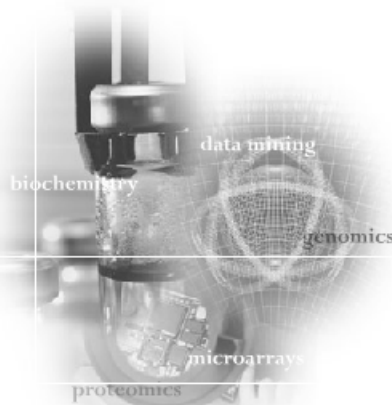


Experiences Establishing a Bioinformatics Computing Facility



Background



- National Institutes of Health funds a Biomedical Research Infrastructure Network (BRIN) program that includes a bioinformatics core
- UALR is the lead institution on Arkansas BRIN for Bioinformatics Core
- Jennings hired May 2002 to start academic program in bioinformatics
- Soon became apparent that additionally we needed to provide a mechanism to support collaboration, services and outreach in bioinformatics
- MidSouth Bioinformatics Center organized with a 'bioinformatics computing facility,' funded by Arkansas BRIN with a Sun Equipment Grant

Status



- Working to configure three servers and establish a web-services platform hosting bioinformatics software
- Negotiating network connections/secure access with local bioinformatics partners
- Interesting in helping establish a grid computing platform regionally

Non-Technical Issues Drive the Process



- Funding
- Funding
- Funding
- Funding
- Funding
- Funding

Service Model



- Based on recommendations of MBC's Board of Directors
 - Core facility with fee-for-service model
- Fee-for-services model sucks
 - Cost recovery low
 - Best case: 70%
 - Very unsuccessful at other bioinformatics computing facilities
 - Worst case: 100% reduction in use!

Funding Strategy (1)



- Must have minimal commitment for core staff from administrative sponsors
 - AR BRIN renewal request includes base support
- All users will be charged for use of computing facilities and for services/support
 - Sliding scale, down to “no charge”, but will be invoiced anyway

Funding Strategy (2)



- Supplement technical staff with Graduate Assistants
 - Cheap!
 - Motivated!
 - Good learning opportunity
 - Opportunity for researchers and GAs to become acquainted
 - Potentially more fundable from a larger variety of sources

Funding Strategy (3)



- Infrastructure grants
- Joint grant writing
 - As line-item support staff
 - As subcontract for specific activities
 - As Co-PI
- Within a context of “researcher affiliation”
 - A “principal” researcher gets
 - A recognized affiliation
 - Access to staff and computing resources
 - Grant-writing assistance
 - templates, boilerplates, letters of cooperation
 - In exchange for a “gentleman’s agreement” to help underwrite the Center in his/her grant submissions

Funding Strategy (4)



- Supplemental income

- Professional services staff
- Workshop fees

- **BUT**

- Must not conflict with funded outreach and service

Positioning



- Core resource
- Multiple sources of funding
- Key player in terms of providing services
 - We develop in-house expertise
 - We provide more stable employment opportunities
 - We provide high-level consultation and development
 - We provide some “seed” assistance for “promising” projects
 - Researchers don’t have to find/hire short-term help or staff with multiple areas of expertise
 - Researchers don’t have to independently fund hardware/software solutions
- Key player in terms of providing outreach
 - Outreach is very important in overall grant evaluation
 - We can help the grant better meet outreach and dissemination goals

Contact Information



Steve Jennings

Associate Professor of Applied Science

Executive Director, MidSouth Bioinformatics Center

University of Arkansas at Little Rock

Little Rock, AR 72204

SFJennings@UALR.Edu

(501) 569-8216