Indiana CTSI Collaboration Tools

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What this talk is about...

• Collaboration background
• CTSA collaboration initiatives
• Indiana CTSI HUB Applications
• Future trends
Collaboration Background

• The intellectual capital to successfully undertake scholarly research is no longer found at a single institution, or a single country.

• Even within institutions and departments, collaborative research is increasingly becoming the norm.

• The resources necessary for competitive research are no longer found in an isolated research lab.

• Distributed analytical and computational facilities and online datasets are changing the research resource landscape.

Collaboration Trends

• Team Science is a higher risk, higher reward approach to research.

• Types of Collaborations include:
  • Social Networking
  • Knowledge Networking
  • Resource Networking

• With the current suite of Web 2.0 tools, it inevitably involves virtual collaboration and the creation of virtual organizations.
  • But lets not forget ‘traditional’ collaboration tools of telephones and conference calls, email, and teleconferencing.
Collaboration Trends

Persistence beyond face to face relationships requires:

- Motivations and Rewards
- Trust
- Dealing with cultural differences
- Governance and Management
- Shared Infrastructures and resource management
- Metrics and Assessment
- Sustainability – financial, intellectual, infrastructure

Types of Research Collaborations

- Highly distributed communities of independent scholars who share educational content and tools.
- Institutional collaborations to accelerate research workflows and move them online.
- Distributed research projects that have moved their analytical workflow online to accelerate research.
CTSA Collaboration Initiatives

Strategic Goal Committee 3: enhancing Consortium-Wide Collaborations
- Collaborative Opportunities for Research Participation

Research Networking
- VIVO (vivoweb.org)
- Eagle-I (eagle-i.org)
- Direct2Experts (direct2experts.org)

Individual CTSA Institutions
- Profiles (catalyst.harvard.edu)
- Community Academic Profiles (med.stanford.edu)
- Loki (www.icts.uiowa.edu/loki)
- Digital Vitae (di.dental.pitt.edu/orc)

The Indiana CTSI HUB

A modular research collaboration portal based on Joomla! that excels at data sharing, modeling and simulations, multimedia content, community participation.

Originally created as nanoHUB at Purdue.
Indiana CTSI HUB Foundations

- Modular ‘Model View Controller’ Architecture
- Built in collaboration tools for sharing content
- HUBzero tools for online collaborative modeling and simulation
- Over 6800 Joomla extensions to add functionality

We added…
- Federated Identity support for authentication
- Ontology-based tagging

Indiana CTSI HUB Applications

- Grant Management System (Open Journal System)
- Clinical Trials Management
- Online Cores (cf. Eagle-I)
- Small Group Collaboration/File Sharing (Alfresco Share)
- Data Collection and Management (REDCap)
- Matchmaking for licensing to industry (i2iConnect)
- Volunteer Recruitment for Clinical Trials (INResearch)
- Email Newsletter
Alfresco Share
500 Users and 5 GB of documents.  https://alfresco.uits.iu.edu

REDCap
175 Users and 110 Projects.  https://redcap.uits.iu.edu
Future Directions

• Profile Integration with Faculty Profiles with VIVO, Faculty Annual Reports (FAR) at IU Bloomington, Faculty Profile System (FPS) at IU School of Medicine, Indiana Database of University Research Expertise (INDURE).

• Creation of middleware to both consume and expose Linked Open Data (by August, 2011).

• CTSA2Community website (ctsa2community.org) as a repository of best practices for community engaged research.
Thank you.

Questions?

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