Facilitating Discovery Science through Information Management

• How can scientific discoveries in the LTER network be better supported by Information Management?

• Discussed several examples
  – Good – where IM contributed or made possible
  – Bad – where project failed

• Identified barriers and potential actions

• Identified potential solutions
Possible Solutions

• improve researcher knowledge of IM capabilities
  – ombudsman for identifying IM expertise for scientists
  – or consult local IM
• document reasons for successes and failures of data synthesis efforts
  – focus on documenting and learning from it
  – perhaps a paper describing process
• document how IM activities contributed to projects
• growth in LTER will require growth in IM
  – do more with less?
  – or growth in scope
Possible Solutions

• education role for both scientists and IM
  – current
  – and next generation
  – informal and formal education

• identify connections and potential collaborations cross site
  – network analysis of pubs is example
  – also role in different synthesis groups
  – often hard to find out which sites involved
  – synthesis coordinator at LNO could play role
  – ASM great place to learn about
Possible Solutions

• increase opportunities for researcher/IM interactions
  – involvement of IMs in synthesis working groups
  – even non-data groups
  – cross-training opportunities

• annual tutorials for incoming graduate students
  – several sets of tutorial materials are available
    • KBS
    • DataONE
    • VCR
  – KBS had test IM for students going to ASM
  – data buddies - each try using each others data
Possible Solutions

• develop of IM tools that are researcher-centric
  – tools that make LTER data work with common analytical packages
  – improved views of data
    • browse
    • graphics
  – improve data discovery
    • identify different audiences
    • customized searches for different groups

• better training in IT tools for students at the university level