

Job Prospectus for Assistant Vice Chancellor for Research Computing and Data



# **About NC State's Research Computing**

The RCD division includes expert staff composed of scientists, technologists, and IT professionals, who facilitate usage of computational resources, design infrastructure workflows and solutions to support research needs, and who have operational responsibility for infrastructure and services that it provides to NC State communities. The RCD division is a partner and often the leader of the university community enabling the cyber requirements to help NC State meet its mission. The RCD division delivers commodity cluster-computing resources including medium-scale on-premises infrastructure, cloud support, and a secure research environment for working with regulated data.

# **The Opportunity**

NC State invites applications and nominations for the position of Assistant Vice Chancellor for Research Computing and Data (AVC RCD). The AVC RCD will help shape and grow the reimagined RCD division within the Office of Information Technology (OIT) in support of the university's new commitments to advance its research cyberinfrastructure program and grow its pool of RCD professionals. The leader will have strong interaction with the University IT Governance, especially related to research and scholarship, as the RCD division is the cyberinfrastructure service leader for the full range of research and scholarly activity of NC State.

### The Position

### The AVC for RCD reports to the Vice Chancellor of Information Technology and will also lead:

- 1. Nationally: To support NC State's engagement in the scientific and research communities.
- 2. Institutionally: To assist in the overall strategic vision and leadership of NC State's research-oriented information technology ecosystem, including the expertise and operational delivery of systems, software, and services to support research domains.
- 3. Organizationally: To lead the OIT RCD division and cultivate partnerships with the other IT services to ensure a coordinated and coherent service portfolio for the university's research community.

The principal task of the AVC RCD Data are:

- Assist in creating a shared strategic vision and lead the operational direction for the university's research computing services
  portfolio across all research domains;
- Forge strong collaborative alliances with NC State's colleges, institutes, centers, units, faculty, deans, college IT, and IT
   Governance to support the advancement of the University's research, scholarship, education, and outreach mission.
- Be an honest broker by identifying the most appropriate data tools and computational resources, whether it is on-site, community, or commercial solutions;
- Collaborate with national organizations in advancing the state-of-the-art for research computing support, including strategy, workforce development, vendor engagements, and engagement with sponsoring agencies;
- Support grant writing for proposals that aim to use existing research computing facilities, collaborate to develop new
  architectures and data flows, and implement novel approaches to computing solutions in support of research goals;
- Develop and maintain robust, agile, and sustainable RCD infrastructure and services to support existing and emerging requirements;
- Grow and enhance the customer-service capabilities to support use and access for RCD tools and infrastructure;
- Inspire and foster a collaborative culture among a dedicated team of professionals, supporting them in the delivery of
  exceptional research computing and data services through effective leadership;
- In continued partnership with the University Libraries and ORI, support and advance the Research Facilitation Service (RFS) in its mission to consult, design, and develop technical solutions for data-intensive and computational workloads;
- Enhance the capabilities for effectively addressing the requirements for controlled research data and applications by meeting current compliance standards, in both on-premises and cloud platforms;

# **NC STATE**

- Collaborate with OIT Networking to develop strategic research-oriented networking improvements that support researcher requirements; and
- Evaluate and expand appropriate strategies and access to cloud computing services suitable for data-driven science. This
  includes engaging with cloud providers, such as Amazon, Google, and Microsoft, as well as national organizations such as
  Internet2 NET+.

# Qualifications

The successful candidate will possess a relevant post-Baccalaureate degree with a minimum of three (3) years or greater of related professional experience. A relevant undergraduate degree and a minimum of five (5) years or greater of relevant experience may be substituted for the advanced degree.

### Other required qualifications include:

Administrative/Management Experience and Capabilities

- Demonstrated strong experience and sufficient longevity managing and being involved with scientific computing and providing services for research support functions in higher education or other research environments;
- Proven progressive leadership experience leading cross-functional teams including the ability to manage a customer facing service and managing a high-performing team; and
- Ability to identify and establish priorities in designing and completing complex projects and tasks that may require in-depth theoretical and functional knowledge.

#### Technical Experience and Capabilities

- Familiarity with operating systems, programming languages, and applications of interest to researchers. Experience with network administration and performance; and
- Experience applying advanced software tools and computing technologies in a dynamic and diverse research setting.

#### **Preferred Qualifications**

Doctoral or Master's degree in a computationally intensive field, or equivalent (PhD preferred).

#### Other preferred qualifications include:

Administrative/Management Experience and Capabilities

- Demonstrated exceptional interpersonal communication skills across a range of stakeholders, including executive leadership, researchers, technical support staff, and sponsors:
- Demonstrated ability to apply analytical skills and problem-solving skills and think creatively, specifically within information technology services contexts in a highly active research institution;
- · Familiarity with negotiating with vendors such as NVIDIA, Intel, AMD, Lenovo, Dell, HPE, and others;
- Experience with securing external funding for research and/or research cyberinfrastructure; and
- Ability to identify and prioritize needs, evaluate options, make decisions, and adapt in a rapidly evolving RCD environment.

## Technical Experience and Capabilities

- Experience evaluating computing performance using a "systems approach" that includes compute, memory, interconnect, filesystems, networking and other factors;
- · Familiarity with AI and data-intensive computing environments and next-generation architectures and technologies; and
- Familiarity with national scientific computing initiatives such as the Open Science Grid, ACCESS, and CloudLab.



# **How to Apply**

Inquiries and nominations are invited and may be directed to: NC State Executive Search Services: Justin Lang, at (919) 513-1963 or jdlang2@ncsu.edu or Jennibeth Brackett, at 919-268-2861 or vkbrack2@ncsu.edu. Confidential review of applications will begin in August 2024 and will continue until the position is filled. Candidates should provide a resume/CV, cover letter, and the names and contact information for three (3) professional references. References will not be contacted without prior knowledge and approval of candidates. These materials may be submitted online at https://jobs.ncsu.edu/ (position # 00110692).

### **About NC State**

At NC State, we create prosperity for North Carolina and the nation. We value diversity, equity, inclusion and justice. We began as a land-grant institution grounded in agriculture and engineering. Today, we're a pre-eminent research enterprise that excels across disciplines.

NC State is a powerhouse in science, technology, engineering and math. We lead in agriculture, education, textiles, business and natural resources management. We're at the forefront of teaching and research in design, the humanities and the social sciences. And we're home to one of the world's best colleges of veterinary medicine.

Our more than 38,000 undergraduate and graduate students learn by doing. They pursue original research and start new companies. They forge connections with top employers and serve communities local and global. Through it all, they enjoy an outstanding return on investment.

Whether it's <u>Princeton Review</u> ranking NC State among the nation's best values for universities, Money magazine naming it the No. 1 best college for your money in North Carolina, or <u>U.S. News & World Report</u> ranking NC State among the top 10 best values in public higher education, the university has many reasons to be proud.

Each year, NC State adds \$6.5 billion to the statewide economy, equivalent to creating more than 90,000 new jobs. That represents a significant return on investment for the citizens of North Carolina in the form of research advances, innovative technologies, successful companies, skilled graduates and new jobs waiting for them. We're also No. 2 in the country for research commercialization among U.S. universities without a medical school.

Our more than 9,000 faculty and staff are world leaders in their fields, bridging the divides between academic disciplines and training high-caliber students to meet tomorrow's challenges. Together, they forge powerful partnerships with government, industry, nonprofits and academia to remake our world for the better. We expect everyone to give of their talents, skills, time and effort to make NC State an environment of inclusive excellence for all.

# **About Raleigh and North Carolina**

North Carolina's rapid growth makes the state a diversity leader and top spot for young professionals and families.

Raleigh reflects statewide growth as a city on the rise:

- No. 4 among the best places to live in the U.S. (Money, 2022)
- One of America's top 20 best-run cities (WalletHub, 2023)

With Durham and Chapel Hill, the capital city anchors the Research Triangle, a national hotspot for high-tech enterprise. The region's top companies — including IBM, Cisco Systems, SAS Institute, Biogen Idec and GlaxoSmithKline — rank among the country's best employers. NC State also maintains strong agricultural partnerships with Bayer, BASF and Syngenta, companies that lead the way in hiring new NC State graduates.

Celebrating its 137<sup>th</sup> year in 2024, NC State continues to make its founding purpose a reality. Every day our career-ready graduates and world-leading faculty make the fruits of learning, discovery and engagement available to people across the state, throughout the nation and around the world.