



# **RESEARCH AND INNOVATION MANUAL**

## **2016-2017**

**University of Pikeville**  
**Kentucky College of Osteopathic Medicine (UP-KYCOM)**

**RESEARCH AND INNOVATION**  
**2016-2017**  
**TABLE OF CONTENTS**

	<b>Page(s)</b>
<b>Mission Statement(s)</b> .....	3
<b>KYCOM Goals and Objectives</b> .....	4
<b>Our History and Commitment to Rural Medicine</b> .....	5
<b>KYCOM Research Background</b> .....	6-9
<b>Faculty Research</b> .....	9-10
<b>Faculty Research Projects</b> .....	10-12
<b>KYCOM Student Summer Research Fellowship Projects</b> .....	12-16
<b>OFP Journal Student Peer Writing and Review Interns</b> .....	16
<b>Resources</b> .....	17-20
<b>Funding Opportunities</b> .....	20-24
<b>Useful links</b> .....	24
<b>KYCOM Strategic Overview and Mission/ Vision and Strategic Plan</b> .....	25
<b>Research Strategic Goals: 2016-2018</b> .....	26-27
<b>Conclusion</b> .....	28
<b>Contact Information</b> .....	29-31
<b>Note Pages</b> .....	32-33

# Mission Statement

## University of Pikeville Mission Statement

The University of Pikeville is the leading higher education institution of Central Appalachia. Founded in 1889, UPIKE remains steadfast in our commitment to preparing students for the future while creating intellectual, cultural, and economic opportunities for Appalachia. Maintaining our commitment to Christian principles, UPIKE recognizes the infinite worth of each person, respecting a variety of religious expressions.

UPIKE achieves its mission by:

- Creating a pathway to higher education for all students who desire to embark upon that journey and attracting and retaining high caliber students who will be future regional, national, and global leaders.
- Preparing graduates through quality academic programs, grounded in the liberal arts, and through involvement in community service, experiential learning, research, athletics, humanitarian efforts and global outreach.
- Achieving academic excellence by maintaining academic rigor and relevancy in undergraduate, graduate, and professional degree programs.
- Attracting and retaining distinguished faculty, staff, administrators, trustees, and alumni who are dedicated to meeting the individual needs of students, promoting a caring and supportive environment conducive to learning and meeting the needs of an evolving university; and
- Providing superior infrastructure with state-of-the-art classrooms, clinics, instructional materials, physical facilities, technological infrastructure and campus amenities through sound fiscal policy and efficient and effective administrative services.

## University of Pikeville-Kentucky College of Osteopathic Medicine (UP-KYCOM)

### Mission Statement

#### Mission Statement

The mission of the University of Pikeville-Kentucky College of Osteopathic Medicine (UP-KYCOM) is to provide men and women with an osteopathic medical education that emphasizes primary care, encourages research, promotes lifelong scholarly activity, and produces graduates who are committed to serving the health care needs of communities in rural Kentucky and other Appalachian regions.

## Goals and Objectives

The Kentucky College of Osteopathic Medicine (KYCOM) educates its students to become competent and compassionate osteopathic physicians. Given KYCOM's mission, its emphasis is on developing primary care physicians for underserved and rural communities. The following goals and objectives guide attainment of the KYCOM mission:

1. To recruit and graduate osteopathic medical students who are dedicated to alleviating the shortage of medical services in rural and underserved areas of Kentucky, Appalachia, and the nation.
  - a. Recruit students from Kentucky, Appalachia, the neighboring region, and other rural and underserved areas.
  - b. Recruit students with a strong desire to practice patient-centered medical care in medically underserved communities.
2. To offer a curriculum that integrates a strong foundation of medical knowledge with the professional, cultural, and ethical traits desired in its students and graduates.
3. To educate osteopathic medical students in the art and science of osteopathic medicine using the most current research in clinical and basic science.
  - a. Provide opportunities for research and scholarly activity for students and faculty.
  - b. Advance medical knowledge and the quality of health care through educational, scientific, and clinical research.
4. To provide a curriculum that promotes and measures student competencies to enhance the development of future osteopathic physicians who are competent practitioners of patient-centered, quality medical care.
  - a. Prepare students to pass the COMLEX-USA board exams.
  - b. Incorporate clinical teaching throughout the four-year curriculum.
  - c. Promote the acquisition of the core competencies during student clinical rotations.
  - d. Develop and maintain clinical education sites in rural and underserved Kentucky and Appalachian areas that promote providing rural primary care within our region.
5. To prepare physicians committed to improving access to quality, competent, and patient-centered medical care for all, with an emphasis on developing primary care physicians for underserved and rural communities.
6. To support the Appalachian Osteopathic Postgraduate Training Institute Consortium (A-OPTIC) in the development of postgraduate educational opportunities that advance the training of our students, residents, and faculty.
7. To prepare KYCOM students to enter and succeed in postgraduate training programs.
8. To cultivate an appreciation of lifelong learning in KYCOM students and graduates through the development of scholarly inquiry skills.

## Our History

“PCSOM is proudly committed to providing the Appalachian region with highly trained, competent, confident, and patient-friendly primary care osteopathic physicians.” -John A. Strosnider, D.O. *Founding Dean*

*Note: Effective on July 1, 2011, the name of Pikeville College School of Osteopathic Medicine (PCSOM) changed to the Kentucky College of Osteopathic Medicine (KYCOM).*

A group of influential businessmen and public officials began to investigate the possibility of establishing a medical school in Eastern Kentucky in the early 1990s. The supporters believed that the creation of an osteopathic medical school would be the best way to help alleviate the shortage of primary care physicians in rural Eastern Kentucky. Support of the development of an osteopathic medical school for this region arose from the fact that osteopathic physicians tend to stay in rural areas and in family practice. KYCOM enrolled its first students in 1997.

## Commitment to Rural Medicine



KYCOM offers a four-year program toward attainment of the degree of Doctor of Osteopathic Medicine (D.O.). The school’s purpose is to educate future primary care physicians to practice in rural Kentucky and other underserved areas. KYCOM opened in 1997 with an entering class of 60 students, and then grew to a class size of 75 students in 2008. The Commission on Osteopathic College Accreditation (COCA) granted approval to KYCOM to increase the size of its entering class to 135 students beginning with the Class of 2016 that entered July 30, 2012, with the opening of the Coal Building.

KYCOM continues to receive national recognition for its commitment to educating osteopathic physicians who practice in rural areas that are medically underserved, particularly within Kentucky.

# KYCOM RESEARCH

## Background

The KYCOM mission statement includes the following: "... [KYCOM] encourages research, promotes lifelong scholarly activity..." This commitment is reinforced by the following goals as stated in the Spring 2015 KYCOM Faculty handbook:

- Goal 3 – "Provide opportunities for research and scholarly activity for students and faculty; [and] b. Advance medical knowledge and the quality of health care through educational, scientific, and clinical research."
- Goal 8 – "Cultivate an appreciation of lifelong learning in KYCOM students and graduates through the development of scholarly inquiry skills."

Research methods, biostatistics, and critical evaluation of the medical literature are core instructional components of the Osteopathic Patient Care (OPC) course series in Years 1 and 2. KYCOM faculty, staff, and students are encouraged to participate in scholarly activities in their area of interest, which includes, but is not limited to: bench-level research, community health, medical education, medical education research, patient care research, and social/behavioral research.

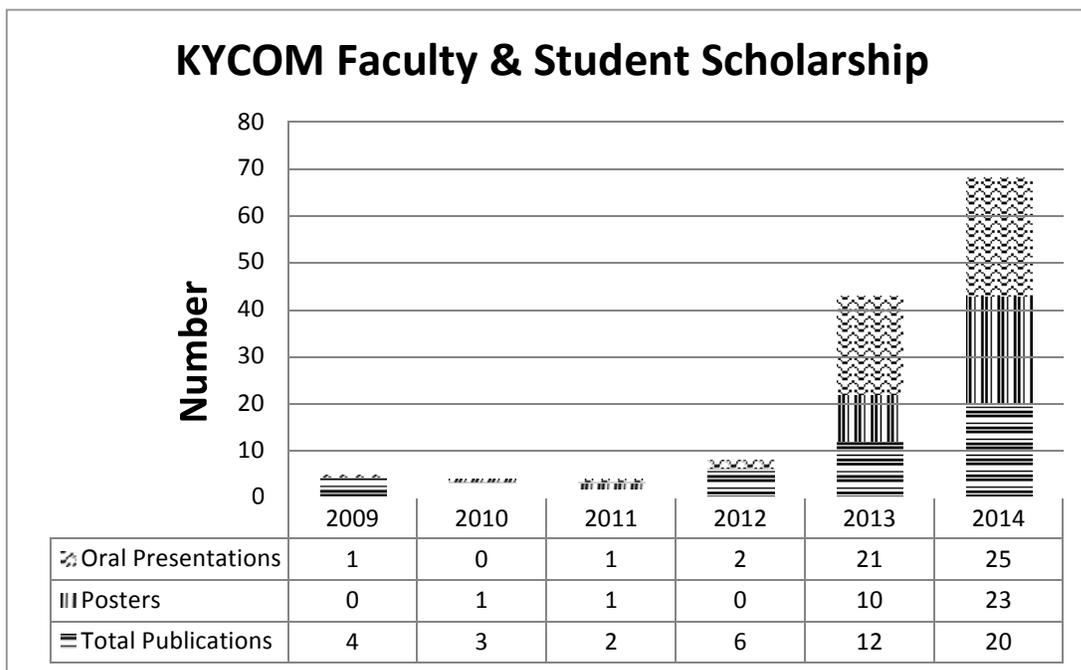
Since the 2008 Commission on Osteopathic College Accreditation (COCA) site visit over 130 publications, posters, and oral presentations have been produced by KYCOM faculty and students. The COM faculty adequacy model shows that approximately 30 percent of faculty time is available for research and scholarly activities and includes a budgeted allocation for intramural funding of faculty research, plus funding for scholarly presentation/scientific meeting attendance.

Overall, KYCOM faculty, staff, and students are actively engaged in research and scholarship, especially in the areas of bench research, medical education research, and medical education. Some areas we have identified where we can improve include enhancing our scholarship efforts in community health, patient care research, and social/behavioral research, which currently accounts for only 12 percent of our research/scholarship activities.

To help support this commitment, the COM sought input from faculty researchers in designing and equipping a dedicated state of the art 2,600 square foot biomedical research laboratory located on the 7<sup>th</sup> floor of the Coal Building (home of KYCOM). In addition to constructing and furnishing the open floor plan facility, the university invested ~\$600K to generously equip the laboratory to conduct research in multiple areas, including cell and molecular investigations, tissue cultures and microbiological studies. For potential studies involving human subjects, KYCOM and the UPIKE College of Arts and Sciences chartered an Institutional Review Board in December 2013 that began reviewing and approving proposals in May 2014. The university also designated a grants officer in July 2011.

Since 2008, as shown in the graph below, KYCOM faculty and staff have logged 47 publications. Compared to 2010, publications (journals, books, book chapters, grants, and

patents) authored by KYCOM faculty doubled in 2012, doubled again in 2013 and increased appreciably in 2014.



Our published manuscripts are diverse, ranging from basic science articles, to osteopathic clinical articles, to COMLEX & USMLE Review books and chapters. Notably, KYCOM launched a Student Summer Research Fellowship program that was instituted in 2012 by Dr. Peter Zajac, who served as Chair of the Research committee, and funded in 2013 by our Dean. To date, 29 COM students have participated in the program: 24 received funding and five agreed to do so non-funded by the program. Their research projects covered a wide spectrum of interest areas, including osteopathic and allopathic patient care areas, behavioral science and basic science (molecular and microbiology). In addition to being exposed to research methods, these students gave oral and poster presentations of their findings. One student, Ravi Raithatha (KYCOM Class of 2016) won 1<sup>st</sup> place for his poster at the 2014 Ohio Osteopathic Symposium.

Another outcome directly due to the KYCOM Student Summer Research Fellowship program is its role in encouraging dialogue with university undergraduate science faculty and students. Ben Clayton, Ph.D., an undergraduate chemistry professor, has been actively involved by mentoring KYCOM students in cannabinoid analog research during both years of this program. Interestingly, in 2014 this summer research opportunity attracted two undergraduate students, who were mentored by KYCOM faculty, and funded by an external agency – The Ledford Scholarship. Thus, this successful and popular program not only benefits our COM faculty and students, but is a conduit to expose undergraduate students to research, and increase their awareness of osteopathic medicine.

KYCOM’s clinical research efforts are supported through our OPTI, the Appalachian Osteopathic Postgraduate Training Institute Consortium (A-OPTIC), which provides linkages to Practice-Based Research Networks (PBRN). The Frontier Rural Innovations Network (FRIN) is

a national PBRN that includes members from Colorado, Kentucky, Mississippi, and Montana. A key focus of the FRIN is improvement of the frontier and rural healthcare delivery process to meet the Triple Aim: Better Outcomes, Better Healthcare, and Better Healthcare Value. A-OPTIC is a founding member of FRIN. KYCOM also is a member of the Consortium for Collaborative Osteopathic Research Development - Practice Based Research Network (CONCORD-PBRN), based at UNTHSC-TCOM. Peter Zajac, D.O., FCOFP, KYCOM's Director of Clinical Skills Training, serves on the Executive Advisory Board and Steering Committee of this PBRN.

KYCOM also is a founding member of the Central Appalachian Consortium of Colleges of Osteopathic Medicine (CACCOM). The Consortium is funded by a six year, \$3.5 million grant from the Osteopathic Heritage Foundations. The four founding colleges of osteopathic medicine include KYCOM, Ohio University-Heritage College of Osteopathic Medicine, Lincoln Memorial University-DeBusk College of Osteopathic Medicine and the West Virginia School of Osteopathic Medicine. The guiding principles of the consortium include a focus on research activities that can best be done together and that none of the colleges can fully accomplish by themselves, as well as improving health outcomes in central Appalachia through innovations in the preparation of the osteopathic physician workforce. The CACCOM members were informed of the approved funding of the program in the amount of \$2.3 million over five years in January, 2015. This alliance will assist us in identifying research activities that can best be accomplished together and that none of the COMs can fully accomplish by themselves, as well as improving health outcomes in central Appalachia through innovations in the training of osteopathic physicians. We have hired the Research Coordinator funded by this grant, who will additionally assist KYCOM in our research infrastructure.

In addition to the construction and equipping of the 2,600 square foot bench research facility, KYCOM states its expectation for scholarship and research in the university strategic plan. To support this expectation, there is a research committee for oversight, the faculty adequacy model provides for protected time for scholarship, and funds are available for faculty and student scholarship and research.

The University of Pikeville's expectation for and support of research and scholarship is interwoven throughout the 2013-2016 University of Pikeville Strategic Plan. Beginning on electronic page 3 of the PDF, the third element (Commitment to Education) of the Statement of Mission reads: "...KYCOM...encourages research..." On electronic page 52 (printed page 48) of the PDF, Basic Science's third goal directly targets research: "Make contributions to the advancement of knowledge and the development of osteopathic medicine through scientific research," with four key performance indicators documenting financial support for internal grants, professional meeting attendance, maintenance of research equipment, and an expectation that faculty will apply for external funding.

Oversight of KYCOM internal research is provided by the research committee, which consists of a mixture of clinical and basic science faculty. The committee is chartered to oversee research sponsored by internal grants supporting faculty and students. They have issued guidance documents for faculty and students desiring to apply for these funds. They also have oversight for the expenditure of these funds. The COM faculty adequacy model shows that approximately 30% of faculty time is available for research and scholarly activities.

In addition to the funds noted above, the Dean sets aside funding to support internal faculty and student research. There is \$50,000 for internal faculty grants, with a maximum of \$10,000 for an individual faculty member. These funds are also available for new faculty and

can be used for laboratory start-up. Beginning in 2013, the Dean earmarked an additional \$15,000 annually to support the KYCOM Student Summer Research Fellowship program. Each student fellow receives a \$2,000 stipend and up to \$400 for supplies. Additionally, the COM pays for travel to at least one annual approved scientific meeting for all full-time faculty members.

## **Faculty Research**

Faculty research clearly is an important aspect of Osteopathic medical education, both to keep faculty involved in and abreast of medical techniques, diagnosis, and scientific breakthroughs, as well as offering students opportunities to explore their research passions and interests.

The University of Pikeville-Kentucky College of Osteopathic Medicine currently provides a variety of research opportunities for interested students. In addition, faculty is actively working to increase and improve research opportunities within the COM, as well as through external sources.

Students interested in participating in research have a variety of opportunities available to them, including partnering with on-campus faculty researchers who also serve as their mentors, participating in research programs at one of many off-campus institutions or continuing to explore their own research interests.

The University of Pikeville-Kentucky College of Osteopathic Medicine faculty is currently engaged in biomedical, clinical, educational, molecular/cellular, and translational lines of research. Much of the research done by our biomedical science faculty is conducted on campus in our research facility located on the 7<sup>th</sup> floor of the Coal Building.

## **KYCOM Faculty Engaged in Research**

- Daniel Atchley, Ph.D.
- Boyd Buser, D.O., FCOFP
- Michael Carnes, D.O.
- Joshua Crum, D.O.
- Gergana Deevska, Ph.D.
- Laura Griffin, D.O.
- Antoinette Justice, D.O.
- Jerry Laurich, Ph.D.
- Warren Lushia, Ph.D.
- Larry Oteham, D.O.
- Maiyon Park, Ph.D.

- Renay Scales, Ph.D.
- Dana Shaffer, D.O., FACOFP
- Edward Stiles, D.O.
- Josh Watson, Ph.D.
- Michael Younger, Ph.D.
- Peter Zajac, D.O., FACOFP (HRSA Grant reviewer)

## Faculty Research Projects

Completed, Current, or Pending Research Projects as of August 2015

Daniel Atchley, Ph.D., Jerry Laurich, Ph.D., Michael Younger, Ph.D., Peter Zajac, D.O., *etal.*  
*Diabetes in Big Sandy - The 1,000 Test Challenge (Status: Pending)*

Gergana Deevska, Ph.D. *Role of sphingolipid metabolism in obesity-related pathophysiology*

John C. Licciardone, D.O. ...Peter Zajac, D.O. *etal.* *Comparative Effectiveness of Treatments Used by Patients with Episodic Acute Low Back Pain in Preventing Pain Chronicity (Status: Complete Application submitted to PCORI for grant funding –Non-Funded)*

John C. Licciardone, D.O. ...Peter Zajac, D.O. *etal.* *Somatic Dysfunction and Use of Osteopathic Manual Treatment Techniques during Ambulatory Medical Care Visits: A CONCORD-PBRN Study (Status: Completed and Study published in the Journal of the American Osteopathic Association May 2014, Vol. 114, 344-354. doi:10.7556/jaoa.2014.072)*

Maiyon Park, Ph.D... *Cashew and mango as dietary supplements for pancreatic cancer patients: based on the study from Anacardic Acid*

Maiyon Park, Ph.D. *Molecular mechanisms of novel therapeutics in pancreatic cancer*

Edward Stiles, D.O. *Emerging Clinical Research Model for the Mesokinetic System*

Josh Watson, Ph.D. *Characterization of novel pathologic genes in Type-2 diabetes*

J. Michael Younger, Ph.D. *Defining Specific Roles for cIAP-1 and cIAP-2 in Inflammatory Responses*

J. Michael Younger, Ph.D. *Development of the Aiptasia model system for use in human health research*

Peter Zajac, D.O. *Evaluating Competency – Performing Competently (Funded by AACOM Grant)*

## **Appalachian College Association Annual Summit XIX**

**JoBeth Bingham** -University of Pikeville undergraduate student won best poster presentation (one of three recognized) on her project entitled ‘O-GlcNAc and Lifespan in *Drosophila melanogaster*’.

Kingsport, TN on September 29-October 1, 2016

**Mentor:** Dr. Josh Watson -Assistant Professor of Physiology at KYCOM.

**Valerie Eversole** -University of Pikeville undergraduate student won best oral presentation (one of six recognized) for her project entitled ‘Examining whether AA exerts anti-tumor activity in Capan-2 and BxPC-3 cells originated from less aggressive pancreatic adenocarcinomas’.

Kingsport, TN on September 29-October 1, 2016

**Mentor:** Dr. Maiyon Park - Assistant Professor of Physiology at KYCOM.



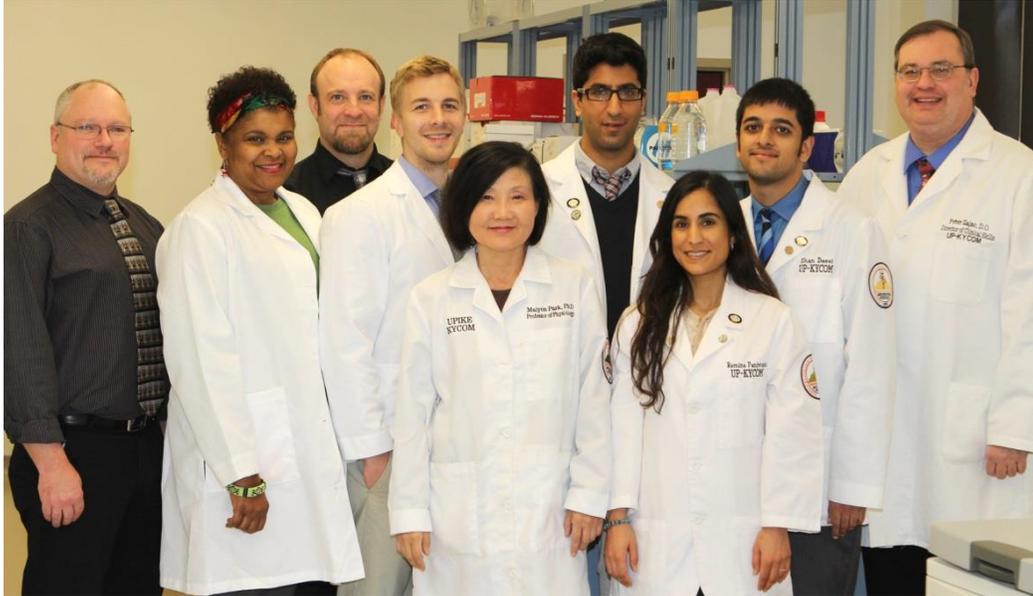
### **Appalachian Osteopathic Postgraduate Training Institute Consortium**

#### **Current Research Projects as of August 2015**

- Joshua Crum, D.O. *Evaluation of a Peer-Reviewed Case-Based Curriculum for Third and Fourth Year Medical Students Developed by Residents and Clinical Faculty on COMLEX II Scores and Student Satisfaction*
- Larry Oteham, D.O. *Evaluation of Participation in Supplementary Educational Activities during Core Clerkship Rotations on COMLEX Level II Scores*
- Boyd Buser, D.O. and Larry Oteham, D.O. *Evaluation of an Online Workshop to Develop Resident Proficiency in Coding for OMM*
- Ryan Singerman, D.O. and Joshua Watts, D.O. *An investigation into the prevalence of piriformis syndrome (PS) in patients with sciatica and evaluation of the effectiveness of a Strain-Counterstrain Osteopathic treatment for PS*
- Roberto Cardarelli, D.O., Dana Shaffer, D.O., and David Reese, MPH. *Raising Awareness About Lung Cancer Screening: Kentucky Terminate Lung Cancer (TLC) Study*
- Joel Dickerman, D.O. *Evaluation of the use of social media (Facebook) in promoting the development of fundamental research skills in third and fourth year medical students*
- Joel Dickerman, D.O. *Evaluation of an online learning program in Care Transitions for third year medical students on inpatient internal medicine rotations*
- Roberto Cardarelli, D.O. and Faith Jones, RN. *Lessons Learned: A Mixed Methods Analysis of Barriers to Swing Bed Utilization in Critical Access Hospitals in Montana*

- Brenda Korte, Ph.D. *AdoptPOC: Improving Rural Health Outcomes through Evidence-Informed Adoption and Implementation of Point-of-Care Technologies*
- Methodist Family Medicine Residency, Henderson, KY. *Reducing Readmissions for COPD Patients*

## KYCOM Student Summer Research Fellowship Projects



**Photo** (From left to right): Michael Younger, Ph.D., Renay Scales, Ph.D., Warren Lushia, Ph.D., Osteopathic Medical Student: Lacy S. Handshoe, Maiyon Park, Ph.D., Osteopathic Medical Students: Ravi Raitkata, Remina Panjwani, and Shan Desai, Peter Zajac, D.O., FACP

### 2013

**\*\*\*Non-funded by KYCOM Student Summer Research Fellowship Program**

#### 1. **Kolton Brusveen**

- **Mentor:** Dr. Larry Oteham

**Title of Project:** *An investigation into the prevalence of piriformis syndrome (PS) in patients with sciatica and evaluation of the effectiveness of a Strain-Counterstrain Osteopathic treatment for PS.*

#### 2. **Robert Cline**

- **Mentor:** Dr. Benjamin Clayton

**Title of Project:** *Synthesis and Structure –Activity Relationships of Trans-Arachidin-3 Analogs at the Cannabinoid receptors.*

3. **Shan Desai**  
 - **Mentor:** Dr. Eileen H. Bigio  
**Title of Project:** *Investigating the amyloid properties of TDP-43 in ALS and FTLD-TDP.*
  
4. **Lacy Samuel Handshoe**  
 - **Mentor:** Dr. Susan Smyth  
**Title of Project:** *Investigating if LPP3 can regulate the ability of oxidized phospholipids to modulate the phenotype of monocytes in atherosclerosis.*
  
5. **Elvis Njere**  
 - **Mentor:** Dr. Walter Wayne Gearheart  
**Title of Project:** *Epidemiological study of obesity and related disorders in central Appalachia (Presented at the 13<sup>th</sup> Annual Kentucky Rural Health Association Conference in Bowling Green, KY) \*\*\**
  
6. **Remina Panjwani**  
 - **Mentor:** Dr. John Licciardone  
**Title of Project:** *Associations of TNF-alpha with Osteopathic Manipulative Treatment for Chronic Low Back pain in Diabetic Patients.*
  
7. **Ravi Raithatha**  
 - **Mentor:** Dr. Doug Graham  
**Title of Project:** *TAM receptor tyrosine kinases are novel biological targets in pediatric acute myeloid leukemia.*

## 2014

\*\*\*Non-funded by KYCOM Student Summer Research Fellowship Program

1. **Jason Ballengee**  
 - **Mentor:** Dr. Thomas E. Carter  
**Title of Project:** *Ultrasound Guidance in Peripheral Nerve Blocks*
  
2. **Emily Broomell**  
 - **Mentor:** Dr. Daniel Atchley  
**Title of Project:** *Efficacy testing of a Novel Antifungal Hydrogel*
  
3. **Scott Craver**  
 - **Mentor:** Dr. M. Park  
**Title of Project:** *Investigation of Posttranslational modifications of Chmp1A and their effects on human pancreatic cancer development \*\*\**

4. **Andrew French**  
- **Mentor:** Dr. Michael Younger  
**Title of Project:** *Defining the Role of cIAP1 and cIAP2 in the Regulation of NF-kB Activation*
5. **Jasmine Gray**  
-**Mentor:** Dr. Renay Scales  
**Title of Project:** *A Comparison of Depression Among Osteopathic Medical students and Non-Medical Age Cohorts at Kentucky State University in Higher Education*
6. **Chris Jarzabek**  
- **Mentor:** Dr. Benjamin Clayton  
**Title of Project:** *Cannabinoids as a Therapy for Neurodegenerative Disorders*
7. **Dawn Neal**  
- **Mentor:** Dr. M. Park  
**Title of Project:** *Investigating posttranslational modifications of Chmp1 A and their Roles in Human Pancreatic Tumor Cell growth*

## 2015

\*\*\*Non-funded by KYCOM Student Summer Research Fellowship Program

1. **Lindsey Bierle**  
- **Mentor:** Dr. Atchley  
**Title of Project:** *Potency and Efficacy Testing of a Novel Silver-Citrate Containing Antifungal Oral Wash.*
2. **Melodie Blackmon**  
- **Mentor:** Dr. M. Park  
**Title of Project:** *Examining the Effects of Anacardic Acid Alone, or in Combination with Chemotherapeutics, on PanC-1 Pancreatic Cancer Cells*
3. **Mohammad Bukhari**  
-**Mentor:** National Institutes of Health  
**Title of Project:** *Attention Deficit Hyperactivity Disorder \*\*\**
4. **Brady Holdaway**  
- **Mentor:** Dr. Younger  
**Title of Project:** *Differentiating cIAP1 & cIAP2 Levels in Cancer Cells*
5. **Robert Malinak**  
- **Mentor:** Benjamin Kaffenberger, M.D. at Ohio State University  
**Title of Project:** *Trousseau syndrome \*\*\**

- 6. Michael (Jordan) Mullin**  
- **Mentor:** Dr. Younger  
**Title of Project:** *The role of CIAP1/CIAP2 in NFK-B expression*
- 7. Leah Patullo**  
- **Mentor:** Dr. Alison Kriegel from the Medical College of Wisconsin in Milwaukee, WI  
**Title of Project:** *Role of Immune Cells in Chronic Kidney Disease Related Cardiac Pathology*
- 8. Aman Shah**  
- **Mentor:** Dr. Esther E. Dupont-Versteegden, Ph.D. at University of Kentucky  
**Title of Project:** *Role of Massage in Skeletal Muscle Regrowth After Atrophy*
- 9. Lisa Shanahan, OMS IV, Selena Raines, OMS IV, and Rachel Coggins, OMS, IV**  
-**Mentor(s):** Drs. Griffin, Carnes, and Moore  
**Title of Project:** *Osteopathic Manipulative Medicine in the Treatment of Isaac's Syndrome – A Case Report \*\*\**

## 2016

\*\*\*Non-funded by KYCOM Student Summer Research Fellowship Program

- 1. Maria Cacciotti**  
-**Mentor:** Dr. Jeffrey Claridge, M.D.  
**Title of Project:** *Examining New Sepsis Criteria in Severe Burn Patients*
- 2. Marty Erlandson**  
-**Mentor:** Dr. Jackie Van Manen  
**Title of Project:** *Somatic Dysfunction Associated with the Nonverbal Use of Smartphones and Tablets.*
- 3. Derek De Mann**  
-**Mentor:** Dr. Josh Watson  
**Title of Project:** *A Drosophila Model for Understanding the Role of Autophagy in Diabetic Cardiomyopathies.*
- 4. Trusha Mehta**  
-**Mentor(s):** Dr. Antoinette Justice and Dr. Michael Younger  
**Title of Project:** *Quantitative Analysis of the Concentration of Nicotine Exposed to Women During and After Pregnancy.*

**5. Casey Potts**

**-Mentor:** Dr. Esther Dupont-Versteegden, University of Kentucky

**Title of Project:** *Investigating fiber type changes of diaphragm muscle in response to hypoxia in mice with and without satellite cells.*

**6. Zac Slattery**

**-Mentor:** Dr. Park

**Title of Project:** *Septins are oncogenes in pancreatic cancer, which can be suppressed by Chmp1A tumor suppressor protein.*

## **Osteopathic Family Physician (OFP) Journal Student Peer Writing and Review Interns**

*Osteopathic Family Physician (OFP)* is the American College of Osteopathic Family Physician's (ACOFP's) official peer-reviewed journal. The bi-monthly publication features original research, clinical images and articles about preventive medicine, managed care, osteopathic principles and practices, pain management, patient education, public health, medical education, and practice management. As peer review and writing interns our students will have the unique opportunity to be mentored and learn, among other skills, how to review and write original research papers and other types of manuscripts submitted for possible publication.

### **2016**

**Samuel Berry** - Class of 2019

**Omar Bukhari** - Class of 2018

**Nazaneen Farahani** - Class of 2019

**Shandilya Ramdas** - Class of 2019

**Frederick Stine** - Class of 2017

### **2017**

**Mackenzie Denton** - Class of 2019

**Ashton Dixon** - Class of 2019

**Robert Malinak** - Class of 2018

**Sujith Modugula** - Class of 2019

**Thomas Thacker** - Class of 2017

**Jordan Wong** - Class of 2020

# RESOURCES

## **Research Laboratory**

Research experience is encouraged as an integral part of the innovative curriculum at KYCOM. In addition to Faculty research, we recognize the need to give Osteopathic Medical students opportunities to continue their learning experience outside the walls of the classrooms. The nicely equipped state-of-the-art 2,600 square foot research laboratory is located on the 7<sup>th</sup> floor of the Coal Building. In addition to constructing and furnishing the open floor plan facility, the university invested ~\$600K to generously equip the laboratory to conduct research in multiple areas, including cell and molecular investigations, tissue cultures and microbiological studies. Students also have opportunities in clinical and biomedical summer research programs both on campus and off campus at a growing number of other facilities.

## **Gross Anatomy (& Neuroanatomy) Lab**

This large laboratory contains 28 cadaver tables and space for study of radiology images, with all necessary amenities as well as a climate-control and ventilation system that is routinely monitored for compliance with OSHA regulations. For both gross and neuroanatomy lab sessions, it accommodates 140 students at a five student per table ratio. Adjacent to this lab are men's and women's locker rooms with showers, as well as laundry facilities specifically for lab attire.

## **Osteopathic Manipulation Treatment (OMT) Lab**

The entire 9th floor is dedicated to Osteopathic Manipulation Treatment (OMT) Lab, accommodating 74 OMT tables which serve both instructional and clinical missions. The 9th floor also provides office space for three faculty members and four OMM/Anatomy teaching fellows.

## **Clinical Skills Training and Evaluation Center (CSTEC)/Community Clinic**

The University of Pikeville-Kentucky College of Osteopathic Medicine houses 10 patient exam rooms and two high fidelity SIM labs in the Clinical Skills Training and Evaluation Center and clinic located on the 4<sup>th</sup> Floor of the Coal Building that is open to the community. In addition to receiving their Clinical Skills Training in their first two years, a majority of KYCOM students complete their required 4<sup>th</sup> year Osteopathic Manipulative Medicine (OMM) rotation in this facility. The Clinic has full time Osteopathic Clinical Faculty who provide patient services and oversee the students who rotate through the facility during clinical rotations. Many of the patient visits seen in the clinic, as an example, were for neuromusculoskeletal conditions such as low back pain, etc. This clinic also is available for clinical and community research studies.

## **KYCOM Student Research Club**

With student interest in research increasing, in October 2015, with the assistance of the Club's founding faculty advisor, Dr. Peter Zajac, KYCOM students established an Inaugural Research Club to generate further interest, facilitate education, develop and provide research opportunities, and enhance the knowledge in clinical, biomedical, and inter-disciplinary research for KYCOM students. A KYCOM Research club newsletter is in development for publication in the Fall of 2016. In addition, to recognize student research at KYCOM, the Student Government Association (SGA) is establishing an annual KYCOM Student Researcher of the Year (SROY) award. Stipends also are being made available for selected students to present their research projects and exhibit abstract posters at regional and national conventions.

## **KYCOM Research Committee**

KYCOM has a standing research committee composed of basic science and clinical faculty to allow interdisciplinary perspectives in reviewing proposals, and has recently encouraged the submission of clinical and interdisciplinary research proposals, in addition to the more traditional bench research. In recognition of the importance of research to medical education, UP-KYCOM allocates a certain amount of internal funds on an annual basis to be used to support research efforts in the areas of basic medical and clinical sciences, education, and technology. Reasonable research proposals will be given full consideration if the application is considered complete and submitted in a timely manner as requested. A proposal is first submitted to the Research Committee for review and approval, followed by the appropriate Associate Dean, and finally the Dean of the UP-KYCOM for final approval. The UP-KYCOM Research Committee entertains applications on a yearly basis. Additionally, the research committee has approval authority for selecting KYCOM Student Summer Research Fellows (described below).

## **KYCOM Student Summer Research Fellowship Program**

With student involvement in research increasing, our Dean launched a KYCOM Student Summer Research Fellowship Program in 2013 that provides stipends for six KYCOM students to conduct research under the supervision of an on- or off- campus mentor(s) per year. Thus far, 28 students have taken advantage of this opportunity – 24 that were funded and four that volunteered to conduct research projects without funding. Students provide oral and poster presentations of their research findings during the annual KYCOM Research Day. Additionally, KYCOM faculty recently began mentoring UPIKE undergraduate science students in research. During the past two years, seven undergraduates have participated in this scholarship program and each presented their work at the regional annual Appalachian College Association's meeting in Kingsport, Tennessee.

## **Collaborative Institutional Training Initiative (CITI)**

The University of Pikeville and Kentucky College of Osteopathic Medicine subscribes to CITI which provides high quality, peer reviewed, web based, research education materials to enhance the integrity and professionalism of investigators and staff conducting research.

•CITI training <https://www.citiprogram.org/>

## **Interprofessional Education Collaborative (IPEC)**

### **What is Interprofessional Education (IPE)?**

The World Health Organization (WHO) describes IPE as when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes. Interprofessional education is necessary to develop the skills to achieve interprofessional collaborative practice. Interprofessional Collaboration is when multiple health workers from different professional backgrounds work together with patients, families, caregivers, and communities to deliver the highest quality of care.

The Osteopathic Patient Care (OPC) I-IV curriculum in the first thru second year currently includes an interprofessional education collaborative that includes nursing, osteopathic medicine, social work, and pharmacy. This facilitates cross-discipline dialogue and will include students from the new college of optometry. Discussions are underway to expand this to include interdisciplinary research between the same disciplines.

## **Institutional Review Board (IRB)**

The Institutional Review Board (IRB) ensures that research involving human subjects complies with ethical standards set by the federal Office for Human Research Protections (OHRP), which operates within the Department of Health and Human Services (DHHS). All research involving human subjects to be conducted at or supported by UPIKE and KYCOM are subject to review by the IRB and such research may not be conducted without IRB approval. In the event that a specific issue arises that has not been addressed in the policies and procedures document, or the policies and procedures document of the reviewing subcommittee, then the reviewing IRB will follow the guidelines found in The Belmont Report (1979) or Title 45, Code of Federal Regulations, Part 46 (2009, or the most up to date revision). In an effort to promote and support human subject's research and to comply with federal guidelines regarding protecting human subjects during research, UPIKE and KYCOM established and certified an institutional research board (IRB) in December 2013. The IRB is composed of an interdisciplinary team, including members from KYCOMs clinical and basic sciences departments, as well as undergraduate faculty from the UPIKE College of Arts and Sciences nursing, and optometry programs. The IRB meets monthly, and has reviewed and approved 37 proposals since May, 2014.

## Medical Library

The KYCOM Medical Library is located within the CTC, 2 blocks from the Coal Building, and is accessible to students 24 hours a day with valid student identification. The KYCOM Medical Library collection includes books, journals and other periodicals, audio and video content, models, and electronic access to numerous databases and medical education platforms (e.g. Elsevier's Clinical Key). The Library contains seating for 70 students in a combination of lounge chairs, task chairs, chairs and tables, group study rooms and study carrels, and provides access to internet-accessible computers.

## Funding Opportunities

### 1. AACOM- American Association of Colleges of Osteopathic Medicine

<https://www.aacom.org/> AACOM's Grants Program includes awards for medical education research and institutional research.

### 2. AAFP- American Academy of Family Physicians

<http://www.aafpfoundation.org/online/foundation/home/awards-and-grants.html>

The AAFP Foundation's awards and grants programs support and recognize individuals and groups who are making an impact in Family Medicine and improving the health of all people through humanitarian, educational and scientific projects.

### 3. ACOFP- American College of Osteopathic Family Physicians

[www.acofp.org](http://www.acofp.org)

#### Opportunities:

- Osteopathic Family Physician (OFP) Journal: Student Peer Writing and Review Interns
- Annual Scientific Poster Presentations: Call for Poster Presentations –Application and Abstract (ACOFP CME Convention)
- Namey/Burnett Preventive Medicine Writing Award

### 4. AHRQ- Agency for Healthcare Research and Quality

<http://www.ahrq.gov/> AHRQ provides an array of intramural and extramural predoctoral and postdoctoral educational and career development grants and opportunities in health services research. Grant announcements from AHRQ for supporting research to improve the quality, effectiveness, accessibility, and cost effectiveness of health care.

**5. AOA- American Osteopathic Association**

<http://www.osteopathic.org/inside-aoa/development/research>

**Grant Opportunities**

AOA Request for Applications

Other funding opportunities

**6. ARC- Appalachian Regional Commission**

<http://www.arc.gov/>

ARC awards grants to projects that address one or more of the five goals identified by ARC in its 2016–2020 strategic plan and that can demonstrate measurable results.

Typically, ARC project grants are awarded to state and local agencies and governmental entities (such as economic development authorities), local governing boards (such as county councils), and nonprofit organizations (such as schools and organizations that build low-cost housing).

**7. Bill and Melinda Gates Foundation** <http://www.gatesfoundation.org/>

The foundation awards the majority of its grants to U.S. 501(c) (3) organizations and other tax-exempt organizations identified by our staff.

**8. Grants.gov** <http://www.grants.gov/>

Find open grant opportunities organized by category, agency, and eligibility. The site provides links to the funder.

**9. HHS – U.S. Department of Health and Human Services** <http://www.hhs.gov/>

The U.S. Department of Health & Human Services (HHS) contractors and grantees play a valuable role in helping to protect the health of all Americans and provide essential human services. We invite you to learn more about how to work with HHS.

**10. HRSA – Health Resources and Services Administration**

<http://www.hrsa.gov/index.html>

HRSA makes grants to organizations to improve and expand health care services for underserved people, focusing on the following program areas: Health Workforce | HIV/AIDS | Maternal & Child Health | Office of the Administrator | Primary Health Care/Health Centers | Rural Health | Healthcare Systems | Organ Donation

**11. IES – Institute of Educational Sciences** <https://ies.ed.gov/>

**Funding Opportunities for Research and Research Training.** The Institute of Education Sciences has an overarching priority to support research that contributes to school readiness and improved academic achievement for all students and particularly for those whose education prospects are hindered by inadequate education services and conditions associated with poverty, race/ethnicity, limited English proficiency, disability, and family circumstance.

- 12. JSMF – James S. McDonnell Foundation** <https://www.jsmf.org/>  
JSMF believes that private philanthropic support for science is most effective when it invests in the acquisition of new knowledge and in the responsible application of knowledge for solving the real world problems.
- 13. The Josiah Macy Jr. Foundation** <http://macyfoundation.org/>  
The Foundation has two distinct grant programs, awarding Board Grants and discretionary President’s Grants. The Foundation also supports educational innovators in medicine and nursing through its Macy Faculty Scholars program. The Josiah Macy Jr. Foundation is dedicated to improving the health of the public by advancing the education and training of health professionals.
- 14. Kentucky Biomedical Research Infrastructure Network and INBRE**  
See link below for state wide research funding opportunities and due dates:  
  
<http://louisville.edu/research/kbrin/kbrin-cores/research-core/research-core/kbrin-investigator-development-award-idea>
- 15. Kroger Company Foundation Grants**  
The company’s philanthropic objective is to enhance the quality of life in communities with a concentration of Kroger customers and employees. The Foundation was created to help the Company meet this goal.  
<http://www.thekrogerco.com/docs/default-document-library/here.pdf?sfvrsn=0>
- 16. NASA Kentucky Space Grant Programs**  
**Space Grant web page:** <http://nasa.engr.uky.edu/space-grant/>  
  
**NASA internship, fellowship and scholarship programs:**  
<https://intern.nasa.gov/ossi/web/public/main/>
- 17. NIAID- National Institute of Allergy and Infectious Diseases**  
<https://www.niaid.nih.gov/Pages/default.aspx>
- 18. NIH- National Institutes of Health** <http://www.nih.gov/>  
NIH is the largest public funder of biomedical research in the world, investing more than \$32 billion a year to enhance life, and reduce illness and disability? NIH funded research has led to breakthroughs and new treatments, helping people live longer, healthier lives, and building the research foundation that drives discovery.
- 19. Ohio Osteopathic Symposium Poster Competition**  
**Web:** [www.ohiocore.org/research](http://www.ohiocore.org/research)  
**Karen Collins, MPA Program Manager:** [collink3@ohio.edu](mailto:collink3@ohio.edu)

**20. PCORI- Patient Centered Outcomes Research Institute**

<http://www.pcori.org/funding-opportunities>

**What & Who We Fund**

**Research Focus**

**Comparative Clinical Effectiveness Research (CER)**

Studies that compare outcomes to determine the effectiveness, including risks and benefits, of two or more approaches to health care.

**CER Methods and Infrastructure**

Studies to improve the methods available for patient-centered CER.

Development of a large, highly representative electronic-data infrastructure, called PCORnet, for improving the conduct of patient-centered CER.

**Conditions Studied**

We pay particular attention to:

Conditions that affect large numbers of people across a range of populations.

Conditions that place a heavy burden on individuals, families, specific populations, and society.

Rare diseases, which are difficult to study.

**Populations of Interest**

We pay particular attention to a number of populations in making research funding decisions:

Racial and ethnic minorities, older adults, low-income, residents of rural areas, women and children, individuals with special healthcare needs, including individuals with disabilities, individuals with multiple chronic diseases, individuals with rare diseases, and individuals whose genetic makeup affects their medical outcomes, patients with low health literacy/numeracy, and limited English proficiency, lesbian, gay, bisexual, transgender (LGBT) persons, veterans and members of the armed forces and their families.

**21. RWJF- Robert Wood Johnson Foundation** <http://www.rwjf.org/> The Robert Wood Johnson Foundation supports a wide array of research and programs which are working to help build a national Culture of Health.

**22. RHI- Rural Health Information Hub** <https://www.ruralhealthinfo.org/>

**23. Russell Sage Foundation -Future of Work**

The Russell Sage Foundation's program on the Future of Work supports innovative research on the causes and consequences of changes in the quality of jobs for less- and moderately-skilled workers and their families. We seek investigator-initiated research proposals that will broaden our understanding of the role of changes in employer practices, the nature of the labor market and public policies on the employment, earnings, and the quality of jobs of workers. We are especially interested in proposals that address important questions about the interplay of market and non-market forces in shaping the wellbeing of workers, today and in the future.

<http://www.russellsage.org/research/funding/future-work>

**24. Society of Family Planning- CBPR Grant (Community Based Participatory Research) Community-based participatory research (CBPR) grant**

Grants support a partnership approach to research that equitably involves community members, organizational representatives, and researchers in all aspects of the research process, and in which all partners contribute expertise and share decision making and ownership. Get information on CBPR principles.

Budget cap: \$150,000 Eligibility: Full and junior fellows

**Apply online for CBPR award**

<http://www.societyfp.org/Research-and-grants/Applying-for-grants.aspx>

**25. William T. Grant Foundation- Research Grants-**

<http://wtgrantfoundation.org/>

The foundation is focused on youth ages five to 25 in the United States. The foundation funds research that increases the foundation's understanding of:

- programs, policies, and practices that reduce inequality in youth outcomes, and
- strategies to improve the use of research evidence in ways that benefit youth.

The foundation seeks research that builds stronger theory and empirical evidence in these two areas. The foundation intends for the research it supports to inform change. While the foundation does not expect that any one study will create that change, the research should contribute to a body of useful knowledge to improve the lives of young people.

## USEFUL LINKS

- Department of Health & Human Services Office for Human Research Protections (OHRP)** <http://www.hhs.gov/ohrp/index.html>
- Food and Drug Administration** <http://www.fda.gov/>
- National registry of clinical trials** <https://www.clinicaltrials.gov/>
- NIH Good Clinical Practice training** <https://gcp.nihtraining.com/>
- NIH grants and funding** <http://grants.nih.gov/grants/oer.htm>
- NIH clinical trials policies** [http://grants.nih.gov/grants/policy/hs/data\\_safety.htm](http://grants.nih.gov/grants/policy/hs/data_safety.htm)

# KYCOM

## Strategic Overview and Mission

KYCOM envisions a dynamic model of scientific scholarship within the confines of a university that contains a college of osteopathic medicine, a college of optometry, a school of nursing, and undergraduate sciences programs. This scholarship model is also flexible enough to adapt to the rapidly changing health sciences environment. The use of inter-disciplinary and other forms of collaboration is essential to the discovery process and scientists, educators, and clinicians are dedicated to helping each other reach the common goals of improving population health and alleviating suffering from disease. Consistent with its mission, KYCOM intends to provide an osteopathic medical education that emphasizes primary care, encourages research, promotes lifelong scholarly activity, and serves the health care needs of communities in rural Kentucky and other Appalachian regions.

## Vision and Strategic Plan



**Photo:** Osteopathic Medical Student Emily Broomell (Class of 2017) conducts research as part of the KYCOM Student Summer Research Fellowship Program.

Research and scholarship, along with teaching, are all essential elements of KYCOM's academic mission. Indeed, we believe that the close combination of interdisciplinary research, scholarship, and teaching is needed to optimize the training of well-rounded osteopathic physicians. Our progress in this endeavor will be tracked via the five following strategic goals:

# Research Strategic Goals: 2016-2018

## 1. Enhance basic science and clinical research programs

- A. KYCOM will maintain or increase current funding levels for internal grants
  - i. Metric: Basic Sciences strategic goal key performance indicator (2016, 2017, 2018)
  - ii. Responsible party: Associate Dean for Basic Sciences
- B. At least 80 percent of faculty doing research will present their research at local, regional, or national conferences.
  - i. Metric: Basic Sciences strategic goal key performance indicator (2016, 2017, 2018)
  - ii. Responsible party: Associate Dean for Basic Sciences
- C. At least two basic science faculty will apply for extramural funding per year.
  - i. Metric: Basic Sciences strategic goal key performance indicator (2016, 2017, 2018)
  - ii. Responsible party: Associate Dean for Basic Sciences
- D. At least two clinical faculty will apply for extramural funding per year.
  - i. Metric: Clinical Sciences strategic goal key performance indicator (2017, 2018)
  - ii. Responsible party: Associate Professor of Family Medicine/Director of Clinical Skills Training and Evaluation for KYCOM
- E. Publish a basic sciences and clinical sciences research manual and maintain a research and creative scholarship database of current and past projects that is viewable by KYCOM, KYCO, and UPIKE Nursing faculty.
  - i. Metric: Publish both and disseminate to health-sciences faculty (2016)
  - ii. Responsible parties: Associate Dean for Basic Sciences, and Associate Professor of Family Medicine/Director of Clinical Skills Training and Evaluation for KYCOM
- F. Identify target areas for research that will foster collaboration among investigators within KYCOM and UPIKE.
  - i. Metric: Conduct needs assessment (2016)
  - ii. Responsible party: KYCOM Research Committee Chair

## 2. Expand community and academic research partnerships

- A. Develop a strategy to collaborate with diverse academic partners
  - i. Metric: Fulfill milestones listed in the Central Appalachian Consortium of Colleges of Osteopathic Medicine/CACCOM (2016, 2017, 2018)
  - ii. Responsible party: Associate Dean for Osteopathic Graduate Medical Education

## 3. Increase student opportunities for participation in research

- A. Increase the number of KYCOM Summer Research Fellowship students conducting clinical research, community-based efforts, and practice-improvement outcomes research.
  - i. Metric: Research Committee will ensure at least two of six Summer Research Fellows conduct research in one or more of these areas (2016, 2017, 2018)
  - ii. Responsible party: KYCOM Research Committee Chair
- B. Recruit, retain, and develop faculty to promote innovation to drive our research mission.
  - i. Metric: As positions become open, hire at least one clinical and basic science faculty member with a student research teaching background (2016-2018)

- ii. Responsible parties: Senior Associate Dean for Osteopathic Education, and Associate Dean for Basic Sciences

#### **4. Support the KYCOM research facility and infrastructure**

- A. Analyze laboratory space utilization to determine appropriate allocation metrics and identify opportunities to make fuller use of research facilities.
  - i. Metric: Allocation metrics and laboratory space utilization report will be created by Research Committee (2017)
  - ii. Responsible party: KYCOM Research Committee Chair
- B. Maintain equipment used in the research laboratory in quality condition.
  - i. Metric: Basic Sciences strategic goal key performance indicator (2016, 2017, 2018)
  - ii. Responsible party: KYCOM Research Committee Chair

#### **5. Expand interdisciplinary research agenda**

- A. Expand the KYCOM Research Day to include UPIKE undergraduate research to increase awareness of the spectrum of research across multiple disciplines at the university, promote more interaction among these disciplines, and further encourage interdisciplinary research.
  - i. Metric: Undergraduates will be invited to present at KYCOM Annual Research Day by Research Committee Chair (2016, 2017, 2018)
  - ii. Responsible party: KYCOM Research Committee Chair
- B. Establish a KYCOM Student Research Club open to students from other UPIKE colleges to further encourage interdisciplinary research.
  - i. Metric: KYCOM Student Research Club will be established (2016)
  - ii. Responsible party: Associate Professor of Family Medicine/Director of Clinical Skills Training and Evaluation for KYCOM
- C. Create a university interdisciplinary biomedical research committee (i.e. a “Collaborative Research Committee”) composed of representatives from the school of nursing and the colleges of arts and sciences, optometry and osteopathic medicine to explore areas of collaboration, especially in research involving pathological conditions that most impact the Appalachian population.
  - i. Metric: Collaborative Research Committee will be established (2017)
  - ii. Responsible party: Vice President for Health Affairs and Dean Kentucky College of Osteopathic Medicine

## CONCLUSION

In conclusion, research and scholarship by KYCOM faculty, staff, and students has grown significantly over the past several years. In order to strengthen our commitment to scholarship and research, we are launching this strategic research plan. This plan outlines specific, measurable objectives to improve internal and external cross-disciplinary collaborations and to leverage internal investments by seeking external financial collaborations. We envision that these efforts will enhance the education and training of our future osteopathic physicians and improve health outcomes in central Appalachia and other regions.



**UNIVERSITY OF PIKEVILLE**  
**KENTUCKY COLLEGE OF OSTEOPATHIC MEDICINE**

# RESEARCH AND INNOVATION 2016-2017 CONTACT INFORMATION



**Boyd R. Buser, D.O., FACOFP**

*Vice President for Health Affairs and Dean for KYCOM*

**Office:** Coal Building 602

**Telephone:** 606.218.5411

**E-mail:** BoydBuser@upike.edu



**Daniel H. Atchley, Ph.D., M.S., MT-ASCP**

*Associate Dean for Basic Sciences*

*Chair of Institutional Review Board (IRB)*

**Office:** Coal Building

**Telephone:** 606.218.5502

**E-mail:** DanielAtchley@upike.edu



**William T. Betz, D.O., MBA, FACOFP, *dist.***

*KYCOM -Senior Associate Dean for Osteopathic Education*

**Office:** Coal Building 302  
**Telephone:** 606.218.5420  
**E-mail:** WilliamBetz@upike.edu

**Melissa Frazier**

*Public Health and Regional Workforce Analysis Researcher for KYCOM*

**Office:** Coal Building Mezzanine, Suite M09  
**Telephone:** 606.218.5494  
**Email:** MelissaFrazier@upike.edu



**Dana C. Shaffer, DO, FACOFP *dist.***

*KYCOM -Associate Dean for Osteopathic Graduate Medical Education*

**Office:** Coal Building 601  
**Telephone:** 606.218.5501  
**E-mail:** DanaShaffer@upike.edu

**Dr. Margaret Sidle**

*Director of Institutional Research & Effectiveness*

**Office:** Record Memorial 600

**Telephone:** 606.218.5290

**Email:** MargaretSidle@upike.edu



**Josh Watson Ph.D.**

*KYCOM Research Committee -Chair*

**Office:** Coal Building 816

**Telephone:** 606.218.5433

**E-mail:** JoshWatson@upike.edu



**Peter Zajac, D.O., FACP**

*Associate Professor of Family Medicine*

*KYCOM -Director of Clinical Skills Training and Evaluation*

*Clinical Research*

**Office:** Coal Building 436

**Telephone:** 606.218.5429

**E-mail:** PeterZajac@upike.edu

**UNIVERSITY OF PIKEVILLE**  
**KENTUCKY COLLEGE OF OSTEOPATHIC MEDICINE**

# NOTES

**UNIVERSITY OF PIKEVILLE**  
**KENTUCKY COLLEGE OF OSTEOPATHIC MEDICINE**

# NOTES

**UNIVERSITY OF PIKEVILLE**  
**KENTUCKY COLLEGE OF OSTEOPATHIC MEDICINE**