



Associate Dean for Integration of Teaching and Scholarship
College of Science and Mathematics
James Madison University

The College of Science and Mathematics (CSM) at James Madison University seeks an innovative scientist educator to shape an integrated model for faculty scholarship in an excellent undergraduate educational environment. The new Associate Dean for Integration of Teaching and Scholarship will lead collaborative science scholarship in the CSM that advances faculty research and engages students in science practice.

Institutional Context

James Madison University (<http://www.jmu.edu>) is a public, comprehensive institution located in the heart of the scenic Shenandoah Valley in Harrisonburg, Virginia. JMU is a primarily undergraduate institution with 21,000+ students including 1700 graduate students. The campus is conveniently located along the I-81 corridor, with access to educational, governmental, and industrial partners in Washington, DC and Richmond, Virginia.

The CSM (<https://www.jmu.edu/csm/>) prepares students to pursue advanced training in science and mathematics, supports applied programs in health sciences and engineering, and provides the science and mathematics foundation for all JMU students. The CSM is comprised of the departments of Biology, Chemistry and Biochemistry, Geology and Environmental Science, Mathematics and Statistics, and Physics and Astronomy, collectively offering a wide range of majors, minors, and concentrations in foundational sciences. Over 240 outstanding full- and part-time faculty are engaged in teaching and mentoring 1700 science majors and over 2000 non-science majors.

Educational context

The CSM maintains a 15:1 student-faculty ratio which ensures that students have high level access to faculty as instructors, mentors, and advisors. Our student population is currently 57% female, with 25% students of color including 17% from groups underrepresented in STEM. Faculty are committed to working toward a diverse and inclusive community in which every student has access to the support and mentoring they need to succeed. To that end, initiatives across the college focus on strengthening student support in gateway and majors courses, on expanding faculty capacity for inclusive student mentoring, and on building a vibrant College community that engages every student in STEM learning.

Our faculty are committed teachers and mentors, and strive to create an excellent learning environment for all students through high-impact practices and pedagogies. Faculty scholarship drives an experiential educational model in the CSM, in which students are engaged with faculty in the courses they teach and through collaborative research. CSM students participate in a variety of course-based research experiences (CUREs) focused on a variety of topics including viral discovery, UAV applications, geological mapping, protein structure analysis. A

strength of the CSM is the diverse array of strategies that has evolved in response to different departmental contexts; an ongoing challenge is to engage all students in meaningful ways given continuous enrollment pressure on larger departments.

Research Infrastructure

Student-faculty collaborative research is supported by outstanding campus facilities including fully equipped faculty research and common use labs, technical staff support, and \$20 million in state-of-the-art instrumentation. Cross-disciplinary research is supported by the Center for Material Science, the Center for Genome and Metagenome Studies, the Shenandoah Valley Regional NMR Facility, and Madison Accelerator Lab. Faculty are supported by both institutional resources and extramural funding from state and federal agencies totaling over \$10 million annually. CSM faculty are active scholars, generating well over 100 research publications and 400 conference presentations annually.

Over 400 students conduct research with faculty mentors during the academic year or summer, and the majority of CSM majors complete an extensive research project before graduation. CSM students enjoy excellent mentoring by research-active faculty and direct access to research equipment and facilities. An established Masters in Biology program provides integrated graduate education in support of undergraduate education. In addition to annual research symposia for JMU students, several departments host regional or national meetings which bring scientists from all over the world to campus.

Our research infrastructure supports a vibrant and mostly undergraduate research community that is distinctive among comparable institutions. More information can be found on the CSM website (<https://www.jmu.edu/csm/research-facilities.shtml>).

Opportunity

The Associate Dean (AD) for Integrating Teaching and Scholarship will support faculty in the College as they advance initiatives that engage students in faculty research, infuse research into the majors and non-majors curricula, and pursue new interdisciplinary research opportunities. The AD will provide leadership in faculty development and will support efforts to strengthen the research community and expand the research infrastructure in the College. The AD serves as liaison with JMU's Office of Research and Scholarship focused on resource development to advance scholarship and innovative curricula, and works closely with the dean as a member of the CSM administrative leadership team. In addition to duties within the College, the AD represents the College across campus through involvement in a university-level project and committee assignments.

This is a great opportunity for someone who is interested in shaping a productive and sustainable model for faculty scholarship at an institution committed to excellence in undergraduate STEM education. We seek an individual who can contribute novel perspective grounded in personal experience and knowledge of national trends in STEM education to our ongoing efforts to support and expand an active community of science and mathematics scholars.

Qualifications

- PhD or other appropriate terminal degree in a one of the disciplines represented in the college;
- Minimum of 6 years in a faculty role engaged in teaching and sustaining an active research program including undergraduate students;
- Track record of excellence in teaching and scholarship and demonstrated accomplishments sufficient for tenure in one of the five CSM departments;
- Academic leadership experience, including the ability to work productively with faculty to develop a scholarship vision for the CSM and its departments;
- Faculty mentoring experience, including working with faculty in the context of undergraduate educational reform
- Active involvement in national STEM reform efforts generally, including knowledge of diverse approaches to undergraduate student engagement through research.
- Demonstrated commitment to diversify STEM community and pathways, and support the success of all students, including those from groups underrepresented in the sciences.

Application

Application materials must be submitted through JMU's central [JobLink](#) site (Posting# F1061).

Applicants should submit a cover letter that describes their interest in the position, curriculum vitae, and list of five references. A leadership statement should also be included that addresses the question: How will you contribute to CSM efforts to build an inclusive STEM community that supports the success of all students?

For more information about this position, please contact Cynthia Bauerle, CSM Dean (bauerlcm@jmu.edu, 540.568.3508).

Review of applications will begin on 10 November 2017.

James Madison University is an equal opportunity employer committed to creating and supporting a diverse and inclusive work and educational community that is free of all forms of discrimination.

This institution does not tolerate discrimination or harassment on the basis of age, color, disability, gender identity, genetic information, national origin, parental status, political affiliation, race, religion, sex, sexual orientation, or veteran status. We promote access, inclusion, and diversity for all students, faculty, staff, constituents, and programs, believing that these qualities are foundational components of an outstanding education in keeping with our mission. The University is interested in candidates whose experience and qualifications support an ongoing commitment to this core quality.

Anyone having questions concerning discrimination should contact the Office for Equal Opportunity: (540) 568-6991.

