### **Concept Clearance**

#### Center for Inherited Disease Research

National Advisory Council for Human Genome Research September 8, 2014 1) Should NIH fund a central facility supported by multiple ICs to carry out large scale genomic analyses on samples from many projects?

2) Should this facility retain flexibility with regard to what genomic services and in what scope are offered?

3) Is it a good idea to do this in such a way that if the services are not needed funds will not be required?

# Inter-Institute Programs

### Shared

- Expertise
- Governance
- Resources
- Research projects
- Economies of scale



#### SPECIFICATION:

MOISTURE (MAX): ASH: GLUTEN: FALLING NUMBER: ABSORPTION: PEAK: MTI:

0,50 % 26 % 260 +/- 30 SEC. 63 % +/- 2 % 7 MINUTES 30 B.U. +/- 5

14,5 %

 Founded in 1996 to speed the discovery genes that contribute to disease

Supported by 13 NIH Institutes

NHGRI – NCI – NEI – NIA – NIAAA NIAMS – NICHD – NIDA – NIDCD – NIDCR NIDDK – NIEHS – NINDS



TRIAD Technology Center Baltimore

- SNP Genotyping
  - Human Genome Wide Association Studies
  - Custom Genotyping
  - Focused Content Panels

Methylation Linkage Oncoarray

- Next Gen Sequencing
  - Targeted
  - Exome
  - Whole genome
- Statistical Analyses

www.cidr.jhmi.edu www.genome.gov/12512879 www.genome.gov/27549920

## Governance

- Board of Governors 6 times / year
- CIDR Access Committee 6 times / year
- CIDR Staff Meetings every other week
  - COR & Chief Scientific Officer
- NHGRI Budget Office
- NHLBI Contracting Office

Trends (2008-2014)

111

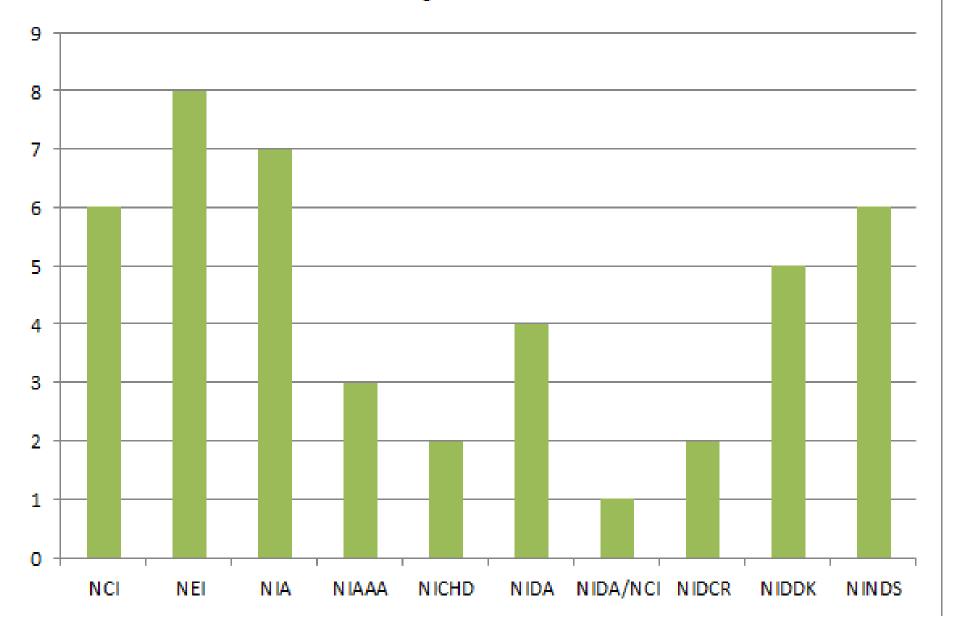
- Number of Projects
- Cost per Genotype
- Size of Projects
- Full-Time Staff
- Administrative Costs

#### **CIDR Program Completed Samples per FY** 180,000 160,000 140,000 120,000 100,000 80,000 60,000 40,000 20,000

### **CIDR Project - Sources**



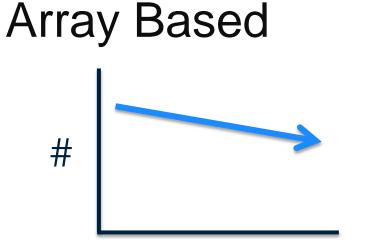
#### Number of Projects Posted to dbGaP



Active Projects - 101,108 samples on site

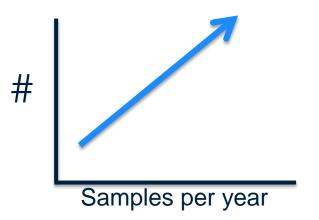
Data production - ~30,000 samples

# The Future



Samples per year

**Sequenced Based** 



### CIDR Program Renewal Proposed Mechanism and Funds

#### <u>Mechanism</u>

- Research and Development Contract
- ID IQ
- 5-7 year term

#### <u>Funds</u>

- \$10M-\$150M over 5-8 years depending on volume
- NHGRI funds nil

#### **Open Competition**

- Contract solicitation and review
- One award