



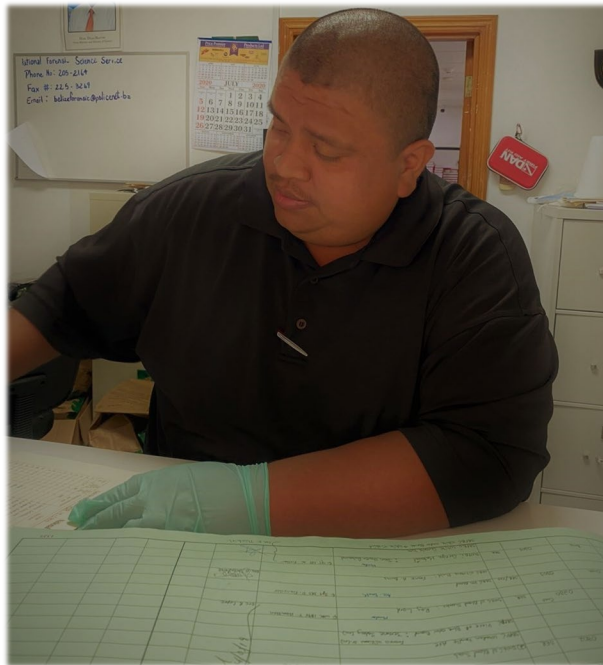
# LIMS – A putative and integral element of the Belize NFSS Quality System

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**infoSEGURA**





***Dedicated in loving memory of Renie Hipolito Moh  
(1989 – 2020)***

**infoSEGURA**



# First Citizen Security Week – LIMS @ Belize's NFSS

- This presentation will look at four tenets of delivering reliable and objective forensic science services in support of administration of justice and citizen security in Belize:
  1. Evidence-based decision making
  2. Good governance efforts
  3. Stakeholder engagement
  4. Change management
- The presentation will also discuss:
  - Rollout of a department-wide quality system at the NFSS
  - Need for a forensic LIMS
  - Resistance to change
  - Synergistic effects of simultaneous project execution



# Organizational Structure of Belize NFSS

- Public Agency staffed by up to 68 civilians
- Independent structure from Police, established in 2013
- Legal mandate provided by the *National Forensic Science Service Act, Chapter 39:02 of the Laws of Belize (Revised Edition 2020)*

## BELIZE NATIONAL FORENSIC SCIENCE SERVICE



SCENES OF CRIME



MEDICAL  
EXAMINER'S OFFICE



FORENSIC  
LABORATORY



MINISTER OF HOME AFFAIRS

CEO

Executive Director

ADMINISTRATIVE ASSISTANT

ADMINISTRATIVE SUPPORT UNIT

QUALITY MANAGER (PROPOSED)

ASSISTANT DIRECTOR FORENSIC LABORATORY

ASSISTANT DIRECTOR SCENES OF CRIME

ASSISTANT DIRECTOR MEDICAL EXAMINERS OFFICE

FORENSIC ANALYSTS (I, II, III) + EXHIBIT MANAGER

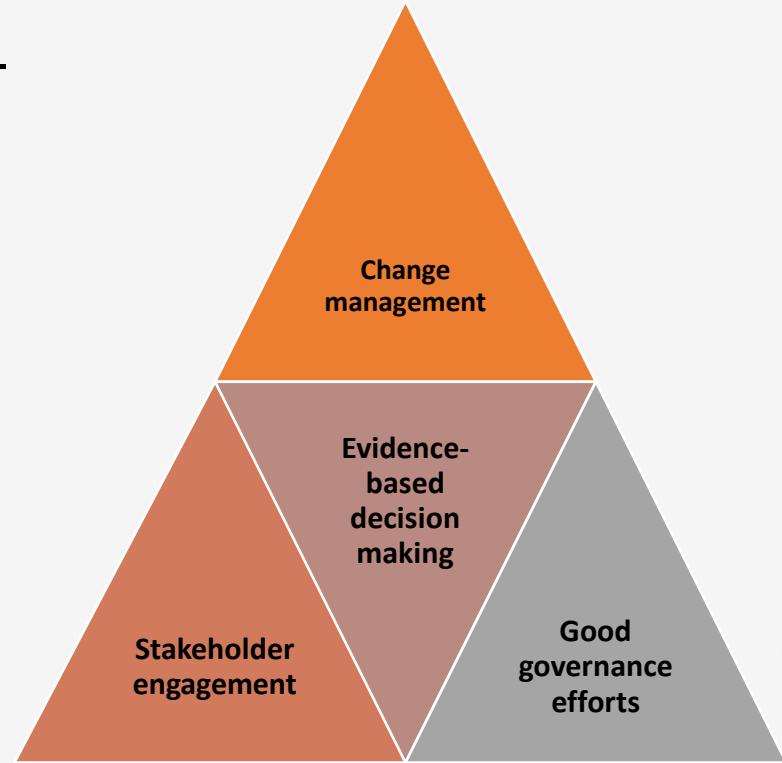
CRIME SCENE TECHNICIANS (BASIC, ADVANCED, SENIOR)

MEDICAL EXAMINERS, CORONER'S ASSISTANT, AUTOPSY TECHNICIAN

# Organizational Structure of Belize NFSS

# First Citizen Security Week – LIMS @ Belize's NFSS

- Guiding principles for administrating a reliable and objective forensic science service in support of the Citizen Security and Justice Sectors in Belize can be categorized into four areas:



**Data Analysis and Data Integration are fundamental → LIMS**

# Laboratory Information Management System (LIMS)

- LIMS is needed to improve delivery of forensic science and legal medicine services by:
  - enabling NFSS to modernize its case file and workflow management system at the Forensic Laboratory by transitioning from paper-based methods to digital information capture and accurate tracking of casefile data
  - addressing technical stability issues and security concerns due to aging MS Access-based system
  - supporting effective digitization, digitalization and integration of casefile information and workflow among the three NFSS units (Scenes of Crime, Medical Examiner's Office and Forensic Laboratory)
  - allowing for interoperability with other Law Enforcement and Justice Sector information management systems
  - mitigating against backlogs in the Courts
- Resistance to change is often encountered along the journey to Quality

# *LIMS – A putative and integral element of the Belize NFSS Quality System*

**Examples of Project Synergies – advantages of simultaneously executing projects with cross-cutting themes centered around evidence-based decision-making:**

1. InfoSegura/UNDP for network server (crime scene casefiles) and LIMS (forensic lab)
2. INL/ICITAP for Quality System implementation
3. SICA & FIIAPP's AC1/I-CRIME for quality, histopathology and toxicology
4. Vital Strategies Grant for medicolegal death investigation system legislative reform
5. Rutgers University Forensic Consortium for humanitarian cold case efforts
6. CABEL's Belize Integral Security Programme for infrastructure needs
7. MOUs with National University and National Tertiary Referral Hospital for research & development and (disaster) risk management





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