

## Office of Advanced Research Computing



The Office of Advanced Research Computing (OARC) is the university's resource for Rutgers researchers facing complex computational and data-intensive projects, at a scale not attainable on desktop computers, like modeling the climate or analyzing human proteins. OARC, a division of the Office of Information Technology, provides faculty, students, and staff researchers with a world-class research computing and data environment, the Amarel cluster, and experts who help researchers in making the best use of the system.

### What does OARC do?

- Enable scholarly achievements and innovative research by accelerating research, data stores, networking, and time to discovery
- Engineer, manage, and maintain the Amarel computing cluster
- Develop and facilitate training workshops to empower sustainable cluster use and critical research growth by faculty and students
- Partner on sponsored projects as research collaborators, enablers of infrastructure growth investments, and proposal support



oarc.rutgers.edu

# **Amarel High-Performance Computing**



#### A world-class research computing environment taking Rutgers research to new levels

### 5,300+

Rutgers students, researchers, and faculty utilizing Amarel

# \$90,000,000+

in collaborative grant funds brought into the university since 2016

# 2,000,000,000+

core compute hours since 2016

### Hear from Rutgers researchers who use OARC resources

"Conducting a simple query for my genomics research within cardiovascular health would take two to three years on a standard desktop computer, but with the Amarel supercomputer, it can be done in two to three minutes."

> – Zeeshan Ahmed, Rutgers Institute for Health, Health Care Policy and Aging Research (IFH)

"Amarel has been essential to my scientific research of individual stars in other space galaxies. The data sets are complex and without the power of Amarel, the analysis would not be feasible."

> Kristen McQuinn, Department of Physics and Astronomy

"Amarel services are a backbone of my research. The resources OARC provides, including the tech support and workshops, have been instrumental in my publications and an invaluable experience for our students learning how to navigate Amarel."



