# BURRELL COLLEGE of OSTEOPATHIC MEDICINE

Office of Research & Sponsored Programs 2022-2024 Research Strategic plan

> Oliver Hayes, DO Interim Assistant Dean for Research & Sponsored Projects Email: research@burrell.edu

> > Developed 2022 Amended June 12, 2023

This document was developed by the Burrell College Office of Research and Sponsored Programs with input from the Burrell College Research Advisory Council. The membership roster of the 2021-2022 Research Advisory Council members is provided on this page. Job titles are reflective of their title at the time of their service on the council.

### 2021-2022 Research Advisory Council Roster

**Joseph N. Benoit, Ph.D. (Council Chair)** Assistant Dean for Research Professor of Physiology

Adrienne Kania, D.O., F.A.A.O. Associate Professor of Osteopathic Manipulative Medicine *Elected Faculty Representative* 

**Pedro del Corral, M.D., Ph.D.** Associate Professor of Pathology *Elected Faculty Representative* 

**Gabor Szalai, Ph.D.** Associate Professor of Immunology Assistant Dean for Faculty Affairs *Elected Faculty Representative* 

Walker Toohey, OMSI Student Representative

Norice Lee, MLIS Director of Library Associate Professor of Biomedical Sciences Ex Officio

#### Harald M. Stauss, M.D., Ph.D.

Professor of Pharmacology Director of Student Research Department of Biomedical Sciences *Ex Officio* 

#### Michael E. Woods, Ph.D.

Associate Professor of Pathology Director of Research Laboratories *Ex Officio* 

Kalli Martinez, M.S. Scientific Research Associate Research Laboratories Manager

Ex Officio

Jennifer E. Taylor Vice-President for Administration Chief Financial Officer *Ex Officio* 

Martha Enriquez Research Office Administrative Coordinator *Council Recording Secretary*  The Strategic Plan was amended during the 2022-2023 academic year to reflect institutional organizational changes and development of an additional location in Melbourne, Florida. Amendments were led by the Burrell College Office of Research and Sponsored Programs with input from the Burrell College Research Advisory Council. The membership roster of the 2023-2023 Research Advisory Council members is provided on this page. Job titles are reflective of their title at the time of their service on the council.

### 2022-2023 Research Advisory Council Roster

Joseph N. Benoit, Ph.D. (Council Chair) Assistant Dean for Research Professor of Physiology

Adrienne Kania, D.O., F.A.A.O. Associate Professor of Osteopathic Manipulative Medicine *Elected Faculty Representative* 

Michael Frederich, M.D. Adjunct Assistant Professor of Clinical Medicine Elected Faculty Representative

**Pedro del Corral, M.D., Ph.D.** Associate Professor of Pathology *Elected Faculty Representative* 

Jon Jackson, Ph.D. Associate Professor of Anatomy and Cell Biology Elected Faculty Representative

Walker Toohey, OMSII Student Representative

Amelia Hidalgo, OMSI Student Representative

**Norice Lee, MLIS** Director of the Library Associate Professor of Biomedical Sciences *Ex-Officio*  Harald M. Stauss, M.D., Ph.D.

Professor of Pharmacology Director of Student Research Department of Biomedical Sciences *Ex Officio* 

Kalli Martinez, M.S. Scientific Research Associate Research Laboratories Manager *Ex Officio* 

**H. Eduardo Velasco, Ph.D., M.D., M.S.** Senior Associate Dean of Academic Affairs *Ex-Officio* 

Jennifer E. Taylor Vice-President for Administration Chief Financial Officer *Ex Officio* 

**Cynthia Peraza, M.B.A.** Sponsored Projects and Research Compliance Specialist *Council Recording Secretary* 

#### BURRELL COLLEGE OF OSTEOPATHIC MEDICINE MISSION, VISION, GUIDING PRINCIPLES

#### **Burrell College Mission Statement**

The Burrell College of Osteopathic Medicine educates a diverse osteopathic physician workforce committed to improving the quality and access to healthcare in underserved communities.

¡Para la gente y el futuro! For the people and the future!

#### Burrell College Vision Statement

The Burrell College of Osteopathic Medicine will be celebrated for preparing culturally competent physicians dedicated to serving the Southwest, particularly among its Native American and Hispanic populations, and further extending locally and nationally to all underrepresented communities served by the College.

#### **Burrell College Guiding Principles**

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

#### Burrell College Office of Research & Sponsored Programs Office Mission, Function, and Organizational Structure

#### **Research Office Mission**

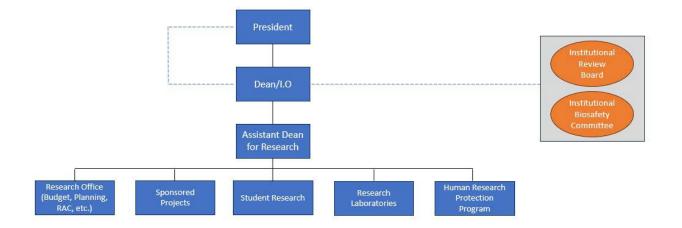
The Burrell College of Osteopathic Medicine Office of Research & Sponsored Programs is committed to supporting faculty and students in their efforts to advance knowledge by creating an atmosphere of inquiry and discovery that inspires excellence in creative scholarship and medical practice.

#### **Research Office Function**

The Office of Research and Sponsored Programs (ORSP) provides organization and infrastructure in support of faculty, staff, and student research activities. ORSP assures that regulatory compliance issues are effectively addressed in ways that facilitate innovation, collaboration, and involvement among Burrell College of Osteopathic Medicine researchers and through collaboration with other research entities.

#### **ORGANIZATIONAL STRUCTURE FOR RESEARCH**

The President has designated Institutional Official (I.O.) for Research Responsibilities to the College Dean. The I.O. has oversight responsibility and signatory authority to ensure compliance in all research functions of the College. The Dean of the College is the Chief Academic Officer appointed by the President and appoints the Assistant Dean for Research. The Assistant Dean for Research provides oversight of the Office of Research and Sponsored Programs (ORSP). The Research Advisory Council includes elected members from the faculty and serves in an advisory capacity to the Assistant Dean for Research. Two Directors are appointed from the faculty by the Assistant Dean for Research. The Director of Student Research is responsible for providing oversight of various student research activities including the Summer Research Experience and Medical Student Research Day. 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. The Human Research Protection Program is responsible for safety, training and compliance in areas related to Biological and Recombinant and Synthetic Nucleic Acid Molecules; Chemical agents; Human Subjects Research, Laboratory Standards, and Responsible Conduct of Research. Two compliance committees provide institutional level oversight in accordance with federal regulations and guidelines. The Institutional Review Board (IRB) is an institutional level board and has sole institutional authority for review and approval of research activites involving human subjects. The IRB is appointed by the Institutional Official. 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. The Human Research Protection Program administratively supports the IRB and IBC.



#### DEVELOPMENT OF THE RESEARCH STRATEGIC PLAN

Research and scholarly activity are of paramount importance in the academic realm of biomedical, clinical, and educational disciplines. The 2022-2024 Research Strategic Plan is the third Burrell College Plan with previous plans published in 2017 and 2019. The 2022–2024 Research Strategic Plan is designed to be a living document developed by the Assistant Dean for Research with input from the Burrell Research Advisory Council and the Burrell Executive Leadership Team.

#### Amendment to the Research Strategic Plan

As a living document, the Research Strategic Plan was reviewed and discussed in the context of the proposed location in Melbourne, Florida, the naming of recent organizational advancements on the campus including appointments of a Chief Diversity Officer in the Executive Administration, Regional Development Officer in Florida, Interim Regional Dean (Proposed Florida Campus), and Associate Dean of Community-Based Learning & Social Accountability to oversee a newly created Mission Medicine initiative. Collectively these changes precipitated the need to revisit the strategic plan. The Assistant Dean for Research in consultation with the Research Advisory Council reviewed the strategic plan and incorporated amendments that aligned with the current growth of the College. The 2022-2024 Research Strategic Plan continues to be guided by Strategic Focus Four of the <u>2021-2024 Burrell College Strategic Plan</u> which appears below:

#### Strategic Focus Four:

<u>Guiding Principle</u>: The College supports faculty and students in their efforts to advance knowledge by creating an atmosphere of inquiry and discovery that inspires excellence in scholarship and medical practice.

- o Expand and Sustain Research and Creative Scholarship Opportunities
  - Develop and expand a tiered mentoring environment that promotes the development of faculty researchers throughout the College, including Regional Academic Centers.
  - Expand the number of faculty mentored student research opportunities throughout the College including the Regional Academic Centers.
  - Sponsor and facilitate opportunities for students to engage with members of the research community through interest groups, professional affiliations, and scholarly events.

- Develop and facilitate collaborations with educational affiliates for research and creative scholarship opportunities.
- Promote opportunities that facilitate the expansion of extramural research.

#### PURPOSE OF THE RESEARCH STRATEGIC PLAN

The purpose of the Research Strategic Plan is to define strategies that will advance the goals and activities of the 2021-2024 College Strategic Plan. Indicators of success in achieving the goals of the research strategic plan will be demonstrated by but not limited to the institutional budget for research, programs, staffing and infrastructure; research expenditures; faculty productivity; student/trainee research engagement; and success in partnerships with other research institutions.

#### STRENGTHS, CHALLENGES, AND OPPORTUNITIES

The Burrell College of Osteopathic Medicine conducts health related research of relevance to the College mission and provides the essential tools for its students to understand the scientific method and design, and to conduct biomedical, behavioral, clinical, educational, and osteopathic medical research. College investments in research have been a major catalyst for the development of faculty driven research programs on the main campus. As part of the strategic planning process, areas of strengths, challenges and opportunities were discussed and are presented in the following sections.

#### Strengths

The College research enterprise continues to grow as evidenced by well-equipped research laboratories supporting basic science, human physiology, and osteopathic medicine research; increasing numbers of faculty and students involved in research; increasing number of research presentations and publications at professional conferences; faculty, staff and student recognition by external research entities; collaboration with neighboring colleges, universities and research organizations; and increased extramural funding for research. The Distinction in Research pathway for students launched in 2021 is on target to award the first Distinction to a member of the class of 2023.

#### Challenges:

Faculty time commitments, infrastructure to support research including personnel, and proprietary status are ongoing challenges. Specifically, expanding demands on faculty time are limiting the amount of effort that can be devoted to research and creative scholarship. Research office workload is limiting the level of office support that can be provided to researchers in areas of grant support, regulatory compliance, and training. Lack of college level support and expertise in statistics and biostatistics creates a challenge as regulatory and funding agencies are placing requirements for incorporating statistical justification into study and grant proposal design. Library support, while adequate for educational purposes, may not be sufficiently robust to support expanding research programs. Increased numbers of faculty and students engaging in research are beginning to indicate a need for additional research space. The College's proprietary status limits the ability of researchers to apply for certain types of sponsored research support.

#### **Opportunities**

Investments in research by the College have established the research laboratories, funded faculty driven research initiatives and created multiple opportunities for students to participate in research projects that are aligned with the College mission as an osteopathic medical school.

As a result, the College is staged for the next phase of research growth and development. Opportunities include engaging clinical researchers at the Regional Academic Centers; a campus location in Melbourne, Florida, partnerships with Florida Institute of Technology (Florida Tech), a focused emphasis of the AOA on increasing NIH funding for osteopathic research; and enthusiasm among Burrell medical students and residents for participating in faculty mentored research projects. Expansion and recent fundraising successes by the Southwest Foundation for Osteopathic Education and Research may also provide opportunities for development in areas related to research.

#### BURRELL COLLEGE PRIORITY AREAS FOR RESEARCH

Strategic Focus Four: Research and Creative Scholarship of The <u>Burrell College 2021-2024 Strategic</u> <u>Plan</u> lists the following five initiatives for research under the heading of "*Expand And Sustain Research And Creative Scholarship Opportunities.*"

- A. Develop and expand a tiered mentoring environment that promotes the development of faculty researchers throughout the College including the Regional Academic Centers and the Florida Campus.
- B. Expand the number of faculty mentored student research opportunities throughout the College including the Regional Academic Centers and the Florida Campus.
- C. Sponsor and facilitate opportunities for students to engage with members of the research community through interest groups, professional affiliations, and scholarly events.
- D. Develop and facilitate collaborations with educational affiliates for research and creative scholarship opportunities.
- E. Promote opportunities that facilitate the expansion of extramural research.

The Research Advisory Council identified specific strategies to advance each of the initiatives that were listed in the 2021-2022 College Strategic Plan.

#### A. Develop and expand a tiered mentoring environment that promotes the development of faculty researchers, student researchers, and office support staff throughout the College, including the Regional Academic Centers and Florida Campus.

- i. Establish a faculty researcher onboarding process in collaboration with the Office of Faculty Affairs and the Office of Community-Based Learning & Social Accountability that extends throughout the college and includes faculty at the Regional Academic Centers and Florida Campus.
- ii. Identify the subset of main campus, Regional Academic Centers, and Florida Campus faculty with research interests and projects for students.
- iii. Establish a mentoring program whereby experienced College faculty researchers mentor less experienced researchers across all Regional Academic Centers and campuses.
- iv. Identify and provide faculty professional development with focus on topics such as identifying funding opportunities, grant-writing, data presentation, manuscript preparation, and responsible conduct of research.
- v. Develop and provide educational opportunities for faculty interested in participating in externally sponsored clinical trials.

- vi. Provide and incentivize pre-award and post-award grant management professional development opportunities for the College employees in offices that support researchers on the main campus, at Regional Academic Centers, and the Florida Campus.
- vii. Provide opportunities for faculty growth in areas related to cultural competency and health disparities research, and creative scholarship that includes understanding regional and local factors throughout the Burrell educational system including the Regional Academic Centers and the Florida Campus.

### B. Expand the number of faculty mentored student research opportunities throughout the College including the Regional Academic Centers and the Florida Campus.

#### Strategies:

- i. Promote faculty involvement in research and faculty mentoring of students involved in research.
- ii. Increase visibility of research at the Regional Academic Centers and the Florida campus through regular visits, seminars, and online communication.
- iii. Encourage collaborative research projects that involve two or more faculty. Provide opportunities for exchange research and creative activity visits between Florida and Las Cruces faculty.
- iv. Promote and encourage involvement of main campus, Regional Academic Centers and Florida campus faculty in non-clinical research electives and the Distinction in Research Program.
- v. Communicate the benefits of faculty mentored research to students. Establish a directory of available faculty mentored research and scholarly projects that are available at all Regional Academic Centers and the Florida campus.
- vi. Track and celebrate collaborative research partnerships among faculty.
  - a. Collaborate with Faculty Affairs to develop a faculty lecture series in which faculty are invited to present a lecture on their research and creative scholarship to the campus community.
  - b. Institute an annual Faculty Research Day.
  - c. Promote a culture of research and creative scholarship that informs and enhances medical education.
  - d. Highlight faculty research in multimedia communications from the College.
  - e. Establish a faculty experts directory for the College that is inclusive of all Regional Academic Centers and the Florida Campus.

## C. Sponsor and facilitate opportunities for students to engage with members of the research community through interest groups, professional affiliations, and scholarly events that bridge across all campus locations and Regional Academic Centers.

- i. Communicate the benefits of students engaging in mentored research experiences such as the summer research experience, directed research, non-clinical research electives, and the Distinction in Research Program.
- ii. Collaborate with the Career Counseling staff to advise students on research opportunities that may be most appropriate to their long-term goals as well as what

opportunities exist on the Las Cruces campus, the Florida campus, and the Regional Academic Centers.

- iii. Provide networking opportunities through student research townhalls and the student research organization. Expand the townhalls and student research organization to include students in the Regional Academic Centers and the Florida campus.
- iv. Provide workshops on presenting and publishing for student researchers. Create opportunities for students across campus locations and Regional Academic Centers to work collaboratively in offering these workshops.
- v. Provide and develop main campus, Regional Academic Center, and Florida campus networking opportunities for students and medical residents interested in research. Encourage and promote student presentations and faculty involvement at local, regional, and state medical academies.
- vi. Create opportunities for students to share research findings at campus events such as student research town halls, poster sessions and informal research gatherings. Expand Medical Student Research Day to the Florida campus.
- vii. Recognize student achievement in areas of research.
- viii. Develop and maintain a searchable database of faculty mentored projects for students on the main campus, the Florida campus, and at all Regional Academic Centers.
- ix. Promote participation and presentation in student friendly scholarly and professional conferences that include regional professional conferences in areas where Burrell has academic centers and campus locations.
- x. Encourage faculty mentors to participate in professional activities with students that facilitate student professional networking and growth.
- xi. Seek extramural partnerships with outside entities that can involve students in research and creative scholarship.
- xii. Provide opportunities for Burrell faculty to present talks on their research to students. Use available technology such that these presentations can broadcast from and be received by any of Burrell Campuses or Regional Academic Center locations.

## D. Develop and facilitate collaborations with educational affiliates for research and creative scholarship opportunities including but not limited to Florida Tech and New Mexico State University.

- i. Involve medical residents in ongoing research projects.
- ii. Develop student research exchange programs that allow Burrell students to participate in research at other institutions and provide research internship opportunities for students at neighboring academic institutions who wish to work under the guidance of Burrell faculty.
- iii. Create opportunities for Burrell to host visiting and international scholars. Encourage research exchange visits between Las Cruces and Florida Tech faculty.
- iv. Develop cross-appointment opportunities for research faculty with Florida Tech, New Mexico State University, and other neighboring academic institutions.
- v. Develop interprofessional education offerings to include ethical and responsible conduct of research and research focused joint degree/certificate programs. Incorporate cultural competency and health disparities training into these offerings.
- vi. Pursue individual and multisite training grants that support students, residents, and postdoctoral fellows who are working on faculty mentored projects.

vii. Promote and encourage synergistic sponsored program activities between Las Cruces, Florida, and Regional Academic Center faculty.

## E. Promote opportunities that encourage and facilitate the expansion of sponsored research on the main campus, the Florida campus, and the Regional Academic Centers.

- i. Fully operationalize the Research Incentive Program for successful grants.
- ii. Develop and implement a process that provides opportunities for obtaining matching funds for grant submissions.
- iii. Provide professional development in areas of grant-writing and project development.
- iv. Provide opportunities for faculty to receive protected time for Research & Creative Scholarship.
  - a. Partner with Faculty Affairs to develop and seek approval for a Research & Creative Scholarship Sabbatical program. Include Las Cruces and Florida faculty exchange program as one of the sabbatical options.
  - b. Partner with Faculty Affairs to develop and seek approval for a Research & Creative Scholarship Hiatus program where faculty could devote 100% effort to research for a short block of time. Include Las Cruces and Florida faculty exchange programs as one of the Hiatus program options.
- v. Incorporate research office staff and research associate support into extramural proposals as allowable by the sponsor.
- vi. Provide opportunities and incentives for research staff professional development.
  - a. Provide periodic webinars and training opportunities for staff.
  - b. Encourage participation in, and provide reimbursement for, research office staff in professional organizations that offer career development and/or certification pathways.
  - c. Develop and implement an advancement pathway for staff based on levels of job-related certification.
- vii. Use professional grant writers for programmatic grants for which the College is uniquely qualified.
- viii. Establish and encourage funding synergies between Burrell faculty on the main campus and Florida Tech as well as researchers at other institutions.
- ix. Enhance institutional data tracking, sharing, and information exchange between the Office of Research & Sponsored programs and other offices or entities that relate to business and/or award management processes that seamlessly work between the main campus, the Florida campus, and all Regional Academic Centers.
  - a. Incorporate research office tracking data into centralized College databases.
  - b. Develop and implement research data sharing practices that conform with federal sponsor requirements.

#### THIS PAGE IS BLANK