



SNA  INTERNATIONAL

Building Laboratory Capacity for
DNA Profiling

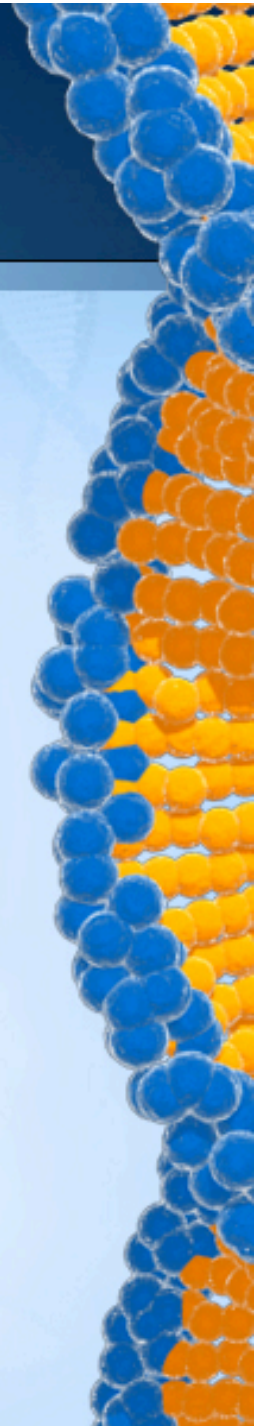
SNA International

- Headquartered in Alexandria, Virginia, USA
- Consortium of business and forensic subject matter experts:
 - DNA profiling
 - Laboratory development
 - ISO 17025 accreditation
 - Automation
- Over 20 years of experience developing forensic DNA laboratories
- Provide exceptional consulting service



Forensic Projects

- City of Alexandria Family Assistance Center Plan
- Cyprus Missing Persons DNA Identification Project Assessment
- Jordanian Police Department DNA Laboratory ISO 17025 Accreditation
- Strengthening Iraq's Forensic DNA Analysis Capabilities: The Application of DNA to the Identification of Missing Persons Resulting from Mass Fatalities
- Securing Afghanistan's Past Forensic DNA Needs Assessment
- Merced County Mass Fatality Response Plan
- Miami Valley Coroner's Office Forensic Laboratory Cost Assessment
- Oklahoma Bureau of Investigation Forensic DNA Needs Assessment
- Forensic Anthropological Foundation of Guatemala Laboratory Development
- Coroner Forensic Center, St. Tammany Parish Forensic Laboratory Implementation
- Forensic and Molecular Diagnostic Laboratory Development Support for the Kingdom of Jordan
- Mississippi State Police Crime Laboratory DNA Backlog Reduction
- Massachusetts State Police Process Mapping and Change Management Action Planning and Implementation
- Louisiana State Police Hurricane Katrina DNA Identifications
- Louisiana State Police Convicted Offender and Arrestee Databasing Program
- California Department of Justice Laboratory Information Management Implementation Support



Team's Mass Fatality Response Experience



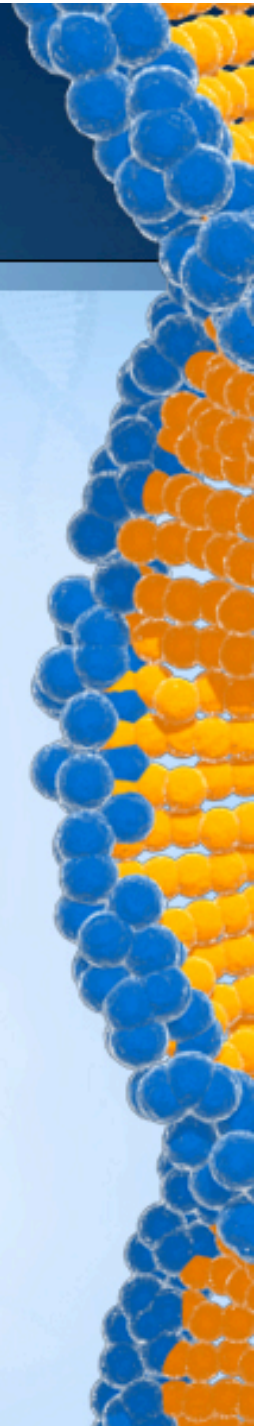
- Joplin, Missouri
- Continental #3407
- Comair #5191
- Hurricane Katrina
- American Airlines #587
- 9/11 World Trade Center
- 9/11 Pentagon
- 9/11 Pennsylvania
- Egypt Air #990 plane crash
- Alaska Air #261 plane crash
- Georgia Tri-State Crematorium
- Columbia Shuttle Crash
- Hurricane Rita (cemetery disruption)
- Hurricane Floyd
- Corporate Air #5966 plane crash
- US Air Express #5481 plane crash
- Haiti Earthquake
- International Mass Fatalities (Humanitarian)
- Colgan Air #3407
- Hurricane Ike

Forensic Laboratory Services

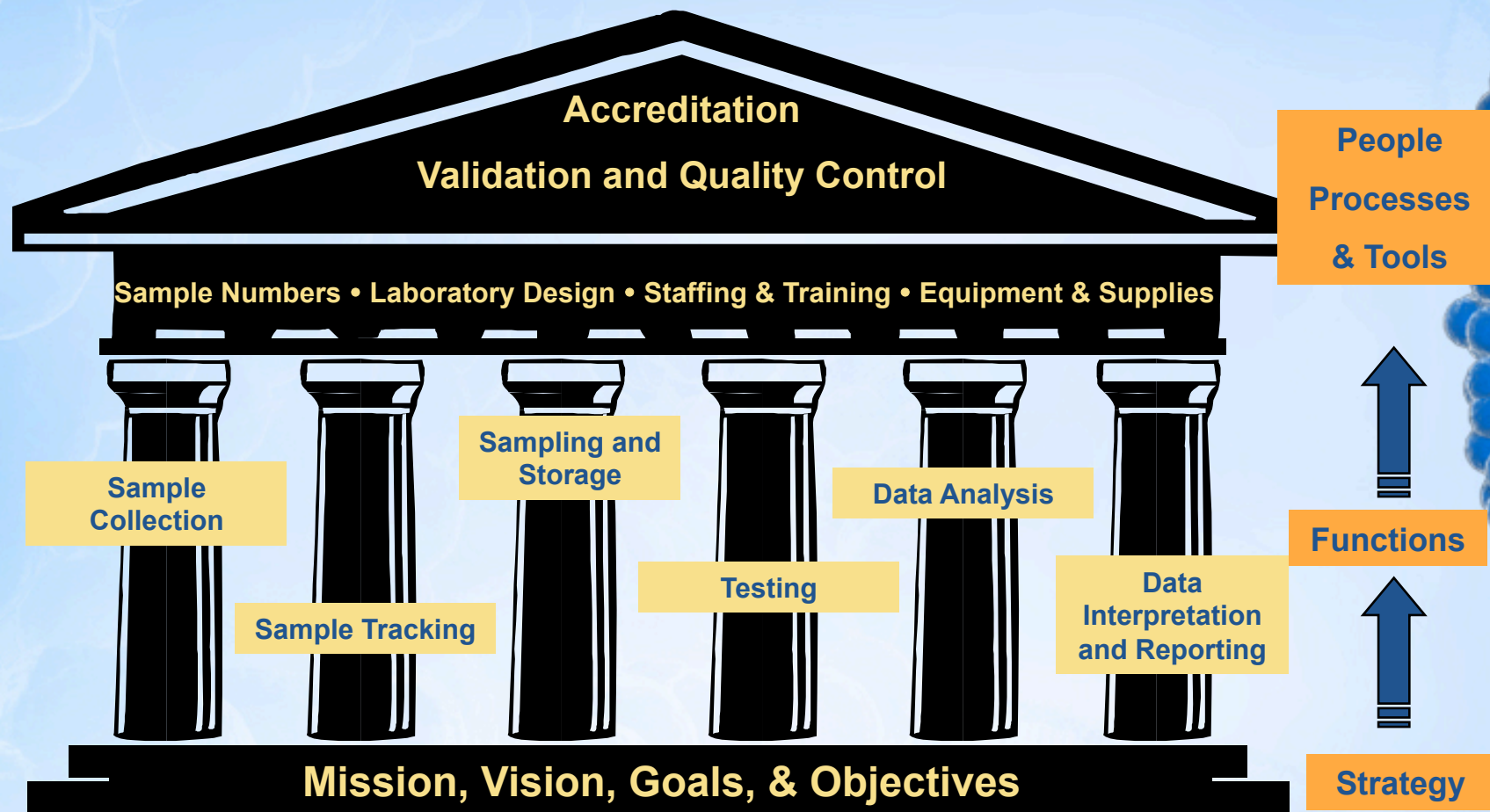
- Training
- Strategic Planning
- Process Mapping and Optimization
- Change Management Assistance
- Budget Analysis
- Needs Assessment/Gap Analysis
- Validation and Implementation of Equipment and Procedures
- Facilitating Communication and Morale in the Laboratory
- Management Training and Mentoring
- Team Building
- Independent Transcript Review and Evaluation
- Moot Court and Testimony Preparation
- Creating a Mass Fatality Response Plan for the Laboratory
- Kinship Screening and Statistics
- Working with Decreased Budgets and Increased Workloads
- Dealing with Increased Workload: Scaling Production

Defining Laboratory Operations

- **Mission**
 - Primary purpose of laboratory
 - Why it exists
 - What it does
- **Vision**
 - What the laboratory hopes to achieve in a given time period
 - 3 to 5 years
- **Goals & Objectives**
 - Provide specific, measurable activities
 - Helps laboratory to achieve its mission and vision



Developing Laboratory Capacity



We Support Laboratory Functions

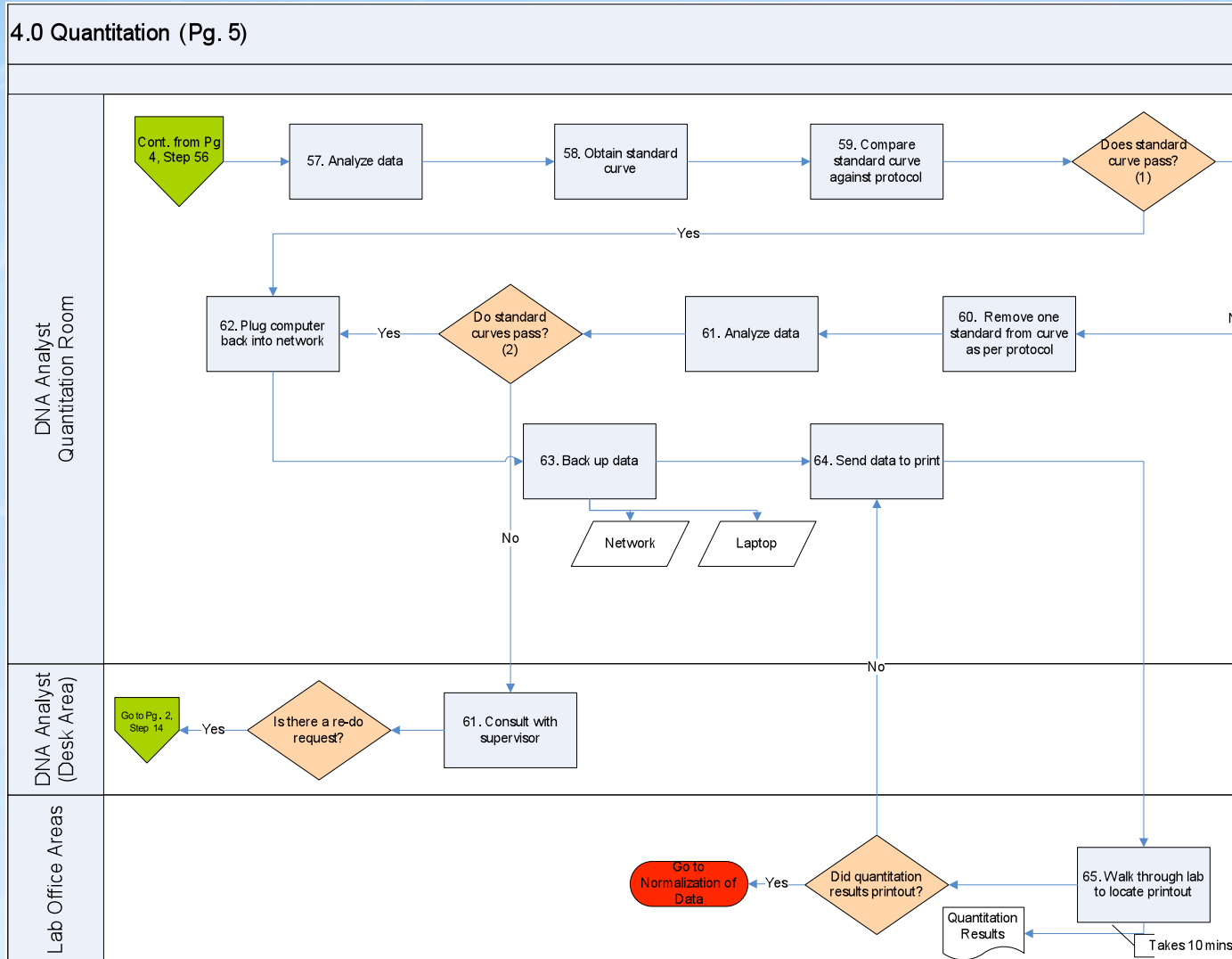
Function	Description
Collection	Procedures for collection of samples, training for sample collectors, automated solutions for data collection.
Accessioning	Determine requirements for a laboratory information management system, support the implementation and customization of computer systems, develop procedures and train staff.
Testing and Profile Analysis	Develop equipment and supply lists, validate equipment, write technical procedures, train staff and help with troubleshooting.
Reporting	Help establish reporting criteria and databases requirements, write procedures and train staff.
Quality	Write Quality Manual and quality procedures, train staff on accreditation and support the laboratory with ISO 17025 ILAC G-19 accreditation.

We Determine All the Testing Steps

- What needs to be done?
- Who does it?
- In what order are things done?
- Why is it done?
- Where is it done?
- How long does it take?
- How often will the process be performed?
- What guides the process (e.g., standards, policies)?
- What information systems are used?



Example Process Map



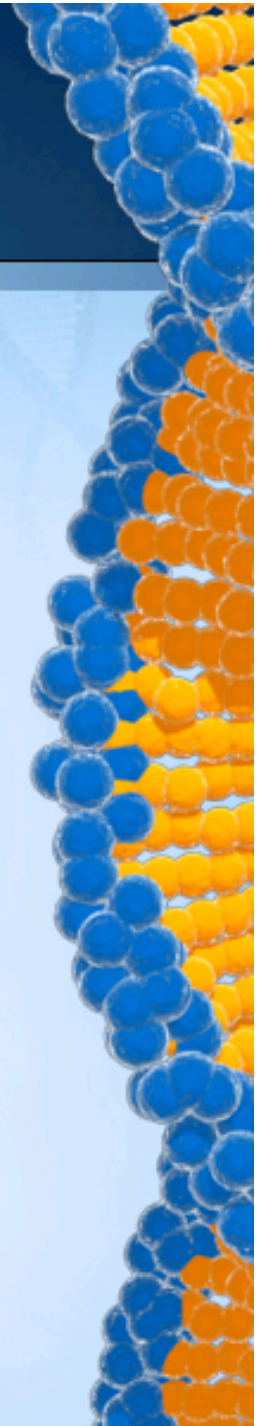
We Identify and Manage Change

Category	#	Current State	Desired State	Key Requirements to Reach Desired State
1.0 FACILITY	1.1			
2.0 STAFFING & TRAINING	2.1			
3.0 BUSINESS PROCESSES	3.1			
4.0 OPERATIONS	4.1			
5.0 QUALITY PROGRAMS	5.1			
6.0 EQUIPMENT AND CONSUMABLES	6.1			
7.0 INFORMATON TECHNOLOGY	7.1			
8.0 BUDGET	8.1			

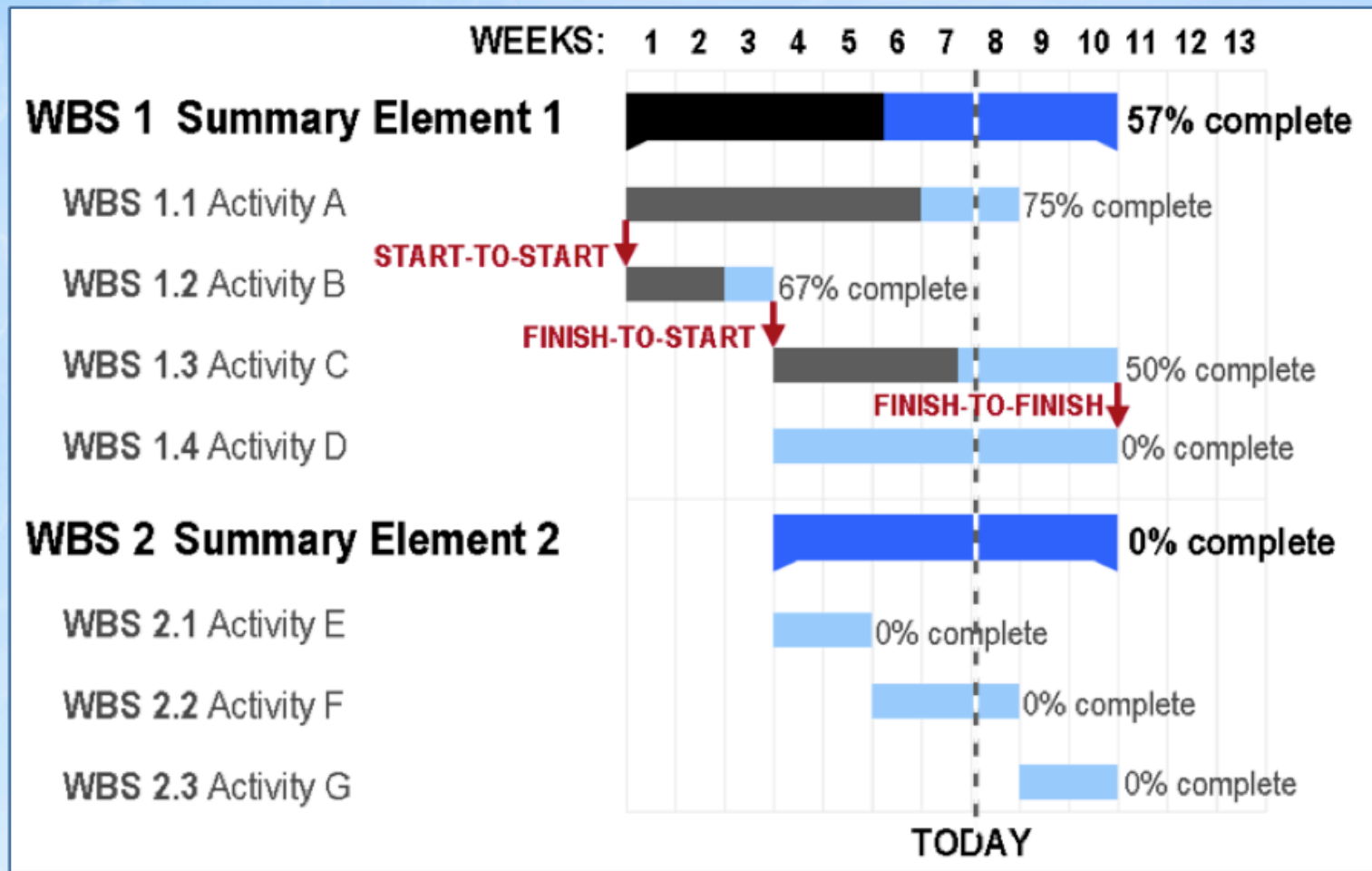
Approaches and Strategies

We identify:

- Goals
- Priorities
- Action plans including:
 - Requirements
 - Specific activities
 - Potential obstacles with solutions
 - Responsibilities
 - Time frames
- Desired outcomes
- Performance goals
- Rewards



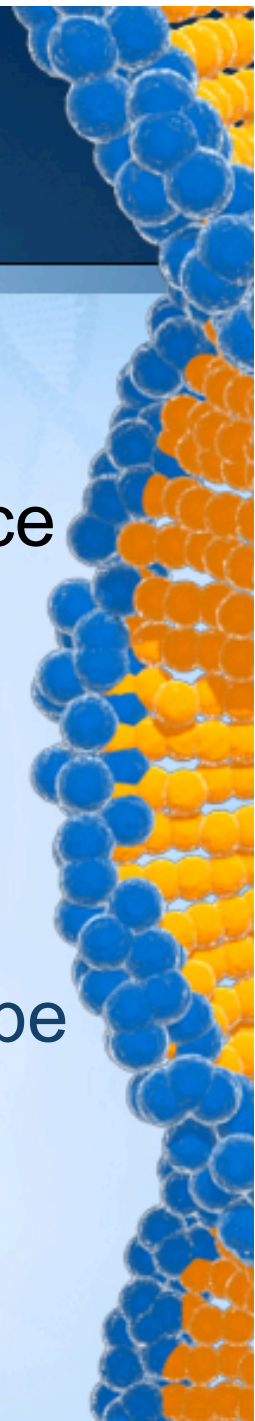
Change Management Action Plans



Our Approach

Keep things as simple and clear as possible since
*over complication leads to confusion and
avoidance*

Implementing DNA operations does not have to be
complicated!



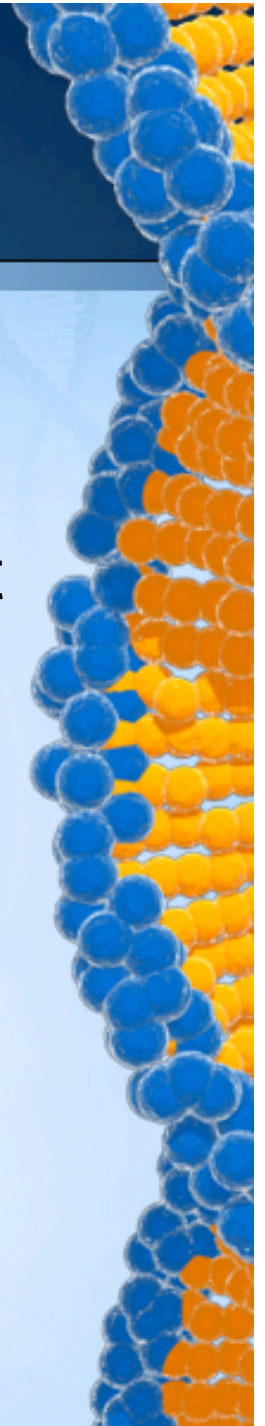
Benefits of Planning



- Increased throughput
- Improved productivity
- Decreased sample processing costs
- Minimized sample retesting
- Tools for monitoring laboratory performance
- Increased staff morale
- Public satisfaction and confidence

Benefits of SNA International

- Work Internationally
- Provide plan development, written procedures, testing implementation, process enhancement and training
- Experienced in forensic DNA laboratory:
 - Development
 - Operations
 - Automation
 - Accreditation
- Reduce internal work load
- Easy and straightforward



Thank you

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