



UNIVERSITY TECHNOLOGY  
CASE WESTERN RESERVE  
UNIVERSITY

# RESEARCH COMPUTING + CYBERINFRASTRUCTURE



# Responsive Service, Enabling Infrastructure, Collaborative Partnerships and Innovative Solutions

[U]Tech Research Computing + Cyberinfrastructure (RCCI) is an organization that supports Case Western Reserve University faculty, staff and students with a wide range of services designed to support the university's research mission.

Discovery, creative activity and innovation are elements that take us all beyond what is possible today to what will be commonplace tomorrow.



## We Provide Responsive Service.

Research is an endeavor that requires responsive service and knowledgeable support. We strive to be proactive instead of reactive and envision services through the lens of the customer.

## We Enable Infrastructure.

Resources such as networks, compute, storage, software and identity are the essential building blocks of research today. Our job is to provide technology resources in order to enable discovery and innovation.

## We Seek Collaborative Partnerships.

We view our role as collaborative, not transactional, because we believe that provides the best value for researchers.

## We Deliver Innovative Solutions.

We passionately believe that technology plays a vital role in research. We exist to deliver innovative solutions that fit researcher needs.

## By the Numbers:

RCCI has provided research computing services since 2006.

Every year more users have turned to RCCI through collaboration and enablement of their research projects.

- 6.75 million computational jobs in 2017
- 11.2 million hours of CPU time in 2017
- 278 faculty lab members
- 1221 RCCI users
- 711 publications that utilize RCCI resources

# Cyberinfrastructure to Support and Enhance the Research Mission

We provide tools, services and people to improve research productivity and enable breakthroughs not otherwise possible. For example:

- Discipline specific research technologists that partner with labs in discovery and innovation.
- Workshops and training on specific tools and technologies used in research.
- High Performance Computing (HPC), that provides CPU cores, GPU cores, distributed RAM, a high-speed network interconnect, and distributed disk storage resource for running advanced applications.
- High Performance Storage, providing dedicated storage space connected to our HPC systems.
- Research Computing Storage, providing multi-petabytes of storage capacity for campus research labs.
- Research Archival Storage, providing multi-petabytes of object storage utilizing tape technology.
- Secure Research Environment, providing application, storage and virtual desktop services in a HIPAA and FISMA compliant environment.
- Big Data Resources, providing Hadoop and Spark frameworks for data processing and storage.
- Application Hosting, utilizing both cloud providers and on-campus systems.
- More than 129 licensed discipline specific software applications maintained by RCCI; Access to more than 59 applications through the [U]Tech Software Center.

## Cyberinfrastructure Expertise

### Partnerships

From data processing and visualization to supercomputers and cloud computing, we offer the opportunity to access technology and expertise in the area of campus cyberinfrastructure through partnerships. We provide concierge services and consulting to educate and bring awareness to what resources are available.

### Workshops and Training Opportunities

Our workshop offerings are designed to satisfy the needs of research computing users who are new to our services as well as our current or more experienced users. We understand that not all users have the same experiential background. RCCI also supports use of HPC and other technologies in the classroom.

### Software Development

We provide access to many software applications through the [U]Tech Software Center and can work with labs in order to optimize discipline specific codes to run on our systems or in the cloud.

### Data Management and Security

Data is an essential component of research. How to store it securely and manage it during the research lifecycle can at times be confusing due to the proposal and award process. We offer a variety of pre-award consultative services, including data management and funding-agency application consultation. We also provide resources for storing and processing data in a secure fashion to meet funding guidelines.



## Contact Us

For more information please contact us at [rcci@case.edu](mailto:rcci@case.edu)

### Leadership

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RCCL is a part of the University Technology (UTech) division that provides solutions that support education, research and the day-to-day functions at Case Western Reserve University. We are committed to the stewardship of the university's information technology resources and to fostering an environment in which integrity, communication, collaboration and support are paramount in everything we do.

Our goal is to provide the highest-quality services in the most cost-effective manner. We measure our performance through feedback from the university community and invite our customers to tell us how we can better meet their needs. We encourage our staff to listen, address concerns and communicate regularly with those we serve.