

University of Arizona High Performance Computing

Letter from the Senior Director

In FY26, Research and Discovery Technologies continued to advance the University of Arizona's research mission by providing the cyberinfrastructure, expertise, and services our researchers need to succeed. Despite a complex federal funding environment affecting higher education nationwide, the University's research enterprise remained strong - as reflected in the accomplishments, metrics, and stories highlighted in this report.

Notably, the number of academic departments using the University's high-performance computing systems increased from 89 to 95. Researchers using these systems accounted for 56% of the University's obligated federal research funding - an increase of 15% over FY25.

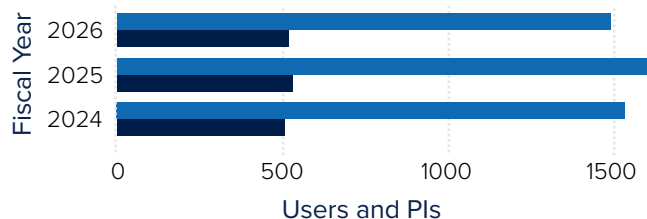
Looking ahead, FY27 will bring significant new capabilities for the research community, including a new HPC cluster and a secure computing environment designed to support research subject to federal requirements such as HIPAA protections for health information and NIST SP 800-171.



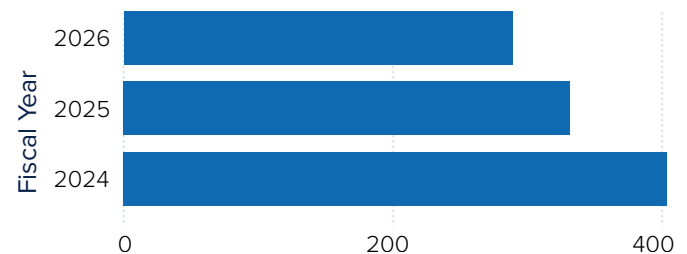
Jeremy Frumkin
Senior Director,
Research & Discovery
Technologies

Users and Primary Investigators Using the HPC

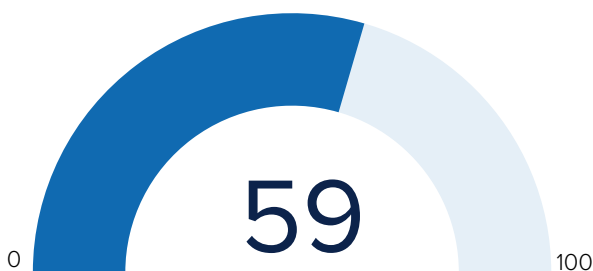
● Users ● PIs



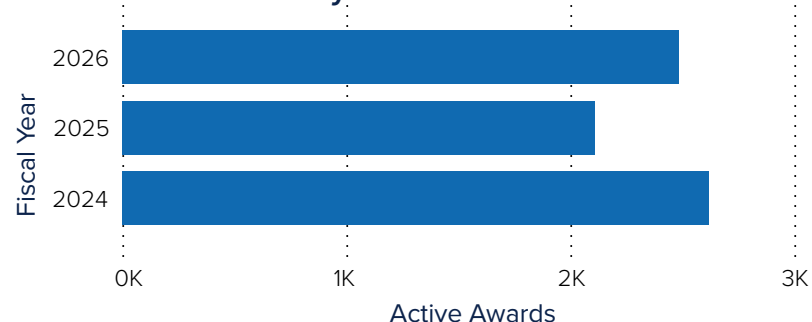
Research Expenditures by HPC Users



Number of Top 100 Researchers Using HPC FY26



Active Awards by HPC Users



Research Stories

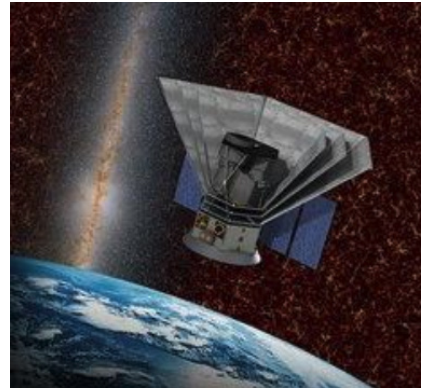
A new space telescope launches into orbit to explore the origins of the Universe. The mission will use sophisticated software developed at the Arizona Cosmology Lab to help astronomers understand what happened in the first trillionth of a second after the Big Bang.

SPHEREx, Spectro-Photometer for the History of the Universe, Epoch of Reionization and Ice Explorer, is a NASA mission that will use a wide-field telescope to gather optical and infrared data on more than 450 million galaxies, as well as more than 100 million stars in the Milky Way.

Tim Eifler, associate professor, says; "We are looking for tracers. Galaxies trace the presence of dark matter. Where there are a lot of galaxies, there is likely a lot of dark matter because of gravity". Elisabeth Krause, also associate professor, is looking for the imprints of the very early universe by making the largest ever 3D map of galaxies.

Given the very large amounts of data, the Arizona Cosmology Lab has turned to machine learning to accelerate the software.

The state-of-the-art high performance computing system on the U of A campus makes this kind of innovation possible, according to the research team

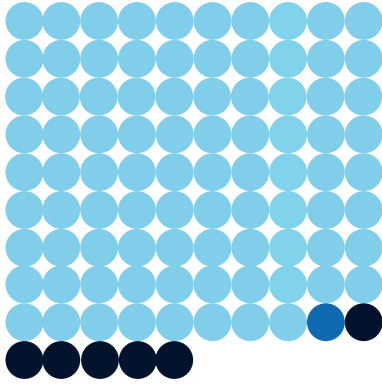


Each HPC PI is **allocated 150,000 CPU hours** to be used by their research group(s) each month.

In fiscal year 2026 researches used **197 million hours** of CPU time, averaging **26 hours a job**.

HPC users ran **7.7 million** jobs in fiscal year 2026.

HPC Usage

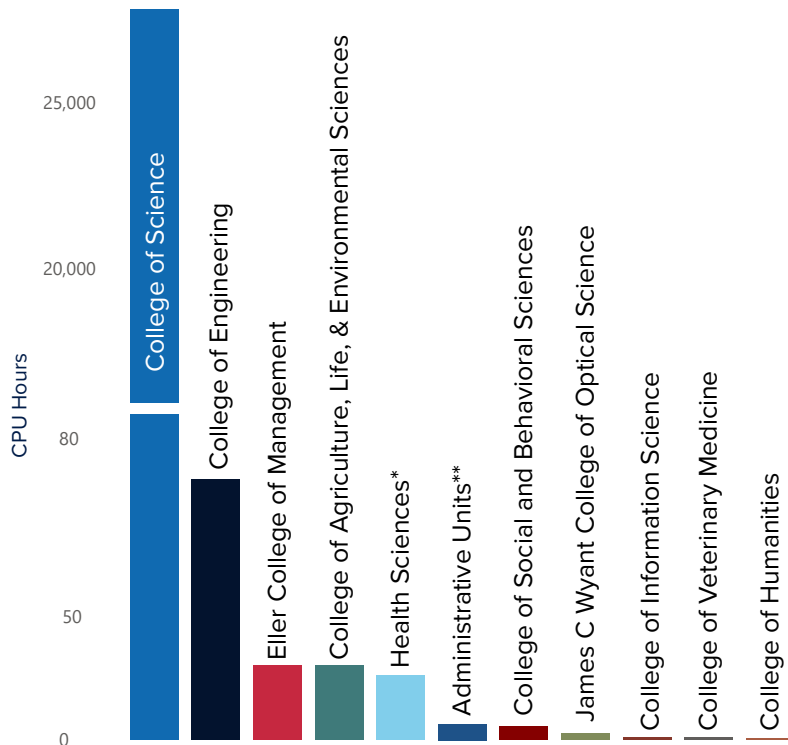


Fiscal Year	# of Departments
2026	95
2025	89
2024	88

In FY2026 **95 new PIs** began using HPC resources.

11 departments began using HPC resources

CPU Hours by College FY26

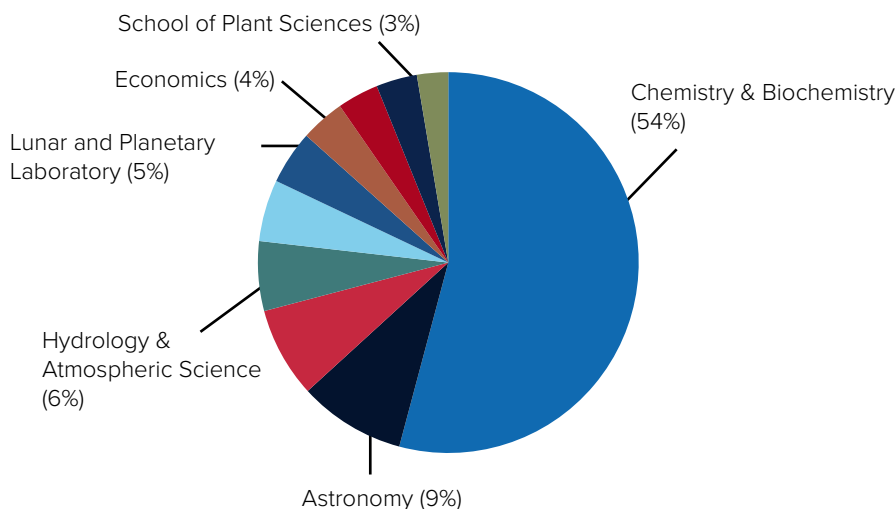


College	CPU Hours (billion hours)
College of Science	423.1
College of Engineering	79.9
Eller College of Management	23.4
College of Agriculture, Life & Environmental Sciences	23.1
Health Sciences	20.3
Administrative Units	5.2
College of Social and Behavioral Science	4.7
James C Wyant College of Optical Science	2.3
College of Information Science	0.51
College of Veterinary Medicine	0.003
College of Humanities	0.0003

• Health Sciences Includes: College of Medicine - Phoenix, College of Medicine - Tucson, Zuckerman College of Public Health, R Ken Coit College of Pharmacy

** Administrative Units Include: Libraries, Undergraduate Education, University Information Technology Services, Office of Research and Partnerships

CPU Time by Top Departments FY 2026



Department	Wall Time (billion hours)
Chemistry & Biochemistry	259.8
Astronomy	43.5
Aerospace & Mechanical Engineering	36.8
Hydrology & Atmospheric Science	28.3
Material Science & Engineering	25.2
Lunar and Planetary Laboratory	21.9
Economics	18.0
Ecology & Evolutionary Biology	16.9
Mathematics	16.7
School of Plant Sciences	12.7

Output by HPC Researchers

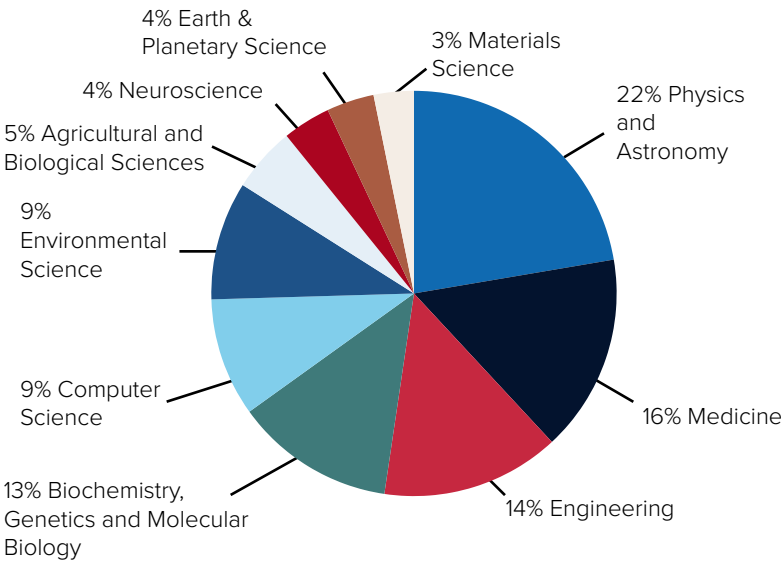
Number of HPC PI Publications 2023-2025

3,520

Citations of HPC PIs 2023-2025

69K

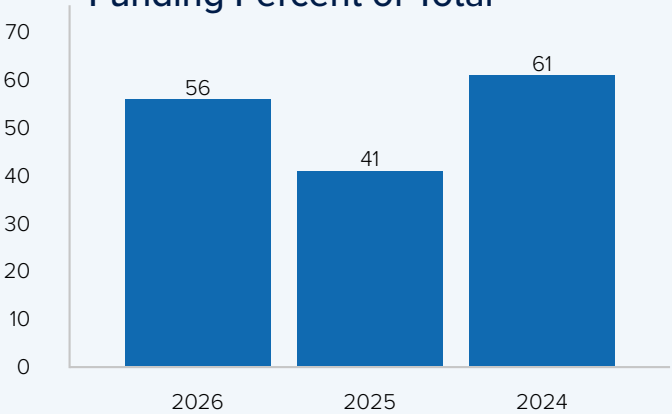
Top Publication Topics 2023-2025



In Fiscal Year 2026 the HPC supported research for **over 68%** of research dollars from the **Department of Energy** (72%), **NASA** (69%) and the **National Institutes of Health** (68%). In total **\$263 million** of federal research expenditures were spent by researchers with HPC access.

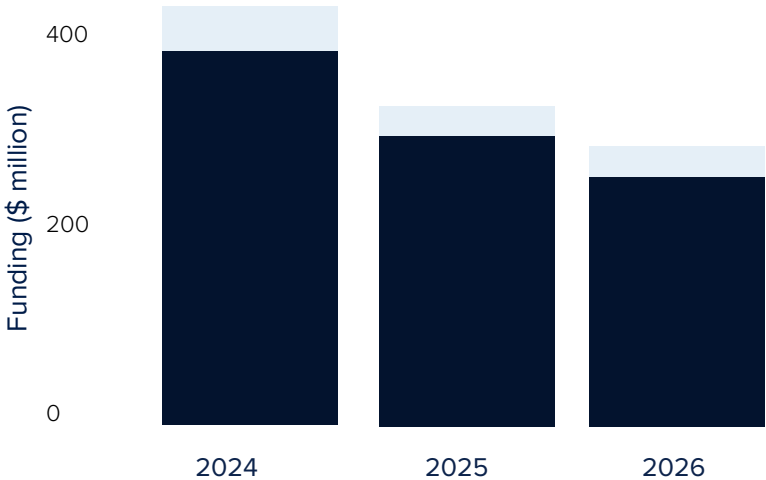
56% of obligated Federal Funding at the U of A has been award to HPC Researchers.

HPC Researcher Obligated Federal Funding Percent of Total



HPC Researcher Award Expenditures by Federal Funding

Source: All Other (light blue), Federal Funding (dark blue)



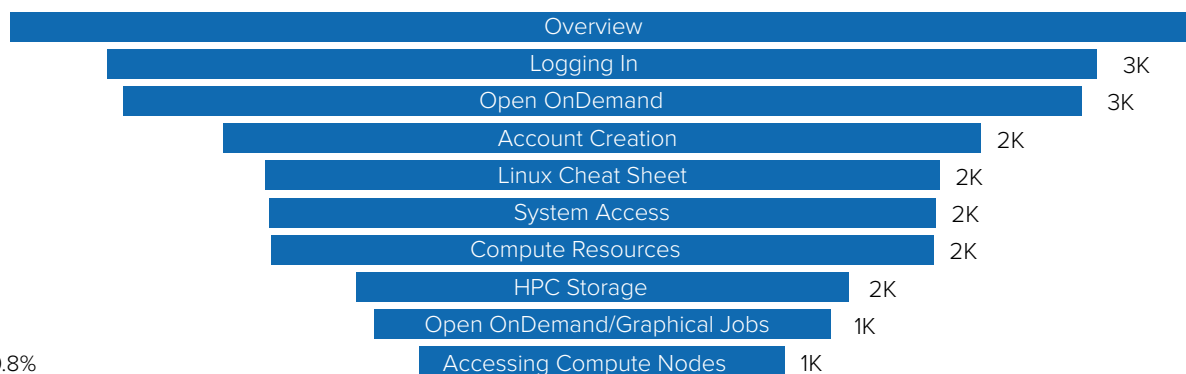
HPC researchers consistently have a large percentage of federal funding

HPC Consulting Services

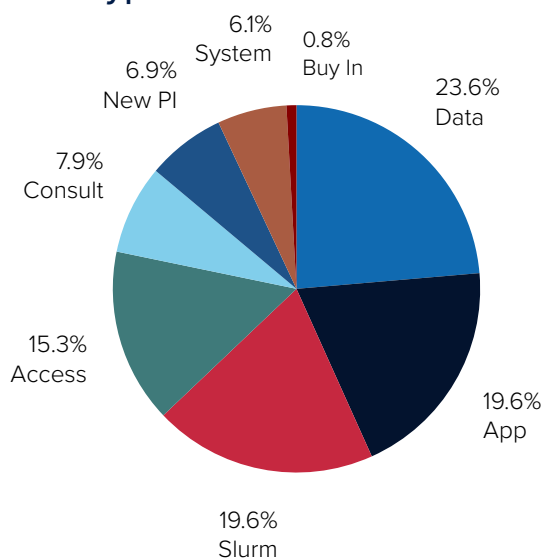
Consulting services are available free of cost to HPC users at the University of Arizona. In addition to a **team of consultants** various resources are available, including robust **documentation** with over **960,000 sessions** throughout the year and video **tutorials**.

In fiscal year 2026 consultants engaged with **738 HPC users**, including onboarding **95 new PI users**. The consultants helped support use of the **300 software programs** that run on the HPC.

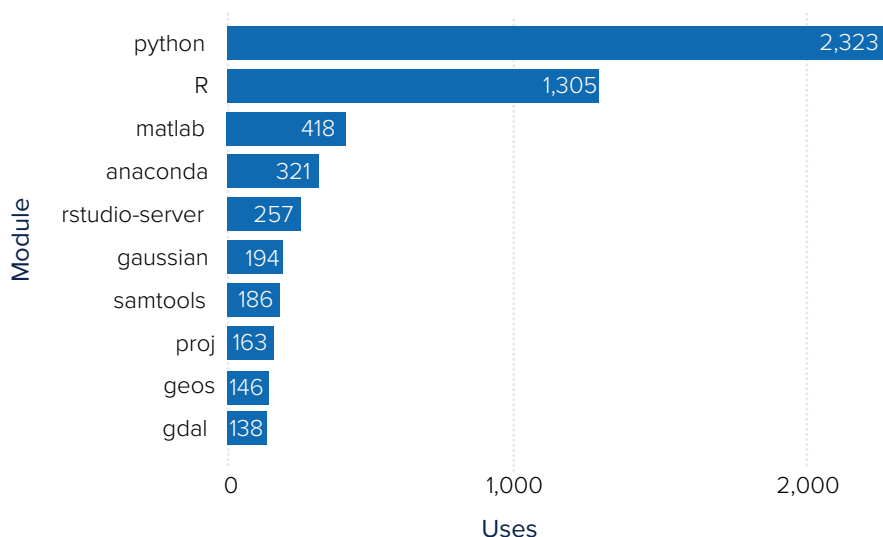
Top Accessed Documentation Pages FY26



Consult Types FY26



Top 10 Software Usage FY26



HPC Consultants Rock!

If you have ever thought about Potentially Hazardous Asteroids and wondered who kept track of them, well that would be the Catalina Sky Survey. We recently helped the new Director, Carson Fuls who has taken over as the new PI of the project.

After setting up his account and the required storage, he replied; "Fantastic! Yes, I can see the [storage drive] now and have started using it for temporary storage of data to be processed. Thank you SO MUCH for all the help! I'm so excited to get back to using the HPC again!"

