



## Teaching & Research Storage in Higher Ed: Deeper DNA and medical research with the capacity and protection of Drobo storage

Established in 1873, Vanderbilt University is an independent, privately supported university offering a full range of undergraduate, graduate, and professional degrees and combines students and staff of more than 30,000. Vanderbilt University School of Medicine ranks 15th out of 126 accredited medical schools, with total research space of 578,000 square feet for cutting-edge research, including human genetics. Based in Nashville, Tennessee, VUSM IT delivers technology services to its departments and research centers.

### QUICK FACTS

#### Solution

- Drobo Pro 8-bay DAS system
- High-capacity hard drives provide more than 20TB of storage

#### Benefits

- Protected capacity where it needs to be for research
- Self-managed storage that researchers can use themselves
- Simplicity and cost enables freedom to produce & analyze more data

“We love that data is protected on fault-tolerant storage. . . . Our research involves data that is too large for moving across our LAN and any local storage needs to be cost effective.” Eric Howard, Senior LAN Manager

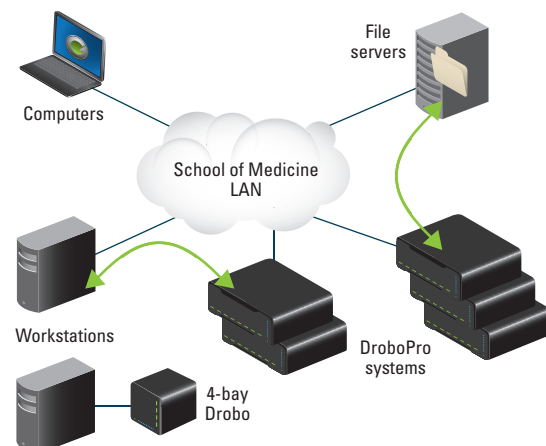
“Very easy to set up for researchers and a lot less expensive than other storage for the capacities we need.” Justin Martin, Research Assistant

## IT Challenge

It just stands to reason that the more service provided by a technology infrastructure, the more research that can be done. The multitude of products, technologies, and specialty applications was always a challenge for IT to fund and manage. Within the school of medicine, applications such as image archiving, DNA analysis, and microscope work was overwhelming the corporate network and central storage. The force of research innovation pushed a consolidated Microsoft Windows server environment to an architecture that put more storage where it needed to be, close to the systems producing and analyzing data.

## Drobo Storage Solution

Rather than replace Windows file servers, could get >10x the capacity by expanding those servers with a cost-effective DroboPro 8-bay direct-attached storage system. For data that benefits from being centralized, applications and configuration did not change; they just expanded the storage beyond internal capacity for those servers. In addition to file server storage, IT storage ISOs and other software images are centrally stored to facilitate efficient software installation.



## More About the Solution

Where DroboPro (shown at right) made the most dramatic impact was for select research workstations, where the size of the data being generated and analyzed is massive. Supporting any 3.5" SATA hard drive, users have the freedom to choose very high capacity drives at very competitive cost, enabling more than 20TB of storage for these workstations. Free from the limitations storage can impose, researchers are free to undertake more research and go deeper into projects in human genetics, human development, and other medical areas. And access to more archived images opens the possibility for new discoveries.



Vanderbilt University School of Medicine has several hundreds of student and researcher workstations, both Windows and Mac OS. In the department of Psychology, several large Mac OS workstations use Time Machine to put their backups onto a shared file server that leverages the 8-bay DroboPro. Other centers use 4-bay Drobo devices directly attached to workstations to enable them to archive research data locally without having to upgrade computer workstations. For a lower total cost, IT at Vanderbilt School of Medicine can also postpone costly refreshes of serviceable systems, which otherwise would need to be replaced to get more internal capacity.

Throughout the university, Drobo storage provides strong protection from hard drive failure for research and departmental data. By adding capacity, it also enables broader use of Windows 7 backup across departments and research centers. The ability to restore full systems vs. reinstall and configure those systems offers better service when the need arises. While the severe 1000-year flooding in Nashville did not impact the school directly, it underlined the need for reliable backup.

## More Information

- Great information on the solutions described here and many others can be found @ [www.drobo.com/solutions](http://www.drobo.com/solutions).
- To learn more about how Drobo solutions can help you, ask your preferred reseller or visit: [www.drobo.com/where-to-buy](http://www.drobo.com/where-to-buy).
- To learn more about the DroboPro, visit [www.drobo.com/products/professionals/drobo-pro/index.php](http://www.drobo.com/products/professionals/drobo-pro/index.php).