

UNC-COM Research Strategic and Scholarly Activity Strategic Plan

Background

The new osteopathic college is being developed as part of a larger university that has an established research presence and program. An interdisciplinary task force was formed to understand the research strengths and challenges faced at UNC and to better align research planning for the College of Osteopathic Medicine (COM) within the university framework and the current research arm of our premier clinical partner. Their insight was used to create a foundational research strategic plan for the COM. This strategic planning process can also be used to provide insight for the strategic planning currently underway at the UNC Office of Research and Sponsored Programs. Members of the planning team are listed below, along with their affiliation and area of research focus.

Team Member	Research Focus Area	Title/Role
Jeri Lyons, PhD	Neuroscience	AVP Research, Dean Graduate School
Darcy Copeland, PhD, RN	Clinical and Educational	School of Nursing
Michaela Romero, DNP, FNP-BC, ENP-C	Quality Improvement	School of Nursing
Michael Aldridge, PhD, RN, CNE	Nursing/medical education and assessment	Associate Director School of Nursing
Nicholas Pullen, PhD	Immunology, Translational, Immunology/medical education	CNHS/Biological Sciences
Reid Hayward, PhD	Clinical	Director University of Northern Colorado Cancer Rehabilitation Institute
Yuyan Han, PhD	Hepatology	CNHS/Biological Sciences
Michael Kimball, PhD	Wellness and Mindfulness	CHSS/Anthropology
Aaron Apawu, PhD	Neuroscience	CNHS/Chemistry
Liz Gilbert, EdD	Population Health	Colorado School Public Health
Heather Helm, PhD	Behavioral Health	Chair, Applied Psychology and Counselor Education
Pam Thompson, DNP	Clinical Trials	Banner Health System
Robert Flynn, PhD	Clinical Trials	Banner Health System
Whitney Duncan, PhD	Immigrant health	CHSS/Anthropology
Angela Mills, MD	Clinical research/GME	CMO, NCMC

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Strategic Planning Process

The planning team convened and conducted a Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis regarding the current state of research at UNC and how this could impact research efforts at the new COM. In addition, team members were asked to provide areas of focus/precepts that were key toward the development of their vision of research at UNC and UNC-COM. The information gathered at this meeting was used to create a survey to enable ranking of each component of the SWOT analysis and to gauge how potential areas of vision resonated with the campus community. The survey was distributed first to team members and then to UNC deans and a broader sampling of the university community.

At a second meeting the results of the surveys were analyzed, compared, and discussed. The team reviewed the newly approved mission, vision, and values of UNC-COM as well as Commission on Osteopathic College Accreditation (COCA) requirements regarding research. The team was asked to use the information provided to outline key concepts that should be reflected in the overall vision for UNC-COM research as well as aspects that could potentially resonate with the greater university. The vision was drafted and sent to the planning team for revision. This vision will be foundational to the creation of strategies and metrics that will be used to develop the UNC-COM research program over the next 5 years.

During subsequent meetings, foundational pillars for the strategic plan were identified and initiatives that will move these pillars forward were discussed. The planning group discussed ways to leverage strengths and opportunities and to mitigate threats while developing our strategy. The team also analyzed resource needs for these initiatives and developed metrics to measure progress during the 5-year strategic plan implementation.

Strengths, Weaknesses, Opportunities, Threats:

Key strengths to build upon include:

- A core group of successful and productive research faculty already exists at UNC.
- There already exists strong support for undergraduate and graduate students in research.
- Collaborative interdisciplinary research is occurring and there is the potential for this to expand.
- University leadership has demonstrated increasing support for research.

Key weaknesses identified include:

- Staffing deficits in the Office of Research and Sponsored Programs negatively impact research support.
- The need for more defined processes and protected time to allow balance between research and teaching responsibilities.
- UNC does not have a clear research identity.
- Research achievements at UNC are often not publicly communicated.
- The current budgetary process causes delays which negatively impacts the research enterprise.
- Declines in graduate student funding have led to the loss of quality students.

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Key Opportunities to leverage include:

- Leveraging the relatively unique identity of having an osteopathic college at a public university.
- Building upon existing relationships with the Weld Trust and Weld County Health Department.
- Leveraging the creation of the medical school to assist in creating a research identity for the university.
- Interprofessional research.
- Expand upon our existing research in health professions education.

Key threats to be aware of include:

- Budgetary challenges at the university.
- Recent high turnover of staff, faculty, and administration.
- Colorado's budgeting process and lack of support for higher education.
- Need for sufficient number of quality graduate students.
- Need for sufficient internal and external funding to support graduate students.

UNC-COM Vision for Research

UNC-COM is committed to an innovative program of research that is integrative, translational, and community focused.

Integrative:

- Focus on interdisciplinary initiatives.
- Cross-pollination of students and faculty on research initiatives between COM and other schools/colleges at UNC.
- UNC-COM policies and processes should reflect and generate resources to advance the overall UNC research mission.
- Research and evidence-based medicine education is integrated across the preclinical and clinical curriculum at the COM.

Translational:

- Development of and participation in initiatives that translate findings from bench to bedside.
- Medical education research which assesses impact(s) of curriculum on student learning, success, and wellbeing as well as on patient care outcomes.
- Research into impact(s) of evidence-based practices on patient and community health outcomes.

Community Focused:

- Research initiatives will build upon existing community relationships and provide an opportunity to create new community partnerships.
- Development of projects that will positively impact health related issues found in the communities served by the COM. (rural, Latinx and immigrant populations for example)

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- Initiatives that focus on medical student/staff wellness.

Pillars, Initiatives and Metrics

Pillar 1: Infrastructure

To best support our students and faculty in their research efforts, we will be establishing an office of research within the COM. This office will regularly interface with the UNC Office of Research and Sponsored Programs (ORSP). Policies and protocols that provide support and guidance in research efforts will need to be developed. Many will be adapted from current UNC policy and others will need to be created de novo. Resourcing this pillar will require personnel, facilities, and fiscal support.

Personnel: We will phase in the hiring of a Medical Librarian (7/2025), Research Coordinator (5/2026), and one additional research support staff (7/2026). This individual may be a statistician, if not statistical support will be outsourced. We will also be hiring an Associate Dean of Research (7/2028). Faculty will also be hired in a phased fashion to meet the needs of our students as we increase class size. Faculty research will be encouraged and supported, however in the early development of the COM it is anticipated that a significant percentage of work effort for faculty will be focused on curricular development and implementation.

Facilities: We have included office space for research personnel and faculty in our new building. Research laboratory space has been earmarked across existing university facilities and research equipment at the university is available for use by our faculty. A detailed description of space is available with our facilities plan, as is a detailed list of available equipment. The COM research budget includes start-up funding that may be used for additional equipment as needed.

Financial: The COM research budget includes salary and benefits for the above personnel and startup funds for individual researchers. The budget also contains funding to support UNC faculty who supervise COM students in research activities.

Initiatives

- UNC-COM Office of Research
 - **Metric 1:** Hiring strategy that follows best practices to assure a diverse applicant pool representative of the field.
 - **Metric 2:** Successful hiring of a medical librarian, research coordinator, research support staff and associate dean of research.
- UNC-COM research policies
 - **Metric 1:** UNC-COM Research Policies Manual.
 - **Metric 2:** Report that assesses central UNC policies and procedures surrounding environmental health and safety as well as training regarding these procedures.
 - **Metric 3:** UNC-COM Environmental Health and Safety Manual or creation of web-based reference that links to existing UNC policies.

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- Protocols/processes regarding the interface of the COM with other university offices and faculty
 - **Metric 1:** Memorandum of Understanding or collection of policies that outline roles and responsibilities of COM office of research and the UNC ORSP.
 - **Metric 2:** Equipment inventory that indicates which equipment is core (can be shared) vs. reserved by individual researchers (Created de novo or adopted from information provided by the College of Natural and Health Sciences).
 - **Metric 3:** Equipment usage report which tracks COM faculty use of shared equipment, accessibility to same, and surveys faculty regarding potential future equipment needs for planning purposes.

Pillar 2: Community Relationships

This pillar addresses both the need to develop relationships to facilitate collaboration within the university community as well as to foster relationships with healthcare partners and community members in Greeley, Weld County, and the Front Range. The university has already established strong working relationships with Banner Health, UC Health, Sunrise Community Clinics, and the Weld County Health Department. Our goal is to leverage existing relationships and grow new connections that will aid in finding research mentors. In addition, working with community leaders and community-based organizations is a proven method to gain trust and increase community members' participation in clinical research. We believe that collaboration with organizations that have a long-established relationship with our community members is essential in developing this foundation and encouraging participation in research endeavors in the future.

Personnel: No additional personnel will be required to implement these initiatives as these will be a significant component of work focus for the UNC-COM office of research as described above.

Facilities: No additional facilities will be required. The program plan for the new COM building includes space that could be used for events and there are numerous event spaces across the university that could be reserved if needed.

Financial: Events will require funding and the COM has a budget line in place to support this.

Initiatives:

- Develop the UNC/UNC-COM research community.
 - **Metric 1:** Host a gathering event for faculty and staff researchers across the university.
 - **Metric 2:** Host a COM research presentation event.
- Foster relationships with community researchers/partners interested in health sciences research initiatives as well as the broader Greeley community.
 - **Metric 1:** Establish a community relations hub in the COM office of research or the COM clinical education department.
 - **Metric 2:** Clinical researcher/partnership database housed in the UNC-COM office of research.

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- **Metric 3:** Host a Health Fair for the community, with educational activities and health screenings. Invite participation of the School of Nursing, Nutrition & Dietetics Program, Colorado School of Public Health, and other health professions programs on campus.
- **Metric 4:** Host a community research symposium in collaboration with the School of Public Health and other health professions programs on campus.

Pillar 3: Student Centered Research

One of the core vision elements of the University of Northern Colorado is to be a “students first university”. This is reflected in the COM mission and vision as well. This pillar addresses support for student education in research and evidence-based medicine as well as support for our students to participate in research initiatives and scholar activity.

Personnel: No additional personnel will be required to implement these initiatives as these will be a significant component of work focus for the UNC-COM office of research as described above.

Facilities: No additional facilities will be required.

Financial: The COM budget contains funds earmarked to support faculty research mentors as well as student travel to national and regional research events to facilitate their ability to present their research.

Initiatives:

- Research Curriculum
 - **Metric 1:** Outline of longitudinal curriculum for research and evidence-based medicine.
 - **Metric 2:** Completion of components of curriculum to be delivered during first year coursework.
 - **Metric 3:** Completion of components of curriculum to be delivered during second year coursework.
 - **Metric 4:** Completion of curricular components to be delivered during clinical rotations.
- Student opportunities to participate in research and scholarly activity.
 - **Metric 1:** Repository of student research activities which includes participation in research projects/scholarly activity, presentations, and publications.
 - **Metric 2:** Report analyzing student trends in research interest over 3 years.
 - **Metric 3:** Creation of a process to review and provide feedback to research mentors.
 - **Metric 4:** Creation of policy for research mentor reimbursement and/or workload reallocation that is consistent with current UNC processes.

Pillar 4: Research initiatives

Some COM faculty will have a research focus. We will work to enable these faculty to pursue their research interests. In addition, we are in the position to leverage the unique aspects of developing a new curriculum

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and program of instruction. We will ground some of our research efforts in the overarching mission of the COM and focus on our local communities that we will serve.

Personnel: No additional personnel will be required to implement these initiatives as these will be a significant component of work focus for the UNC-COM office of research as described above.

Facilities: No additional facilities will be required.

Financial: The COM budget contains funds earmarked to support faculty research startup costs as well as travel to disseminate research findings.

Initiatives:

- Define the research identity of UNC-COM
 - **Metric 1:** Repository of research areas of interest, past and current, for COM faculty.
 - **Metric 2:** Identify areas of research interest to focus on in the next round of faculty hiring to support development of research identity.

- Ongoing research that supports the COM mission or our vision for research
 - **Metric 1:** Identify/initiate 3 projects that involve collaboration of COM faculty with faculty in other colleges at the university.
 - **Metric 2:** Identify/initiate 2 protocols that incorporate osteopathic philosophy or osteopathic manual medicine.
 - **Metric 3:** Identify/initiate 1 protocol that focuses on rural populations.
 - **Metric 4:** Initiate 1 medical education research project analyzes outcomes or effectiveness of the newly developed curriculum of the COM.

Implementation of the strategic plan for research and scholarly activity

The research strategic plan will be reviewed bi-annually by members of the COM research community as well as by the COM Research Strategic Planning team. Progress on identified metrics will be assessed, barriers to achieving metrics identified and potential solutions to enhance progress will be identified as necessary. Areas of focus for the next 5-year strategic plan will be noted. Progress in achieving metrics will be presented to the academic leadership team.

The research strategic planning process is a key component for the work of the COM office of research and will be led by the Associate Dean of Research once that individual is onboarded.