



Accreditation of Rapid DNA Technology for Relationship Testing

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Rapid DNA Technology

- Purchased ANDE in June 2015
- Expedite the process of identifying human remains



Initial Discussions

- Accreditation with AABB for relationship testing
 - Specifically for cases that have family
 - Less than 100 cases per year
 - Develop a budget
- Support of Administration
 - Financial
 - Personnel
 - Time
 - Policy



AABB Standards

- Support from DHS S&T
- Review standards
- Submit variances in January 2017
- Develop timeframe with key deadlines
- Project plan detailing tasks



Project Plan

- Training
 - Journal Articles
 - Procedures
 - Collecting
 - Accessioning
 - Testing
 - Reviewing Data
 - Calculations
 - Reporting
 - Demonstrate competency
 - Sign off by Lab Director



Project Plan

- Validation

- Tissue Samples

- Buccal – over 100 swabs
 - Bone
 - Soft Tissue - muscle
 - FTA Cards – positive control and CAP proficiency tests

- Send to AABB lab to demonstrate concordance

- Reporting

- 13 complete cases
 - Inclusion
 - Exclusion
 - Inconclusive



Project Plan

- Validation
 - Software Systems
 - OSIRIS – Open Source Independent Review and Interpretation System
 - KinCALc
 - Probability Worksheet
 - ANDE FlexPlex
 - Sample results demonstrating concordance



Challenges

- Changing to FlexPlex chemistry
 - Locating accredited lab that had similar chemistry
 - Alter bone processing procedure
- Different software systems
 - ANDE results
 - OSIRIS analysis
 - KinCALc input
- Technical Issues
 - Instrument and Chip



Cape Cod Office

