Forensic Science Laboratories

- Three tier functions:

    1. Crime scene management: Collection and preservation of the clues

    2. Examination, analysis and reporting

    3. Appearing in the court as expert witness

- To provide answers to :

    Is crime committed? If so, How? When? and Who?

Basic Sciences & Lie Detector: Type of Analysis (77 to 90)

Division	Examinations	Instruments
Physics	Soil Examination, Cut Marks, Tool Marks, Cement, Oil, Fiber, Rope, Glass, Deciphering of engine number, chassis number and vehicle registration number, Elemental Analysis, Document examination	Microscope, comparison Microscope, Infrared Microscope, Emission Spectrophotometer, IR Spectrophotometer, Refractometer, X-ray machine, Sieve shaker,
Chemistry	Chemical Analysis, Toxicological Examination, Testing of Samples for Medical Preparation	Thin Layer Chromatography, GC, UV Spectrophotometer
Biology	Detection of Blood, Blood Grouping, Hair Examination	Compound Microscope, Comparison Microscope, Centrifuge Refrigerator, Oven, Incubator, Micro Section Device, Laminar Air Flow, Lyophilizer, Craniofor, Stereo Microscope, Phase Contrast Microscope

Forensic Sciences & Forensic Psychology (90-2005)

- Chemical Sciences: chemistry, toxicology, narcotics, explosives, prohibition - possession and blood alcohol

- Biological Sciences: Biology, Serology, DNA, & microbiology

- Physical Sciences: Physics, Ballistics, Forensic Photography

- Handwriting and Questioned Document examination, Fingerprinting

- Mobile Investigation labs,

- DNA fingerprinting & Computer Forensics

- Forensic Psychology: polygraph examination, Forensic narcoanalysis, Forensic Hypnosis and forensic psychological assessments & Brain mapping technologies.

- Instrumentation:

- Scanning Electron Microscope, Atomic Absorption Spectrophotometer

- EDXRF, FTIR, HPLC, GCMS, GCHS, Lie detector, BEOS/icognative

Forensic Sciences, Behavioural Sciences & Digital Forensics (2006-2022)

- Mobile Crime Investigation Vans
- Special Investigation Vans for Cow Meat Analysis
- Wild Life Crime Mobile Laboratory - Sasangir
- Tele forensics
- 3D Crime Scene Scanner
- Behavioural Science: Suspect Detection System, Layered Voice Analysis, i-cognative, Eye Detector
- Digital Forensics: Cyber security , artificial intelligence, machine learning
- Multi Disciplines & Inter related Multi Professionals

Forensic & Behavioural Science Services

- The Civil , juvenile and Criminal Courts
- Human Rights Commission
- Police Department
- NIA, Central Police, CBI, NCB, DRI, Air force, Customs, Army, Other State Police etc.
- Government / Semi Government Bodies
- Forest Department
- Other State Agencies
- Insurance Companies, Private and Corporate Companies
- Prisons & juvenile homes
- Police & judicial academies,

Computer Forensics /Ballistics

Damaged SIM Card
Analysis System

Integrated Ballistics Identification System
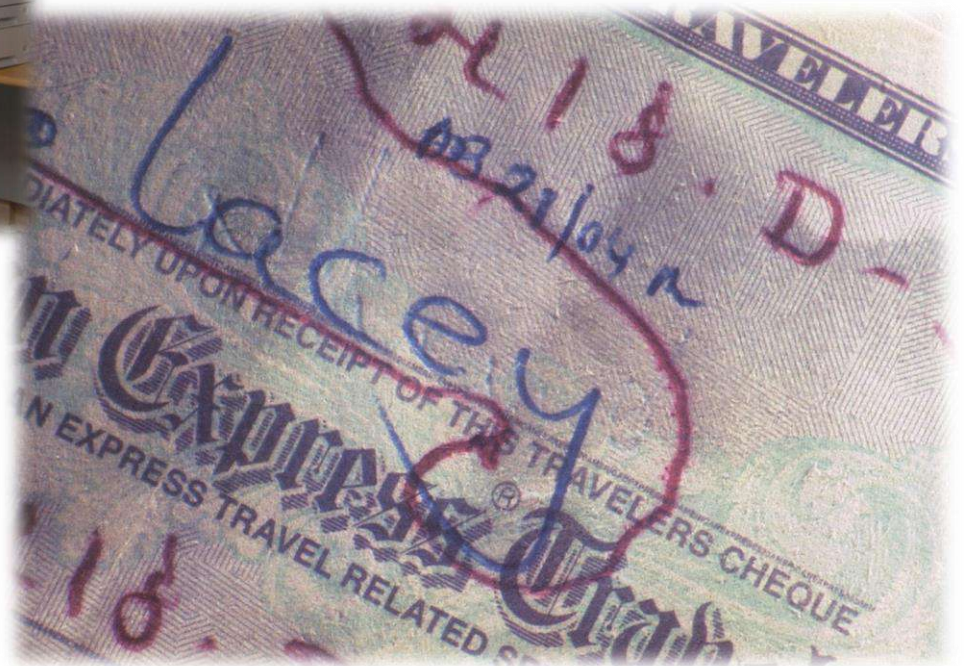
Mobile Investigation Van

Crime Scene Management

Gir Lion Poaching Case, the Forensic Mobile team collected important evidences from crime scenes & habitats of the criminals that helped in conviction

Cow Meat Testing Mobile Laboratory

The First State in the country to create such facility in four locations
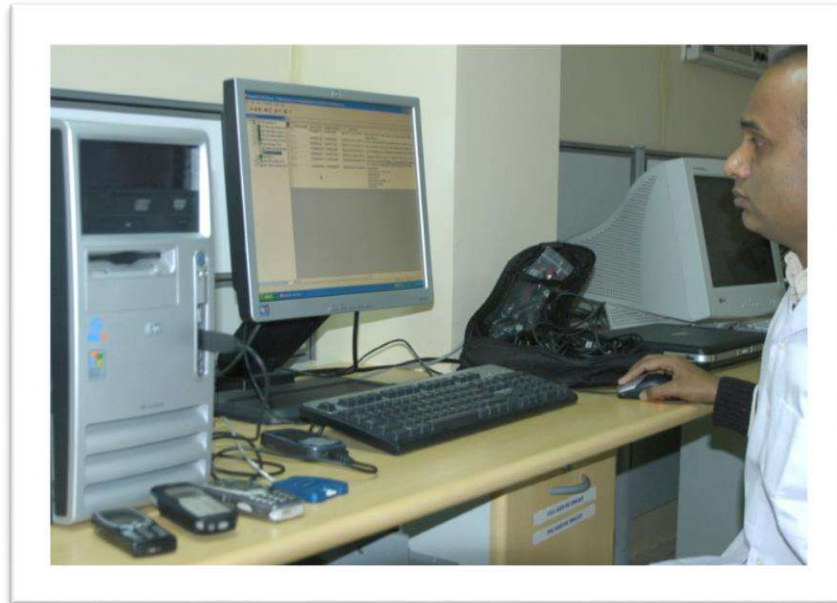
HPB / CEQD

Automated Fingerprint Identification System

Forensic Photography

Computer Forensic Lab

Voice Identification System

Audio - Video authentication system

Physics Division

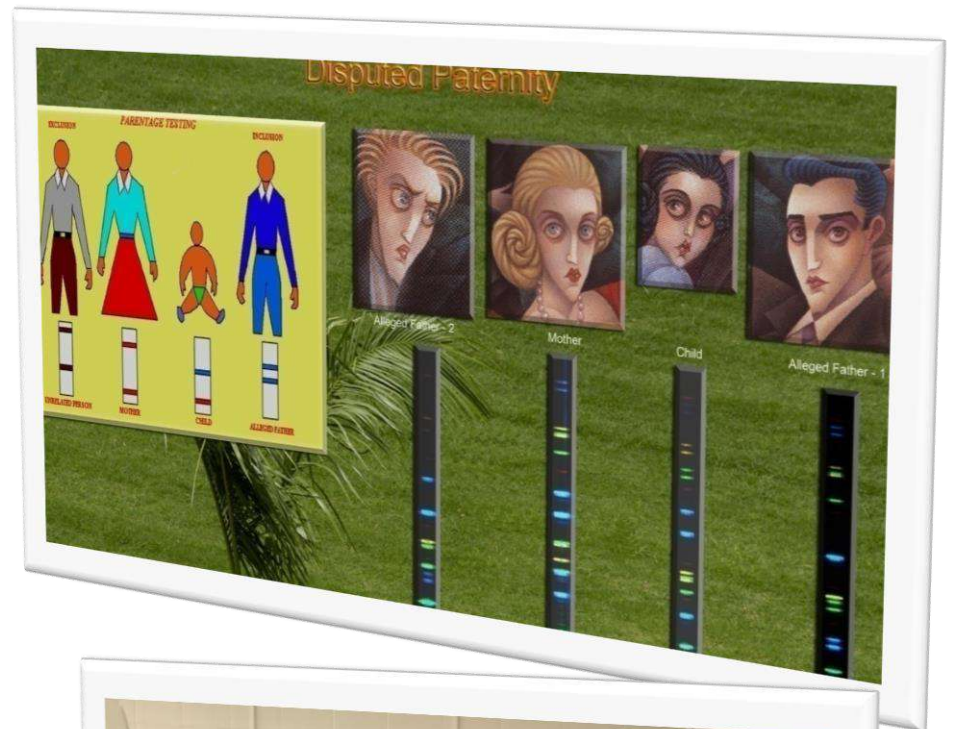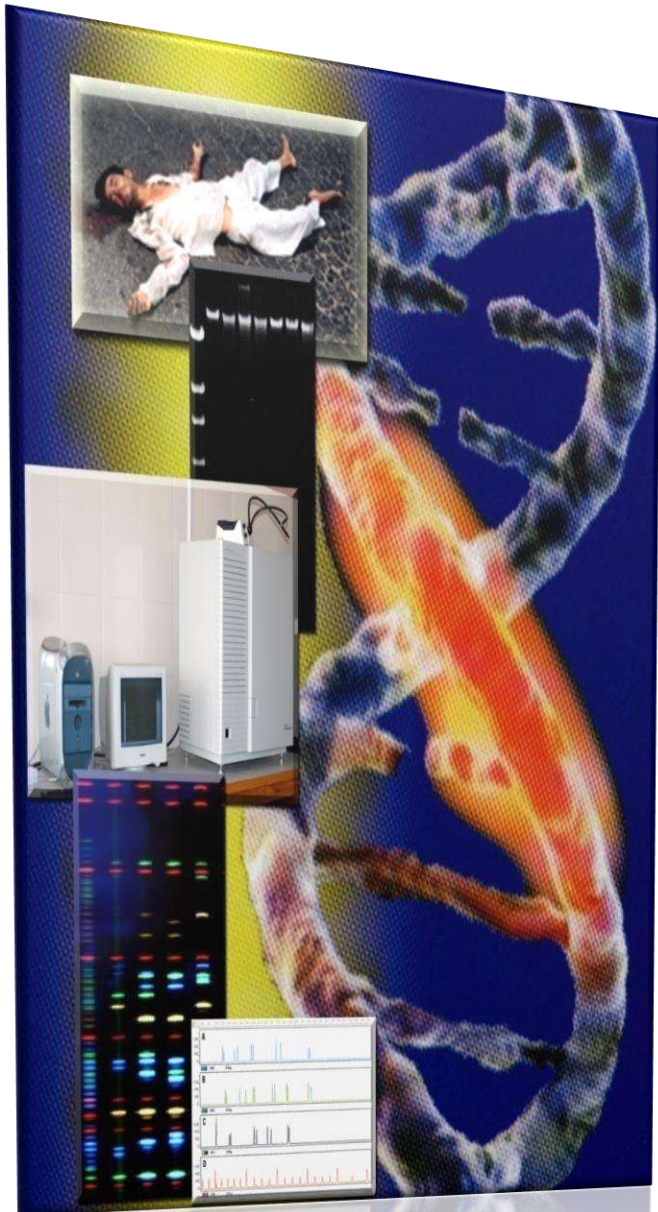# Integrated Ballistics Identification System (IBIS)

Chemistry Division

Blood Alcohol Analysis

DNA Fingerprinting

Forensic Psychology

Minor O.T. for Narcoanalysis

Brain Finger Printing/ BEOS

LEFT

RIGHT

```
        Fp1      Fp2
          AF3      AF4
    F7    F3    Fz    F4    F8
  FT7   FC3   FCz    FC4   FT8
  T3    C3    Cz     C4    T4
  PT7   CP3   CPz    CP4   PT8
    T5   P3   Pz   P4   T6
          O1   Oz   O2
```
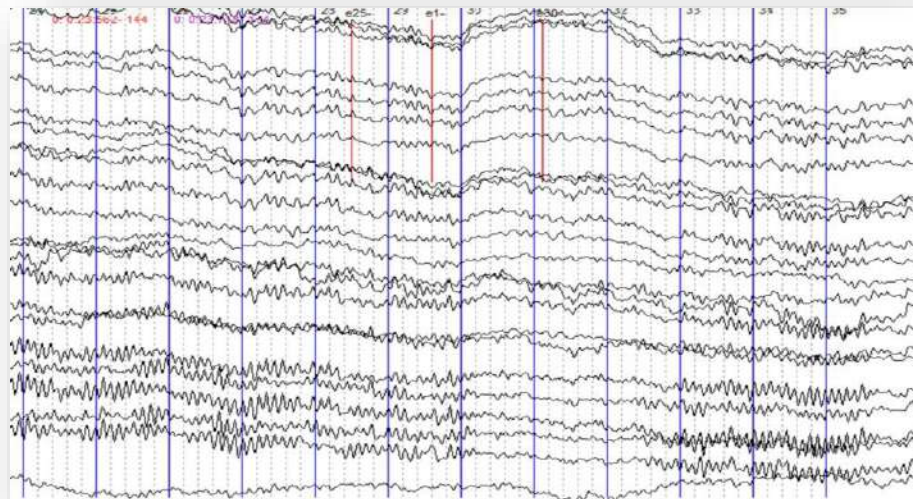
Suspect detection system- AUTOMATED DECISION MAKING TOOL

Enables screening and investigation of isolate terrorists, criminals and hostile employees at check points, border crossing, crime scene, combat zone and field operation

Informed Consent and Anesthetist inducing Narco/Narco Interview

Narco-Free association & Perseverance in Narco Interview

Polygraph Instrument (Lie Detector)

Polygraph Instrument (Lie Detector)

Polygraph Attachments

Computerized Polygraph Lab

COMPUTERIZED POLYGRAPH EXAMINATION
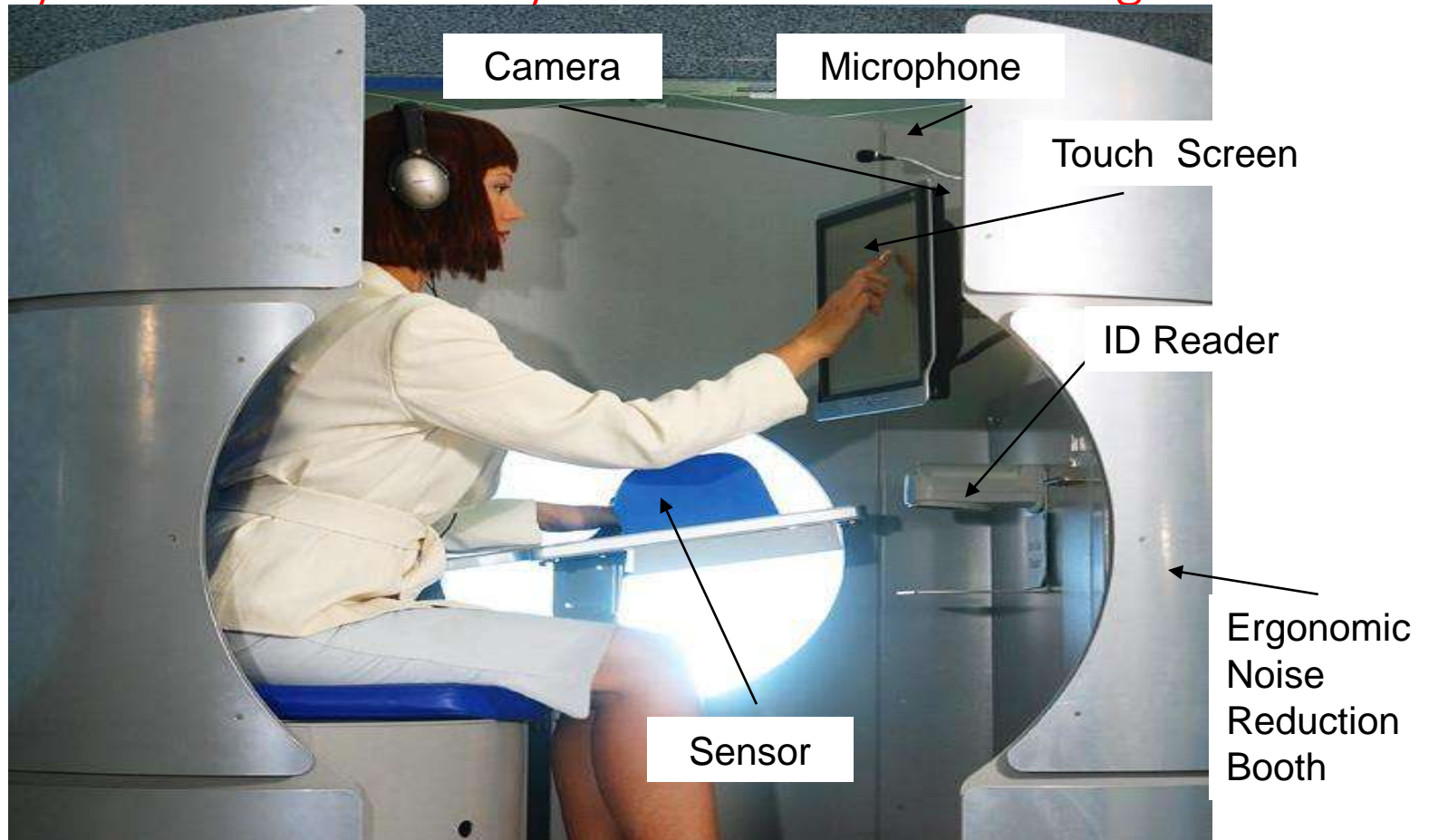
B.E.O.S.P. Laboratory

BEOS Recording in progress

BEOS Recording in progress

Recording in Progress (B.E.O.S Subject Lab)

SDS- Fully Automated Fixed System for Mass Screening

Camera

Microphone

Touch Screen

ID Reader

Sensor

Ergonomic Noise Reduction Booth

Mobile System (1)

Mobile System (2)

Military grade man pack rigid system

Thank You