

eGrants: University of Cincinnati's Digital Grants Preparation, Workflow Routing, and Submission System

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Overabundance of largely unorganized and unfiltered information is the greatest information problem facing the faculty, staff, and students of the University of Cincinnati (UC). The goal of UC's IAIMS operations grant is to provide individuals with information that is organized, filtered, context-appropriate, and presented in personalized formats. This presentation will focus on one module, eGrants, of UC's IAIMS research administration system, which will fully digitize the pre-award, post-award, and compliance phases of the grant lifecycle. eGrants will streamline and reduce errors in the grant preparation, routing, and submittal process thus raising the overall quality of and consistency of grant submittals and greatly reducing the time and the cost of grant preparation.

The immediate product of eGrants is a paperless, fully paginated PHS-398. UC is ready to deliver a complete NIH electronic grant submission with a seamless interface to the NIH submission site (probably in XML). eGrants consists of a three tier approach. The first tier is a "thin client" portal for researchers and business administrators using standard web browsers. The second tier is middleware constructed with Cold Fusion. The third tier is an integrated database built on Microsoft SQL Server. The UC Integrated Database in coordination with robust middleware manages people information and is integral to the data security and routing/workflow component. These components give UC the ability to provide secure access to grant proposals with defined parameters that determine the steps needed to complete the grant preparation, routing, and submittal process. Additional data input to eGrants is drawn from the following five authoritative sources: (1) Human Resources Management System (HRMS) – Salary information for all UC employees. HRMS populates the budget section; (2) Space Management System (SPAN) – Room/location information, for all UC campuses, that populates the worksite section of the grant proposal from the SPAN database; (3) Institutional Animal Care and Use Committee (IACUC) – Animal protocol information needed for the face page of the grant submission from the Sirius database; (4) Institutional Review Board (IRB) – Protocol information from the IRB portion of the Integrated Database; (5) Sponsored Programs Online Tracking System (SPOTS) – Agency information from the funded and pending grants control system. A future release of eGrants will populate SPOTS once a grant has been approved.

eGrants has several other notable features

- Data is entered one time only per grant application and is mapped to relevant PHS-398 fields
- Boilerplate data is automatically generated
- Variable data is presented to the investigator/business administrator via "picklists" for authority control
- Key data fields have reasonability filters
- Personnel budget data is "pulled" from the UC HRMS database
- The budget function provides the ability to do multiple "what if" scenarios before finalizing the budget
- Budget calculations are automatic for percent effort and overhead (similar to "TurboTax")
- Internal processes are programmed, including automatic workflow routing and digital signatures
- All required fields must be completed and accurate before PHS-398 will be generated
- All errors are listed, automatically linked back to error location, and will not clear until error is corrected
- Overrides are available for specified data fields
- eGrants will not allow routing for approvals until all errors are corrected
- Routing table and workflow is flexible and adjustable
- New data entry is directly to the integrated database which provides ideal data protection and availability

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