REVIEW COMMITTEE CHARGE AND PROCESS

Scott Novogoratz
CSU Data Management Charter

Establish strategies and directions for an institutional approach to manage research data
ISTeC Data Management Committee

- Mr. Scott Baily, Academic Computing & Network Services
- Dr. Patrick Burns, Dean of Libraries & CIO
- Dr. Richard Casey, IDRC & HPC
- Ms. Nancy Hunter, Libraries
- Dr. Andrew Jones, Cooperative Institute for Research in the Atmosphere
- Ms. Nicole Kaplan, Natural Resource Ecology Laboratory
- Dr. Rick Lyons, Infectious Disease Research Center
- Mr. Scott Novogoratz, College of Veterinary Medicine & Biomedical Sciences
- Mr. Ed Peyronnin, College of Agricultural Sciences
- Dr. Richard Slayden, College of Veterinary Medicine & Biomedical Sciences
- Mr. Shea Swauger, Libraries
Current State Attitude Survey

• Focus on challenges facing the CSU research community surrounding data management
Attitude Survey Response

- 260 respondents ~ 20% of target audience
- Business & Liberal Arts underrepresented
Less Challenging from Survey

- Providing open access
- Determining what needs to be available to public
- Protecting intellectual property
- Finding appropriate tools
- Moving data
- Protecting data from unauthorized access
Moderately Challenging from Survey

- Facilitating collaboration
- Finding and utilizing safe medium
- Analysis
Most Challenging from Survey

• Preserving data for the long term
• Funding for the data management function
• Organizing, cataloging, documenting & managing data
Themes from Verbatim Responses

• Doing bioinformatics is difficult
• Training needed
• Unstructured data presents new challenges
• Collaboration opportunities wanted
• Interdisciplinary approach needed for data management
• Distinguish data, from information from results and analysis
• Resource availability (hardware, software, storage space, expertise)
Four Recommendations

1. Learn from one another through Affinity groups
2. Spread knowledge broadly about specific research data management challenges and solutions.
3. Build an information technology infrastructure, including both storage and compute capacity, to facilitate research.
4. Merge the research and data curation processes to make data management seamless.
Affinity Groups Plan

Form Affinity Groups focusing on data management challenges within the University research community.
Nancy Hunter

EDUCATION
Data Management Education Plan

1. Create data management educational opportunities for formal training among data practitioners within the CSU research community.

2. Plan informal data management outreach activities for members of the research community. Bring visibility to the issues, skills and tasks involved in managing research data.
Scott Baily

PHYSICAL INFRASTRUCTURE
Build Physical Infrastructure

*Build physical IT infrastructure to meet the current and anticipated needs of the University research community*
Identified Needs & Concerns

• Individual researchers and funding constraints
• Privacy, Security, and The Cloud
  – Historically a concern, but still considering
• EULAs problematic with Cloud Services
  – Efforts to establish campus policies under way
Infrastructure Recommendation 1

- Expand local cloud storage resources
  - Rolling out “Research Cloud” Service
  - Core and Specialized Facility Grant from VPR
  - Easy to use
  - Will enable inter-institutional collaboration
  - Fast
  - Secure
Infrastructure Recommendation 2

• Enhance Campus Computing Capacities
  – Enables compute-intensive research
  – Greater Economies of Scale Possible
  – Leverages existing data centers
  – Cost-effective alternative, not a mandate

• An HPC subcommittee is being convened by VPR and VPIT
Infrastructure Recommendation 3

• Create “Research DMZ”
• Scalable model to accommodate big data, e.g.
  – Large bulk data transfers
  – Remote experiment control
  – Data Visualization
• Network Design Optimizes Data Transfers
FRGP

Research Networks

Internet

Border 1
Border 2

Core 1
Core 2

Border Routers

“Research LAN”

Storage

10 Gbps Research Connections (typ.)

Commodity Users & Researchers (typ.)

Production LANs

Core Campus Routing Cluster

Dedicated 10 Gbps Wave For Research

B i S O N

For Research

LAN
CURATION
Merge Research Process & Curation
Ed Peyronnin

GOVERNANCE
Affinity Group Incubation

Perspective
- Faculty
- Research
- Funding Resource Guidance

Faculty Council

Perspective
- Technologists
- Technology Resource
- IT Policy Guidance

ITEC (IT Executive Committee)

Create a subcommittee of IAC and ISTEC whose goals are:
- Provide an authoritative source for data policy, planning and resource
- Facilitate operational objectives with strategic vision
- Give administration an operational model to include with their strategic planning
Questions?