

Vision Team 4: Undergraduate Research Report

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Context:

The Undergraduate Research Vision Team was charged with developing strategies to expand and elevate JMU undergraduate research in alignment with the 2040 vision: to receive recognition for being #1 in the country for undergraduate research accomplishments.

With that bold goal in mind, we identified approaches that would increase access for undergraduate research experiences across the university and center, coordinate, support, and sustain a network upon which these opportunities can seed innovation, impact, and recognition. Drafting a formal definition of undergraduate research for JMU—based on the NCUR definition—was foundational to our work:

JMU defines undergraduate research as mentored creative inquiry involving undergraduate students, initiated by any member of the JMU community that seeks to make a novel scholarly or artistic contribution rooted in a disciplinary or multidisciplinary body of knowledge.

A shared definition is critical to the success of our recommended strategy to enhance a university-wide understanding of what qualifies as undergraduate research and define

measurable outcomes. As well, we sought a definition that would reflect the many ways that research happens at JMU.

Core questions that guided our work included:

- How should JMU define undergraduate research experiences?
- What is current participation, and what is an appropriate target?
- Which strategies best expand access, quality, and student impact?
- How can research connect to careers, graduate study, and societal impact?
- What resources, policies, and structures support equitable engagement?
- How can faculty mentorship be recognized and incentivized?
- What models foster collaboration among undergraduates, graduate students, and faculty?

While exceptional work is being done by and for undergraduate research currently, there are three critical focus areas that have been identified as central barriers to excellence by various groups across campus. These groups include students and faculty involved in FYRE, CSM faculty and leadership, the libraries advisory student group, SGA, faculty listening sessions, faculty and student surveys, feedback gathered at the Vision Open House, and individual interviews with both internal and external contacts.

Student access and support. Stakeholder groups universally cited awareness of and access to available research opportunities as a key barrier for students. Access to undergraduate research experiences includes awareness of opportunities, purpose of engagement, and funding support.

Faculty and staff participation and support. Faculty cited workload capacity, available support (e.g., financial, time), and recognition of effort (e.g., in annual evaluations; tenure and promotion; awards; grants) as barriers to incorporating undergraduate research into their scholarly agenda. Furthermore, stakeholder feedback cited the lack of faculty/staff development and mentoring opportunities as a barrier for those who would like to learn how undergraduate research might be incorporated in their classrooms or campus work.

Undergraduate research infrastructure. Stakeholder feedback made clear that efforts to conduct authentic, high-impact creative inquiry are hampered by inadequate support infrastructure.

Our recommendations address these three broad themes and ensure measurable progress in student success, research excellence, and power skill development. While parts of the JMU community already provide exceptional research opportunities for undergraduate students, in ways that are deeply rooted in our history as a teaching

college, a central barrier to national excellence is the disparate and disconnected ways this is happening. Achieving national recognition also requires sustained, coordinated storytelling. Structural, centrally coordinated growth in undergraduate research must be paired with an intentional communications and marketing strategy that positions JMU's model clearly and consistently on a national stage.

Note: The recommendations below have been summarized from the much longer Vision Team report

Recommendation #1: Conduct an initial campus-wide assessment of all undergraduate research within the JMU community

As an essential prequel to implementing changes and improvements related to the primary themes of student access and support, faculty participation, and undergraduate research infrastructure, the university must establish a current baseline of undergraduate research activities that are currently happening on campus. We propose a year-long undergraduate research assessment effort that dovetails into a permanent undergraduate research assessment program for JMU. The knowledge generated will equip JMU to make smart, informed, strategic choices—allowing us to prioritize the highest-value actions, attract funding, establish metrics of excellence, and determine the next phases of work in undergraduate research.

Recommendation #2: Increased support for undergraduate student research participation

Across the university, there is high demand for increased financial support for undergraduate students to participate in research experiences, particularly during the summer. Providing financial support ensures that students who need to work are not excluded from research experiences that would otherwise be unpaid or credit-based. Strategies such as a capital campaign and community partnerships could expand existing streams of money for research support. However, the most effective implementation of this recommendation will require assessment to determine how much we spend already and where those resources are allocated.

Recommendation #3: Expansion of the JMU First Year Research Experience (FYRE) program

The First Year and Transfer Students Research Experience (FYRE) program promotes the engagement of first year and transfer students in undergraduate research, immersing them in authentic, faculty-mentored projects at the very start of their academic careers. FYRE is a selective program that provides students with structured, high-impact opportunities across STEM and non-STEM disciplines. Financial support for both students and faculty,

combined with intentional assessment of each cohort, ensures broad participation and an inclusive learning experience. The program has been widely praised by faculty and students alike, and its demonstrated success has had considerable impact on students' academic trajectories while simultaneously supporting faculty scholarly productivity. Expanding FYRE is essential for strengthening JMU's national distinction in undergraduate research since early engagement is strongly correlated with deeper learning, higher retention, and long-term scholarly productivity. Our recommendation envisions making first-year research a distinctive feature of JMU's approach to undergraduate research, not only broadening access but also establishing a foundation for sustained, mentored inquiry throughout a student's academic journey. Moving forward, we should be mindful that FYRE itself could act as a barrier to entry into undergraduate research if students are not made aware of the program's existence, benefits, and purpose. By scaling FYRE, JMU can further solidify its reputation as a university where undergraduate research is not simply an add-on, but an institutional hallmark that shapes students from their very first semester.

Recommendation #4: Increased offerings of authentic research experiences into the curriculum

To offer an authentic research experience to every JMU student who wants one, we must move beyond the traditional apprenticeship model as the primary format for undergraduate research. For units like Biology (with ~1200 majors) and Health Sciences (with ~1600 majors and only 15 full-time faculty), it is simply not possible for every student to find a research mentor. Classroom-based experiences incorporated across the curriculum can serve as an alternative, and in some cases, a springboard for students interested in research.

Recommendation #5: Implement a faculty support model that aligns with the demands of a nationally recognized program of undergraduate research

The existing culture at JMU resoundingly supports undergraduate research, both as a high-impact practice for students and as a means of advancing faculty research and scholarship. However, faculty report barriers to participation in undergraduate research that range from workload and recognition for T&P to a lack of necessary support infrastructure. JMU has a reputation for providing authentic research experiences for our students. Elevating that reputation to the national level will require significant growth in support for faculty who are the driving force for undergraduate research opportunities. It will also require coordinated amplification of faculty mentorship and scholarly impact through a research-centered communications strategy. To guarantee that every JMU student who wants a research experience has access, faculty must have the time and support to dedicate to mentoring undergraduates, whether that is in the laboratory, on

stage, at a field site, or in the classroom. A single change will not address the suite of barriers in place that preclude faculty participation in mentoring undergraduates in research. Instead, a series of changes related to policy, culture, and staffing are proposed to address these issues.

Recommendation #6: Create a centralized office of undergraduate research

If undergraduate research is to function as a true strategic pillar rather than a collection of isolated successes, the institution must move beyond a decentralized, ad hoc model and invest in a coordinated and centralized office.

From the student perspective, decentralization creates unnecessary friction. When opportunities are scattered across departments, centers, and individual faculty websites, access depends less on student interest or ability and more on insider knowledge or chance. Students, especially first-generation and other historically underrepresented students, must navigate a fragmented system with no clear entry point, inconsistent criteria, and uneven communication. A centralized office provides a single, legible front door, reducing barriers and making undergraduate research an accessible and normalized experience.

For faculty and staff, decentralization inhibits collaboration and scale. Faculty mentors often duplicate effort in recruitment, onboarding, training, and assessment, while staff operate from partial vantage points with limited ability to align timelines or share infrastructure. A centralized office serves as connective tissue and allowing research mentors to focus on mentorship and scholarship rather than administrative overhead and aligning policies.

Institutionally, decentralization obscures the story of undergraduate research. Without centralized coordination, the institution lacks consistent data on participation, outcomes, and engagement. A central office would strengthen strategic decision making, assessment, and storytelling. Centralization does not eliminate disciplinary ownership, but supports and amplifies it by aligning effort, infrastructure, and strategy. At the same time, research needs to be available for access and citation; JMU Libraries currently provides a publishing platform for graduate theses and dissertations, and the James Madison Undergraduate Research Journal. With additional resources, Libraries could potentially develop and recommend strategies for the wide variety of formats and expressions of undergraduate research.

Recommendation #7: Turning Inquiry into Identity: Creating A National Strategy for Visibility, Communications and Marketing of JMU Undergraduate Research

National distinction in undergraduate research requires both structural excellence and an intentional, sustained communications strategy. A research-centered communications and marketing plan will position undergraduate research as a defining feature of the JMU experience, highlighting engaged mentors, hands-on inquiry, and collaborative applied learning that produces transformative student outcomes. Visibility efforts will be grounded in verified student outcomes, undergraduate research collection use, research participation data, and faculty mentorship impact, ensuring communications reflect measurable institutional progress.

The timing is strategic with the anticipated hiring of JMU's inaugural Vice President for Strategic Communications and Marketing in Spring 2026. This centralized division will elevate JMU's profile, strengthen national visibility, align cross-university messaging, and measure impact. Undergraduate research provides a mission-aligned anchor for this work, with the Office of Undergraduate Research serving as a primary partner.

The plan establishes coordinated national positioning of undergraduate research across platforms and audiences. It integrates web strategy, digital and print campaigns, organic social, media relations, alumni narratives, paid social amplification, and visual documentation into a unified research-forward framework. Marketing resources must be allocated toward institutional priorities, placing undergraduate research alongside other 2040 pillars. By showcasing all types of inquiry and making opportunities visible and attainable to all students, JMU strengthens participation, mentorship, alumni engagement, and philanthropic support.