Associate Vice President for Research Computing

Rice University invites nominations and applications for the newly created position of Associate Vice President for Research Computing (“AVP-RC”). Reporting to the University’s Vice President for Information Technology & Chief Information Officer, the AVP-RC provides vision and leadership in the development of computing infrastructure and services that advance the research mission of the University. The AVP-RC oversees the Center for Research Computing and works with the Research Computing Committee, a component of faculty governance.

Research Computing at Rice

The AVP-RC will join Rice at an exciting time, with a new University president and provost and newly defined vice-president positions leading research and innovation. Rice has established the goal of doubling its research expenditures over the coming decade, in part by recruiting approximately 200 new faculty members over the next five to six years. Investing in faculty, graduate and post-doctoral education, core facilities, and infrastructure — including computing infrastructure, associated services, and professional staff support — are all central elements of the ambition to “elevate ... research accomplishments to the highest level to advance human knowledge and creativity, and make vital contributions to the betterment of our world,” in the words of the Vision for the Second Century, Second Decade (V2C2), the University’s recent update to its seminal 2010 strategic plan. V2C2 is available here; the current site of the University’s office for research is here.

Today’s research computing resources at Rice derive from the early success of faculty and of the Ken Kennedy Institute in establishing high-performance computing resources with significant external grant support, notably from the NSF, and operating those resources. As the Institute has shifted to serving as a hub for computational research at Rice focused on AI, Data, and Computing for a Global Impact, the University’s Office for Information Technology has assumed greater responsibility for research advanced computing as broadly defined. OIT is the University’s central technology provider, supporting research, academic and administrative systems, other core applications, and voice, network, and computing infrastructure for the Rice community. OIT works with other campus groups to support the University’s mission through innovative uses of technology and service excellence. OIT has organized its systems and support services for advanced computing in the Center for Research Computing (CRC).

CRC compromises one large supercomputing cluster, known as NOTS, and a range of other on-premise and cloud-based private and commercial environments. The Center’s well-regarded technical staff provide expert assistance in accessing and using these solutions. While CRC hosts computing resources for individual researchers or labs, its core solutions are set up and operated in a common usage model,
which is to say that whereas first-generation cyberinfrastructure at Rice was funded by agency grants, the funding sources have evolved and diversified enough to change the business model of the Center. Notable in this regard is the $7M commitment the University made to research computing in 2020 in the form of a term endowment exclusively to support research computing. This Research Computing Endowment is to be used for fundamental, strategic investments in computing resources.

CRC employs 18 full-time staff, supplemented by student and contract workers. Its FY 2022 budget is approximately $2.5 million. Less than 10% of the current-year expense budget derives from the endowment. Since the endowment is to be used strategically, its role in CRC’s annual expenditures varies.

The Position

Reporting to the University’s Vice President for Information Technology, the Associate Vice President for Research Computing (AVP-RC) provides University-wide leadership in research computing. A significant dimension of the role involves providing direction to the Center for Research Computing, whose leader is one of the AVP-RC’s direct reports.

The AVP-RC is responsible for strategy, engagement, and operations:

Strategy

- Engage with partners across Rice to understand the needs of the research community for computational support and to develop a sustainable approach to addressing those ever-growing needs through on-campus and cloud-based solutions
- Understand the evolving nature of the technology used to support research computing, such as the growing use of cloud resources, co-processors, and on- and off-campus storage, along with traditional CPU clusters, and develop a mixture of services using those technologies that is well matched to the needs of the campus community
- Work with the Research Computing Committee and the Vice President for IT to plan and prioritize the spending from the Research Computing Endowment
- Increase CRC’s connections with regional and national supercomputing centers such as Texas Advanced Computing Center to enable easier access to these resources

Engagement

- Work with partners across the University to develop proposals for funding from external and internal sources
- Explain to and work with researchers who have not traditionally used central research computing resources on how to apply them to the research problems they face
- Contribute to the successful recruitment and retention of research-active faculty; present CRC as one of the reasons to come to and stay at Rice
- The AVP-RC is responsible for aligning the CRC workforce with University objectives for diversity, equity, and inclusion, as well as increasing diversity among faculty user base by lowering barriers
to entry to advanced computing and performing outreach to a broad range of faculty from multiple academic disciplines across campus

• Contribute to the University’s engagement with commercial players in the compute, storage, and applications spaces to position Rice with regard to high-impact areas such as AI, machine learning, and quantum computing

**Operations**

• Develop effective service models, facilities, and capabilities to provide the computing support for the research mission of the University
• Work with the Research Computing Committee and the VP for IT to review and prioritize the IT support provided under the auspices of the Center for Research Computing; provide direction and oversight to ensure the efficient performance of Center staff and systems
• Facilitate and oversee effective communication between the Research Computing Committee and the Center for Research Computing
• Sustain alignment with partner areas within the Office of Information Technology and Information Security groups

**Qualifications and Competencies**

**Professional competencies:**

• The ability to lead a high-performing team dedicated to advancing the University’s research mission
• Ability to work effectively with faculty, staff, and students from a variety of diverse backgrounds
• Ability to adapt within a rapidly changing technical environment
• Excellent verbal and written communication skills, including the ability to explain technical concepts to audiences with a wide range of technical skills and build support among a broad spectrum of stakeholders including faculty, researchers, students, and staff
• The budgetary acumen to create a business plan and funding model that is attractive to users and sustainable for Rice
• Some experience with proposal development and/or grant submission and management (e.g. infrastructure grants)
• Forward-looking views about, for example, opportunities created by AI and/or the implications of data science on academic disciplines
• Engagement with computing in service to education as well as research

**Minimum qualifications:**

• An undergraduate degree and eight years of experience involving computing and/or computational science
• Experience managing budgets with multiple funding sources
• At least three years of experience leading and supervising personnel
Preferred/additional qualifications:

- Advanced degree in science, computer science, and/or engineering
- Experience managing and protecting restricted data
- Experience working with faculty or clients in a computational domain
- Experience using HPC systems as a researcher
- Experience developing and delivering tutorials, workshops, and lectures on high-performance computing at the institutional, regional, and national levels

Appointment terms

The AVP-RC will hold a full-time, 12-month administrative position with a full range of health and retirement benefits. Salary will be commensurate with experience. Candidates with a current faculty position (or laboratory equivalent position) are welcome to apply and may be considered for an academic appointment commensurate with their qualifications.

Rice University

Founded in 1912, William Marsh Rice University is a comprehensive research university located in the heart of Houston, Texas adjacent to the Texas Medical Center, the Museum District, and Hermann Park. Boasting a 300-acre tree-lined campus, Rice University is ranked among the nation’s top 20 universities by U.S. News & World Report. Rice has a 6-to-1 undergraduate student-to-faculty ratio, and a residential college system, which supports students intellectually, emotionally, and culturally through social events, intramural sports, student plays, lectures series, courses, and student government. Developing close-knit, diverse college communities is a strong campus tradition, which is why Rice is highly ranked for best quality of life and best value among private universities.

Known for fostering diversity and an intellectual environment that produces the next generation of leaders and advances tomorrow’s thinking, Rice has 671 full-time and 210 part-time instructional faculty members and a student population of approximately 3,800 undergraduate and 2,800 graduate students. The University has eight schools: the Shepherd School of Music, the School of Architecture, the School of Social Sciences, the School of Humanities, the George R. Brown School of Engineering, the Jesse H. Jones Graduate School of Business, the Wiess School of Natural Sciences, and the Susanne M. Glasscock School of Continuing Studies.

As a leading research university with a distinctive commitment to undergraduate education, Rice aspires to path-breaking interdisciplinary research, unsurpassed teaching, and contributions to the betterment of our world. It advances these goals by cultivating a diverse community of learning and discovery that produces leaders across the spectrum of human endeavor, advances interdisciplinary initiatives in research and education, enhances innovation in learning, prepares students for leadership, carries scientific breakthroughs into social purpose, and provides opportunities for growth and recognition for students, faculty, staff, and alumni.
In FY 2021, Rice reported revenues of $804M. At the end of FY 2021, its endowment was $8.7B, positioning Rice as amongst the strongest institutions on a per-capita basis.

**For Candidates**

Rice University has engaged [Opus Partners](mailto:opuspartners.net) to assist this search. Craig Smith, Partner, and Thomas Lapierre, Senior Associate, are leading the search. To seek additional information, or nominate qualified candidates, please email Thomas Lapierre at [thomas.lapierre@opuspartners.net](mailto:thomas.lapierre@opuspartners.net). To be considered for the position, candidates must formally apply via Opus Partners and must provide a resume and a cover letter.

*Rice University is an equal opportunity, affirmative action institution committed to cultural diversity and compliance with the Americans with Disabilities Act.*