

Associate Dean for Research, College of Engineering Wichita State University Wichita, Kansas

THE SEARCH

Wichita State University (WSU), the premier urban, public research university in Kansas, seeks an engaging and forward-thinking leader to be the next Associate Dean for Research (ADR) in the College of Engineering. Founded in 1895, WSU has a keen focus on student success and applied learning, with a deep commitment to the Wichita community as a driver in talent development and economic prosperity. It is a growth-minded university where collaboration and creativity shape the future of education and research, with an entrepreneurial spirit embedded in its foundation. This is a transformative opportunity for an innovative, nimble, and collaborative leader to shape a strategic research agenda for an ambitious college at a university on an impressive trajectory toward Carnegie R1 status.

Reporting to the Dean of the College of Engineering, the ADR will help shape and execute a strategic vision that prioritizes the growth of the research ecosystem within the college. The ADR will champion a research culture inclusive of all disciplines and forms of scholarship while capitalizing on areas of strength and opportunity for direct community impact. The ADR will enhance research infrastructure, support faculty in securing funding, leverage existing external partnerships, creatively build new collaborations, and facilitate the dissemination of research outcomes. The ADR must be a collaborative leader and dynamic communicator able to converse and liaise with researchers across disciplines within the college, across the university, and with external stakeholders, especially funding agencies and companies.

Wichita State University has retained Isaacson, Miller, a national executive search firm, to assist in the recruitment of the new Associate Dean for Research. All confidential inquiries, applications, and nominations should be directed in confidence as noted at the end of this document.

WICHITA STATE UNIVERSITY

The mission of WSU is to be an essential educational, cultural, and economic driver for Kansas and the public good. With the vision to be one of the nation's premier urban public research universities, known for providing impactful applied learning experiences and driving prosperity for the people and communities they serve, WSU defined three key priorities in 2023-2024:

- Helping families through access and affordability
- Supporting Kansas businesses with a talent pipeline that meets employer needs
- Increasing economic prosperity with higher education that benefits the Kansas economy

Highly focused on core and distinctive values, the University is specifically committed to:

- *Student Centeredness*: Promote holistic student success through a supportive learning environment in which all students, past, present, and future, continually thrive and grow.
- *Research and Scholarship*: Accelerate the discovery, creation, and transfer of new knowledge.
- *Campus Culture*: Empower students, faculty, staff, and the greater Wichita community to create a culture and experience that meets their ever-changing needs.
- *Inclusive Excellence*: Be a campus that reflects and promotes, in all community members, the evolving diversity of society.
- *Partnerships and Engagement*: Advance industry and community partnerships to provide quality educational opportunities and collaboration to satisfy rapidly evolving community and workforce needs.

Wichita State is one of six state universities governed by the Kansas Board of Regents (KBOR) and is Kansas' only urban, public research university. With an institutional operating budget of over \$750 million, WSU's approximately 4,360 employees have a regional economic impact of \$1 billion. On a sprawling 330-acre campus, WSU currently has over 500 tenured or tenure-track faculty and an enrollment of over 17,500 students (approximately 76 percent undergraduate and 24 percent graduate) with a steady record of sustainable enrollment. WSU is home to eight academic divisions and libraries: the Fairmount College of Liberal Arts and Sciences, the College of Applied Studies, the College of Engineering, the College of Fine Arts, the W. Frank Barton School of Business, the College of Health Professions, the College of Innovation and Design, the Dorothy and Bill Cohen Honors College, the Graduate School, and the University Libraries. Offering associate, bachelor's, master's, and doctoral degrees, and credit-bearing certificates, WSU offers its educational opportunities to students and community members through the main campus and seven regional campus locations as well as WSU Online.

WSU is the most racially and ethnically diverse campus in Kansas. About 77 percent of its students are from Kansas and the remainder hail from every state in the U.S. and 111 countries. In the current academic year, approximately 45 percent of all degree-seeking undergraduates at Wichita State are first-generation students, 55 percent identify as women, and 21 percent are underrepresented minorities. Reflecting its deep commitment to diversity, equity, and inclusion, WSU is working towards designation as a Hispanic-serving institution.

WSU leadership is focused on strengthening the educational opportunities provided to students, helping ensure student success, and providing a wide array of research and career opportunities. To foster these

opportunities, the University has experienced tremendous growth over the last ten years with new research centers, labs, classroom buildings, housing, dining, and athletic facilities. The newest college, the College of Innovation and Design, merges arts, science, and technology curricula to create opportunities for student-faculty collaboration across the colleges and is one of the only face-to-face programs of its type in the country.

To help address the core workforce needs of the state while creating a seamless pipeline to higher education, WSU established an affiliation with WSU Tech. WSU Tech offers more than 100 programs of study, including aviation, health care, manufacturing, design, and business.

WSU's Innovation Campus is an interconnected community of partnership buildings where organizations establish operations and reap the rewards of the University's vast resources and laboratories that give students access to real-world applications and the training needed to effortlessly assimilate into the workforce. It is also a community makerspace that gives both students and non-students alike access to the technology and services that help facilitate product development and mixed-use areas that provide everyone with a place to eat, sleep, play, shop, and share. Applied learning is an integral part of the university's mission, and students earned \$30M in wages last year in about 9,000 positions working on campus.

RESEARCH

With yearly funding topping \$400 million and moving towards the goal of R1 recognition, research at Wichita State University ranges from bioscience, chemistry, and engineering to mathematics, physics, and ancient civilization. WSU received 1,669 research awards, totaling more than \$398 million. On a successful upward trajectory, WSU has grown its research portfolio by nearly 30% in the last five years.

Highly engaged research is a key component of WSU's Innovation strategy. The unique blending of accomplished faculty, high-tech labs and research facilities and on-campus partnerships offers students the chance to participate in vital research that is changing lives. Since 2010, Wichita State University is one of the fastest-growing research universities in the United States. They intend to continue that arc with increased opportunities for student research and interdisciplinary research projects. Currently designated as a "High Research Activity" institution, WSU is strategically moving towards the "Very High Research Activity" Carnegie classification. Considerably strengthening research awards in the last several years has moved WSU far beyond the threshold of an R1 classification, and the University is now concentrating on increasing the number of PhD graduates.

The University's location in the heart of Wichita – a mecca for aircraft manufacturing, healthcare and business – provides the opportunity for applied learning and research to be infused throughout each student's educational experience. By conducting research and internships in their fields, students gain real-world experience, allowing them to develop and apply critical skills. Additionally, local businesses

count on WSU centers, like the National Institute for Aviation Research (NIAR), as a vital part of their business plan.

The National Institute for Aviation Research (NIAR) was established at Wichita State University in 1985 in an effort to increase research and development capabilities, focused on the needs of the Air Capital of the World. Since then, NIAR has expanded to multiple sites across the city and is known globally for expertise in the most critical areas of aerospace R&D. NIAR provides research, design, testing, certification and training to the aviation manufacturing industries and government agencies including the U.S. Department of Defense. NIAR has a \$350 million annual budget, a staff of 1,200, and 2 million square feet of laboratory and office space, six locations across the city of Wichita and an office in downtown Huntsville, Alabama. Because of NIAR's research efforts, Wichita State University also ranks fourth among all U.S. universities in aeronautical R&D expenditures according to the National Science Foundation. WSU ranks first in industry funding for aeronautical expenditures. WSU and NIAR R&D expenditures have steadily increased over the last two decades, a testament to its unique capabilities and ability to collaborate successfully with government and industry.

LEADERSHIP

Dr. Richard (Rick) Muma was named the 15th president of Wichita State University on May 6, 2021. Before becoming president, he was the provost and executive vice president providing academic leadership for the University's priorities, including enrollment, applied learning, funded research, and regional economic development. Dr. Muma has also served as senior associate vice president for Academic Affairs and Strategic Enrollment Management and chair and professor in the departments of Public Health Sciences and Physician Assistant.

Dr. Anthony Muscat was named dean of Wichita State University's College of Engineering on July 25, 2021. Before joining Wichita State, Dr. Muscat was a professor and chair of Chemical and Environmental Engineering at the University of Arizona, where he had been since 1998. He has extensive experience in the fields of Chemical, Environmental, Mechanical, and Aerospace Engineering and has been in higher education for over 30 years. With a passion for applied learning, Dr. Muscat wants to help Wichita State train engineers who are confident in their technical chops and who apply the fundamentals in applied learning projects that teach them to exercise good judgment.

THE CITY OF WICHITA

Sitting in the center of the U.S. Great Plains, and as Kansas' largest metro area, with a growing population of nearly 700,000, Wichita is the commercial, financial, medical, cultural, and entertainment hub for the state. Despite its growth, WSU has a large footprint across Wichita and is a leader in the active higher education community of the city, which includes multiple universities and community colleges. Wichita has maintained the friendly Midwestern feel and enjoys a mild climate for most of the year. Wichita has been nationally recognized for its low cost of living, growing economy, and excellent quality of life. Forbes

recently named Wichita the No. 4 city to move to in 2024. More information about the City of Wichita can be found at <u>https://www.wichitachamber.org/main/welcome-to-wichita/</u>

COLLEGE OF ENGINEERING

Vision, Mission, Strategic Goals

In recent years the College of Engineering has moved upwards in national rankings and is now recognized as one of the top 50 engineering schools in the United States. The mission of the College of Engineering is to be an essential educational and economic driver for Kansas and the greater public good.

The College has seven strategic goals:

- Guarantee an applied learning or research experience for every student by each academic program.
- Accelerate the discovery, creation, and transfer of new knowledge.
- Capitalize systemically on relevant existing and emerging socioeconomic trends that increase quality educational opportunities.
- Create a new model of faculty and staff assessment, incentive, and reward to accomplish our vision, mission, and goals.
- Empower students to create a campus culture and experience that meets their changing needs.
- Be a campus that reflects in staff, faculty and students the evolving diversity of society.
- Pioneer an educational experience for all that integrates interdisciplinary curricula across WSU and other universities.

The College of Engineering has been a hallmark of Wichita State University, and is among the top 50 U.S. Colleges in engineering research and development. The National Science Foundation ranks WSU No. 1 in the U.S. in industry-funded aeronautical research and development with more than \$100 million in overall engineering R&D expenditures and No. 2 in industry-funded engineering research and development overall.

The College has continued to build mutually beneficial relationships that provide resource support, critical partnerships and collaboration, community engagement, and funnels to jobs in industry for current and graduating students. Companies and government organizations are eager to engage with the University, students and faculty for innovative research and experiential learning opportunities. Almost 25 percent of Wichita engineers are WSU graduates.

The College has 80+ tenured and tenure-track faculty and approximately 3,400 students across the following seven departments: Aerospace, Biomedical, Electrical and Computer, Industrial, Systems and Manufacturing, Mechanical, and Engineering Technology, in addition to the newly established School of Computing. All of the College's programs are fully ABET accredited. The College of Engineering reported

research expenditures of approximately \$7 million. The undergraduate student population is 35 percent first generation students.

Working closely with the Dean on workforce development and industry partnerships regionally and nationally is the WSU College of Engineering **Industry Advisory Board** (IAB). The 33-member board is comprised of individuals representing a number of different industries within the state of Kansas and on a national level. Many of the individuals sitting on the IAB are also proud graduates of the College. The Dean relies on these board members for feedback on industry engineering needs, curriculum updates and their input on how best to provide students with experienced-based learning opportunities alongside fundamental technical knowledge. The board meets once each semester, generally coinciding with the WSU Foundation National Advisory Council Meetings.

Applied Learning

WSU and the College of Engineering work continuously to bridge the gap between classroom learning and real-world experience. Students in every major can gain the skills, connections and confidence needed for career success prior to graduation with employers in virtually every industry, and more specifically, engineering students have access to the largest engineering co-op and internship program in the state. In 2022-23, students earned over \$35.6M in wages and worked in more than 9,000 positions. More than 700 employers offered students applied learning experiences.

Engineering+

In response to the recommendation of the National Academy of Engineering report on the future needs of engineering graduates, the College launched the Engineering+ program. Through this program, WSU graduates enter the workforce with broad-based education through various experiential learning opportunities for students to complete alongside their undergraduate education. In addition to the course requirements for an engineering or computer science BS degree at WSU, each student must complete at least three of the seven following activities: cooperative education or internship; entrepreneurship and innovation; global learning or study abroad; multidisciplinary education; undergraduate research; leadership training; or service learning. This program makes the educational experience more meaningful to the student more desirable to local and national industries.

Engineering Student Success Center

The Engineering Student Success Center (ESSC) supports students as they enter the College of Engineering and persist towards an undergraduate degree. In partnership with engineering faculty and staff, the ESSC provides a personalized approach by offering a wide range of support services that help students achieve their academic and personal goals. The ESSC supports 20 student-run, engineering-related organizations, engineering living learning communities, the GEEKS tutoring and academic success center, the ACE mentoring program, merit-based and need-based scholarships, and engineering summer camps for children in the community.

THE ROLE OF THE ASSOCIATE DEAN FOR RESEARCH

Reporting to the Dean, the Associate Dean for Research (ADR) is a key leadership position with the College of Engineering. The ADR is responsible for providing strategic direction, oversight, and support for research activities. The ADR will work closely with faculty, students, and administrators to promote and enhance research initiatives, foster collaborations, secure funding, and facilitate the dissemination of research outcomes. This role requires a deep understanding of engineering research methodologies, a strong track record of scholarly accomplishments, success in winning extramural research funding, and the ability to cultivate a collaborative environment conducive to research excellence.

KEY OPPORTUNITIES AND CHALLENGES FOR THE ASSOCIATE DEAN FOR RESEARCH:

The next Associate Dean for Research will be charged with addressing the following opportunities and challenges:

Co-create a strategic vision and champion a forward-thinking research strategy.

The ADR will act as a thought partner in formulating a vision for the college, in concert with the Dean and the Associate Dean for Undergraduate and Graduate Programs, and take the lead in translating that vision into strategic research priorities aligned with the college's mission and goals. Given the opportunity that exists at Wichita State, the ADR will need to work closely with the Dean's leadership team, department chairs, and faculty to foster trusting relationships, build productive partnerships, and facilitate effective communication. An ability to translate ideas into action steps that consider the college's strengths, resources, and areas for improvement will be critical. Equally important will be the ADR's ability to assess the effectiveness of the college and the university, changing course when necessary. The ADR's ability to translate a thoughtful, strategic, and sustainable vision for the future into an innovative and forward-thinking research strategy is vital.

Build capacity, provide support, and develop sustainable research infrastructure.

The ADR role requires a depth of knowledge and focus on research funding opportunities and the proposal submission process. In pursuit of increasing the quantity and quality of scholarship the college produces, the next ADR will actively promote the submission of competitive grant proposals and provide project management and supplemental pre- and post-award administrative support to achieve sustainability. Prioritizing new initiatives that enhance faculty scholarship, increase academic excellence, and expand and diversify extramural funding will be key to this endeavor. Building capacity and providing research support extends beyond the faculty and includes working closely with the graduate program coordinators

to enhance the research experience for graduate students and support the recruitment and retention of high-quality PhD students.

The ADR will also be charged with developing and sustaining productive research infrastructure. The ADR will oversee the development and maintenance of research facilities, equipment, and resources, collaborating with relevant stakeholders to ensure that the infrastructure supports cutting-edge research in a multitude of engineering disciplines. Developing and implementing mechanisms for assessing and evaluating the impact and productivity of research activities within the college, providing feedback and support to faculty in improving their research outcomes, and overseeing the college's research integrity and compliance efforts to ensure adherence to ethical principles and responsible conduct of research will be process and policy priorities of the ADR role.

Cultivate a highly collaborative and interdisciplinary community of research.

The ADR will be a strategic thinker who engages broadly and deeply with all departments, institutes, and units pertaining to academic research within the College of Engineering and the university. To expand and elevate the college's research portfolio, the ADR will be expected to contribute to a collaborative and interdisciplinary community of research. There is a desire for a more formalized structure that supports and encourages faculty-led research and an opportunity to pursue research in new and creative ways that leverage new areas of intersectional interest. The ADR will facilitate interdisciplinary collaborations across the college, discovering, fostering, and resourcing the grassroots interdisciplinary efforts already taking place while simultaneously initiating new research projects and partnerships. Beyond the college, there are opportunities on campus to help facilitate work with Industry and Defense Programs (IDP), including the National Institute for Aviation Research (NIAR), an institute that has a strong relationship with the College of Engineering, and the new National Institute for Research and Digital Transformation (NIRDT). The ADR must be a talented communicator – multicompetent across disciplines and audiences – an engaging storyteller, and most importantly a good listener. Building strong, trusting relationships will be essential for the ADR's success.

Strengthen and expand relationships with external partners in pursuit of increased research and applied learning opportunities.

WSU's ambitious goal of achieving R1 status will guide the ADR's agenda and priorities. Achieving such status will require strengthening and deepening of relationships with external partners – with the goal of developing sustainable partnerships and attracting resources into the college – while simultaneously bolstering WSU's research infrastructure and encouraging faculty pursuit of new opportunities. The ADR will serve in an externally facing capacity and be equipped to understand, navigate, and capitalize on the community in the surrounding area and beyond.

WSU's location in the heart of the Midwest, in the largest city in Kansas that acts as the major industry hub of the state and long considered the "Air Capital of the World", is rich with opportunities for industry, foundation, and municipal partnerships. Increasingly, the Wichita community and the State of Kansas look to future-focused universities like WSU for innovative ideas, data-driven research to guide economic development decisions, and investments to support continued growth. The ADR will build productive partnerships with local and regional industry, government agencies, and other academic institutions to advance applied research opportunities and secure external funding. It will be critical that the ADR create an easily accessible avenue for external partners to engage with the College of Engineering and eliminate any barriers to collaboration. In addition to strengthening relationships between faculty and external partners, the ADR will also devote effort to expanding the college's capacity in working with industry partners for undergraduate and graduate applied learning opportunities.

Build a culture of research excellence and be an advocate for research in the college.

As WSU moves from a high-performing R2 to emerging R1 status, the ADR will play a central role in strengthening the culture of research and creative academic activity, working in collaboration with other ADRs on campus, the Research Office, and university leaders. The ADR will further play a crucial advocacy role for the College of Engineering and research, identifying and pursuing strategic public and private partnerships that enable the institute to flourish. The ADR will be called upon to speak and engage as an expert in applied research and impact, conveying a compelling vision for how the college can contribute to addressing industry's most important questions and new areas of inquiry. The ADR will be well-versed in the college's research portfolio and key achievements, armed with data on research activities, funding, publications, and patents, amplifying such successes to stakeholders within and outside the college.

QUALIFICATIONS AND CHARACTERISTICS

While no one person will embody all of them, the successful candidate will exemplify many of the following qualifications and attributes:

- A doctoral degree in an engineering discipline or a related field.
- A tenured faculty appointment in engineering or a closely related field.
- A distinguished record of research accomplishments, including publications, grants, and collaborations.
- Extensive experience in engineering research methodologies and knowledge of emerging research trends.
- Demonstrated leadership and management skills, with the ability to foster collaboration and engage faculty, students, and stakeholders.
- Strong interpersonal and communication skills to effectively interact with diverse individuals and groups.
- Familiarity with funding agencies, grant application processes, and research compliance requirements.

- Ability to develop and implement strategic plans and initiatives to advance research within the college.
- A commitment to promoting diversity, equity, and inclusion in research activities.
- Experience in supervising and mentoring researchers and graduate students.
- Knowledge of research policies, regulations, and best practices in higher education.
- Ability to forge and maintain strong relationships and partnerships, internally and externally.

To Apply

Wichita State University has retained Isaacson, Miller, a national executive search firm, to assist the Associate Dean for Research, College of Engineering Search Committee in its identification and review of candidates. Inquiries, referrals, and resumes accompanied by a cover letter should be submitted via the Isaacson, Miller website: <u>https://www.imsearch.com/open-searches/wichita-state-university-college-engineering/associate-dean-research</u>

Jackie Mildner, Partner Courtney Cabansag, Associate Isaacson, Miller Washington, D.C.

Wichita State University (WSU) does not discriminate in its employment practices or in its educational programs or activities on the basis of age (40 years or older), ancestry, color, disability, ethnicity, gender, gender expression, gender identity, genetic information, marital status, national origin, political affiliation, parental status, pregnancy, race, religion, sex, sexual orientation, or status as a veteran. WSU also prohibits retaliation against any person making a complaint of discrimination or against any person involved or participating in the investigation of any such allegation. Sexual misconduct, relationship violence, and stalking are forms of sex discrimination and are prohibited under Title IX of the Education Amendments Act of 1972, other federal laws, and WSU policy. The following persons have been designated to handle inquiries regarding WSU's non-discrimination policies: the Institutional Equity and Compliance Director (Telephone: (316) 978-3205), Title IX Coordinator (Telephone: (316) 978-5177), or Equal Opportunity Coordinator (Telephone: (316) 978-3186), each located at Wichita State University, 1845 Fairmount, Wichita, KS 67260, Human Resources Building.