



CASE STUDY



Product

Xythos Enterprise Document Management Suite

Why Xythos?

- Intuitive interface
- Ability to address grant writing and collaboration requirements
- Easy to install and deploy

Benefits

BWH has secured more than **\$40 million** in grant funding after the Xythos Enterprise Document Management Suite implementation.

As part of the Department of Radiology of Brigham and Women's Hospital, the Surgical Planning Laboratory (SPL) is one of U.S. News and World Report's Honor Roll of top hospitals and a teaching affiliate of Harvard Medical School. Housed in a clinical environment, SPL provides a computer science-oriented laboratory and vast amounts of data storage and software to computer scientists, physicians, applications developers, imaging physicists and researchers, as well as other members of the 2,000 employees of Brigham and Women's Radiology Department. This environment encourages diverse collaboration for colleagues within the hospital and other hospitals and universities throughout the world.

A Model For Medical Collaboration

With a stand-alone IT infrastructure, the Surgical Planning Laboratory supports 200 active users and more than 600 global collaborators. Dr. Michael Halle, Director of Technology Development at the SPL at Brigham and Women's Hospital (BWH), is responsible for architecting new computer systems and providing computer graphics and imaging solutions required by physicians, clinicians, surgeons, and researchers. Halle and SPL's IT group is also actively involved in the collaborative infrastructure that supports creating new grant proposals to secure research funding for the hospital.

Because the Lab's goal is to become a working model for securely sharing and managing medical information among clinicians, researchers and physicians, Halle and his team recognized users needed a simple and secure way to protect, track and exchange medical images, sensitive medial documents, and patient information. After an extensive evaluation of available web-based document management systems, Halle's team selected Xythos Enterprise Document Management Suite. Halle's team chose Xythos to eliminate the need to send unsecured email attachments and simplify the content sharing process associated with grant writing.

An Effective Grant Writing Process

Being a non-profit means that Brigham and Women's Hospital relies on government and private research grants and contracts – the process of which is



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extremely competitive. With thousands of researchers competing for the limited number of available grants, awards from key agencies and national departments is key to the success, and oftentimes the viability, of research organizations and hospitals.

Grant writers, seeking thousands and often millions of dollars, exchange sensitive and often unpublished information in order to develop the best content for a proposal. What’s more, since proposals generally include researchers from other institutions and across time zones effective and secure collaboration outside of the organization are critical solution. “When you are a research institution, everyone is involved in grant writing,” Halle observed. “Yet even when you are working with colleagues every day, you may not necessarily want everyone to see what you are doing in real time. You want to be able to protect the sensitivity and confidentiality of information and share it at the appropriate time, and with the appropriate people. The ability of Xythos to allow SPL to flexibly apply and manage folder and document level permissions is a key benefit to us and to our teams.”

Grant writing begins with a principal investigator identifying requirements and instructing collaborators on how to begin the writing process. Collaborators then focus on creative or research tasks. Since almost all grant writing is completed in sections, which is integrated later by an editor or principal investigator, the need to share information iteratively between participants is a major part of the grant writing process. Once the authors have submitted the inputs for their sections, the editor then creates a composite document. Xythos Enterprise Document Manager makes it easy to change “read” and “write” permissions to the composite document as its status changes throughout the proposal authoring process. When that step is complete, it is available to contributors for review and edits. Halle estimates there are between 10 and 12 versions of an average grant.

One of the biggest issues SPL and other institutions traditionally face is the ability for multiple people to share and edit the documents that form the basis for the grants. “The other software products that we tried did not provide the multi-person document sharing and editing required for grant writing. Because we support several national centers that involve many departments (including radiology, surgery, psychiatry, etc.) at BWH, and collaborate with researchers throughout the U.S., we needed a better approach. Xythos’ Enterprise Document Manager enables us to better support the collaborative grant writing process,” remarked Halle.

A Productive System

SPL applied for its first grant using Xythos Enterprise Document Manager just three months after purchasing the system. Those collaborating on the grant found that sharing files and documents through the Xythos system was much easier compared to other methods like email attachments or FTP servers because of Xythos’ intuitive user interface and desktop folder capabilities. They also appreciated how Xythos handled multiple writers and editors, as well as version control maintenance.

Because many grants have a significant number of collaborators outside of BWH that are also involved in the proposal process, Xythos Enterprise Document Manager enables Halle’s team to create accounts with permissions that enable these outside collaborators to access and edit specific documents. On the occasions when the Lab needs to share documents with temporary contributors,



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SPL staff use Xythos tickets with time-limited access using secure URLs. Each collaborator only has the access and privileges that they need to perform their designated task.

In a recent grant writing submission there were 35 global organizations, including eight departments within BWH - working on a single research grant. “By deploying Xythos software and being able to collaborate more easily with colleagues, BWH was able to more efficiently compete for grant proposals, while also incorporating content from other hospitals and research organizations. We believe that Xythos helps our grant-writing process as we are now able to bring people with the right skills together, regardless of where they are located and who they work for,” Halle remarked.

Exemplary Results

One recent example of how Xythos Enterprise Document Management Suite is helping the Surgical Planning Lab is a National Institute of Health (NIH) project called BIRN (the Biomedical Informatics Resource Network.) The BIRN initiative involves a consortium of research universities that will develop a high-speed multi-terabyte distributed database devoted to research and analysis in brain imaging. Participating institutions that are among the 19 universities and 26 research groups include Harvard, UCLA, UCSD, and Duke.

Large-scale multi-institutional collaborations such as BIRN are one of medicine’s newest and most powerful tools to understand, treat, and eventually eradicate devastating diseases such as cancer. Targeted at establishing ‘the big picture’ that will someday cure diseases as pervasive as mental illness, the \$50 million BIRN initiative looks at records of patients from hospitals and research centers in more than ten states in order to understand patterns of disease. Since BIRN can only be done successfully if it includes participation from different geographies and hospitals, the Xythos Enterprise Document Manager is integral to the process.

According to Halle, “The BIRN grant fosters distributed collaboration in biomedical science through information technology. This research presents the opportunity for a number of organizations to share valuable information - and the Xythos Enterprise Document Manager enables us to more easily share, edit and revise the documents that form the basis for the proposal and subsequent collaboration.”

SPL also uses Xythos Enterprise Document Manager in other NIH-related activities. “Our NIH funding requires that we share our software, imaging algorithms, and research results. We use the Xythos logging feature to record how many people - in other research communities as well as in the public - we are reaching through our dissemination efforts. This information helps meet NIH requirements, it also helps us organize bigger projects and to better audit and share our results,” concluded Halle..

***For more information please call 1.888.4XYTHOS
or visit www.xythos.com***