



# Central Research Forum

Thursday

October 13, 2016

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# Program

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2:30-4:30 p.m.  
Apollo Room

**Poster Set-up**

4:00-4:10 p.m.  
E156 Student Union

**Welcome: Timothy Broderick, M.D.**

Associate Dean for Research Affairs, BSOM, Chief Scientist, WSRI,  
Professor, Surgery

4:10-5:30 p.m.  
E156 Student Union

**Speaking Session: Translational Research and Collaboration**

Endeavor Room

***“Linking Biomedical Research to Biomarkers and Personalized  
Medicine”***

**Madhavi Kadakia, Ph.D.**

Chair and Professor, Biochemistry & Molecular Biology

***“Novel Decoder Algorithms for Closed-loop Prosthetic Control”***

**Sherif M. Elbasiouny, Ph.D., P.E., P.Eng**

Assistant Professor, Departments of Neuroscience, Cell Biology &  
Physiology (NCBP) and Biomedical, Industrial & Human Factors  
Engineering (BIE), Boonshoft School of Medicine, College of  
Engineering and Computer Science, and College of Science and  
Mathematics

***“A Novel Approach to Chemotherapy Induced Neurotoxicity”***

**Jacob Vincent**

M.D./Ph.D. Candidate

***“Targeting a novel persistent inward current in skeletal  
muscle as a treatment for muscle stiffness in myotonia  
congenita”***

**Ahmed Hawash**

M.D./Ph.D. Candidate

***“Sugar Makes the Heart Beat Stronger?”***

**Eric Bennett, Ph.D.**

Chair and Professor, Neuroscience, Cell Biology and Physiology

5:30-8:00 p.m.  
Apollo Room

**Reception and Poster Session**

**8:00 p.m.**

**CONCLUSION OF 2016 CENTRAL RESEARCH FORUM**

# Our Speakers

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## **Madhavi Kadakia, Ph.D.**

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Madhavi P. Kadakia, Ph.D., serves as the chair of the Department of Biochemistry and Molecular Biology. She is currently a full-time professor of biochemistry and molecular biology, and the associate director of the Center for Genomics Research and director of the master's program within the Department of Biochemistry and Molecular Biology. She has been with Wright State University since 1999.

She attained her bachelor's and master's degrees in microbiology from the University of Mumbai. After receiving her Ph.D. in infectious diseases and microbiology from the University of Pittsburgh, she completed a postdoctoral fellowship with the Pittsburgh Cancer Institute and later conducted research at the Cancer Institute of New Jersey.

At Wright State, she was awarded the Faculty Mentor Award in 2010 from the Boonshoft School of Medicine. In 2011, Kadakia served as a visiting research scholar at Nottingham University and the Leicester Medical Research Council in the United Kingdom. She has served as an organizing member on the International p63/p73 Workshops. Her research, funded by the National Cancer Institute, focuses on identification of signaling pathways that play a role on cancer and development. The second area of focus in her laboratory has been to identify biomarkers that can help differentiate different stages of cancer that may eventually lead to personalized patient care.

In addition, recently her laboratory has been involved in examining the differential expression of known microRNAs and unknown small RNAs in tissue and plasma sample of patients with Barrett's esophagus (BE), Esophageal adenocarcinoma (EAC) in order to identify circulating microRNA biomarkers for early detection of EAC using next generation sequencing. The laboratory has recently received funding to obtain next generation sequencer along with the top of the line Real time PCR machine with high throughput capabilities to facilitate these studies.

Dr. Kadakia is excited to bring the newest and most advanced research trends to the Dayton, Ohio area. Dr. Kadakia is recognized by her colleagues for her strong commitment to ethical research practices and her commitment to mentoring students. We are pleased and honored to have Dr. Kadakia as a member of BSOM's faculty.

## **Sherif M. Elbasiouny, Ph.D., P.E., P.Eng.**

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Dr. Elbasiouny is an assistant professor at Wright State University. He has a joint faculty appointment in the Departments of Neuroscience, Cell Biology & Physiology and Biomedical, Industrial & Human Factors Engineering across the Boonshoft School of Medicine, College of Engineering & Computer Science, and the College of Science & Mathematics. In addition, Dr. Elbasiouny is the director of the *Neuro Engineering, Rehabilitation, and Degeneration (NERD) laboratory*, housed in the Neuroscience Engineering Collaboration building within the university's Neuroscience Institute. His extensive involvement across many university departments, including his own lab, has had a profound impact on fostering a collaborative research community among students and faculty. He currently chairs a committee to establish

a neuro-engineering master's program, and also contributes in his administrative capacity in the creation of integrative curriculum between the neuroscience and engineering programs.

Dr. Elbasiouny's research interests are in the fields of neuro- rehabilitation and neurodegenerative diseases with the ultimate goal of alleviating disability, improving motor function, and extending survival of patients with neurological injuries or neurodegenerative diseases. His work combines computational modeling, electrophysiology, and immunohistochemical techniques for studying the role of spinal neurons in integrating the sensorimotor signals for movement control in health and after neurodegenerative diseases, such as amyotrophic lateral sclerosis (aka Lou Gehrig's disease). His research program has attracted over \$2.6 million in federal (NIH) and military (DARPA and AFRL) grant funding.

In 2015, Dr. Sherif Elbasiouny received WSU's Presidential Early Career Achievement Award and the Southwestern Ohio Council for Higher Education (SOCHE) Faculty Excellence Award to recognize his early career achievements. We are thankful to him for his contributions to the research community and look forward to following his accomplishments for years to come.

### **Mr. Jacob Vincent**

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Jacob Vincent is a current graduate student in BSOM's joint M.D./Ph.D. Program, and is expected to complete his formal educational training in 2019. He currently works as a Ph.D. student in the laboratory of Dr. Timothy Cope in the Department of Neuroscience, Cell Biology and Physiology. He is an executive member of the Research Learning Community, which is a student-run organization focused on bringing students together for journal clubs, Research Seminar Series presented by faculty, and organizing the annual Medical Student Research Symposium. He served as the student Associate Director for the Medical Student Research Symposium from 2013-2014 and as the Director of the event from 2015-2016. In his capacity as both Associate Director and Director, he was responsible for reviewing student research poster abstracts, coordinating event services and setup, working with faculty judges to determine award categories and scoring, and also the creation of a research booklet distributed throughout the medical school and all departments. He is the recipient of the 2015 Academy of Medicine's Outstanding Research Award.

In addition, Jacob serves as the M.D./Ph.D. representative on the Medical Student Council, and has served as an academic representative within the student council during his first two years as a medical student . In this role, he circulated anonymous course surveys and generated course reports to discuss with course directors in an effort to provide feedback to improve curriculum content and structure. He also served on the B1 and Foundations Curriculum Committee where individual courses were evaluated and medical school academic policies were modified and redesigned to better integrate self-directed and team based learning methods. As a student-faculty liaison, he provided valuable feedback regarding curriculum content and student workload impact utilized by different teaching modules.

Jacob's research interests focus on translational research in the field of neuroscience and cell biology, particularly in the area of studying the mechanisms underlying chemotherapy induced peripheral neurotoxicity. Using in vivo electrophysiology and pharmacology, he has identified the mechanisms responsible for muscle proprioceptor dysfunction following chemotherapeutic treatment regimes, which he will present in detail this evening. We are

pleased to have Jacob present to discuss his research findings and look forward to following his future research endeavors and leadership undertakings at BSOM.

### **Ahmed Hawash**

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Ahmed Hawash is a student in the joint M.D./Ph.D. program at Boonshoft School of Medicine. He is expected to complete his formal educational training in 2019. He currently works under the supervision of Dr. Mark Rich, and is involved in a thesis project studying skeletal muscle electrophysiology to identify the etiology behind myotonia congenita. In addition to pursuing his medical degree and status as a Ph.D. candidate, Ahmed has served as the co-director of the WSU-BSOM Annual Medical Student Research Symposium, and is also a participant in the event which showcases the research endeavors of medical students in poster-presentation format. He is also one of the founding members of the Research Learning Community, which is a research-focused group that brings WSU medical students and faculty together to foster research assistance and collaboration. Ahmed also serves as a medical student representative for BSOM at the AAMC, and in this capacity has participated in meetings with the Dean to share ideas and provide student feedback regarding medical education and curriculum modalities.

Outside of school, Ahmed enjoys basketball and motorsports. His other research interests include spinal cord injury and novel treatments for it. We are excited to have Ahmed speak this evening and share his research experiences with us.

### **Eric S. Bennett, Ph.D.**

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Eric S. Bennett, Ph.D., is the newly appointed professor and Chair of the Department of Neuroscience, Cell Biology and Physiology at Wright State University, and joined our faculty October 1, 2016. Dr. Bennett comes to Wright State from the University of South Florida Morsani College of Medicine (USF MCOM) where he served as professor and vice chair of the Department of Molecular Pharmacology and Physiology and Associate Dean for Ph.D. and Postdoctoral Programs. At USF, Bennett was a leader in the development and implementation of new programs within his department and for the university as a whole, as well as being a successful educator and researcher. He is a graduate of Cornell University, where he received a B.S. in applied and engineering physics. Dr. Bennett earned his M.S. and Ph.D. in biophysics from the University of Rochester School of Medicine and Dentistry and then moved to the University of Colorado Health Sciences Center for a postdoctoral fellowship in neuroscience.

Bennett initially served as an assistant professor of physiology and biophysics in 1997 at USF MCOM. By 2006, he was the founding director of the USF MCOM Ph.D. program in integrated biomedical sciences, and oversaw the development and implementation of a new Ph.D. program, including the recruitment and admissions of all Ph.D. students, the curriculum, qualifying examinations, and dissertation defenses. He is highly regarded as being an outstanding educator and leader, having won many awards from medical students, Ph.D. students and the Office of Educational Affairs at USF.

In addition to his academic and administrative duties, Dr. Bennett developed a federally funded, internationally recognized, independent research program at USF. His research focuses on understanding the control, modulation and pathophysiology of electrical signaling in the body, and how it contributes to cardiac, neuronal and skeletal muscle diseases such as arrhythmias, epilepsies, and myopathies. Specifically, his lab is interested in describing the role and mechanism of regulated and aberrant glycosylation in transmembrane protein function, and how these glyco-dependent changes in protein function impact electromechanical signaling and overall cardiac, brain, and skeletal muscle function. Thus, Dr. Bennett developed transgenic mouse models of aberrant glycosylation that produce a disease phenotype. Using these models, he investigates how changes in the glycans attached to specific glycoproteins contribute to disease etiology employing a set of biophysical, functional, biochemical, and molecular techniques at multiple levels ranging from the molecular through whole animal physiology. Techniques routinely utilized in the lab include echocardiography, histology, electrophysiology, primary/immortal cell culture methods, as well as protein/glycan biochemistry using a combination of purification methods, gel electrophoresis, lectin biology, immunocytochemistry, basic confocal microscopy, and molecular biology.

Dr. Bennett is currently the principal investigator (PI) or co-PI on multiple research projects, one of which is funded by the National Science Foundation. As the author and coauthor of numerous scholarly papers, his work has been featured in peer-reviewed journals including the Proceedings of the National Academy of Sciences, FASEB Journal, the Journal of Physiology, Journal of General Physiology, the Journal of Biological Chemistry, Basic Research in Cardiology, and Journal of Molecular and Cellular Cardiology. Bennett serves as a reviewer for several scientific journals, including the Journal of Physiology, Circulation Research, Journal of Neuroscience and was recently an editorial board member for the Journal of Biological Chemistry. Dr. Bennett serves as a member of the Biophysical Society, the American Physiological Society, the Society for Neuroscience, the American Society for Biochemistry and Molecular Biology and the American Heart Association, among others.

We are excited to have Dr. Bennett join WSU and lead the Department of Neuroscience, Cell Biology and Physiology into future research endeavors and collaborations.

# Posters / Alpha Listing

Poster #	Name	Poster #	Name
4	Siham <b>Abdullah</b>	35	Daniel <b>Keltner</b>
55, 56	Ali <b>Abtahi</b> , D.O.	27	Michael <b>Kemp</b> , Ph.D.
66	Uchenna <b>Agbim</b>	78, 79, 80, 81	Shireen <b>Khan</b> , MBBS
42	Haitham <b>Alabsi</b> , D.O.	28	Jeremy <b>Kress</b>
57	Renee <b>Albers</b>	9	Ekaterini <b>Lordanou</b>
20	Hitham <b>Aldharee</b>	73	Marc <b>Lubitz</b>
58	Nasser M. <b>Alhamdan</b>	67	Aaron <b>Madaris</b>
12	Amjad <b>Aljagthmi</b>	16	Amr <b>Mahrous</b>
2	<del>John</del> <b>Allen</b>	70	Kyle <b>Maier</b>
23	Hadel <b>Alsaran</b>	29, 30	Morgan <b>Manley</b> , D.O.
38	Alan <b>Avila-John</b>	50, 51, 52, 53	Patrick <b>McCullough</b> , M.D.
10, 11	Alison <b>Bales</b>	68	Zahra <b>Meghjani</b>
13	Spencer <b>Barnhill</b>	17	Taylor <b>Miller</b>
21	Shimpi <b>Bedi</b>	69	Marvin <b>Miller</b>
49	Angela <b>Campo</b>	62	Clarice <b>Montecalvo</b>
24	Minyi <b>Chen</b>	5, 6, 7	Parvaneh <b>Nouri</b>
25	Reilly <b>Clark</b>	61	Amnah <b>Obidan</b>
3	Brian <b>Cothorn</b> , M.D.	8	Nicole <b>Panstingel</b>
59	Gabriel <b>Crabb</b>	75	Tom <b>Pitts</b> , M.D.
41	Mathew <b>Dancy</b>	31	Chien <b>Poon</b>
14	April <b>Daubenspeck</b>	43	Jennifer <b>Rehbein</b>
1	Karl <b>de Dios</b> , M.D.	71	Daniel <b>Rohrbach</b> , Ph.D.
37	David <b>Dennis</b>	Digital	Lindy <b>Rosal</b> , M.D.
65	Khalid <b>Elased</b> , Pharm.D., Ph.D.	82	Najmus <b>Sahar</b>
64	Rucha <b>Fadnavis</b>	18	Suraj <b>Sakaram</b>
26	Kristen <b>Fite</b>	34	Erica <b>Seabold</b>
22	Ramya <b>Ganesan</b>	39	Andrew <b>Stacy</b>
46	Matthew <b>Gayed</b>	44	Andrew <b>Steffensmeier</b>
33	Ronak <b>Ghiya</b>	60	Kaitlyn <b>Steffensmeier</b>
36	Charles <b>Grant</b> , III	45	Matthew <b>Thomas</b>
63	Nadja <b>Grobe</b> , Ph.D.	72	Roman <b>Trimba</b> , M.D.
15	Dan <b>Halm</b> , Ph.D.	19	Christopher <b>Waker</b>
48	Lucas <b>Harrison</b>	Digital	Lindsey <b>Weigand</b> , D.O.
76, 77	Nicole <b>Hogan</b>	54	Stephanie <b>Welsh</b>
47	Chad <b>Hyer</b>	32	Syed <b>Zaidi</b>
40	Madhavi <b>Kadakia</b> , Ph.D.	74	Lauryn <b>Zielinski</b>

# Poster Session

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## Digital Presentations

**Lindy Rosal, M.D.**  
**(Surgery)**

Parry, L. M.D., D. Keller MS M.D., J. Ouellette D.O., R. Tuttle M.D., C. Johnson M.D., V. Obias M.D., M. Hellan M.D.

*Robotic-assisted Abdominoperoneal Resection for Malignant Disease of the Low Rectum and Anus: A Multi-Center Review*

**Lindsey Weigand, D.O.**  
**(Surgery)**

Carla Christ, M.D., Minia Hellan, M.D., James Ouellette, D.O., Rebecca Tuttle, M.D.

*Management of thin melanomas in the community hospital setting*

## Traditional Poster Presentations

**1 Karl de Dios, M.D.**  
**(Genetics)**

*Phenotypic Presentation of three patients with Hyperprolinemia*

**2 John Allen**  
**(Neuroscience, Cell Biology, and Physiology)**

Sherif Elbasiouny, Ph.D., P.E., P.Eng.

~~*A computational motor neuron pool model for the development of motor decoder algorithms for prosthetic control*~~

**3 Brian Cothorn, M.D.**  
**(Internal Medicine)**

Brian Cothorn, M.D., Taylor Gardner, E. Samuel Roberto, M.D., Thein Tun Aung, M.D., Anwarul Kabir, M.D.(Attending Cardiologist)

*Coronary Artery Fistula Presenting as Myocardial Infarction: Case Study and Review of Operative Management with Percutaneous versus Surgical Intervention.*



**4 Siham Abdullah  
(Pharmacology and Toxicology)**

*Effect of CRISPR-mediated genetic edits of the hs1,2 enhancer on  $\epsilon$  IGH expression in U266 Cells*

**5 Parvaneh Nouri  
(Neurology)**

Tom Pitts M.D., Kiran Poudel M.D., Bradley Jacobs M.D., Bryan Ludwig M.D.

*Rapid Aneurysm Formation And Multiple Ischemic Infarcts In A Patient With Aspergillus Endocarditis.*

**6 Parvaneh Nouri  
(Neurology)**

Allison Briggs, D.O., Parvaneh Nouri, B.S., Jerome L. Yaklic, M.D., Rose Maxwell, Ph.D., Kathleen O'Leary, M.D., and Steven R. Lindheim, M.D., MMM

*Preliminary Findings Regarding Patients' Attitudes Towards Genetic Carrier Testing*

**7 Parvaneh Nouri  
(Neurology)**

Allison Briggs, D.O., Parvaneh Nouri, BS, Kathleen O'Leary, M.D., Jerome L. Yaklic, M.D., Rose Maxwell, Ph.D., and Steven R. Lindheim, M.D., MMM

*Expanded Genetic Carrier Screening (E-GCS) in Clinical Practice: A Current Survey of Physician Impressions and Attitudes*

**8 Nicole Panstingel  
(Pharmacology and Toxicology)**

Bassam Kashgari, M.S. and Courtney Sulentic, Ph.D.

*Elucidating the Physiological and Toxicological Role of the AhR in Human Ig Expression Using CRISPR/Cas9 Gene Editing*

**9 Ekaterini Lordanou  
(Genetics)**

Samantha Rhine, Kara Withrow, M.S., C.G.C., Colleen Jackson-Cook, M.S., Ph.D.

*Confirmed diagnosis of Roberts syndrome/SC phocomelia in an individual with two novel truncating ESCO2 variants and mild rhizomelic shortening*

10 **Alison Bales**  
**(Surgery)**

Robert C. Siska, David J. Dennis, Anthony R. OdD.O., Echo VanderWal, PAC, Harry VanderWal, M.D., Ronald Markert, Ph.D., Mary C. McCarthy, M.D.

*Should Extraperitoneal Bladder Injuries be Repaired at the Time of Pelvic Fixation?*

11 **Alison Bales**  
**(Surgery)**

Kevin F. Purcell, Julie Ferraiola, M.D., Ronald J. Markert, Ph.D., A. Peter Ekeh, M.D., Gregory R. Semon, D.O., Diane M. Kimpel, CNS, Michael J. Prayson, M.D., Mary C. McCarthy, M.D.

*Application of Medical Student Research Objectives in an International Medical Elective: Voluntary Medical Male Circumcision in Swaziland*

12 **Amjad Aljagthmi**  
**(Biochemistry and Molecular Biology)**

Natasha T. Hill, Suraj Sakaram, Madhavi Kadakia, Ph.D.

*$\Delta Np63\alpha$  suppresses EMT by targeting RAC1 through miR320a*

13 **Spencer Barnhill**  
**(Neuroscience, Cell Biology, and Physiology)**

Dr. Lucile Wrenshall, M.D., Ph.D., Prakash Arumugam

*IL-2 Receptor Expression in Atherosclerotic Plaque Vascular Smooth Muscle Cells*

14 **April Daubenspeck**  
**(Emergency Medicine and Biomedical Sciences Ph.D. Program)**

David Cool, Ph.D., Bryan Ludwig, M.D., James Olson, Ph.D.

*A novel approach to ischemic stroke biomarker discovery*

15 **Dan Halm, Ph.D.**  
**(Neuroscience, Cell Biology, and Physiology)**

Susan Halm

*Survival and growth of C57BL/6J mice lacking the BK channel(KCa1.1)*

- 16 **Amr Mahrous**  
**(Neuroscience, Cell Biology, and Physiology)**  
Sherif Elbasiouny, Ph.D., P.E., P.Eng.  
*SK channel inhibition is critical for initiating motoneuron bursting and grading the motor output of the spinal cord*
- 17 **Taylor Miller**  
**(Biochemistry and Molecular Biology)**  
Julian Gomez-Cambronero, Ph.D.  
*Regulatory Relationship between PLD2 and PARN: Activation of PARN Ribonuclease by Phosphatidic Acid (PA)*
- 18 **Suraj Sakaram**  
**(Biochemistry and Molecular Biology)**  
Suraj Sakaram, Ethan D. Grant, Andrew J. Whitlatch, Natasha Hill, Michael Craig, Ph.D. and Madhavi P. Kadakia, Ph.D.  
*JNK Regulation of  $\Delta Np63\alpha$*
- 19 **Christopher Waker**  
**(Neuroscience, Cell Biology, and Physiology)**  
Renee Albers, Richard Pye, Ph.D., Savannah Doliboa, Christopher Wyatt, Ph.D., Thomas Brown, Ph.D., and Debra Mayes, Ph.D.  
*AMPk knockdown in placental labyrinthine progenitor cells results in altered differentiation and restriction of critical energy resources*
- 20 **Hitham Aldharee**  
**(Biochemistry and Molecular Biology)**  
Weiwen Long, Ph. D.  
*ERK3's role in regulating RhoGDI-PAK signaling axis in Cancer*
- 21 **Shimpi Bedi**  
**(Biochemistry and Molecular Biology)**  
Heather A Hostetler, Ph.D. and Stanley D. Rider, Jr., Ph.D.  
*Critical roles of helices 9 and 10 in mediating heterodimerization between LXR alpha mediated complexes*

- 22 **Ramya Ganesan**  
**(Biochemistry and Molecular Biology)**  
Vasile I Pavlov, M.D., Karen Henkels, Gregory Stahl, Ph.D. and Julian Gomez-Cambroner, Ph.D.
- Myocardial Ischemia/Reperfusion Injury is Mediated by Neutrophils through Activation of Phospholipase D (PLD) and mTOR*
- 23 **Hadel Alsaran**  
**(Biochemistry and Molecular Biology)**  
Lobna Elkhadragey and Weiwen Long, Ph.D.
- Functional characterization of ERK3 mutants existing in human cancers*
- 24 **Minyi Chen**  
**(Biochemistry and Molecular Biology)**  
Michael Markey, Ph.D., Weiwen Long, Ph.D.
- Regulation of ERK3 by BRAF/BRAFV600E in melanoma*
- 25 **Reilly Clark**  
**(Biochemistry and Molecular Biology)**  
Jin Zhang, Ph.D., Michael Craig, Ph.D., Sangeeta Agrawal, MBBS, Madhavi Kadakia, Ph.D.
- Differential microRNA Expression in Esophageal Adenocarcinoma*
- 26 **Kristen Fite**  
**(School of Medicine)**  
Julian Gomez-Cambroner, Ph.D.
- A Repertoire of MicroRNAs Target Phospholipase D (PLD) to Inhibit Breast Cancer Cell Invasion*
- 27 **Michael Kemp, Ph.D.**  
**(Pharmacology and Toxicology)**  
Dan Spandau, Jeff Travers, M.D., Ph.D.
- Effect of Insulin-like Growth Factor-1 (IGF-1) Signaling on Cellular Responses to UV-induced DNA Damage*

- 28 **Jeremy Kress**  
**(Biomedical, Industrial and Human Factors Engineering)**  
Daniel J. Rohrbach, Ph.D., Jonathan Lovell, Ph.D. and Ulas Sunar, Ph.D.
- Quantitative Optical Imaging of Light-Triggered Doxorubicin Release for Treatment of Ovarian Cancer*
- 29 **Morgan Manley, D.O.**  
**(Internal Medicine)**  
Katelyn Booher, D.O., Roberto Col`on, M.D.
- The Proof is in the Pudding: Cultures tell all in PET Scan resembling malignancy and metastases*
- 30 **Morgan Manley, D.O.**  
**(Internal Medicine)**  
Satej Pradhan, D.O. , Ted A. Spiewak, OMS IV, E. Samuel Roberto M.D., David Lindholm, M.D.
- Cryptosporidium-associated Pancreatitis in an Immunocompetent Female during an Outbreak in Ohio*
- 31 **Chien Poon**  
**(Biomedical, Industrial and Human Factors Engineering)**  
Jeremy Kress, M.S., Daniel Rohrbach. Ph.D., Jeffrey Travers, M.D., Ph.D., Ping He, Ph.D. and Ulas Sunar, Ph.D.
- Combined Ultrasound and Optical Imaging for Skin Disease Characterization*
- 32 **Syed Zaidi**  
**(Biomedical, Industrial and Human Factors Engineering)**  
Jeremy Kress, M.S., Daniel J. Rohrbach, Ph.D. and Ulas Sunar, Ph.d.
- Optical Redox Imaging of Neuronal and Cancer Activity*
- 33 **Ronak Ghiya**  
**(School of Medicine)**  
Elaine Kim, Anthony Oddo
- Amyotrophic Lateral Scleroris Presenting As A Paraneoplastic Neurological Syndrome with Multiple Myeloma: A Case Report*

- 34 **Erica Seabold**  
**(Surgery)**  
Emily Sweet, M.D., Akpodure Peter Ekeh, M.D., Karen Herzing, RN; Ronald Markert, Ph.D.; Alyssa Gans, M.D.  
  
*Laparoscopic Cholecystectomy in the Acute Care Surgery Model: Risk Factors and Complications*
- 35 **Daniel Keltner**  
**(School of Medicine)**  
Juanita Draime, Pharm.D., Paige Sutton, Rachael Libertin, M.D., Stephanie Welsh  
  
*STEPS Towards Better Health Care Delivery:A Student-Led Multidisciplinary Approach*
- 36 **Charles Grant, III**  
**(Family Medicine)**  
Lisa Righter, M.D., Christen Johnson  
  
*Wait Times and Patient Satisfaction at Five Rivers Health Center in Dayton, Ohio*
- 37 **David Dennis**  
**(Internal Medicine)**  
Katherine Ochs, Anna-Maria South, M.D., Dean Bricker, M.D.  
  
*Beliefs and Attitudes of Chronic Opiate Prescribing*
- 38 **Alan Avila-John**  
**(Community Health)**  
Jason Fruth, Ph.D., Patrick Fletcher, Tessa Miracle  
  
*Universal Prevention and Addressing Gender Inequality in Classrooms*
- 39 **Andrew Stacy**  
**(Biomedical Sciences)**  
Natasha T. Hill, Jin Zhang, Michael Craig, Ph.D., and Madhavi P. Kadakia, Ph.D.  
  
*Tip60 and  $\Delta Np63\alpha$ : Potential Implications in Cancer and Aging*
- 40 **Madhavi Kadakia, Ph.D.**  
**(WSRI)**  
Bruce Howard, Michael Raymer, Michael Markey, Michael Craig, Jin Zhang, Marcas Bamman, David Sweatt, Joseph Ecker, Ronald Evans, Madhavi Kadakia and Timothy Broderick  
  
*PHITE Precision High Intensity Training through Epigenetics*

- 41 **Matthew Dancy**  
**(Neuroscience, Cell Biology, and Physiology)**  
Morgan Miller, Teresa Garrett, Sherif Elbasiouny, Ph.D.  
*A Comprehensive Approach for Efficient Monitoring of Motor Function in ALS*
- 42 **Haitham Alabsi, D.O.**  
**(Neurology)**  
Nicole Hogan, M.D., Chris Zust  
*"In the Eye of the Beholder: A Case of Orbital Necrotizing Xanthogranuloma with Metastasis to the Brain"*
- 43 **Jennifer Rehbein**  
**(Neurology)**  
Tom Pitts M.D., Barbara Phillips M.D, Ania Pollack M.D,  
*A Rare Case Of Spinal Glioblastoma Multiforme In A Young Patient*
- 44 **Andrew Steffensmeier**  
**(Orthopedic Surgery and Internal Medicine)**  
Karen Kirkham, M.D., John Wiemann, M.D.  
*Core Decompression with Synthetic Grafting as a Joint Preservation Strategy in Humeral Avascular Necrosis due to Sickle Cell Anemia - A Case Report*
- 45 **Matthew Thomas**  
**(School of Medicine)**  
Mark J. Adamczyk, M.D.; Melanie M. Morscher, PT; Suneet Sagal M.D..  
*Onabotulinum Toxin A Injections to the Triceps Muscle Unmasks Elbow in Infant Brachial Plexus Birth Palsy: A Case Series*
- 46 **Matthew Gayed**  
**(Surgery)**  
Akpofure Peter Ekeh, M.D., FACS  
*Is There Still A Role For "Selective Management In Penetrating Neck Trauma?"*
- 47 **Chad Hyer**  
**(School of Medicine)**  
Katherine Ochs  
*Extracranial atypical meningioma with comorbid fibromyalgia: A case report*

48 **Lucas Harrison**  
**(School of Medicine)**  
Károly Markó, Ph.D., Éva Mezey, M.D., Ph.D.

*Studies on the Contribution of the Neural Crest to Hematopoietic Organ Development*

49 **Angela Campo**  
**(Biomedical Sciences)**  
Nick Reo, Ph.D., Urszula Warncke, Beata Lecka-Czernik, Ph.D.

*Diet Effects of Adipose Tissue Lipid Composition in Mice*

50 **Patrick McCullough, M.D.**  
**(Psychiatry)**  
Robert P Heaney M.D.

*Correction Of Vitamin D Deficiency Using Sublingually Administered Vitamin D2 In A Crohn's Disease Patient With Mal-Absorption And A New Ileostomy.*

51 **Patrick McCullough, M.D.**  
**(Psychiatry)**  
Douglas Lehrer M.D.

*Marked Clinical Improvement Following Treatment With Vitamin D3 In 3 Long-Standing, Poorly Controlled Cases Of Asthma, Crohn'S Disease, And Epilepsy, Using Daily Oral Doses Ranging From 20,000 International Units (Iu) To 40,000 Iu.*

52 **Patrick McCullough, M.D.**  
**(Psychiatry)**  
Jeffrey Amend R.N.

*Results Of Daily Oral Dosing With Up To 60,000 International Units (Iu) Of Vitamin D3 For 2 To 6 Years In 3 Adult Males.*

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