BURRELL COLLEGE OSTEOPATHIC MEDICINE

Office of Research & Sponsored Programs

2021-2022 Annual Report

Prepared by:

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Introduction

This report summarizes research activities of the Burrell College of Osteopathic Medicine and the Office of Research & Sponsored Programs from July 1, 2021 through June 30, 2022.

The Office of Research & Sponsored Programs (ORSP) is the administrative unit within the Burrell College that is charged with providing oversight of all research and creative scholarly work conducted at the Burrell College of Osteopathic Medicine. As an administrative unit ORSP provides organization and infrastructure in support of faculty, staff, and student research activities and assures that the College research programs are compliant with local and federal policies and regulations. The Office of Research and Sponsored Programs provides both pre-award and post-award support for grants and contracts.

ORSP is responsible for oversight and operation of the Burrell College Research Laboratories located at the Southwest Research & Production Complex in the West Mesa Industrial Park in Las Cruces. The College Research laboratories support the research conducted by College faculty and students with dedicated facilities for Basic Biomedical Science Research as well as Human Physiology & Osteopathic Manipulative Medical Research. In addition, many College faculty have ongoing collaborative studies with researchers at New Mexico State University and the University of Texas at El Paso.

Office of Research & Sponsored Programs Mission

The Burrell College of Osteopathic Medicine Office of Research & Sponsored Programs is committed to supporting 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

Figure 1 shows the 2021-2022 organizational structure for research. The President has designated Institutional Official (I.O.) for Research responsibilities to the Assistant Dean for Research. The I.O. has oversight responsibility and signatory authority to ensure compliance in all research functions of the College. The Dean and Chief Academic Officer of the College is appointed by the President and appoints the Assistant Dean for Research. The Assistant Dean for Research provides oversight of the Office of Research & Sponsored Programs (ORSP). The Research Advisory Council includes elected members from the faculty and serves in an advisory capacity to the Assistant Dean and ORSP. Two Directors are appointed from the faculty by the Assistant Dean. The Director of Student Research provides oversight of student research activities including the Summer Research Experience, Medical Student Research Day, and the Distinction in Research pathway. The Director of Research Laboratories provides oversight of the operational aspects of the Burrell Research Laboratories. A Scientific Research Associate manages the Research Laboratories and also serves as the Chemical Hygiene Officer. Two compliance committees provide institutional level oversight in accordance with federal regulations and guidelines. The Institutional Review Board (IRB) is an institutional level committee responsible for oversight of research involving human subjects and is appointed by the I.O. The Institutional Biosafety Committee (IBC) is an institutional level committee responsible for oversight of research involving recombinant DNA and biohazardous agents. The I.O. for Research assures that the IRB and IBC are appropriately resourced and empowered.

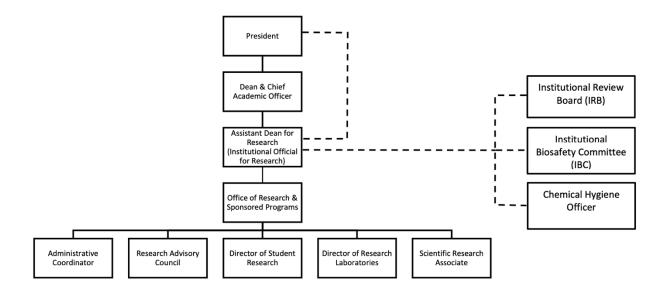


Figure 1

Burrell College organizational structure for research. Solid connectors show direct reporting lines and dashed lines depict delegated responsibilities by the President to the Assistant Dean and by the Assistant Dean to the oversight committees.

2021-2022 Research Office Staff

The ORSP staff for the period covered in this report were Joseph N. Benoit, Ph.D., Assistant Dean for Research; Harald M. Stauss, M.D., Ph.D., Director of Student Research; Michael E. Woods, Ph.D., Director of Research Laboratories; Kalli Martinez, M.S., Scientific Research Associate & Chemical Hygiene Officer; and Martha Enriquez, Research Office Coordinator.

The Office of Research staff are encouraged to engage in professional activities related to their jobs since these activities provide clear benefits to the employee, office of research, and institution. Notable affiliations of the Office of Research Staff during the 2021-2022 academic year included the National Council of University Research Administrators (J. Benoit), AOA Grant Review and Manuscript Review (J. Benoit, H. Stauss), OMED Student Poster Judging (J. Benoit), Medical Center of Americas Clinical Trials Task Force (J. Benoit), Medical Center of the Americas Clinical Trials Academy (H. Stauss), Public Responsibility in Medicine & Research (J. Benoit), AACOM Council of Researchers (J. Benoit), NM Bio, AAALAC, International (J. Benoit), American Physiological Society (H. Stauss, J. Benoit), ABSA International Biosafety Organization (M. Woods), NIH Grant Review (H. Stauss), NMSU Institutional Biosafety Committee (K. Martinez), and Thompsons Grants Management Training (M. Enriquez).

2021-2022 Research Advisory Council

The Research Advisory Council members for the period covered by this report were Joseph N. Benoit, Ph.D., Council Chair; Walker Toohey, OMS-1; Pedro Del Corral, M.D., Ph.D., Associate Professor of Pathology; Adrienne Kania, D.O. Associate Professor of Clinical Medicine; Gabor Szalai, Ph.D., Associate Professor of Immunology; Norice Lee, MLIS, Associate Director of the Library (ex officio voting member); Harald Stauss, M.D., Ph.D., Director of Student Research (ex officio, non-voting member); Michael Woods, Ph.D., Director of Research Laboratories (ex officio, non-voting member); Jennifer E. Taylor, Vice-President for Administration (ex officio, non-voting member); Kalli Martinez, M.S., Scientific Research Associate (ex officio, non-voting). Martha Enriquez served as the Recording Secretary for the Council. The following positions on the Council were vacant: Associate Dean for Pre-Clerkship Curriculum, Clinical Faculty Representative, OMS II Student Representative.

The Research Advisory Council activities included annual review of research office policies and procedures, review of Summer Research Experience Projects, review of student funding requests, review of faculty funding requests, and participation in development of the 2022-2024 Research Strategic Plan.

Institutional Review Board

The IRB members for the 2021-2022 year were Harald M. Stauss, M.D., Ph.D., Professor of Pharmacology (Chairperson); Philipp A. Djang, Ph.D., (non-affiliated community member); Nancy Minugh-Purvis, Ph.D., Professor of Anatomy & Cell Biology; Michael Frederich, M.D., Adjunct Assistant Professor of Family Medicine & Palliative Care; Adrienne Kania, D.O., Associate Professor of Clinical Medicine; Robert J. Ketchum, Ph.D. Professor of Anatomy; Norice Lee, MLIS, Associate Director of the Library; Tanya Martinez, C-TAGME, Designated Institutional Official at Mountainview Regional Medical Center (community member); Vanessa De La Rosa, Ph.D., Assistant Professor of Biomedical Sciences, David Osborne, Ph.D., Professor of Physiology (alternate member); Elizabeth Eaton, Director of Compliance (alternate member). Martha Enriquez provided IRB administrative office support.

The IRB held monthly meetings throughout the year, reviewed 14 new submissions, 19 protocol amendments, 15 protocol resubmissions, and conducted 37 continuing reviews. Actions of the IRB were approval of 12 new protocols, disapproval of 2 protocols, and closure of 5 protocols. There are 46 currently active IRB protocols; these are listed in **Appendix 1**.

Institutional Biosafety Committee

The IBC members for the 2021-2022 year were Michael Woods, Ph.D. (Chair), Associate Professor of Pathology; Joanne Dupre, Ph.D., Manager, Biosafety/Export Control, NMSU; Erin Martin, RN, BSN, MHA, CPPS, Chief Quality Officer at Main Street Anesthesia Consulting; Kalli Martinez, M.S., Scientific Research Associate; Gabor Szalai, Ph.D., Associate Professor of Immunology; Jon Jackson, Ph.D., Associate Professor of Anatomy & Cell Biology, Director of the Gross Anatomy Laboratory (ex officio, voting); Joseph N. Benoit, Ph.D., Professor of Physiology & Assistant Dean for Research (ex officio, voting); Nina Nunez, M.A.Ed., Assistant Vice-President for Enrollment Services (ex officio, non-voting); Jeff Harris, Assistant Vice-President of Administration (ex officio, non-voting).

The Institutional Biosafety Committee held quarterly meetings, reviewed 8 new submissions, 9 resubmissions, and 3 amendments. Actions of the IBC were approval of 8 new protocols, and closure of 1 protocol. There are 17 currently active IBC protocols. **Appendix 2** provides a list of currently active IBC protocols.

Scholarly Productivity

Information regarding publications and presentations was gathered in two ways. The academic departments chairs were asked to submit department level information to the Office of Research. This information on publications and presentations as provided by the Chairs is tabulated in **Appendix 3**. In addition to information provided by the four academic departments, the Assistant Dean for Research conducted a search on PubMed using the search term "Burrell College of Osteopathic Medicine". This search yielded 67 publications in the 2021-2022 year. Many of these publications involved students working with individuals that were not members of the four academic departments such as clinical preceptors. This complete citation list is also included in **Appendix 3**.

Clinical Trials

In accordance with Federal Regulations, Burrell College maintains a registration with Clinical Trials.gov and investigators are required to register clinical trials. There are four clinical trials registered in Clinical Trials.gov from Burrell College. One is completed, two are actively recruiting subjects, and one has not yet started recruiting subjects. This activity is summarized in **Appendix 4**.

Grant Activity

Appendix 5 details the grants activity during the 2021-2022 year. Seven proposals were submitted to outside sponsors requesting a total of \$768,520. Three proposals received notification of funding, two were not funded, and two are pending final decisions. New awards that were received during the 2021-2022 fiscal year amounted to \$15,000. An additional award of \$523,492 will begin on July 1, 2022 and will be counted in the 2022-2023 fiscal year.

Research and Sponsored Program Expenditures

Appendix 6 provides a breakdown of intramural and extramural research expenditure for the 2021-2022 year. A total of \$643,032 was expended for research and sponsored program activities.

Intramural expenditures by the Office of Research & Sponsored Programs budget totaled \$301,875. Operating costs were \$246,801. In addition to the operating expenses, the Office also received a capital equipment budget to replace an aging flow-cytometer. A Luminex Guava easyCyte 5HT single laser flow cytometer was installed in the BioScience Laboratory at a cost of \$55,074.

Extramural expenditures paid by sponsored programs exceeded the Office of Research expenditures for the first time in the history of the College. Sponsored program expenditures

for the 2021-2022 fiscal year were \$341,157. A table detailing the breakdown of sponsored program expenditures is included in **Appendix 6**.

Invited Speakers

The Distinguished Researcher Seminars Series is a Collegewide speakers series funded by the Office of Research & Sponsored Programs. Invited speakers represent leaders in their respective fields and are invited by the academic departments and students. Each academic department is given the opportunity to invite and host two speakers per year and the students are provided the opportunity to invite and host one speaker per year. An additional speaker is invited to provide the keynote lecture for the annual Medical Student Research Day. Seminars are open to the campus and general public, and are also webcast live via Zoom. The 2021-2022 year was the second year that the Office of Research funded the seminar series and the first year where speakers were able to visit our campus and give in-person lectures since the COVID-19 pandemic prevented in person visit last year. **Appendix 7** lists the invited speakers funded by the Office of Research.

Medical Student Research Activities

The Office of Research has responsibilities for fostering opportunities for students to engage in research as well as tracking and monitoring of student research activities. Dr. Harald Stauss was appointed Director of Student Research on August 12, 2021 following the resignation of Dr. Steven Ontiveros from this position. Dr. Ontiveros agreed to organize and oversee the 2021 Medical Student Research Day as his last official duty. Dr. Stauss was charged with advancing research office priorities for the 2021-2022 year which included creation of a student research organization, expansion of the Summer Research Experience to include engagement of clinical faculty who could mentor research opportunities for students, improving communication with all campus stakeholders on matters related to student research, and launching the Distinction in Research program. Significant accomplishments in student research have been realized under Dr. Stauss' Directorship. This section of the annual report summarizes activities and accomplishments in areas related to student research.

Medical Student Research Day 2021

The 2020-2021 Summer Research Experience culminated with Medical Student Research Day on July 16, 2021. The event was organized by Dr. Steven Ontiveros, who served as Director of Student Research during the 2020-2021 academic year. A complete listing of presentations from the 2021 event appear in **Appendix 8**. The keynote speaker was Andrea Amalfitano, M.D., Ph.D., Dean of the College of Osteopathic Medicine at Michigan State University.

Student Research Organization

The Burrell College Student Research Organization was founded in Fall 2021. Inaugural student officers were Massha Rezzai and Ashley Stiglich. Dr. Harald Stauss serves as the faculty advisor for the Student Research Organization.

Distinction in Research

The Distinction in Research is an optional research pathway that recognizes a high level of engagement by a medical student in research. The Distinction path is designed to provide opportunities for medical students who seek higher levels of research experience than would normally be available through a single summer research experience. Working under the direction of a Burrell College faculty member, the Distinction path provides an intensive supervised research experience that mentors students in the process of designing, conducting, and disseminating research in a biomedical, clinical, community, or educational setting. Twelve students were admitted into the Distinction in Research pathway in Fall 2021. **Appendix 9** provides the names of the Distinction in Research students and their faculty mentors.

2022 Summer Research Experience

The 2022 Summer Research Experience (SRE) began on May 31, 2022. The SRE includes a weekly Responsible of Conduct workshop as well as an opportunity for course credit through OM6000. The workshop theme for the current year is manuscript preparation and publication. The 2022 Medical Student Research Day will be held on August 13, 2022. As in past years, the Office of Research provides funding to support the projects. Fund allocation was based on project budgets submitted by the faculty mentors. Two clinical faculty at remote sites submitted projects and received funding. Some investigators with other sources of funds did not request support. **Appendix 10** lists the projects as well as funds allocated to each project.

Tracking Student Research Activity: The Intent to Participate in Research

Students participating in research or creative scholarly projects outside of the Summer Research Experience are required to notify the Office of Research by submitting an Intent to Participate in Research. The Director of Student Research and Assistant Dean review these requests, check for potential compliance concerns and notify the student of approval or denial of the request. A total of 65 students intents were received and reviewed during the 2021-2022 year. **Appendix 11** summarizes these requests. Activities in which students participated in were Case Reports (6); Conference Paper submissions (17); Journal Article or Manuscript submissions (7); and Participation in a Mentored Research Project (35).

Student Travel Requests

Students presenting research papers at conferences are eligible for travel funds to partially offset the cost of attending the conference. Travel awards are capped at \$1,200. Requests are submitted to the Office of Research, and reviewed by the Research Advisory Council. The recommendation for funding is then forwarded to the Office of Student Affairs for final dispensation of funding. The Office of Research received seven requests during the 2021-2022 academic year, for a total of \$7,004. Total recommended funding was \$6,682. **Appendix 12** lists the requests and amount awarded.

Non-clinical Research Rotations

Third and fourth year students are eligible for non-clinical rotations that some students choose to use for a non-clinical research elective. Fourteen students requested non-clinical research electives during the 2021-2022 academic year. Thirteen requests were approved; seven were OMS-3 and six were OMS-4 students. **Appendix 13** lists the approved requests along with the faculty mentor and location.

Student Research Town Halls

The Office of Research held monthly town hall meetings throughout the year. The Town Halls were organized by Dr. Stauss and typically included updates from the research office and student research organization, as well as a short research presentation by a faculty or student. A summary of agenda items from each of the town halls is provided in **Appendix 14**.

Student Researcher of the Year

The Student Researcher of the Year (SROY) is an AACOM sponsored award that recognizes osteopathic medical students with highly competitive experiences and advancement in clinical, translational, or basic science research. Osteopathic medical student nominees are reviewed at the individual College level and a single College SROY is identified and advanced to the AACOM Council of Osteopathic Student Government Presidents (COSGP) for the National Competition. The Burrell SROY Committee was chaired by Walker Toohey (OMS-1) and was comprised in accordance with AACOM/COSGP guidelines to include student members, faculty members, and a member from the research office. Members of the Burrell SROY selection committee were Walker Toohey, Marion Memmott, Elise Lopez, David Nguyen, Cindy Funk, Pedro Del Corral, and Joseph Benoit. Eight nominees were considered. Gina Gilderman (OMS-3) was selected as the Burrell College Student Researcher of the Year and her application materials were submitted for the national competition.

New Research Courses

Two elective courses were approved by the curriculum committee.

OM6000 Summer Research Directed Study

The Summer Research Directed Study is a supervised research experience that provide an opportunity for students to learn outside the formal class structure under the supervision and direction of a College faculty member. It is designed for highly motivated students and with the purpose of providing medical students with an intensive summer research experience in the areas that are relevant to the College mission. Students will develop an understanding of research practices and develop a stronger knowledge of the subject matter. The course culminates with students presenting their research at the annual Medical Student Research Day.

<u>Status</u>: This course is being offered for the first time during the 2022 SRE. Dr. Stauss is the course director.

• OM6300 - Directed Research

The Directed Research course is designed to provide opportunities for students to engage in faculty supervised research over the course of a semester of study. Students enrolling in the course will work under the guidance of a faculty mentor on a research or scholarly project. Students enrolling in Directed Research are expected to be actively involved in the execution of the research or scholarly activity. Assessment of progress will be based on project milestones that the student and faculty mentor mutually agree to prior to the start of the course project. Students enrolling in the course will gain knowledge and appreciation of relevant medical science literature, responsible conduct of research, as well as the process by which scientific knowledge is generated, critically evaluated, and disseminated.

<u>Status:</u> This course was approved by the curriculum committee in 2022 and will be offered to students as an elective beginning in the 2022-2023 academic year.

Research Laboratories Activities

The College continues to operate research laboratories at the Southwest Research & Production Complex located in the West Mesa Industrial Park in Las Cruces. Dr Michael Woods serves as Director of Research Laboratories and Ms. Kalli Martinez serves as the Scientific Research Associate for the Laboratories. In addition to regular staff, the research laboratories use independent contractors for weekly custodial services. A separate contract worker provides lab cleaning in restricted areas and facility monitoring in evening hours during the week on an as needed basis.

The laboratories consist of an open format BSL-2 BioScience Laboratory supporting cellular and molecular research, a Human Physiology Laboratory that is equipped for studies centered human metabolism, cardiovascular regulation, and osteopathic manipulation. A support area with computers, printers, and an imaging microscope is also available for researchers. During the past year, the research laboratories received institutional funding to replace the flow cytometer which was becoming obsolete and no longer supported by the manufacturer. The new flow cytometer if fully operational. In addition to new equipment, the Research Office funded the replacement of the laboratory electronic access system on laboratory doors with a system that is compatible with the main College buildings. This allows for improved building security and access tracking. An emergency phone was also installed outside of Building 200.

OSHA required Laboratory Standard and Hazard Communication Training is also provided by Ms. Martinez and Dr. Woods. Two in-person training courses were offered during the year along with an online refresher course for all individuals who had previously completed the in person course.

The 2021-2022 year saw a resumption of laboratory usage and lifting of COVID-19 restrictions on human subjects research. Laboratory entry logs reported 10,256 card swipe entries between July 1, 2021 and June 21, 2022. Faculty currently using and supervising students in the laboratories during this time period and the areas where they perform their research is listed in **Appendix 15**.

Office of Research and Sponsored Programs Plans and Goals for Next Year

Goals for next year center on continued growth and expansion of research in the College.

- 1. Expand research opportunities for faculty and students in collaboration with clinical and community affiliates including the Regional Academic Centers.
- 2. Improving data tracking and reporting by collaborating with campus information technology programmers to incorporate research office data into CAPRI and Progress IQ.
- 3. Collaborate with Faculty Affairs to identify faculty at regional centers who are interested in mentoring students in research. Create an adjunct appointment process for research faculty.
- 4. Work with the Director of Research Laboratories to develop a space management plan for the laboratories.
- 5. Continue to build pre-award and post-award capabilities that can support federal grant requirements.

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Appendix 1 Active IRB Protocols

Investigator	Title	Category of Review
Chenthuran Deivaraju, MD; Robyn Marks	A Case Study of Post Operative Morbidity Following Dital Femur Osteotomy: Patellar Impingement	Case Report (Exempt
Fidel Barrantes, MD; Matthew Baska; Hannah Kerr; Ifran Khan; Mohammad Abraar Quraishi	Acute Respiratory Distress Syndrome In A Dual Kidney/Pancreas Transplant Recipient After "Dabbing" With Marijuana Rosin: A Case Report	Case Report (Exempt)
Scott Cyrus, DO; Emily Hanka;Jorey Cunico	When Mosaicism Saves a Life – A Case Report on Trisomy 7	Case Report (Exempt)
Vanessa De La Rosa, PhD	Identifying predictors of osteopathic medical student clinical performance and professionalism	Case Report (Exempt)
William Baker, DO; Darlene Diep; Tyler Janitz; Bineetha Aluri	Linear Porokeratosis Treated With Cholesterol/ Lovastatin Cream	Case Report (Exempt)
Aghaegbulam Uga, MD; Vijay Singh; Mahmoud Alnsour; Shreedhar Kulkarni, MD	Estimation of Geographic and Demographic Variabilities Associated with Schizophrenia Age of Onset and Duration of Untreated Psychosis	Exempt
Cindy Funk, PhD	The effectiveness of utilizing guided, online formative assessments to enhance student engagement and learning in a pandemic environment.	Exempt
Gabor Szalai, PhD;	Results of an Interrupted Asynchronous Learning Module in Immunology	Exempt
Harald Stauss, PhD; Reed A. Lampert; Faye Tager; Augustine Nguyen; Uma Komatreddy	Validation of a Novel Technique to Assess Baroreceptor Reflex Function in Patients with Insulin-Dependent Diabetes Mellitus and Healthy Controls	Exempt
Harris Ahmed	Practice Locations of Michigan Ophthalmologists as a Model for the Implications of Osteopathic vs. Allopathic Training	Exempt
LeAnn Jons-Cox, DO	Phase II-Project in Osteopathic Medicine Education and Empathy (POMEE): Longitudinal Study of Changes in Empathy in Medical School	Exempt

Michael Woods, PhD; Zac Taylor;Mark Wright; Anup Amatya	Cancer Trends in New Mexico and Along the U.SMexican Border	Exempt
Miriam Donohue, PhD; Cindy Funk, PhD; Kris Vaudrey; Rylee Samander	Impact of Integration of Neuroanatomy and Head Anatomy on student learning outcomes in a year 1 medical course	Exempt
Nancy Minugh-Purvis, PhD; Mery Yanez; Kimberly Yos; Destiny Newsome; Chloe Lattin; Kumail Rizvi	Removing Barriers to Pursuing Healthcare Careers among New Mexican Native American and Hispanic Youth	Exempt
Steven J Ontiveros MBA, PhD; Michael E. Woods, PhD; Jules Manger, MD; Charlotte Gard, PhD; Tyler Tumey; Zaachariah Taylor	Genitourinary Cancer Incidence, Staging, and Survival Along the US- Mexico Border	Exempt
Steven J. Ontiveros, Phd	Encouraging Rural High School Students Towards Careers in Osteopathic Medicine by Offering a Summer American College Test (ACT) Preparatory Camp	Exempt
Steven J. Ontiveros, Phd;Nancy Phu; Katherine Manseau; Victoria-Lynn Ramos; Matthew Baska; Waldo Cuellar; Rodrigo Alvarez	Comparative Perspectives of the Expansion of Health Insurance Coverage in the Southwest	Exempt
Adrienne Kania, DO; Huda Abughannam	The Presence of Chapman Reflexes Pre- and Post-Osteopathic Treatment, A Pilot Study	Expedited
Debra Bramblett, PhD; Alison Crane-Russell; Bineetha Aluri; Darlene Diep; Jorge Perdomo; Rochelle Mogilevsky; Ilana Pyatetsky; Madeline Regal	Skin cancer recognition and education among community cosmetic professionals for optimal preventative medicine	Expedited Review
Gabor Szalai, PhD; Harald Stauss; Jessica Daggett; Ariana Dalgleish; Matthew Horvath; Mikal Shankey, Kaina Dusek, Theodore Li	Study of cell-type specific anti- inflammatory actions after OMT	Expedited Review
Harkesh Arora; Sathishkumar Ramalingam	Characteristics and outcome of hospitalized patients with positive COVID -19 test during Omicron wave in the United States.	Expedited Review
Jose J. Monsivais, MD; Agustin Herber	Comparison of Results Following CMC Joint Resection Arthroplasty and Collagen Interposition While Using One of Two Different Bone Anchors	Expedited Review

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	For the Management of Basal Thumb	
	Arthritis	
Michael E Woods, PhD; Emily	The effects of natural compounds on	Expedited Review
Barr; Joshua Rutz-Robbins;	Neutrophil Extracellular Trap (NET)	
6/2/21 added students-Tanner	formation and links to autoimmune and	
Hancock; Cindy Rezk; Cecil	inflammatory disease	
Guardado; Oscar Moran ;		
6/1/2022 added student Justin		
Best; Mr. Ahymad Lee;		
6/13/2022 added student		
Anshika Bandyopadhyay		
Adrienne Kania, DO; Cherylene	The Effect of Osteopathic Manipulative	Full Committee
Abalos, DO; Matthew Robinson,	Treatment Interventions on Opioid Use	
DO	in Patients with Acute Pancreatitis	
Adrienne Kania, DO; Harald	Optimization of the osteopathic	Full Committee
Stauss, MD, PhD	suboccipital decompression technique	
	for induction of parasympathetic	
	activation	
Adrienne Kania, DO; Harald	Optimization of splenic pump to induce	Full Committee
Stauss, MD, PhD, Emanuel	translocation of immune cells from the	
Rudolph Romeo, Kathryn	spleen to the systemic circulation	
Cerami, Richard Huynh, Julia		
Wong		
Adrienne Kania, DO; Sheeba	Efficacy of Instructional Methods of	Full Committee
Tano, DO; Tina Wong; Cesar	Abdominal Examination	
Yeelot; Marie Kylee Keohler;		
Janika Petersburg		
Adrienne Kania, DO; Victoria	Quantification of palpatory forces	Full Committee
Chang, DO; Tina Wong, Kylee	exerted during abdominal examination	
Stevenson; Cesar Yeelot	of normal subjects by practicing	
	physicians.	
Ahmed Salman, MD; Rangina	Effect of Social Media Platforms on	Full Committee
Farhad; Boris Yushuvayev	COVID - 19 Fear	
Harald Stauss, MD, PhD; Michael	Clinical Efficacy of taVNS in Cutaneous	Full Committee
Frederich, MD; Kathryn Hall;	Psoriasis	
Ilana Pyatetsky; Reilly Hostager;		
Angeline Kurian; Ayana		
McLaren; Matthew Bohman;		
Mehdia Zaidi; Angela Nguyen;		
Tommy Brennan Tsang		
Harald Stauss, MD, PhD;	Anti-Inflammatory Actions of OMT –	Full Committee
Adrienne Kania, DO;Emily	Role of the Cholinergic Anti-	
Barr; Adam Viegas; Minyu Chen	Inflammatory Reflex and Translocation	
	of Immune Cells from Reticular Organs	
	to the Systematic Circulation	

Jennifer Eastwood, PhD	Development of a Semi-Structured	Full Committee
Jennier Lasewood, Fild	Interview Protocol For Epistemic	i un committee
	Cognition in Medical Students	
Jon Jackson;	Attitudinal surveys of an entire medical	Full Committee
John Jackson,	college on the Use of Cadavers in	Tun committee
	Medical Education	
Jose J. Monsivais, MD;	Dupuytren's Contracture: Effectiveness	Full Committee
3030 3. 141011314413, 1412,	of Fasciectomies vs. Collagenase	Tun committee
	Injection and Minimally Invasive	
	Surgical Correction	
Jose Monsivais, MD; Jamil	Comparing the Surgical Outcomes of	Full Committee
Ayeza; Neda Shaghaghi; Joel	Carpal Tunnel Release in Diabetic and	
Quinones; Srinivasa Vogirala	Non-Diabetic Populations. Exploring the	
	Role of Diabetic Neuropathy	
Jose Monsivais, MD; Luiz Zuniga;	Incidence of of Infectious Neuropathies	Full Committee
Hansell Puentes; Michael	in a Patient Population with Chronic	
Anderson; Agustin Herber	Neuropathic Pain	
Michael E Woods, PhD; Emily	Correlation between ex vivo immune	Full Committee
Barr; Joshua Rutz-Robbins;	system activation and COVID-19 severity	
6/2/21 add students-Oscar		
Moran; Tanner Hancock; Cindy		
Rezk		
Pedro Del Corral, MD, PhD;		Full Committee
Adrian Martinez Campos;	Effects of Moderate Hyperoxia on	
Karnvir Singh; Austin Smith	Skeletal Muscle Oxygenation and Blood	
	Pressure During Exercise	
Pedro Del Corral, MD, PhD;	Effects of exercise and transcutaneous	Full Committee
Harald Stauss, MD, PhD; Brian	auricular vagus nerve stimulation	
Beyer;Kevin Dwyer; Jordyn	(taVNS) on parasympathetic tone	
Mullins; Anjali Patel; Cody		
Sheppard		
Robert Goldsteen, DO; Vanessa	Assessing the relationship between	Full Committee
De La Rosa, PhD; Gina	demographics, comorbidities and	
Gilderman; Courntey Cyr; Dawn	outcomes in COVID-19 patients in	
Sanchez, Luis Zuniga	southern New Mexico.	5 H.C
Scott McMahon, MD, Lauren	Evaluation of CIRS Biomarkers in	Full Committee
Sparks	Erythromelalgia Patients	Full Committee
Scott W. McMahon, MD	An Evaluation of an Association	Full Committee
Coott M. Mandak NAD. A.d.	Between PANS, PANDAS and CIRS	Full Commontates
Scott W. McMahon, MD; Arlys	Retrospective Analysis of a CIRS	Full Committee
Finch; Added Student	Database	
1/16/2020- Curran Ditmeyer	Durguing An Internal Madicine	Full Committee
Sheeba Tano, DO; Gina	Pursuing An Internal Medicine	Full Committee
Gilderman; Rachel Boren, PhD;	Subspecialty: A Review of the Factors	
Maryanne Long, PhD	Influencing Female Medical Students'	
	Intentions for Fellowship	

Vanessa De La Rosa, PhD;	Exploring barriers to prenatal vitamin	Full Committee
Alondra Sierra	adherence and acceptance in the Paso	
	del Norte Region.	
William Baker, DO; Darlene	Linear Porokeratosis Treated With	Case Report (Exempt)
Diep; Iiana Pyatetsky	Topical Lovastatin Ointment	

Appendix 2 Institutional Biosafety Committee Approved Active Protocols

Investigator	Protocol Title
Debra Bramblett, PhD; Michael E. Woods, PhD; Marion Memmot; Jiwon Kim	Development of RT-LAMP Assay for Detection of Arboviruses in the Context of Homogenized Mosquito Tissues
Debra Bramblett, PhD; Michael Woods, PhD; Kalli Martinez, MS; Samantha Meza; Jessica Bonilla; Alexander Meyers; Ezechiel Fenelon; Brent Hochstein	Rate of MRSA Acquisition in Medical Students From Pre-Clinical to Clinical Years
Debra Bramblett, PhD; Michael Woods, PhD;; Eric Yukl; Anna Subonj; Marion Memmott; Jiwon Kim	SHERLOCK: A CRISPR Diagnostic Test for Zika Virus
Gabor Szalai, PhD; Anissa Johnson	Generating stable clones expressing Keratin 18 in MDA-MB-231Br cells
Gabor Szalai, Phd; Harlad M. Stauss, MD, PhD; Joshua Jensen; Ariana Dalgleish; Kiana Dusek; Theodore Li	Study of Cell-type Specific Anti-inflammatory Actions after OMT
Harald M. Stauss, MD, PhD	Optimization of splenic pump to induce translocation of immune cells from the spleen to the systemic circulation
Harald M. Stauss, MD, PhD	Clinical Efficacy of taVNS in Cutaneous Psoriasis
Harald M. Stauss, MD, PhD; Joshua Jensen; Zoey Good; Jose Del Castillo; Ariana Dalgleish; Leigh Cooper; Giselle Irio, Valeria Nunez Martinez, Jessica Lee, Cristina Lee, Erica Kozorosky, Leandra Padayachee, Emily Barr, Tanner Hancock. Adam Viegas, Minyu Chen	Anti-inflammatory actions of OMT – Role of the cholinergic anti-inflammatory pathway and translocation of immune cells from reticular organs to the systemic circulation
Harald M. Stauss, MD, PhD; Pedro Del Corral, MD, PHD	Effects of exercise and transcutaneous auricular vagus nerve stimulation (taVNS) on parasympathetic tone
Jon Jackson, PhD; Sara Dressman, MS1	What's Growing in There — the microbiome of an anatomical donor cadaver.
Kristin Gosselink, PhD	Neurological responses to stress in females: The role of ovarian hormones
Michael E. Woods, PhD	Correlating NETosis and COVID-19 Severity
Michael E. Woods, PhD; Zoey Good; Emily Barr, Cecil Guardado, Tanner Hancock, Oscar Moran, Cindy Rezk, Joshua Rutz-Robbins; Justin Best; Anshika Bandyopadhyay	The effects of natural compounds on Neutrophil Extracellular Trap (NET) formation and links to autoimmune and inflammatory disease
Michael Woods, PhD; Kalli Martinez, MS; James Blaine; Umara Khalique; Jordan Long; Zack Cady	Mechanism of Zika Virus-Mediated Cell Cycle Blockade
Pedro Del Corral, MD, PhD;	Effects of Moderate Hyperoxia on Skeletal Muscle Oxygenation and Blood Pressure During Exercise

Steven J. Ontiveros, PhD; Crystal Nguyen; Ismael	Determining the Effects of Resveratrol on
Moradeyo; Raymon Carbajal	Hexokinase II Mitochondria Membrane
	Attachment in Cancer Cells
Vanessa De La Rosa, PhD	Endocrine disrupting chemicals and placental
	dysfunction using an in vitro model

Appendix 3

Scholarly Productivity

Publications as Reported by the Departments of Anatomy & Cell Biology, Biomedical Science, Clinical Medicine, and Physiology & Pathology:

- Stuut T, Popescu O, *Oviedo A. N-Glycanase 1 Deficiency Is a Rare Cause of Pediatric Neurodegeneration With Neuronal Inclusions and Liver Steatosis. Cureus. 2021 Oct 29;13(10):e19126. doi: 10.7759/cureus.19126. PMID: 34858763; PMCID: PMC8614178.
- *Bewley DJ, *Lee J, Popescu O, *Oviedo A. SARS-CoV-2 Placental Infection in an Unvaccinated Mother Resulting in Fetal Demise. Cureus. 2021 Dec 30;13(12):e20833. doi: 10.7759/cureus.20833. PMID: 35141086; PMCID: PMC8800441.
- Schwartz DA, Avvad-Portari E, Babál P, Baldewijns M, Blomberg M, Bouachba A, Camacho J, Collardeau-Frachon S, Colson A, Dehaene I, Ferreres JC, Fitzgerald B, Garrido-Pontnou M, Gergis H, Hargitai B, Helguera-Repetto AC, Holmström S, Irles CL, Leijonhfvud Å, Libbrecht S, Marton T, McEntagart N, Molina JT, Morotti R, Nadal A, Navarro A, Nelander M, *Oviedo A, Otani ARO, Papadogiannakis N, Petersen AC, Roberts DJ, Saad AG, Sand A, Schoenmakers S, Sehn JK, Simpson PR, Thomas K, Valdespino-Vázquez MY, van der Meeren LE, Van Dorpe J, Verdijk RM, Watkins JC, Zaigham M. Placental Tissue Destruction and Insufficiency From COVID-19 Causes Stillbirth and Neonatal Death From Hypoxic-Ischemic Injury. Arch Pathol Lab Med. 2022 Jun 1;146(6):660-676. doi: 10.5858/arpa.2022-0029-SA. PMID: 35142798.
- Sierra-Fonseca, J.A., J.N. Hamdan, A.A. Cohen, S.M. Cardenas, S. Saucedo, Jr., G.A. Lodoza, and **K.L. Gosselink***. Neonatal maternal separation modifies proteostasis marker expression in the adult hippocampus. Front. Mol. Neurosci. 2021 Jul 22;14:661993. doi: 10.3389/fnmol.2021.661993. eCollection 2021.
- Chidi, C.*, G.A. Frietze, L. Muniz*, M.E. Padilla, M.A. Olivas, A.A. Martinez, J. Cordero, O.T. Ibilah, J. Ayala, E.M. Moya and K.L. Gosselink*. Cancer prevention: Healthcare provider knowledge and attitudes may influence HPV vaccine recommendations in a majority Hispanic community. Advancing the Science of Cancer in Latinos (ASCL 2022)
- Kozorosky, E. M., Lee, C. H., Lee, J. G., Nunez Martinez, V., Padayachee, L. E., & Stauss, H. M. (2022). Transcutaneous auricular vagus nerve stimulation augments postprandial inhibition of ghrelin. Physiological Reports, Physiological Reports 121: 401-415, 2022.
- Hayle Scanlan*, Zachary Coffman*, Jeffery Bettencourt*, Timothy Shipley, **Debra E. Bramblett*.** H erpes Simplex Virus 1 as an Oncolytic Viral Therapy for Refractory Cancers Manuscript submitted 5-10-2022 to Frontiers in Oncology, Revisions requested, Manuscript ID 940019

- Dalgleish AS*, Kania AM*, **Stauss HM***, Jelen AZ*. Occipito-Atlantal Decompression and Non-invasive Vagus Nerve Stimulation Slow Conduction Velocity Through the Atrioventricular Node in Healthy Participants; J. Osteopath. Med. 121(4): 349-359, 2021.
- Kania AM*, Weiler KN*, Kurian AP*, Opena ML*, Orellana JL*, and Stauss HM*.
 Activation of the Cholinergic Anti-inflammatory Reflex by Occipitoatlantal Decompression and Transcutaneous Auricular Vagus Nerve Stimulation. J. Osteopath. Med. 121(4): 401-415, 2021.
- Robert Goldsteen- Diep D*, Aluri B*, Crane A,* et al. Severe Stevens-Johnson Syndrome in a Patient of Color and Assessment of Diversity in medical education resources. Cureus, 14(2), Feb 15, 2022.
- Oliver Hayes- Article, Graduate Medical Education Education Enhancement and the Consolidated Appropriations Act, 2021, Journal of Graduate Medical Education, Oct 2021, p 650-653

Scholarly Presentations as Reported by the Departments of Anatomy & Cell Biology, Biomedical Science, Clinical Medicine, and Physiology & Pathology:

- **D.E. Bramblett*** Emerging SARS-CoV2 Variants and the impact on diagnosis and vaccines, CME Conference (Virtual) June 2021. Burrell College of Osteopathic Medicine.
- Kristen Gosselink, Debra Bramblett*, Michael Woods*, Vanessa De La Rosa*:
 Increasing student engagement and advising efficiency through the implementation of advisory colleges at an osteopathic medical school 2022 IAMSE conference workshop, Denver Co, June 5,2022
- **Gabor Szalai***, *COVID-19 vaccines and the provoked immune response*, CME Conference (Virtual) June 2021. Burrell College of Osteopathic Medicine.
- OMS-ll student Anissa Johnson* and **Gabor Szalai***, PhD attended the 2022 conference of the American Association of Cancer Researchers and presented a poster on the regulation of brain metastasis of triple negative cancer cells.
- **Dr. Bramblett*** presented at the annual meeting of the Association of Medical School Microbiology and Immunology Chairs.
- Stauss HM*. The Cholinergic Anti-inflammatory Reflex Probed with Vagus Nerve Stimulation Experiments: An Osteopathic Approach. Virtual presentation at the Biochem/mol biol/cell bio/physio Graduate Seminar at Florida Institute of Technology, Melbourne, FL. April 2022.

- Stauss HM*. Neuromodulation of Glucose Homeostasis. Virtual presentation at the Biochem/mol biol/cell bio/physio Graduate Seminar at Florida Institute of Technology, Melbourne, FL. January 2022.
- Stauss HM*, Cristina Lee* (DO2024), Erica Kozorosky* (DO2024), Jessica Lee*
 (DO2024), Leandra Padayachee* (DO24), Valeria Nunez Martinez* (DO2024). Insulin and C-peptide Release in Response to Noninvasive Auricular Vagal Nerve Stimulation. National SOMA Research Symposium, virtual 11/2021 (1st prize)
- Stauss HM*, Cristina Lee* (DO2024), Erica Kozorosky* (DO2024), Jessica Lee*
 (DO2024), Leandra Padayachee* (DO24), Valeria Nunez Martinez (DO2024).
 Transcutaneous Auricular Vagus Nerve Stimulation
 Induces Pancreatic Insulin Release. American College of Physicians New Mexico Chapter Conference 11/2021, Albuquerque, NM.
- Stauss HM*, Cristina Lee* (DO2024), Erica Kozorosky* (DO2024), Jessica Lee* (DO2024), Leandra Padayachee* (DO24), Valeria Nunez Martinez (DO2024).
 Transcutaneous Auricular Vagus Nerve Stimulation Induces Pancreatic Secretion of C-Peptide Together with Insulin. AOA-OMED virtual 10/2021
- **Dr. De La Rosa**'s* research mentee, OMS-III Alondra Sierra*, will present her project on exploring barriers to prenatal vitamins in the Paso del Norte region of New Mexico and Texas at the United Health Foundation/NMF Diverse Medical Scholars Program symposium on June 8th, 2022
- Victoria Chang- Culture Counts: How to incorporate Culture into Patient Care. For APASMA Student Group. 12
- Adrienne Kania- Hollis Wolf Presentation- Dr Kania- with students- Nina Kar* Orlando Conference- AAO Convocation- "OMT for Nephrolithiasis".

Result of PubMed Search

A pubmed search using "Burrell College of Osteopathic Medicine" as the search term identified the following publications.

- 1: Yan J, Xu W, Lenahan C, Huang L, Wen J, Li G, Hu X, Zheng W, Zhang JH, Tang J. CCR5 Activation Promotes NLRP1-Dependent Neuronal Pyroptosis via CCR5/PKA/CREB Pathway After Intracerebral Hemorrhage. Stroke. 2021 Dec;52(12):4021-4032. doi: 10.1161/STROKEAHA.120.033285. Epub 2021 Nov 1. PMID: 34719258; PMCID: PMC8607924.
- 2: Emmady PD, Tadi P, Del Pozo E. Dementia (Nursing). 2022 May 8. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan—. PMID: 34033314.
- 3: Brooks JE, Mix FM, Buck JC, Walters RA. COVID-19-Induced Guillain-Barré Syndrome. Cureus. 2021 Nov 22;13(11):e19809. doi: 10.7759/cureus.19809. PMID: 34956793; PMCID: PMC8693695.
- 4: Oelhaf RC, Del Pozo E, Azadfard M. Opioid Toxicity. 2021 Dec 5. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan–. PMID: 28613731.
- 5: Zhou X, Chen H, Wang L, Lenahan C, Lian L, Ou Y, He Y. Mitochondrial Dynamics: A Potential Therapeutic Target for Ischemic Stroke. Front Aging Neurosci. 2021 Sep 7;13:721428. doi: 10.3389/fnagi.2021.721428. PMID: 34557086; PMCID: PMC8452989.
- 6: Martheswaran T, Shmunes MH, Ronquillo YC, Moshirfar M. The impact of vaping on ocular health: a literature review. Int Ophthalmol. 2021 Aug;41(8):2925-2932. doi: 10.1007/s10792-021-01842-w. Epub 2021 Apr 16. PMID: 33860887.
- 7: Schwartz DA, Avvad-Portari E, Babál P, Baldewijns M, Blomberg M, Bouachba A, Camacho J, Collardeau-Frachon S, Colson A, Dehaene I, Ferreres JC, Fitzgerald B, Garrido-Pontnou M, Gergis H, Hargitai B, Helguera-Repetto AC, Holmström S, Irles CL, Leijonhfvud Å, Libbrecht S, Marton T, McEntagart N, Molina JT, Morotti R, Nadal A, Navarro A, Nelander M, Oviedo A, Otani ARO, Papadogiannakis N, Petersen AC, Roberts DJ, Saad AG, Sand A, Schoenmakers S, Sehn JK, Simpson PR, Thomas K, Valdespino-Vázquez MY, van der Meeren LE, Van Dorpe J, Verdijk RM, Watkins JC, Zaigham M. Placental Tissue Destruction and Insufficiency From COVID-19 Causes Stillbirth and Neonatal Death From Hypoxic-Ischemic Injury. Arch Pathol Lab Med. 2022 Jun 1;146(6):660-676. doi: 10.5858/arpa.2022-0029-SA. PMID: 35142798.
- 8: Nguyen C, Athigaman M, Qureshi A. Giant leiomyosarcoma of the transverse colon. BMJ Case Rep. 2021 Dec 2;14(12):e246646. doi: 10.1136/bcr-2021-246646. PMID: 34857593; PMCID: PMC8640626.
- 9: Li J, Zhou Y, Wang H, Lou J, Lenahan C, Gao S, Wang X, Deng Y, Chen H, Shao A. Oxidative Stress-Induced Ferroptosis in Cardiovascular Diseases and Epigenetic Mechanisms. Front Cell Dev Biol. 2021 Aug 19;9:685775. doi: 10.3389/fcell.2021.685775. PMID: 34490241; PMCID: PMC8416916.
- 10: Mix FM, Sucher BM, Brooks JE. Stingray-Induced Tarsal Tunnel Syndrome. Cureus. 2021 Jul 30;13(7):e16761. doi: 10.7759/cureus.16761. PMID: 34513381; PMCID: PMC8405374.

- 11: Oelhaf RC, Del Pozo E, Azadfard M, Haddad LM. Opioid Toxicity (Nursing). 2021 Dec 5. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2022 Jan—. PMID: 34033315.
- 12: Arora H, Ramalingam S, Sanghavi R, Balogun A, Muruganandam M. Disseminated Nocardia infection-A rare presentation. Clin Case Rep. 2021 Aug 21;9(8):e04673. doi: 10.1002/ccr3.4673. PMID: 34457292; PMCID: PMC8380077.
- 13: Sierra-Fonseca JA, Hamdan JN, Cohen AA, Cardenas SM, Saucedo S Jr, Lodoza GA, Gosselink KL. Neonatal Maternal Separation Modifies Proteostasis Marker Expression in the Adult Hippocampus. Front Mol Neurosci. 2021 Jul 22;14:661993. doi: 10.3389/fnmol.2021.661993. PMID: 34447296; PMCID: PMC8383781.
- 14: Osuorji C, Master K, Osuorji I. IgG4-Related Disease With Renal and Pulmonary Involvement. Cureus. 2021 Aug 10;13(8):e17071. doi: 10.7759/cureus.17071. PMID: 34522549; PMCID: PMC8428951.
- 15: Gu R, Wang L, Zhou H, Wang X, Lenahan C, Qu H, Liu Y, Li S, Wei C, Han L, Hu X, Zuo G. Rh-CXCL-12 Attenuates Neuronal Pyroptosis after Subarachnoid Hemorrhage in Rats via Regulating the CXCR4/NLRP1 Pathway. Oxid Med Cell Longev. 2021 Nov 9;2021:6966394. doi: 10.1155/2021/6966394. PMID: 34795842; PMCID: PMC8595028.
- 16: Zhang A, Zhang Z, Zhang WB, Wang X, Lenahan C, Fang Y, Luo Y, Liu Y, Mei S, Chen S, Zhang J. Development of a nomogram for predicting clinical outcome in patients with angiogram-negative subarachnoid hemorrhage. CNS Neurosci Ther. 2021 Nov;27(11):1339-1347. doi: 10.1111/cns.13712. Epub 2021 Jul 28. PMID: 34320688; PMCID: PMC8504520.
- 17: Wang Z, Zhou S, Zhao J, Nie S, Sun J, Gao X, Lenahan C, Lin Z, Huang Y, Chen G. Tobacco Smoking Increases Methylation of Polypyrimidine Tract Binding Protein 1 Promoter in Intracranial Aneurysms. Front Aging Neurosci. 2021 Jul 6;13:688179. doi: 10.3389/fnagi.2021.688179. PMID: 34295240; PMCID: PMC8292010.
- 18: Liu Y, Fang Y, Zhang Z, Luo Y, Zhang A, Lenahan C, Chen S. Ferroptosis: An emerging therapeutic target in stroke. J Neurochem. 2022 Jan;160(1):64-73. doi: 10.1111/jnc.15351. Epub 2021 Apr 12. PMID: 33733478.
- 19: Hayes OW, Scaglione J, Hutchinson CP, Zhorzholiani I. Graduate Medical Education Enhancement and the Consolidated Appropriations Act, 2021. J Grad Med Educ. 2021 Oct;13(5):650-653. doi: 10.4300/JGME-D-21-00467.1. Epub 2021 Oct 15. PMID: 34721793; PMCID: PMC8527944.
- 20: Zhou X, Li Y, Lenahan C, Ou Y, Wang M, He Y. Glymphatic System in the Central Nervous System, a Novel Therapeutic Direction Against Brain Edema After Stroke. Front Aging Neurosci. 2021 Aug 4;13:698036. doi: 10.3389/fnagi.2021.698036. PMID: 34421575; PMCID: PMC8372556.
- 21: Lan Y, Jin C, Kumar P, Yu X, Lenahan C, Sheng J. Ketogenic Diets and Hepatocellular Carcinoma. Front Oncol. 2022 May 4;12:879205. doi: 10.3389/fonc.2022.879205. PMID: 35600387; PMCID: PMC9115558.

- 22: Arbuiso S, Roster K, Gill A, Tarawneh O, Cole KL, Kazim SF, Vellek J, Schmidt MH, Bowers CA. Multinodular and Vacuolating Neuronal Tumor: Incidental Diagnosis of a Rare Brain Lesion. Cureus. 2021 Dec 25;13(12):e20674. doi: 10.7759/cureus.20674. PMID: 35106217; PMCID: PMC8786570.
- 23: Valencak TG, Csiszar A, Szalai G, Podlutsky A, Tarantini S, Fazekas-Pongor V, Papp M, Ungvari Z. Animal reservoirs of SARS-CoV-2: calculable COVID-19 risk for older adults from animal to human transmission. Geroscience. 2021 Oct;43(5):2305-2320. doi: 10.1007/s11357-021-00444-9. Epub 2021 Aug 30. PMID: 34460063; PMCID: PMC8404404.
- 24: Ottesen TD, Montoya RL, Ogunleye TD, Brown KE, Woolley PM, Dejean JMCB, Qudsi RA, Agarwal-Harding KJ, Dyer GSM. Implementation and Impact Evaluation of a Virtual Orthopaedic Continuing Medical Education Conference in a Low-Resource Country. J Surg Educ. 2021 Sep-Oct;78(5):1629-1636. doi: 10.1016/j.jsurg.2021.01.002. Epub 2021 Feb 8. PMID: 33573909.
- 25: Tai TT, Tai BT, Chang YJ, Huang KH. The Importance of Understanding Parental Perception When Treating Primary Nocturnal Enuresis: A Topic Review and an Institutional Experience. Res Rep Urol. 2021 Sep 7;13:679-690. doi: 10.2147/RRU.S323926. PMID: 34522688; PMCID: PMC8434936.
- 26: Jin P, Deng S, Sherchan P, Cui Y, Huang L, Li G, Lian L, Xie S, Lenahan C, Travis ZD, Zhang JH, Gong Y, Tang J. Neurokinin Receptor 1 (NK1R) Antagonist Aprepitant Enhances Hematoma Clearance by Regulating Microglial Polarization via PKC/p38MAPK/NFμB Pathway After Experimental Intracerebral Hemorrhage in Mice. Neurotherapeutics. 2021 Jul;18(3):1922-1938. doi: 10.1007/s13311-021-01077-8. Epub 2021 Jul 9. PMID: 34244927; PMCID: PMC8608951.
- 27: Almaghlouth NK, Anyiam FE, Shah S, Haq S, Attia MJ, Guevara R, Antony S. The Use of Single Therapy With Tocilizumab Versus Combination Therapy With Remdesivir and Tocilizumab in SARS-CoV-2 Patients in El Paso, Texas. Cureus. 2021 Jul 13;13(7):e16351. doi: 10.7759/cureus.16351. PMID: 34277310; PMCID: PMC8276197.
- 28: Monsivais JJ, Herber A, Charest G, Ogunleye D, Weaver M. Comparative Study of 2 Bone Anchors Using a Limited Open Procedure for the Management of Distal Radioulnar Joint Instability. Hand (N Y). 2021 Dec 28:15589447211057300. doi: 10.1177/15589447211057300. Epub ahead of print. PMID: 34963344.
- 29: Bewley DJ, Lee J, Popescu O, Oviedo A. SARS-CoV-2 Placental Infection in an Unvaccinated Mother Resulting in Fetal Demise. Cureus. 2021 Dec 30;13(12):e20833. doi: 10.7759/cureus.20833. PMID: 35141086; PMCID: PMC8800441.
- 30: Fang Y, Shi H, Huang L, Ren R, Lenahan C, Xiao J, Liu Y, Liu R, Sanghavi R, Li C, Chen S, Tang J, Yu J, Zhang JH, Zhang J. Pituitary adenylate cyclase- activating polypeptide attenuates mitochondriamediated oxidative stress and neuronal apoptosis after subarachnoid hemorrhage in rats. Free Radic Biol Med. 2021 Oct;174:236-248. doi: 10.1016/j.freeradbiomed.2021.08.011. Epub 2021 Aug 13. PMID: 34400297; PMCID: PMC8985554.
- 31: Osuorji C, Ojumah N, Adedoyin O, Okoye O, Mbonu I. Cul de Sac : An Unusual Presentation of Giant Cell Arteritis. Cureus. 2021 Jul 13;13(7):e16361. doi: 10.7759/cureus.16361. PMID: 34395138; PMCID: PMC8360317.

- 32: Bhatt GC, Sethi SK, Mehta I, Nair N, Chakraborty R, Sharma B, Singh S, Kumar N, Gulati K, Raina R. Literature Review of the Efficacy of High-Volume Hemofiltration in Critically Ill Pediatric Patients. Blood Purif. 2022 Apr 25:1-11. doi: 10.1159/000520519. Epub ahead of print. PMID: 35468595.
- 33: Diep D, Calame A, Cohen PR. Morphologic Mimickers of Seborrheic Keratoses: Cutaneous Lesions Masquerading as Seborrheic Keratoses. Cureus. 2021 Oct 7;13(10):e18559. doi: 10.7759/cureus.18559. PMID: 34765343; PMCID: PMC8575325.
- 34: Zhu G, Wang X, Chen L, Lenahan C, Fu Z, Fang Y, Yu W. Crosstalk Between the Oxidative Stress and Glia Cells After Stroke: From Mechanism to Therapies. Front Immunol. 2022 Feb 25;13:852416. doi: 10.3389/fimmu.2022.852416. PMID: 35281064; PMCID: PMC8913707.
- 35: Young JN, York J. Abiotrophia Causing Prosthetic Joint Septic Arthritis. Cureus. 2022 Mar 3;14(3):e22801. doi: 10.7759/cureus.22801. PMID: 35399397; PMCID: PMC8980255.
- 36: Stuut T, Popescu O, Oviedo A. N-Glycanase 1 Deficiency Is a Rare Cause of Pediatric Neurodegeneration With Neuronal Inclusions and Liver Steatosis. Cureus. 2021 Oct 29;13(10):e19126. doi: 10.7759/cureus.19126. PMID: 34858763; PMCID: PMC8614178.
- 37: Zhang A, Zhang Z, Liu Y, Lenahan C, Xu H, Jiang J, Yuan L, Wang L, Xu Y, Chen S, Fang Y, Zhang J. The Role of Caspase Family in Acute Brain Injury: The Potential Therapeutic Targets in the Future. Curr Neuropharmacol. 2022;20(6):1194-1211. doi: 10.2174/1570159X19666211111121146. PMID: 34766893.
- 38: Kozorosky EM, Lee CH, Lee JG, Nunez Martinez V, Padayachee LE, Stauss HM. Transcutaneous auricular vagus nerve stimulation augments postprandial inhibition of ghrelin. Physiol Rep. 2022 Apr;10(8):e15253. doi: 10.14814/phy2.15253. PMID: 35441808; PMCID: PMC9020171.
- 39: Rahman HH, Niemann D, Yusuf KK. Association of urinary arsenic and sleep disorder in the US population: NHANES 2015-2016. Environ Sci Pollut Res Int. 2022 Jan;29(4):5496-5504. doi: 10.1007/s11356-021-16085-6. Epub 2021 Aug 22. PMID: 34420169.
- 40: Yu X, Liu C, Ji C, Lenahan C, Fang Y, Wang Y, Shao A. Changes of Functional, Morphological, and Inflammatory Reactions in Spontaneous Peripheral Nerve Reinnervation after Thermal Injury. Oxid Med Cell Longev. 2022 Feb 1;2022:9927602. doi: 10.1155/2022/9927602. PMID: 35154578; PMCID: PMC8826209.
- 41: Zhou J, Xu N, Liu B, Wang C, He Z, Lenahan C, Tang W, Zeng H, Guo H. lncRNA XLOC013218 promotes cell proliferation and TMZ resistance by targeting the PIK3R2-mediated PI3K/AKT pathway in glioma. Cancer Sci. 2022 May 30. doi: 10.1111/cas.15387. Epub ahead of print. PMID: 35637600.
- 42: Wang X, Xu P, Liu Y, Wang Z, Lenahan C, Fang Y, Lu J, Zheng J, Wang K, Wang W, Zhou J, Chen S, Zhang J. New Insights of Early Brain Injury after Subarachnoid Hemorrhage: A Focus on the Caspase Family. Curr Neuropharmacol. 2022 Apr 20. doi: 10.2174/1570159X20666220420115925. Epub ahead of print. PMID: 35450528.
- 43: Johnson JE, Gupton MS, Finn J, Deivaraju C. Chronic Multifocal Osteomyelitis Is Mycobacterium avium Complex Really the Culprit? A Case Report in an Adult Female. J Orthop Case Rep. 2021 Sep;11(9):86-89. doi: 10.13107/jocr.2021.v11.i09.2428. PMID: 35415176; PMCID: PMC8930344.

- 44: Fang Y, Huang L, Wang X, Si X, Lenahan C, Shi H, Shao A, Tang J, Chen S, Zhang J, Zhang JH. A new perspective on cerebrospinal fluid dynamics after subarachnoid hemorrhage: From normal physiology to pathophysiological changes. J Cereb Blood Flow Metab. 2022 Apr;42(4):543-558. doi: 10.1177/0271678X211045748. Epub 2021 Nov 22. PMID: 34806932; PMCID: PMC9051143.
- 45: Fang Y, Wang X, Lu J, Shi H, Huang L, Shao A, Zhang A, Liu Y, Ren R, Lenahan C, Tang J, Zhang J, Zhang JH, Chen S. Inhibition of caspase-1-mediated inflammasome activation reduced blood coagulation in cerebrospinal fluid after subarachnoid haemorrhage. EBioMedicine. 2022 Feb;76:103843. doi: 10.1016/j.ebiom.2022.103843. Epub 2022 Feb 2. PMID: 35101655; PMCID: PMC8822177.
- 46: Rahman HH, Niemann D, Munson-McGee SH. Association among urinary polycyclic aromatic hydrocarbons and depression: a cross-sectional study from NHANES 2015-2016. Environ Sci Pollut Res Int. 2022 Feb;29(9):13089-13097. doi: 10.1007/s11356-021-16692-3. Epub 2021 Sep 26. PMID: 34569004.
- 47: Rahman HH, Niemann D, Munson-McGee SH. Association of chronic kidney disease with exposure to polycyclic aromatic hydrocarbons in the US population. Environ Sci Pollut Res Int. 2022 Apr;29(16):24024-24034. doi: 10.1007/s11356-021-17479-2. Epub 2021 Nov 25. PMID: 34822075.
- 48: Tian M, Wang W, Wang K, Jin P, Lenahan C, Wang Y, Tan J, Wen H, Deng S, Zhao F, Gong Y. Dexmedetomidine alleviates cognitive impairment by reducing blood- brain barrier interruption and neuroinflammation via regulating Th1/Th2/Th17 polarization in an experimental sepsis model of mice. Int Immunopharmacol. 2021 Dec;101(Pt B):108332. doi: 10.1016/j.intimp.2021.108332. Epub 2021 Nov 14. PMID: 34785141.
- 49: Singh V, Haynes PL, Quan SF. Assessing Depression and Suicidality Among Recently Unemployed Persons with Obstructive Sleep Apnea and Socioeconomic Inequality. Southwest J Pulm Crit Care Sleep. 2022 May;24(5):81-88. doi: 10.13175/swjpcc020-22. Epub 2022 May 16. PMID: 35702528; PMCID: PMC9190213.
- 50: Rahman HH, Niemann D, Munson-McGee SH. Environmental exposure to metals and the risk of high blood pressure: a cross-sectional study from NHANES 2015-2016. Environ Sci Pollut Res Int. 2022 Jan;29(1):531-542. doi: 10.1007/s11356-021-15726-0. Epub 2021 Jul 31. PMID: 34331653.
- 51: Jin P, Qi D, Cui Y, Lenahan C, Deng S, Tao X. Activation of LRP6 with HLY78 Attenuates Oxidative Stress and Neuronal Apoptosis via GSK3β/Sirt1/PGC-1aPathway after ICH. Oxid Med Cell Longev. 2022 Apr 4;2022:7542468. doi: 10.1155/2022/7542468. PMID: 35419167; PMCID: PMC9001077.
- 52: Diep D, Aluri B, Crane A, Miao K, Kannan KS, Goldsteen R. Stevens-Johnson Syndrome in a Patient of Color: A Case Report and an Assessment of Diversity in Medical Education Resources. Cureus. 2022 Feb 15;14(2):e22245. doi: 10.7759/cureus.22245. PMID: 35340465; PMCID: PMC8929762.
- 53: Reyes CA, Young JN, Torres PR. First Reported Case of Femoral Facial Syndrome in an Adult: Esophageal Adenocarcinoma as a Progressive Gastrointestinal Manifestation. Cureus. 2022 Apr 19;14(4):e24285. doi: 10.7759/cureus.24285. PMID: 35607579; PMCID: PMC9123342.

- 54: Xu N, Li X, Weng J, Wei C, He Z, Doycheva DM, Lenahan C, Tang W, Zhou J, Liu Y, Xu Q, Liu Y, He X, Tang J, Zhang JH, Duan C. Adiponectin Ameliorates GMH- Induced Brain Injury by Regulating Microglia M1/M2 Polarization *Via* AdipoR1/APPL1/AMPK/PPARγ Signaling Pathway in Neonatal Rats. Front Immunol. 2022 Jun 3;13:873382. doi: 10.3389/fimmu.2022.873382. PMID: 35720361; PMCID: PMC9203698.
- 55: Hughes J, Chavez B. Magnetic Resonance-Guided Diagnosis of Spontaneous Intracranial Hypotension in a Middle-Aged Woman. Case Rep Neurol Med. 2022 Feb 21;2022:4438923. doi: 10.1155/2022/4438923. PMID: 35237456; PMCID: PMC8885260.
- 56: Rahman HH, Niemann D, Munson-McGee SH. Urinary metals, arsenic, and polycyclic aromatic hydrocarbon exposure and risk of chronic bronchitis in the US adult population. Environ Sci Pollut Res Int. 2022 May 27. doi: 10.1007/s11356-022-20982-9. Epub ahead of print. PMID: 35624372.
- 57: Rahman HH, Niemann D, Munson-McGee SH. Association of albumin to creatinine ratio with urinary arsenic and metal exposure: evidence from NHANES 2015-2016. Int Urol Nephrol. 2022 Jun;54(6):1343-1353. doi: 10.1007/s11255-021-03018-y. Epub 2021 Oct 13. PMID: 34643861.
- 58: Rahman HH, Niemann D, Munson-McGee SH. Urinary Metals, Arsenic, and Polycyclic Aromatic Hydrocarbon Exposure and Risk of Self-reported Emphysema in the US Adult Population. Lung. 2022 Apr;200(2):237-249. doi: 10.1007/s00408-022-00518-1. Epub 2022 Feb 18. PMID: 35178625.
- 59: Sakthivelnathan V, Senthil T, Varatharaj S, Mounasamy V, Sambandam S. HIV/AIDS patients undergoing total knee arthroplasty are at higher risk of acute renal failure and transfusion and incurred higher cost: a propensity-matched database study. Knee Surg Relat Res. 2022 Jun 15;34(1):28. doi: 10.1186/s43019-022-00156-0. PMID: 35706063; PMCID: PMC9202157.
- 60: Osuorji C, Bilal J, Osuorji I. Recurrent strokes and memory loss in a patient with triple-positive antiphospholipid antibody syndrome. BMJ Case Rep. 2022 Mar 25;15(3):e246104. doi: 10.1136/bcr-2021-246104. PMID: 35338038; PMCID: PMC8961123.
- 61: Young JN, Reyes CA, Erinle AO. An Arterial Anastomosis Stenosis Used in Lieu of Banding to Prevent Dialysis Access Steal Syndrome. Cureus. 2022 May 5;14(5):e24757. doi: 10.7759/cureus.24757. PMID: 35676983; PMCID: PMC9167043.
- 62: Kerber E, Bukowska S, Mancol F, Kosowski B, Lee SR, Teelucksingh S, Del Corral P. Increased vasoconstrictor sensitivity to glucocorticoids is associated with the exaggerated systolic blood pressure during submaximal exercise in young healthy adults. Eur J Prev Cardiol. 2022 Feb 9;28(18):e28-e31. doi: 10.1093/eurjpc/zwaa055. PMID: 33624050.
- 63: Gupta P, Quan T, Abdo MG, Manzi JE, Knapp B, Shaffer G. Thirty-Day Morbidity and Mortality in Patients With COPD Following Open Reduction and Internal Fixation for Rotational Ankle Fractures. J Foot Ankle Surg. 2022 Apr 7:S1067-2516(22)00110-7. doi: 10.1053/j.jfas.2022.03.015. Epub ahead of print. PMID: 35501248.
- 64: Sillah A, Watson NF, Peters U, Biggs ML, Nieto FJ, Li CI, Gozal D, Thornton T, Barrie S, Phipps AI. Sleep problems and risk of cancer incidence and mortality in an older cohort: The Cardiovascular Health Study (CHS). Cancer Epidemiol. 2022 Feb;76:102057. doi: 10.1016/j.canep.2021.102057. Epub 2021 Nov 17. PMID: 34798387; PMCID: PMC8792277.

- 65: Niemann D, Paul S, Rahman HH. Avalanche Preparedness and Accident Analysis Among Backcountry Skier, Sidecountry, and Snowmobile Fatalities in the United States: 2009 to 2019. Wilderness Environ Med. 2022 Jun;33(2):197-203. doi: 10.1016/j.wem.2022.03.006. Epub 2022 Apr 28. PMID: 35491311.
- 66: Rahman HH, Niemann D, Munson-McGee SH. Association between environmental toxic metals, arsenic and polycyclic aromatic hydrocarbons and chronic obstructive pulmonary disease in the US adult population. Environ Sci Pollut Res Int. 2022 Mar 18. doi: 10.1007/s11356-022-19695-w. Epub ahead of print. PMID: 35303226.
- 67: Shah S, Haq S, Antony SJ. Coccidioidomycosis Resulting in a Prosthetic Joint Infection in an Immunocompetent Patient after a Total Hip Arthroplasty: A Case Report and Review of the Literature. Infect Disord Drug Targets. 2022;22(2):e170322188282. doi: 10.2174/1871526520999201123205249. PMID: 33231149.

Appendix 4
Burrell College Clinical Trials that are registered with Clinical Trials.gov

Study Title	Principal Investigator	Conditions	Interventions	Locations	Status
Effects of Transcutaneous Auricular	Harald Stauss, M.D., Ph.D.	Diabetes	Device: taVNS	Burrell College of	Completed
Vagus Nerve Stimulation on Obesity		Mellitus, Type	Device: Sham taVNS	Osteopathic Medicine, Las	
and Insulin Resistance		2		Cruces, NM	
		Obesity			
Anti-inflammatory Actions of	Harald Stauss, M.D., Ph.D.	Inflammation	Procedure: Occipito-Atlantal	Burrell College of	Recruiting
Osteopathic Manipulative Treatment	Adrienne Kania, D.O.		Decompression (OA	Osteopathic Medicine,	
			DC)Procedure: Sham	Las Cruces, NM	
			Occipito-Atlantal		
			Decompression (Sham OA		
			DC)Procedure: Splenic		
			Lymphatic Pump Technique		
			(SpLPT)Procedure: Sham		
			Splenic Lymphatic Pump		
			Technique (Sham		
			SpLPT)Device:		
			Transcutaneous Auricular		
			Vagus Nerve Stimulation		
			(taVNS)Device: Sham Transcutaneous Auricular		
			Vagus Nerve Stimulation		
			(Sham taVNS)		
Augmenting Standard-of-care	Harald Stauss, M.D., Ph.D.	Psoriasis	Device: Active taVNS	Burrell College of	Recruiting
Treatment of Plaque Psoriasis by	Tiaraid Stauss, M.D., Tin.D.	Vulgaris	Device: Sham taVNS	Osteopathic Medicine, Las	recruiting
Neuromodulation		v digaris	Bevice. Sham ta vi vo	Cruces, NM	
rearomodulation				Graces, 1 vivi	
Healthcare Provider Human	Kristen Gosselink, Ph.D.	Health	Behavioral: Tailored HPV	Burrell College of	Not yet
Papillomavirus Education and		Personnel	Education and Professional	Ostopathic Medicine, Las	recruiting
Professional Skills Intervention		Attitude	Skills Intervention Group	Cruces, New Mexico,	
		Health	Behavioral: General HPV	United States	
		Knowledge,	Education and	The University of Texas at	
		Attitudes,	Communication Skills	El Paso, Border	
		Practice	Control Group	Biomedical Research	
			1	Center	
				El Paso, Texas, United	
				States	

Appendix 5 Grant Activity

Investigators or Project Directors	Project Title	Sponsor	Start Date End Date	Total Cost	Status
Vanessa De La Rosa, Ph.D.	Development of a Diagnostic Test for Early Screening of Pregnancy Complications	Marsh Foundation	9/1/2021 8/30/2024	\$146,506	Pending
Adrienne Kania, D.O. (P.I.) Harald Stauss, M.D., Ph.D. (Co-I)	Optimization of Splenic Pump to Induce Translocation of Immune Cells from the Spleen to the Systematic Circulation	American Academy of Osteopathy	12/15/202 1 12/14/202 2	\$10,000	Funded
Gabor Szalai, Ph.D.	Study of the effects of hypomethylating agents on T-lymphocyte development and function using T-lymphocytic Trp53 conditional knockout mice	NIH	7/1/2022 6/30/2025	\$43,920	Pending
Joseph Benoit, Ph.D.	South Central Faculty Development Alliance for Clinical and Translational Research (SCFDA)	NIH	7/1/2022 6/1/2027	\$64,602	Not Funded
Hayes Oliver, DO Irina Zhorzholiani,MBA	Development of New Residency Programing in Eastern New Mexico	State of NM	7/1/2022 7/1/2024	\$523,492	Funded
Harald Stauss, MD, PhD Ayana McLaren-Trainee	Augmenting Standard-of-Care Treatment of Plaque Psoriasis by Neuromodulation	National Psoriasis Foundation	5/1/2022 7/8/2022	\$5,000.00	Funded
Harald Stauss, PhD	Augmenting Standard-of-Care Treatment of Plaque Psoriasis by Neuromodulation	National Psoriasis Foundation	8/1/2022 7/31/2023	\$75,000.00	Not Funded
				\$768,520	
				\$15,000	
Funded, but will be accounted for next year.				\$523,492	
	Directors Vanessa De La Rosa, Ph.D. Adrienne Kania, D.O. (P.I.) Harald Stauss, M.D., Ph.D. (Co-I) Gabor Szalai, Ph.D. Joseph Benoit, Ph.D. Hayes Oliver, DO Irina Zhorzholiani, MBA Harald Stauss, MD, PhD Ayana McLaren-Trainee Harald Stauss, PhD	Vanessa De La Rosa, Ph.D. Adrienne Kania, D.O. (P.I.) Harald Stauss, M.D., Ph.D. (Co-I) Gabor Szalai, Ph.D. Joseph Benoit, Ph.D. Joseph Benoit, Ph.D. Hayes Oliver, DO Irina Zhorzholiani, MBA Harald Stauss, M.D., Ph.D Ayana McLaren-Trainee Harald Stauss, Ph.D Directors Development of a Diagnostic Test for Early Screening of Pregnancy Complications Optimization of Splenic Pump to Induce Translocation of Immune Cells from the Spleen to the Systematic Circulation Study of the effects of hypomethylating agents on T-lymphocyte development and function using T-lymphocyte Trp53 conditional knockout mice South Central Faculty Development Alliance for Clinical and Translational Research (SCFDA) Development of New Residency Programing in Eastern New Mexico Augmenting Standard-of-Care Treatment of Plaque Psoriasis by Neuromodulation Augmenting Standard-of-Care Treatment of Plaque Psoriasis by Neuromodulation Funded, but will be accounted for	Vanessa De La Rosa, Ph.D. Development of a Diagnostic Test for Early Screening of Pregnancy Complications Adrienne Kania, D.O. (P.I.) Harald Stauss, M.D., Ph.D. (Co-I) Study of the effects of hypomethylating agents on T-lymphocyte development and function using T-lymphocyte Trp53 conditional knockout mice NIH Joseph Benoit, Ph.D. South Central Faculty Development Alliance for Clinical and Translational Research (SCFDA) State of NM Hayes Oliver, DO	Vanessa De La Rosa, Ph.D. Development of a Diagnostic Test for Early Screening of Pregnancy Complications Marsh Foundation 8/30/2024 Adrienne Kania, D.O. (P.I.) Harald Stauss, M.D., Ph.D. Co-I) Translocation of Splenic Pump to Induce Translocation of Immune Cells from the Spleen to the Systematic Circulation 12/14/202 Gabor Szalai, Ph.D. Study of the effects of hypomethylating agents on T-lymphocytic development and function using T-lymphocytic Trp53 conditional knockout mice NIH 7/1/2022 Joseph Benoit, Ph.D. South Central Faculty Development Alliance for Clinical and Translational Research (SCFDA) State of NM 7/1/2022 Hayes Oliver, DO Irina Zhorzholiani,MBA Psoriasis State of NM Augmenting Standard-of-Care Treatment of Plaque Psoriasis by Neuromodulation National Psoriasis Psoriasis Psoriasis Proundation Psoriasis Psoriasis Psoriasis Proundation Psoriasis Proundation Psoriasis Psoriasis Proundation Psoriasis Proundation Psoriasis Psoriasis Proundation Psoriasis Proundation Psoriasis Psoriasis Proundation Psoriasis Pso	Vanessa De La Rosa, Ph.D. Development of a Diagnostic Test for Early Screening of Pregnancy Complications Marsh Foundation 9/1/2021 \$146,506 Marsh Foundation 9/1/2021 \$146,506 Marsh Foundation 8/30/2024 Marsh Foundation 12/15/202 \$10,000 Foundation 12/15/202 \$43,920 Foundation 12/15/202 \$43,920 Foundation 12/15/202 \$43,920 Foundation 12/15/202 \$6/30/2025 Foundation 12/15/202 \$6/4,602 Foundation 12/15/202

Appendix 6

2021-2022 Research Expenditures

2021-2022 Intramural Research Expenditures

Category	Expenditure
Contract Services Expense	\$4,530
Invited Speakers	\$10,229
Business Dining & Meetings	\$2,291
General Business Travel	0
Dues and Fees	0
Institutional Faculty/Staff Professional Development	\$1,585
Intramural Research	\$38,401
SRE 2020 Projects	\$12,050
SRE 2021 Projects	\$5,499
Library, Books & Subscriptions	\$3,193
Research Lab Supplies	\$22,424
Printing/Publishing	\$677
Office Supplies	\$2,263
Lease-Research Lab	\$77,400
Custodial/Waste	\$9,976
Life Safety & Maintenance	\$1,616
Electric Research	\$4,971
Utilities Water/Wastewater	\$2,340
Utilities Fiber/Connectivity	\$1,386
Software Expenses	\$10,214
Telecommunications & Data	\$1,100
Equipment & Furniture <\$5,000	\$17,363
Equipment Repairs & Maintenance	\$17,293
Subtotal (Operational Expenditures)	\$246,801
Capital Equipment (Flow Cytometer)	\$55,074
Subtototal (Capital Equipment)	\$55,074
Total Operating and Capital Equipment	\$301,875

2021-2022 Extramural Grant Expenditures

Category		Expended	
Salaries & Wages Expense		92,568	
Student Research Aid			
Human Subject Research Participants		2,244	
General Business Travel			
Research Lab Supplies		23,407	
Office Supplies		4009.17	
Other Operating Expenses		193	
Contract Service Expense		217,741	
Business Dining and Meetings			
Printing/Publishing			
Hardware			
External Faculty/Professional Development		995	
	Total	341,157	

Appendix 7 Invited Speakers funded by the Office of Research

Speaker	Title of Presentation	Date
Andrea Amalfitano, D.O., Ph.D. Dean, College of Osteopathic Medicine & Osteopathic Heritage Foundation Endowed Professor of Pediatrics, Microbiology and Molecular Genetics Michigan State University East Lansing, MI	Genetic Experiences in Translational Research	July 16, 2021
Medical Student Research Day Keynote Speaker Theresa Byrd, Dr. PH, MPH, RN Chair- Department of Public Health Associate Dean – Graduate School of Biomedical Sciences Texas Tech University Health Sciences Center Lubbock, TX Hosted by Dept. of Biomedical Science	What IS Public Health: Research Example AMIGAS	September 24, 2021
Claudia Krebs, M.D., Ph.D., FAAA Professor of Teaching Department of Cellular & Physiological Sciences University of British Columbia Vancouver, BC Canada Hosted by Dept. of Anatomy & Cell Biology (Online Only)	How to Make the Learning Experience Better, Not Just Different: The Role of Technology in Medical Education.	October 11, 2021
Nancy Pandhi, M.D., M.P.H., Ph.D. Professor Family & Community Medicine Center for Native American Health University of New Mexico Albuquerque, NM Hosted by Dept. of Physiology & Pathology	Amplifying Diverse Health Experience Stories: The Health Experiences Research Network	November 18, 2021

Richard Duff, M.D.	Patient-Centered Outcomes Research: Open Visitation in	December 10, 2021
Pulmonary Medicine	the ICU.	
Grand Strand Medical Center	the 100.	
Myrle Beach, SC		
Hosted by Dept. of Clinical Medicine (Online Only)		
Chris Bashur, Ph.D.	Cardiovascular Tissue Engineering and the Cellular	January 24, 2022
Associate Professor	Microenvironment	
Biomedical and Chemical Engineering		
Florida Institute of Technology		
Melbourne, FL		
Hosted by Dept. of Anatomy & Cell Biology		
Robert G. Carroll, Ph.D.	Adaptive Modeling Accurately Predicts Student	March 17, 2022
Associate Dean for Medical Education	Performance on the USMLE Step 1 Examination	
Professor of Physiology		
East Carolina University School of Medicine		
Greenville, NC		
Hosted by Dept. of Physiology & Pathology		
Julie Armin, Ph.D.	Structural Vulnerability and Cancer Care: Policies,	April 26, 2022
Assistant Professor	Practice, and Patient Experience	
Family & Community Medicine		
Director, Health Disparities Curriculum		
College of Medicine		
University of Arizona		
Tucson, AZ		
Hosted by Medical Students		
Robert A. Kirken, Ph.D.	JAKs: Where We Came from and Where We Are Going	May 23, 2022
Dean, College of Science		
Professor of Biological Sciences		
Border Biomedical Research Center		
Hispanic Health Disparities Center		
University of Texas at El Paso		
El Paso, TX		
Hosted by Dept. of Clinical Medicine		

Appendix 8

Medical Student Research Day 2021

Students gave oral presentions summarizing their research activities. The following projects were presented. Student names are in boldface type; faculty names are underlined.

- Transcutaneous Auricular Vagus Nerve Stimulation Induces Pancreatic Insulin Release Kozorosky EM, Lee CHN, Lee JG, Nunez Martinez V, Padayachee LE, and Stauss HM Department of Biomedical Sciences, Burrell College of Osteopathic Medicine
- Comparing Covid-19 Survivors' Neutrophil Extracellular Traps And Associated Disease Severity Moran O, Rutz-Robbins J, and Woods ME Department of Physiology & Pathology, Burrell College of Osteopathic Medicine
- Effects Of Hypoxia On Blood Pressure And Skeletal Muscle Oxygenation During Incremental Exercise Jahangiri OS, Singleton HS, Vaudrey K, and Del Corral P Department of Physiology & Pathology, Burrell College of Osteopathic Medicine, Las Cruces, NM 88001
- The Dose Dependent Effects Of Cannabidiol On Neutrophil Extracellular Trap(Net) Formation Hancock TJ, Rezk CA, and Woods ME Department of Physiology and Pathology, Burrell College of Osteopathic Medicine
- Transcriptionfactorsinmda-Mb-231br(Brain-Seeking) Breast Cancer Cell Line Of Keratin 18
 Gene Johnson AE, Singh S, and Szalai G Department of Biomedical Sciences, Burrell College of
 Osteopathic Medicine, Las Cruces, NM 88001
- Oleocanthal And Olive Oil May Have Ananti-Inflammatory Effect Via Decreased Netosis **Guardado CA, Barr EC and** Woods ME Department of Physiology & Pathology, Burrell College of Osteopathic Medicine, Las Cruces, NM 88001
- Optimizing Reverse-Transcription Loop-Mediated Isothermal Amplification (Rt- Lamp)
 Assay For Improved Detection And Differentiation Of West Nile And Zika Virus In Bodily
 Fluids Kim J, Memmott MC, Subonj A, and Bramblett D Department of Biomedical Sciences,
 Burrell College of Osteopathic Medicine, Las Cruces, NM 88001
- Analyzing The Effects Of Moderate Hyperoxia On Cardiovascular Parameters During
 Incremental Exercise Campos AR, Singh K, Smith AM, Vaudrey K, and Del Corral P
 Department of Physiology & Pathology, Burrell College of Osteopathic Medicine, Las Cruces, NM 88001
- Qualitative Analysis Of Cadaver Fluid Via Gc-Ms Frezza AM, Smith HM, and Jackson JA Department of Anatomy and Cell Biology, Burrell College of Osteopathic Medicine
- Fluorescence Detection Of Flaviviruses Using Sherlockcrispr/Cas13a Subonj A, Kim J,
 Memmott C, and Bramblett D Department of Biomediacal Sciences, Burrell College of Osteopathic Medicine, Las Cruces, NM 88001
- Barriers To Pursuing Careers In Medicine Encountered By Students From Racial And Ethnic Minorities: A Case Study At Burrell College Of Osteopathic Medicine Lattin CZ, Newsome DA, Rizvi KA, Yanez MD, Yos KB, and Minugh-Purvis N Department of Anatomy & Cell Biology, Burrell College of Osteopathic Medicine
- Building3dinteractive E-Learning Content Using Anatomical Photogrammetry Haughton DR, McClellan JT, Ford BM, and Jackson JA Department of Anatomy and Cell Biology, Burrell College of Osteopathic Medicine

- The Baroreceptor-Heart Rate Reflex Response Does Not Correlate With The Blood
 Pressure Regulatory Function Of The Baroreceptor Reflex Derderian RS, Komatreddy
 UM, Lampert RA, Nguyen AA, Tager F, and Stauss HM Department of Biomedical Sciences,
 Burrell College of Osteopathic Medicine
- Socioeconomic Status As A Barrier To Medical School Application, Interviews And
 Admissions Pyatetsky IA, Tavarez MS, Aluri BC, Perdomo JE, Lewis C¹, and <u>Jackson</u>

 <u>J²</u>. ¹Office of Student Enrollment Services, ²Department of Anatomy and Cell Biology, Burrell College of
 Osteopathic Medicine
- Quantification Of Palpatory Forces Exerted During Abdominal Examination Of Generally Healthy Subjects By Practicing Physicians Stevenson KM, Wong TT, Yeelot C, and Kania A Department of Clinical Medicine, Burrell College of Osteopathic Medicine, Las Cruces, NM 88001
- The Osteopathic Splenic Pump Technique Modulates Immune Function Potentially
 Through Translocation Of Immune Cells From The Spleen To The Systemic Circulation
 Darby KA, Dusek KL, Li TZ, Romeo ER, Kania A, Szalai G, and Stauss HM Department
 of Biomedical Sciences, Burrell College of Osteopathic Medicine
- Real-Time Monitoring Of Sternocleidomastoid While Performing Muscle Energy
 Technique In Generally Healthy Subjects 'Thoman FN, Chang V, and Jackson JA
 Department of Clinical Medicine and Department of Anatomy & Cell Biology, Burrell College of
 Osteopathic Medicine, Las Cruces, NM 88001
- Comparing The Surgical Outcomes Of Carpal Tunnel Release In Diabetic And Non-Diabetic Populations And Exploring The Role Of Diabetic Neuropathy Jamil A, Shaghaghi N, Quinones J, Vogirala S, and Monsivais J
- Development of Stevens-Johnson syndrome in a patient of color Diep D, Aluri B, and Goldsteen R Department of Clinical Medicine, Burrell College of Osteopathic Medicine

Appendix 9
Students who were admitted into the Distinction in Research Pathway

Student Name	Student Classification	Faculty Mentor
Gina Gilderman	OMS-3	Kristin Gosselink, Ph.D.
Kathryn Hall	OMS-2	Harald Stauss, Ph.D.
Erica Kozorosky	OMS-2	David Jimenez, M.D., FACS
Jessica Lee	OMS-2	Harald Stauss, M.D.,Ph.D.
Anissa Johnson	OMS-2	Gabor Szalai, Ph.D.
Dillon Haughton	OMS-2	TBD
Christina Lee	OMS-2	Harald Stauss, M.D., Ph.D.
Anna Subonji	OMS-2	Debra Bramblett, Ph.D.
Jacob McClellan	OMS-2	TBD
Akhil Gupta	OMS-1	Pedro Del Corral, M.D., Ph.D.

Appendix 10
2022 Summer Research Experience Project Summary

Mentor	Project	Students	Requested Funds for 2022
Adrienne Kania	The Presence of the Chapman Reflexes Pre- and Post-Osteopathic	Huda Abughannam	\$0
	Treatment, A Pilot Study		
Adrienne Kania and	Optimization of splenic pump to induce translocation of immune	Kathryn Anne Cerami	\$1,000
Harald Stauss	cells from the spleen to the systemic circulation	Richard Huyhn	
		Julia May Wong	
Adrienne Kania and	Optimization of the osteopathic suboccipital decompression	Maria Guadalupe Escano	
Harald Stauss	technique for induction of parasympathetic activation	Ashley Rose Maczka	
Camilo Mohar, DO	High Fidelity Lateral Canthotomy	Salma Bouchibti	\$1,097
Debra Bramblett	The SHERLOCK assay, a specific high-sensitivity enzymatic	Jessica Carolina Brenes	\$7,533
	unlocking assay, for virus detection	Jose Massie Osteria	
		Daniel Allen Pattarozzi	
Debra Bramblett and	Development of RT-LAMP Assay For detection of Arboviruses in	Divya Bhatia	\$9,400
Michael Woods	the Context of homogenized Mosquito tissues	Maverick John Buckley	
		Love Opoku Afrifa	
Harald Stauss	Clinical Efficacy of taVNS in Plaque Psoriasis	Matthew Hunter Bohman	\$1,000
		Tommy Brennan. Tsang	
		Ayana Juanita McLaren	
		Angel Nguyen	
		Mehdia Hijab Zaidi	

Harald Stauss	Validation of a Novel Technique to Assess Baroreceptor	Anna Ruth Fuller	\$0
	Reflex Function in Patients with Insulin-Dependent Diabetes	Akhil Kumar Gupta	
	Mellitus and Healthy	Jason Akira Noguchi	
	Controls		
Harald Stauss and	Anti-Inflammatory Actions of OMT – Role of the Cholinergic Anti-	Minyu Chen	
Adrienne Kania	Inflammatory Reflex and Translocation of Immune Cells from	Adam George Viegas	
	Reticular Organs to the Systemic Circulation		
Jon Jackson	Attitudes about cadaver anatomy	Madeline Hansen	\$0
Kristin Gosselink	Neurological responses to stress in females: The role of ovarian	Lauren Alexis Mackell	\$0
	hormones	Adrian Mercado	
		Kate Lynn Ripley	
		Walker Coleman Toohey	
Michael Woods	Assessing the anti-inflammatory properties of cannabinoids by flow	Justin Paul Best	\$5,000
	cytometry		
Pedro Del Corral	Effect of FIO2 on BP responses during and immediately after	Jake Christopher Acalin	\$0
	exercise	Hunter Jamison Kall	
		Christopher Miller	
		Christine Marie Peck	
Pedro Del Corral and	Effects of exercise and transcutaneous auricular vagus nerve	Brian Robert Beyer	\$1,800
Harald Stauss	stimulation (taVNS) on parasympathetic tone	Kevin Patrick Dwyer	
		Jordyn Ray Mullins	
		Anjali Dhirag Patel	
		Cody Sheppard	
Robert Goldsteen	Survey of health literacy in transnationals	Chelsea Claudia Pelayo	\$0
Udit Bhatnagar, MD	Predictors of Diagnostic Yield of Implanted Loop Recorder in	Colten Germaine	\$4,200
	Patients With Cryptogenic Stroke: a Systemic Review and Meta- analysis	Erin Kathleen Nolte	

Vanessa De La Rosa	Endocrine disrupting chemicals and placental dysfunction	Sabrina Mahmoud	\$5,900
		Barghouty	
		Maria Tsai Basista	
		Pavithra Prabhakar	
		Stephen Isaiah Valentino	
Vanessa De La Rosa	Environmental Health Literacy Among Child Bearing Women in Las	Shreya Tumu	\$0
	Cruces		
Total Support			\$36,930
Provided			

Appendix 11
Student submitted Intent to Participate in Research during the 2021-2022 Academic Year

Student (Last, First)	Type of Activity (New Project, Manuscript, Conference)	Project Title	Mentor (Last, First)
Diep, Darlene	Case Report	Linear Porokeratosis Treated With Cholesterol/ Lovastatin Cream	Baker, William, DO
Janitz, Tyler	Case Report	Linear Porokeratosis Treated With Cholesterol/ Lovastatin Cream	Baker, William, DO
Aluri, Bineetha	Case Report	Bilateral Linear Porokeratosis Treated with Topical Cholesterol/ Lovastatin Cream.	Baker, William, DO
Crane, Alison	Case Report	Linear Porokeratosis	Baker, William, DO
Aluri, Bineetha	Case Report	My Skin is Falling Offl: A Case of Severe Stevens-Johnson Syndrome in a Patient of Color	Goldsteen, Robert, DO
Young, Juliana	Case Report	Abiotrophia causing Prosthetic Joint Septic Arthritis	York , John, DO
Lee, Jessica	Conference	Increase In Pancreatic Insulin Secretion By Transcutaneous Auricular Vagus Nerve Stimulation	Stauss Harald, MD, PhD
Haughton, Dillon	Conference	Building 3d Interactive E-Learning Content Using Anatomical Photogrammetry	Jackson Jon, PhD; Ford Bonny, PhD
McClellan, Jacob	Conference	Building interactive 3D anatomical content for e-learning using photogrammetry	Jackson Jon, PhD; Ford Bonny, PhD

Johnson, Anissa	Conference	Transcription factors in MDA-MB-231Br (brain-seeking) breast cancer cell line of keratin 18 gene	Szalai, Gabor, PhD
Uche, Stanley	Conference	DFB: Tiny burn, big problem - the implications of a diabetic foot burn	Mittal, Rohit
Diep, Darlene	Conference	"My Skin is Falling Off!": A Case of Severe Stevens- Johnson Syndrome in a Patient of Color	Goldsteen, Robert
Janitz, Tyler	Conference	Bilateral Linear Porokeratosis Treated with Topical Cholesterol/ Lovastatin Cream	Baker, William
Chidi, Chinanu	Conference	Cancer Prevention: Healthcare provider knowledge and attitudes may influence HPV vaccine recommendations in a majority Hispanic community	Gosselink, Kristin, PhD
Crane, Alison	Conference	Skin cancer recognition and education among community cosmetic professionals for optimal preventive medicine.	Bramblett, Debra
Farahnik, Ferina	Conference	Implementing the Childbirth Experience Survey in Ten Hospitals: A Comparative Analysis using two Recruitment Strategies	Gregory, Kimberly, MD, MPH
Tekin, Yunus	Conference	Case Report: A Rare Cause of Cholecystitis Abboud, Elia	
Stanley, Annika	Conference	Syndrome of Inappropriate Anti-Diuretic Hormone and Small Cell Carcinoma	Lam Alex, DO
Yanez, Merv	Conference	Barriers to Pursuing Medical Careers Encountered by Racial and Ethnic Minorities: A Case Study	Minugh-Purvis, Nancy PhD

Comeau, Stephen	Conference	Case Report; Synchronous Colon Cancers and Laparoscopy.	Abboud, Elia Chrabel, MD
Anderson, Michael	Conference	Case Series: An Uncommon Cause of Appendicitis	Abboud, Elia, MD
Tekin, Yunus	Conference	Case Report: A Rare Scrotal Mass	Abboud, Elia, MD
Garrett, Olivia	Conference	Successful treatment using Botulinum A injection for refractory latissimus dorsi flap fasciculations in the clavipectoral region: case report	Franklin, Krystal MD, MBA
Bewley, Dominic	Journal Article/Manuscript	Case Report	Ovideo, Angelica, PhD
Diep, Darlene	Journal Article/Manuscript	Case Report	Goldsteen, Robert
Shmunes, Margaret	Journal Article/Manuscript	Case Report	Haque, Danish
Young, Juliana	Journal Article/Manuscript	Case Report	York, John
Bettencourt, Jeffrey	Journal Article/Manuscript	Systematic Review or Metaanalysis	Bramblett, Debra
Reyes, Cynthia	Journal Article/Manuscript	First Reported Case of Femoral Facial Syndrome in an Adult: Esophageal Adenocarcinoma as a	Torres, Paul, MD

Young, Juliana	Journal Article/Manuscript	An Arterial Anastomosis Stenosis used in lieu of Banding to prevent Dialysis Access Steal Syndrome	Erinle, Ayodele, MD
Ditmeyer, Curran	New Project	Comparing NeuroQuant pathology with CIRS and their HLA's	McMahon Scott, MD
Sierra, Alondra	New Project	Exploring barriers to prenatal vitamin adherence and acceptance in Hispanic communities of New Mexico.	De La Rosa, Vanessa, PhD
Uche, Stanley	New Project	Tiny burn but a big problem: the implications of a diabetic foot burn.	Mittal, Rohit
Rezaei, Mahssa	New Project	Predictors of Diagnostic Yield of Implanted Loop Recorder in Patients with Cryptogenic Stroke: A Systemic Review and Metaanalysis	Bhatnagar, Udit
Mogilevsky, Rochelle	New Project	Skin cancer recognition and education among community cosmetic professionals for optimal preventive medicine in New Mexico	Bramblett, Debra
Aluri, Bineetha	New Project	Skin cancer recognition and education among community cosmetic professionals for optimal preventive medicine.	Bramblett, Debra
Perdomo, Jorge	New Project	Skin Cancer Recognition and Education Among Community Cosmetic Professionals For Optional Preventative Medicine	Bramblett, Debra
Pyatetsky, Ilana	New Project	Skin cancer recognition and education among community cosmetic professionals for optional preventative medicine	Bramblett, Debra
Crane, Alison	New Project	Skin cancer recognition and education among community cosmetic professionals for optimal preventive medicine.	Bramblett, Debra

Hijazi, Tarek	New Project	Perceptions, Knowledge and Attitudes towards hypertension management among refugees in San Diego	Al Rousan, Tala
Bettencourt, Jeffrey	New Project	Herpes Simplex Virus 1 as an Oncolytic Viral Therapy for Refractory Cancers	Bramblett, Debra
Farahnik, Ferina	New Project	On going research intern for multiple projects since 2018, previous clinical research associate(before beginning school	Gregory, Kimberly, MD, MPH
Hansen, Briton	New Project	Endocrine effects in CNS injury	Gosselink, Kristin, PhD
Tekin, Yunus	New Project	Case Report: A Rare Cause of Cholecystitis	Abboud, Elia
Shmunes, Margaret	New Project	Aripiprazole-Associated Transient Myopia in an Adolescent	Haque, Danish
Stanley, Annika	New Project	Syndrome of Inappropriate Anti-Diuretic Hormone and Small Cell Carcinoma	Lam Alex, DO
Yanez, Merv	New Project	Barriers to Pursuing Medical Careers Encountered by Racial and Ethnic Minorities: A Case Study This research was conducted during the Summer Research Program	Minugh-Purvis, Nancy PhD
Reyes, Cynthia	New Project	First Reported Case of Femoral Facial Syndrome in an Adult: Esophageal Adenocarcinoma as a Progressive Gastrointestinal Manifestation	Torres, Paul, MD
Young, Juliana	New Project	An Arterial Anastomosis Stenosis used in lieu of Banding to prevent Dialysis Access Steal Syndrome Erinle, Ayodele,	
Tekin, Yunus	New Project	Case Report: A Rare Cause of Cholecystitis	Abboud, Elia Chrabel, MD

Comeau, Stephen	New Project	Synchronous Colon Cancers and Laparoscopy; a Case Report.	Abboud, Elia Chrabel, MD
Anderson, Michael	New Project	Progressive Gastrointestinal Manifestation	Abboud, Elia, MD
Tekin, Yunus	New Project		Abboud, Elia, MD
Gilderman, Gina	New Project	Native valve endocarditis caused by Gemella morbillorum in an immunocompetent host: a case report and review of the literature	Antony, Nishaal, MD
Garrett, Olivia	New Project	Successful treatment using Botulinum A injection for refractory pectoralis major flap fasciculations in the clavipectoral region: case report	Franklin, Krystal MD, MBA
Eltze, Lara	New Project	Investigation of the Effect of Biothermomechanic Parameters on Non-invasive Glucose Testing Using Light- Based Measurements of the Hand	Garcia, Antonio, PhD
Deshmukh, Rahul	New Project	Aplasia Cutis Congenita: Review of Literature and Overview of Presentation	Jimenez, David, MD
Chen, Alciia	New Project	Correlation of oculomotor tracking and visual/photo processing with endorsed visual symptoms to cognitive/cochlear profile scores and academic/exercise tolerance in persistent post-concussion syndrome	Mortazavi, Mohammed

Mullins, Jordyn	New Project	COVID-19 and placental infection: Are fetal survivors at risk of long-term Cardiovascular Complications?	Oviedo, Angelica, MD
Toohey, Walker	New Project	Correlations of Urinary PAH, Arsenic, and Metal Species and Cancer: Skin Cancers	Rahman, Humaira Rahman
Mansukhani, Anusia	New Project	Stress and Maternal Health	Gosselink, Kristin, PhD
Luong, Susanna	New Project	Sudden death from Sarcoid involving the lungs, heart & frontal bone	Oviedo, Angelica, MD
Puentes, Hansell	New Project	Neurological responses to stress	Gosselink, Kristin, PhD
Culver, Rachel	New Project	Osteopathic manipulative treatment (OMT) use among osteopathic physicians with completed fascial distortion model (FDM) training during curricular years	Boucher, Joshua DO
Farhad, Rangina	New Project	Affect of Social Media on COVID-19 fear	Salman, Ahmed

Appendix 12

Student Travel Request Summary.

Students submit travel request to the Office of Research for review. Approved requests are forwarded to the Office of Student Affairs for funding. The maximal allowable amount per student request is \$1,200.

Student Name	Faculty Advisor	Type of Presentation	TITLE OF PRESENTATION	Amount Requested (rounded to nearest \$)	Amount Funded
Joel Quinones	Jose Monsivais, MD	Oral Presentation	Surgical Outcomes of Carpal Tunnel Release Comparing Diabetic and Non-Diabetic Populations with and without Diabetic Neuropathy	\$1,388	\$1,200
Erica Kozorosky	Harald Stauss, Md, PhD	Oral and Poster Presentation	Increase in Pancreatic Insulin Secretion by Transcutaneous Auricular Vagus Nerve Stimulation	\$562	\$562
Darlene Diep	Robert Goldsteen, DO	Poster Presentation	My Skin is Falling Off!": A Case of Severe Stevens- Johnson Syndrome in a Patient of Color	\$737	\$737
Tyler Janitz	William Baker, DO	Poster Presentation	Bilateral Linear Porokeratosis Treated with Cholesterol/Lovastatin Cream	\$735	\$735
Anissa Johnson	Gabor Szalai, PhD	Poster Presentation	Transcription factors of keratin 18 gene in MDA-MB-231Br (brain-colonizing) breast cancer cells	\$1,434	\$1,200
Yunus Tekin	Ella Charbel Abboud, MD	Poster Presentation	Case Report: A Rare Scrotal Mass	\$1,082	\$1,082
Stephen Comeau	Ella Charbel Abboud, MD	Poster Presentation	Case Report; Synchronous Colon Cancers and Laparoscopy	\$1,066	\$1,066
Total Travel Support Provided					\$7,004

Appendix 13
Non-clinical Research Rotations taken by OMS-3 and OMS-4 medical students.

Student	Expected	Mentor	Location
	Graduation		
	Year		
Gina Gilderman	2023	Kristen Gosselink, Ph.D.	Burrell College, Las Cruces
Chinanu Chidi	2023	Kristen Gosselink, Ph.D.	Burrell College, Las Cruces
Yann Dacquay	2022	Joseph Benoit, Ph.D.	Burrell College, Las Cruces
Rishika Chauhan	2022	Deana Mercer M.D.	University of New Mexico, Albuquerque
Vijay Singh	2022	Aghaegbulam Uga, M.D.	Memorial Medical Center, Las Cruces
Jessica Bonilla	2022	Chirajyoti Deb, Ph.D.	Orlando Health, Florida
Paul Uzodinma	2022	Kareem Shaath, M.D.	Orlando Health, Florida
Bryan Hummel-Price	2022	Joseph Benoit, Ph.D.	Burrell College, Las Cruces
Lindsay Muniz	2023	Kristen Gosselink, Ph.D.	Burrell College, Las Cruces
Angeline Kurian	2023	Robert Goldsteen, D.O.	Burrell College, Las Cruces
Summer Horchler	2023	Dino Ravnic, D.O.	Penn State College of Medicine

Appendix 14

Student Research Townhalls

Date	Announcements/Updates	New Business
August 17, 2021	CITI Training	Student Research Organization
	Distinguished Researcher Seminars	Distinction in Research Pathway
	Student Research Representative Elections	·
	Research Laboratory Update	
	Student Research Updates	
September 27, 2021	Student Research Organization Leadership Opportunities	Adrienne Kania, D.O OMT Research Project
	Distinction in Research Dates & Deadlines	in her lab.
	Directed Study Course Update	
October 19, 2021	Student Research Organization	Harald Stauss, M.D., Ph.D Research Projects in
	Medical Center of Americas Clinical Trial Academy	his Plab.
	Opportunity	
November 9, 2021	New Mexico Academy of Family Physicians Winter	Gabor Szalai, Ph.D. – Research Projects in his lab.
	Conference – Dr. Valliant	
	Summer Research Experience Update	
	Student Research Organization Update	
December 7, 2021	Student Research Reporting Requirements	Vanessa De La Rosa, Ph.D. – Research Projects in
	Student Research Organization	her lab.
	Summer Research Experience Update	
January 18, 2022	Student Research Organization Update	Summer Research Experience Projects
	Summer Research Experience Update	-
	Research at Other Institutions	
February 8, 2022	Student Research Organization Update	Kristen Gosselink, Ph.D., - Summer Research
	CITI Training Requirements for Summer Research	Project Presentation (Neurologial responses to
	Experience	stress in females: The role of ovarian hormones)
		Pedro Del Corral, M.D., Ph.D. & Harald Stauss,
		M.D., Ph.D. – Summer Research (Effects of
		exercise and transcutaneous auricular vagus nerve
		stimulation (taVNS) on parasympathetic tone)

March 8, 2022	Student Research Organization Updates	Q&A Session
	Summer Research Experience Update	
	CITI Training Requirements for SRE	
April 5, 2022	Summer Research Experience Update	Research Presentation from Last Year SRE
		Students – Jessica Lee & Christina Lee
May 10, 2022	Summer Research Experience	Presentation on Predatory Journals – Susan Beck,
		NMSU Library

Appendix 15

Faculty with assigned Research Laboratory Access. Student access to research laboratory areas is limited to spaces assigned to their mentor. The approximate summer student access is also provided.

Faculty Name	BioScience Research Laboratory	Human Physiology Laboratory
Debra Bramblett, Ph.D.	•	
Vanessa De La Rosa, Ph.D.	•	
Pedro Del Corral, M.D., Ph.D.	•	•
Kristen Gosselink, Ph.D.	•	
Jon Jackson, Ph.D.	•	
Adrienne Kania, D.O.		•
Harald Stauss, M.D., Ph.D.	•	•
Gabor Szalai, Ph.D.	•	
Michael Woods, Ph.D.	•	
Steven Ontiveros, Ph.D.	•	
Approximate Number of Summer Students in Lab Areas	25-30	18-20