

# CANCER RESEARCH DAY



### "Innovation to cure cancer" Nov. 19, 2012

## Student Union, University of Mississippi Medical Center 2500 N. State Street, Jackson MS 39216

8:30am -8:40am

Opening remark: Dr. Lucio Miele, Director of Cancer Institute

Session I Chair, Dr. Pochampally

\* 8:40am-8:55am "Regulation of Gene Expression by Mutant p53"

Luis Martinez

\* 8:55am-9:10am "Obesity-Induced Angiogenesis and Increased Cancer Risk"

Jian-Wei Gu

\* 9:10am-9:25am "Novel Treatment Option for Breast Cancer Patients With Triple Negative Disease"

Wael Elshamy

\* 9:25am-9:40am "Fringe-Modulated Notch Activation in the Triple Negative Breast Cancer"

Keli Xu

\* 9:40am-9:55am "The Role of Non-Coding RNAs in Cancer"

Yin-Yuan Mo

10:00am-10:10am Coffee break, poster

Session II

Chair, Dr. Tracy Brooks

\* 10:10am-10:25am "Introduction to the UMMC/NCNPR Cancer Drug Discovery Core"

David Pasco

\* 10:25am-10:40am "Novel Anticancer Marine Prototypes Targeting the Tumor Cell Membrane and

HER-3 Over Expressing Cells"

Mark Hamann

\* 10:40am-10:55am "Evaluation of Wild Yam (*Dioscorea villosa*) Root Extract as a Potential

Epigenetic Agent in Breast Cancer Cells"

Asok Dasmahapatra

\* 10:55am-11:10am "Novel Aspects of AKT Regulation and Function: Implications in Cancer and

Lifespan Control"

**Guri Tzivion** 

\* 11:10am-11:25am "New Insights Into Cancer Therapy From the Genetic Control of Apoptosis in

C. Elegans"

Joseph Maher

 \* 11:25am-11:40am "Association Between Health-Related Quality of Life and Colorectal Cancer Screening"

Rohan Mahabaleshwarkar

11:40am-1:30pm Lunch and poster session (Lunch Will Be Provided)

#### Session III Chair, Dr. Gene Bidwell

- \* 1:30pm-1:45pm "G-Quadruplex Formation in the kRAS Promoter: A New Molecular Target"

  Tracy Brooks
- \* 1:45pm-2:00pm "Intramural and Extramural Goals of the Cancer Education Program" Roy Duhe
- \* 2:00pm-2:15pm "Depressive Features Associated With Cigarette Smoking: Clinical Implications"

  Thomas Payne
- \* 2:15pm-2:30pm "Analyzing Cardiovascular Data From the ARIC Cohort to Identify Prevalence of Risk Factors for Common Cancer"

Christopher Friedrich

\* 2:30pm-3:00pm "Integrative Medicine and Oncology: Managing Symptoms and Direct Antitumor Potential"

Gailen Marshal

3:00pm-3:10pm Coffee break, poster

#### Session IV Chair, Dr. Keli Xu

\* 3:10pm-3:25pm "Combinatorial Effect of Encapsulating Curcumin and Ceramide 6 in Liposomal Nanoparticles Against Solid Tumors"

Radhika Pomchampally

\* 3:25pm-3:40pm "Integrative Genomic Strategies for Biomarker Discovery in Breast and Prostate Cancer"

Chindo Hicks

\* 3:40pm-3:55pm "Mechanism-based preclinical studies with Resveratrol and its potent Natural Analogue Pterostibene in Prostate Cancer"

**Anait Levenson** 

\* 3:55pm-4:10pm" In Silico Studies of Resveratrol Interaction With Nuclear Receptors"

Pradip K. Biswas (Tougaloo College)

- \* 4:10pm-4:25pm "Roles of Tumor Metastasis Suppressor Genes in Breast and Prostate Cancers" Kounosuke Watabe
- \* 4:25pm-4:40pm "Hypoxia-Controlled Genes as Novel Biomarkers and Therapeutic Targets in Prostate Cancer"

**Christian Gomez** 

4:40pm-5:10pm

Poster discussion, (5 posters---5min presentation)

5:10pm-5:20pm

Closing remark: Dr. Kounosuke Watabe, Associate Director of Basic Science







#### **Poster session**

"Epigenetic Mechanisms of PTEN Regulation by Resveratrol" <u>Swati Dhar</u>, Kun Li, Steven Dias, and Anait S Levenson

"Regulation of Notch1 and Notch4 by Phosphorylation"
Wen-Cheng Chung, Gopalakrishnan Ramakrishnan, Gantulga Davaakhuu, Lucio Miele, Guri Tzivion

"Down Regulation of microRNA-29c is Associated with the Over Expression of ID2 in Cancer Stem like Cells of DCIS" Yin Liu, Puspa. R. Pandey, Fei Xing, Sambad Sharma, and Kounosuke Watabe

"Reactive Astrocytes Promote the Growth of Cancer Stem-Like Cells of Metastatic Breast Tumor by Activating Notch Signaling in Brain"

Fei Xing, Sambad Sharma, Yin Liu, Kerui Wu and Kounosuke Watabe

"SPARC in Tumor Microenvironment Induces Dormancy of Prostate Cancer in Bone" <u>Sambad Sharma</u>, Aya Kobayahsi, Fei Xing, Kounosuke Watabe

"A Novel Notch-Akt-NFkB Axis in Triple Negative Breast Cancer Cells" <u>Kandis Backus</u> and Lucio Miele

"Targeting Notch and c-Met in the Basal-Like and Caudin-Low Breast Cancer Models" Shubing Zhang and Keli Xu

"Control Stability of Long Non-Coding RNA UCA1 by HnRNPI" Jianguo Huang and Yin-Yuan Mo

"A Genetic Selection System for micro-RNA Target Identification and Validation" Nanjiang Zhou and Yin-Yuan Mo

"A quick and easy way of assembling TALE/TALEN modules for genetic modification in mammalian cells" Juan Zhang and Yin-Yuan Mo

"Exercise Increases Soluble Vascular Endothelial Growth Factor Receptor-1 (sFlt1) in Circulation of Adult Women" <a href="Kristina L. Makey">Kristina L. Makey</a>, Sharla G. Patterson, James Robison, Mark Loftin, Dwight E. Waddell, Lucio Miele, Edmund Chinchar, Min Huang, Andrew Smith, Mark Weber, Jian-Wei Gu

"EGCG, a Green Tea Antioxidant Suppresses Breast Tumor Angiogenesis and Growth via Inhibiting the Activation of HIF-1a and NFkB, and VEGF Expression"

Kristina L. Makey, Kevan B. Tucker, Edmund Chinchar, Lucio Miele, Ivy Pei, Emily Y. Thomas, and Jian-Wei Gu

"High Fat Diet-Induced Postmenopausal Obesity Promotes Tumor Angiogenesis and Breast Cancer Progression in Age-Relevant Ovariectomized Mice"

Gu JW, Young E, Patterson SG, Makey KL, Wells J, Huang M, Tucker KB, Miele L

"High Fat Diet Increases Adipose Tissue Mass, but not Lean Tissue Mass in Age-Relevant Postmenopausal Mice in Association with Induction of VEGF Expression and Angiogenesis in Adipose Tissue"
Gu JW, Makey KL, Shareef MA, Chinchar E, Pei I, Miele L

"Fem1b Attenuates the Transcriptional Activity of Gli1 by Promoting the Ubiquitin Mediated Degradation of Gli1" Andrew Gilder, Deyin Lu, and Joseph Maher "Early Neurocognitive Screening for Pediatric Brain Tumor Patients"
Cynthia Karlson, Edward Manning, Betty Herrington, Stacey Leist-Haynes, Janie Criddle, and T. David Elkin

"Pain and Sleep Disturbances in Pediatric Hematology/Oncology"
Cynthia Karlson, Stacey Leist, Melissa Faith, Maria Smith, T. David Elkin, and Tonya Palermo

"Negative regulation of miR-21 by long non-coding RNA GAS5" Zigiang Zhan and Yin-Yuan Mo

"Effect of a Pharmacist Intervention on the Health-Related Quality of Life of Oncology Patients in an Outpatient Clinic" Morgan Hall, Shirley Hogan, and Allison Bell

"Interaction of Notch and RB pathways"
<u>Filomena Papa</u>, Nicole Darak, Antonio Pannuti, Lucio Miele

"Serum 25-hyroxyvitamin D and cancer mortality in NHANES III and NHANES 2001-2004" Xu Zhang

"Coexpression of Mef2 and Notch1 in Human Tissues" He Zhu, Xinchun Zhou, Zhi He, and Luico Miele

"Trauma Factors, Psychosocial Symptoms, and Perceived Quality of Life Among Long-Term Survivors of Pediatric Cancer" Maria Smith, Jasmin Searcy, Jessica Polson, Sarah Zito, Grace Owens, Gail C. Megason, and T. David Elkin

"Psychological Stress in Pediatric Long Term Follow Up Patients" Maria Smith, Jessica Pierce, Gail C. Megason, and T. David Elkin

"Hypoxia-Reactive Proteins as Potential Tumor-Associated Antigens in Prostate Cancer" Tangeng Ma and Christian Gomaz

"Targeting BRCA1-IRIS to combat ovarian cancer drug resistance and recurrence" Bibbin Paul and Wael ElShamy

"Fem1b regulating of the Nkx3.1 prostate cancer tumor suppressor gene" Deyin Lu and Joseph Maher

"Regulation of Notch localization by endocrine therapy in Estrogen Receptor positive breast cancer cells" Ingrid Espinoza, Mary Caskey, Rodney Baker and Lucio Miele

"Wilms Tumor: A Single Institution's Experience on the Incidence and Risk Factors for Poor Outcome" Jitsuda Sitthi-Amorn, Britni Hill, Catherine Gordon, Gail Megason, Suvankar Majumdar

"Biological Functions of *Drosophila* Nicotinamidase in Mammalian Systems" Gantulga Davaakhuu and Guri Tzivion

"Cultural & Environmental Factors Associated with Mortality of African American & Caucasian Pediatric B-Precursor Acute Lymphocytic Leukemia Patients in Mississippi"

Amy Forsythe, Maria Smith, Naveed Ahmad, David Elkin, and Gail Megason

"Exosomal RNAs as Mediators for Cell-Cell Communications" Ramesh Singh and Yin-Yuan Mo "Exosomes secreted by human Mesenchymal Stem Cells: miRNA and Proteomics Profiles" Patrice Penfornis and Radhika Pochampally

"CD49fhi/CD90lo From Primary Human Osteosarcoma Cells Are Enriched for Tumor Initiating Property" Krishna Chauhan and Radhika Pochampally

"Gene expression profiles of Tamoxifen Resistant, Notch-overexpressing Breast Cancer Cells" Antonio Pannuti and Lucio Miele

"Identification of a Cross-Talk Between the PI3-Kinase-AKT Pathway and Sirtuins and its Potential Implications in Cancer and Metabolism Control"

Gopalakrishnan Ramakrishnan and Guri Tzivion

"The Enhanced Accumulation of Elastin-Like Polypeptides in Pancreatic Tumors with Local Hyperthermia and the Relationship With its Molecular Weights"

Jung Su Ryu and Drazen Raucher

"Utilizing the Targeting Properties of Elp to Safely Deliver a Potent Doxorubicin Derivative" Leslie Walker, Eddie Perkins, Feliz Kratz, Drazen Raucher

"Enchantment of Natural Killer Cell Activity in Healthy Subjects by Immulina®, a *Spirulina* Extract Enriched for Braun-Type Lipoproteins"

<u>Premalatha Balachandran</u>, Nirmal D. Pugh, Claus Henrik Nielsen, Ole Christensen, Hemlata Tamta, Kenneth J. Sufka, Xiangmei Wu, Anette Walsted, Michelle Schjørring-Thyssen, Christian Enevold, and David S. Pasco

"Predicting Survival in Metastatic Melanoma Patients on Bevacizumab Using MASS Criteria and Baseline LDH-Evaluation of a Prospective Phase II."

<u>Mark Gray</u>, Sara Martin del Campo, Katelyn Garner, Haowei Zhang, Frederico Souza, Xu Zhang, William Carson, Andrew Smith.

#### **Program committee:**

Dr. Wael Elshamy, Dr. Guri Tzivion, Dr. Roy Duhe, Dr. Kounosuke Watabe

#### **Contact and information:**

Ms. Veronica Mayes, <a href="mayes@umc.edu">vmayes@umc.edu</a>







