Idaho College of Osteopathic Medicine (ICOM) Strategic Plan for Research & Scholarly Activity 2017 – 2023
MISSION, VISION AND GOALS

The ICOM mission requires a dedication to research and scholarly activity that is essential to academic excellence in health professions education. Congruent with its mission, ICOM is dedicated to a robust culture of research and the presentation of scholarly information to its students and the academic community. To this end, ICOM has established policies and procedures designed to support research development and the scholarly productivity of its faculty, staff and students.

Such policies and procedures are a natural extension of ICOM’s vision to be the nation’s leader in the training of caring and expert osteopathic physicians and in support of our mission as operationalized in the following two goals and objectives:

• Goal 1 requires ICOM “educate osteopathic medical students in the art and science of osteopathic medicine using the most current research in clinical and biomedical sciences.”

• Goal 5 requires that ICOM “contribute to the fund of osteopathic medical knowledge through educational, scientific and clinical research and other scholarly activity.”

The strategies to achieve these goals, including specific timelines and outcomes, will become part of the ongoing academic planning at ICOM. See Table 1 for outcome goals, timelines, and performance measures linked to these ICOM goals.

ACHIEVING OUR GOALS

Faculty Adequacy Model (FAM). ICOM considers teaching to be the primary responsibility of its faculty. Taking into account the faculty adequacy model, ICOM faculty are expected to fulfill their teaching obligations while remaining productive in the areas of research and scholarly activity. All full-time faculty will be required to engage in research and scholarly activity as described in the ICOM Employee Handbook.

The allocation of time for scholarly activity by faculty type can be seen in Table 1 of the Faculty Adequacy Model. In general, biomedical sciences faculty are allocated more time to these endeavors than non-biomedical sciences faculty. Faculty members who also have administrative roles, such as chairs, are also assigned less time for scholarly activities than non-administrative roles. Overall, we have 12,928.4 hours/year dedicated to scholarly activities. The FAM that shows that we will have 7,232 hours/year in
dedicated time for Biomedical Research. This provides evidence that we will have sufficient faculty to meet all the obligations of the academic program and still have protected time to engage in a research enterprise that will enable student participation in scientific discovery and advance our mission.

In general, to achieve promotions in academic rank, faculty must document scholarly activity of high quality and significance, commensurate with faculty rank and responsibilities, which is evaluated during the annual faculty performance evaluation process. Scholarly activity assessments impact and contribute to the development of Professional Performance Plans for the upcoming year. The percent effort that each faculty commits to scholarly activity is detailed in his or her annual review. Guidelines for protected research time are 30% for biomedical sciences faculty, 10% for non-OPP clinical faculty, and 20% for OPP faculty. This system is designed to recognize the diversity that exists among faculty, their career objectives and their unique contributions to the COM.

Expected Research Outcomes. Research and scholarship endeavors are defined broadly to include biomedical sciences, clinical, public health, and medical education research, including research that investigates questions arising from the elements and applications of principles and practices of osteopathic medicine (OPP). Research may occur in a variety of settings that include research laboratories, the classroom, patient care settings and review of data relevant to medical education endeavors, and mentorship of student research. Evidence of faculty scholarship may include publications in peer-reviewed journals, as well as abstracts and book chapters; presentations at regional, national and international meetings; grant proposal submissions and awards including competitively funded ICOM research seed grants that include faculty-mentored student research as a condition of funding; support and mentoring for student research or scholarship; awards or other evidence of research excellence including national or international recognition. Faculty members are entitled to full freedom in research and in the publication of the results, subject to the adequate performance of other academic duties.

Student Involvement in Research. All ICOM students will be expected to be conversant with current medically relevant research at a level sufficient to review and present primary literature articles to an audience of peers. The ICOM curriculum will be highly integrated to provide an opportunity to understand and participate in the basics of scholarly activity and scientific research. Students will be able to engage in such research activities via research electives, participation in summer research opportunities through which faculty guide students on a research project, and travel to present posters or deliver oral presentations at recognized research conferences.
Student presentations will be used to document the understanding of medically relevant research. Additionally, ICOM students will be expected to contribute to scientific discovery and dissemination of new knowledge in the biomedical sciences, clinical, osteopathic, public health, and medical education research through participation in research projects under the supervision and mentoring of ICOM faculty. Research opportunities will be available in the biomedical sciences at ICOM and in collaborations with faculty at local, regional, and national universities, colleges, and medical centers. Clinical and public health research projects offer ideal opportunities for students to become involved in research, and research that involves other health care professionals, including PAs, nurses, and health officers.

Throughout the academic year, and particularly during the first and second years, our students will be able to take advantage of protected time in their schedule for research. In the student schedule, Friday afternoons are reserved and no classes will be scheduled and will be a time for biomedical research opportunities.

Additionally, all OMS-III students will complete a 4 week rotation titled SCRO 3751: Scholarly Activity (see the SCRO 3751: Scholarly Activity syllabus). The SCRO 3751 rotation will enhance and improve students’ knowledge and skills in medical research and scholarly activity. Through this rotation, OMS-III students will be expected to gain understanding of the grant writing process, IRB approval, biostatistics, clinical trials and patient care research, medical education research, health services research, and evaluating published research in terms of validity and usefulness. To this end, students will assist in ongoing research through mentoring occurring at either their core rotation site or ICOM. Students will be expected to prepare a case report in the form of a poster or demonstrate collaboration with faculty researchers with a paper to explain their level of participation and a summary of the ongoing project.

The Research Seed Grants program is intended to facilitate student research and scholarship during the academic year. The ideal project would involve students in as many aspects of research and the scholarly process as possible. As a condition of the grant, students will be expected to present their results at the annual Research Symposium designed to highlight faculty and student research. Faculty mentors are encouraged to mentor students in proposal-writing and submission. RSG Proposals will include a description of the nature of student activities and learning goals and objectives as well as faculty mentoring approaches and activities planned including history of prior faculty-mentored student research projects. Students will be expected to contribute to or co-author a manuscript for publication that results from their work. As
a condition of the grant, students will be expected to present their results at the annual Research Symposium designed to highlight faculty and student research.

ICOM will provide funds for students to attend local, regional, national or international meetings as outlined in the Application for ICOM Student Research Presentation Travel Funding. Funds will support student participation in scientific discovery and dissemination of new knowledge in the biomedical sciences, clinical, osteopathic, public health, and medical education research.

RESEARCH SUPPORT

The Research Chair and the ICOM Research Committee will provide oversight and guidance for all faculty and student research at the COM, and articulate the plan for research development outcome goals that will be recognized and rewarded. The Research Chair alerts faculty to grant announcements and assisting applicants with compliance requirements. ICOM’s Research Committee will be charged with fostering a culture of research and scholarly activity that will contribute to the advancement of knowledge in the fields of the biomedical sciences, clinical medicine and osteopathic principles and practice.

The ICOM Research Committee ensures that all members of the academic community receive appropriate institutional support to enhance research productivity. The Research Committee facilitates faculty mentorship and research collaboration; provides assistance in seeking funding sources; reviews and documents grant proposals and awards including competitively funded ICOM research seed grants that include faculty-mentored student research as a condition of funding; and facilitates Institutional Review Board review.

The committee will also monitor and assure compliance and integration of research efforts. The monitoring and reporting functions ensure that all research activities remain in alignment with the educational mission of ICOM; that their level of success is measured accurately; and that data and timely reports are prepared and disseminated to inform all key stakeholders. Committee minutes, reports and evidence of published articles in scholarly journals, abstracts and book chapters; presentations at regional, national and international meetings; grant proposal submissions and awards; support and mentoring for student research and scholarship; research awards and other evidence of research excellence will be available for site visitor review as they become available. See the attached Institutional Research Committees overview.
GENERAL RESEARCH SUPPORT
ICOM will leverage the following existing resources and other incentives to promote the research productivity of faculty, staff, and students (see the 10-year Research and Scholarly Activities sub-category of the ICOM Budget).

• Startup packages for faculty research and scholarship activities will be developed in the form of research seed grants to meet faculty recruitment needs.

• To further enhance its research environment, ICOM will support research through consideration of funding of capital research equipment requests submitted by the faculty.

• The COM will provide funds for faculty to attend local, regional, national or international meetings as outlined in the Employee Handbook and annual employment contract.

• The ICOM Business Office will provide researchers support that includes pre- and post-award accounting management of grants, accounting, purchasing and compliance oversight with grant administrative requirements.

• The Chair of Research alerts faculty to grant announcements and assists applicants with compliance requirements.

• In keeping with its charge, the Professional Development Committee will oversee the development and continual improvement of programs for all on-campus and off-campus ICOM faculty and staff that includes informing and stimulating research. All ICOM faculty and staff will be invited to attend.

• ICOM will provide funds for students to attend local, regional, national or international meetings as outlined in the Application for ICOM Student Research Presentation Travel Funding. Funds will support student participation in scientific discovery and dissemination of new knowledge in the biomedical sciences, clinical, osteopathic, public health, and medical education research.

• To help disseminate the outcomes of research conducted by our students, the Research Committee will coordinate an annual Research Symposium designed to highlight faculty and student research.

• An annual Publication of the Year award will be determined by the research committee.
FACILITIES

The Idaho College of Osteopathic Medicine (ICOM) is a freestanding, privately funded, separately licensed and independently operated entity located at Idaho State University (ISU) - Meridian Health Science Center. The school will be independent of ISU, but ISU will have representation on the school’s board of trustees. Initial capital investment in the ICOM project will be approximately $120 million. As part of the collaboration and affiliation agreement with ISU, the proposed ICOM – application status has agreed to a long-term land lease for its facility at ISU’s Meridian Health Science Center. Construction of a roughly 96,000-square-foot, $32 million building to house the medical school was completed in 2018. The ICOM library will contain the books, journals and search software necessary to support both biomedical and clinical sciences research.

Strategic planning for research ensures that ICOM leverages its close proximity to local universities and colleges, and in particular its affiliation with the ISU Meridian Health Science Center to support biomedical, clinical and educational research. ISU is a Carnegie-classified doctoral research and teaching institution classified by the Carnegie Foundation as a Research University-High. The ISU Meridian Health Science Center campus has the necessary dedicated facilities and infrastructure (i.e., research institutes, incubators, medical device research/development/production, related health care education programs (NP, RN, PA, PT, OT), support faculty/staff and library facilities) to conduct research and provide research opportunities for faculty, students and clinical investigators. ICOM’s current affiliation agreement with ISU stipulates that both parties use good faith efforts to collaborate regarding faculty teaching and research expertise. To this end, ICOM and ISU have agreed to use good faith efforts to collaborate on research projects that will be mutually identified and which the parties agree will be mutually beneficial. Additionally, ISU represents options for pursuing additional graduate or post-graduate educational opportunities (see attached ISU/ICOM Affiliation Agreement). Boise State University is also growing its research capacity and ICOM will look at strategic opportunities to engage with their faculty.

Construction within existing space in the building began on our own BSL-2 laboratory in September 2018. This tenant improvement will provide approximately 1,674 total square feet of wet and dry bench research laboratory space for ICOM faculty and students to pursue laboratory research. This multipurpose lab space will accommodate anticipated growth and meet faculty and staff recruitment needs. The space will be located in rooms 148, 148A, 148B, and 148C (see Figure 1) and is anticipated to be ready by January 2019. Campus infrastructure and site utilities available in the lab include:
1. Electrical service  
2. Plumbing  
3. Lab Vacuum  
4. Lab Air  
5. Natural Gas  
6. Wireless access  
7. Data and Telephone

Clinical trials and patient care research will be accommodated by twelve (12) examination rooms equipped with examination tables and standard clinic equipment for physical diagnosis located on the second floor of the ICOM building. This will provide approximately 3,300 square feet of clinical research space, enough to support the anticipated research needs of the new faculty hires relevant to the college's organizational chart and faculty adequacy model (see Figure 2 below). Total research space available (bench space and clinical space) will be approximately 4,974 square feet. ICOM has established an ongoing relationship with Nautical Clinical Research to provide coordinating services as we conduct clinical trials. Nautical Clinical Research has over 20 years combined clinical research coordinating experience including contract, budget and regulatory compliance. See the attached Clinical Trial Agreement - Nautical Clinical Research.

In addition, ICOM faculty and students will conduct research studies in the Boise metropolitan area and at affiliated training sites focused on community health issues. An emphasis will be placed on community-based research involving both biomedical and clinical ICOM faculty and ICOM students to investigate critical health problems endemic to the local population, and in particular, the challenges of medicine and health care in a rural and frontier state. By interacting directly with community members and helping to improve the health of the community, ICOM will gain good will and public recognition while advancing our research agenda, as well as preparing our students to be life-long learners who actively participate in the advancement of medical knowledge.

ICOM’s Information Technology Director and the Research Chair will collaborate to provide cloud-based high-performance computing capabilities to researchers who require intensive computational tasks.

Looking ahead, the renovation of existing facilities to support research remains an important priority for ICOM (see the Research Facilities Plan and 10-year Research and Scholarly Activities sub-category of the ICOM Budget). The Research Chair and Research Committee began coordinating resources beginning in Fall 2017, with an
emphasis on leveraging resources from departments, the Research Committee, and the college centrally, as well as external partners. Success will be demonstrated by the establishment of a sustainable research laboratory infrastructure sufficient to support faculty. The strategies to accommodate anticipated growth and meet faculty and staff recruitment needs, including specific timelines and outcomes, will become part of the ongoing academic planning at ICOM.
Figure 1: Wet and dry bench research laboratory space (Rooms 148, 148A, 148B, and 148C) currently under construction
Figure 2: Multipurpose clinical examination rooms designated for clinical research.

RESEARCH PARTNERSHIPS WITH ISU

ICOM and ISU as partnering institutions, share a goal of maximizing the benefits that may flow from the collaborations made possible by the geographic proximity of their respective academic enterprises. This will include collaboration to obtain an increase in research funding and other grants available to healthcare related disciplines. Any specifically agreed upon research project will be the subject of a separate research memorandum that will detail the scope of work, benefits to ICOM and ISU, ownership and publication rights with respect to any intellectual property arising from or
generated by the research, budgets and funding mechanisms for each project. Any research grant proposals prepared as a result of collaboration between the parties and submitted to external third parties shall explicitly identify the parties as independent legal entities.

INSTITUTIONAL RESEARCH COMMITTEES

ISU has an established institutional research committee system on each of its campuses to oversee all research and instruction conducted under its auspices. These committees were established to ensure compliance with local, state, federal, and institutional policies, regulations and guidelines for the conduct of research and to ensure that all human and animal research is conducted in a humane manner including, but not limited to, compliance with Idaho Code and Statutes Title 39 Chapter 93 the Unborn Infants Dignity Act. ICOM has entered into agreements with compliance committees to ensure, document, and verify full compliance with all applicable regulations, policies and standards.

- The Institutional Review Board (IRB) oversees all research that involves human subjects. The IRB assists in establishing and implementing policies and procedures that comply with all applicable local, state, and federal regulations, policies, guidelines and standards for human research subjects to minimize their risks and protect their rights and welfare. IRB approval will be required prior to initiation for all research conducted by ICOM biomedical and clinical faculty, staff and students that qualifies as human subjects research regardless of the location at which the research is conducted. Students will not be permitted to serve as principal investigators. Students will be required to obtain a faculty sponsor to oversee their research who will serve as the principal investigator. ICOM will submit all IRB protocols subject to regulations for human subjects research to WIRB (Western Institutional Review Board), located in Puyallup, Washington. Protocols for human subjects research that is exempt from regulations will be submitted to the Boise State University IRB.
- The Institutional Animal Care and Use Committee (IACUC) oversees all research that involves animals. ICOM will not be sponsoring research that involves animals on its own campus and thus has not entered into a partnership with a local IACUC.
- The Biosafety Committee oversees all biosafety issues on campus related to the research and teaching activities of the faculty. The committee establishes and implements policies and procedures that comply with state and Federal laboratory safety guidelines, including National Institutes of Health (NIH)-funded research that involves recombinant DNA, as well as the use of other
biological, chemical and physical agents in the laboratory. The Biosafety Committee has the authority to assess hazards, determine needed safeguards, inspect laboratories and suspend activities it determines are conducted in a manner inconsistent with applicable policies. See the attached Letter of Intent for Biosafety, Radiation Safety, and IACUC.

- The Radiation Safety Committee oversees all research that involves radioactive materials. The committee establishes and implements policies and procedures that comply with state and Federal standards for the use and disposal of such materials, and it ensures that all faculty and technical staff members using these materials are appropriately trained. See the attached Letter of Intent for Biosafety, Radiation Safety, and IACUC.

Research and instruction using organs or cells (living or dead) purchased from non-ICOM sources having the necessary valid NIH assurance may be conducted provided ICOM personnel or resources are not involved in the initial harvesting of tissue. See the attached Institutional Research Committees overview.

INCREASING RESEARCH FUNDING AND PRODUCTIVITY

ICOM is committed to increasing research funding and productivity of faculty, staff and students. Sustainable growth will be achieved by 1) leveraging existing resources 2) building institutional funding capacity, and 3) targeting external sources. Specifically, this strategic plan for enhancing research includes the following outcome goals, timelines, and performance measures as outlined in Table 1.

Table 1: Research strategic plan outcome goals, timelines, and performance measures

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<th>Outcome Goals</th>
<th>Timeline</th>
<th>Performance Measure</th>
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<td>Providing competitive salaries and research seed grants that include faculty-mentored student research as a condition of funding.</td>
<td>Resources for faculty are available for the 2018-19 academic year. Review and advocacy will be iterate with the ongoing planning process in the Dean’s Council for academic years 2017 – 2023.</td>
<td>Success will be demonstrated by annual indices of faculty and staff employment relevant to the college’s organizational chart.</td>
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<td>Hiring and retaining high quality faculty.</td>
<td>Hiring began in July, 2017 and continues throughout academic years 2017-23 based on the college’s organizational chart. The Professional Development Committee will use both qualitative and quantitative criteria to develop specific plans for a robust faculty retention program following the same timeline. Professional Development workshops began in Fall 2017.</td>
<td>Success will be demonstrated by annual indices of faculty and staff employment relevant to the college’s organizational chart.</td>
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<td>Balancing faculty workloads to promote quality teaching and research.</td>
<td>Criteria for faculty workloads based on the Faculty Adequacy Model was made available to faculty as set out in Employee Handbook in Spring 2017. Updates will occur biennially. The Professional Development Committee began workshops with an emphasis on quality teaching and research in September 2017.</td>
<td>Success will be measured by faculty and staff participation in Professional Development, annual indices of faculty and staff employment, as well as publications, presentations, grant proposal submissions and awards.</td>
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<td>Maintaining access to well-equipped research facilities.</td>
<td>The research facilities plan to accommodate anticipated growth and meet faculty and staff recruitment needs was developed during academic year 2016-2017. The Research Chair and Research Committee are coordinating resources, with an emphasis on leveraging resources from departments, the Research Committee, and the college centrally, as well as external partners.</td>
<td>Success will be demonstrated by establishment of a sustainable research laboratory infrastructure sufficient to support faculty, based on needs identified at the time of hire.</td>
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<td>Ensuring that the faculty evaluation process recognizes and rewards teaching and research.</td>
<td>Criteria for the faculty evaluation process is available to faculty as set out in Employee Handbook, beginning Spring 2017. Updates will occur biennially. The Research Chair and Research Committee will work with the Associate Dean for Academic Affairs Chairs to encourage faculty awareness of these indicators and measures into annual evaluations and promotion applications.</td>
<td>Success will be measured by publications in peer-reviewed journals, abstracts and book chapters; presentations at regional, national and international meetings; grant proposal submissions and awards including competitively funded ICOM research seed grants that include faculty-mentored student research as a condition of funding; support and mentoring for student research or scholarship; awards or other evidence of research excellence including national or international recognition.</td>
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<td>Encouraging and supporting research programs that include student participation in scientific discovery and dissemination of new knowledge in the biomedical sciences, clinical, osteopathic, public health, and medical education research.</td>
<td>Students will be able to engage in biomedical sciences, clinical medicine and medical education research activities via research electives, participation in summer research opportunities through which faculty guide students in scientific discovery, dissemination of new knowledge, and travel to present posters or deliver oral presentations at recognized research conferences with enrollment of the first entering class.</td>
<td>Success will be measured by the number of collaborations between faculty and students and their sponsorship of projects, publications, presentations, grant proposals and awards.</td>
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<td>Expanding research partnerships with nearby community hospitals and private businesses.</td>
<td>To be jointly identified and recruited by the Research Chair, Research Committee, and Associate Dean for Academic Affairs, respectively.</td>
<td>Success will be measured by the number of research partnerships with nearby community hospitals and private businesses for research, scholarly, and creative projects or their sponsorship of ICOM projects.</td>
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**BUDGET**

See ICOM’s 10-year research and scholarly activities budget.

**STUDENT PARTICIPATION IN RESEARCH ACTIVITIES**

Research and education are essential to academic excellence in health professions education. The ICOM mission requires a dedication to research and scholarly activity that provides both formal and informal mechanisms for students to be actively engaged
in research, under the supervision of faculty members. Congruent with this mission, ICOM is dedicated to supporting student research that will enable student participation in scientific discovery, dissemination of new knowledge, and professional networking in the biomedical sciences, clinical, osteopathic, public health, and medical education research. Student presentations will be used to document the understanding of medically relevant research. As previously noted, students will be able to engage in such research activities via research electives, participation in summer research opportunities through which faculty guide students on a research project, and travel to present posters or deliver oral presentations at recognized research conferences.

Research opportunities will be available in the biomedical sciences at ICOM and in collaborations with faculty at local, regional, and national universities, colleges, and medical centers. Clinical and public health research projects offer ideal opportunities for students to become involved in research, and research that involves other health care professionals, including PAs, nurses, and health officers.

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Additionally, all OMS-III students will complete a 4 week rotation titled SCRO 3751: Scholarly Activity (see the SCRO 3751: Scholarly Activity syllabus). The SCRO 3751 rotation will enhance and improve students’ knowledge and skills in medical research and scholarly activity. Through this rotation, OMS-III students will be expected to gain understanding of the grant writing process, IRB approval, biostatistics, clinical trials and patient care research, medical education research, health services research, and evaluating published research in terms of validity and usefulness. To this end, students will assist in ongoing research through mentoring occurring at either their core rotation site or ICOM. Students will be expected to prepare a case report in the form of a poster or demonstrate collaboration with faculty researchers with a paper to explain their level of participation and a summary of the ongoing project.

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objectives as well as faculty mentoring approaches and activities planned including history of prior faculty-mentored student research projects. Students will be expected to contribute to or co-author a manuscript for publication that results from their work. As a condition of the grant, students will be expected to present their results at the annual Research Symposium designed to highlight faculty and student research.

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Attachments:

Application for Student Research Presentation Travel Funding Revised
Clinical Trial Agreement - Nautical Clinical Research
Faculty Adequacy Model
ICOM Strategic Plan for Research Revised
Institutional Research Committees Revised
IRB MOU
ISU/ICOM Affiliation Agreement
LOI for Collaboration and Laboratory Usage between ISU and ICOM
SCRO 3751: Scholarly Activity syllabus
10-year Research and Scholarly Activities Budget Revised
ISU/ICOM Affiliation Agreement