

Bioinformatics Core at Purdue University

Jyothi Thimmapuram, Ph.D.
Bioinformatics Core Director
jyothit@purdue.edu
765-496-6252

bioinformatics@purdue.edu

YONG 1022
155 South Grant Street
West Lafayette, IN 47907

<https://www.bioinformatics.purdue.edu/>

Bioinformatics Core at Purdue University

Two years old

1st year - All services free

Recharge facility since Jan 2013 + subsidized

Staff:

- 3 Fulltime bioinformaticians (2 MS, 1 Ph.D.)

- 2 Graduate students

- ½ time sys admin (installing and maintaining software packages)

Hardware support

University IT group maintains hardware – computing & storage

Software

Almost all open source software packages
(Cyber Center, CS dept, College of Technology, Statistical Consulting Center)

Recharge rate

Data analysis: \$60/hr (internal, subsidized)
 \$150/hr (external, not subsidized)

Training: Free through seminars and workshops

Consultation: Free

Users:	Internal and external
Type of work:	NGS (Illumina) (454, SOLiD, Microarray) (Other cores: proteomics, metabolomics, Microscopy, Cytometry, etc)
Type of applications:	CUSTOMIZABLE RNA-Seq; SNP; Metagenomics/Metatranscriptomics; miRNA; MeDIP-Seq Assembly and annotation Genotyping Phylogenomics; Population genomics SSR Microarray

Data storage and management (included in the fee)

- Scratch space:** Highly-available; data intensive computation;
Redundant and High-performance disk space;
Large no. of connections;
Purged after 90 days; No backup
- Group & home:** Network attached; Backed up via snapshots;
Redundant and Medium-performance;
Non-purged;
Current projects – 2 years – all files;
All projects results ...
- Archival storage:** Free, provided by the university
Multi-tiered file caching and storage
Online disk and robotic tape drives
2 copies on separate storage devices

Data deposition: SRA
Project Websites
Libraries (provide doi for data sets)

Data privacy No clinical data
Confidential

NON_MODEL ORGANISMS

Data ownership & responsibility

User or Core, which core

Metadata — not in lab note books

Delivering results — varies with the project

Managing User expectations

Meeting people

Seminars in different departments

User surveys (anonymous)

Faculty Advisory Committee

Newsletter

Authorship guidelines

Training

Available

Accessible

Affordable

<http://scientopia.org/blogs/genrepair/>

Choosing a core facility (2011)

Core of ill-repute

High \$ Core

Waiting by the phone for the Core to call

The High Maintenance Core

The Easy Core Next Door

(We all try to be the easy core next door)

<http://core-genomics.blogspot.com/>

What sort of user are you? 2011

The “the deadline is always tomorrow” user

The “how can I do it cheaper” user

The “I didn’t quite follow the protocol” user

The “I want to use this method that was just published last week” user

The " " silent user

The “thanks a lot” user