

NO. 72685-4-1

IN THE COURT OF APPEALS  
OF THE STATE OF WASHINGTON  
DIVISION I

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In re Personal Restraint  
Petition of

BRANDON EARL,

Petitioner.

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BRIEF IN OPPOSITION TO  
PERSONAL RESTRAINT PETITION

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## **I. ISSUES**

At trial, evidence was introduced of DNA analysis. Following trial, the defense obtained personnel records of the forensic scientist. These records showed that over 2½ years before trial, questions had been raised about some of the scientist's procedures, but these problems had been corrected. The records showed that the scientist's testimony at trial had *understated* the significance of the test results.

(1) Would these records have probably changed the outcome of the trial, so as to justify a new trial based on newly discovered evidence?

(2) Do these records undermine confidence in the outcome of the trial, so as to make their non-disclosure a constitutional violation?

## **II. STATEMENT OF THE CASE**

### **A. EVIDENCE AT TRIAL.**

The report of proceedings covering the trial is in the records of this court under cause no. 70144-4-l. That evidence showed the following:

## **1. Molestation And Disclosure.**

On Christmas Eve, 2010, there was a family party at a home in Granite Falls. Among the people at the party were 3½-year-old M.F., A.M. (her mother), S.M. (her grandmother), and Brandon Earl (defendant at trial, petitioner now<sup>1</sup>). At one point in the evening, A.M. noticed that M.F. was not with the other children. A.M. went upstairs, where the children had been playing earlier. RP 273-74. She opened the door to the defendant's bedroom.

When I opened it, I could hear a bunch of commotion. I look around, and I can see Brandon coming from the left side of the bed, kind of readjusting, sitting up to the right side of the bed. The covers were over his bottom half, fully dressed. [M.F.] is more towards the foot of the bed on the left side.

RP 279.

A.M. picked up her daughter and left the room. As they were walking down the stairs, M.F. said that Brandon told her not to tell. A.M. took M.F. into a bathroom and asked her what happened. M.F. didn't say anything. A.M. left the bathroom and sat her daughter on a stool next to S.M. A.M. then went to talk to the defendant's wife. RP 284-85.

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<sup>1</sup> For simplicity, Earl will be referred to as "defendant."

S.M. asked M.F. what she was doing. M.F. said she was playing or watching TV. She then bent over and whispered in S.M.'s ear, "He licked my pee-pee." S.M. asked who she was talking about. M.F. said Brandon. RP 360-62.

S.M. went into the garage, where A.M. was talking to the defendant and his wife. S.M. told them what M.F. had said. The defendant said no, he was blowing butterflies. RP 364-65. Later that evening, A.M. and M.F. went home. As M.F. was getting ready for bed, she told her mother, "He made a mess down there." RP 295-96.

A few days afterwards, this incident was reported to police. RP 298, 302-03. On January 7, 2011, police interviewed the defendant. The defendant told police that he was "blowing raspberries" on M.F.'s stomach. While he was doing this, his "face might of come in contact with down there." He said that his face was accidentally in contact with her genital area for 30 seconds. Ex. 58 at 27, 38.

## **2. Laboratory Testing.**

Police were given two pairs of underwear that M.F. had been wearing around that time. On one of the pairs, amylase was found on the inside of the crotch area. RP 672. Amylase is an enzyme

found in saliva. It is found in lower levels in other body fluids, including urine. RP 667. There was staining and a urine odor on that pair of underwear. RP 671. The other pair had the same staining and odor, but no amylase was found on it. 5 RP 664, 727.

On the same pair of underwear that had the amylase, male DNA was also found. RP 694. Forensic scientist Dr. Michael Lin tested this sample using Y-STR analysis. That analysis looks solely at the Y chromosome, which is found only in males. This technique is useful for samples that contain large amounts of female DNA and smaller amounts of male DNA. RP 768-69, 772-73. The analysis disclosed a profile identical with that of the defendant. RP 838.

Y-STR profiles are identical for all males within the same line of inheritance. RP 769. As a result, the frequency of a particular profile must be estimated using the "counting method." RP 819. This involves comparing the profile to a database maintained by the National Center for Forensic Sciences. RP 839. As the database grows in size, it allows a more specific calculation of the frequency of any particular profile. RP 841.

In this case, the defendant's profile did not exist in the database. That fact establishes an upper limit on the probable frequency of this profile within the U.S. population. This limit is

calculated using a 95% confidence interval. In other words, it is 95% likely that the true frequency of this profile is less than the estimated limit. It is only 5% likely that the true frequency is more than that limit. RP 845-47.

During the lengthy interval between the lab tests and the trial, more profiles were added to the database. The defendant's profile still did not exist in the expanded database. As a result, the probable frequency of this profile decreased. From the database that existed in November, 2011, the estimated frequency of the defendant's profile was less than one in 2800 individuals. On July 29, 2012, the database was updated. Based on the larger database, the estimated frequency of the defendant's profile was reduced to less than one in 4400. RP 847-49. During trial, the database was updated again, allowing the estimated frequency to be reduced to less than one in 5200. RP 847-49, 902. Each time, it was 95% likely that the true frequency was smaller than the estimate, based on the then-existing size of the database.

#### **B. MOTION FOR NEW TRIAL.**

Over a year after the conviction, the defendant filed a motion for new trial. The motion was transferred to this court for consideration as a personal restraint petition.

This motion is based on a number of documents from the Washington State Patrol Crime Lab concerning Dr. Lin. These documents are identified in the motion and the petitioner's brief as Attachments A through L.<sup>2</sup> They are attached to this brief as Appendix 1. In response, the State presented a sworn declaration from Dr. Lin's supervisor, Lorraine Heath. This declaration is attached to this brief as Appendix 2.<sup>3</sup>

Dr. Lin was hired by the Washington State Patrol Lab in February, 2008. He was in trainee status until December, 2009. App. 2-2 ¶ 3. His lab work in this case was completed in November, 2011. RP 844. He testified on Friday, February 1, and Monday, February 4, 2013. RP 765-907. On March 1, he was removed from active case work pending completion of a work improvement plan. He resigned from the Crime Lab in June, 2013. App. 2-2 ¶ 3.

The first three documents presented by the defendant deal with Dr. Lin's work while he was a trainee. Attachment A (dated 6/16/09) sets out four problems with his lab work: (1) He was not properly disposing of bio-hazardous trash. (2) He did not

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<sup>2</sup> Attachment M was a defense discovery motion. It contains no information about Dr. Lin.

<sup>3</sup> The Attachments and Declaration will be referred to in this brief by the page numbers in the Appendix.

consistently inform his supervisor of inability to meet deadlines. (3) He was mixing sperm cells with his pipette. As a result, he could “loose” sperm fraction pellets and “compromise low level cases.” (4) In one particular case, he had made a second slide without carefully examining the first slide. This could “waste precious sample.” It could also lead to an incorrect conclusion if the second slide was negative. App. A-1.

Attachment B (dated 9/29/09) sets out a “Job Performance Improvement Plan” to correct these problems. App. B-1 - B-3. Attachment C (dated 12/4/09) shows his successful completion of that plan. App. C-1 – C-3.

The next two documents deal with problems that occurred shortly after Dr. Lin began independent lab work. Attachment D (dated 4/27/10) refers to two incidents that occurred on April 23, 2010. Both involved his use of phatebas paper. This reagent is used to screen for the presence of amylase, a component of saliva. In the first incident, he used a “known saliva center” to check the functioning of the paper. This “sample” was placed within close proximity of evidence. When questioned about this, Dr. Lin gave an evasive answer. In the second incident, Dr. Lin used phatebas paper to screen panties that had visible fecal material. This

procedure led to meaningless results, since amylase is also found in fecal material. App. D-1.

The supervisor's declaration clarified these incidents. The second incident wasted time and money, but it would not compromise the case or its results. The first incident involved use of Dr. Lin's own saliva. The procedure used by him created the risk that the sample could be contaminated with his own DNA. Such contamination would, however be detected by routine quality controls. App. 2-4 ¶ 8. The lab compares any unknown DNA profiles to those of their staff. There was never any indication that an evidence sample was contaminated with Dr. Lin's DNA. App. 2-2 - 2-3 ¶¶ 4-5.

Attachment E (dated 5/4/10) refers to two other incidents. In the first, Dr. Lin had not completed a "case approach work sheet." In the second, he used "an unnecessary number of reagent blanks." App. E-1. The supervisor's declaration explains that the first incident involved a failure to follow directions rather than any action that could compromise a case. The second involved lack of efficiency. App. 2-4 ¶ 9.

Attachment E is the last document that relates to Dr. Lin's work prior to trial in the present case. The incidents discussed in

that document occurred 18 months before he completed the lab work in this case (in November, 2011). They were almost 33 months before his trial testimony (in February, 2013).

The next document in chronological order is Attachment G. This is a "Court Testimony Performance Evaluation" dated 2/4/13. The document says that Dr. Lin "gave a poor, unconfident, unprepared impression to the jury and the judge." He could not answer questions concerning subjects that he should have known. He gave some technically incorrect statements. He failed to appropriately qualify statements. App. G-1 – G-2.

The supervisor who prepared this document was Lorraine Heath. Her declaration provides further details concerning her criticism. Dr. Lin had been unable to explain how he avoided contamination, even though the information was contained in his lab notes. He was unable to answer questions concerning the quantity of DNA in touch samples and urine. Correct testimony would have been that the amount of male DNA found in this case was inconsistent with those sources. Overall, "[t]he effect of [Dr. Lin's] answers was to significantly understate the significance of lab results." App. 2-4 – 2-6 ¶ 11.

Attachment H is another Job performance Documentation Record, dated 2/8/13. It sets out two more incidents related to the trial. When Dr. Lin was questioned about the nature of a pre-trial hearing, he gave an evasive answer. During the weekend between the days that he testified, he stayed in a hotel in Everett instead of returning to Spokane. This was contrary to instructions that he had received. The document also mentioned a prior incident in October, 2012, involving the storage of a mop. He had raised the issue at a section meeting, even though it had previously been resolved with a supervisor. App. H-1 – H-2.

The remaining items deal with the Crime Lab's response to these incidents. Attachment I is a memo (dated 2/19/13) removing Dr. Lin from regular casework duties pending completion of a Job Performance Improvement Plan. App. I-1. Attachment J is a letter (dated 3/1/13) notifying the American Society of Crime Lab Directors of this removal. App. J-1. Attachment F is a Corrective Action Plan that was signed on March 15.<sup>4</sup> App. F-1. Attachment K (dated 3/27/13) is the Performance Improvement Plan. App. K-1 –

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<sup>4</sup> The Motion for New Trial organized this document by the "Date Notified" rather than the signature date. As a result, it is out of chronological order.

K-3. Finally, Attachment L (dated 10/28/13) is a memo noting Dr. Lin's resignation. App. L-1.

### **III. ARGUMENT**

#### **A. THE "NEWLY DISCOVERED EVIDENCE" FAILS TO SHOW THAT THE EVIDENCE INTRODUCED AT TRIAL WAS UNRELIABLE.**

The defendant seeks a new trial based on Crime Lab personnel records. Before applying the applicable legal standards, it is important to recognize exactly what the records show and what they do not show. The problems identified by the defendant can be classified into three areas: issues concerning Dr. Lin's lab work, issues concerning his testimony at this trial, and issues concerning his honesty.

##### **1. Issues Concerning Lab Work.**

The defendant claims that Dr. Lin was "incompetent." The documents do not support this claim. While Dr. Lin was a trainee, there were some problems with his lab work. App. A-1. There were a few additional problems within the first four months after he began doing independent lab work. App. D-1 – D-2, E-1. During the ensuing period of over 2½ years until the trial in this case, there were no documented problems.

Furthermore, most of these incidents had nothing to do with the accuracy of Dr. Lin's results. Some of them involved administrative matters, such as filling out forms or notifying supervisors of delays. App. A-1, E-1. Some of them involved inefficiency, such as over-use of expensive reagents. App. D-1, E-1. One of them involved improper disposal of trash. App. A-1. Although these problems needed to be corrected, none of them bear on the guilt of this defendant.

This leaves only three incidents that could affect the accuracy of Dr. Lin's results. Two of those, which occurred during training, had the potential of creating false *negatives*. Dr. Lin had stirred a sample with his pipette, which created the risk of losing part of the sample. He also once created a second slide without an adequate examination of the first, which wasted sample and could have led to a false negative. App. A-1. Again, these problems needed to be corrected, but they had no bearing on the accuracy of a *positive* result obtained in a test conducted by Dr. Lin.

This leaves one incident that created the risk of contaminating a sample. App. D-1. This is the *only* incident creating this danger that has been documented during the five years that Dr. Lin worked for the Crime Lab. The potential contamination,

however, was from Dr. Lin's *own* DNA. Any such contamination would be detected by routine quality controls. There is no indication that it ever occurred. App. 2-2 – 2-3 ¶¶ 4-5. And if it did occur and somehow went undetected, it would lead to the false *exculpation* of a suspect, not false *inculpation*.

## **2. Issues Concerning Trial Testimony.**

The second area relied on by the defendant concerns problems with Dr. Lin's testimony in this trial. These problems are documented in one memorandum – the Court Testimony Performance Evaluation dated 2/4/13. App. G-1 – G-2. More details about these problems are set out in the declaration of Dr. Lin's supervisor. App. 2-4 – 2-6. Other documents contain brief summaries of these problems, without setting out any details. App. F-1, J-1, K-1.

The Performance Evaluation says that Dr. Lin “gave the impression of being unfamiliar with both his case file, SOPs [standard operating procedures], and various areas of QA/QC[quality assurance/quality control].” This was reflected in his inability to answer various questions, his “equivocat[ion] about how he performed the work,” and his failure to clarify that various procedures were equally acceptable. Additionally, Dr. Lin had made

“technically incorrect statements” and “failed to appropriately qualify statements.” These included statements concerning the Y-STR database and statements concerning other possible sources of the DNA found in the lab tests. App. G-1- G-2.

The supervisor’s declaration explains that the effect of Dr. Lin’s testimony was to “significantly understate the significance of the lab results.” App. 2-4 ¶ 11. For example, he was unable to explain various aspects of the statistical analysis. He displayed lack of knowledge concerning the amount of DNA found in touch samples and urine. “Correct testimony would have been clear that the amount of male DNA present in this sample was not consistent with a touch DNA source” and likewise “not consistent with the source being urine.” App. 2-5 – 2-6 ¶ 11.c., 11.d.

For the most part, the problems with Dr. Lin’s testimony were neither “newly discovered” nor “undisclosed.” To the extent that he failed to answer questions, that failure was apparent to everyone at the trial. The defense also had its own DNA expert, who could provide information (and testimony) about possible sources of the DNA. The defense expert testified that the amount of DNA found in the sample was consistent with a touch DNA source. RP 938-39. According to his supervisor, Dr. Lin’s error was giving *too much*

credence to the opinions of the defense expert. The Motion for New Trial presents nothing to the contrary. Such an error is properly of great concern to the Crime Lab – but it is not exculpatory evidence.

### **3. Issues Concerning Honesty.**

The defendant claimed that the documentation showed that Dr. Lin was “noted to not be forthcoming regarding past failures to follow proper procedures and when questioned by his supervisor about Earl’s case.” Petitioner’s Opening Brief at 22. This claim appears to reflect two incidents. In one, Dr. Lin was counseled on a Friday concerning proper laboratory procedures. On the following Monday, a different supervisor asked what procedure he used. Dr. Lin responded by explaining the procedure that he had been told to use on Friday. The supervisor thought this “evasive,” but it is equally likely that Dr. Lin answered the question that he thought he had been asked. App. D-1.

In the second incident, Dr. Lin was asked about the foundational hearing during this trial. He responded that it was “not very important.” App. H-1. Again, the supervisor thought this “evasive,” but it may have reflected Dr. Lin’s honest opinion. In any event, neither of these incidents involve any outright falsity. Neither casts any genuine doubt on the accuracy of Dr. Lin’s lab notes or

the truthfulness of his testimony. Two possible instances of “evasiveness” during five years of employment have essentially no bearing on this case.

In short, the documentation set out a few instances of improper lab procedure, which occurred over a year before the testing in this case. None of those incidents involved any danger of cross-sample contamination. The documents also indicate that Dr. Lin’s testimony provided unjustified *support* to exculpatory to exculpatory defense theories. This court must now determine whether these documents warrant a new trial.

**B. THE “NEWLY DISCOVERED EVIDENCE” DOES NOT SATISFY THE STANDARDS FOR GRANTING A NEW TRIAL.**

The defendant claims that the documents establish “newly discovered evidence” justifying a new trial. When a new trial is sought on this ground, the party must demonstrate that the evidence

(1) will probably change the result of the trial; (2) was discovered since the trial; (3) could not have been discovered before trial by the exercise of due diligence; (4) is material; *and* (5) is not merely cumulative or impeaching.

State v. Williams, 96 Wn.2d 215, 223, 634 P.2d 868 (1981) (court’s emphasis). Here, the evidence fails the most fundamental portion of

the test: it is not evidence that would *probably* change the result of the trial. Parts of the evidence fail other portions of the test as well.

**1. Since The DNA Results Could Not Have Resulted From Contamination By Dr. Lin, The Court Cannot Conclude That The New Evidence Would Probably Change The Result Of The Trial.**

To justify the grant of a new trial, it is not sufficient that evidence may change the outcome of the trial. Rather, the court must be able to conclude that the evidence *will* probably change the result. State v. Peele, 67 Wn.2d 724, 731, 409 P.2d 663 (1968). The new evidence here does not satisfy that standard.

To begin with, the DNA evidence must be viewed in context. Contrary to the defendant's claim, the DNA result was not the primary evidence against the defendant. The direct proof of the crime came from the victim's statements. This was strongly corroborated by the defendant's statements to police. He told them that his face was "accidentally" in contact with the victim's genital area for 30 seconds. Ex. 58 at 27, 38. It is highly unlikely that a jury would believe that a 30-second contact between the defendant's face and the victim's genitalia was "accidental." The victim's statements were further corroborated by her mother's observations

of a “commotion” when she found the defendant in bed with the victim. RP 279.

The DNA test results provided some further corroboration of this contact. The defense was, however, successful in minimizing the impact of this evidence. There was evidence that the DNA could have been deposited by casual touching. RP 939. There was evidence that it could have been transferred from a reference sample because of improper packaging. RP 932. There was also evidence implying that it could have represented urine from a dirty toilet seat. RP 520, 881-83, 943-44. All of this significantly reduced the significance of the DNA evidence. In light of this evidence, there is little likelihood that further impeachment of the DNA evidence would have changed the result.

There are three possible exculpatory theories of how the defendant’s DNA got into the sample tested by Dr. Lin: (1) it came from some bodily substance other than saliva; (2) it came from contamination before Dr. Lin handled the samples; or (3) it came from contamination resulting from his improper handling of the samples. None of these theories are supported by new evidence to an extent that would probably change the result of the trial.

With regard to theory (1), the new evidence is *inculpatory*. The deficiency in Dr. Lin's testimony was that it *exaggerated* the likelihood that the DNA came from some other source. He did not show adequate familiarity with information concerning the quantity of DNA expected from touch or urine samples. According to his supervisor's declaration, correct testimony would have been that the amount of DNA detected with inconsistent with either of these sources. App. 2-5 – 2-6, ¶ 11.c.-d. The new evidence on this point would make conviction more likely, not less.

With regard to theory (2), the new evidence is irrelevant. It does not question the lab work of anyone other than Dr. Lin. It therefore casts no new light on whether errors in that lab work occurred.

With regard to theory (3), contamination from mis-handling by Dr. Lin is not a reasonable explanation of the test results in this case. This is because male DNA was extracted from the sample *before* he handled the evidence. If that DNA came from someone other than the defendant (or his paternal relatives), and if the sample was then contaminated with the defendant's DNA, then *two* DNA profiles would have been found – one from the defendant, and the other from the person whose DNA was on the underwear.

There were not, however, two male DNA profiles – there was only one. Accordingly, that profile could not have resulted from Dr. Lin’s mis-handling of the sample. App. 2- 3 ¶ 6.

There is no evidence that Dr. Lin has *ever* mishandled a sample in a way that resulted in contamination. Although he had made some procedural mistakes years before, most of these had no bearing on the possibility of contamination. Furthermore, the Crime Lab has procedures in place to detect contamination. App 2- 2 ¶ 4. None has ever been detected in any of Dr. Lin’s lab work. App. 2-3 ¶ 5. Even if that might have happened in some other case, however, it did not happen in *this* case. The presence of male DNA *before* he handled the sample, combined with the detection of only a *single* profile, ensure that this profile was not the result of contamination. There is no basis for this court to conclude that the new evidence would *probably* change the result of the trial.

**2. The New Evidence Does Not Establish That The Evidence Was Tampered With Or Contaminated, So As To Destroy The “Chain Of Custody.”**

The defendant claims that the result of a new trial would be different because the new evidence breaks the “chain of custody.”

[W]here evidence is not readily identifiable and is susceptible to alteration by tampering or contamination, it is customarily identified by the

testimony of each custodian in the chain of custody from the time the evidence was acquired. This ... test requires the proponent to establish a chain of custody with sufficient completeness to render it improbable that the original item has either been exchanged with another or been contaminated or tampered with. Factors to be considered include the nature of the item, the circumstances surrounding the preservation and custody, and the likelihood of tampering or alteration. The proponent need not identify the evidence with absolute certainty and eliminate every possibility of alteration or substitution. Minor discrepancies or uncertainty on the part of the witness will affect only the weight of the evidence, not its admissibility.

State v. Roche, 114 Wn. App. 424, 436, 59 P.3d 682 (2002)

(court's emphasis; citations omitted).

Here, Dr. Lin's lab notes confirm that he followed proper procedures to prevent contamination. App. 2-3, ¶ 6. There is no evidence that he has falsified lab notes, either in this case or any other. There is also no evidence that *any* sample he has ever tested became contaminated. App. 2-3 ¶ 5. As discussed above, the evidence in this case demonstrates that the lab results *could not* have resulted from contamination during testing by Dr. Lin. App. 2-3 ¶ 6. Any possibility that the sample was contaminated, notwithstanding all of these facts, affects the weight of the evidence, not admissibility.

The defendant seeks to compare this case to Roche. There, newly discovered evidence established that a criminalist had been stealing drugs that he had been testing. He lied to his supervisors about these activities. There was also evidence that he had been “dry labbing” – that is, fabricating test results. The court considered these facts “critical with respect the [the criminalist’s] own credibility, the validity of his testing, and the chain of custody.” Roche, 114 Wn. App. at 437-38. It therefore ordered a new trial.

The present case is entirely different. There is no evidence that Dr. Lin stole or altered evidence. There is no evidence that he lied to his superiors or anyone else. There is no evidence that he altered test results. Under these circumstances, any questions about his credibility or the reliability of his procedures went to the weight of the evidence, not the admissibility. The newly discovered evidence does not affect the “chain of custody.”

**3. The New Evidence Does Not Establish That The Test Results Were So Unreliable As To Be Excluded Under ER 702.**

The defendant also claims that the new evidence establishes that Dr. Lin’s testimony was inadmissible under ER 702. “The admissibility of expert testimony under this rule depends upon three factors: whether (1) the witness qualifies as an expert, (2) the

opinion is based upon an explanatory theory generally accepted in the scientific community, and (3) the expert testimony would be helpful to the trier of fact.” State v. Ciskie, 110 Wn.2d 263, 270-71, 751 P.2d 1165 (1988). “If the testing before the trial court shows that the testing procedure as performed was so flawed as to be unreliable, the results may be inadmissible because they are not helpful to the trier of fact.” State v. Russell, 125 Wn.2d 24, 51, 882 P.2d 747 (1994).

Here, Dr. Lin had extensive education, which qualified him as an expert. RP 766-67. No question has been raised about the scientific validity of Y-STR testing. As discussed above, the evidence also shows that the testing in this case was performed in a reliable manner. Therefore, Dr. Lin’s testimony was admissible under ER 702. Once the requirements of that rule are satisfied, questions about the reliability of the evidence go to weight, not admissibility. Russell, 125 Wn.2d at 51.

The defendant’s arguments confuse issues about Dr. Lin’s lab work with issues about his testimony. “The Job Performance Improvement Plan was intended only to rectify his problems with courtroom testimony, as there were no concerns regarding his laboratory casework.” App. 2-6 ¶ 12. At any new trial, Dr. Lin would

probably be an essential witness with regard to the test *results* – but there is no legitimate question about the admissibility of those results. He would not, however, be a necessary witness concerning the *interpretation* of those results. In light of subsequent developments, his testimony would doubtless be supplemented with that of some other expert who is more knowledgeable concerning those issues.

Such testimony would be *less* favorable to the defendant. Another expert could answer questions about the statistical analysis that Dr. Line was unable to answer. App. 2-5 ¶ 11.b. Even more significantly, another expert could provide stronger refutation of the defense expert's claim that the defendant's DNA could have been deposited by causal touching. App. 2-5 – 2-6 ¶ 11.c. Notwithstanding the new evidence, the State's case at any retrial would be *stronger*. The new evidence would not thus render any key evidence inadmissible. It cannot be said that the new evidence would probably change the result of the trial.

**4. The “Newly Discovered Evidence” Also Does Not Warrant A New Trial Because It Is Merely Impeaching, And Because It Was Or Could Have Been Discovered During The Trial.**

Portions of the new evidence also fail other requirements for granting a new trial. To begin with, some of it was not discovered

since the trial. A large portion of the criticism of Dr. Lin's testimony involved his inability to answer questions. App. G-1 – G-2. His failure to answer questions was evident to everyone during the trial.

To the extent that the problems were not disclosed during trial, most could have been discovered through the exercise of due diligence. With respect to the prior incidents, the defense never submitted a discovery request for personnel records. They requested "contamination and discrepancy entries," but none of the incidents involved any contamination. Mot. for New Trial, Attachment M. Nor were there any "discrepancies" between Dr. Lin's test results and those of any one else. With respect to errors in Dr. Lin's testimony, the defense had their own DNA expert, who could provide correct information.

Finally, most if not all of the new evidence is merely impeaching. "When the only purpose of new evidence is to impeach or discredit evidence produced at trial, a new trial cannot be properly granted." State v. Sellers, 39 Wn. App. 799, 807, 695 P.2d 1014, review denied, 103 Wn.2d 1036 (1985). Here, defendant has presented nothing that is affirmatively exculpatory. The sole purpose of the new evidence is to discredit the testimony of Dr. Lin. Such evidence cannot support the grant of a new trial.

This court has recognized an exception to the rule barring new trials based on newly discovered impeachment. "Impeaching evidence can warrant a new trial if it devastates a witness's uncorroborated testimony establishing an element of the offense." State v. Savaria, 82 Wn. App. 832, 838, 919 P.2d 1263 (1996). In Savaria, the defendant was charged with harassment. The sole evidence of the alleged harassment was the victim's testimony. The defendant testified that she had called her father after receiving the threat, and the father corroborated this testimony. After trial, the defendant discovered evidence of telephone records concerning that call. The opinion does not describe the records, but it indicates that they "devastate[d]" her credibility. Under such circumstances, a new trial was required.

The court applied the holding of Savaria in Roche. As discussed above, that case involved a witness who had stolen evidence, lied about that conduct, and may have falsified lab results. This court held that evidence of this misconduct was not "merely impeaching" because it was "critical, with respect to [the analyst's] own credibility, the validity of his testing, and the chain of custody." Roche, 114 Wn. App. at 438.

The situation in the present case is significantly different from these cases. In Savaria, the impeached witness's testimony was the sole evidence of the threats that constituted the crime. In Roche, the impeached witness provided essential evidence of a necessary element – the identity of the substances that the defendants possessed. In the present case, Dr. Lin's testimony did not directly establish any element. Proof of the elements came from the victim's statements and the defendant's own admissions. Dr. Lin's testimony simply provided some corroboration for that testimony. Even if Dr. Lin had not testified at all, or if the jury had completely disbelieved his testimony, there was sufficient evidence for the jury to convict the defendant.

Nor did the testimony "devastate" Dr. Lin's testimony. In Roche, the new evidence showed that the witness had lied in his testimony in other cases and may have fabricated evidence. In Savaria, the opinion is not clear, but it appears that the new evidence contradicted the witness's testimony at trial. In the present case, the evidence at most suggests that Dr. Lin might have made some errors in his lab work. This evidence may reduce his credibility, but it does not "devastate" his credibility as in the other cases.

The five requirements for granting a new trial are conjunctive. “The absence of any one of the five factors is grounds for the denial of a new trial or the reversal of the grant of a new trial.” Williams, 96 Wn.2d at 223 (citations omitted). Even if some particular evidence would probably change the result of the trial, that fact is not sufficient to justify a new trial. The evidence must also be newly discovered, not discoverable through diligence, *and* not merely impeaching. Here, much of the new evidence was evident at trial. Most of the rest of the rest could have been discovered at or prior to trial. All of the evidence is merely impeaching. The defendant is therefore not entitled to a new trial based on newly discovered evidence.

**C. THE NEW EVIDENCE DOES NOT UNDERMINE CONFIDENCE IN THE VERDICT, SO THAT ITS NON-DISCLOSURE VIOLATED CONSTITUTIONAL REQUIREMENTS.**

Alternatively, the defendant claims that the non-disclosure of documents concerning Dr. Lin violated the constitutional requirements of Brady v. Maryland, 373 U.S. 83, 83 S.Ct. 1194, 10 L.Ed.2d 215 (1963).

There are three components of a true Brady violation: The evidence at issue must be favorable to the accused, either because it is exculpatory, or because it is impeaching; that evidence must have been

suppressed by the State, either willfully or inadvertently; and prejudice must have ensued.

In re Stenson, 174 Wn.2d 474, 486-87 ¶ 18, 276 P.3d 286 (2012).

In this context, “prejudicial” and “material” are used interchangeably. Stenson, 174 Wn.2d at 487 ¶ 18. Evidence is “material,” and its non-disclosure is “prejudicial,” if “there is a reasonable probability that, had the evidence been disclosed to the defense, the result of the proceeding would have been different.” A “reasonable probability” exists if the suppression of information “undermines confidence in the outcome of the trial.” Id. ¶ 20.

Here, the “new” evidence deals with two subjects: Dr. Lin’s lab techniques, and his testimony. These two portions of the evidence warrant separate analysis.

With regard to Dr. Lin’s lab errors, it is doubtful whether the evidence was “exculpatory” in any meaningful sense. This question is, however, subsumed within the question of “materiality.” If the evidence was “material” in the constitutional sense, it was also sufficiently exculpatory to require disclosure. Conversely, if the defendant was not “material,” there was no constitutional violation even if the evidence was “exculpatory.”

The evidence does not, however, satisfy the requirement of materiality. The reasons for this are largely the same as was discussed above. There was only one incident in Dr. Lin's record that could result in contamination. That incident occurred over 2½ years before the trial in the present case. App. D-1. Quality control had never detected any contamination. Lab notes showed that proper procedures had been followed. Finally, the facts surrounding the testing in this case showed that the DNA identified by Dr. Lin *could not* have resulted from contamination during his handling of the sample. App. 2-3 ¶¶ 5-6.

With regard to the problems with Dr. Lin's testimony, there was no "suppression" of evidence. "There is no Brady violation ... if the defendant, using reasonable diligence, could have obtained the information at issue." In re Gentry, 137 Wn.2d 378, 396, 972 P.2d 1250 (1999). The problems arose in open court or during defense interviews. To the extent that Dr. Lin failed to answer questions, that failure was obvious to everyone. To the extent that his answers were incorrect, the errors could (and possibly were) discovered by consultation with the defendant's own expert. Moreover, the new evidence on this point was *not exculpatory*. Correct information would have strengthened, not weakened, the defense case. It

would have minimized the likelihood of contamination and further discounted the possibility of a “touch DNA” source. App 2-4 – 2-6 ¶ 11.

Nor did the evidence provide any substantial reason to question Dr. Lin’s honesty. At most, it indicated that he might have been “evasive” on two occasions during his five years of employment. It would be a vast stretch to use those incidents to include that he falsified his lab notes. Whether considered separately or together, this evidence provides nothing that would undermine confidence in the outcome of this trial. Since the evidence was not “material” in the constitutional sense, there was no Brady violation.

**IV. CONCLUSION**

The personal restraint petition should be dismissed.

Respectfully submitted on August 12, 2015.

MARK K. ROE  
Snohomish County Prosecuting Attorney

By:   
\_\_\_\_\_  
SETH A. FINE, WSBA # 10937  
Deputy Prosecuting Attorney  
Attorney for Respondent

## **APPENDIX 1**

Attachment A – Job Performance Documentation Record (6/16/09)

A-1

Attachment B – Job Performance Improvement Plan (9/29/09)

B-1

Attachment C – Job Performance Improvement Plan Conclusion (12/4/09)

C-1

Attachment D – Job Performance Documentation Record (4/27/10)

D-1

Attachment E – Job Performance Documentation Record (5/4/10)

E-1

Attachment F – Corrective Action Plan (3/15/13)

F-1

Attachment G – Court Performance Testimony Evaluation (2/4/13)

G-1

Attachment H – Job Performance Documentation Record (2/8/13)

H-1

Attachment I – Memo to Michael Lin (2/19/13)

I-1

Attachment J – Letter to American Society of Crime Lab Directors (3/1/13)

J-1

Attachment K – Job Performance Improvement Plan (3/25/13)

K-1

Attachment L – Memo to James Tarver

L-1

## **APPENDIX 2**

Declaration of Lorraine Heath

2-1



**JOB PERFORMANCE DOCUMENTATION RECORD**

EMPLOYEE Michael Lin

DATE 6/16/09

EMPLOYEE STATUS  PROBATIONARY  TRIAL SERVICE  
 PERMANENT  NON-PERMANENT

COUNSELING

POSITIVE RECOGNITION

**DETAILS:**

Bio-haz trash is taking way too long and it seems to be using too many receptacles. Some contaminated lids were also observed in the laboratory. Please make sure to monitor that in the future. Bill Culnane will meet with you on Monday 6/29, and he will go over the process again.

You were advised again that if you are not able to meet deadlines, you need to inform your supervisor. Your EZ-1 competency was not complete on time and you failed to notify me. This was previously documented.

Kristi advised you during your co-signs that mixing your sperm cell pellets with your pipette was not appropriate, you continued to do so. What you understood completely contradicts Kristi's reported instructions. I clarified this for you by telling you to stop mixing by pipetting during the washes of sperm fraction pellets, and also pointed out that you were not taught that technique here. You can loose your pellet, and continue to compromise low level cases. You were again advised to listen and follow the directions of the senior scientists that are training you.

An incident during your co-signs also caused concern. When you were examining a sexual assault slide, you noted a high level of epithelial cells. You gave it a cursory look, not a thorough exam, and then went on to do the second digest, without noting any sperm on the first slide. Kristi examined the first slide and identified spermatozoa. Though a second slide may be good idea, you may have a low level sample and thus may waste precious sample or you may truly get a negative second slide, which in may cause an incorrect conclusion.

You will continue to do more co-signs, with an emphasis on sexual assaults.

[Signature]  
EMPLOYEE'S SIGNATURE

Michael Lin  
EMPLOYEE'S PRINTED NAME

BADGE NO.  
(IF APPLICABLE)

6/16/09  
DATE

[Signature]  
SUPERVISOR'S SIGNATURE

Lisa Turpen  
SUPERVISOR'S PRINTED NAME

BADGE NO.  
(IF APPLICABLE)

6/16/09  
DATE

cc: Supervisor Desk File (documentation file)

## INTEROFFICE COMMUNICATION

# WASHINGTON STATE PATROL



**TO :** Mr. Michael Lin, Crime Laboratory Division/Spokane  
**FROM :** Ms. Lisa Turpen, Crime Laboratory Division/Spokane  
**SUBJECT:** Job Performance Improvement Plan  
**DATE :** September 29, 2009

### PROBLEMS IDENTIFIED AND OUTLINED IN SPECIFICS:

As reflected in your evaluation dated August 25, 2009, and as well as your Job Performance Documentation records dated 4/10/09 and 6/16/09, I am concerned about your casework quality, your time management skills, and your inappropriate attitude. You have not been progressing as expected in your path to becoming an independent casework analyst. You have struggled with basic serology screening techniques, DNA case approach, and following directions.

### PERFORMANCE OBJECTIVES SET:

The following Job Performance Improvement Plan is an attempt to address and resolve specific areas of concern, as well as outline efforts necessary to correct these deficiencies.

### EXPECTATIONS:

It is important that you understand the significance of your deficiencies and the impact they have to others within the DNA section. You are expected to perform the job functions assigned to you and to complete your assignments in a timely manner and other assigned duties in the standard prescribed time limits.

You have been employed at the WSP Crime Lab for approximately 18 months. You have not been signed-off as an independent forensic scientist, though you have had several rounds of co-signed cases. Typically five co-signs are given to a trainee, you have completed twelve. At this time you do not possess the requisite skills to function as an independent DNA analyst. The following expectations will need to be applied immediately upon receipt of this IOC.

1. You will be expected to spend two weeks at other laboratories where you will observe experienced DNA scientists.
2. You will meet with Dr. Gary Shutler, Crime Laboratory Division DNA Technical Leader. He will be training you as well as evaluating your skills and knowledge.
3. The site visits and meeting with Dr. Gary Shutler will take place within the first 30 days of the Job Performance Improvement Plan.
4. The remaining time that you have in the first 30 day period will be used to observe your fellow senior scientists in the Spokane Laboratory.

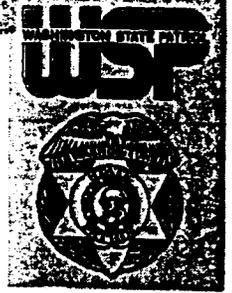
B-1



B-2

## INTEROFFICE COMMUNICATION

# WASHINGTON STATE PATROL



**TO:** Mike Lin, Forensic Scientist 2  
**FROM:** Lisa Turpen, Supervising Forensic Scientist  
**SUBJECT:** JOB PERFORMANCE IMPROVEMENT PLAN CONCLUSION  
**DATE:** December 4, 2009

### PROBLEMS IDENTIFIED AND OUTLINED IN SPECIFICS:

As reflected in your evaluation dated August 25, 2009, and as well as your Job Performance Documentation records dated 4/10/09 and 6/16/09, I am concerned about your casework quality, your time management skills, and your inappropriate attitude. You have not been progressing as expected in your path to becoming an independent casework analyst. You have struggled with basic serology screening techniques, DNA case approach, and following directions.

### PERFORMANCE OBJECTIVES SET:

The following job performance improvement plan is an attempt to address and resolve these issues and to identify specific areas of concern, as well as outline efforts necessary to correct these deficiencies.

### EXPECTATIONS:

It is important that you understand the significance of your deficiencies and the impact they have to others within the DNA section. You are expected to perform the job functions assigned to you and to complete your assignments in a timely manner and other assigned duties in the standard prescribed time limits. The following expectations will need to be applied immediately upon receipt of this IOC.

1. You have been employed at the WSP Crime Lab for approximately 18 months. You have not been signed-off as an independent forensic scientist, though you have had several rounds of co-signed cases. Typically five co-signs are given to a trainee, you have completed twelve. At this time you do not possess the requisite skills to function as an independent DNA analyst.
2. You will be expected to spend one week at other laboratories where you will observe experienced DNA scientists. **This was fulfilled. The feedback from the laboratories that hosted Mike was positive.**
3. You will then meet with Dr. Gary Shutler, Washington State DNA Technical Leader. He will be training you as well as evaluating your skills and knowledge. **This was fulfilled.**
4. The site visits and meeting with Dr. Gary Shutler will take place within the first 30 days of the job performance improvement plan. **This was fulfilled.**
5. The remaining time that you have in the first 30 day period will be used to observe your fellow senior scientists in the Spokane Laboratory. **This was fulfilled.**

C-1



6. Following completion of your site visits and your appointment with Dr. Shutler you will complete 4 co-signed cases with either DNA supervisor in the next 30 day period. The supervisors will evaluate your work and provide feedback on ways to improve your documentation, approach, and timeliness. You need to schedule work time with the supervisors 24 hours in advance. These four cases must also be in peer review status within the second 30 days of this plan. **Although not all four cases made it into peer review, this was fulfilled. Mike worked diligently to screen and extract his cases and he did so in an efficient manner. Three of the cases became problematic. Additional work had to be completed on one case, Y-STR became the only good resolution for a second case, and the third case needed a consumption note while the officer was out of town. Unfortunately situations like these are out of the analyst's control. Mike made a good effort into thinking about the best ways to approach these less than straightforward situations.**
7. Corrections on all peer reviewed case files will be made within 2 working days of the return of the case file to you. **N/A, as none made it through peer review.**
8. You must continue completing your non-casework duties within the prescribed timelines. **This was fulfilled.**
9. You will not work more than forty hours in a work week. You will not work any paid overtime or comp time until the job performance improvement plan has been completed, unless there is an unforeseen court obligation. If a situation arises requiring OT/Comp time, it is necessary to obtain prior approval from either DNA Supervisor or from Laboratory Manager, Mr. Kevin Fortney. **This was fulfilled.**
10. You will follow directions given to you by the experienced scientists that are training you. **This was fulfilled.**
11. You are expected to interact with others in the workplace in a respectful manner. **This was fulfilled.**

**FOLLOW-UP:**

Mike has successfully completed his Job Performance Improvement Plan. Mike has stayed on track and worked independently when he had the opportunity. Mike's feedback regarding his site visits was excellent. Mike took this as an opportunity to really improve. Three of four cases ended up being somewhat problematic, but this is typical of casework. When these situations arose, Mike took the time and critically thought of ways to approach these difficult decisions. Mike showed great improvement with case approach and streamlined techniques.

	12/4/09		12/4/09
Employee	Date	Supervisor	Date

Cc: Debbie Chavira, Human Resource Division  
 Dr. Gary Shutler, DNA Technical Leader  
 Kevin Fortney, Spokane Crime Laboratory Manager  
 Lynn McIntyre, Crime Laboratory Division Manager



## JOB PERFORMANCE DOCUMENTATION RECORD

EMPLOYEE Michael Lin

DATE 4/27/10

EMPLOYEE STATUS     PROBATIONARY     TRIAL SERVICE  
                           PERMANENT         NON-PERMANENT

COUNSELING

POSITIVE RECOGNITION

### DETAILS:

On Friday April 23<sup>rd</sup> you were observed in the laboratory screening evidence. During this examination you used phatebas paper. This paper is used to screen for the presence of amylase, a component of saliva.

As with all of our reagents, it is necessary to check that they are working properly before they are used to screen evidence. This procedure is to be separated by time and space to avoid the risk of contamination. You placed a known saliva sample within close proximity of evidence. Both the known sample and the evidence were being screened with the same piece of phatebas paper at the same time. You showed a high level of disregard to the preservation and integrity of the evidence. Another analyst in the laboratory witnessed this, and confronted you regarding this practice. She did direct you to remove a small portion from the phatebas paper and QC that separately in another room. When I asked you on Monday April 26<sup>th</sup>, about how you QC phatebas paper, you described the method that the senior analyst prescribed to you on Friday, which prior to Monday April 26<sup>th</sup>, you did not use this method. You were evasive in answering my simple question. I have counseled you in the past about leaving known samples used to QC reagents lying on your bench. This was also witnessed by me on Monday April 26<sup>th</sup>. You are to discard your known samples immediately after the reagent check. The quality systems we have in place are vital to the integrity of the evidence and reliability of the results. We are to minimize contamination events to the best of our ability. These practices are of great concern. In many cases we do not have the ability to go back to the evidence for a second time.

Also on Friday April 23<sup>rd</sup>, you were also observed using phatebas paper to screen panties that had visible fecal material. This is an inappropriate use of this screening method. Amylase is also found in fecal material, which you agreed upon in my office yesterday, April 27<sup>th</sup>. The result was positive; however it was in close proximity to the fecal staining and is most likely due to diffusion from the fecal material. The result is meaningless. Your use of this test in this manner is an indication of your lack of understanding appropriate case approach. You wasted a lot of time and expensive reagents, and now will have to deal with writing the results in your report.





## Corrective Action Plan

Incident Date: 2/1/13 Date Notified: 2/3/13

Assigned to: Dr. Gary Shutler

Employee Involved: Dr. Michael Lin

Case Number 411-000146

**1. Describe the incident or attach the Notification of Nonconformance form (CLD-NLN-4015).**

The analyst was rated poorly in a recent defense interview and testimony performance on a YSTR analysis case. He had difficulty in more than one area including responses to questions about statistics applied to YSTR results despite having attended a refresher workshop on YSTR analysis the week before. According to LIMS records he has testified 7 times since 2011 with 4 monitored. This is his first unsatisfactory report.

**2. Root cause analysis and results:**

The analyst is uncomfortable with and does not perform well during defense interview and in court for YSTR testimony involving challenges. This may be due to a lack of confidence in answering questions where Michael feels he doesn't have enough depth of knowledge despite having successfully completed the YSTR training plan and a recent refresher course.

**3. Immediate Corrective Action Steps taken:**

His supervisor, Lorraine Heath, traveled on-site to provide instructional assistance in person when she learned of Michael's earlier testimony difficulties and resulting foundational hearing. The hearing and continued testimony was monitored and rated. He was allowed to provide YSTR testimony however it was still rated as unfavorable.

**4. Preventative Action(s) planned:**

Removal of the analyst from casework followed by a Job Performance Improvement Plan (JPIP). Lorraine Heath was assigned to draft the JPIP.

**5. Timeline with milestones for completion of corrective action:**

Suspension of new case assignments effective 2/19/2013

Commencement of a JPIP 3/19/2013

Completion of JPIP by 5/17/2013

**Signatures:**

Plan approved by /S/ Erik Neilson Date: 3/15/13

Lab Manager /s/ Jayne Aunan Date: 3/15/13

Supervisor /S/ Lorraine Heath Date: 3/19/13

Employee /S/ Michael Lin Date: 3/19/13

## Court Testimony Performance Evaluation

Name: Michael Lin Evaluator: Lorraine Heath

Date: 2/4/13 Court (name/location): Snohomish Superior, Everett

Case Number/Type of Case: 411-146, Child Sexual Assault

Prosecutor: Andrew Alsdorf Approximate length: 2.75 hrs

### I. Technical Knowledge

Appropriate use and clarity of technical terminology, effective demonstration of conclusions, accuracy and knowledge/competence

While there were a few areas where Michael was able to give clear explanation, there were many areas where he failed to demonstrate knowledge/competence. He also made technically incorrect statements (such as comments on the effect of ethnicity on the US Y-STR database and the inclusion of suspects in the database as well as failure to mention vaginal secretions as the likely source of the DNA in the crotch of the victim's underwear) and often failed to appropriately qualify statements (probability of contamination, likely effect of database size on frequency of suspect's profile, and the probable/possible sources of DNA on item).

### II. Communication Skills

Ability to speak effectively, grammar, non-verbal communication, impartiality, tone, voice projection and talking to the jury, appropriate eye contact, professional appearance, demeanor, ability to convey technical information to jury/judge in a clear and concise manner.

Michael was professional in appearance, had good tone and voice projection, and appropriately addressed, and made eye contact with, the jury. When questions were in his comfort zone, he did a good job of conveying technical information in a clear manner, but in areas he was less confident he tended to equivocate, leave sentences unfinished, and give unclear and/or unqualified answers. In addition, he often understated his training and experience and generally gave a poor, unconfident, unprepared impression to the jury and the judge. He was unforthcoming with the prosecutor and defense, despite prior preparation regarding the questions that would be asked (through direct communication and defense interviews). He continued to use inappropriate terminology, such as the word "hearsay," despite repeated counseling from his supervisor.

### III. Case Preparation

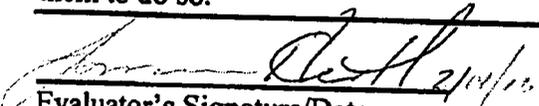
Organization of materials, familiarization with the case, case report and notes, knowledge of operation procedures, quality assurance and control procedures, and validation studies

Michael gave the impression of being unfamiliar with both his case file, SOPs, and various areas of QA/QC. He often answered questions with "I don't know" (or similar) when the information was in his case file. He could not answer questions regarding why certain procedures are used (such as using the whole Y-STR database for statistics, rather

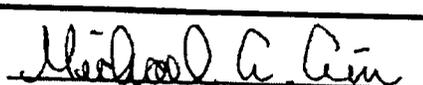
than individual ethnic groups), he equivocated on how he performed the work (giving the impression that contamination was more likely than it was), and he did not make it clear that there was latitude within the SOPs such that what he did was acceptable (such as leaving amplified samples in the freezer or in the thermocycler overnight – both are OK so it didn't matter that he didn't note, or remember, which had occurred). Despite knowing the areas most likely to come up on cross examinations (based on two prior defense interviews), he still failed to properly prepare himself with knowledge in those areas despite more than ample time to do so.

**IV. Other Comments/Recommendations**

A portion of this testimony included a foundational hearing wherein Michael's status as an expert, and his ability to testify to the Y-STR match statistic, was in question. Not only did Michael testify poorly in the hearing, he failed to realize the potential impact of an adverse ruling on himself and other WSP scientists. The prosecutor, with help from Michael's supervisor, was able to "save" the situation despite his testimony rather than because of it. He failed to realize, after a poor performance in a defense interview (weeks prior to the trial), that there was a potential problem, thus necessitating last minute attempts by his supervisor to assist him rather than proper, prior preparation. He demonstrated a lack of understanding/recognition of the effect his testimony could have on the case as a whole, his future credibility, and future testimony by other WSP Y-STR analysts. There were numerous instances where the prosecutor and/or the judge saved him from appearing even more incompetent and it is completely inappropriate to rely on them to do so.

 2/14/13  
Evaluator's Signature/Date

LIMS/date 2/14/13

 2/14/13  
Examiner's Signature/Date

LIMS/date 2/14/13



### JOB PERFORMANCE DOCUMENTATION RECORD

EMPLOYEE Michael Lin

DATE 2/8/13

EMPLOYEE STATUS  PROBATIONARY  TRIAL SERVICE  
 PERMANENT  NON-PERMANENT

COUNSELING

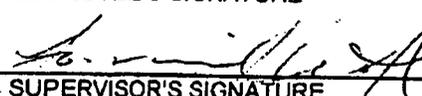
POSITIVE RECOGNITION

#### DETAILS:

This past weekend, for the second time in less than 6 months you demonstrated an inability to follow the directions of a supervisor. You advised your supervisor on Friday, February 1 that your testimony in Everett was not completed and that you were required to returned to testify at 9am on Monday morning. Your supervisor gave you the option of returning on your Friday evening flight and returning to Everett Sunday evening (or Monday morning depending on timing) or staying with family you have in the area over the weekend. You opted to stay with family. Your supervisor found out on Sunday that you, instead, stayed in a hotel room all weekend at the State's expense (through the prosecutor's office). This was not an appropriate use of State resources and was not one of the options your supervisor gave you on Friday afternoon. You only told your supervisor of this deviation when she indicated she was coming over to assist you with the case and asked where you were staying. This behavior is unacceptable and is bordering on insubordination. If you did not want to stay with your family over the weekend, you should have told your supervisor on Friday and we would have made appropriate travel arrangements to handle your testimony on Monday. If the prosecutor offered you a hotel room over the weekend after you spoke with your supervisor, you should have contacted your supervisor to request permission to accept the offer. Further, when your supervisor asked you on Friday the nature of the foundational hearing that was occurring, you indicated that it was not very important and that it could be discussed later. Given that the hearing was addressing your ability to testify to the portion of the case of primary importance (the Y-STR match and associated statistic), it is incredible that you felt this was not important. You were either trying to be evasive and hide the situation from your supervisor, or you truly had no idea of the potential impact of the hearing on your own credibility, WSPs credibility, and the ability of other Y-STR analysts to testify in future cases. Given your training and education on legal issues, your supervisor finds the latter hard to believe and you could have sought clarification if you were unclear when you spoke with your supervisor on Friday. Instead, your actions necessitate extensive inconvenience for your supervisor and expense for the State that could have been avoided with full disclosure during the Friday conversation.

Previously, in October 2012, you went to perform your monthly duty of cleaning the post-PCR room and discovered that the mop you usually use, which is stored in the foyer to the room, was missing. You sent an email asking the section if they knew of the whereabouts of the mop. You later located the mop yourself in the reagent preparation room. Your supervisor was out of the office that day (Monday, Oct. 29) so you approached Erica, the other DNA supervisor, about the situation and asked her opinion regarding the mop having been potentially used in a pre-PCR area. She admitted that it was her fault it had been moved, in response to a flooding situation in the reagent preparation room, and that she hadn't realized it was "dedicated" to the post-PCR room. She also explained to you, with supporting scientific reasoning, why she felt it was not a problem and that it was also OK for you to return the mop to its normal storage location and use it for your monthly cleaning. When you left her office, you gave her the impression that you were satisfied with her answer. The next day, the section had a general meeting in the afternoon and you added the mop as an agenda item. You then proceeded to announce that you had found the mop in the reagent preparation room and ask the

group if they were "OK" with this situation. You had already received an answer, from a supervisor, regarding the situation – asking the group for their opinion was inappropriate and unnecessary. If you were uncomfortable with Erica's initial response to you, you should have addressed it directly with her or spoken to your supervisor about it (who was available prior to the section meeting). While it is important that you address quality issues, regardless of their source, it is not appropriate for you to call out a supervisor in an open meeting with other staff members after the supervisor has already addressed, and given you directions in the matter, without either directly discussing your concerns with that supervisor or with the other supervisor. In discussions with both you and Erica, your supervisor determined that your overall interactions and response to Erica's directions have improved since this incident, but you need to be more aware of the appearance/impression your actions give to others.

 EMPLOYEE'S SIGNATURE	<u>Michael L. Lin</u> EMPLOYEE'S PRINTED NAME	 BADGE NO. (IF APPLICABLE)	<u>2/8/13</u> DATE
 SUPERVISOR'S SIGNATURE	<u>Lorraine Heath</u> SUPERVISOR'S PRINTED NAME	 BADGE NO. (IF APPLICABLE)	<u>2/8/13</u> DATE

cc: Supervisor Desk File (documentation file)

**From:** Tarver, James (WSP)  
**To:** Lin, Michael (WSP)  
**Cc:** Graham, Erica (WSP); Heath, Lorraine (WSP); Aunan, Jayne (WSP); Shutler, Gary (WSP); Neilson, Erik (WSP); Johnston, George (WSP)  
**Subject:** Suspension of new case assignments  
**Date:** Tuesday, February 19, 2013 3:23:01 PM  
**Sensitivity:** Confidential

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Hi Mr. Lin,

As we work-through the issues regarding your testimony evaluation dated February 4, 2013, please complete current case requests where work has already commenced. Other case requests assigned to you will be reassigned. Please do not resume regular casework duties until a *Job Performance Improvement Plan* has been implemented, and you have been notified that it is successfully completed.

Please direct any questions to FS5 Erica Graham or Dr. Gary Shutler. Thanks.

*James A. Tarver  
Crime Laboratory Division Commander  
Washington State Patrol  
2203 Airport Way South, Suite 250  
Seattle, WA 98134  
Ph. 206.262.6050 / Fax 206.262.6033*

CHRISTINE O. GREGOIRE  
Governor



JOHN R. BATISTE  
Chief

STATE OF WASHINGTON  
WASHINGTON STATE PATROL

2203 Airport Way South, Suite 250 • Seattle, Washington 98134-2045 • (206) 262-6020 • [www.wsp.wa.gov](http://www.wsp.wa.gov)

March 1, 2013

Director Ralph Keaton  
American Society of Crime Lab Directors  
Laboratory Accreditation Board  
139 J Technology Drive  
Garner, NC 27529

Dear Mr. Keaton:

This communication is to inform you of nonconformance on the part of a DNA analyst in our Spokane Crime Laboratory. In a recent testimony regarding Y-STR analysis, the analyst gave a very poor testimony, being unable to appropriately respond to several questions regarding subject matter that he should have known and been very familiar with. A job performance improvement plan is being prepared to bring him up to the level of competency expected for his position, with a goal of successful completion in 60 days from issuance. He will be allowed to complete casework he has already started but is removed from additional cases until he has successfully completed the improvement plan.

If you have any questions please contact me at (206)-262-6113 or via e-mail at:  
[Erik.Neilson@wsp.wa.gov](mailto:Erik.Neilson@wsp.wa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Erik Neilson".

Mr. Erik Neilson, Quality Assurance Manager  
Forensic Laboratory Services Bureau  
Washington State Patrol

ERN:ern

cc: Ms. Jayne Aunan, Spokane Crime Laboratory  
Ms. Lorraine Heath, Spokane Crime Laboratory  
Mr. James Tarver, Crime Laboratory Division

13-001

APR 03 2013



# Job Performance Improvement Plan

WSP HUMAN RESOURCE DIVISION

See also the *Supervisor/Employee Reference Manual* procedure on "The Job Performance Improvement Process."

30 Working Days     60 Working Days     90 Working Days

HRD Assigned Tracking Number  
13-001

Effective Dates 04/01/13 through 06/24/13

Improvement Plan for: <b>Michael Lin</b>		DOP Personnel Number 20021935		OR Badge No.	
District/Detachment FLSB-CLD-Spokane DNA B		Date 3/25/13	Phone Number (509) 625-5456		
Address 580 W 7 <sup>th</sup> St, Cheney, WA, 99004					
Supervisor's Name Lorraine Heath		Rank Forensic Scientist 5			

### Problems Identified and Outlined in Specifics

As reflected in the court testimony monitoring form addressing your testimony in Snohomish County Superior Court on February 2<sup>nd</sup> and 4<sup>th</sup>, 2013 and associated defense interviews, it is evident that you do not currently have the ability to provide expert testimony of the high quality needed to function as a Forensic Scientist 3. This Job Performance Improvement Plan (JPIP) is designed to address this deficiency.

An overall lack of confidence in your knowledge resulted in very poor performance when under pressure from the defense counsel in both the interviews and the courtroom. Your testimony included technically incorrect statements; inappropriately qualified or unqualified statements; equivocation where none was warranted; the appearance you were unprepared, untrained, and unforthcoming; the use of inappropriate terminology despite counseling immediately prior to your testimony; responses of "I don't know" to questions that either you should have known the answer to, or to which the answer was contained in the case file; and a failure to recognize the impact of your poor performance reflecting poorly on yourself and on other scientists in the Washington State Patrol (WSP). Although the specific case that triggered this JPIP was a Y-STR case, you demonstrated deficient testimony not only on Y-STR analysis but also screening/serological examinations, as well as on general procedures that would apply to all types of DNA casework.

Your position as a Forensic Scientist 3 (FS3) is vital to the Spokane DNA section and to the customers you support. Your primary responsibility is to produce DNA casework of consistently high quality. A critical component of this is to provide effective expert testimony. Even though not all cases go to court, a FS3 must be prepared for testimony on any case. If appropriate expert testimony cannot be reliably provided, your casework efforts are wasted.

### Performance Objectives Set

The following work improvement plan is an attempt to address and resolve these issues and to identify specific areas of concern, as well as outline efforts necessary to correct these deficiencies.

It is important that you understand the significance of your deficiencies and the impact they have on the customers the division serves and others within the DNA section. The following expectations will need to be applied immediately upon receipt of this document.

1. Cease performing casework and peer review until the satisfactory completion of this JPIP.



## Job Performance Improvement Plan

2. Observe expert DNA evidence courtroom testimony to increase knowledge of appropriate testimony.
3. Increase knowledge on the use of screening testing, results interpretations, implications, and limitations.
4. Increase knowledge of standard operating procedures that affect all DNA casework.
5. Increase knowledge of issues specific to Y-STR casework and testimony, especially regarding statistical interpretations of the results and their foundational principles.
6. Increase confidence during testimony and interviews, especially under pressure from defense counsel.
7. You will not volunteer for, or participate in, any duties other than those that you are already assigned without prior approval from a supervisor.
8. You must continue completing your non-casework duties within the prescribed timelines.
9. You will not work any paid overtime or comp time until the job performance improvement plan has been completed, unless there is an unforeseen court obligation.

### Methods Outlined to Meet Those Objectives

1. Any court testimony or court-related interviews that occur during this JPIP will be observed by your supervisor.
2. You will observe any DNA or screening court testimony by any DNA scientist during this JPIP unless otherwise directed not to do so by your supervisor.
3. To improve knowledge of standard operating procedures that affect all DNA casework, you will review the appropriate manual sections, assume all section instrument maintenance, cleaning, temperature monitoring, and other quality control duties during the time frame of this JPIP.
4. Attend the Expert Witness – What Makes a Credible Witness webinar on April 25, 2013 at 1pm EST (<http://view.mail.advantagebusinessmedia.com/?i=fe951771716d057971&m=fe9715707266027173&ls=fdee16767d64037e771c7971&l=feed157277610475&s=fe601075716c057e7710&jb=ffcf14&ju=fe6910787464017e7414&f=0>)
5. Complete the 90-minute online How to Be a Good Expert Witness course offered by RTI International ([https://www.forensiced.org/training/courseapp.cfm?csection=Expert Testimony](https://www.forensiced.org/training/courseapp.cfm?csection=Expert%20Testimony))
6. To improve your knowledge on the use of screening testing, results interpretations, implication, and limitations and issues specific to Y-STR casework, you will read the articles listed in Appendix A attached to this document.
7. In addition to the articles listed in Appendix A, you will locate and read at least 10 additional articles that you feel would assist you in improving your court testimony and knowledge of the areas where you had difficulties testifying (i.e. foundational principles in the statistical approach for the US YSTR data base).
8. You will review transcripts from your defense interview and compose how you would answer those questions if asked again.
9. You will have a total of 4 mock courts during this JPIP. The first 3 will cover specific topics (screening, SOPs, and Y-STRs), while the final mock court will cover all areas as could be expected in true court testimony. These exercises will be conducted by various individuals including, but not limited to, supervisors, FS4s, the DNA Technical Leader, other senior scientists, and external members of the criminal justice community. At least one of the mock court exercises will be videotaped.

# Job Performance Improvement Plan



## Controls Involved

You will meet monthly with your supervisor to measure your progress or lack of progress with meeting the objectives and expectations outlined in this Job Performance Improvement Plan.

You will receive verbal and written feedback from all participants and any observers of each mock court exercise.

You will provide documentation when you have completed the two online trainings (Items 4 & 5 above) along with a written synopsis of what you learned from each course and how it relates to your previous poor testimony.

As you locate the additional articles required in Item 7 above, you will have them approved by your supervisor prior to reading them.

## Time Frames for Follow-Up

Over the next 60 days, we will review your performance and I will assess if improvement have been made in the areas indicated in this document. The mock court exercises will take place approximately every 15 days after this JPIP commences. After the first two mock court exercises there will be a review of your performance to that point. There will be a final review at the conclusion of this work improvement plan. I will make a determination based on your level of success in meeting the above expectations. Failure to successfully complete the expectations may result in further action, to include disciplinary action.

Employee Signature <i>Michael Lin</i>	Print Name Michael Lin	Date 3/27/13
Supervisor Signature <i>Lorraine Heath</i>	Print Name Lorraine Heath	Date 3/27/13
Commander Signature <i>James Tanner</i>	Print Name James Tanner	Date 3-28/13
HRD Manager Review Signature <i>BEN LASTMADER</i>	Print Name BEN LASTMADER	Date 04/11/13

**Forward a copy of the Job Performance Improvement Plan at the beginning of the performance period to the Human Resource Division for placement in the employee personnel file.**

For Supervisor Use Only	
HRD Contacted:	Follow-Up Meeting On:
Ongoing Deficiencies Discussed On:	Improvements Demonstrated:
HRD Contacted:	Follow-Up Meeting On:
Ongoing Deficiencies Discussed On:	Improvements Demonstrated:
HRD Contacted:	Follow-Up Meeting On:
Ongoing Deficiencies Discussed On:	Improvements Demonstrated:

# Job Performance Improvement Plan



For HRD Use Only	
<input type="checkbox"/> HRD Secretary Supervisor – Logging	Date
<input type="checkbox"/> Manager – Review	Date
<input type="checkbox"/> HRC – Personnel File	Date

**Michael Lin Job Performance Improvement Plan 2013 – Appendix A**

Wickenheiser, R.A. Trace DNA: A Review, Discussion of Theory, and Application of the Transfer of Trace Quantities of DNA Through Skin Contact. *J. Forensic Sci.* 2002; 47(3), 442-450.

Phipps, M. and Petricevic, S. The Tendency of Individuals to Transfer DNA to Handled Items. *Forensic Sci. Int.* 2007; 168, 162-168.

Low, A., Murray, C., Whitacker, J., Tully, G., and Gill, P. The Propensity of Individuals to Deposit DNA and Secondary Transfer of Low Level DNA from Individuals to Inert Surfaces. *Forensic Sci. Int.* 2002; 129, 25-34.

Johnson, D.J., Calderaro, A.C., and Roberts, K.A. Variation in Nuclear DNA Concentrations During Urination. *J. Forensic Sci.* 2007; 52(1), 110-113.

Budowle, B., Ge, J., Chakraborty, R. Basic Principles for Estimating the Rarity of Y-STR Haplotypes Derived from Forensic Evidence.  
<http://www.promega.com/geneticidproc/ussymp18proc/oralpresentations/Budowle.pdf>

Nakazono, T., Kashimura, S., Hayashiba, Y., Hara, K., Matsusue, A., and Augustin, C. Dual Examinations for Identification of Urine as Being of Human Origin and for DNA-Typing of Small Stains of Human Urine. *J. Forensic Sci.* 2008; 53(2), 359-363.

Redd, A.J., Chamberlain, V.F., Kearney, V.F., Stover, D., Karafet, T., Calderon, K., Walsh, B., and Hammer, M.F. Genetic Structure Among 38 Populations from the United States Based on 11 U.S. Core Y Chromosome STRs. *J. Forensic Sci.* 2006; 51(3), 580-585.

Kenna, J., Smyth, M., McKenna, L., Dockery, C., and McDermott, S.D. The Recovery and Persistence of Salivary DNA on Human Skin. *J. Forensic Sci.* 2011; 56(1), 170-175.

Billie, T., Bright, J., and Buckleton, J. Application of Random Match Probability Calculations to Mixed STR Profiles. *J. Forensic Sci.* 2013; 58(2), 474-485.

Richert, N.J. Swabbing Firearms for Handler's DNA. *J. Forensic Sci.* 2011; 56(4), 972-975.

Soares-Vierira, J.A., Billerbeck, A.E.C., Iwamura, E.S.M., Zampieri, R.A., Gattas, G.J.F., Munoz, D.R., Hallak, J., Mendonca, B.B., and Lucon, A.M. Y-STRs in Forensic Medicine: DNA Analysis in Semen Samples of Azoospermic Individuals. *J. Forensic Sci.* 2007; 52(3), 664-670.

Budowle, B., Ge, J., Aranda, X.G., Planz, J.V., Eisenber, A.J., and Chakraborty, R. Texas Population Substructure and Its Impact on Estimating the Rarity of Y STR Haplotypes from DNA Evidence. *J. Forensic Sci.* 2009; 54(5), 1016-1021.

All information provided on the US Y-STR Database website: <http://usystrdatabase.org/>

Chapters 13 and 18 in Advanced Topics in Forensic DNA Typing: Methodology by John M. Butler, Elsevier, 2011.

**Michael Lin Job Performance Improvement Plan 2013 – Appendix A**

Washington State v Aaron Robert Bander – YSTR Counting Method Challenge – Court of Appeals Decision June 8, 2009

SWGAM letter to NIJ March 1, 2012

YSTR training material on STRbase including Ballantyne & Butler on YSTRs Jan 2012  
SWGAM presentation

**INTEROFFICE COMMUNICATION**

**WASHINGTON STATE PATROL**



**TO:** Mr. James Tarver, CLD

**FROM:** Dr. Gary Shutler, FLSB/SAS

**SUBJECT:** Corrective Action Report

**DATE:** October 28, 2013

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Since the analyst involved in this corrective action has resigned, the corrective action plan is essentially concluded. No further actions are recommended.

GGG:ggs

cc: Mr. Erik Neilson, FLSB/SAS

Mr. Gene Lawrence, CLD/Spokane-Cheney Crime Laboratory

Ms. Lorraine Heath, CLD/Spokane-Cheney Crime Laboratory

Ms. Erica Graham, CLD/Spokane-Cheney Crime Laboratory

L-1



SUPERIOR COURT OF WASHINGTON  
FOR SNOHOMISH COUNTY

THE STATE OF WASHINGTON,

Plaintiff,

v.

EARL, Brandon J.,

Defendant.

No. 12-1-00034-9

DECLARATION OF  
LORRAINE HEATH

Lorraine Heath states the following

1. I am a Supervising Forensic Scientist in the DNA Section of the Washington State Patrol Spokane Crime Lab. As such, I perform body fluid screening and DNA analysis on criminal cases submitted to the lab as well as supervising other scientists in the section. I have 15 years of experience in forensic DNA analysis in laboratories in the United States, Canada, and the United Kingdom. I have a B.S. degree in Forensic Science and Biology from the University of Toronto as well as a M.Phil. (Masters of Philosophy) degree from John Moores University in Liverpool, U.K. My Masters degree was awarded for my research and thesis regarding the use of DNA analysis for forensic soil comparisons. A copy of my Curriculum Vitae is attached.

2. I was the supervisor of Dr. Michael Lin. I personally observed his testimony in this case. I have also reviewed the following documents: (a) Dr. Lin's lab notes relating  
DECLARATION OF LORRAINE HEATH-1

to his testing in this case; (b) Dr. Lin's personnel file; (c) the Motion for New Trial on the Basis of Newly Discovered Evidence. This declaration is based on my personal knowledge, my review of the sources listed above, and my training and experience.

3. Dr. Lin was hired by the Washington State Patrol Crime Lab in February, 2008. He was in training status until December, 2009. He began performing independent case work in January, 2010. On March 1, 2013, he was removed from active case work pending completion of a work improvement plan. He resigned from the Crime Lab in June, 2013.

4. This lab uses a wide variety of procedures to prevent and detect contamination. Specifically for detection of contamination, reagent blanks or negative controls are used throughout all processes. This means that a blank sample is run with all casework samples to ensure the detection of any contamination of reagents/chemicals or the consumable plasticware in which we perform our chemical reactions. In addition, the DNA profiles from all scientists are on file. Part of the analysis of the data produced during DNA typing of casework involves the comparison of any unknown evidence profiles to the staff profile database to detect any contamination from them. Cross contamination is prevented via rigorous adherence to proper protocols regarding sample handling and evidence examination. Unknown evidence profiles are also compared to other samples processed in the same batch to detect cross contamination. Reference samples are processed separately from evidence samples to ensure no cross contamination occurs from the reference sample to the evidence. We also use the actual DNA profile, along with the biological screening results, to determine if cross contamination has occurred.

DECLARATION OF LORRAINE HEATH--2

5. All of these procedures were in use throughout the time that Dr. Lin worked at this Lab. In no instance has there been any indication that his work involved either cross contamination between evidence samples, cross contamination between evidence samples and reference samples, or contamination with his own DNA.

6. With regard to the testing in this case, Dr. Lin's lab notes indicated that he properly followed Crime Lab procedures. There are only two possible explanations for the profile matching Brandon Earl: (a) Mr. Earl (or someone with an identical Y-STR profile) was the source of the male DNA on the underwear; or (b) the sample was contaminated before it came into Dr. Lin's possession. Male DNA was detected on the underwear by Forensic Scientist Kristina Hoffman before the sample came into Dr. Lin's possession. If Dr. Lin had contaminated the sample with the reference sample from Mr. Earl, we would expect another male profile to have also been detected to account for the male DNA detected in the sample during the earlier testing. Since no such profile was detected, it is not reasonable to conclude that the profile matching Mr. Earl was the result of contamination during Dr. Lin's processing of the samples.

7. Attachments A, B, and C to the Motion for New Trial relate to counseling that occurred while Dr. Lin was doing supervised casework after having just completed his training program. It is not uncommon for new scientists to have shortcomings while putting their training into practice. The purpose of the additional training with co-signed cases is to catch these errors and rectify them. Dr. Lin was not permitted to complete independent casework until the issues were rectified and therefore, no cases were jeopardized.

8. Attachment D refers to the use of an analyst's own saliva as a positive control to check that the reagent being used, in this case phadebas paper, was working correctly. Although the way Dr. Lin was checking his reagent is clearly not best practice as he risked contaminating evidence with his own DNA, it is something that would be easily detected via downstream quality controls. While the other issue documented in this written counselling is also not best practice, the primary result of his unnecessary screening was a waste of time and money rather than compromising the case or its results.

9. Attachment E documents a minor infraction that presented another opportunity for improvement in efficiency by critiquing his use of more reagent blank controls than needed for a proficiency test. Dr. Lin's failure to use the case approach worksheet was a failure to follow the directions of his supervisor monitoring his work rather than an action that could result in any case he was working being compromised.

10. Attachment H refers to another instance of Dr. Lin's failure to follow his supervisor's instructions. This in no way impacted the quality of his case work.

11. Attachments F and G refer to weaknesses in Dr. Lin's answer to questions during a defense interview and trial in this case. The effect of these answers was to significantly understate the significance of the lab results. Areas of weakness included the following:

a. Dr. Lin was vague about how he avoided contamination, especially with regards to questions on the proximity of samples to each other. Many of the questions that he was asked could have been answered by reference to his lab notes. For example, he stated that he didn't know what order he rehydrated samples. This

information was in his notes. He used a multichannel pipette to load samples but stated he didn't know which samples were loaded together. Again, this information was in his notes.

b. There were a wide range of questions regarding the Y-STR statistical database. Dr. Lin performed poorly on most of them. Specifically, he incorrectly stated that ethnicity was more important in Y-STR testing. He did a poor job of explaining why we don't report a single ethnicity statistic (the database size, and specifically the small number of samples from certain ethnic groups, has a disproportional effect on the reported frequency). He didn't know the criteria for acceptance of samples into the database or that it is checked for duplicates. He incorrectly answered a question regarding the probability being more frequent if a similar profile was added to the database – the addition of a similar profile would not have that effect on the frequency of the profile that he reported. He was unclear on the composition of the Y-STR statistical database. He performed similarly poorly during the same line of questioning during his pre-trial defense interview.

c. There was some questions regarding touch DNA. Dr. Lin failed to qualify most of the statements made by distinguishing between which statements/hypotheticals were more or less likely than others. He was questioned regarding his familiarity with the amount of DNA obtained from touch samples as reported in published literature. He responded that he had no familiarity with this information. He should have explained that he was familiar with the general amount of DNA expected from touch samples, even though he was not familiar with specific numbers from specific articles. He also failed to discuss his own experience with touch DNA samples. Correct testimony would

have been clear that the amount of male DNA present in this sample was not consistent with a touch DNA source.

d. There were a variety of questions regarding the possibility that the Y-STR profile was from urine. He incorrectly claimed that he was never trained in urine analysis. In the interview he was very unclear regarding which body fluids had more DNA than others. He couldn't correctly answer whether sterile urine would have DNA - it doesn't, the only DNA present in urine is from skin cells. He stated that he "assumed" urine had less DNA in it than blood, semen, or saliva - this is not an assumption, but a fact. Again, correct testimony would have been clear that the amount of male DNA present in this sample was not consistent with the source being urine.

12. Dr. Lin was not removed from casework because of any concerns about the quality of his work within the laboratory. He was removed because his understating of the evidence could have jeopardized the result of this case. The Job Performance Improvement Plan was intended only to rectify his problems with courtroom testimony, as there were no concerns regarding his laboratory casework.

Signed at Cheney Washington this 30<sup>th</sup> day of July, 2014.

  
\_\_\_\_\_  
LORRAINE HEATH

## **CURRICULUM VITAE**

**Lorraine E. Heath**  
Washington State Patrol  
Spokane Crime Lab  
580 W. 7<sup>th</sup> St.  
Cheney, WA, 99004  
(506) 625-5453 (ph)/(509) 625-5440 (fax)

### **EDUCATION:**

Master of Philosophy in Forensic DNA Profiling of Soil,  
Liverpool John Moores University, UK, 2005

Post Graduate Certificate in Teaching & Learning in Higher Education  
Liverpool John Moores University, UK, 2002

Bachelor of Science in Forensic Science and Biology  
Honours with High Distinction  
University of Toronto, Canada, 1998

### **PROFESSIONAL EXPERIENCE:**

- 07/08-Present      **Supervising Forensic DNA Scientist**, Washington State Patrol Crime Lab,  
Spokane, WA
- Perform and report results of forensic serological examinations and DNA analyses (STR and Y-STR).
  - Crime scene investigation and bloodstain pattern interpretation.
  - Supervise forensic scientists in DNA section.
- 01/07-07/08      **Forensic Biology Scientist**, Centre of Forensic Sciences, Sault Ste. Marie,  
Ontario, Canada
- Performed and reported results of forensic serological examinations and DNA analyses (STR and Y-STR).
- 03/04-12/06      **DNA Criminalist**, Arizona Department of Public Safety Crime Lab, Phoenix,  
AZ
- Performed and reported results of forensic serological examinations and DNA analyses (STR and Y-STR).
  - Crime scene investigation and bloodstain pattern interpretation.
- 09/01-03/04      **Forensic Science Lecturer**, Liverpool John Moores University, Liverpool,  
UK
- Taught undergraduate forensic science courses.
  - Co-ordinated and supervised undergraduate research projects.
  - Performed research on forensic DNA analysis of soil.
- 05/00-09/01      **Forensic DNA Technician**, Lothian & Borders Police Forensic Lab,  
Edinburgh, UK
- Performed and reported results of forensic STR DNA analyses

## **PROFESSIONAL EXPERIENCE (cont'd):**

- 01/99-05/00           **DNA Criminalist**, Kansas City, MO Police Department Crime Lab, MO
- Validated and performed forensic STR DNA analyses.
- 04/98-01/99           **Technical Sale Representative**, Helixx Technologies, Etobicoke, Canada
- Biotechnology product development, testing, and sales.

## **PROFESSIONAL TRAINING:**

**Root Cause Analysis – When Blaming the Analyst Completely Misses the Point** (4 hours), American Academy of Forensic Sciences Annual Meeting, Seattle, WA, 2014

**Managing the 21<sup>st</sup> Century Forensic Science Organizations** (8 hours), American Academy of Forensic Sciences Annual Meeting, Seattle, WA, 2014

**ArmedXpert DNA Mixture Analysis Software Training** (8 hours), NicheVision, Seattle, WA, 2013

**Amplifying Productivity in Today's Forensic Laboratory** (4 hours), American Academy of Forensic Sciences Annual Meeting, Washington DC, 2013

**Calculating Likelihood Ratios Incorporating a Probability of Drop-Out** (4 hours), American Academy of Forensic Sciences Annual Meeting, Washington DC, 2013

**Advanced Y-STR Training** (8 hours), Sorenson Forensics, Portland, OR, 2013

**HID Future Trends in Forensic DNA Technology**, Life Technologies, Seattle, WA, 2012

**Plexor HY System and Analysis Software Training** (8 hours), Promega, Spokane, WA, 2012

**Combined DNA Index System (CODIS) 7.0 Training** (20 hours), FBI, Portland, OR, 2012

**Crime Scene Analysis and Reconstruction** (40 hours), Green Forensics, Shelton, WA, 2012

**Advanced DNA Mixture Interpretations and Statistical Approaches** (16 hours), American Academy of Forensic Sciences Annual Meeting, Atlanta, GA, 2012

**Bloodstain Pattern Analysis II** (40 hours), Bevel & Gardner, Shelton, WA, 2012

**Statistical Methods for DNA Evidence** (8 hours), International Conference on Forensic Inference and Statistics, Seattle, WA, 2011

**ASCLD/LAB Internal Auditor Training** (32 hours), American Society of Crime Lab Directions/Laboratory Accreditation Board, Emeryville, CA, 2011

**Bloodstain Pattern Interpretation from Photographs** (4 hours), International Association for Identification Annual Conference, Spokane, WA, 2010

**PROFESSIONAL TRAINING (cont'd):**

**Bloodstain Pattern Interpretation on Clothing** (4 hours), International Association for Identification Annual Conference, Spokane, WA, 2010

**Crime Scene Fingerprint Processing** (8 hours), Washington State Patrol, Spokane, WA, 2010

**Advances in Forensic DNA Analysis** (10 hours), American Academy of Forensic Sciences Annual Meeting, Seattle, WA, 2010

**Bullet Trajectory Analysis** (10 hours), Washington State Patrol, Seattle, WA, 2009

**Firearms Safety Handling Procedures** (6 hours), Washington State Patrol, Seattle, WA, 2009

**DNA Mixture Analysis** (24 hours), Northwest Association of Forensic Scientists Fall Conference, Fort Collins, CO, 2009

**DNA Population Statistics & Likelihood Ratios** (24 hours), George Carmody, Seattle, WA, 2009

**Advanced GeneMapper ID-X Software Training**, Applied Biosystems, Seattle, WA, 2009

**Forensic Y-STR Training** (34 hours), Marshall University Forensic Science Centre, Huntington, VA, 2009

**Future Trends in Forensic DNA Technology**, Applied Biosystems, Seattle, WA, 2009

**Combined DNA Index System (CODIS) Training**, FBI, Arlington, VA, 2009

**Leadership in Police Organizations**, Washington State Patrol, Shelton, WA, 2008

**Quality Assurance Standards Auditor Training**, FBI, Arlington, VA, 2008

**Future Trends in Forensic DNA Technology**, Applied Biosystems, Seattle, WA, 2008

**Human Identification e-Symposium on DNA Interpretation**, The Forensic Institute, UK, 2008

**Homicide Investigation, Trial Preparation and Testimony**, American Academy of Forensic Sciences Annual Meeting, Washington DC, 2008

**GeneMapper ID-X Next Generation Forensic Data Analysis Software and Expert System**, Applied Biosystems, Webinar, 2007

**Expert Evidence in Criminal Proceedings**, Osgoode Hall Law School, Canada, 2007

**Forensic DNA Statistics** (24 hours), Bruce Budowle, Toronto, Ontario, Canada, 2007

**Annual Workshop on DNA Technology**, Centre of Forensic Sciences & Promega, Canada, 2007

**PROFESSIONAL TRAINING (cont'd):**

**Human Identification e-Symposium on Profiling Degraded and Low Amounts of DNA**, The Forensic Institute, UK, 2007

**Forensic DNA Statistics** (24 hours), Bruce Budowle & John Planz, Tucson, AZ, 2006

**Math and Physics for Bloodstain Pattern Analysis** (40 hours), Ontario Police College, Canada, 2006

**Future Trends in Forensic DNA Technology**, Applied Biosystems, Phoenix, AZ, 2006

**DNA Mixture Interpretation** (24 hours), George Carmody & Ray Wickenheiser, Phoenix, AZ, 2006

**Statistical Analysis of Forensic DNA Evidence** (16 hours), George Carmody, Phoenix, AZ, 2006

**Promega 2005 Summer Expedition**, Phoenix, AZ, 2005.

**Basic & Advanced Bloodstain Pattern Recognition** (80 hours), MVP Forensics, Scottsdale, AZ, 2005

**Parentage and Mixture Statistics**, International Symposium on Human Identification, Phoenix, AZ, 2004

**Y-STRs: Practical Considerations and Interpretation Issues**, International Symposium on Human Identification, Phoenix, AZ, 2004

**Future Trends in Forensic DNA Technology**, Applied Biosystems, Phoenix, AZ, 2004

**Forensic Serology Training**, Arizona Department of Public Safety, Phoenix, AZ, 03/04-05/04

**Advanced Course on Forensic Human Identification** (35 hours), Forensic Toxicological Service Analytical Unit, St. George's Hospital Medical School, London, UK, 2003

**Y-Chromosome Analysis & Its Application to Forensic Casework**, American Academy of Forensic Sciences Annual Meeting, Atlanta, GA, 2002

**Basic Fingerprinting Technology**, American Academy of Forensic Sciences Annual Meeting, Atlanta, GA, 2002

**Blood Pattern Analysis**, Forensic Alliance Ltd, Oxford, UK, 2001

**Bond Solon Courtroom Skills and Cross Examination Training**, Lothian & Borders Police Forensic Lab, Edinburgh, UK, 2001

**STR Analysis Data: Processing, Interpretation and Storage**, American Academy of Forensic Sciences Annual Meeting, Seattle, WA, 2001

### **PROFESSIONAL TRAINING (cont'd):**

**Sexual Offences Investigation**, Lothian & Borders Police Forensic Lab, Edinburgh, UK, 2000

**Death Investigation**, Jackson County Medical Examiner's Office, Kansas City, MO, 1999

**Crime Scene Investigation Techniques Course** (80 hours), Kansas City Police Department, Kansas City, MO, 1999

**ABI Prism 310 Capillary Electrophoresis and AmpFISTR PCR**, PE Biosystems, Kansas City, MO, 1999

**Search & Seizure and Courtroom Demeanor**, Jackson County Prosecutor, Kansas City, MO, 1999

**Internship**, Firearms & Toolmarks Section, Centre of Forensic Sciences, Toronto, Canada, 1998

**Death Investigation Conference**, Jefferson Parish Coroner, New Orleans, LA, 1995

**Crime Scene Investigation and Evidence Collection**, Peel Police, Mississauga, Canada, 1995

### **CONFERENCES ATTENDED:**

**International Conference on Forensic Inference and Statistics** – 2011

**International Association for Identification Annual Conference** – 2010

**Northwest Association of Forensic Scientists Fall Conference** – 2009

**Annual National CODIS Conference** – 2013, 2012, 2008

**American Academy of Forensic Sciences Annual Meeting** – 2014, 2013, 2012, 2010, 2008, 2004, 2002, 2001, 1998, 1997

**International Symposium on Human Identification (Promega)** – 2004

**Canadian Society of Forensic Science Annual Conference** – 1996, 1995

### **PUBLICATIONS/PRESENTATIONS:**

**Heath, L.** and Saunders, V., Spatial Variation in Bacterial DNA Profiles for Forensic Soil Comparisons. Canadian Society of Forensic Science Journal, 41(1), 29-37, 2008.

**DNA Evidence Identification, Collection and Preservation for Law Enforcement.** Presented via the U.S. Department of Justice Community Oriented Policing Services to law enforcement personnel in Phoenix, AZ, Reno, NV, and Huntsville, TX (filmed for training DVD production). Also presented in 'Train the Trainer' format in Salt Lake City, UT. 2006

**Heath, L.** and Saunders, V., DNA Profiling for Forensic Soil Comparisons. Journal of Forensic Sciences, 51 (5), 1062-1068, 2006.

**PUBLICATIONS/PRESENTATIONS (cont'd):**

**Heath, L.** and Saunders, V., DNA Profiling for Forensic Soil Comparisons. Paper presented at American Academy of Forensic Sciences Annual Meeting, Dallas, TX, 2004

Harland, J., Reid, A., Pitt, S., Prosser, M. and **Heath, L.** Do Student Feelings About Their Term-Time Employment Relate to Any Effects on Their Work? Paper presented at Society for Research into Higher Education Annual Conference, Glasgow, UK, 2002

**GRANTS AWARDED:**

Forensic Science Foundation Acorn Grant, 2003

**PROFESSIONAL AFFILIATIONS:**

Fellow (Molecular Biology) – American Board of Criminalistics, 2011-Present

Member – International Association of Bloodstain Pattern Analysts, 2005-Present

Fellow – American Academy of Forensic Sciences, 2013-Present

Full Member – American Academy of Forensic Sciences, 2005-2013

Provisional Member – American Academy of Forensic Sciences, 2002-2005

Trainee Affiliate – American Academy of Forensic Sciences, 2000-2002

Student Affiliate – American Academy of Forensic Sciences, 1997-2000

Full Member – Forensic Science Society, 2001-2003

Member – Missouri Division of International Association of Identification, 1999-2000

Student Member – Canadian Society of Forensic Science, 1996-1998