

WHAT IS THE FUTURE OF THE LATENT PRINT DISCIPLINE?

AN FBI PERSPECTIVE

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The Big Picture

Topics

- Recruitment and Hiring
- Training and Certification
- Case Work
- Testimony
- Research
- Other interesting issues

Recruitment and Hiring

- Two Prong Approach
 - Person with no fingerprint experience
 - Person with fingerprint experience
 - Person with latent print experience
 - Person with limited fingerprint experience
 - Trend is 10-print examiners lack adequate skills primarily due to automation.

Person with NO Fingerprint Experience

- Require college science degree.
 - Desire to be more closely related with the “scientific laboratory” concept.
 - Brings a skill set better equipped to address secondary issues, e.g. research, formal writing, public speaking.
 - Minimal or non-existent technical fingerprint skill.

Person with NO Fingerprint Experience

- Degree in what?
 - Hard science v. forensic science v. criminal justice v. ???
- Universities offering specific fingerprint related courses.

Person with NO Fingerprint Experience

- FBI experiences to date.
 - Recruitment:
 - over 400 applicants with degrees ranging from Bachelors to Ph.D.
 - Hiring:
 - Standard FBI application plus specific request for knowledge, skills and abilities on specific matters.
 - Interview
 - Background investigation

Person with Fingerprint Experience

- 10-print experience is not a factor.
- Latent print experience.
 - Standard FBI application plus specific request for knowledge, skills and abilities on specific matters.
 - Interview
 - Background investigation
 - Demonstration of skills
 - leads to customized training program
 - IAI certification (consideration)
 - Coming from an ASCLD LAB accredited laboratory (proficiency testing). (consideration)
 - Meet SWGFAST training guidelines. (consideration)

Future for Recruitment and Hiring

- Emphasis on college education
 - hard sciences
 - irrespective of experience
 - need for certified aptitude testing
 - college and agency level
- Established probationary period

TRAINING and CERTIFICATION

- Training:
 - formal program; well documented
 - performance tracking; well documented
 - instructor qualifications
 - adherence to SWGFAST Guidelines
 - standard training program
 - national, international
 - computer based training

TRAINING

- Time in training versus quantity/quality of training.
 - Experience should be measured in actual performance, not just time.
 - The number of comparisons and identifications is more important than the amount of time.
 - The quality of the training content (instructor, material, etc.).

FBI Training

Physical Scientists - Latent Prints

- Two year program
 - formal classroom instruction followed by practical exercises.
Lectures on wide range of topics - module format
 - classification
 - ACE-V methodology
 - comparison exercises beginning with good quality 10-print v. 10-print through difficult latent prints v. typical 10-prints.
 - errors
 - physiology of friction skin.
 - visualization, development techniques.
 - automation
 - legal
 - photography and digital imaging
 - history
 - standard operating procedures

FBI Training

Physical Scientists - Latent Prints

- Two year program continued;
 - tests conducted on each topic
 - several comparison tests
 - mentoring
 - oral boards
 - moot courts

FBI Certification

Physical Scientists - Latent Prints

- Formal examination
 - comparison test
 - 2 sessions, each time constrained
 - written test
 - 6 hour time constrained
- **PASS / FAIL**

TRAINING

- Continuing Education
 - In-Service
 - External training received
 - Conferences
- External Training Provided
 - Academy, Road Schools, WVU, Conference workshops, CBT
 - Certificate issue

Future Training

- Internal
 - continue to improve current program
 - efforts to create more detailed standard in line with SWGFAST Guidelines.
- External
 - revised program to utilize Computer Based Training (CBT)
 - conform with SWGFAST Guidelines

CASE WORK

- Maintaining skills
 - proficiency testing
- Errors
 - proficiency testing
 - case work
- Quantity vs. Quality

CASE WORK

- AUTOMATION
 - Capture technology; latent prints and known exemplars
 - 3 dimensional
 - AFIS / APPIS
 - improved algorithms using advanced technology
- Globalization via internet

TESTIMONY

- Training
 - Daubert Hearing testimony
 - Trial testimony
 - Moot Courts

TESTIMONY

- Exhibits
 - discontinue use of old style charts,
 - more use of PowerPoint-like demonstrations

Demonstration

TESTIMONY

- Present more complete testimony.
- Recognize Daubert, Frye, specific state case law issues.
- Present ACE-V methodology as opposed to simplistic point counting.

RESEARCH

- More “scientific” research
 - formalized, validated, published, peer-reviewed.
 - Visualization / Development Techniques
 - Physiology of Friction Skin
 - Statistical Probability Modeling
 - Aptitude Testing (including form blindness)
 - Automation validation
 - live-scan; lights-out; biometrics; etc.

Other Interesting Issues

- Interrelationship with and influence by:
 - academia
 - professional organizations
 - IAI, AAFS, Forensic Science Consortium, etc.
 - scientific community
 - biometrics, technology
 - politics

Cole's Prediction

- Fingerprints may be replaced by DNA
 - *Suspect Identities*, page 286

FINGERPRINTS,
HERE TO STAY

Scientifically Sound