

**JAMES P. WILMOT
CANCER INSTITUTE**

**24th ANNUAL SCIENTIFIC
SYMPOSIUM**



Thursday, November 14th, 2019

9:00 am – 4:00 pm

**Kornberg Medical Research Building
University of Rochester Medical Center
601 Elmwood Avenue, Rochester, NY**

We gratefully express our appreciation to

Linda Wells Davey

Joyce Underberg, and the

James P. Wilmot Cancer Institute

for their support of the Symposium.

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24TH ANNUAL SCIENTIFIC SYMPOSIUM**

Thursday, November 14, 2019
Sarah Flaum Atrium and Class of '62 Auditorium
University of Rochester Medical Center

8:30–8:50 a.m.	Continental Breakfast	Sarah Flaum Atrium
9:00 a.m.	Welcome and Introduction	Class of '62 Auditorium
Hartmut (Hucky) Land		
9:00–10:40 a.m.	SESSION I:	Paula Vertino
Clara Kielkopf, <i>Biochemistry&Biophysics</i>		
“Discovery of a cancer-relevant small molecule modulator of pre-mRNA splicing”		
Josh Munger, <i>Biochemistry&Biophysics</i>		
”Stealing the keys to the kitchen: Viral manipulation of the host cell metabolic network”		
Isaac Harris, <i>Biomedical Genetics</i>		
“Understanding the roles of antioxidants in cancer”		
Jeevisha Bajaj, <i>Biomedical Genetics</i>		
“Identifying Novel Regulators of Myeloid Leukemia with In Vivo CRISPR Screening”		
10:40–11:00 a.m.	Coffee Break	Sarah Flaum Atrium
11:00–12:15 p.m.	SESSION II:	Michelle Janelins
Michael Giacomelli, <i>Biomedical Engineering</i>		
“Virtual Histology of Whole Tissue Using Two Photon Microscopy”		
Dongmei Li, <i>Public Health Sciences</i>		
“Association of electronic cigarette use with health conditions and symptoms”		
Scott McIntosh, <i>Public Health Sciences</i>		
“Cancer Prevention: Technology Assisted Tobacco Cessation”		
12:20–1:00 p.m.	Davey Award and Lecture:	Hucky Land
Edith Lord, <i>Microbiology/Immunology</i>		
“Radiotherapy and the immune response in the tumor microenvironment”		
1:00–3:00 p.m.	Lunch & Poster Competition	Sarah Flaum Atrium
3:00–3:45 p.m.	Underberg Lecture:	Jonathan Friedberg
Ari Melnick, <i>Weill Cornell Medicine, New York City</i>		
“Precision Epigenetic Therapy for B-Cell Lymphomas”		
3:45–4:00 p.m.	Presentation of Poster Prizes:	Hucky Land

24th Annual Davey Memorial Award
for Outstanding Cancer Research

Award Winner
Edith M. Lord, Ph.D.

Edith Lord, Ph.D., is a Professor of Microbiology & Immunology and Oncology, and she is Wilmot Cancer Institute's Associate Director for Mentoring and Career Development.

Lord's research is focused on the generation of anti-tumor immunity, how immune cells function within the tumor microenvironment, and how treatment modalities such as radiation therapy affect the immune response. Using mouse model systems, Lord has helped establish a new paradigm that the generation of immunity is an important component of the effectiveness of radiation in controlling tumors. She collaborates with colleagues within and beyond her department, and she works closely with clinical faculty to ensure that her basic science studies are relevant and translatable to patients. Lord has published, as author and co-author, more than 130 scientific articles and continues her passion for research today.

In addition to her research, Lord is dedicated to the education and training of young scientists. From 2006-2008, she led the graduate program in the Department of Microbiology and Immunology, and she served as the Senior Associate Dean for Graduate Education and Postdoctoral Affairs at the School of Medicine and Dentistry from 2008-2018.

Lord joined the University of Rochester in 1976, and she has led various programs at the university, including Immunology Program; the Immunology, Microbiology and Virology Graduate Cluster, and the Post-Baccalaureate Research Education Program. In addition, she has served on a number of NIH study sections and special panels.

The Davey Memorial Award for Outstanding Cancer Research was established in 1997 as a tribute to R. Bruce Davey, who succumbed to cancer in 1996. Mr. Davey's wife Linda is a founding member of the Cancer Center Board and served as its first chair. The Davey Award is given annually to University of Rochester faculty member(s) who have made outstanding contributions to cancer research.

Alan J. Underberg Memorial Lecture

2019 Keynote Speaker

Ari M. Melnick, M.D.

Ari M. Melnick, M.D., is the Gebroe Family Professor of Hematology/Oncology at Weill Cornell Medical College, and he serves as chair of the Hematologic Malignancies Research Program at Weill Cornell's Meyer Cancer Center. His expertise is in the biology of the immune system, and his research focuses on the mechanisms through which the epigenome programs the normal immune response; how mutations in epigenetic modifier genes causes lymphoma; the molecular epigenetic blueprints that determine the biology of acute leukemias; novel therapeutic agents and regimens for patients with lymphomas and leukemias. Melnick is known for his work describing the mechanism of action of the BCL6 transcriptional repressor, results that led his developing the first rationally designed transcription factor inhibitor.

The Alan J. Underberg Memorial Lecture was established in memory of Alan J. Underberg, a prominent Rochester attorney and longtime supporter of the University of Rochester. He was a former University trustee and chair and president of the Memorial Art Gallery. He also served as Chair of the Board at the Genesee Hospital and a founder of Viahealth.

Mr. Underberg was a patient at the Wilmot Cancer Institute. After his death, his wife, Joyce, and children established the lectureship because of the excellent care he received and his longtime association with the University.

The lectureship brings a leader in cancer research to deliver the Underberg Lecture at the Wilmot Cancer Institute's Scientific Symposium.

The Underberg family continues to support the advancement of cancer research and care at the Wilmot Cancer Institute.

**Presenters listed in italic*

Cancer Control/Epidemiology

1	<p>HIGHER MITOCHONDRIAL GENE EXPRESSION PREDICTS LESS FATIGUE AND GREATER WELL-BEING IN BREAST CANCER SURVIVORS</p> <p><i>Amber S. Kleckner</i>, Ian R. Kleckner, Eva Culakova, Andrew P. Wojtovich, Sarah L. Kerns, Michelle C. Janelins, Amy C. Vander Woude, Jeremy Deutsch, Luke J. Peppone Cancer Control Division, Department of Surgery (ASK, IRK, EC, MCJ, LJP); Department of Anesthesiology (APW); Department of Radiation Oncology (SLK), University of Rochester Medical Center; Cancer & Hematology Centers of Western Michigan, Grand Rapids, MI (ACVW); Cancer Center of Kansas, Wichita, KS (JD)</p>
2	<p>A LONGITUDINAL ASSESSMENT TO EVALUATE THE IMPACT OF HIGHER BODY MASS INDEX ON CANCER-RELATED FATIGUE IN BREAST CANCER PATIENTS RECEIVING CHEMOTHERAPY</p> <p><i>Julia E. Inglis</i>, Michelle C. Janelins, Eva Culakova, Javier Bautista, Karen M. Mustian, Po-Ju Lin, Amber S. Kleckner, Ian R. Kleckner, Luke J. Peppone Department of Surgery, Cancer Control</p>
3	<p>SELF-REPORTED USE OF FLAVORED E-CIGARETTES AND THE TYPE OF E-CIGARETTE DEVICES USED AMONG ADULTS AND YOUTH IN THE US - RESULTS FROM WAVE 3 OF THE POPULATION ASSESSMENT OF TOBACCO AND HEALTH STUDY (2015–2016)</p> <p><i>Liane M. Schneller</i>, PhD, MS^{1,2}; Maansi Bansal-Travers, PhD²; Maciej L. Goniewicz, PhD, PharmD²; Scott McIntosh, PhD³; Deborah¹Ossip, PhD³; Richard J. O'Connor, PhD² ¹Clinical and Translational Science Institute, University of Rochester ²Department of Health Behavior, Roswell Park Comprehensive Cancer Center ³Department of Public Health Sciences, University of Rochester</p>

4	<p>LANDSCAPE ANALYSIS OF STATE SMOKERS' QUIT SITES: RESOURCES FOR ELECTRONIC CIGARETTES AND VAPING CESSATION</p> <p><i>Scott McIntosh, PhD, Viktoriia Shevchenko, Manpreet Kaur, Astghik Baghinyan, and Deborah J. Ossip, PhD</i> Department of Public Health Sciences</p>
5	<p>EFFECTS OF A HOME-BASED EXERCISE PROGRAM ON CANCER-RELATED FATIGUE AND MUSCULAR STRENGTH IN PATIENTS WITH BREAST CANCER</p> <p><i>Lin, P.-J., Loh, K.P., Inglis, J.E., Dunne, R.F., Kleckner, A.S., Kleckner, I.R., Fung, C., Gilmore, N.J., Lopez, G., Heckler, C.E., Culakova, E., Peppone, L.J., Janelins, M.C., Kamen, C.S., Mustian, K.M.</i> Surgery-Cancer Control</p>
6	<p>ASSOCIATION BETWEEN VAPING AND HYPERTENSION AMONG US ADULT ELECTRONIC CIGARETTE (E-CIGARETTE) USERS</p> <p><i>Hangchuan Shi, Deborah J. Ossip, Zahira Quinones Tavarez, Qiang Wen, and Dongmei Li</i> Department of Clinical & Translational Research, University of Rochester Medical Center, Rochester, NY Department of Public Health Sciences, University of Rochester Medical Center, Rochester, NY</p>
7	<p>GENERAL ANESTHETICS IN CANCER RESECTION SURGERY (GA-CARES): A PRAGMATIC RANDOMIZED TRIAL OF PROPOFOL VS VOLATILE INHALATIONAL ANESTHESIA</p> <p><i>Jacob W. Nadler, Marjorie S. Gloff, Elliott Bennett-Guerrero</i> Department of Anesthesiology and Perioperative Medicine, University of Rochester Medical Center; Department of Anesthesiology, Stony Brook University</p>
8	<p>DOES TRANEXAMIC ACID IN METASTATIC SPINE TUMOR SURGERY DECREASE BLOOD LOSS?</p> <p><i>Noorullah Maqsoodi, Jaren Section MD, Addisu Mesfin MD</i> Department of Orthopedics & Rehabilitation</p>
9	<p>MINIMALLY INVASIVE SURGERY FOR METASTATIC SPINE DISEASE DECREASES BLOOD LOSS AND TIME TO RADIATION TREATMENT</p> <p><i>Noorullah Maqsoodi, Addisu Mesfin MD,</i> Department of Orthopedics & Rehabilitation</p>

10	<p>RESULTS OF A RANDOMIZED CONTROLLED TRIAL EVALUATING SAFETY AND FEASIBILITY OF A LOW TO MODERATE INTENSITY EXERCISE REGIMEN IN PATIENTS WITH GI CANCERS AND CACHEXIA.</p> <p><i>Richard F. Dunne</i>, Aminah Jatoi, Supriya G. Mohile, Nicholas Gerbino, Javier Bautista, Michelle C. Janelins, Marcus S. Noel, Erika Ramsdale, Aram F. Hezel, Karen M. Mustian.</p> <p>Division of Hematology/Oncology, Department of Medicine Division of Cancer Control, Department of Surgery</p>
11	<p>INFLAMMATORY FACTORS ARE ASSOCIATED WITH SUSTAINED ATTENTION PERFORMANCE IN PATIENTS RECEIVING CHEMOTHERAPY</p> <p><i>Elizabeth Belcher</i>¹, Eva Culakova¹, Lianlian Lei¹, Charles Heckler¹, Bryan Thompson¹, Nikesha Gilmore¹, Sara Hardy¹, Michelle Janelins¹</p> <p>¹Department of Surgery</p>
12	<p>THE EFFECT OF STRUCTURED EXERCISE DURING CHEMOTHERAPY ON CHEMOTHERAPY-INDUCED PERIPHERAL NEUROPATHY (CIPN): A ROLE FOR INTEROCEPTIVE BRAIN CIRCUITRY</p> <p><i>Ian R. Kleckner</i>, Jennifer S. Gewandter, Charles E. Heckler, Susan Staples, Ann Colasurdo, Po-Ju Lin, Michelle Shayne, Alissa Huston, Allison Magnuson, Mohamedtaki A. Tejani, Richard F. Dunne, Chunkit Fung, Brea Lipe, Frank Passero, Nimish A. Mohile, Gary R. Morrow, Michelle C. Janelins, Karen M. Mustian.</p> <p>Department of Surgery.</p>
13	<p>HEALTH RELATED QUALITY OF LIFE OUTCOMES ARE CORRELATED WITH SURVIVAL IN GLIOMA PATIENTS IN THE SEER-MHOS DATABASE</p> <p><i>S. Hardy</i>¹, C. W. Doucette¹, C. Pandya², M. Janelins³, N. Mohile⁴, and M. T. Milano¹</p> <p>¹Department of Radiation Oncology, University of Rochester Medical Center, Rochester, NY ²Analytics and Informatics, Dana Farber Cancer Institute, Boston, MA ³Division of Health Policy and Outcomes Research, Department of Public Health Sciences, University of Rochester Medical Center, Rochester, NY, ⁴Department of Neuro-oncology, University of Rochester, Rochester, NY</p>

14	ASSOCIATION OF PHYSICAL PERFORMANCE AND PATIENT REPORTED FUNCTIONAL DECLINE IN OLDER PATIENTS WITH ADVANCED COLORECTAL CANCER RECEIVING CHEMOTHERAPY <i>Nikeshia Gilmore¹</i> , Mostafa Mohamed ¹ , Lianlian Lei ¹ , Michelle Janelins ¹ , Himal Subramanya ¹ , Rakesh Gaur ² , Bryan Faller ³ , Adedayo Onitilo ⁴ , Supriya Mohile ¹ ¹ University of Rochester Medical Center, Rochester NY, ² Kansas City NCORP, Kansas City KS, ³ Heartland NCORP, St. Louis MO, ⁴ Wisconsin NCORP, Marshfield WI
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15	<p>PHAGOCYTIC CAPABILITIES OF MESENCHYMAL STEM CELLS DECREASES RATE OF SENESENCE AND HINDERS ADIPOCYTIC DIFFERENTIATION.</p> <p><i>Emily Quarato</i>, Benjamin Frisch, Thomas J. Fountaine, Laura M. Calvi</p> <p>1. Department of Environmental Medicine, University of Rochester Medical Center, Rochester, NY; 2. Department of Pathology and Laboratory Medicine, University of Rochester Medical Center, Rochester, NY; 3. Department of Medicine, University of Rochester Medical Center, Rochester, NY; 4. Wilmot Cancer Center, University of Rochester Medical Center, Rochester, NY, 5. Center for Musculoskeletal Research, University of Rochester Medical Center, Rochester, NY</p>
16	<p>DISCOVERY OF SMALL MOLECULE INHIBITORS OF PD-L1/PD-1 IMMUNE CHECKPOINT AXIS BY ARTIFICIAL INTELLIGENCE/MACHINE LEARNING</p> <p><i>Rakesh Singh PhD*</i>, Kyu Kwang Kim PhD, Rachael R. Turner MD, PhD, Richard G. Moore MD.</p> <p>Wilmot Cancer Center, University of Rochester Medical Center, Rochester, NY</p>
17	<p>A SPECIFIC MESENCHYMAL STEM AND PROGENITOR (MSPC) SUBPOPULATION WITH A MULTIPOTENT STEM-LIKE GENE SIGNATURE IS TRANSCRIPTIONALLY ALTERED IN THE SETTING OF MYELODYSPLASTIC SYNDROME (MDS) IN PRIMARY HUMAN BONE MARROW ASPIRATES.</p> <p><i>Thomas J. Fountaine</i>, Mark W. LaMere, Daniel K. Byrun, Jason R. Myers, John M. Ashton, Jane L. Liesveld, Youmna Kfoui, David T. Scadden, Michael W. Becker, Laura M. Calvi Wilmot Cancer Center, University of Rochester Medical Center; Functional Genomic Research Center, University of Rochester Medical Center, Center for Regenerative Medicine, Massachusetts General Hospital.</p>
18	<p>MONOCLONAL ANTIBODY THERAPY IN CLL IS GOVERNED BY ANTIBODY-DEPENDENT CELLULAR PHAGOCYTOSIS</p> <p>Charles C. Chu,¹ Karl VanDerMeid,¹ Jonathan Pinney,² Raquel Izumi,³ Veerendra Munugalavadla,³ Michael R. Elliott,² Clive S. Zent¹</p> <p>¹Department of Medicine, Wilmot Cancer Institute, ²Department of Microbiology and Immunology, Center for Vaccine Biology & Immunology, University of Rochester Medical Center, Rochester, NY, and ³Acerta Pharma, South San Francisco, CA, USA</p>

19	<p>SUBCLONAL VARIATION OF RAG-MEDIATED DIVERSIFICATION IN B CELL ACUTE LYMPHOBLASTIC LEUKEMIA</p> <p><i>Carol Fries, MD¹</i>; Diana G. Adlowitz, PhD²; Philip J. Rock²; Janice M. Spence, PhD²; John P. Spence, PhD³; W. Richard Burack, MD, PhD²</p> <p>¹Division of Pediatric Hematology/Oncology, Department of Pediatrics, University of Rochester</p> <p>²Department of Pathology & Laboratory Medicine, University of Rochester</p> <p>³NGS Tech, Albany, NY</p>
20	<p>DNA METHYLATION REPROGRAMMING IN RELAPSED/REFRACTORY MYELOMA CONVERGES WITH LOCI PROGNOSTIC OF SURVIVAL IN NEWLY DIAGNOSED PATIENTS</p> <p>Benjamin G. Barwick¹, Sheri Skerget², Vikas A. Gupta¹, Jonathan J. Keats², Daniel Auclair³, Sagar Lonial¹, Lawrence H. Boise¹, <i>Paula M. Vertino⁴</i></p> <p>¹Department of Hematology and Medical Oncology, Winship Cancer Institute, Emory University. ²Translational Genomics Research Institute. ³Multiple Myeloma Research Foundation. ⁴Department of Biomedical Genetics and the Wilmot Cancer Institute, University of Rochester Medical Center.</p>
21	<p>PRDM3 PROTECTS HEMATOPOIETIC STEM PROGENITOR CELLS HSPC DURING STRESS HEMATOPOIESIS</p> <p>Rongli Sun, Kelly McGlynn, Edward Ayoub, Sarah Rudzinskaskas, Archibald Perkins, and <i>Yi (Stanley) Zhang</i></p> <p>Department of Pathology and Lab Medicine</p>
22	<p>SUBCLONAL MUTATIONS OF <i>TP53</i> ARE COMMON IN UNTREATED FOLLICULAR LYMPHOMA AND MUTATION STATUS IS PREDICTIVE OF PFS WHEN CHOP IS COMBINED WITH 131-IODINE TOSITUMOMAB BUT NOT WITH RITUXIMAB: AN ANALYSIS OF SWOG S0016</p> <p><i>W. Richard Burack</i>, Hongli Li, Janice M. Spence, <i>Diana Adlowitz</i>, Lisa Rimsza, Rita Braziel, Catherine Spier, Mark Kaminski, John P. Leonard, Richard I. Fisher, Michael LeBlanc, Sonali Smith, Jonathan W. Friedberg</p> <p>Pathology</p>

23	<p>INTRACLONAL HETEROGENEITY CAUSED BY ACTIVATION-INDUCED CYTIDINE DEAMINASE IS NOT A PROGNOSTIC BIOMARKER IN UNTREATED ADVANCED STAGE FOLLICULAR LYMPHOMA: AN ANALYSIS OF SWOG S0016</p> <p><i>W. Richard Burack, Hongli Li, Diana Adlowitz, Janice M. Spence, Lisa Rimsza, Rita Braziel, Catherine Spier, Mark Kaminski, John P. Leonard, Richard I. Fisher, Michael LeBlanc, Sonali M. Smith, Jonathan W. Friedberg</i></p> <p>Pathology</p>
24	<p>THE ROLE OF COLLAGEN MICROSTRUCTURE IN BREAST TUMOR METASTASIS</p> <p><i>Danielle E. Desa, Tresa Elias, Ananya Goyal, Mark Buckley, Phong Nguyen, Catherine Kuo, Robert Strawderman, Robert Hill, Bradley Turner, Edward Brown</i></p> <p>Department of Biomedical Engineering, Harmonigenic Corporation, Department of Biostatistics and Computational Biology, Department of Pathology and Laboratory Medicine</p>
25	<p>IDH1 S280F MUTATION IS POTENTIALLY A NOVEL MECHANISM OF RESISTANCE TO IVOSIDENIB THERAPY IN AN IDH1 POSITIVE AML</p> <p><i>Oltvai, Z.N.^{1,2,3}, Harley, S.E.¹, Koes, D.², Mitchel, S.¹, Warlick, E.D.⁴, Nelson, A.C.¹, Yohe, S.¹, Mroz, P.¹</i></p> <p>¹Department of Laboratory Medicine and Pathology and ⁴Department of Medicine, University of Minnesota, Minneapolis, MN, 55455</p> <p>²Department of Computational & Systems Biology, University of Pittsburgh, School of Medicine, Pittsburgh, PA, 15213;</p> <p>³Department of Pathology & Laboratory Medicine, University of Rochester, School of Medicine, Rochester, NY 14620</p>
26	<p>DEVELOPMENT OF PROTEASE-ACTIVATED CYTOKINES FOR TUMOR IMMUNOTHERAPY</p> <p><i>Karli Norville, Denise Skrombolas, Shannon Ferry, Nancy Corson, and John G. Frelinger</i></p> <p>Department of Microbiology and Immunology</p>

27	<p>REDUCTION OF LEUKEMIC BURDEN VIA BONE TARGETED NANOPARTICLE DELIVERY OF AN INHIBITOR OF CCL3 SIGNALING</p> <p><i>Marian A. Ackun-Farmmer</i>^{1,2}, Daniel K. Byun³, Lila Yang⁴, Laura M. Calvi^{2,3,5}, Danielle S.W. Benoit^{1,2,6,7}, Benjamin J. Frisch^{2,5,8}</p> <p>¹Department of Biomedical Engineering, ²Center for Musculoskeletal Research, ³Department of Medicine Endocrine Division, ⁴New York Institute of Technology College of Osteopathic Medicine, ⁵James P. Wilmot Cancer Institute, ⁶Materials Science Program, ⁷Department of Chemical Engineering, ⁸Department of Pathology and Laboratory Medicine</p>
28	<p>MULTIDIMENSIONAL ANALYSIS OF FLOW CYTOMETRIC DATA TO IDENTIFY VARIANT MACROPHAGE POPULATIONS DURING MYELODYSPLASTIC SYNDROMES</p> <p><i>Benjamin J. Frisch</i>^{1,2,3}, Mark W. LaMere², Daniel K. Byun², Kathleen E. McGrath⁴, Paul D. Kingsley⁴, James Palis⁴, Laurie A. Steiner⁴, Roman A. Eliseev^{3,5}, Michael R. Elliot⁶, Jane L. Liesveld^{2,7}, Michael W. Becker^{2,7}, Laura M. Calvi^{2,3,8}</p> <p>¹Department of Pathology and Laboratory Medicine, ²James P. Wilmot Cancer Institute, ³Center for Musculoskeletal Research, ⁴Department of Pediatrics, ⁵Department of Orthopedics, ⁶Department of Microbiology and Immunology, ⁷Department of Medicine Division of Hematology/Oncology, ⁸Department of Medicine Division of Endocrinology</p>
29	<p>ALTERATIONS IN THE ERYTHROID-ASSOCIATED MARROW MICROENVIRONMENT IN MYELODYSPLASTIC SYNDROME (MDS)</p> <p><i>Kathleen E. McGrath</i>¹, Anne D. Koniski¹, Leah Vit¹, Allison J. Li², Benjamin J. Frisch^{2,3}, Thomas Fountaine³, Paul D. Kingsley¹, Michael W. Becker^{2,3}, Laura M. Calvi^{2,3}, Laurie A. Steiner¹, James Palis^{1,3}</p> <p>¹Dept. of Pediatrics and Center for Pediatric Biomedical Research, ²Dept. of Medicine, ³Wilmot Cancer Institute, University of Rochester Medical Center</p>

30	<p>DISTINCT MECHANISMS OF FCγR- AND COMPLEMENT-MEDIATED HYPOPHAGIA</p> <p>Jonathan Pinney,¹ <i>Charles C. Chu</i>,² Fátima Rivera-Escalera,¹ Hannah Whitehead,¹ Karl VanDerMeid,² Clive S. Zent² and Michael R. Elliott¹</p> <p>¹Department of Microbiology and Immunology, Center for Vaccine Biology & Immunology and ²Department of Medicine, Wilmot Cancer Institute, University of Rochester Medical Center, Rochester, NY, USA.</p>
31	<p>PRDM3 PLAYS AN ESSENTIAL ROLE IN INFANT LEUKEMIAS VIA SUPPRESSION OF APOPTOSIS: A VULNERABILITY FOR TREATMENT</p> <p>Yi (Stanley) Zhang and <i>Archibald Perkins</i></p> <p>Pathology & Lab Medicine</p>
32	<p>NANOPARTICLE MEDIATED DELIVERY OF NOVEL ANTI-LEUKEMIC THERAPEUTIC AGENTS</p> <p><i>Marian Ackun-Farmmer</i>^{1,2}, Hanan Alwaseem³, Michele Counts¹, Benjamin Frisch^{2,4}, Rudi Fasan³, Danielle S.W. Benoit^{1,2,5,6}</p> <p>¹University of Rochester, Department of Biomedical Engineering, Rochester, NY, USA, ²University of Rochester Medical Center, Center for Musculoskeletal Research, Rochester, NY, USA, ³University of Rochester, Department of Chemistry, Rochester, NY, USA, ⁴University of Rochester, Wilmot Cancer Institute, Department of Medicine Hematology/Oncology Division, Rochester, NY, USA, ⁵University of Rochester Medical Center, Department of Orthopaedics, Rochester, NY, USA, ⁶University of Rochester, Materials Science Program, Rochester, NY, USA</p>
33	<p>MODULATING INTERLEUKIN-1 SIGNALING IN AML AND MDS</p> <p><i>Hiroki Kawano</i>, MD, PhD, Tzu-Chieh Ho, PhD, Mark W. LaMere, Kristen O'Dwyer, MD, Jane L. Liesveld, MD, Eunice S. Wang, MD, Craig T. Jordan, PhD, Laura M. Calvi, MD, John M. Ashton, PhD, and Michael W. Becker, MD</p> <p>Hematology/Oncology</p>
34	<p>DNA METHYLATION BIOMARKERS CORRELATED WITH METASTASIS AND SURVIVAL OF UVEAL MELANOMA</p> <p><i>Gilbert Giri</i>, Tae Jin Lee, Sai Karthik Kodeboniya, Ashok Sharma</p> <p>Center for Biotechnology and Genomic Medicine, Medical College of Georgia, Augusta University, Augusta, GA</p>

35	<p>CDK12-MEDIATED SUPPRESSION OF INTRONIC POLYADENYLATION AND ITS CONSEQUENCES IN CANCER</p> <p><i>Robbin Jang, Thomas Osinski, Stanislav Bellaosov, and Paul L. Boutz</i> Department of Biochemistry and Biophysics, Center for RNA Biology, Center for Biomedical Informatics, Department of Urology, and Wilmot Cancer Institute</p>
36	<p>IDH1 AS DNA DAMAGE RESPONSE REGULATOR IN HIGH CYCLIN E HIGH-GRADE SEROUS OVARIAN CANCER.</p> <p><i>Qingyuan Jia</i>^{1,2}, Erika S. Dahl¹, Kelly E. Leon¹, and Katherine M. Aird¹ Cellular and Molecular Physiology, Penn State College of Medicine, Hershey, PA¹ Department of Biology, University of Rochester, Rochester, NY²</p>
37	<p>LOCAL IRRADIATION INDUCES SYSTEMIC INFLAMMATORY RESPONSE AND ALTERATION OF THE HEMATOPOIETIC STEM CELL NICHE</p> <p><i>Yuko Kawano MD, PhD, Daniel K. Byun, Hiroki Kawano MD, PhD, Mark W. Lamere, Lizz Lamere, Carl J. Johnston PhD, Jacqueline P. Williams PhD, Benjamin J. Frisch PhD, and Laura M. Calvi MD</i> 1. Department of Endocrine/Metabolism, Wilmot Cancer Institute, University of Rochester Medical Center 2. Department of Pediatrics, University of Rochester School of Medicine 3. Department of Environmental Medicine, University of Rochester School of Medicine</p>
38	<p>REGULATION OF CD8⁺ T CELL METABOLISM IN THE TUMOR MICROENVIRONMENT</p> <p><i>Andrea M. Amitrano</i>^{1,2}, Brandon J. Berry³, Andrew P. Wojtovich^{3,4}, Ph.D., Minsoo Kim^{1,2}, Ph.D. ¹Department of Pathology, ²Department of Microbiology & Immunology, ³Department of Pharmacology and Physiology, ⁴Department of Anesthesiology and Perioperative Medicine, University of Rochester, Rochester, NY</p>

39	<p>JUVENILE RADIOTHERAPY TREATMENT INDUCES SKELETAL MUSCLE FIBROSIS, ATROPHY, AND PHYSIOLOGICAL FORCE DEFICITS IN A MURINE MODEL FOR RHABDOMYOSARCOMA</p> <p><i>Jacob G Kallenbach¹, Nicole D Paris², John F Bachman³, Roméo S Blanc², Carl J Johnston⁴, Eric Hernady⁵, Jacqueline P Williams⁵, Joe V Chakkalakal^{1,2,6}</i></p> <p>¹Department of Biomedical Engineering ²Department of Pharmacology and Physiology ³Department of Pathology and Laboratory Medicine; Cell Biology of Disease Graduate Program ⁴Department of Pediatrics ⁵Department of Environmental Medicine ⁶Wilmot Cancer Institute, UR Stem Cell and Regenerative Medicine Institute</p>
40	<p>RasGRP3 ASSOCIATES WITH EPOR TO MEDIATE CELL MOBILITY VIA RAF/RAS SIGNALING.</p> <p><i>Yahui Grace Chiu, Liana Toia, Jacquelyn Lillis, Jessica Shand, John M. Ashton, and Omar S. Aljitawi</i> Hematology and Oncology, Wilmot Cancer Center</p>
41	<p>EXPLORING THE ROLE OF SIRT6 C-TERMINUS IN TUMOR SUPPRESSION</p> <p><i>Yifei (Sylvia) Lin, Jonathan Gigas, Matthew Simon, Ph.D., Andrei Seluanov, Ph.D., Vera Gorbunova, Ph.D.</i> Department of Biology, University of Rochester</p>
42	<p>ADAPTING FLUORESCENCE ACTIVATED CELL SORTING OF MURINE PANCREATIC ACINAR AND DUCTAL CELLS FOR CUT & TAG</p> <p><i>Emily Berry, Zamira Guerra Soares, Stephano Mello</i> Biomedical Genetics</p>
43	<p>CHARACTERIZATION OF THE BINUCLEATED ACINAR CELL POPULATION IN THE SALIVARY GLAND</p> <p><i>Sarah A. Kintzel, Matthew H. Ingalls, Catherine E. Ovitt</i> Department of Biomedical Engineering, Center for Oral Biology, Department of Biomedical Genetics</p>
44	<p>THE ROLE OF SOX9 IN ADULT SALIVARY GLAND ACINAR CELLS</p> <p><i>Matthew H. Ingalls, Szilvia Arany, Catherine E. Ovitt</i> Center for Oral Biology, Department of Biomedical Genetics</p>

45	<p>REDOX-FYN-C-CBL REGULATES O-2A/OPC CELL CYCLE EXIT AND DIFFERENTIATION</p> <p><i>Yunpeng Pang</i>, Christopher J Folts, Ibro Ambeskovic, Mark D Noble Neuroscience Graduate Program, UR SMD</p>
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