STAFF AND TRAINING

I. Criminalist Certification

A. The ways in which labs support individual criminalist certification are listed below in the order of method used most.
   1. On-Duty study time
   2. Pay exam fees
   3. Pay recertification fees
   4. Pay or credits for certification
   5. Does not support certification
   6. Other (reimbursing fees if exam is passed and by paying yearly recertification fees, encouraging certification and allowing certification testing to occur on duty)

B. The average number of certified analysts in each lab is 10. **[24 labs reported]**

II. Staff

A. There was an average of 32.5 Full Time Equivalent technical and managerial staff allocated as of 12/31/07. **[30 labs reported]**

B. The breakdown of degree level for technical and managerial staff is as follows: **[30 labs reported]**
   a) *Average with B.A. or B.S.:* 23
   b) *Average with Masters:* 7.3
   c) *Average with Ph.D.:* <1

C. Out of an average of 4.2 supervisors, 1.4 do casework regularly

D. Support staff needs - labs reported an overwhelming need for Property Controllers, Clerical Support staff, Information Technology specialists, Quality Assurance officers, Laboratory Technicians, and Forensic Laboratory aides

E. Factors that have a significant effect on the ability of technical staff to meet their workload
   a) Technical Staff Problems
      1. Staff shortages
      2. Difficulty in attracting experienced analysts
      3. Training time required to get criminalists up to speed. San Mateo County Sheriff's Forensics lab estimates that it takes "9 months to 3 years depending on the discipline…"
      4. Staffing fluctuations (extended leave/FMLA, vacation, sick time, RDO)
      5. Criminalist Retention
      6. Turnover
   b) Legal Issues/Expectations
      1. Law enforcement expectations that everything in the case should be examined
      2. CSI Effect
      3. Time spent in court (travel, wait, testify)
      4. Amount of evidence profiles submitted

5. Excessive discovery and public records requests
6. Increase in demand for Serology/DNA requests
7. Training law enforcement and district attorneys

c) Lack of Support Staff
   1. No clerical support/office technician means that criminalists are required to spend valuable time ordering supplies, evaluating equipment, taking in evidence, etc.
   2. Insufficient supervisory personnel
   3. The amount of paperwork and administrative duties required adds significantly to the time it takes to work each case

d) Miscellaneous
   1. Quality Assurance demands
   2. Grant management
   3. Instrument maintenance
   4. Lack of facility space
   5. Budget constraints

III. Recruitment and Retention

A. **[14 out of 31 labs reported]** having an active recruitment process

B. Technical staff hiring process includes

Written Exam	Oral Exam	Background Investigation	Polygraph Exam
~~IIII IIII IIII IIII~~ IIII	~~IIII IIII IIII IIII IIII~~ IIII	~~IIII IIII IIII IIII IIII IIII~~	~~IIII IIII~~

C. Recruitment/retention problems - most of the labs cited low pay, cost of living, lengthy background checks, and a limited pool of qualified applicants as recently experienced recruitment/retention problems
   a) Other problems included burnout from having to juggle crime scene and technical casework burdens, high caseload demands and expectations; difficulties passing background checks and polygraphs; turnover (retirement, transfers, relocation); and not enough promotional opportunities

D. **[20 labs reported]** the following deficiencies in education and training of entry-level staff
   a) Basic language skills (oral and written)
   b) Lack of fundamental chemistry, genetics, molecular biology, and instrument analysis
   c) No formal forensic science background
   d) Lack of understanding of the field
   e) Lack of basic lab skills
   f) Lack of university level training in forensic sciences
   g) Difficulty finding candidates who meet quantitative analysis requirements
   h) New staff often not aware of the broader concepts and practices in forensic sciences

IV. Continuing Education/Training of Technical Staff

A. Availability of adequate training opportunities – **[27 labs reported]** having adequate training opportunities while the remaining **[5 reported]** that they did not.
   a) The most common provider of training is the California Criminalistics Institute
   b) The 5 labs reporting inadequate training opportunities cite problems such as recent budget constraints, not enough money allocated per person to meet current needs, and difficulty getting staff enrolled into firearms and trace courses

B. Mandatory continuing education – **[27 labs reported]** having some kind of mandatory continuing education protocol that their technical staff must observe. Examples include:
   a) DNA has a mandatory 8 hours of continuing education as well as the rest of the technical staff in their respective discipline(s)
   b) Clandestine Lab responders - required 8-hour recertification annually
   c) The laboratory follows the continuing education requirements as described in the FBI DNA Quality Assurance Standards
   d) Technical staff must have no less than eight hours of continuing education annually
   e) Each technical staff member must attend training at least once per calendar year
   f) Sworn criminalists must go to Advanced Officer Training and qualify with their sidearms once per year

C. Notable opportunities and deficiencies in the continuing education/training of technical staff

Opportunities	Deficiencies
Ability of staff to take CCI courses and attend professional conferences	Training is difficult to accomplish because it takes analysts away from doing casework
Ongoing education through CSU Los Angeles and UC Davis, CCI, FBI academy, and other federal and state programs	Training in new laws and new decisions needs to get to staff much quicker
Borkenstein course, DRE training, California Association of Toxicology meetings	CCI doesn't offer a sufficient number of classes
Coverdell Grants	Difficulty getting training approved that has either (1) registration/tuition fees the state must pay or (2) requires out of state travel.
CCI, CAC, IAI workshops and seminars	Lack of funding and encouragement from current administration to send employees to training
	Large case loads make it difficult for senior staff to train new employees

D. Major training needs
    a) General forensics training for new employees
    b) Funding for in-state and out-of-state training
    c) Time for journey level staff to provide on the job training to newer staff
    d) Technical training in all areas (DNA, biology, firearms & toolmarks, trace, serology, crime scene processing techniques, and controlled substances & clandestine drug lab analysis)

E. Other needs
    a) Crime scene and clandestine lab response vehicle
    b) Higher salaries
    c) Increased staffing/support staff
    d) Larger facility/additional space for evidence storage and case files
    e) Salary parity
    f) CSI Unit
    g) Full time firearms trainer
    h) High end scanning devices
    i) Larger facility
    j) Professional development/more resources to attend high level professional meetings at the national level

V. **Quality Assurance** *(Only labs that aren't accredited were required to answer questions pertaining to sections A-E below. All but 2 labs reported being accredited; however, some of those labs still answered the questions, which accounts for the low numbers of labs reported.)*

A. Disciplines for which Standard Operating Procedures manuals are not maintained
    a) Trace analyses such as hair and fibers
    b) Crime Scene Processing and Latent print (in process of being written)
    c) Polygraph (not an accredited discipline)

B. Disciplines for which Quality Assurance *manuals* are not maintained
    a) Trace analyses, animal dissections to recover bullet fragments, bullets or other trace evidence
    b) Crime Scene Processing and Latent print (in process of being written)
    c) Polygraph (not an accredited discipline)

C. **[7 labs reported]** that they maintain Quality Assurance *documents* in both individual case files and collectively in a centralized location
    a) **[6 labs reported]** that their quality assurance documents include unexpected results

D. **[4 labs reported]** the following disciplines in which their lab conducted an internal validation study
    a) Alcohol, Controlled Substances, Toxicology, Latent Prints, Traces (Various sub-disciplines), Crime Scenes, Serology DNA, Firearms (including Toolmarks), Impression Evidence
    b) Animal anti-serums, enzymes used for wildlife identification. All wild animals we conduct DNA analyses on. Hair, blood and tissue samples used in identification of wild animals. Carcass cooling parameters

c) DNA, CSI, Controlled Substance, Alcohol
d) Forensic Biology, Trace Evidence, Controlled Substances, Latent Prints, Questioned Documents

E. **[3 labs reported]** having a Quality Assurance Unit/Section. The employees who work in the QA unit have the following responsibilities
   a) Maintains and updates quality manual, evaluates instrumentation calibration and maintenance records, assesses adequacy of report review, schedules and coordinates quality system audits, selects, trains, and evaluates internal auditors, proposes improvements to quality system
   b) Quality Assurance Manager administers the proficiency test program, approves training plans, conducts audits, maintains Quality System Manuals, checks instrument calibration records, reviews and approves unit SOP manuals, checks validation of new techniques, and investigates technical problems

F. Laboratory protocol for the monitoring of staff courtroom testimony
   a) Every staff member is required to take to every court appearance testimony review cards for the DA, defense and judge
   b) Phone call follow-up with DA/court officer
   c) Each analyst is monitored by a crime lab supervisor or designee at least once a year
   d) Written or verbal feedback from court or prosecuting attorney
   e) Review of transcripts

G. A majority of the labs report that each analyst is monitored by a supervisor or technical peer at least once a year.
   a) Outliers include:
      1. Less than once a year
      2. Daily