BEFORE THE PERSONNEL APPEALS BOARD

STATE OF WASHINGTON

ARNOLD MELNIKOFF, Appellant, v. WASHINGTON STATE PATROL, Respondent.	Case No. DISM-04-0046 FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER OF THE BOARD

I. INTRODUCTION

1.1 **Hearing.** This appeal came on for hearing before the Personnel Appeals Board, BUSSE NUTLEY, Vice Chair, and GERALD L. MORGEN, Member. The hearing was held at the office of the Personnel Appeals Board in Olympia, Washington, on April 26, 27, and 28, 2005.

1.2 **Appearances.** Appellant Arnold Melnikoff was present and was represented by Christopher Coker, Attorney at Law, of Parr, Younglove, Lyman & Coker, P.L.LC. Elizabeth Delay Brown, Assistant Attorney General, represented Respondent Washington State Patrol.

1.3 **Nature of Appeal.** This is an appeal from a disciplinary sanction of dismissal for the causes of neglect of duty, incompetence, gross misconduct, and willful violation of agency policy. Respondent alleges Appellant provided misleading testimony during a trial.

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II. BACKGROUND

2.1 Appellant was a permanent employee for Respondent Washington State Patrol. Appellant and Respondent are subject to Chapters 41.06 and 41.64 RCW and the rules promulgated thereunder, Titles 356 and 358 WAC. Appellant filed a timely appeal with the Personnel Appeals Board on April 15, 2004.

2.3 Appellant began his employment as a Forensic Scientist 3 with the Washington State Patrol in September 1989. The duties of a Forensic Scientist 3 include performing complex analyses on physical evidence in criminal cases, interpreting analytical results, preparing written opinion reports, and testifying as an expert in courts of law. Appellant has a Bachelor's Degree in biology with a minor in mathematics and a Master's Degree in organic chemistry. Appellant also took a course in hair identification from the FBI laboratory. While employed with the WSP, Appellant worked at the Spokane Crime Lab performing tests on drugs and methamphetamine laboratory evidence. Appellant had no previous disciplines of any type.

2.4 Prior to his employment with the Washington State Patrol, Appellant was a Forensic Scientist and Bureau Chief of the Montana Crime Lab for the state of Montana beginning in 1970. While working in Montana, Appellant performed hair analyses for criminal cases, and he provided testimony in court.

2.5 In October 2002, Barry Logan, Director of the WSP Forensics Laboratory Bureau, received a copy of a letter to the Washington State Attorney General dated September 30, 2002, from Peter Neufeld, founder and director of the Innocence Project. In the letter, Mr. Neufeld complained about Appellant's scientific practices, claiming that Appellant "engaged in scientific fraud during his

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tenure as the director and hair examiner for the Montana State Crime Laboratory during the 1980's." Mr. Neufeld's letter indicated that as a result of "false testimony" offered by Appellant during a criminal trial, defendant Jimmy Bromgard was convicted of a crime. Mr. Bromgard was subsequently exonerated of the crime based on DNA evidence. Mr. Neufeld provided the WSP with a peer review report from four experts on hair examination who reviewed Appellant's testimony in the Bromgard trial and concluded, in part, that Appellant's testimony was "completely contrary to generally accepted scientific principles."

2.6 On October 30, 2002, as the result of the above complaint, Lieutenant Darrin T. Grondel with the Internal Affairs Section of the WSP, notified Appellant that Internal Affairs had initiated an investigation into the allegation that Appellant engaged in misconduct related to "courtroom testimony and/or hair analysis." On January 14, 2003, Lt. Grondel notified Appellant that the scope of the administrative investigation had been expanded to include the following allegations:

> On or about January 16 through 18, 1990, you provided statistical comparisons based on analysis of hair samples during courtroom testimony for the State of Montana while you were an employee of the Washington State Patrol. The statistical comparisons you provided were not consistent with scientific principles or training you received.
>
> On or about January 16 through 18, 1990, you provided testimony for the State of Montana while employed by the Washington State Patrol in which you stated you had conducted hair analysis in 500 to 700 cases. It is alleged that you conducted substantially fewer hair analysis than you testified to in court.

The above allegations were related to testimony Appellant provided in the state of Montana regarding forensic testing he performed, while still employed with the Montana Crime Lab, on head and pubic hairs of a defendant named Paul D. Kordonowy.

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2.7 During his testimony in State of Montana v. Paul D. Kordonowy in 1990, Appellant testified regarding the probability that hair found at the crime scene did not belong to Kordonowy. Excerpts from the Kordonowy trial reflect that Appellant, when questioned about statistical probabilities, indicated that he had done "somewhere between five and seven hundred hair cases" in the state of Montana. In the Kordonowy trial, Appellant testified that in his personal experience of having worked on 500 to 700 cases, that "one in a hundred" was a "good, conservative estimate of the probability of two people's hair matching, either head or pubic hair" of Kordonowy. Therefore, Appellant testified there was less than a "1 in 10,000 chance" that the pubic and head hair found at the crime scene did not belong to Kordonowy. In explaining how two individuals would have head hair and pubic hair of the same characteristics, Appellant, on page 309, lines 7 through 14 of the trial transcript, testified as follows:

> You have two separate areas of the body depositing hair whose characteristics are not the same as the other, and so for both to occur at the time would be a multiplication of the individual probability. So it would be one chance out of a hundred for the head hair times one chance out a hundred for a pubic hair, so if you multiply those two together you get approximately one chance in ten thousand."

2.8 During the Kordonowy trial, Appellant also cited the hair studies and statistics of Dr. Barry Gaudette. On page 352, lines 18 through 20 of the transcript, Appellant indicated that Dr. Gaudette's study concluded that the probability of matching two hairs from two different people was "one chance in three thousand for head hair and about one chance in a thousand for pubic hair …"

2.9 Appellant's testimony in Kordonowy was similar to testimony Appellant gave in the State of Montana v. Jimmy Ray Bromgard trial.

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2.10 Subsequently, the WSP charged Appellant with misconduct, alleging that during his testimony in the Kordonowy trial, he provided statistical comparisons that were not consistent with the scientific principles or training he received regarding hair analysis. The WSP also alleged Appellant was untruthful when he testified he had conducted hair analyses in 500 to 700 cases, because case records from Montana crime lab reflected he had worked on 255 cases and, therefore, would have conducted substantially fewer hair analyses.

2.11 In response to the allegations, Appellant informed the WSP that his testimony during the Kordonowy trial was based on scientific studies and the accepted scientific principles of the time. Appellant indicated that he cited the principles of Dr. Barry Gaudette, a forensic scientist who specialized in microscopic examination of hair evidence.

2.12 To determine whether Appellant's explanations were credible, the WSP contacted Dr. Gaudette and provided him with Appellant's testimony from both the Montana v. Bromgard and the Montana v. Kordonowy trials. Appellant's name was redacted from these copies and Dr. Gaudette performed a blind review of the transcripts of the trials. The following are excerpts from his written report to the WSP:

> I have read both transcripts submitted … Based on my experience as a forensic hair examiner, my research, and my knowledge of the literature in the field, I noted that there were several areas in which the testimony given in both proceedings did not meet the standards of practice expected of a fully qualified and competent hair examiner.

2.13 In particular, Dr. Gaudette found several areas of concerns with Appellant's testimony. Below is a summary of Dr. Gaudette's concerns:

> Dr. Gaudette noted that while it was proper for Appellant to tell the jury about the number of times he was unable to distinguish two known hair samples, Appellant

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failed to do this in a proper manner by making "off the cuff" guesses rather than basing his testimony on accurate records and calculations. Dr. Gaudette found that Appellant's use of a probability calculation based on personal casework was an improper way to represent the odds that hair could not be distinguished and that Appellant failed to show an understanding about the difference between casework and empirical research.

Dr. Gaudette found that Appellant demonstrated a lack of familiarity with Dr. Gaudette's literature, failed to cite his correct first name, the title of the articles and the full journal references and failed to present the correct numbers from his research. Dr. Gaudette noted that Appellant used a variety of different numbers when referring to Dr. Gaudette's studies. For example, Appellant used "1 in 3000" but this figure did not appear in Dr. Gaudette's research articles, and the proper numbers were "1 in 4500" for head hair, and "1 in 800" for pubic hair. Furthermore, he found Appellant failed to put the numbers in context to how they related to the case on which he was providing testimony and failed to clarify the numbers were average numbers.

Dr. Gaudette stated that his study could be used to lend value to hair comparison evidence in general, but should not have been directly applied to any one case or used as a basis to draw statistical conclusions regarding the probabilities of hair comparisons, as Appellant had done.

He found that Appellant's multiplication of the head and pubic hair probabilities was not scientifically sound because in order to combine probabilities by simple multiplication, two probabilities must be independent to each other. However, because there are some correlations between pubic and head hair characteristics, they are not totally independent events. He found this area of Appellant's testimony disconcerting because Appellant indicated he had obtained a minor in math and therefore should have been aware of the basic principle of probability theory.

2.14 Marty Knorr, Communications Division Administrator, was given appointing authority to discipline Appellant by former WSP Chief Ronald W. Serpas. Mr. Knorr's two major areas of concern regarding the allegations were Appellant's professional competence and his ability to provide credible courtroom testimony. He found that Appellant's testimony was inaccurate, inconsistent and misleading and that it was irresponsible for Appellant to give "ball park" numbers when he should have been providing accurate figures of his casework. Although Mr. Knorr did not discipline Appellant for the testimony he gave in Bromgard, he found Appellant engaged in a

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pattern where he failed to properly apply correct probabilities and statistical principles as reflected during his testimony in Kordonowy. In reaching this conclusion, Mr. Knorr placed a great deal of weight on Dr. Gaudette's blind review of Appellant's testimony in the Bromgard and Kordonowy trials.

2.15 Mr. Knorr met with Appellant and Appellant's attorney at a pre-determination meeting. After considering Appellant's responses to the charges, Mr. Knorr concluded that Appellant failed to keep accurate figures of his casework and found that it was inappropriate for Appellant to provide "off the cuff" numbers during his testimony. Mr. Knorr concluded that Appellant's inaccurate testimony could not be mitigated, especially when considering Appellant's extensive education, training and years of experience performing hair analysis.

2.16 In determining the level of discipline, Mr. Knorr considered Appellant's length of service, his employment record, and numerous letters of support provided from various prosecutors on Appellant's behalf. However, Mr. Knorr was troubled with the lack of credible statistics Appellant provided in his testimony, especially when considering his experience, training and knowledge as a forensic scientist. Mr. Knorr did not find that progressive discipline was appropriate in this case because as a forensic scientist at any level and regardless of the type of analysis being performed, Appellant would be required to testify in court. Mr. Knorr concluded that Appellant could no longer provide credible testimony on behalf of the Washington State Patrol. Therefore, Mr. Knorr concluded that termination was the appropriate sanction.

III. ARGUMENTS OF THE PARTIES

3.1 Respondent argues that Appellant's dismissal is based only on the false and misleading testimony he gave in State of Montana v. Kordonowy, while he was an employee of the Washington

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State Patrol. However, Respondent asserts that the testimony Appellant provided in the Bromgard case is pertinent because it supports the contention that Appellant engaged in a disturbing pattern of providing similar testimony regarding hair analysis and statistics that was not scientifically sound.

Respondent argues that the most egregious testimony Appellant gave was the "1 in 10,000" probability he quoted in both the Bromgard and Kordonowy trials, but which was erroneous and not founded on proper research. Respondent asserts the testimony from qualified forensic scientists in the field of hair analysis supports that the statistics Appellant utilized were not acceptable in courtroom testimony in 1990, or today. Respondent further argues that the credible evidence supports that even if it had been appropriate for Appellant to cite the numbers he did and even if the numbers had been correct, there was still an issue with the number of hair analysis cases he claimed to have performed while employed in Montana.

Respondent argues that the testimony Appellant gave in Kordonowy has a negative impact on the agency because it showed he was incompetent and could no longer provide trustworthy and reliable expert testimony as a forensic scientist behalf of the Washington State Patrol.

3.2 Appellant argues the evidence presented does not support that he testified improperly. Appellant asserts that in the 1980s and 1990s it was not uncommon for other forensic scientists to use probabilities in courtroom testimony. Appellant argues that his termination was politically driven due to pressure on the WSP by Peter Neufeld and by the media attention garnered by the Innocence Project. Appellant asserts he had excellent performance evaluations while employed by the WSP and contends that during the entire time he worked for WSP his only assignment was to test drugs in a lab setting and he was never required to provide testimony in court. Appellant contends termination is not appropriate because he is a 14-year employee of the WSP and has no prior disciplinary history.

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IV. BOARD REVIEW AND ANALYSIS

4.1 The only issue before us is whether the testimony Appellant gave in the Kordonowy trial, while he was employed by the state of Washington, was "inaccurate, incorrect, misleading and confused," thereby rendering him incompetent to perform in the capacity of a Forensic Scientist 3, as alleged by the appointing authority, Marty Knorr.

4.2 Appellant contends his testimony in 1990 of conducting between "500 to 700 hundred cases" was an approximation of the number of hair comparisons he conducted, not the number of cases he was assigned while employed in Montana. Appellant testified that his documented cases in Montana totaled a least 299, and that each case required at least two hair analyses. In addition, Appellant asserted that 299 documented cases did not include cases he started but did not finish, or a year and half worth of cases that could not be found. Appellant testified that the "1 in 100" statistic resulted from his own casework in Montana, which he tracked. Appellant admitted that he misquoted Dr. Gaudette's "1 in 4500" research figure when he testified to "1 in 3000."

4.3 Although Dr. Gaudette is now deceased, other scientists in the field of forensics credibly testified that it is unacceptable to make statements of statistical probabilities about hair comparison conclusions. Their testimony further supports that there has never been a standard by which to statistically match hairs through microscopic inspection and no probable or accurate statistics exist when it comes to matching hair samples because no statistical database exists, unlike a DNA database.

4.4 Appellant provided testimony from two forensic scientists. Dr. Larry Howard testified that when he and Appellant both worked at the Montana Crime Lab, they performed hair analyses and provided testimony in court, including that the chances that two hair samples are microscopically indistinguishable are "one in a hundred." However, Dr. Howard disagreed with how Appellant

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arrived at the probability that there was a "1 in 10,000" chance that the hairs did not belong to the defendant because head and pubic hairs are dependent events and not independent, as Appellant testified. Mike Howard, a self-employed forensic scientist, also testified that the manner in which Appellant arrived at the "1 in 10,000" probability was not appropriate because he multiplied events which were not independent events, but that he agreed with the conclusion of "1 in 10,000" based on his personal experience in the field.

V. FINDINGS OF FACT

5.1 We have reviewed the Kordonowy transcript as well as the testimony presented at the hearing, and we find a preponderance of the evidence supports Appellant's testimony in the Kordonowy trial demonstrated a lack of understanding of the science and statistics related to the field of hair analysis and probability calculations.

5.2 Appellant's testimony during the Kordonowy trial was not at the level expected of a forensic scientist providing expert level testimony. The preponderance of the credible evidence supports that Appellant's testimony regarding hair analysis was inconsistent with the scientific principles of hair analysis at that time and demonstrated a lack of fundamental understanding regarding human hair comparisons.

5.3 Appellant demonstrated his incompetence when, without any scientific basis, he concluded that head and pubic hairs are independent of each other. He then erroneously multiplied the individual probabilities together, reaching the incorrect statistical conclusion that there was a "less than 1 in 10,000 chance" that some other individual would have both head hair and pubic hair which matched Kordonowy's.

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5.4 Appellant's testimony during the Kordonowy trial was supposed to provide the court with accurate scientific information and his opinions as an expert; however, the evidence supports his inability to interpret and correctly cite Dr. Gaudette's studies and distinguish between the number of cases he analyzed versus the number of samples he examined.

VI. CONCLUSIONS OF LAW

6.1 The Personnel Appeals Board has jurisdiction over the parties and the subject matter.

6.2 In a hearing on appeal from a disciplinary action, Respondent has the burden of supporting the charges upon which the action was initiated by proving by a preponderance of the credible evidence that Appellant committed the offenses set forth in the disciplinary letter and that the sanction was appropriate under the facts and circumstances. WAC 358-30-170; Baker v. Dep't of Corrections, PAB No. D82-084 (1983).

6.3 Incompetence presumes a lack of ability, capacity, means, or qualification to perform a given duty. Plaisance v. Dep't of Social and Health Services, PAB No. D86-75 (Kent, Hrg. Exam.), aff'd by Board (1987).

6.4 Gross misconduct is flagrant misbehavior which adversely affects the agency's ability to carry out its functions. Rainwater v. School for the Deaf, PAB No. D89-004 (1989).

6.5 Willful violation of published employing agency or institution or Personnel Resources Board rules or regulations is established by facts showing the existence and publication of the rules

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or regulations, Appellant's knowledge of the rules or regulations, and failure to comply with the rules or regulations. Skaalheim v. Dep't of Social & Health Services, PAB No. D93-053 (1994).

6.6 Neglect of duty is established when it is shown that an employee has a duty to his or her employer and that he or she failed to act in a manner consistent with that duty. McCurdy v. Dep't of Social & Health Services, PAB No. D86-119 (1987).

6.7 Respondent has met its burden by a preponderance of the credible evidence that Appellant's testimony in the Kordonowy trial did not meet the standards of practice expected of a fully qualified and competent forensic examiner and was contrary to the scientific principles and practices of hair analysis. Appellant was an experienced forensic examiner; however, his testimony in Kordonowy of statistical probabilities was erroneous, which is especially disturbing considering Appellant's knowledge, experience, training and education, including a minor in mathematics. Appellant's testimony was not that of a competent forensic hair examiner and discredited his crucial role in the courtroom. As an expert witness, Appellant was in a position to influence a jury with his testimony regarding his analysis and knowledge of evidence. Appellant's failure to provide accurate testimony based on his own professional experience, his failure to accurately cite scientific research and his seeming inability to understand probabilities and statistics supports the charge of incompetence and undermines his ability to continue to represent the WSP in the capacity of a forensic scientist. Although Respondent has failed to establish that Appellant neglected his assigned duties or that he violated WSP policies, Respondent has proven Appellant's actions rise to the level of gross misconduct.

6.8 In determining whether a sanction imposed is appropriate, consideration must be given to the facts and circumstances, including the seriousness and circumstances of the offenses. The

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penalty should not be disturbed unless it is too severe. The sanction imposed should be sufficient to prevent recurrence, to deter others from similar misconduct, and to maintain the integrity of the program. Holladay v. Dep't of Veterans Affairs, PAB No. D91-084 (1992).

6.9 The appointing authority presented persuasive testimony that Appellant's incompetent testimony in his capacity as an expert witness irreparably harmed Appellant's reputation as a credible expert witness and forensic scientist. Under the circumstances, the appointing authority concluded that Appellant could not withstand the close scrutiny necessary of an expert witness providing a court and jury with scientific information. Under the facts and circumstances of this case, we conclude that Respondent has proven that the sanction of dismissal is appropriate, and the appeal of Arnold Melnikoff should be denied.

VII. ORDER

NOW, THEREFORE, IT IS HEREBY ORDERED that the appeal of Arnold Melnikoff is denied.

DATED this _____ day of _____, 2005.

WASHINGTON STATE PERSONNEL APPEALS BOARD

_____
Busse Nutley, Vice Chair

_____
Gerald L. Morgen, Member

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