Bioinformatics Core Best Practices

How to set priorities for the core
Who Am I?

- Director of Research Informatics Core
  - 9 Developers
  - 7 Data Analysts
  - 3 Administrators (Linux, Windows, Database)

- 17 Years of Biology Research experience
  - 5 Years at the bench
  - 12 Years in Bioinformatics
Projects – understand your users

- What kind of projects are your users asking for
  - Large – needing multiple software developers
    - LIMS
    - Pipeline development
    - Web Application/Database
  - Medium – needing 1 developer or data analyst
    - Software for new statistical method
    - Website
    - GWAS or next gen sequencing data analysis
  - Small – need part of FTE
    - Pilot data analysis
    - Installation of shared tools
    - Software/hardware maintenance
How to prioritize projects

- Based on size of project?
  - Misses the opportunity to create new customers

- Based on money? $, €, kr
  - Misses pilot projects which could become large grants

- Based on merit?
  - Take projects which allow your core to grow in new directions
  - What can do the most good for the institutional community.
How to prioritize hiring

● When to hire new staff?
  – Have enough work ready for 50% effort from new hire
  – New technology that your core has no experience with.
  – New areas of support

● Consultants/Temps/Part Time?
  – Should only be used for small projects or small parts of larger projects
  – Should only use when you cannot find staff with technical knowledge
How to prioritize time

- Understand the investigator may not be ready when they first talk to you
  - Get a timeframe and plan to have staff ready

- Project overlap
  - Finish one before starting another

- Take time to plan
  - Plan a project before starting
Manage projects, don’t let them manage you

- Use project management tools
  - Fogbugz
  - Basecamp
  - Trac

- Recognize slow times
  - Project work is periodic
  - Have work that can slot into slow times
Manage expectations

- Be transparent
  - Make sure investigators know you are not playing favorites
  - Show them your projects
- Be honest
  - Don’t tell them what you think they want to hear
  - Give them realistic estimates
- Turn down work
Seek out help

- Talk to other core managers
- Don’t be afraid to use someone else’s idea
- Diversify your userbase
- Reward your team
- Educate your users