GrantSwarmer Project Brief

Product Vision

GrantSwarmer is groupware that facilitates the grant application process, especially building a research team and managing the copious "administrivia" that is required for a successful grant project. GrantSwarmer will take advantage of existing resources with the Catalyst project to allow potential Principal Investigators to build project teams that may include researchers they would not otherwise have encountered. GrantSwarmer may assist existing grant administrators that are already adept at "shoving stuff through the system," or independent junior researchers that do not have such experience or administrative support. GrantSwarmer will allow senior researchers to assist junior researchers in building their academic social network, ultimately increasing the amount of collaboration that occurs within Harvard.

Business Goals

- To increase collaboration between disparate parts of the Harvard research community
- To help junior researchers build teams and write grants
- To improve chances of grant success by ensuring timely completion of administrative and content-development requirements
- To provide compelling reasons to spend time within the Catalyst system
- To automate the tedious parts of the grant application process
- To satisfy an important milestone for the Harvard CTSA grant

Project Scope

- Create a project to write an NIH grant
- Find potential collaborators based on MeSH terms (from inside Harvard community only)
- Invite potential collaborators to a grant application project (from inside and outside Harvard)
- Compose and collaborate on key sections of NIH grant application (specific aims, background and significance, preliminary studies, research design and methods)
- Submit and manage biosketches for collaborators
- Submit and manage "other support pages" for collaborators
- Compose and collaborate on budget spreadsheet
- Provide checklist for what steps remain to be done, including reminders to keep human subjects certification current
- Generate biosketches from existing Catalyst profiles
- Provide access to educational resources about the grant application process
- Establish an access point that utilizes existing Catalyst login functionality but also allows non-Harvard personnel to use the product
- Manage teams, restricting access to any project to which a user has not been invited and setting roles within each project

Success Measures

- XX grants written through GrantSwarmer in first XX months
- XX grants written by researchers from two or more sites in first XX months

Competitive Landscape

The Traditional Method
- Will be the default fallback if application is not compelling enough
- Good admins know the process very well
- Hard for inexperienced to become efficient
- Lots of cat-herding

Epernicus.com
- Social networking amongst researchers
- Share resources
- Find new points of collaboration
- Attractive entry point for junior researchers (post-docs, graduate students)
- Does NOT focus on the grant preparation project

LinkedIn.com
- Social networking for business
- Helps you find potential customers, employers
- Large portion of academic community already using it
- Lacks any tools for collaboration around projects

Stakeholders

Key Team Members
- Project Lead: Will Crawford, Director, ISG
- Research Lead: Evan Pankey, ISG
- Design Lead: Jonathan Abbett, ISG
- Quality Assurance Lead: Nicole Zanetti, ISG
- Development Lead: Steven Boscarine, ISG

Project Sponsors
- Zak Kohane, Co-Director, CBMI
- Alexa McCray, Co-Director, CBMI

Other Stakeholders
- Doug McFadden, Director of Informatics Technology, CBMI

Perceived Target Users

Junior Researcher
- Has been awarded their first K grant, or is applying
- Likely to leverage social networking to locate potential grant team members
- May access document collaboration tools
- Largest target audience

Senior Researcher
- Elite faculty with wide academic network
- May leverage social networking for synergistic mentoring opportunities
- May access document collaboration tools

Graduate Student
- Interested in social networking aspects for own research in later stages of career

Post-Doc
- Pursuing fellowships toward goal of faculty appointment
- Seeking intramural grants
- May leverage social networking
- May access document collaboration tools

Grants Administrator
- Responsible for compiling all materials for grant application
- Familiar with "pushing stuff through the system"
- May have an interest in the accuracy and timeliness of available collaboration tools
- Interested in getting investigators to provide materials in a timely fashion

Systems Administrator
- Responsible for deploying and maintaining the application

Constraints

Timescales
- Product must be released by August 2009
- Integration testing and QA by late June 2009

Software Environment
- Orchestra environment does not currently support J2EE
- Outside hosting (e.g. EC2) is acceptable
- Back-end database may be MySQL
- APIs to retrieve GrantSwarmer data may be "Phase II"

Style
- Existing Catalyst website has professionally-designed look and feel which will be integrated with GrantSwarmer
- Header, footer, CSS will be provided for design integration

Operations
- Uptime, maintenance, logging, monitoring requirements

Existing Resources

- MedVane
- Profiles Module
- NIH Office of Extramural Research
- MeSH / PubMed