Forensic Scientist III (Biology/DNA Unit)
Jefferson County Sheriff's Office Crime Laboratory
Pevely, Missouri | Full-time
Salary: $84,050- $100,100.00 annually
Application deadline: Open until filled

Help build the future of forensic DNA services in Jefferson County
The Jefferson County Sheriff's Office Crime Laboratory (JCSOCL) seeks an experienced forensic DNA scientist to serve as Forensic Scientist III in its developing Biology/DNA Unit. Applicants must meet the FBI Quality Assurance Standards qualifications for a DNA Technical Leader. The selected candidate may be designated DNA Technical Leader based on laboratory needs.

This position offers an opportunity to help shape a developing Biology/DNA Unit, guide implementation of modern forensic DNA methods, mentor scientists, and support the laboratory's pursuit of accreditation. Working with the Laboratory Director and DNA personnel, the selected candidate will establish and maintain scientifically sound practices that support reliable, impartial forensic services.

Location
Located in Pevely, Missouri, the Jefferson County Sheriff's Office Crime Laboratory combines small-community living with access to the St. Louis region. The area offers an affordable cost of living, a range of suburban and rural housing options, and nearby parks, trails, and outdoor recreation in the scenic Ozarks foothills. Employees can enjoy Jefferson County's relaxed pace of life while remaining within reach of St. Louis's dining, professional sports, cultural attractions, and major airport.

Laboratory technology
The laboratory's DNA workflow combines automated sample processing, expanded STR testing, and advanced interpretation tools:

- **AutoMate Express** — automated DNA extraction.
- **Hamilton NIMBUS Presto** — automated sample processing and liquid handling.
- **QuantStudio 5 and Quantifiler Trio** — real-time PCR quantification and assessment of human DNA.
- **SeqStudio Genetic Analyzer** — capillary electrophoresis.
- **PowerPlex 35GY System** — Autosomal STR and YSTR amplification
- **FaSTR** — DNA profile analysis.
- **STRmix** — probabilistic genotyping and mixture interpretation.
- **DBLR** — likelihood-ratio evaluation, kinship analysis, and database comparison applications.

The successful candidate will help guide validation, implementation, troubleshooting, and continued development of these capabilities.

Primary responsibilities

- Perform forensic biology/DNA examinations, interpret results, prepare reports, and provide expert testimony as assigned and authorized.
- Conduct technical reviews and mentor laboratory personnel.
- Develop and evaluate procedures, conduct validation studies, and support accreditation preparation.
- Participate in quality assurance, proficiency testing, audits, and technical troubleshooting.
- If designated DNA Technical Leader, oversee DNA technical operations and exercise the authority and responsibilities required by the current FBI QAS.

Minimum qualifications

Applicants must meet the applicable qualifications for a DNA Technical Leader under the current **FBI Quality Assurance Standards for Forensic DNA Testing Laboratories**, including:

Education and coursework

- A **master's degree or higher in a biology-, chemistry-, or forensic science-related area**.
- Successful completion of **at least 9 credit hours of coursework in biology- or chemistry-related areas that provide an understanding of the foundation of DNA analysis**.
- **Additional coursework in statistics or population genetics**.
- **At least one graduate-level course** among the required coursework.

Documented permanent ASCLD degree waivers or previously accepted Technical Leader educational qualifications may be considered where permitted by the current FBI QAS and accepted by JCSOCL.

Experience and training

- At least **three years of experience as a qualified analyst performing human DNA analysis on forensic samples**; current or previous qualifying experience is acceptable.
- Current or previous analyst qualification in each technology used by the laboratory, or completion of documented training in each technology within one year of appointment.
- Previous successful completion of the current FBI DNA auditor training course, or successful completion within one year of appointment.

Professional skills

- Strong knowledge of forensic DNA analysis, mixture interpretation, statistical evaluation, contamination prevention, and quality assurance.
- Ability to evaluate scientific data, document defensible decisions, and communicate technical information clearly.
- Ability to lead collaboratively, mentor personnel, and maintain confidentiality and impartiality.

Preferred qualifications

- Previous service as a DNA Technical Leader, senior DNA analyst, or technical reviewer.
- Experience with STRmix, probabilistic genotyping validation, and complex DNA mixtures.
- Experience with laboratory startup, accreditation preparation, or implementation of new DNA methods.
- Familiarity with one or more of the laboratory's listed instruments and software systems.
- Experience with kinship statistics, likelihood-ratio interpretation, or DBLR.
- Experience providing expert testimony and training forensic scientists.

How to apply
Submit a cover letter, résumé or curriculum vitae, and academic transcripts documenting the required degree and coursework to kkellogg@jeffcomo.org

Applicants should identify the courses used to satisfy each coursework requirement and provide course descriptions or syllabi when the subject matter is not clear from the transcript.

Applicants relying on a documented educational waiver or previously accepted Technical Leader qualifications should include supporting documentation.