## NY State Police Forensic Investigation Center Biological Science Section



### Grant Manager's Perspective

- Background on secured funding.
- Provide an illustration of the backlog.
- Experience with an OIG Audit.
- Overview of a Capacity Enhancement Performance Metric.

#### **NYS DNA Databank**

- Legislative Expansion in July of 2006
- Databank Law was expanded to all convicted felonies and 18 misdemeanors.
- Expansion also included a retro clause

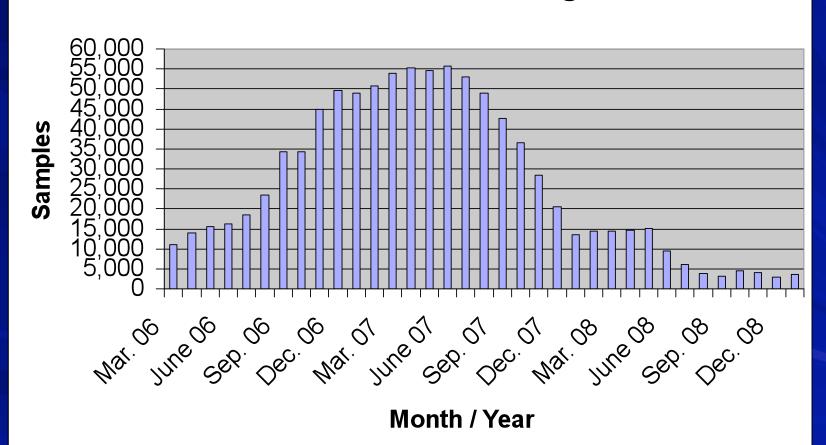


#### Secured NIJ Grants

- 2006 Convicted Offender and/or Arrestee DNA Backlog Reduction Program.
- 2006 Outsourcing Grant
- 2007 Convicted Offender and/or Arrestee DNA Backlog Reduction Program.
- In-house Funding originally allocated for mostly supplies and overtime.

### Timeline of Backlog

#### **DNA Databank Backlog**



### **Grant Delays**



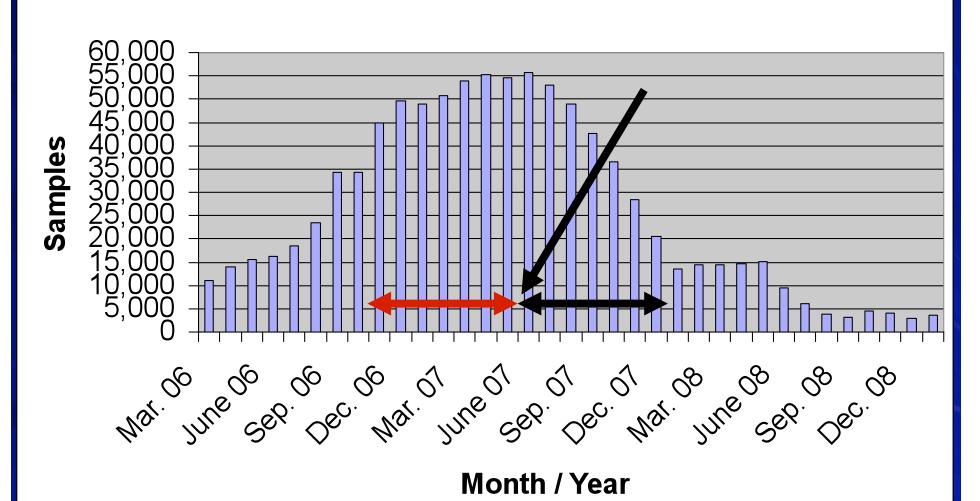
- Procurement Process
- Cost Center Number
- Must exhaust previous grants

### Obtaining Cost Center Number

- Required to request appropriations in advance for the budget.
- Formality to acquire spending authority for the amount secured by the grant.
- Fiscal Management forwards appropriate documentation to the Division of Budget.
- Review Documentation and approved for budget.
- Forwarded to Comptroller's office
- Review to determine if money was allocated appropriately.
- Sole Source Justification from Office of State Comptroller (OSC)

### Timeline of Backlog

#### **DNA Databank Backlog**



## OIG Coming to Audit



#### Office of Inspector General Audit

- Positive Experience
- Extremely thorough review
- Programmatic Requirements
- **Fiscal Requirements**
- Objective evidence

## Office of Inspector General Points of Interest

- Procurement Process
- Expectation of backlog samples.
- Expectations for staff and overtime as purchase of supplies increased.
- Impact of an Expert Review System

# US Department of Justice Office of Inspector General Recommendation

Ensure funding is documented to clearly show that the DNA samples analyzed with agreement funds are incremental or additional to what the NYSP could accomplish with existing funding.

## GAN - Change of Scope Capacity Enhancement

- Unforeseen procurement delays.
- Worked with NIJ to secure the funding for critical capacity enhancements.
- Will not be applying for additional convicted offender grants until 2007 grant is closed.

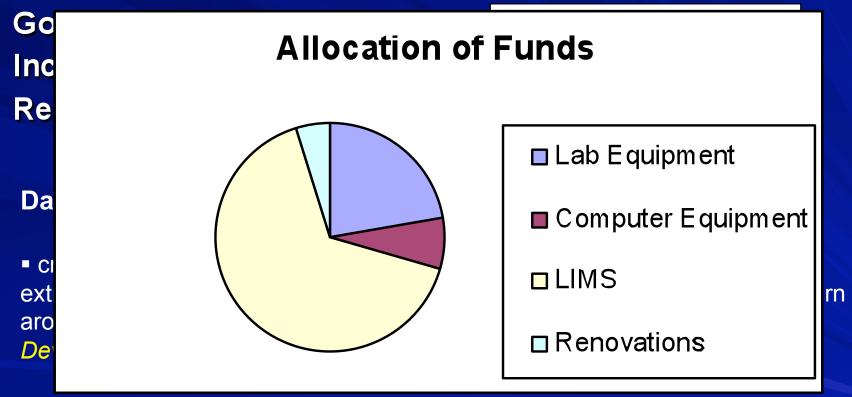
#### **Grant Categories**

- Overtime
- Salary and Benefits of Additional Laboratory Employees
- Consultant and Contractor Services for Data Review
- Laboratory and Computer Equipment for the DNA Database Laboratory
- Certain Supplies
- Renovations
- Administrative Expenses
- Other (LIMS System)



#### Forensic Investigation Center - Albany, NY

NIJ FY 07 Convicted Offender and/or Arrestee DNA Backlog Reduction Program (2007-DN-BX-K005)



■ A data exchange process to reduce the types of medium used for data exchange and make the process more efficient, automated, and less time consuming. Reduce the amount of manually entered data.

Completed August 2008.



#### Forensic Investigation Center - Albany, NY

NIJ FY 07 Convicted Offender and/or Arrestee DNA Backlog Reduction Program (2007-DN-BX-K005)







Qiagen BioSprint

BioTek Synergy 2

TrueAllele Workstations

#### **New Laboratory and Computer Equipment:**

**Biosprint** is an Automated robot utilized for DNA purification. Purchased to increase throughput and reduce extraction costs. The **BioSprint** consumes minimal bench space and the purification capacity of <u>one</u> **BioSprint** is 150,000 sample per year. **Currently in validation**.

The BioTEk **Synergy2** is a plate reader for quantitating DNA concentrations. The **Synergy2** has improved filter designs and is a modular unit that can expand if needed in the future. The software is much more user friendly is the instrument is supported with a test plate for routine quality control testing. *Currently in validation*.

**TrueAllele Workstations** were purchased for the Developmental Validation of TrueAllele Expert System software using data generated from the 3130XL Genetic Analyzer (Collection 3.0) / Identifier amplification kit. The DNA Databank currently utilizes Cofiler and Profiler Plus amplification kits. TrueAllele processing time will be reduced at least 2 fold with Identifiler data. *Validation commenced August 2009.* 

#### **Renovations:**

More instrumentation in smaller areas require better temperature and humidity regulation. Air conditioners, heater, and humidifiers will be purchased for the extraction and amplification rooms to optimized temperature conditions for the analysis process. This improvement will assist in decreasing re-extractions and re-analysis caused be temperature fluctuations. *Renovations expected to begin November 2009.* 

#### GOAL

- The New York State DNA Databank's goal for this grant is to reduce the sample turn around times to 7 days and achieve a testing capacity of 8,500 -10,000 samples per month.
- CODIS Unit performs a search to compare convicted offender DNA profiles to the forensic index DNA profiles every two weeks at SDIS and uploads DNA profiles on a weekly basis for NDIS searching.

### **Establishing Current Capacity**

#### **Projected Capacity**

8,500 to 10,000 samples

5,220 samples

3,280 to 4,780 additional samples

1 month

1 month

1 month

**25,000** samples

3,280

**25,000** samples

~8 Months

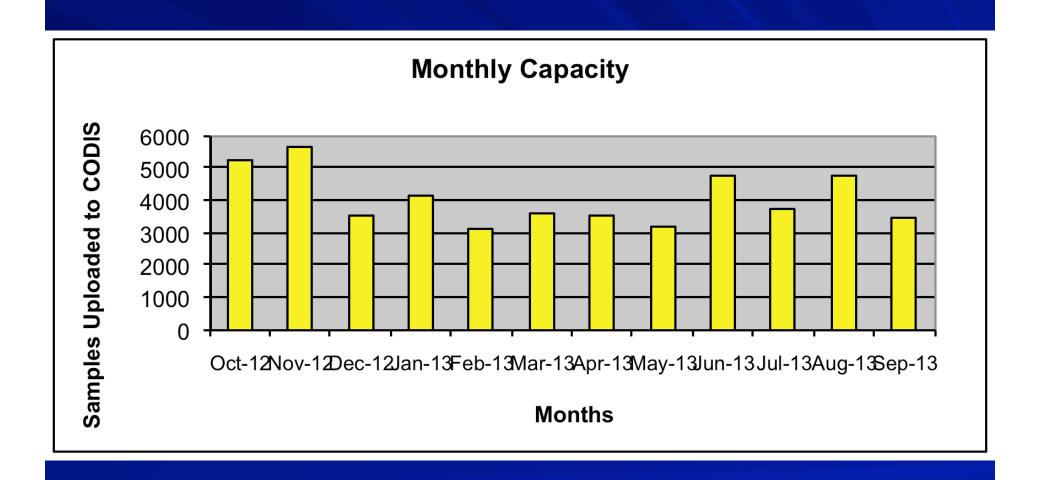
~ 5 Months

4,780

#### Capacity Enhancement Performance Metric

Month	Sample Uploaded	Average TAT	(On Average) # of Samples / Day	Projected Monthly Capacity
Nov-08	4,121	22	187	5610
Dec-08	3,039	26	117	3510
Jan-09	3,699	27	137	4110
Feb-09	2,672	26	103	3090
Mar-09	3,812	32	119	3570
Apr-09	4,425	38	116	3480
May-09	3,573	34	105	3150
Jun-09	5,037	32	157	4710
Jul-09	3,100	25	124	3720
Aug-09	4727	33	143	4719
Sep-09	3868	34	114	3,420

#### **Capacity Enhancement Performance Metric**



#### Performance Metrics Delays

- Validations
- Training





LIMS Development and Customization



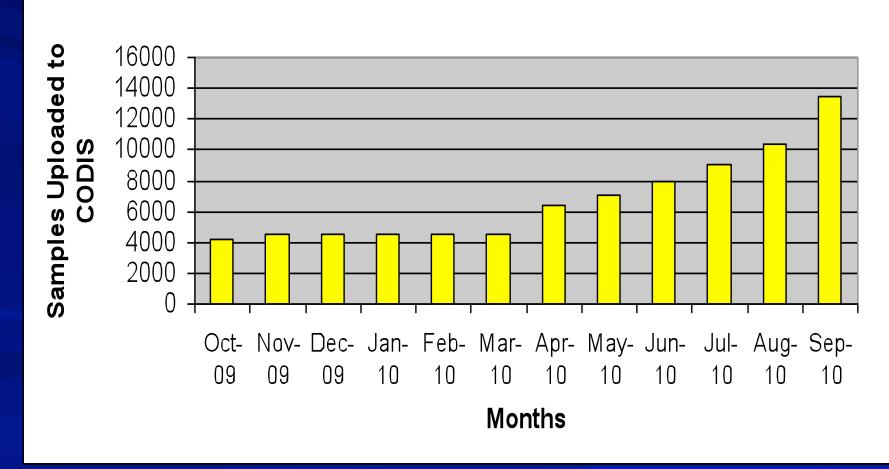




Month	Sample Uploaded	Average TAT	(On Average) # of Samples / Day	Projected Monthly Capacity
Oct-09	4,500	32	141	4230
Nov-09	4,500	30	150	4500
Dec-09	4,500	29	155	4495
Jan-10	4,500	32	141	4512
Feb-10	4,500	29	155	4495
Mar-10	4,500	26	173	4498
Apr-10	4,500	21	214	6420
May-10	4,500	19	237	7110
Jun-10	4,500	17	265	7950
Jul-10	4,500	15	300	9,000
Aug-10	4,500	13	346	10,380
Sep-10	4,500	10	450	13,500

## Capacity Enhancements Projected Monthly Capacity





## New York Pending Legislation

- All Crimes Bill
  - >10,000 samples / Month
  - ➤ 120,000 samples / Year
- All Crimes including Arrestees
  - ≥20,000 samples / Month
  - >240,000 samples / Year

#### **Contact Information**

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Thank You