

Computing plays a growing role in research across all the disciplines in the School of Arts and Sciences. Research computation can deal with vast amounts of data on a previously unimagined scale and can quickly perform iterations or parallel operations.

Arts & Sciences Computing provides specialized support for research and high performance computing. Our website, "Information Technology for Research,"

**<http://www.sas.upenn.edu/computing/research>**  
provides up-to-date information and resources for the following topics.

<b>Data management plans</b>	Your research project data has a future... plan for it now!
<b>Storage and backup</b>	Information worth researching is worth storing securely.
<b>Large storage projects ("big data")</b>	When your research data exceed the capacity of publicly accessible resources, we can help.
<b>High performance computing</b>	We can provide a computing system that can crunch very large amounts of data and quickly handle millions of iterations or massively parallel calculations.
<b>Sensitive data</b>	No one likes a data breach. We can help you stay out of the headlines if your research involves sensitive data.
<b>Encryption technology</b>	Encrypting your data can keep it secure. Sometimes encryption is required.
<b>Data visualization</b>	Effective visual representation provides alternative methods for analyzing and communicating complex abstract information.
<b>Collaboration and sharing</b>	You may want to share your data with colleagues or the public.
<b>Permanent public data repository</b>	Does your research need a permanent home and address? One that people will still be able to find years from now?
<b>Custom applications or software development</b>	If you need a programmer to create special software for your research, here are some things to consider before you begin.
<b>Training resources</b>	The University provides resources for learning how to use research tools.

**For further help choosing technology that is appropriate for your research, please consult your Local Support Providers.**