, Joel Brendemuhl, Kwang Cheol Jeong, Lokenga Badinga

**194. A multicenter approach to preclinical trials: Evaluating combination therapies for the reversal of type 1 diabetes.** Amanda Posgai, Clive Wasserfall, Mark Atkinson

**195. Impairment of NOD mice splenocytes mobilization in response to GM-CSF and G-CSF.** Young Mee Yoon, Ramya Sivakumar, Clive Wasserfall, Laurence Morel, Mark Atkinson

**196. Macrophage function in Alpha 1-Antitrypsin deficiency.** Karia Krotova, George Marek, Nazli Khodayari, Rejean Wang, Farshid Rouhani, Regina Oshins, Jorge Lascano, Pamela Schreck, Tracie Kurtz, Joane Nolte, Mark Brantly

**197. Metabolic profiling of human T cells.** Daniel Perry, Jing Chen, Clayton Mathews, Todd Brusko

**198. Elucidating the immunoregulatory roles of CD226 and TIGIT during type 1 diabetes.** Wen-I Yeh, Christopher Fuhrman, Todd Brusko

**199. CaSR: Linking enteral nutrition to gut inflammation.** Lieqi Tang, Yaima Lightfoot, Tao Yang, Mansour Mohamadzadeth, Sam Cheng

**200. Insulinitis in type 1 diabetes.** Martha Campbell-Thompson, Irina Kusmartseva, Tiffany Heiple, Ann Fu, Cathy Sun, Jayne Moraski, Suzy Ball, Clive Wasserfall, John Kaddis, Desmond Schatz, Alberto Pugliese, Mark Atkinson

**201. A three-dimensional perspective of diabetic pancreas.** Vindhya Vijay, Ann Fu, Zita Burkhalter, Cathy Sun, Martha Campbell-Thompson

**202. Genetic regulation of elevated interferon- $\alpha/\beta$  responses in NOD mice.** Sindhu Arivazhagan, Lihui Yuan, Rehan Khan, Ciara Alvarez, Michael Clare-Salzler

**203. Type I interferon and virus involvements in type I diabetes.** Lihui Yuan, Shuyao Zhang, Clayton Mathews, Michael Clare-Salzler

**204. Targeting leukemia sanctuary sites with vascular disrupting combretastatins.** Raphael Bosse, Briana Wasserstrom, Amy Meacham, Elizabeth Wise, Christopher Cogle

**205. THC treatment during differentiation primes human macrophages.** Sofia Appelberg, Julie Williams, Yun Mei, Bruce Goldberger, Thomas Klein, John Sleasman, Maureen Goodenow

**206. Effects of substance use by HIV-infected young adults on whole blood transcriptional profiling.** Ashok Dinasarapu, Kai-Fen Chang, Manju Karki, Julie Williams, Xinrui Zhang, Yin Li, John Sleasman, Maureen Goodenow

**207. HIV-1 infection is reduced in human macrophages differentiated in the presence of THC.** Julie Williams, Sofia Appelber, Yun Mei, Bruce Goldberger, Thomas Klein, John Sleasman, Maureen Goodenow

**208. Hemolinc RNA orchestrates three-dimensional chromatin architecture to activate HoxB genes and programs early lineage development.** Changwang Deng, Ying Li, Besabeh Khoramian Tusi, Wei Jian, Bhavita Patel, Yangqiu Li, Jörg Bungert, Lei Zhou, Yi Qiu, Suming Huang

**209. Targeted microparticle delivery modify immune dendritic cell behavior for the prevention of autoimmune diabetes in mice.** Jamal Lewis, Matt Carstens, Natalia Dolgova, Cindy Ying, Chris Roche, Chang Qing Xia, Michael Clare-Salzler, Benjamin Keselowsky

**210. Use of alum as an innate immune adjuvant in neonatal sepsis: What is the role of caspase 1?** Angela Cuenca, Alex Cuenca, Lori Gentile, Dina Nacionales, Ricardo Ungaro, Lyle Moldawer, Shawn Larson

**211. Generation of vascular cells from patient derived iPSC to model hypertension.** Nikolett Biel, Chaeho Lim, Katherine Santostefano, Bayli DiVita, Rhonda Cooper-DeHoff, Julie Johnson, Naohiro Terada

**212. Mitochondrial ATP transporter Ant2 depletion impairs erythropoiesis and B lymphopoiesis.** Joonseok Cho, Jiyoung Seo, Chae-Ho Lim, Lijun Yang, Takayuki Shiratsuchi, Min-Ho Lee, Jae-Sung Kim, S. Paul Oh, Young Jae Lee, Naohiro Terada

**213. Overexpression of Pbx1-d, a novel splice isoform of Pbx1, changes the portion of follicular CD4 T cell populations and impairs regulatory T cell homeostasis.**

Seung-Chul Choi, Leilani Zeumer, Laurence Morel

**214. Characterizing the role of the G-CSF pathway in a mouse model of SLE.**

Ramya Sivakumar, Laurence Morel

**215. Metabolic inhibitors normalize CD4 T cell metabolism and functions, and reverse disease in a murine model of lupus.**

Yiming Yin, Todd Brusko, Daniel Perry, Howard Seay, Clayton Mathews, Eric Sobel, Laurence Morel

**216. Contribution of marginal zone B cells to autoimmunity in the B6.Sle1.Sle2.Sle3 lupus prone mouse.**

Ying-Yi Zheng, Laurence Morel

**217. The role of islet homeostasis protein in diabetes mellitus progression.**

Seh-Hoon Oh, Paulette Robinson, Liya Pi, Alicia Brown, Marda Jorgensen, Bryon Petersen

**218. Connective tissue growth factor and integrin  $\alpha\beta6$ : A new pair of regulators critical for ductular reaction and biliary fibrosis.**

Liya Pi, Paulette Robison, Marda Jorgensen, Seh-Hoon Oh, Alicia Brown, Thu Le Trinh, Chen Liu, Edward Scott, Gregory Schultz, Bryon Petersen

**219. Evaluation of biological properties of digested porcine liver extracts.**

David Sullivan, Jonathan Repper, Bryon Petersen

**220. A unique population of cardiac progenitor cells.**

Yanfei Qi, Juan Zhang, Dipankar Gupta, Mohan Raizada, Carl Pepine

**221. Divergent signaling pathways downstream of TLR7 regulate TNF $\alpha$  production by bone marrow neutrophils and monocytes in experimental lupus.**

Shuhong Han, Haoyang Zhuang, Yuan Xu, Yi Li, Lijun Yang, Westley Reeves

**222. Bioengineered pancreas: Human insulin-secreting islet cells in vascularized pig kidney scaffolds.**

Edward Ross, Bradley Willenberg, Jose Oca-Cossio, William Clapp, Nao Terada, Dale Abrahamson, Gary Ellison, Clayton Mathews, Christopher Batich

**223. Induction of human beta-defensin-1 (hBD-1) gene expression is dependent on IRF-7 and PU.1.**

Gill Diamond, Patricia Fitzgerald-Bocarsly, Jihong Dai, Kyell Schwartz, Lisa Ryan

**224. Altered mucosal immunity and cellular plasticity in the progression of type 1 diabetes.** Michael Nelson, Maigan Hulme, Christina Graves, Heather Sorenson, Shannon Wallet

**225. HIV infection induces polyfunctional activation of macrophages.** Jared Taylor, Timothy Garrett, Maureen Goodenow, Mark Wallet

**226. LIGHTing up CD8 T cells.** Pritesh Desai, Shahram Salek-Ardakani

**227. Clathrin and dynamin play a critical role in Vaccinia virus replication in mouse lung epithelial cells.** Tarun Hutchinson, Vikas Tahiliani, Georges Abboud, Pritesh Desai, Matthew Seskin, Shahram Salek-Ardakani

**228. The AP1 transcription factor Batf3 differentially regulates virus specific cytotoxic and CD4 T follicular helper cells.** Vikas Tahiliani, Georges Abboud, Shahram Salek-Ardakani

**229. The TNFR family member OX40 controls T follicular helper cell survival and function.** Vikas Tahiliani, Tarun Hutchinson, Georges Abboud, Shahram Salek-Ardakani

**230. Anti-CD3 antibody treatment induces hypoglycemia and super tolerance to glucose challenge in mice through enhancing glucose consumption by activated lymphocytes.** Chang-Qing Xia, Anna Chernatynskaya, Benjamin Looney, Michael Clare-Salzler

**231. MiRNA-130b and -432 regulate mesenchymal stem cell differentiation in vitro.** Alfonso Martin-Pena, Laura Danielson, Eva Hernando, Glyn Palmer

## **INFECTIOUS DISEASES**

**232. Microbial flora of cochlear implants by gene pyrosequencing.** Carolyn Ojano-Dirain, Patrick Antonelli

**233. Pseudomonas aeruginosa adherence to adenoid tissue.** Jennifer Kuo, Barbara Kate Snowden, Carolyn Ojano-Dirain, Rodrigo Silva, William Collins, Patrick Antonelli

**234. Single-stranded DNA binding proteins direct clamp loaders to DNA sites for clamps.** Jaclyn Hayner, Linda Bloom

- 235. Analysis of the temporal removal of the heterochromatic mark H3K27me3 during explant-induced reactivation of HSV-1 reveals a bi-phasic pattern of chromatin remodeling.** Harald Messer, Derek Jacobs, Adit Dhummakupt, Dane Phelan, David Bloom
- 236. Optimizing rAAV vectors to target ON bipolar cells.** Miranda White, Frank Dyka, Charles de Leeuw, Seok Hong Min, Qing Ruan, Sanford Boye, Neal Peachey, Elizabeth Simpson, William Hauswirth, Shannon Boye
- 237. Genomic and proteomic analysis of transcription factor TFII-I reveals insight into the response to cellular stress.** Alex Fan, Giorgio Papadopoulos, Mir Hossain, I-Ju Lin, Jianhong Hu, Michael Kilberg, Rolf Renne, John Strouboulis, Jörg Bungert
- 238. Identification and characterization of functional amyloids in *Streptococcus mutans*.** Richard Besingi, L. Jeannine Brady
- 239. *Streptococcus mutans* P1: Understanding adhesive function at the cell surface.** Kyle Heim, L. Jeannine Brady
- 240. YlxM modulates Ffh-FtsY complex formation and GTPase activity in the signal recognition particle pathway.** Matthew Williams, Paula Crowley, L. Jeannine Brady
- 241. Effects of intracellular glutamine levels on the reversible assembly of cytoplasmic rod and ring autoantigenic structures.** John Calise, Wendy Carcamo, Claire Krueger, Joyce Yin, Daniel Purich, Edward Chan
- 242. High pressure freezing/freeze substitution as a technique to reveal vaccinia virus nucleocapsid structure.** Desyree Jesus, Nissin Moussatche, Richard Condit
- 243. Pediatric fungal abscess of the parotid due to *scopulariopsis* species- a case report and review of the literature.** Joshua Weiss, William Reschly, Peter Dziegielewski
- 244. CpxRA negatively regulates expression of the Shiga toxin and the locus of enterocyte effacement of enterohemorrhagic *E. coli*.** Miguel de la Cruz, Jason Morgan, James Riordan, Jorge Girón
- 245. Flagella comprised of *flaC* and *flaE* are necessary and sufficient to confer virulence to *Vibrio vulnificus* in a mouse model.** Jacob Comiskey, Nima Rezaie, Patrick Thiaville, Matthew Tucker, Paul Gulig

**246. Murine noroviruses persistently infect B cells.** Makiko Watanabe, Melissa Jones, Shu Zhu, Doron Regev, Stephanie Karst

**247. Directed differentiation of ES cells into cardiomyocytes by bacterial injection of transcription factors.** Fang Bai, Chae Ho Lim, Katherine Santostefano, Naohiro Terada, Shouguang Jin

**248. Bacterial delivery of TALEN proteins for genome editing.** Jingyue Jia, Lijun Yang, Naohiro Terada, Shouguang Jin

**249. Re-isolation of a Caribbean arenavirus, the Tacaribe virus, from host-seeking ticks in Florida.** Katherine Saylor, William Clapp, Anthony Barbet, Rick Alleman, John Lednicky

**250. Immunophenotypical changes of acute promyelocytic leukemia blasts following all-trans retinoic acid treatment.** Ahmad Alkhasawneh, John Ross, Christopher Carter, Samer Al-Quran, Robert Allan, Ying Li

**252. Phylodynamics of vibrio cholerae O1 in Haiti demonstrates evidence of ongoing selection marked by sequential population bottlenecks driven by positive selection.** Taj Azarian, Afsar Ali, Judith Johnson, David Mohr, Mattia Prosperi, Nazle Veras, Mohammad Jubair, Samantha Strickland, Mohammad Rashid, Meer Allam, Thomas Weppelmann, J. Glenn Morris, Marco Salemi

**253. Biochemical predictions on the Spike glycoprotein gene of avian Coronavirus detected in wild and synanthropic birds from southern and southeastern Brazil.** Ricardo Durães-Carvalho, Paulo Felipe, Leonardo Caserta, Ana Barnabé, Márcia Santos, Clarice Arns, Marco Salemi

**254. Early adaptation and selection of envelope and nef genes in 12 Rhesus Macaques infected with SIV.** David Nolan, Susanna Lamers, Brittany Rife, Gary Fogel, Tricia Burdo, Kenneth Williams, Marco Salemi

**255. Whole-genome sequencing for national surveillance of enteric diseases.** Kristen Waterman, Taj Azarian, Zhiyao Luo, Marc Allard, Anita Wright, Judy Johnson, Marco Salemi

**256. Does rapid identification and resistance gene testing directly from positive blood cultures improve patient outcome?** Joseph Pardo, Kenneth Klinker, Samuel Borgert, Brittany Butler, Kenneth Rand

**257. Kaposi's sarcoma-associated herpesvirus (KSHV) latency-associated genes down-regulate TGF-beta signaling by inducing cellular miRNAs.** Hong Seok Choi, Valibhav Jain, Denise Whitby, Rolf Renne

**258. Virus encoded miRNAs facilitate gammaherpesvirus latency and pathogenesis in vivo.** Emily Feldman, Mehmet Kara, Carrie Coleman, Katrina Grau, Lauren Oko, Brian Krueger, Rolf Renne, Linda van Dyk, Scott Tibbetts

**259. Lytic replication-associated genes are expressed during the establishment phase of MHV68 latency.** Katrina Grau, Haiyan Li, Carrie Coleman, Ting-Ting Wu, Ren Sun, Scott Tibbetts

**260. MHV68 miRNA mutant lacking 12 of 14 pre-miRNA stem loops displays normal lytic replication in vitro and in vivo.** Mehmet Kara, Emily Feldman, Brian Krueger, Katrina Grau, Rolf Renne, Scott Tibbetts

**261. MHV68 lncRNAs and epigenetics.** Lisa Keyes, Mehmet Kara, Emily Feldman, Mariel Rickert, Scott Tibbetts

**262. Hemophagocytic lymphohistiocytosis secondary to ehrlichiosis in a child.** Apisadaporn Thambundit, Sukesh Sukumaran, Vini Vijayan

**263. Magnetic resonance and optical imaging as a biomarker for muscle injury.** Stephen Chrzanowski, Brittany Lee, Abhinandan Batra, Ravneet Vohra, Yanhua Deng, Huabei Jiang, Krista Vandenborne, Glenn Walter

**264. Impacts of dietary restriction and rapamycin on the gut microbiome.** Zhubene Mesbah, Kristin Schnackenberg, Mariana Kirst, Eric Li, Dallas Khamiss, Drake Morgan, Christy C. Carter, Gary Wang

## **INFLAMMATION, VASCULATURE, AND TRAUMA**

**265. Correlating disease pathogenesis with behavioral symptoms in a rat model of knee osteoarthritis.** Heidi Kloefkorn, Brittany Jacobs, Ayo Loye, Kyle Allen

**266. Magnetic collection of molecular biomarkers in joints for early detection of osteoarthritis.** Elena Yarmola, Zachary Kaufman, Yash Shah, Bettina Kozissnik, Alexandra Garraud, David Arnold, Jon Dobson, Kyle Allen

**267. Genomic response to burn.** Cecilia Lopez, Lyle Moldawer, David Herndon, Ronald Tompkins, Henry Baker

**268. Differential gene and transcription factor binding site expression between the intima and media drives intimal hyperplasia.** Kenneth DeSart, Brad Schmit, Chris Kuppler, Kerri O'Malley, Zihua Jiang, Scott Berceli

**269. A systems based analysis of p27kip1 as the driver for pathologic vein graft remodeling.** Kenneth DeSart, Khayree Butler, Kerri O'Malley, Zihua Jiang, Scott Berceli

**270. Monocyte genomics and their effect on arteriovenous fistula remodeling.** Christopher Kuppler, Kerri O'Malley, Lyle Moldawer, Scott Berceli

**271. Prostaglandin E2 EP1 receptor antagonism or genetic knockout reduces blood-brain barrier disruption in ischemic stroke.** Jan Frankowski, Kelly DeMars, Abdullah Ahmad, Kimberly Hawkins, Sylvain Doré, Eduardo Candelario-Jalil

**272. Neurovascular protection by post-ischemic injections of a lipoxin A4 receptor agonist, BML-111, in a rat model of ischemic stroke.** Kimberly Hawkins, Kelly DeMars, Henry Cho, Jonathan Singh, Jan Frankowski, Sylvain Doré, Eduardo Candelario-Jalil

**273. Prostacyclin receptor activation and neurovascular protection in ischemic stroke.** Changjun Yang, Kelly DeMars, Kimberly Hawkins, Eduardo Candelario-Jalil

**274. Advanced age is an independent predictor of complicated outcomes and mortality among severely injured patients in hemorrhagic shock.** Erin Vanzant, Frederick Moore, Lyle Moldawer, Philip Efron, Scott Brakenridge

**275. Switching from O-negative red blood cell units to O-positive in the setting of massive transfusion protocol: Evaluating inventory use and risk of patient harm.** Matthew Martelli, Craig Fletcher, Jay Brooks

**276. Hypertension modulates sexual dimorphism of aortic aneurysm in TGF- $\beta$ -deficient mice via ERK activation.** Bradley Schmit, Chunhua Fu, Pu Yang, Kenneth DeSart, Scott Berceli, Zihua Jiang

**277. Naturally processed serpin reactive center loop (RCL) peptides display independent function, extending native serpin anti-inflammatory activities.** Ganesh Munuswamy-Ramunajam, Donghang Zheng, Erbin Dai, Sriram Ambadapadi, Alexandra Lucas

**278. Caspase 1 deficiency and viral anti-inflammatory protein Serp-2 improves survival in mouse ischemia/reperfusion model.** Hao Chen, Donghang Zheng, Kenneth Rand, Lisa Dixon, Jorge Fuentes, Alexandra Lucas

**279. Common and distinctive pathogenetic mechanisms for development of arteriovenous malformations in HHT1 and HHT2.** Eva Garrido-Martin, Tyler Cunningham, Se-woon Choe, Helen Arthur, S. Paul Oh

**280. Haptoglobin genotype predicts cerebral vasospasm and functional outcome following aneurysmal subarachnoid hemorrhage.** Jenna Leclerc, Spiros Blackburn, Nicholas Mendez, Jeffrey Wharton, Sylvain Doré

**281. Blockade of prostaglandin F2a-FP receptor prevents lyzed red blood cell and hemin neurotoxicity.** Shekher Mohan, Emily Koller, Shuh Narumiya, Sylvain Doré

**282. The role of PGF2-alpha FP receptor in a mouse model of intracerebral hemorrhage.** Shekher Mohan, Shuh Narumiya, Sylvain Doré

**283. Deletion of PGE2 EP1 receptor results in reduced phagocytosis and exacerbates hemorrhagic injury.** Nilendra Singh, Bo Ma, Luke Soshnik-Schierling, Abdullah Shafique Ahmad, Shuh Narumiya, Sylvain Doré

**284. The role of prostaglandin E2 (PGE2) receptor type 1 (EP1) in hemorrhagic stroke.** Chase Chambers, Nilendra Singh, Sylvain Doré

**285. Resveratrol rescues neuron survival in primary postnatal cultures.** Megha Agrawal, Joshua Immergluck, Sylvain Doré

**286. The leukocyte transcriptome can explain immune suppression and defects in the neonatal and elderly immune response to sepsis.** Lori Gentile, Dina Nacionales, Cecilia Lopez, Erin Vanzant, Angela Cuenca, Alex Cuenca, Ricardo Ungaro, Christiaan Leeuwenburgh, Frederick Moore, Henry Baker, Lyle Moldawer, Philip Efron

**287. A failure to resolve inflammation rather than hyper-inflammation characterizes the aged response to severe trauma.** Dina Nacionales, Lori Gentile, Ricardo Ungaro, Cecilia Lopez, Jeevan Jyot, Erin Vanzant, Angela Cuenca, Sonia Gabrilovich, Azra Bihorac, Frederick Moore, Anna Joseph, Christiaan Leeuwenburgh, Henry Baker, Lyle Moldawer, Philip Efron

**288. Acute kidney injury (AKI) causes persistent dysregulation of the leukocyte transcriptome.** Benjamin Szpila, Lori Gentile, Cecilia Lopez, Erin Vanzant, Ricardo Ungaro, Scott Brakenridge, Frederick Moore, Henry Baker, Lyle Moldawer, Philip Efron

**289. Aging depresses protective immunity and prolongs inflammation in severe blunt trauma subjects.** Erin Vanzant, Rachael Hilton, Cecilia Lopez, Dina Nacionales, Ricardo Ungario, Lori Gentile, Ben Szpila, Angela Cuenca, Azra Bihorac, Frederick Moore, Scott Brakenridge, Henry Baker, Christiaan Leeuwenburgh, Lyle Moldawer, Philip Efron

**290. Sirtuin 1-induced autophagy suppresses ischemia/reperfusion injury to mouse liver.** Thomas Biel, Kevin Behrns, Jae-Sung Kim

**291. Overexpression of Calpastatin enhances hepatocellular autophagy and prevents ischemia/reperfusion injury to mouse livers.** Joseph Flores-Toro, Thomas Biel, Kevin Behrns, Jae-Sung Kim

**292. Third and contralateral ventricular compression are early CT signs heralding secondary infarcts in non-penetrating severe traumatic brain injury.** Ferenc Rabai, Elizabeth Mahanna, Andrea Gabrielli, Ronald Hayes, Claudia Robertson, Ilona Schmalzfuss

**293. Dynamic changes in the patterns of MMP activity, human neutrophil elastase activity, TNF- $\alpha$  in wound fluids collected from chronic venous leg ulcers over 12 weeks of treatment correlate with healing and non-healing phases.** Daniel Gibson, Gregory Schultz

**294. Biomimetic cell culture systems for high-throughput dynamic in vitro studies.** Chelsey Simmons

**295. Novel biomarker of acetaminophen overdose.** Archie Svetlov, Mengde Cao, Mitchell McGill, Harmut Jaeschke, Stanislav Svetlov

**296. Overpressure blast injury induced oxidative stress in brain.** Hale Zerrin Toklu, Sehkar Oktay, Nataliya Kirichenko, Yasemin Sakarya, Kevin Strang, Zhiui Yang, Kevin Wang, Philip Scarpace, Nihal Tümer

**297. TDP-43: Dual substrate of calpain and caspase in neuroinjury and TBI pathology.** Zhihui Yang, Fan Lin, Kevin Wang

## **METABOLIC DISEASES**

**298. Role of plasma FGF21 as a biomarker for nonalcoholic fatty liver disease (NAFLD) and steatohepatitis (NASH).** Fernando Bril, Romina Lomonaco, Paola Portillo-Sanchez, Maryann Maximos, Amitabh Suman, Michelle Weber, Kenneth Cusi

**299. High risk of nonalcoholic fatty liver disease (NAFLD) and steatohepatitis (NASH) in obese patients with type 2 diabetes mellitus (T2DM) and normal aminotransferases.** Maryann Maximos, Fernando Bril, Paola Portillo-Sanchez, Romina Lomonaco, Diane Biernacki, Sreevidya Subbarayan, Amitabh Suman, Kenneth Cusi

**300. Is there a link between hypothyroidism and nonalcoholic fatty liver disease?** Paola Portillo-Sanchez, Fernando Bril, Maryann Maximos, Sushma Kadiyala, Romina Lomonaco, Sreevidya Subbarayan, Kenneth Cusi

**301. Quantitation of 25-hydroxyvitamin D2 and D3 in serum and plasma by liquid chromatography-tandem mass spectrometry.** Dayong Lee, Timothy Garrett, Bruce Goldberger, Lindsay Bazydlo

**302. Global metabolomics using 1D and 2D 13C NMR.** Chaevien Clendinen, Christian Pasquel, Brittany Lee-McMullen, Ramadan Ajredini, Vijaykumar Ramaswamy, Gregory Stupp, Glenn Walter, Arthur Edison

**303. Global metabolomics of stressed *Caenorhabditis elegans* using paired isotopic ratio outlier analysis.** Gregory Stupp, Chaevien Clendinen, Ramadan Ajredini, Chris Beecher, Timothy Garrett, Lauren McIntyre, Arthur Edison

**304. Acid-base regulation of intestinal oxalate transport.** Jonathan Whittamore, Robert Freel, Marguerite Hatch

**305. Activation of the NLRP3 inflammasome in association with calcium oxalate crystal-induced reactive oxygen species in kidneys.** Sunil Joshi, Wei Wang, Ammon Peck, Saeed Khan

**306. Human macrophages facilitate kidney stone clearances.** Sergei Kusmartsev, Paul Dominguez-Gutierrez, Benjamin Canales, Johannes Vieweg, Saeed Khan

**307. Development of a dissolution DNP system for in vivo spectroscopy.** Daniel Downes, Bimala Lama, James Collins, Adam Smith, Joanna Long

**308. Intestinal epithelial cell dysfunction in type 1 diabetes.** Christina Graves, Shannon Wallet

## NEUROMEDICINE

**310. Direct sequencing of long tandem pentanucleotide repeats in SCA10.** Jilin Liu, Karen McFarland, Ivette Landrian, Savita Shanker, Bill Farmerie, Tetsuo Ashizawa

**311. Repeat interruptions in spinocerebellar ataxia type 10 expansions are strongly associated with epileptic seizures.** Karen McFarland, Jilin Liu, Ivette Landrian, Desmond Zeng, Salmo Raskin, Mariana Moscovich, Emilia Gatto, Adriana Ochoa, Hélio Teive, Astrid Rasmussen, Tetsuo Ashizawa

**312. Overexpression of CRF in the central amygdala diminishes the depressive-like state associated with nicotine withdrawal.** Xiaoli Qi, Zhiying Shan, Yue Ji, Valerie Guerra, Jon Alexander, Brandi Ormerod, Adriaan Bruijnzeel

**313. Transmission of toxic SOD1 conformations in mouse models.** Jacob Ayers, Awilda Rosario, Susan Fromholt, David Borchelt

**314. Identifying inhibitors of SOD1 aggregation.** Adam DeBosier, Jacob Ayers, Guilian Xu, Kevin Felsenstein, David Borchelt

**315. A novel and efficient method of microglia transduction using rAAV2/6 with point mutations in surface exposed residues.** Awilda Rosario, Pedro Cruz, Andrew Li, Carolina Ceballos-Diaz, Zoe Siemienski, Amanda Sacino, Arun Srivastava, Georgiy Aslanidi, Yona Levites, Todd Golde, Paramita Chakrabarty

**316. Brain control of functional reach in healthy adults and stroke survivors.** Ken Hrovat, John Holcomb, Svetlana Pundik, Janis Daly

**317. Risky decision-making behavior modulates the epigenetic factor MeCP2.** Caitlin Orsini, Kristy Shimp, Jennifer Bizon, Barry Setlow, Jay Deng

**318. Glycogen accumulation varies by fiber type in the Pompe diaphragm.** Lauren Pascual, Mai El Mallah, Darin Falk, Garrett Fitzpatrick, Adrian Todd, Barry Byrne, David Fuller

**319. A functional interaction between RAF2 with ATG3 and TSG101 in Amyloid beta degradation.** Yan Zhang, Kelsey Faust, Diego Rincon-Limas, Pedro Fernandez-Funez

- 320. Divergent effects of the H50Q and G51D SNCA mutations on the aggregation of  $\alpha$ -synuclein.** Nicola Rutherford, Brenda Moore, Todd Golde, Benoit Giasson
- 321. Role of shear stress – mediated inflammation, ELR+ CXC chemokines and peroxisomal proliferator-activated receptor (PPAR) pathway in cerebral aneurysm formation.** Kamil Nowicki, Koji Hosaka, Yong He, Peter McFetridge, Edward Scott, Brian Hoh
- 322. Serine protease cathepsin G is detrimental in low reperfusion subset of ischemic stroke.** Saeed Ansari, Peter Cai, Nauder Faraday, Sylvain Doré
- 323. Prostaglandin D2 DP1 receptor ameliorates stroke outcomes through cerebral blood flow and hemostasis.** Abdullah Shafique Ahmad, Thomas Dougherty, Shuh Narumiya, Sylvain Doré
- 324. Therapeutic role of the prostaglandin E2 EP1 receptor in traumatic brain injury.** Jawad Fazal, Alexander Glushakov, Sushmita Mittal, Shuh Narumiya, Sylvain Doré
- 325. Prostaglandin F2a FP receptor antagonist attenuates brain inflammation and improves outcomes after experimental traumatic brain injury.** Alexander Glushakov, Sean Robbins, Connor Bracy, Shuh Narumiya, Sylvain Doré
- 326. Beneficial stroke outcomes following epicatechin consumption in young and older mice.** Christopher Leonardo, Monique Mendes, Abdullah Ahmad, Sylvain Doré
- 327. Spatial neglect and Parkinson disease.** Adam Falchook, Liliana Salazar, Dan Neal, Tigran Kesayan, John Williamson, Irene Malaty, Nikolaus McFarland, Michael Okun, Ramon Rodriguez, Aparna Wagle Shukla, Kenneth Heilman
- 328. Brain MR relaxation times In an animal model recapitulating features of autism spectrum disorders.** Luis Colon-Perez, Marcelo Febo
- 329. Mapping in vivo neural circuit activity during withdrawal from chronic cocaine exposure: An MEMRI study in male and female rats.** Pablo Perez, Gabrielle Hall, Kelvin Tran, Jasenka Zubcevic, Luis Colon-Perez, Mohan Raizada, Habibeh Khoshbouei, Marcelo Febo
- 330. Peripheral immune challenges produce activation patterns in the brain consistent with sympathoexcitation.** Maria Korah, Jeffrey Thinschmidt, Luis Colon-Perez, Jaleel Miyan, Marcelo Febo, Maria Grant

**331. Functional magnetic resonance imaging mapping of central nervous system actions of “bath salts” in awake rats.** Kelvin Tran, Zhihui Yang, Kenneth Blum, Mark Gold, Bruce Goldberger, Kevin Wang, Marcelo Febo

**332. Chronic leptin antagonist administration to the VTA increases food intake without altering motivation to obtain either high fat or high sugar pellets: Dissociation between “liking” and “wanting”.** Dallas Khamiss, Jayike Nwokolo, Michael Matheny, Hale Toklu, Nihal Tumer, Philip Scarpace, Drake Morgan

**333. A novel 5HT2C-specific agonist/5HT2A-2B antagonist attenuates psychomotor behaviors induced by methamphetamine, oxycodone, and their combination.** Jessica Rose, Paul Orza, Myong Kim, Clint Canal, Raymond Booth, Drake Morgan

**334. Using the fruit fly, *Drosophila melanogaster*, as an Alzheimer’s disease drug discovery tool.** Carly Rabin, Margot Samson, Carolina Hernandez, Pedro Funez-Fernandez, Diego Rincon-Limas, Kevin Felsenstein

**335. Alzheimer’s disease: Looking for answers from natural products.** Margot Samson, Ashleigh Price, Carly Rabin, Brenda Moore, Carolina Hernandez, Kevin Felsenstein

**336. Are shorter Ab peptides protective?** Jason Martin, Brenda Moore, Yona Levites, Paramita Chakrabarty, Awilda Rosario, Ashleigh Price, Zoe Siemienski, Tom Ladd, Pedro Cruz, Kevin Felsenstein, Todd Golde

**337. Soluble toll-like receptors as anti amyloid beta agents.** Paramita Chakrabarty, Andrew Li, Pedro Cruz, Thomas Ladd, Brenda Moore, Awilda Rosario, Carolina Ceballos-Diaz, Zoe Siemensi, Todd Golde

**338. AAV capsid-promoter combinations for transduction of primary neuronal cultures.** Pedro Cruz, Meghan Pardo, Doris Deng, Christian Archer, Maria Parianos, Vincent Hudson, Nadia DiNunno, Julia Giardina, Estefania Steiner, John Guitierrez, John Butterfield, Yen Le, Carolina Ceballos, Amanda Sacino, Jenna Leclerc, Gabriela Hernandez, Shekher Mohan, Awilda Rosario, Yona Levites, Paramita Chakrabarty, Todd Golde

**339. POP2 decreases alpha-synuclein inclusion formation in primary neuronal-glia cultures.** Nicolas Lara, Alex McKinney, Amanda Sacino, Carolina Ceballos-Diaz, Pedro Cruz, Awilda Rosario, Todd Golde

- 340. Hyperactivity and alterations in iron homeostasis in mu opioid receptor knockout mice: Possible implications for restless legs syndrome/Willis-Ekbom disease.** Mark DeAndrade, Erica Unger, Li Zhang, Fumiaki Yokoi, Arthur Walters, Yuqing Li
- 341. Electromyographic characterization reveals sustained muscle contractions in Dyt1 ΔGAG knock-in dystonia mouse model.** Mark DeAndrade, Chad Cheetham, Ning Peng, J. Michael Wyss, Yuqing Li
- 342. Pre-synaptic release deficits in a DYT1 dystonia mouse model.** Fumiaki Yokoi, Chad Cheetham, Susan Campbell, David Sweatt, Yuqing Li
- 343. The role of mixed vasopressin antagonism (V1a/V2) in treatment of ischemic-induced brain edema.** Vishnumurthy Hedna, Saeed Ansari, Peter Cai, Aakash Bodhit, Irawan Satriotomo, Shekher Mohan, Michael Waters, Sylvain Doré
- 344. Role of vagus nerve stimulation in ischemic stroke: Current status.** Peter Cai, Aakash Bodhit, Roselle Derequito, Saeed Ansari, Spandana Thenkabail, Sarah Ganji, Pratap Ravraj, Gautam Subaiah, Atish Patel, Kathleen Park, Pradeepan Saravanapavan, Vishnumurthy Hedna
- 345. Utility of CT perfusion for diagnoses of posterior reversible encephalopathy syndrome subtypes.** Sarah Ganji, Saeed Ansari, Peter Cai, Pradeepan Saravanapavan, Pratap Raviraj, Gautam Subaiah, Atish Patel, Kathleen Park, Vaibhav Rastogi, Spandana Tenkabail, Aakash Bodhit, Sheema Khan, Vishnumurthy Hedna
- 346. Validity of laser doppler flowmetry in predicting outcome in intraluminal middle cerebral artery occlusion stroke model in mice.** Saeed Ansari, Shima Shahjouei, Peter Cai, Vaibhav Rastogi, Abdullah Ahmad, J Mocco, Vishnumurthy Hedna
- 347. Treatment of stroke related refractory brain edema using mixed vasopressin antagonism.** Monika Mishra, Sharathchandra Bidari, David Gubernick, Saeed Ansari, Asif Khan, Mohit Mishra, Priyank Shukla, Pradeepan Saravanapavan, Ashwin Babuji, Saeed Khan, Sujatharani Thiruman, Adnan Qureshi, Vishnumurthy Hedna
- 348. Intracerebral hematoma volume measurement using ITK-SNAP software: Initial experience.** Monika Mishra, Priyank Shukla, Mohit Mishra, Aakash Bodhit, Ganesh Asaithambi, Arnaldo Velez, Christian Rosado, Pradeepan Saravanapavan, Ashwin Babuji, Saeed Khan, Sujatharani Thiruman, Vishnumurthy Hedna

**349. Neuroinflammation and ischemic stroke – A review.** Monika Mishra, Mohit Mishra, Priyank Shukla, Pradeepan Saravanapavan, Ashwin Babuji, Sheema Khan, Sujatharani Thiruman, Vishnumurthy Hedna

**350. Ticagrelor and stroke in ACS patients.** Steve Noutong, Ming Jia, Helen Zhang, David Sun, Sheema Khan, Vishnumurthy Hedna

**351. Analysis and comparison of hemispheric differences to literature data in malignant middle cerebral artery stroke.** Vaibhav Rastogi, Saeed Ansari, Peter Cai, Pradeepan Saravanapavan, Pratap Raviraj, Sujatharani Thiruman, Gautam Subaiah, Spandana Tenkabail, Aakash Bodhit, Sheema Khan, Vishnumurthy Hedna

**352. Consequences of isolated middle cerebral artery dissection: Case report and literature review.** Pradeepan Saravanapavan, Bimali Nanayakkara, Vaibhav Rastogi, Saeed Ansari, Pratap Raviraj, Sujatharani Thiruman, Gautam Subaiah, Spandana Tenkabail, Aakash Bodhit, Sheema Khan, Vishnumurthy Hedna

**353. Hemorrhagic brain metastasis: A rare manifestation of transitional bladder carcinoma.** Pradeepan Saravanapavan, Bimali Nanayakkara, Vaibhav Rastogi, Saeed Ansari, Pratap Raviraj, Sujatharani Thiruman, Gautam Subaiah, Spandana Tenkabail, Aakash Bodhit, Sheema Khan, Vishnumurthy Hedna

**354. Benzylidene-anabaseine binding within the torpedo muscle nicotinic receptor ion channel.** Solomiya Virstyuk, Lu Ziang, Sophia Habibi, Sau-Hyon Cho, Ron Leong, Stephan Jahn, Hong Xing, Ferenc Soti, William Kem

**355. Analyzing the LRRK2-tau interaction as a potential link between Parkinson's disease and tau.** Rachel Bailey, Jason Covy, Matthew Hamm, Heather Melrose, Linda Rosseau, Ruth Watkinson, Joshua Knight, Sarah Miles, Gerry Shaw, Matt Farrer, Dennis Dickson, Benoit Giasson, Jada Lewis

**356. Atp13a2-deficient mice exhibit neuronal ceroid lipofuscinosis, limited a-synuclein accumulation and age-dependent sensorimotor deficits.** Patrick Schultheis, Sheila Fleming, Amy Clippinger, Sruti Rayaprolu, Jada Lewis, Tajji Tsunemi, Benoit Giasson, Dennis Dickson, Joseph Mazzulli, Mark Bardgett, Kristi Haik, Osunde Ekhatior, Anil Kumar Chava, John Howard, Matt Gannon, Elizabeth Hoffman, Yinhuai Chen, Vikram Prasad, Stephen Linn, Rafael Tamargo, Wendy Westbroek, Ellen Sidransky, Dimitri Krainc, Gary Shull

**357. Divergent phenotypes in mutant TDP-43 transgenic mice highlight potential confounds in TDP-43 transgenic modeling.** Simon D'Alton, Marcelle Altshuler, Ashley Cannon, Dennis Dickson, Leonard Petrucelli, Jada Lewis

- 358. Regulation of dopaminergic neuronal firing by alpha-synuclein overexpression.** Damiano Angoli, Brittany Butler, Kaustav Saha, Habibeh Khoshbouei
- 359. Dopamine transporter recruits alpha-synuclein to the plasma membrane.** Brittany Butler, Kaustav Saha, Etienne Cartier, Shawn Goodwin, Habibeh Khoshbouei
- 360. Regulation of dopamine transporter trafficking is voltage-dependent.** Ben Richardson, Danielle Sambo, Kaustav Saha, Jarod Swant, Damiano Angoli, Mu-Fa Zou, Amy Newman, Habibeh Khoshbouei
- 361. Intracellular methamphetamine prevents the dopamine-induced enhancement of neuronal firing.** Kaustav Saha, Ben Richardson, Min Lin, Damiano Angoli, Paran Davari, Laura Villarroel, Shawn Goodwin, Habibeh Khoshbouei
- 362. Sigma-1 receptor interaction with the dopamine transporter influences methamphetamine-mediated activity.** Danielle Sambo, Min Lin, Ben Richardson, Habibeh Khoshbouei
- 363. Quantitative susceptibility mapping using MRI phase image.** Guita Banan, Garrett Asary, Luis Colon-Perez, Thomas Mareci
- 364. Reduced cortical connectivity in excised rat brain with thyroid hormone deficiency.** Luis Colon-Perez, Eric Montie, Michelle Couret, Thomas Mareci
- 365. Perforant pathway tracking in human temporal lobe ex vivo tissue.** Luis Colon-Perez, Mansi Parekh, Michelle Couret, Rosemary Klassen, Michael King, Paul Carney, Thomas Mareci
- 366. Measuring phase changes produced in a magnetic field due to current injection through a wire placed in hydrogel.** Aditya Kumar Kasinadhuni, Rosalind Sadleir, Guita Banan, Paul Carney, Thomas Mareci
- 367. Measurement of point-infusion tracer flow in hydrogel using phase contrast MRI.** Kulam Magdoom, Malisa Sarntinoranont, Thomas Mareci
- 368. ALS-linked mutants of Ubiquilin-2 cause inclusion pathology in somatic brain transgenic mouse model.** Carolina Ceballos-Diaz, Awilda Rosario, Paramita Chakrabarty, Amanda Sacino, Pedro Cruz, Zoe Siemienski, Nicolas Lara, Corey Moran, Natalia Ravelo, Hyo-Jin Park, Todd Golde, Nikolaus McFarland

- 369. Alpha-synuclein accumulation and pathology are attenuated by Rab protein expression in models of Parkinson disease.** Nikolaus McFarland, Hyo-Jin Park, Mandy Herring, Tomoko Sahara, Ryan Coultas, Daniel Ryu
- 370. Retention in endoplasmic reticulum (Rer1) promotes alpha-synuclein degradation by ubiquitin proteasome system.** Hyo-Jin Park, Daniel Ryu, Lauren Ricchiuti, Nikolaus McFarland
- 371. Absence of HSP70 favors protein aggregation in mouse embryonic fibroblasts.** Vinita Chittoor, Sooyeon Lee, Andrew Judge, Lucia Notterpek
- 372. Alterations in TFEB activation and autophagic-lysosomal function with aging in Schwann cells and CMT1A patient fibroblasts.** Sooyeon Lee, Lucia Notterpek
- 373. The absence of PMP22 alters cell adhesion, migration and lamellipodial extension.** Lucia Notterpek, Stephanie Amici, Steven Freeland, Waylon Zeng, Sooyeon Lee
- 374. Differential modulation of brain nAChR function by varenicline, cytisine, and two novel bispidine compounds.** Can Peng, Clare Stokes, Yann Mineur, Marina Picciotto, Isabelle Tomassoli, Christoph Eibl, Daniela Guendisch, Roger Papke
- 375. Cervical spinal cord injury alters functional mapping of brainstem inspiratory and expiratory neuronal activity.** Lynne Mercier, Milap Sandhu, Savannah Posgai, Elisa Gonzalez-Rothi, Nicole Little, David Baekey, David Fuller, Paul Reier
- 376. Lesions of the basolateral amygdala induce elevated risk-taking in rats.** Caitlin Orsini, Jennifer Bizon, Barry Setlow
- 377. Lesions of the orbitofrontal cortex decrease risk-taking in rats.** Rosie Trotta, Caitlin Orsini, Jennifer Bizon, Barry Setlow
- 378. Acute administration of d-amphetamine into nucleus accumbens decreases impulsive choice.** Kristy Shimp, Marci Mitchell, Dominique Quimet, Bonnie McLaurin, Barry Setlow
- 379. Post-stroke activation of the brain renin angiotensin system by translational approaches is neuroprotective.** Douglas Bennion, Emily Haltigan, Alex Irwin, Lauren Donnangelo, Robson Santos, Colin Sumners

**380. Abnormal vestibulo-ocular reflex eye movements in autism spectrum disorders.** Bradley Wilkes, Tana Bleser, Kunal Patel, Ji Hyun Ko, Jim Bodfish, Karl Newell, Mark Lewis

**381. Neuroendocrine long-term developmental effects of exposure of neonatal rats to anesthesia with propofol or etomidate.** Changqing Xu, Sijie Tan, Wanting Zhu, Jesse Willis, Dyanet Puentes, Jiaqiang Zhang, Rong Ma, Christoph Seubert, Nikolaus Gravenstein, Anatoly Martynyuk

**382. Metabolomic analysis for Duchenne Muscular Dystrophy in the mdx mouse model.** Brittany Lee-McMullen, Chaevien Clendinen, Stephen Chrzanowski, Ravneet Vohra, William Triplett, Sean Forbes, Arthur Edison, Krista Vandenborne, Glenn Walter

**383. Neonatal seizures disrupt growth of primary cilia in developing cortical neurons.** Alexander Parker, Megan Le, Tyler Smith, George Ugartemendia, Jason Coleman, Matthew Sarkisian

## VISION

**385. Glaucoma in herpetic eye diseases.** Anthony Greer, Eric Swanson, Trent Talbot, Anup Kubal, Delbert Benzenhafer, Sonal Tuli

**386. RNA processing of gamma secretase complex members, Pen2 and nicastrin, corneal epithelia.** Stephen Sugrue, Daniel Ryu, Qian Peng, Jeong-Hoon Joo

**387. Non-redundant roles of PGC-1 $\alpha$  and PGC-1 $\beta$  in retinal sensitivity to light damage.** Carolina Abrahan, John Ash

**388. Gp130 signaling in the retina dampens neutrophil infiltration to prevent excess inflammation and promotes changes in microglial morphology.** Marcus Hooper, John Ash

**389. Characterization of regulatory elements of Leukemia Inhibitory Factor.** Clayton Santiago, Jiangang Wang, John Ash

**390. Metformin protects photoreceptors in mice with the PDE6bRd10 mutation and protects RPE in mice treated with sodium iodate.** Lei Xu, Huiming Xia, John Ash

**391. Vitreous cell in retinitis pigmentosa patients with cystoid macular edema.** Daniel Kasuga, Adam Ross, Melinda Exume, Christine Kay

- 392. Reversal of oxidative stress in a mouse model of dry AMD.** Manas Biswal, Zhaoyang Wang, Haoyu Mao, Hong Li, Alfred Lewin
- 393. Developing gene therapy viral vectors for age-related macular degeneration.** Cristhian Ildefonso, Henrique Jaime, Quihong Li, Alfred Lewin
- 394. Gene therapy with self-complementary recombinant adeno-associated virus in models of autosomal dominant retinitis pigmentosa cause by RHO mutations.** Brian Rossmiller, Alfred Lewin
- 395. Expression and cellular localization of Mas receptor in adult and developing mouse retina.** Tuhina Prasad, Amrisha Verma, QiuHong Li
- 396. Oral delivery of ACE2 or Ang-(1-7) bioencapsulated in plant cells protect against experimental uveitis and autoimmune uveoretinitis.** Pollob Shil, Kwangchul Kwon, Ping Zhu, Amrisha Verma, Vinayak Shenoy, Mohan Raizada, Henry Daniell, QiuHong Li
- 397. Role of Prorenin and Prorenin receptor in ocular inflammation.** Amrisha Verma, Yunyang Wang, Ping Zhu, Pollob Shil, Tuhina Prasad, QiuHong Li
- 398. The neuroprotection of Angiotensin-(1-7) in Tg(RHO P347S) and rd10 mice.** Ping Zhu, Pollob Shil, Wentao Deng, Jie Li, Amrisha Verma, Tuhina Prasad, QiuHong Li







**UF** | UNIVERSITY of  
**FLORIDA**

*The Foundation for The Gator Nation*

THE UF COLLEGE OF MEDICINE  
OFFICE OF RESEARCH AFFAIRS  
(352) 273-5995

[HTTP://RESEARCHAFFAIRS.MED.UFL.EDU](http://RESEARCHAFFAIRS.MED.UFL.EDU)