



Research Strategic Plan

OFFICE OF RESEARCH AND SPONSORED PROGRAMS
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Burrell College of Osteopathic Medicine Research Strategic Plan 2019

This document was developed by the BCOM
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Burrell College of Osteopathic Medicine Research Strategic Plan

Table of Contents

Section Title	Page
BCOM Mission, Vision, Guiding Principles	6
Research Mission	
Organizational Structure for Research	7
Development of Research Strategic Plan	8
Purpose of the Research Strategic Plan	9
Strengths, Weaknesses, Opportunities, Threats	
Drivers for Research and Creative Scholarship	11
The Work	
Priority Areas for Research	
BCOM Research Strategic Initiative (College Level)	
BCOM Research Tactical Initiative Action Plan (June 21, 2019)	12
Goal of the Tactical Initiative Plan	
Tactical Initiative 1	
Tactical Initiative 2	
Tactical Initiative 3	13
Tactical Initiative 4	14
Tactical Initiative 5	
Tactical Initiative 6	15
Tactical Initiative 7	16
Tactical Initiative 8	17

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BURRELL COLLEGE OF OSTEOPATHIC MEDICINE

MISSION, VISION, GUIDING PRINCIPLES

BCOM Mission Statement

Para la gente y el futuro: For the people and the future; the Burrell College of Osteopathic Medicine at New Mexico State University (BCOM) is dedicated to improving the health of the Southwestern United States and Northern Mexico through culturally humble undergraduate, graduate and continuing osteopathic medical education, research and clinical service to the community.

BCOM is focused on increasing diversity in the physician workforce and fostering a practice of life-long learning, compassion, respect and excellence in its students.

BCOM Vision Statement

The Burrell College of Osteopathic Medicine will be regionally and nationally recognized for significantly impacting physician workforce needs of the Southwest and access to quality medical services. BCOM will be a leader in increasing workforce diversity, particularly among Native American and Hispanic populations.

BCOM Guiding Principles

1. BCOM will achieve and maintain accreditation for its academic program(s) through appropriate accrediting bodies.
2. BCOM provides an evidence-based osteopathic medical education program that enables students to demonstrate the knowledge and competencies required to enter graduate medical education and the practice of osteopathic medicine.
3. BCOM embraces diversity that fosters inclusiveness and cultural awareness among all learners and educators with the ultimate goal to increase diversity in the regional physician workforce.
4. BCOM prepares students to effectively address the health needs of diverse populations, with emphasis on the southwest border region, particularly among Hispanic and Native American populations.
5. BCOM supports faculty and students in their efforts to advance knowledge by creating an atmosphere of inquiry and discovery that inspires excellence in scholarship and medical practice.
6. BCOM supports the establishment of a healthcare culture that promotes osteopathic principles of wellness and prevention.
7. BCOM develops new graduate medical education (GME) opportunities with special emphasis on primary care and physician retention in the region.

BCOM RESEARCH MISSION AND STRATEGIC PLANNING PROCESS

RESEARCH MISSION

The Burrell College of Osteopathic Medicine is committed to supporting the BCOM faculty and students in their efforts to advance knowledge by, creating an atmosphere of inquiry and discovery that inspires excellence in creative scholarship and medical practice.

ORGANIZATIONAL STRUCTURE FOR RESEARCH

The Office of Research and Sponsored Programs (ORSP) serves to provide organizational and infrastructure support of faculty efforts in grant, contract, and sponsored program activities. In doing so, ORSP works to ensure that regulatory and compliance requirements that are relevant to the research enterprise are appropriately addressed. The BCOM Organizational Structure for Research is shown in **Figure 1**.

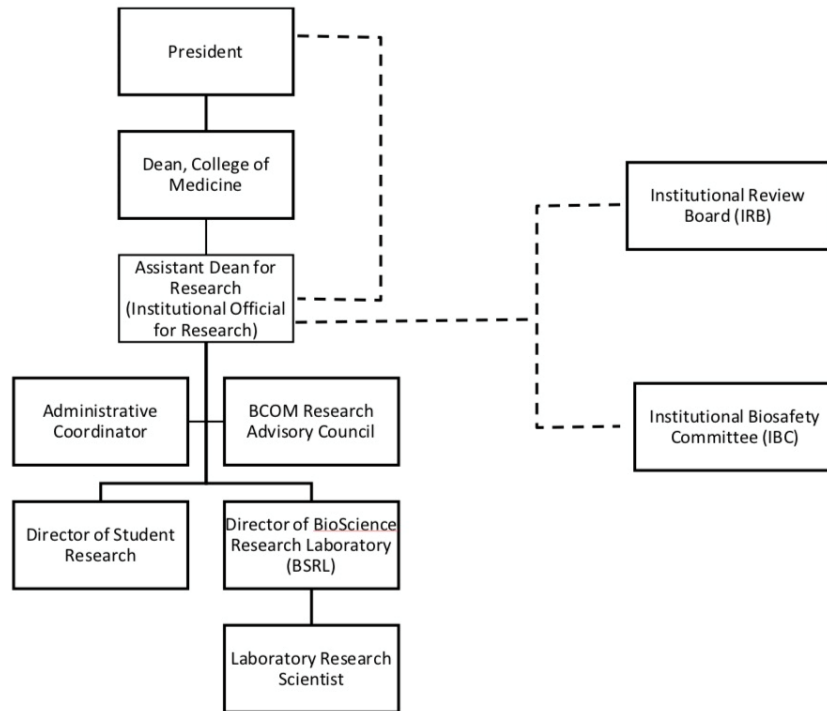


FIGURE 1

BCOM organizational structure for research. BCOM President John Hummer has designated Institutional Official for Research Responsibilities to the Assistant Dean for Research (Joseph Benoit). The Assistant Dean for Research reports to the Dean of the College (Don Peska) in all other matters involving the Office of Research & Sponsored Programs. The administrative office of ORSP is staffed by an administrative coordinator. The BCOM Research Advisory Council (RAC) serves in an advisory capacity to the Assistant Dean for Research & ORSP. Two Directors are appointed from the faculty by the Assistant Dean for Research. The Director of Student Research (Steven Ontiveros) is responsible for providing oversight of the Summer Medical Student Research Program and the Medical Student Research Day activities. The Director of the Research Laboratories (Michael Woods), provides oversight of both the BioScience Research Laboratory and the Human Physiology Laboratory. A Scientific Research Associate (Kalli Martinez) is responsible for operational and technical support of the laboratories. Two compliance committee provide institutional level oversight in accordance with federal regulations and guidelines. The Institutional Biosafety Committee (IBC) is an institutional level committee responsible for oversight of research involving recombinant DNA and biohazardous agents. The Institutional Review Board (IRB) is an institutional level committee responsible for oversight of research involving human subjects. The IBC and IRB function independently of the Office of Research & Sponsored Programs in decision making authority. The I.O. for Research appoints the committee and assure that the committees are adequately resourced.

DEVELOPMENT OF THE RESEARCH STRATEGIC PLAN

Research and scholarly activity are of paramount importance in the academic realm of biomedical, clinical, and educational disciplines. This 2019 Research Strategic Plan represents a revision of the original 2017 Research Strategic Plan. The Research Strategic Plan is a living document developed by the BCOM Research Advisory Council with input from the BCOM Executive Leadership Team. The planning process involved discussions centered around the development of strategy maps that were further used to define institutional level priorities. The framework for the 2019 Research Strategic Plan is informed by the College level Strategic Initiatives that were defined at a July 24-26 2018 College retreat of core leadership, invited faculty and staff. **Table 1** shows the 2018-2020 BCOM college level strategic initiatives by responsible department. The 2019 Research Strategic Plan defines tactical initiatives and activities that ORSP will take to operationalize the 2018-2020 College Level Research Strategic Initiative.

Table 1
BCOM 2018-20 Strategic Initiatives

Strategic Initiative	Responsible Department
Attain full accreditation by COCA	Dean
Adopt a system of curricular management that promotes efficient course construction and integration, alignment with core competencies, and a comprehensive assessment strategy	Academic Affairs
Provide student learning opportunities that are mission appropriate	Clinical Education
Adopt a plan to improve comprehensive, student-centered enrollment services that attract and retain high quality candidates for the degree program(s).	Enrollment Services
Provide longitudinal programming to faculty to develop skills in teaching	Dean
Collaborate with regional hospitals and other health care entities to create and support development of new residency programs	Clinical Education
Incorporate a formal curriculum for professionalism training into the degree program.	Student Affairs
Assemble a support staff that enables BCOM to fully operationalize delivery of the Doctor of Osteopathic Medicine degree program	Human Resources
Provide opportunities for student participation in faculty driven research	Research

ANTECEDENTS

As a new medical school, BCOM focused on recruitment of faculty and staff with the primary goal of developing and delivering a strong osteopathic medical curriculum. In doing so, BCOM also recognized the importance of Research and Creative Scholarship as an essential component of medical student education inasmuch as knowledge advancement through research are central to the BCOM educational mission and essential for institutional reputation and regional healthcare improvement. BCOM encourages faculty to engage in research and creative scholarly activities. At the same time, many students choose to pursue research related opportunities as part of their educational experience. The proximity of BCOM to New Mexico State University and the University of Texas at El Paso has already yielded collaborations and partnerships between BCOM and these nearby research universities.

2019 Research Strategic Plan

PURPOSE OF THE RESEARCH STRATEGIC PLAN

The purpose of this Research Strategic Plan is to define BCOM tactical initiatives that will advance the Research Strategic Initiative. As a guide for short as well as long term institutional planning the Research Strategic Plan provides activities and metrics. Indicators of success in achieving the goals of the research strategic plan will be demonstrated by but not limited to the institutional budget for research programs and infrastructure, faculty productivity, student/trainee research engagement and success in partnerships with other research institutions.

STRENGTHS, WEAKNESSES, OPPORTUNITIES, THREATS

The Burrell College of Osteopathic Medicine conducts health related research of particular relevance to the college mission and provides the essential tools for its students to both understand the scientific method and design and conduct biomedical, behavioral, health care, and population health research projects. As a young growing institution and the only osteopathic medical school in New Mexico, BCOM is uniquely positioned to advance areas of research and creative scholarship that align with the educational mission and expertise in areas of osteopathy, biomedical science, medical education, and population health.

As part of the research strategic planning process, the BCOM Research Advisory Council considered current strengths, weaknesses, opportunities and threats prior to developing goals for the future. These are summarized in **Table 2**.

TABLE 2
Results of Research Advisory Council SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Diverse Faculty with strong academic credentials • Diverse student body; many with advanced research skills and motivation to participate in research • Experienced leadership • Strong institutional support for library, services, and resources • Expanding research programs and facilities • Collaborative faculty are forging partnerships with area research universities • Research and Creative Activity is becoming a catalyst for faculty recruitment • Emerging and growing relationships with regional medical centers, agencies, and programs. • Commitment to excellence • Strong community support • Growing name recognition • Coalescing institutional vision • Relationship with non-profit foundation • Institutional agility 	<ul style="list-style-type: none"> • Faculty workload limits time available for research and creative scholarship. • For-profit status restricts certain research funding opportunities • Foundation infrastructure limits ability to apply for certain types of federal awards
Opportunities	Threats
<ul style="list-style-type: none"> • BCOM is becoming a catalyst for health research-related activities. • Clinical trials and practice-based research network • Institutional agility • Coalescing institutional vision • Strategic recruitment of faculty with complementary interests, skills, and scholarly work • Research diversifies BCOM financial base • Accreditation (Regional and COCA) contributes to institutional reputation • Relationship with Southwest Foundation for Osteopathic Education and Research (SWFOER) 	<ul style="list-style-type: none"> • Volatility of national, state, and local economies • Proposed federal budget cuts for science and research. • Faculty workload that limits available time for research • UNM, NMSU and others see us as a competitor for resources • Current lack of regional accreditation limits access to certain types of research funding

DRIVERS FOR RESEARCH AND CREATIVE SCHOLARSHIP

Several major conditions serve as a driving force for development and expansion of research at BCOM. These fall into three broad categories that relate to: 1) faculty recruitment, retention, and advancement; 2) student recruitment and competitiveness for graduate medical training; and 3) meeting educational program accreditation requirements. Furthermore, one cannot discount the fact that development of research and creative scholarly programs at BCOM that generate extramural support will diversify the BCOM financial model by providing a non-tuition based source of support for faculty research programs.

THE WORK

Operation and support of the research organization involves various resource and levels of engagement by researchers and research partners. The Office of Research and Sponsored Programs receives budgetary support for staffing, facilities, technology, and operations in order to provide oversight and facilitation of research activities. Faculty provide research expertise and are afforded time for research and creative activity. BCOM encourages faculty to provide opportunities for students to participate in faculty-driven research projects. In addition, BCOM works to cultivate opportunities for faculty research affiliations with NMSU and other partnering institutions.

In support of the work conducted by faculty, BCOM operates staffed laboratory facilities at the Southwest Research & Production Complex located in the City of Las Cruces West Mesa Industrial Park that consists of the BioScience Research Laboratory, the Human Physiology Laboratory as well as common areas for data analysis and intellectual exchange. ORSP provides administrative oversight of this space, research activities conducted on the premises, and assures institutional compliance with federal and local research regulations. The investments in research infrastructure support the BCOM mission as faculty driven programs bring recognition to BCOM and provide research opportunities for students.

PRIORITY AREAS FOR RESEARCH

BCOM has identified a single 2018-2020 Strategic Initiative for Research that is viewed to be central to mission of preparing students for the practice of osteopathic medicine. The objective is that graduates of the BCOM Doctor of Osteopathic Medicine degree program will be able to critically appraise, evaluate, and apply scientific evidence to inform patient care and research. A single research strategic initiative with two goals was defined at the 2018 BCOM Strategic Planning Retreat.

BCOM RESEARCH STRATEGIC INITIATIVE (COLLEGE LEVEL)

BCOM will provide opportunities for student participation in faculty driven research.

Priorities:

1. Establish a summer research experience for students between years 1 and 2
2. Establish a Distinction in Research track for incoming students.

BCOM Research Tactical Initiative Action Plan (June 21, 2019)

To address the BCOM Strategic Initiative, the Office of Research and Sponsored Programs and Research Advisory Council developed an overarching goal and tactical initiative action plan with tactical activities and metrics. The 2018 action plan was reviewed and updated at the June 21, 2019 meeting of the Research Advisory Council.

GOAL OF THE TACTICAL INITIATIVE PLAN

BCOM supports faculty and students in their efforts to advance knowledge by creating an atmosphere of inquiry and discovery that inspires excellence in scholarship and medical practice.

⇒ **TACTICAL INITIATIVE 1:** ORSP supports submission and administration of sponsored research requests.

ACTIVITY 1: Develop a pre-award submission process that facilitates research grant submission by BCOM faculty and students.

Metrics

- Services Provided
- Grants Submitted
- Grant awards

ACTIVITY 2: Develop a post-award monitoring process that meets agency requirements for accounting and post-approval monitoring.

Metrics

- Services Provided
- Expenditures
- Audits

⇒ **TACTICAL INITIATIVE 2:** ORSP operates research compliance and training programs for all researchers.

ACTIVITY 1: Provide and track CITI program basic course offerings.

Metrics

- Courses Accessed
- Number of Enrollments
- Number of Course Completions

ACTIVITY 2: Expand CITI Training to include additional modules on the Revised Common Rule, Research Study Design, and Essential of Statistical Analysis

Metrics

- Courses Accessed
- Number of Enrollments
- Number of Completions

ACTIVITY 3: Establish an on-campus Responsible Conduct of Research Training Program for faculty, staff, and students that complies with NIH, CDC, and OSHA guidelines

Metrics

- Training opportunities offered
- Number of attendees

ACTIVITY 4: Develop and maintain procedure manuals for research involving Human Subjects, Biohazardous Agents, and Hazardous Chemicals.

Metrics

- Completion and distribution of manuals

⇒ **TACTICAL INITIATIVE 3:** Develop and maintain Research Laboratories that are available to BCOM faculty and student researchers.

ACTIVITY 1: Ensure that the laboratory is adequately equipped and maintained

Metrics

- Number of Ongoing Projects
- Number of Laboratory Users
- Laboratory Expenditures

ACTIVITY 2: Assess staff workload and identify needs for research office support of BCOM research activities.

Metrics

- Services Provided
- Accounts managed
- Protocols and grants

ACTIVITY 3: Develop and distribute standard operating procedures for the Research Laboratories

Metrics

- Written and approved Standard Operating Procedures

ACTIVITY 4: Maintain record of laboratory inventory (Equipment, supplies, and chemicals)

Metrics

- Established inventory
- SDS database
- Expenditures

ACTIVITY 5: Identification of opportunities and planning for laboratory expansion and sustainability.

Metrics

- Space Management plan
- Square footage of research space

⇒ **TACTICAL INITIATIVE 4:** Develop and maintain relationship with SWFOER and other non-profits that support BCOM Research Activities

ACTIVITY 1: Finalize formal research and associated service agreements that support advancement of research at BCOM

Metrics

- Executed Agreements
- Activities

ACTIVITY 2: Submission of extramural research grants through SWFOER by BCOM researchers

Metrics

- Grant Submissions
- Awards Received
- Expenditures

ACTIVITY 3: Secure additional research facilities and resources through partnerships with SWFOER

Metrics

- Space management plan
- Square footage
- Gift revenue

⇒ **TACTICAL INITIATIVE 5:** Maintain a Faculty Research Incentive Plan that Encourages Research and Extramural Grant Activities

ACTIVITY 1: Work with Faculty Council, RAC and BCOM Administration to fully define terms and conditions of the incentive plan

Metrics

- Approved incentive plan
- Salary savings
- Incentives paid

ACTIVITY 2: Finalize agreements with SWFOER to include incentives for faculty

Metrics

- Executed agreements
- Accounts established

ACTIVITY 3: Provide intramural research funding for departments through ORSP

Metrics

- Request funded
- Expenditures
- Research income

ACTIVITY 4: Develop and operationalize an institutional intellectual property agreement

Metrics

- Policy and procedures approval
- Patents filed
- Expenditures
- Royalties

⇒ **TACTICAL INITIATIVE 6:** Create and expand opportunities for student research and research related education

ACTIVITY 1: Formalize summer research program for students

Metrics

- Numbers and types of opportunities
- Number of faculty participating in the program
- Number of students participating in the program
- Program funding

ACTIVITY 2: Continue to expand the medical student research day activities.

Metrics

- Number of student presentations
- Quality of research presented
- Research awards
- Keynote speakers
- Number of attendees and participants

ACTIVITY 3: Provide financial support for student travel to meetings and conferences

Metrics

- Number of funding requests
- Number of travel awards granted
- Budgetary support
- Expenditures

ACTIVITY 4: Provide professional development for faculty supervising students

Metrics

- Types of professional development opportunities
- Enrollment by faculty
- Budgetary support
- Expenditures

ACTIVITY 5: Develop and implement Distinction in Research tract for medical students

Metrics

- Program approval
- Number of program faculty
- Number of student inquiries
- Number of students admitted into the tract
- Number of students pursuing the tract

- Number of distinctions awarded at commencement

ACTIVITY 6: Develop and implement a student mini-grant program to support student originated projects.

Metrics

- Number of submissions
- Number of awards
- Expenditures

ACTIVITY 7: Expand non-clinical elective research opportunities

Metrics

- Number of elective opportunities
- Number of students taking electives

⇒ **TACTICAL INITIATIVE 7:** Expand research opportunities through consortia and networks

ACTIVITY 1: Seek clinical trial opportunities through collaboration with regional research organization

Metrics

- Number of clinical trials
- Number of physicians participating
- Revenue for clinical trials

Metrics

- Number of physicians participating
- Revenue generated

ACTIVITY 4: Provide opportunities for medical residents to work with BCOM faculty on research projects

Metrics

- Number of residents participating
- Number of BCOM faculty participating
- Publications and presentations
- Grants and contracts

ACTIVITY 5: Provide opportunities for non-BCOM Students & Fellows to work on research projects with faculty

Metrics

- Number of students participating
- Number of BCOM faculty participating
- Publications and presentations
- Grants and contracts

⇒ **TACTICAL INITIATIVE 8:** Create sponsored outreach programs that are aligned with the BCOM Mission, faculty interest, and creative scholarship

ACTIVITY 1: Partnerships with NMSU, Arrowhead Center, and others to sponsor research conferences and workshops

Metrics

- Number of conferences and workshops
- Attendance

ACTIVITY 2: Offer continuing education opportunities that meet the needs of the medical professionals in the region

Metrics

- Number of opportunities offered
- Attendance
- C.E. credit awarded
- Revenue
- Other

ACTIVITY 3: Pursue opportunities for funding and delivery of partnered outreach programs between BCOM and other entities

Metrics

- Programmatic grants
- Partnerships
- Number of Programs Offered
- Attendance
- Revenue



**Office of Research and Sponsored Programs
2018-19 Annual Report**

Joseph N. Benoit, Ph.D.
Assistant Dean for Research

August 29, 2019

Introduction

This annual report summarizes the activity of the Office of Research & Sponsored Programs (ORSP) and related research activities in the time period covered by the 2018-19 academic year. The format of the report speaks directly to the tactical initiatives and activities that support the BCOM Strategic Initiatives. ORSP staff contributing to the efforts summarized in the report were Joseph Benoit, Assistant Dean for Research; Martha Enrinquez, Administrative Coordinator; Steven Ontiveros, Director of Student Research; Michael Woods, Director of Research Laboratories, and Kalli Martinez, Scientific Research Associate.

BCOM Strategic Planning

The College Dean hosted a leadership retreat in June 2018 to define college level strategic initiatives and priorities. The retreat identified one overarching research initiative with two priority areas for the 2018-2020 time frame.

BCOM Strategic Initiative Provide opportunities for student participation in research.

Priority 1: *Establish a summer research experience for students between years 1 and 2*

Target Implementation Date: June 2019

Status: Implemented/Ongoing

Dr. Steven J. Ontiveros was appointed Director of Student Research by the Assistant Dean for Research in August 2018. The summer medical student research program was successfully launched in May 2019. The program culminated with Medical Student Research Day on July 19, 2019. The keynote speaker for the event was Alan Langnas, D.O., F.A.C.S., Professor of Surgery, University of Nebraska Medical Center, Omaha, NE. Details of tactical activities supporting the implementation of this activity are provided in this report.

Priority 2: *Establish a Distinction in Research track for incoming students.*

Target Implementation Date: July 2020

Status: On Target for June 2020 implementation

Work in this area is ongoing with plans to bring program proposal to the curriculum committee during the Fall 2019 semester and full implementation of the program by June 2020.

ORSP Tactical Initiatives Status and Accomplishments

As part of the implementation of 2018-2020 Strategic Planning Process, a unified research office tactical goal and eight specific tactical initiatives were defined by the Office of Research & Sponsored Programs in consultation with the BCOM Research Advisory Council and the BCOM Executive Leadership. Status and accomplishments relative to each of the tactical initiative and activities is presented in the following sections.

ORSP TACTICAL GOAL

BCOM supports faculty and students in their efforts to advance knowledge by creating an atmosphere of inquiry and discovery that inspires excellence in scholarship and medical practice.

Tactical Initiative 1

The Office of Research & Sponsored Programs supports submission and administration of sponsored research requests.

1) *Develop a pre-award submission process that facilitates research grant submission by BCOM faculty and students.*

a) Status: Ongoing

ORSP serves as the central point of contact for investigators submitting grants in support of research and creative activity. Assistance and guidance on grant submission processes, budget preparation, and any needed logistics are provided to all faculty upon request. ORSP assists with routing proposal submissions for signatures and maintains records of submitted applications during the pre-award period. The Assistant Dean for Research oversees compliance activities to ensure that ORSP can support the needs of the faculty and students in this area.

i) Metrics:

- (1) Grants Submitted: Four extramural grant requests totaling \$252,750.00 were submitted during the fiscal year ending beginning July 1, 2018 and ending on June 30, 2019 (FY-19). The grants are listed below.
 - (a) Rate of MRSA Acquisition in Medical Students from Pre-Clinical to Clinical Years. Debra E. Bramblett; Ph.D. (P.I.) and Michael E. Woods (Co-Investigator; Edward N. and Margaret G. Marsh Foundation; Amount Requested (Total Costs): \$84,750.
 - (b) Hypertension Awareness in the Border Region of New Mexico – Overcoming Barriers for Primary Health Care. Harald M. Stauss, M.D., Ph.D. and Pedro Del Corral, M.D., Ph.D.; New Mexico Office of Border Health; Amount Requested (Total Costs): \$8,000
 - (c) Anti-inflammatory actions of OMT-Role of the cholinergic anti-inflammatory reflex and translocation of immune cells from reticular organs to the systemic circulation. Harald M. Stauss, M.D., Ph.D. (P.I.), Adrienne Kania, D.O., and Debra Whitson, D.O. (Co-Investigator); American Osteopathic Association Research Grant Program 2019, Amount Requested (Total Costs): \$150,000.
 - (d) Health and Wellness: Training for Promotores (Community Health Workers). Norice Lee and Erin Palazzolo; U.S. National Library of Medicine, National Network of Libraries of Medicine South Central Region; Amount Requested (Total Costs): \$10,000

(2) Grant Awards:

A total of \$76,125.00 in grant awards were funded during FY-19. The funded grants are listed below.

- (a) Rate of MRSA Acquisition in Medical Students from Pre-Clinical to Clinical Years. Debra E. Bramblett; Ph.D. (P.I.) and Michael E. Woods (Co-Investigator; Edward N. and Margaret G. Marsh Foundation; Start Date: 9/13/2018; Amount Awarded (Total Costs): \$66,125.
- (b) Health and Wellness: Training for Promotores (Community Health Workers). Norice Lee and Erin Palazzolo; U.S. National Library of Medicine, National Network of Libraries of Medicine South Central Region; Amount Awarded (Total Costs): \$10,000.

2) *Develop a post-award monitoring process that meets agency requirements for accounting and post-approval monitoring.*

a) Status: Ongoing

ORSP has implemented and continues to refine a process for monitoring accounting and post-approval monitoring. ORSP coordinates the establishment of an account with the finance office. Orders are processed through the office of research and checked against the grants as an internal control measure. Funds can only be used for designated purposes as defined by the award.

i) Metrics:

- (1) Services provided: ORSP assisted with all purchasing transactions linked to active grants in FY-19. ORSP also reconciled monthly budget reports and communicated this information to P.I.s as needed.
- (2) Expenditures: FY-19 expenditures of research supported through grants in FY-19 was \$10,683.55.

Tactical Initiative 2

ORSP operates research compliance and training programs for all researchers.

1) *Provide CITI Program Basic Course Offerings for researchers*

a) Status: Ongoing

As part of meeting regulatory compliance training requirements for research, ORSP uses the Collaborative Institutional Training Initiative (CITI) courses for research ethics and compliance training. Specific requirements for training are tailored to the type of research conducted by BCOM agents of research. Medical residents, preceptors, and research mentors seeking Institutional Review Board or Institutional Biosafety Committee approval of research must also complete specific modules. ORSP tracks the training of individuals accessing CITI courses.

i) Metrics

- (1) Courses Accessed: Twenty different courses were accessed during the 2018-19 Academic Year.
- (2) Number of Credits Earned: 2,461 credits were earned. A breakdown of credits by course grouping is shown in the following table.

Table 1
CITI Course Summary for FY-19

Course Grouping	Credits Earned
Bioethics	1
Biomedical Research	212
Faculty Conflict of Interest	48
Administrator Conflict of Interest	4
Student Conflict of Interest	488
Community/Population Research	74
Essentials of Statistical Analysis	2
Good Clinical Practice for Clinical Trials with Investigational Drugs and Biologics	2
Clinical Faculty/Staff Information Privacy Security	33
Research Faculty/Staff Information Privacy Security	33
Students Information Privacy Security	812
Institutional/Signatory Official: Human Subject Research	7
IRB Administration	3
IRB Chair and Vice-Chair	3
Institutional Review Board Members	5
Faculty & Student Advisors Responsible Conduct of Research	48
Students & Trainees Responsible Conduct of Research	601
Research Staff Responsible Conduct of Research	6
Revised Common Rule	1
Social Behavioral/Education Research	78
TOTAL	2,461

2) *Expand CITI Training to include additional modules on the Revised Common Rule, Research Study Design, and Essentials of Statistical Analysis.*

a) Status: Implemented.

All three modules were successfully incorporated in the CITI training course offerings in 2019. The summer research program encouraged students to access the statistical modules as necessary in consultation with their research mentor. The Revised Common Rule module is available to all human subject researchers and IRB members needing more information about the 2018 changes. The 2018-19 IRB received training on the Revised Common Rule in a webinar and were not required to participate in this CITI module. The module will become a requirement for new IRB members in July 2019.

3) *Establish an on-campus Responsible Conduct of Research (RCR) Training Program for faculty, staff, and students that complies with NIH guidelines.*

a) Status: Ongoing

Training requirements were assessed and prioritized based on the types of research being conducted at BCOM. As a result, the activity was expanded to include training on CDC and OSHA guidelines. RCR training for medical students during the past year was provided by the Assistant Dean for Research, the Director of Student Research, invited members of the faculty, and the Scientific Research Associate in medical student courses as well as in special training sessions.

i) Metrics:

- (1) Sessions Offered: A total of 11.5 contact hours of RCR instruction were offered. The various RCR sessions offered during the year to students are shown in the following table.

Table 2
RCR Sessions Offered During the 2018-2019 Academic Year

Session Title	Venue	Instructor	Contact Hours
Big Data	PCP Course (2 nd Year)	J. Benoit	1.5
Biostatistics II	PCP Course (2 nd Year)	J. Benoit	1.5
Understanding Peer Review	PCP Course (1 st Year)	J. Benoit	1.5
Research, Collaborations, and Authorship	PCP Course (1 st Year)	S. Ontiveros	1.5
Ethics and Society	PCP Course (1 st Year)	J. Benoit	1.5
Medical Student Summer Research Program	Orientation & RCR Sessions	J. Benoit, S. Ontiveros, K. Gosselink, K. Martinez, H. Stauss, M. Woods	4.0
Total Hours Offered to Students			11.5

4) *Develop procedure manuals for human subjects, biohazardous agents, and chemical agents.*

a) Status: Ongoing.

The Office of Research & Sponsored Programs is continuously reviewing, updating and developing new guidance for research. The following accomplishments were made in this area:

i) Metrics:

- (1) Human Subjects research policies were reviewed and updated as needed. An informed consent template was also approved by the IRB.
- (2) A Blood-Borne Pathogen Exposure Control Plan and a Biosafety Manual were developed for BCOM. Dr. Woods and the Institutional Biosafety Committee led the development of the plan.
- (3) Chemical Hygiene procedures have also been developed and incorporated in the Laboratory Standard and Hazard Communication training sessions. These two hour training sessions were offered by Ms. Martinez on three occasions: 4/11/19, 5/17/19, and 5/28/19. A total of twenty-three researchers completed the training.

Tactical Initiative 3

Develop and maintain Research Laboratories that are available to BCOM faculty and student researchers.

1) *Ensure that the laboratory is adequately equipped and maintained.*

a) Status: Ongoing.

In 2019, BCOM entered into a lease agreement for a fully functional 3,600 square foot laboratory and adjacent 1,800 square foot building. The College also purchased additional equipment that existed in the laboratory and relocated the laboratory from the Arrowhead Park Genesis Center to Building 200 of the Southwest Research & Production Complex at the City of Las Cruces, West Mesa Industrial Park, 9035 Advancement Avenue. The adjacent Building 300 (1,800 square feet) houses the research Computer Laboratory (CL) and the newly designated Human Physiology Laboratory (HPL). The BioScience Research Laboratory (BSRL) is designated as a Biosafety Level 2 (BSL-2) facility equipped for cell culture, microbial culture, nucleic acid and protein chemistry. The Human Physiology Laboratory is equipped to support research related to Osteopathic Manipulative Medicine and non-invasive measurements of cardiovascular function. A metabolic cart is approved for FY-20 and will add the capabilities of monitoring metabolic activity of humans at rest and during exercise.

i) Metrics

- (1) Number of Ongoing Projects: Currently there are 8 faculty driven projects utilizing the research laboratories. Faculty are mentoring eighteen student researchers in the research laboratories. A list of projects, investigators and primary space utilization is listed in the following table.

**Table 3
Faculty Use of BCOM Research Laboratories in 2018-2019**

Project	Faculty Investigator	Student Researchers	Space Utilization
Development and Assessment of a Computer Model of External Compressive Forces on Interstitial Fluid Dynamics	J. Benoit	Y. Dacquay B. Hummel-Price	Computer Lab
Development of a Multiplexed Reverse Transcription-Loop Mediated Isothermal Amplification (RT-LAMP) Assay for the Detection of Emerging Arboviruses	D. Bramblett	J. Jaynes	BSRL Computer Lab
Central Regulation of Energy Balance in Stress and Hypertension	K. Gosselink	G. Gilderman T. Besong	BSRL Computer Lab
Effect of Osteopathic Manipulative Treatment on Autonomic Balance	A. Kania	K. Weiler M. Opena	HPL
Determining the Effects of Resveratrol on Hexokinase II Mitochondria Membrane Attachment in Cancer Cells	S. Ontiveros	R. Carbajal I. Maradeyo C. Nguyen	BSRL Computer Lab
Comparison of Metabolically Balanced versus High Fructose Corn Syrup based beverages on glucose & HBA1c levels	R. Selinfreund	K. Melgarejo S. Sridhar	Computer Lab
Clinical Physiology: Effects on Non-Invasive Transcutaneous Auricular Vagal Nerve Stimulation on Hemodynamic, Autonomic, Endocrine, and Immune Function	H. Stauss A. Kania	J. Orellana A. Kurian	HPL Computer Lab
Mechanisms of Zika Virus-Mediated Cell Cycle Blockade	M. Woods	J. Long U. Khalique J. Blaine Z. Cady	BSRL Computer Lab

- (2) Laboratory Expenditures: The general intramural expenditures supporting the research laboratories in FY-19 are summarized in the following table.

**Table 4
FY_19 Laboratory Expenditures**

Category	Expenditures
Research Lab Supplies	\$30,328.00
Building Lease	\$28,471.00
Software Expenses	\$23,777.00
Equipment Repairs and Maintenance	\$9,035.00
Custodial & Waste	\$4,017.00
Total	\$95,628.00

2) *Identify and hire appropriately qualified individual for Scientific Research Associate position.*

- a) Status: Completed.

A national search for the laboratory scientist resulted in the hiring of Ms. Kalli Martinez.

i) Metrics:

- (1) Number of Applicants: Thirteen applications were received.
 (2) Number of Interviews: Two applicants were interviewed
 (3) Successful Hire: Kalli Martinez, M.S. began employment in February 2019.

3) *Develop and distribute standard operating procedures for the BioScience Research Laboratory.*

a) Status: Ongoing.

SOPs are developed as needed and a procedure manual is being assembled.

4) *Maintain record of laboratory inventory (Equipment, Supplies, and Chemicals).*

a) Status: Ongoing.

A complete inventory of laboratory equipment, supplies and chemicals has been created. Equipment and supply inventories are kept on Excel spreadsheets. Safety Data Sheets (SDS) for chemicals in the laboratory are maintained in the MSDS online database which was fully implemented for the research laboratories during the FY-19 fiscal year.

i) Metrics:

(1) Established Inventory: Equipment inventories including serial numbers and location have been created.

(2) SDS Database Implemented: The MSDS database has been deployed and populated with all chemicals currently in the laboratory. Researchers can search for all existing chemicals in the laboratory and gain immediate access to a Safety Data Sheet along with storage location in the laboratory. Investigators can search for SDS of new chemicals using the MSDS database. Two computers in the laboratory area have direct links to the MSDS database which can be accessed without the need to login to the MyBCOM portal. All employees and students of BCOM, even those not in the BSRL, have access to the MSDS online database through the MyBCOM portal.

5) *Identification of opportunities and planning for laboratory expansion and sustainability.*

a) Status: Ongoing.

BCOM began occupancy of the new laboratory facility in February 2019. The initial focus was to establish the BioScience Research Laboratory in Building 200 and the Computer Laboratory in the upper level of Building 300. This was accomplished. In May 2019, Dr. Stauss, Kania and Whitson received notification that their research funding from the American Osteopathic Association was approved. We also received notification that our budget request for equipment for human physiological metabolic monitoring equipment was approved for FY-20. At that time, ORSP began working to establish the Human Physiology Laboratory on the lower level of Building 300. All areas are presently being utilized by BCOM investigators.

i) Metrics:

(1) Space Management Plan: All space within the research laboratories is open format with designated areas for faculty researchers. Core equipment is shared and equipment use is monitored by the Director of Laboratories (M. Woods) and Scientific Research Associate (K. Martinez). Each faculty member in the BSRL (Building 200) has a designated section of bench space with overhead and under the counter storage. Faculty approved for space in the BSRL have access to all core equipment in the facility. Faculty in the Human Physiology Laboratory (HPL, Building 300 lower level) have access to the entire laboratory as a shared facility. The Computer Lab (CL, Building 300 upper level) has cubicles, a conference table, and printing capabilities and operates as an open access facility. There has not been a need to schedule computer lab utilization at this time. The following table shows how space has been allocated to date.

Table 5
Faculty Occupancy of Research Laboratories

Faculty	Designated Space	Accessible Shared Open Format Space
J. Benoit		Bldg. 300, ~900 sq. ft.
D. Bramblett	Bldg. 200, ~200 sq. ft.	BSRL, ~3,600 sq. ft. C.L. 300, ~ 900 sq. ft.
K. Gosselink	Bldg. 200, ~ 200 sq. ft.	BSRL, ~3,600 sq. ft. CL, ~ 900 sq. ft.
P. del Corral	Bldg. 300, ~ 200 sq. ft.	HPL, ~900 sq. ft. CL, ~900 sq. ft.
S. Ontiveros	Bldg. 200, ~200 sq. ft.	BSRL, ~3,600 sq. ft. CL, ~ 900 sq. ft.
H. Stauss	BSRL, ~200 sq. ft. HPL, ~200 sq. ft.	BSRL, ~3,600 sq. ft. HPL, ~900 sq. ft. CL, ~900 sq. ft.
A. Kania	BSRL, ~200 sq. ft.	HPL, ~900 sq. ft. CL, ~ 900 sq. ft.
R. Selinfreund	BSRL, ~ 200 sq. ft.	BSRL, ~3,600 sq. ft. CL, ~ 900 sq. ft.

BSRL, Building 200; HPL, Building 300 lower level, CL, Building 300 upper level.

Tactical Initiative 4

Develop and maintain relationship with SWFOER and other non-profits that support BCOM Research Activities.

1) Finalize formal research and associated service agreements that support advancement of research at BCOM.

a) Status: Implemented/Ongoing.

ORSP worked with the BCOM Finance Office and SWFOER to implement a process for handling research related funds. The process that is now in place is for BCOM to be reimbursed by SWFOER for expenses tied to SWFOER research accounts. ORSP coordinates with SWFOER and Finance the establishment of a research account and ORSP staff track expenditures in the account. Faculty submit requisitions for purchasing to ORSP and the orders are placed by BCOM. Finance invoices SWFOER for the expenses incurred.

i) Metrics:

- (1) Executed Agreements: Implemented/Ongoing. Currently there are two functioning SWFOER research accounts being administered through this process.

2) Submission of extramural research grants through SWFOER by BCOM researchers.

a) Status: Implemented/Ongoing

ORSP coordinated with SWFOER and the Finance office to establish a process whereby BCOM faculty can submit grants through SWFOER. We have also established a mechanism for faculty to set up SWFOER accounts to support their research.

i) Metrics:

- (1) Grant Submissions:

- (a) Rate of MRSA Acquisition in Medical Students from Pre-Clinical to Clinical Years. Debra E. Bramblett; Ph.D. (P.I.) and Michael E. Woods (Co-Investigator; Edward N. and Margaret G. Marsh Foundation; Amount Requested (Total Costs): \$84,750.

- (b) Grants Received:
Rate of MRSA Acquisition in Medical Students from Pre-Clinical to Clinical Years. Debra E. Bramblett; Ph.D. (P.I.) and Michael E. Woods (Co-Investigator; Edward N. and Margaret G. Marsh Foundation; Start Date: 9/13/2018; Amount Awarded (Total Costs): \$66,125.
 - (2) Research Fund Accounts Created
 - (a) Harald Stauss Research Fund. ~\$2,000
- 2) *Secure additional research facilities and resources through partnerships with SWFOER.*
 - a) Status: Nothing to report at this time

Tactical Initiative 5

Develop and Implement a Faculty Research Incentive Plan that Encourages Research and Extramural Grant Submission.

- 1) *Work with faculty council, research advisory council, and BCOM administration to fully define terms and conditions of the Incentive Plan.*
 - a) Status: Implemented/Ongoing
A faculty research incentive plan was developed and approved by the Executive Leadership during the year. The procedures for implementing the plan are being finalized. The plan distributes salary savings from grants to the Office of the Dean, Office of Research, Faculty member's department, and faculty member in the form of a grant incentive bonus.
 - i) Metrics:
 - (1) The plan is in the implementation phase.
 - (2) Incentives Paid: None in FY-19.
- 2) *Finalize agreements with SWFOER to include incentives for faculty.*
 - a) Status: Ongoing.
Faculty receiving grants that are administered through SWFOER are able to participate in the Incentive Plan.
- 3) *Provide intramural research funding for departments through ORSP.*
 - a) Status: Implemented
The Office of Research and Sponsored Programs created the Faculty Research Support Fund as a means of providing support to faculty for specific research needs. Faculty submit requests to ORSP, the requests are reviewed by members of the Research Advisory Council who provide a recommendation to the Assistant Dean for Research. Approved requests are funded through the fund which is administered by ORSP.
 - i) Metrics:
 - (1) Expenditures: A total of \$17,587 in requests were funded through this program in FY-19 in support of Research & Creative Scholarship. Funds were dispersed as shown in the following table.

Table 6
Faculty Research Support Fund Disbursements

Faculty Member	Amount Disbursed
M. Woods	\$4,197
H. Stauss	\$3,151
K. Gosselink	\$1,186
S. Cyrus	\$472
S. Ontiveros	\$1,026
H. Stauss and A. Kania	\$7,555
Total	\$17,587.00

Tactical Initiative 6

Create and expand opportunities for student research and research related education.

1) Formalize summer research program for students.

a) **Status:** Implemented/Ongoing

The Assistant Dean for Research appointed Dr. Ontiveros as Director of Student Research in August 2018. One of the responsibilities of the appointment was to fully implement a summer research program for medical students. The Assistant Dean worked with the Dean to jointly fund the program from existing budgets, since the FY-19 budget did not include funding for the Summer Research Program. It was agreed that the program would provide funding to the mentors to fund the project cost for summer research. Each participating faculty member would be funded for 2 students. Established accounts would be able to carry forward so that faculty would have available resources for up to two years. The program would involve a six-week research experience beginning in the last week of May and culminating with Student Research Day on the Friday of new student orientation week.

i) **Metrics:**

(1) **Number and Types of Opportunities:** A total of 13 projects were submitted by faculty. Two projects were withdrawn; one as the result of a faculty departure and the other at the request of the project faculty. The remaining eleven projects involved nine different faculty and enrolled 25 students. Faculty funds were created using a funding formula of \$3,000 per student mentored with a maximum allotment of \$6,000. Funding was distributed over the FY-19 and FY-20 program. The following table provides a summary of projects, faculty and students.

Table 7
Summer Medical Student Research Faculty, Projects, Student Participation and Funding

Faculty Mentor	Project Title	Students Mentored	FY-19 Allocation	FY-20 Allocation
J. Benoit	Development and Assessment of a Computer Model of External Compressive Forces on Interstitial Fluid Dynamics	Y. Dacquay B. Hummel-Price	\$850.00	\$5,150.00
D. Bramblett M. Woods	Development of a Multiplexed Reverse Transcription-Loop-Mediated Isothermal Amplification (RT-LAMP) Assay for the detection of emerging arboviruses	J. Jayne	\$2,355.00	\$3,645.00
K. Gosselink	Central Regulation of Energy Balance in Stress and Hypertension	G. Gilderman T. Besong	\$1,902.00	\$4,098.00
A. Kania H. Stauss	Effect of Osteopathic Manipulative Treatment on Autonomic Balance	K. Weiler M. Opena	\$4,000.00	\$2,000.00
N. Minugh-Purvis K. Vaudrey A. Kania L. Jons-Cox	Enhancing Palpatory Skill Development in Entering Osteopathic Medical Students	A. Balogun N. Chajec	\$3,275.00	\$2,725.00
N. Minugh-Purvis K. Vaudrey	Reassessing Microtia in New Mexico	M. Velasquez S. Diaz T. Christensen	\$4,000.00	\$2,000.00
S. Ontiveros	Determining the Effects of Resveratrol on Hexokinase II Mitochondria Attachment in Cancer Cells	C. Nguyen I. Moradeyo R. Carbajal	\$5,120.00	\$880.00
R. Selinfreund	Collaborative Study-BCOM-NMSU; Computer Modeling Guided Development of Complexes to Increase Bioactivity of Clinically-Important Compounds.	C. Nguyen-Gonzalez A. Kisule	\$4,000.00	\$2,000.00
H. Stauss	Clinical Physiology: Effects of Non-Invasive Transcutaneous Auricular Vagal Nerve Stimulation on Hemodynamic Autonomic, Endocrine and immune function	J. Orellana S. Horchler	\$4,000.00	\$2,000.00
M. Woods	Mechanisms of Zika Virus-Mediated Cell Cycle Blockade	J. Blaine J. Long U. Khalique Z. Cady	\$4,000.00	\$2,000.00
Total			\$33,502.00	\$26,498.00

2) *Continue to expand the medical student research day activities.*

a) Status: Ongoing

The Medical Student Research Day was held on July 19, 2019. The keynote speaker for the 2019 event is Alan Langnas, D.O., Professor of Surgery, University of Nebraska Medical Center, Omaha, NE. Dr. Langnas is an academic transplant surgeon.

i) Metrics:

(1) Number of presentations: There were 22 Poster Presentations by student presenters. The presentations are listed below. BCOM faculty mentors are shown in bold type.

1. Moazeni, S, Umar S, Methangkool E, Sarji S. Mahajan A, Eghbali M. Functional and Molecular Changes of the Maternal Heart During the Late Pregnancy Stage: A two-dimensional speckle-tracking echocardiography study. Burrell College of Osteopathic Medicine and University of California Los Angeles Department of Anesthesiology & Perioperative Medicine.
2. Soliman M, Song C, Gowda C, Ding Y, Dovat S. Transcriptional regulation of cellular proliferation in T-cell acute lymphoblastic leukemia. Burrell College of Osteopathic Medicine and Pennsylvania State University College of Medicine Department of Pediatrics.

3. Dacquay YJ, Hummell-Price BT, **Benoit JN**. Dynamic computer modeling of protein and fluid exchange in skeletal muscle and elucidating the physiological properties underlying the therapeutic effect of lymphatic pumping in OMT. Burrell College of Osteopathic Medicine Department of Physiology & Pathology.
4. Jaynes, J, **Bramblett D, Woods M**. Development of a multiplexed reverse transcription-LOOP-mediated isothermal amplification assay for the detection of west Nile virus in the Culex mosquito. BCOM Departments of Biomedical Sciences, and Physiology & Pathology.
5. Gilderman GS, **Gosselink KL**. Neurological responses to stress are modified by time of exposure and hypertension. BCOM Department of Physiology & Pathology.
6. Nguyen C, Carabajal RJ, Moradeyo IG, **Ontiveros SJ**. Determining the effects of resveratrol on hexokinase II mitochondrial membrane attachment in cancer cells. BCOM Department of Anatomy & Cell Biology.
7. Kurian AP, Weiler, KN, **Stauss HM, Whitson DDS, Kania AM**, Opena M, Orellana JN. Transcutaneous auricular vagus nerve stimulation increases cardiac and glandular parasympathetic activity. BCOM Departments of Biomedical Sciences, and Clinical Medicine.
8. Nguyen Gonzalez C, Kisule A, Talipov M, Yuki E, Breslin P, **Selinfreund R**. Computer Modelling: Stabilizing Oleocanthal Using Various Docking Molecules Such as Lecithin, Cyclodextrin, PEG, and Carbon Nanotubes. BCOM Department of Physiology & Pathology; NMSU Department of Chemistry and Biochemistry; Monell Chemical Senses Center, Philadelphia, PA; Rutgers University Department of Nutritional Sciences.
9. Cady Z, Khalique U, Blaine J, Long J, **Woods ME**. Analysis of Key Cell Cycle Regulators During G2/M Phase Cell Cycle Arrest in Human Neural Progenitor Cells After Zika Virus Infection. BCOM Department of Physiology & Pathology.
10. Besong T, **Gosselink K**. Neuroanatomical Characterization of GHSR1A Expression Levels in Stress and Hypertension. BCOM Department of Physiology & Pathology.
11. Albrechtsen CL, Todd D, Wellington B. A Rare Instance of a Benign Ovarian Cystic Teratoma With Multiple Teeth. BCOM and Memorial Medical Center, Las Cruces.
12. Fadah K, Velimirovic B. Extra-osseous Chordoma of Spine Imitating Neurogenic Tumor. BCOM and Department of Neurosurgery, Del Sol Medical Center, El Paso, TX.
13. Hunsaker B, Richards, KD, An YW. Parameters of UCL Repair Compared with Reconstruction in the Treatment of Ulnar Collateral Ligament Tear. BCOM.
14. Hunsaker B, Nelsen A. Case Report: Dorsal Penile Foreign Body. BCOM
15. Weiler, KN, Kurian AP, Orellana JN, **Stauss HM, Whitson DDS, Kania AM**, Opena M. Suboccipital Decompression Lowers Blood Pressure Through Reduction of Sympathetic Tone. BCOM Departments of Biomedical Sciences, and Clinical Sciences.

16. Sridhar S, Melgarego K, **Selinfreund R**, Breslin P. Non-fructose Based Beverages: Assessment of Progression of Metabolic Syndrome. BCOM Department of Physiology & Pathology, Rutgers University Department of Nutritional Sciences, Monell Chemical Senses Center, Philadelphia, PA.
17. Taylor ZD, Mcleod EM, Wright MT, Gard C, **Woods ME**. BCOM Department of Physiology & Pathology, NMSU Department of Economics, Applied Statistics, & International Business.
18. Meza-Rodriguez SM, Bonilla J, Johnson E, Lay W, Ayala S, Ponce de Leon M, Ortega A, Hooshmand C, Guitierrez S, **Woods M**, Dominguez DC, **Bramblett D**. BCOM Departments of Physiology & Pathology, and Biomedical Sciences, UTEP Department of Biology.
19. **Aburto J**, Nguyen-Espino BX, Nguyen-Espino JT. Founder Effect and Mutations in BRCA1 Genes in New Mexico: A Historical Literature Review. BCOM Department of Clinical Specialties.
20. Christensen T, Diaz S, **Vaudrey K**, Velasquez M, **Minugh-Purvis N**. Revisiting Microtia in New Mexico. BCOM Department of Anatomy & Cell Biology.
21. Ivey KM, Nguyen TN, Fleckman EM, McLeod EA, **Funk CK**. Traditional Textbook Use Compared to External Resource Use in a First and Second Year U.S. Osteopathic Medical School Curriculum. BCOM Department of Academic Affairs,
22. Balogun A, Chajec N, **Vaudrey K**, **Minugh-Purvis N**. Enhancing Palpatory Skill Development in Entering Osteopathic Medical Students. BCOM Department of Anatomy & Cell Biology.

(2) Research Day Awards

(a) Best Overall Research Poster Award

Project Title: *Percentage of Staphylococcus Aureus and MRSA Colonization in First-Year Osteopathic Medical Students*

Awardee and Presenting Author: Samantha Meza-Rodriguez, OMS-I

Project Advisor(s): Debra Bramblett, PhD, and Michael Woods, PhD

(b) 1st Place Poster: Biomedical Sciences Research

Title: *Neurological Responses to Stress are Modified by Time of Exposure and Hypertension*

Awardee and Presenting Author: Gina Gilderman, OMS-I

Project Advisor(s): Kristin Gosselink, PhD

(c) 1st Place Poster: Clinical Sciences and OMT Research

Title: *Suboccipital Decompression Lowers Blood Pressure through Reduction of Sympathetic Tone*

Awardees and Presenting Authors: Kailee Weiler, OMS-I and Marielle Opeña, OMS-III

Project Advisor(s): Adrienne Kania, DO, and Harald Stauss, MD, PhD

(d) 1st Place Poster: Population and Public Health Research

Title: *Percentage of Staphylococcus Aureus and MRSA Colonization in First-Year Osteopathic Medical Students*

Awardee and Presenting Author: Samantha Meza-Rodriguez, OMS-I

Project Advisor(s): Debra Bramblett, PhD, and Michael Woods, PhD

(e) **1st Place Poster: Medical Education Research**

Title: *Traditional Textbook Use Compared to External Resource Use in a First- and Second-Year U.S. Osteopathic Medical School Curriculum*

Awardee and Presenting Author: Kayla Ivey, OMS-III

Project Advisor(s): Cindy Funk, PhD

3) *Provide financial support for student travel to meetings and conferences.*

a) Status: Implemented/Ongoing

The Office of Research & Sponsored Programs does not have line item funding for student travel. A student travel funding program has been supported through the ORSP general fund. In support of the Summer Research Program, the ORSP funds travel of the overall winner to the National Student Research Forum (NRSF) in Galveston, TX. ORSP also supports request for presenting student authors to travel to scholarly meetings.

i) Metrics: The following table summarizes the FY-19 Student Travel Funding

Table 8
Research Office Student Travel Funding

Student Funded	Meeting Attended	Amount Awarded
Victor Liao	National Student Research Forum	\$1,316.00
Guy Charest	2019 Annual Meeting of Piedmont Orthopedic Society	\$1,200.00
Zachariah Taylor	Arizona Osteopathic Medical Association Meeting	\$136.00
Total		\$2,652.00

4) *Provide professional development for faculty supervising students.*

a) Status: Ongoing

A program has not been fully implemented. For the FY-19 year, professional development for faculty mentors was accomplished through the CITI training modules. One OMS-III student was approved for a research elective during the 2018-19 academic year.

5) *Develop and implement Distinction in Research Tract for Medical Students*

a) Status: In Progress

ORSP has a target date of June 2020 for implementation of this program. Progress to date has involved program planning and drafting documents for presentation to the Curriculum Committee during the Fall 2019 semester.

6) *Provide non-clinical elective opportunities for 3rd and 4th year students.*

a) Status: In Progress

Several students have requested 4th year research electives. The Office of Research and Office of Clinical Education have developed a process for students to request a research elective as a non-clinical elective. Implementation of the process began in Spring 2019 for students during the 2019-20 academic year.

Tactical Initiative 7

Expand research opportunities through consortia and networks.

- 1) *Seek clinical trial opportunities through collaboration with regional research organizations.*
 - a) **Status:** Ongoing
The Assistant Dean for Research has been representing BCOM at a series of ongoing meetings at the Medical Center of the Americas focused on developing and expanding clinical trials in the border region. As a result, BCOM has joined more than 30 key industry stakeholders from the US and Mexico in the MCA Clinical Trials Consortium to advance discussion and implement strategies and initiatives that focus on advancing the region's clinical trial infrastructure.

- 2) *Establish a Practice-Based Research Network at BCOM.*
 - a) **Status:** In progress
ORSP is conducting background research and gathering information. The Assistant Dean is meeting with local stakeholders as part of this process.

- 3) *Provide opportunities for medical residents to work with BCOM faculty on research projects.*
 - a) **Status:** In development
Informal collaboration between medical residents and some BCOM clinical affiliated faculty has started. A formal program has not been implemented.

Tactical Initiative 8

Create sponsored outreach programs that are aligned with the BCOM Mission, faculty interest, and creative scholarship.

- 1) *Partnerships with NMSU, Arrowhead Center, and others to sponsor research conferences and workshops.*
 - a) **Status:** Ongoing
ORSP continues to work with various entities to advance research initiatives at BCOM.
 - i) **Metrics:**
 - (1) **Conferences and Workshops**
 - (a) **New Mexico Bio Meeting:** ORSP collaborated with the NMSU Arrowhead Center for local meeting of the NM Bio on the NMSU Campus. Dr. Benoit was on the program and provided an update of research at BCOM at the April 11, 2019 meeting held on the NMSU campus.
 - (b) The ORSP partnered with the Mesilla Valley Economic Development Alliance (MVEDA) and NMSU Arrowhead Center to sponsor a booth at the 2019 American Telemedicine Association Meeting in New Orleans (April 14-16, 2019). Dr. Benoit led the initiative to develop a short high-quality video highlighting BCOM.

- 2) *Offer continuing education opportunities that meet the needs of the medical professions in the region.*
 - a) **Status:** In development
ORSP provided support for the student poster session at the First Continuing Medical Education Conference held at BCOM. ORSP printed the student posters and funded the awards offered.

- 3) *Pursue opportunities for funding and delivery of partnered outreach programs between BCOM and other entities.*
a) Status: No activities to report.

2018-19 Faculty and Student Presentations and Publications

The following documents faculty and student scholarly activity during the academic year. A superscripted number following a name indicates the year that the student is currently in. (e.g., 2= OMS-II, etc.)

Abstracts and Posters

1. Alonso, G.T., Coakley A, Pyle L, Manseau K³, Thomas S, Rewers A. DKA at Type 1 Diabetes Diagnosis. American Diabetes Association Conference, June 2019.
2. **Eastwood J.**, Kleinberg K⁴, and **D. Rodenbaugh**. Collaborative Testing in Medical Education: Student Perceptions and Knowledge Retention. 23rd Annual Meeting of the International Association of Medical Science Educators, Roanoke, VA. 2019 (Poster Presentation)
3. Ibarra M., Baca B., Dominguez D., **Woods, M.**, and **D. Bramblett**. Prevalence of Biocide Resistance Genes Detected in First Year Medical Students Colonized by *Staphylococcus aureus*. UTEP COURI Symposium 2019.
4. Kleinberg, K⁴, **Eastwood JL**, and **DW Rodenbaugh**. Efficacy of Collaborative Testing for Long-Term Retention of Medical Knowledge. FASEB J. 32 (Supplement 1): 21.6, 2018. Abstract No. 21.6. (Poster)
5. Manseau, K³, B. Frohnert, and T. Alonso. Impact of Type 1 Screening. American Diabetes Association Conference, June 2019.
6. Meza-Rodriguez S², Bonilla J², Johnson E³, Lay W³, Ayala S⁴, Ponce de Leon M⁴, Ortega A⁴, Hooshmand C, Guitierrez S, **Woods M**, Dominguez DC, and **D. Bramblett**. Medical Center of the Americas 2019 Annual Poster Session. El Paso, TX.
7. Orellana, R², and J. Espinosa. Using a Social Ecological Framework to Understand and Mitigate High Asthma Rates in the South Bronx. 2019 Social Medicine Consortium Conference.
8. Orellana, R², and R.J. Rameau. A Novel Approach to Medical Education: Meeting the Needs in Global Health through the Integration of Social medicine in the Training and Education of Healthcare Professionals. Educating Leaders 2019, the AACOM Annual Conference, Washington, D.C.
9. **Palazzolo E**, **Lee N**. *Engaging Community through Harry Potter's World: The Magical Experience of Hosting an NLM Traveling Exhibit*. Poster session co-presented at the Medical Library Association, South Central Chapter Annual Meeting in San Antonio, TX, October 23, 2018.
10. Sierra-Fonseca JA¹, Hamdan JN, Cohen AA, Cardenas SM, Saucedo S, Lodoza GL, and **KL. Gosselink**. Impaired Proteostasis in Response to Early Life Stress in the Adult and Aged Hippocampus. Neuroscience 2019.
11. Soliman, M², Song C, Gowdal C, Ding Y, and S. Dova. Regulation of T-cell Leukemia using CK2 Inhibitors. BCOM CME Spring Regional Conference, 2019

12. Soliman, M², Song C, Gowdal C, Ding Y, and S. Dovat. Regulation of Cellular Proliferation in Acute Lymphoblastic Leukemia.
13. Taylor Z⁴, Wright M⁴, Neal A⁴, Amatya A., and **M.Woods**. Analysis of Seer 18 Cancer Trends Along the United States/Mexico Border. Texas Tech University Health Sciences Center El Paso 13th Annual Research Symposium, 2019. (Poster)
14. Taylor Z⁴, Wright M⁴ Amatya, A., and **M.Woods**. Incidence trends among common cancers in New Mexico from 2000-2014: An analysis of SEER 18 data. New Mexico Medical Society Annual Conference 2018.
15. Taylor, Z⁴, Wright M⁴, A. Amatya, C. Gard, and **M. Woods**. Cancer incidence and mortality in a border state. Arizona Osteopathic Medical Association Annual Convention 2019.

Presentations

1. **Benoit JN**, Transitioning to Administration. American Physiological Society Institute for Teaching and Learning, Madison, WI June 2018.
2. Montgomery M, Fitterling L, **Palazzolo E**, **Lee N.**, *Finding the Best Fit: Integrating Library Instruction into the Curriculum*. Presentation at the AACOM Annual Conference in Washington, D.C., April 11, 2019.
3. Fitterling L, Garber D, **Palazzolo E**, Medical Information Literacy Q-Bank: A Collaborative and Developing Project. *Medical Reference Services Quarterly*. 2019; 37(4):331-340.
4. **Lee N.** *Fact or Fiction? Health Information in the News & Media*. Presented at the New Mexico Library Association Conference Annual Conference in Albuquerque, November 2, 2018.
5. **Lee N, Palazzolo E.** *Creating Community Connections in Harry Potter's World: Hosting an NLM Traveling Exhibit*. Poster session presented at the New Mexico Library Association Annual Conference in Albuquerque, October 31, 2018.
6. **Lee N, Palazzolo E.** *Librarians' Diverse Roles in Teaching & Assessing Evidence Based Practice*. Roundtable Discussion at the Medical Library Association, South Central Chapter Annual Meeting in San Antonio, TX, October 23, 2018.

Publications:

1. **Antony, S.**, J. Singh J⁴, and M. Dejesus⁴. A Retrospective Study Evaluating Sexually Transmitted Diseases in Military Personnel During Deployment. Is There a Need to Change Current Practices. Doi: 10.5812/jamm 88596
2. **Benoit, JN.**, Weichbrod RH, Norton JN, and JC Garber. Chapter 36: Future Directions and Challenges. In *Source Management of Animal Care and Use Programs in Research, Education, and Testing*. 2nd Edition. RH Weichbrod, GAH Thompson, JN Norton, editors. CRC Press/Taylor & Francis, Boca Raton, FL. 843-857, 2018.
3. Cnop, K⁴, Martinez B³, and K. Austad. Resistant dermatomyositis in a rural indigenous Maya woman. *BMJ Case Rep*. 2019 February 21. PMID: 30796072.

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