IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

)	
DEAN CAGE,)	
	Plaintiff,)	
v.)	
)	09 C 3078
CITY OF CHICAGO, Chicago Police)	
Employees ANDREW JONES, JOHN ERVIN,)	Judge Virginia M. Kendall
CECILIA M. DOYLE, PAMELA FISH, as-yet)	
unidentified employees of the CITY OF)	
CHICAGO,)	
)	
	Defendants.)	

MEMORANDUM OPINION AND ORDER

In 1995, Plaintiff Dean Cage was accused and convicted of raping Loretta Zilinger, a teenage girl. After serving 12 years in prison, DNA testing proved Cage did not commit the rape. The State of Illinois thereafter agreed to vacate his conviction. After his exoneration, Cage filed suit against the City of Chicago, Chicago Police employees Andrew Jones, John Ervin, Ceclia M. Doyle, and Pamela Fish, alleging claims under 42 U.S.C. § 1983. Specifically, Cage alleges that the Defendants denied him a fair trial in violation of his Due Process rights by withholding exculpatory evidence, fabricating evidence and false reports, misleading and misdirecting the his criminal prosecution, and using unduly suggestive identification procedures. Cage also asserts constitutional claims for false imprisonment, malicious prosecution, failure to intervene, and conspiracy to deprive him of his constitutional rights, as well as state law claims for malicious prosecution, intentional infliction of emotional distress, civil conspiracy, respondeat superior, and indemnification. Finally, Cage seeks recovery against the City under Monell v. Dept. of Soc. Sycs., 436 U.S. 658 (1976), alleging that municipal customs, policies, and

practices at the Chicago Police Department Crime Lab caused the alleged constitutional violations.

On February 11, 2013, the Court commenced *Daubert* hearings to evaluate the proposed testimonies of Plaintiff's expert witnesses Gary Harmor and Charles Alan Keel, and Defendants' expert Witnesses Lucy Davis, Barry Spector, and Dan Bergman. The Court informed the parties that their filings were sufficient to arrive at a determination regarding the proposed testimony of Plaintiff's expert witness Dr. Brian Cutler. At the conclusion of the hearings, the parties resolved amongst themselves all then-outstanding objections related to the testimony of Dan Bergman. (Tr. 2/13/13, pp. 219–20.) Additionally, the parties were able to resolve through the briefing process two of Cage's three *Daubert* objections related to the proffered testimonies of Lucy Davis and Barry Spector. In the aftermath of all of this, the following motions remain pending before the Court: (1) Defendants' Motion to Bar the Testimony of Gary Harmor (Dkt. 163); (2) Defendants' Joint Motion No. 1 to Bar Plaintiff's Expert, Charles Alan Keel's, Testimony and Opinions (Dkt. 169); (3) Defendants' Joint Motion No. 2 to Bar Plaintiff's Expert, Charles Alan Keel's Testimony Regarding Defendant Pam Fish's Alleged Fraudulent Intent/Credibility in Testifying Concerning Serological Analysis Performed in Unrelated Criminal Cases (Dkt. 171); (4) Plaintiff's Motion to Bar Testimonies of Lucy Davis and Barry Spector (titled "Plaintiff's Daubert Motions") (Dkt. 165); and (5) Defendants' Motion to Exclude the Testimony of Dr. Brian L. Cutler (Dkt. 162.)

LEGAL STANDARD

"The admissibility of expert testimony is governed by Federal Rule of Evidence 702 and the Supreme Court's opinion in *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993)." *Lewis v. CITGO Petroleum Corp.*, 561 F.3d 698, 705 (7th Cir. 2009) (citing *Naeem v. McKesson*

Drug Co., 444 F.3d 593, 607 (7th Cir. 2006)). Rule 702 charges trial judges with the responsibility of acting as "gatekeeper[s] with respect to testimony proffered under Rule 702 to ensure that the testimony is sufficiently reliable to qualify for admission." Mihailovich v. Laatsch, 359 F.3d 892, 918 (7th Cir. 2004) (citing Kumho Tire Co. v. Carmichael, 526 U.S. 137, 147 (1999)). "The purpose of [the *Daubert*] inquiry is to vet the proposed testimony under Rule 702's requirements that it be 'based on sufficient facts or data,' use 'reliable principles and methods,' and 'reliably appl[y] the principles and methods to the facts of the case.' "Lapsey v. Xtek, Inc., 689 F.3d 802, 804 (7th Cir. 2012) (quoting Fed.R.Evid. 702). In evaluating whether an expert's proposed testimony meets the *Daubert* standard, the Court is to "scrutinize the proposed expert witness testimony to determine if it has 'the same level of intellectual rigor that characterizes the practice of an expert in the relevant field' so as to be deemed reliable enough to present to a jury." Lapsey, 689 F.3d at 805 (quoting Kumho Tire, 526 U.S. at 152). Whether to admit expert testimony rests within the discretion of the district court. See Gen. Elec. v. Joiner, 522 U.S. 136, 142 (1997); *Lapsey*, 689 F.3d at 810 ("[W]e 'give the district court wide latitude in performing its gate-keeping function and determining both how to measure the reliability of expert testimony and whether the testimony itself is reliable." ") (quoting Bielskis v. Louisville Ladder, Inc., 663 F.3d 887, 894 (7th Cir. 2011)). "The proponent of the expert bears the burden of demonstrating that the expert's testimony would satisfy the Daubert standard" by a preponderance of the evidence. Lewis, 561 F.3d at 705; see also Fed.R.Evid. 104(a) ("The court must decide any preliminary question about whether a witness is qualified"); Fed.R.Evid. 702 advisory committee note (2000 Amends.) ("[T]he admissibility of all expert testimony is governed by the principles of Rule 104(a). Under that Rule, the proponent has the burden of establishing that the pertinent admissibility requirements are met by a preponderance of the evidence.").

Under Rule 702, "[a] witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case. Fed.R.Evid. 702; see also Ortiz v. City of Chicago, 656 F.3d 523, 526 (7th Cir. 2011). Rule 702 calls for a conjunctive test and thus expert testimony must meet all five requirements to be admissible; failure on any prong is fatal to admissibility. Each requirement has been thoroughly explored in the case law and each requires a separate analysis, although the last two—reliability of principles and methods and reliable application—are closely related.

Thus, as a practical matter, district courts apply the *Daubert* framework described above using a three-part analysis. *Meyer v. Ill. Cent. R.R. Co.*, 629 F.3d 639, 644 (7th Cir. 2010). First, the Court must determine whether the proposed witness is qualified as an expert by knowledge, skill, experience, training, or education. If so, the Court must then decide whether the reasoning or methodology underlying the expert's testimony is reliable. If these two requirements are met, the Court must assess whether the expert's proposed testimony will assist the trier of fact in understanding the evidence or to determine a factual issue. *See Meyer*, 629 F.3d at 644 (citing *Ervin v. Johnson & Johnson, Inc.*, 492 F.3d 901, 904 (7th Cir. 2007)). In addition, the Court will only address those opinions brought to the Court's attention and will not separately probe each expert's report and issue *sua sponte* determinations regarding the admissibility of each statement

under *Daubert*. See, e.g., Goldberg v. 401 North Wabash Venture LLC, No. 09 C 6455, 2013 WL 212912, at *1 n.1 (N.D. Ill. Jan. 18, 2013).

DISCUSSION

Police crime laboratories operated by state and municipal governments are tasked with forensic examination (fingerprints, blood typing, DNA analysis, etc.) regarding crime-related evidence. This includes clothing and bodily fluids such as semen, sperm, and saliva. Forensic analysts known as "criminalists" perform these tests and relay their findings in the form of signed laboratory reports to prosecutors, defense attorneys, and courts. Before the proliferation of DNA analysis, most testing of bodily fluids involved blood typing or serological analysis, the purpose of which was to determine whether the bodily fluid revealed a blood type that matched that of the alleged perpetrator. In some situations, there were insufficient bodily fluids from which to reach a blood type conclusion. In such cases, the criminalist would report a negative finding.

In the mid-1990s, DNA analysis became prominent. As a result, crime laboratories continued to employ serological tools to locate and recover bodily fluids from crime evidence but also attempted, if possible, to create DNA profiles from such fluids. The DNA profile, if generated, would then be compared to the DNA profile of the alleged perpetrator. However, where the initial serological tests failed to reveal bodily fluid on the crime evidence, no DNA analysis is conducted and the resulting reports are the same as a negative pre-DNA serological report.

I. Defendants' Motion to Bar the Testimony of Gary Harmor (Dkt. 163)

During the course of the criminal investigation following Zilinger's rape, physical evidence was collected from Zilinger's underwear and tested by Defendant and then-Chicago

Police Department Crime Laboratory ("CPD Crime Lab") analyst Cecilia M. Doyle. The specific test Doyle conducted is called an acid phosphatase test ("AP test"). Doyle conducted this test by swabbing a sample of fluid from Zilinger's underwear and performing a chemical test on that sample. The resulting March 9, 1995 lab report (the "Zilinger Report"), created by Doyle and reviewed by Defendant Pamela Fish, states in relevant part that "[c]hemical tests for the presence of semen [were] conducted on extracts of," among other things, the victim's underwear, but "yielded negative results." (Zilinger Report, Dkt. 163, Ex. 2.) Cage argues that by using the term "extracts" in the Zilinger Report, Doyle misrepresented the type of tests performed on the Zilinger's clothing because the term "extracts" in this context implied the use of Prostate Specific Antigen ("P30" or "PSA") testing, which Doyle did not perform.

Gary Harmor, the Chief Forensic Serologist² and Executive Director at the Serological Research Institute ("SERI") in Richmond, California, along with his colleague, Dr. Brian Wraxall, ³ analyzed the evidence and performed the same AP test performed Doyle in 1995. (Tr. 2/13/13, pp. 22, 32.) In addition, Harmor and Dr. Wraxall conducted P30 on pieces of the victim's underwear. The P30 test was developed after scientists discovered that the P30 protein is present in seminal fluid but not in other body fluids. (Tr. 2/13/13, p. 28.) In addition, the P30 protein is more stable and has a longer life in dried stains than the AP enzyme. (Harmor Report,

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¹ Harmor explained that the Prostate Specific Antigen test has two different short-form names because it was discovered simultaneously by two scientists in different parts of the country. Dr. Sensabaugh, who discovered the underlying protein at Berkeley University, named his test the "P30" test. Researchers who discovered the same protein in Buffalo, New York named the test the Prostate Specific Antigen or "PSA" test. (Tr. 2/13/13, p. 29.)

² Harmor explained that a serologist "is a scientist who is involved in the identification and individualization of blood and other body fluids, such as semen and saliva, feces, and so forth." (Tr. 2/13/13, p. 22.) Serologists identify such fluids "and then develop information from any genetic markers that may be present" (*Id.*)

³ Dr. Brian Wraxall, who originally performed SERI's testing for this case, has since passed away. Harmor replicated and relied upon Dr. Wraxall's testing.

¶ 16.) Harmor and Dr. Wraxall's tests on Zilinger's underwear detected the presence of the P30 protein, which in turn implies the presence of semen or DNA. (Dkt. 163, Ex. 3, Harmor Rep. ¶¶ 17-18.) Harmor, whom Cage seeks to call as an expert witness at trial, opines, *inter alia*, that Doyle also would have obtained a positive result in 1995 had she performed chemical tests on extracts in the manner her report suggests. (Id. ¶ 18-20.) According to Harmor, the phrase "chemical tests for the presence of semen conducted on extracts" was understood in 1995 to refer to chemical and microscopic testing through the use of slides. Because the test that would have been performed on extracts in 1995 is the P30 test, Cage argues that Doyle's report gave the false impression to those who read it – Doyle's supervisor and reviewer, Pamela Fish, prosecutors, and Cage's criminal defense attorneys – that the negative results were the product of a type of testing that had in fact never been performed. According to Harmor, had Doyle actually conducted the P30, the results would have revealed the presence of P30 protein, and therefore semen, in Zilinger's underwear. Harmor further opines that if the semen had been detected, the follow-up DQ Alpha DNA test, which was available in 1995, would have generated a DNA profile that would have excluded Cage as the attacker and prevented his wrongful conviction.

A. Opinions Pertaining to the Use of the Term "Extract"

Harmor offers four separate but related opinions regarding the Zilinger Report. First, Harmor opines that the term "extracts" as used in the report would have indicated to a DNA practitioner that slides were created and searched microscopically for sperm. (Harmor Report, Dkt. 163, Ex. 3, ¶ 8). Second, Harmor opines that Doyle misrepresented the actual testing performed on the semen sample because she used the term "extract" in the Zilinger Report. (*Id.* ¶ 12.) Third, Harmor concludes that Fish's review of Doyle's report did not comport with industry standards. (*Id.* ¶¶ 10-13). Specifically, Harmor states that "[l]aboratory reports and supporting

documentation should be reviewed to verify that the conclusion(s) drawn are supportable by the tests that were performed and [that] the results obtained ... are appropriate." (*Id.* ¶ 10.) Harmor determined that the administrative review Fish claims to have performed in the Zilinger case—which included checking the RD number, comparing the list of exhibits in the submission documents to the report, and ensuring that the pages in the case file were numbered—"does not meet the minimum standards that [he] would expect from a laboratory doing examinations for biological fluids on items of evidence for use in a court of law." (*Id.*) Harmor asserts that "it is scientifically unacceptable for any laboratory to conduct the testing in this manner and then report their findings inaccurately in a criminal matter." (*Id.* ¶ 13.) Fourth, Harmor opines that Fish would have discovered and prevented the misreporting if she had conducted a proper substantive review by comparing Doyle's actual work and underlying documentation to the way her findings were conveyed in the Zilinger Report. (*Id.* ¶ 10, 12).

1. Qualifications

Harmor is qualified to offer the opinions described above. He received his Bachelor's degree in Forensic Science from the California State University in 1976 and began working at SERI in 1978 as a Senior Forensic Serologist. (Tr. 2/13/13, p. 23.) In that capacity, Harmor was responsible for the technical review of lab analyses and reports and for the interpretation of laboratory protocols. (Harmor CV, Dkt. 184, Ex. A, p 8.) In 2012, Harmor became SERI's Chief Forensic Serologist and Executive Director. (*Id.* at 7.) As Chief Forensic Serologist, Harmor oversees "quality assurance, safety, and proficiency testing." (*Id.*) He is also responsible for the evaluation of analysts, the technical review of analyses and reports, and evaluating other analysts' testimony. (*Id.*) Harmor held the positions of Quality Assurance Manager between 2003 and 2011 and Assistant Director between 2008 and 2011. (*Id.* at 8.) In addition, he has

reviewed the analytical work of several other laboratories. (Harmor Report, \P 10.) Harmor is a fellow of the American Board of Criminalistics in forensic biology, with subspecialities in forensic biochemistry and forensic molecular biology. (Harmor CV, at 8.) He has testified as an expert witness in forensic serology over 400 times in over 20 states and has qualified as a DNA expert in approximately 240 cases in 14 states. (*Id.* at 9.) Harmor has also been involved with a significant amount of post-conviction work, which requires that he conduct DNA testing in old cases. (Tr. 2/13/13, pp. 47–48.)⁴

Based on this experience, which encompasses the relevant time period and includes the review of countless lab reports, Harmor is qualified to offer opinion testimony regarding (1) the meaning of the term "extract" to DNA practitioners; (2) whether Doyle's use of the term was misleading given the actual testing performed; (3) whether Fish's review of Doyle's report comported with generally accepted standards in the field of serology; and (4) whether Fish would have been able to detect the misrepresentation by comparing report to the testing performed.

2. Methodology

Next the Court must decide whether the reasoning or methodology underlying Harmor's opinion is scientifically reliable. In this case, Harmor's conclusions pertaining to Fish's review of the Zilinger Report and the meaning of the term "extract" are based primarily on his experience in the field of forensic serology and in part on the American Society of Crime Laboratory Directors Laboratory's ("ASCLD-Lab") 1994 Accreditation Criteria Standards, which set forth the criteria for administrative and conclusion review. (Harmor Report, ¶¶ 10, 13.)

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⁴ The Court took under advisement Defendants' objection to testimony regarding Harmor's experience with post-conviction work on the basis that it constitutes a previously undisclosed basis for his opinions. (Tr. 2/13/13, pp. 47–48.) The Court overrules Defendants' objection and finds Harmor's previous experience with post-conviction work independently relevant in establishing his qualifications as an expert.

These opinions are not derived from any formula, test, survey, statistical analysis, or technical evaluation.

"Rule 702 specifically contemplates the admission of testimony by experts whose knowledge is based on experience." *Walker v. Soo Line R.R. Co.*, 208 F.3d 581, 591 (7th Cir. 2000); *accord Metavante Corp. v. Emigrant Sav. Bank*, 619 F.3d 748, 761 (7th Cir. 2010); *see also Kumho Tire Co.*, 526 U.S. at 153 ("[N]o one denies that an expert might draw a conclusion from a set of observations based on extensive and specialized experience."); *Jordan v. City of Chi*, No. 08 C 6902, 2012 WL 254243, at *3 (N.D. Ill. Jan. 27, 2012) ("An expert may be qualified to render opinions based on experience alone."). Indeed the Advisory Committee Notes to Rule 702 provide:

[s]ome types of expert testimony will not rely on anything like a scientific method Nothing in this amendment is intended to suggest that experience alone—or experience in conjunction with other knowledge, skill, training or education—may not provide a sufficient foundation for expert testimony. To the contrary, the text of rule 702 expressly contemplates that an expert may be qualified on the basis of experience. In certain fields, experience is the predominant, if not sole, basis for a great deal of reliable expert testimony.

Fed.R.Evid. 702. Thus, "expert[] testimony is not unreliable simply because it is founded on his experience rather than on data." *Metavante Corp.*, 619 F.3d at 761; *see*, *e.g.*, *Peoples State Bank v. Stifel, Nicolaus & Co., Inc.*, 2013 WL 1024917, at *5 (N.D. Ind. Mar. 24, 2013) (finding the methodology and reliable-facts-and-data factors of the *Daubert* inquiry "not very helpful" where expert relied principally on twenty-five years of experience in the industry; in such cases, the "relevant reliability concerns ... focus upon personal knowledge or experience") (quoting *Kumho Tire*, 526 U.S. at 150); *Goldberg*, 2013 WL 212912, at *5 (rejecting defendant's argument that expert's "methodology is unreliable because he applies personal experience and

knowledge of industry customs and practices to actions taken by defendants," finding that the expert's opinion is "not inherently unsound because it is founded on his experience rather than on data").

More specifically, an expert witness may opine on the accepted meaning (or lack thereof) of a word or phrase within a particular industry based his or her experience and training. See Lakeside Feeders, Inc. v. Producers Livestock Marketing Ass'n, 666 F.3d 1099, 1111 (8th Cir. 2012) ("Courts have frequently recognized the value of expert testimony defining terms of a technical nature and testifying as to whether such terms have acquired a well-recognized meaning in the business or industry.") (quoting Nucor Corp. v. Neb. Pub. Power Dist., 891 F.2d 1343, 1350 (8th Cir. 1989)); see, e.g., Wellogix, Inc. v. Accenture, L.L.P., --- F.3d ----, 2013 WL 2096356 (5th Cir. 2013) (expert witness allowed to opine on the software industry's understanding of certain terms based on his experience and training in the software industry); Van Straaten v. Shell Oil Products Co. LLC, 678 F.3d 486, 489 (7th Cir. 2012) (admitting expert testimony "that the payment-card industry understands 'account number' and the ISO's 'primary account number' to be the same thing"); Hot Wax, Inc. v. Turtle Wax, Inc., 191 F.3d 813, 818 (7th Cir. 1999) (noting that parties submitted "competing expert testimony regarding the industry definition of 'wax' "); cf. Bank of China, New York Branch v. NBM LLC, 359 F.3d 171, 182 (2d Cir. 2004) (witnesses testimony regarding definitions of banking terms reflected specialized knowledge based on his extensive experience in international banking and thus should not have been admitted pursuant to Rule 701 but "[o]f course, these opinions may, nonetheless, have been admissible pursuant to Rule 702 ..."). Similarly, experts may rely on their professional experience to offer opinion testimony regarding the standard of care and generally-accepted industry standards. See, e.g., WH Smith Hotel Servs., Inc. v. Wendy's Int'l, Inc., 25 F.3d 422, 429

(7th Cir. 1994) (affirming admission of expert testimony on customs in the commercial real estate industry); Balndonado v. Wyeth, 04 C 4312, 2012 WL 3234240, at *3-6 (N.D. Ill. Aug. 6, 2012) (denying *Daubert* challenge to expert who would opine on the standard of care in the pharmaceutical industry where expert "[brought] to bear her experience and training on the issue" and "repeatedly emphasized during her testimony that her opinions are not subjective, but are instead based on training and experience and having done the same process"); In re Yasmin and Yaz (Drospiernone) Mktg. Litig., MDL No. 2100, 2011 WL 6740391, at *12 (S.D. Ill. Dec. 22, 2011) (plaintiffs "may ask a witness, who has familiarity with other pharmaceutical companies, if that witness is familiar with custom and practice in the industry"); Fed. Ins. Co. v. Arthur Andersen, LLP, No. 03 C 1174, 2006 WL 6555232, at *3 (N.D. Ill. Jan. 18, 2006) ("An expert may properly testify as to 'the customs and standards of an industry, and [] opine as to how a party's conduct measured up against such standards.") (quoting Lippe v. Bairnco Corp., No. 96 C 7600, 2002 WL 15630, at *2 (S.D.N.Y. Jan. 7, 2002)); Harmes v. Lab. Corp. of Am., 155 F. Supp.2d 891, 903-04 (N.D. Ill. 2001) ("[T]estimony on the general standards of care in the industry would come from [the expert's] professional knowledge, not from his observations of [the defendant's] testing procedures as related to the current case. This is classic expert testimony.").

Accordingly, Harmor's reliance on the 1994 ASCLD-Lab standards and his thirty years of experience as a serologist, which includes interpreting and overseeing laboratory protocol and reviewing lab reports generated by SERI and other laboratories, constitutes a sufficient basis for his opinions regarding the meaning of the term "extract" and Fish's review of the Zilinger Report.

3. Helpfulness to the Trier of Fact

The Court must also assess whether Harmor's proposed opinions will assist the jury in determining a factual issue. *See Meyer*, 629 F.3d at 644. This is essentially a relevance inquiry. *Porter v. Whitehall Labs., Inc.*, 9 F.3d 607, 613 (7th Cir. 1993) ("Expert testimony which does not relate to any issue in the case is not relevant and, ergo, non-helpful.") (quoting *Daubert*, 509 U.S. at 591); *see also Roman v. Western Mfg., Inc.*, 691 F.3d 686, 694 (5th Cir. 2012) ("To be 'helpful' under Rule 702, the evidence must possess validity when applied to the pertinent factual inquiry Principally this is a matter of relevance.") (internal quotations omitted); *Hemmings v. Tidyman's Inc.*, 285 F.3d 1174, 1184 (9th Cir. 2002) ("Whether testimony is helpful within the meaning of Rule 702 is in essence a relevancy inquiry."); *United States v. Downing*, 753 F.2d 1224, 1242 (3d Cir. 1985) ("An additional consideration under Rule 702—and another aspect of relevancy—is whether expert testimony proffered in the case is sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute.").

Defendants argue that Harmor's testimony regarding the meaning of the term "extract" should be excluded pursuant to Federal Rule of Evidence 403 as unfairly prejudicial and confusing because it does not purport to explain how a layperson (as opposed to a DNA practitioner) would have interpreted the term in 1995. This argument misconceives the purpose of Harmor's testimony and Cage's theory of liability. Defendants are correct that Harmor's understanding of how a DNA practitioner would interpret the word "extract" says very little about how a lay person might interpret the term. However, Cage's allegations against Fish and Doyle do not implicate the layman's understanding of "extract." Rather, Cage alleges that Doyle created a misleading report by using terminology that, when read in the context of a serological report, implies the use of testing that she had not in fact performed and that Fish, Doyle's

supervisor, either conducted an in-depth review of the report, recognized the misrepresentation, and ignoring that misrepresentation, allowed the report to be produced anyway, or acted with deliberate indifference by performing a cursory "rubber-stamp" review of the report in a manner that fell short of nationally established standards and thus did not catch the misreporting. Under either theory of liability, Harmor's opinion is relevant and helpful to the jury's determination of what Doyle would have understood "extract" to mean when she drafted the report and what Fish would have understood the term to mean when she reviewed Doyle's report. How a layperson would define the term is beside the point.

Defendants next argue that Harmor's conclusions regarding the meaning of "extract" and the duties of crime lab supervisors should be barred as irrelevant and confusing because Harmor contradicted his own conclusions during his deposition. Specifically, the Defendants assert that Harmor: (1) conceded that there are not and were not in 1995 nationally accepted standards governing the language that must be contained in a serology lab report; (2) defined the term "extracting" broadly to mean "tak[ing] biological material [from a] garment," effectively admitting the Defendants' argument that "extract" is not and was not in 1995 as scientifically significant a term as Cage makes it out to be; and (3) conceded that Doyle conducted a technical review of her own report and that the nationally accepted standards in 1995 did not require that technical review be performed by someone other than the report writer, but rather allowed for review by the same person that made the report.

As the Court informed the parties during the *Daubert* hearing, these objections concern the weight that should be accorded to Harmor's testimony and are not proper bases for exclusion. (Tr. 2/12/13, p. 232–33.) The Defendants will be free to explore on cross-examination any testimony suggesting that Harmor made inconsistent statements or equivocated when confronted

with his report at his deposition. At this stage in the proceedings, however, the Court's inquiry is focused on Harmor's qualifications and his methods, not his results. *See Lapsey*, 689 F.3d at 805 ("A *Daubert* inquiry is not designed to have the district judge take the place of the jury to decide ultimate issues of credibility and accuracy [T]he accuracy of the actual evidence is to be tested before the jury with the familiar tools of 'vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof.' "); *see also Wielgus v. Ryobi Technologies, Inc.*, No. 08 C 1597, 2012 WL 3643682, at *3 (N.D. Ill. Aug. 23, 2012) ("[T]he trial court's role as gatekeeper is not intended to replace cross-examination and the presentation of conflicting evidence as traditional mechanisms for highlighting weaknesses in the expert's testimony.") (citing *Spearman Indus. v. St. Paul Fire & Marine Ins. Co.*, 128 F.Supp.2d 1148, 1150 (N.D. Ill. 2001)) (internal quotations omitted).

Relatedly, Defendants maintain that Harmor's second and fourth opinions—that Doyle's report was misleading and that her misrepresentation would have been caught through adequate review, respectively—should be barred because they rest on Harmor's flawed conclusion regarding the meaning of the term "extract." Having found Harmor's opinions regarding the term "extract" relevant and admissible, these objections are also denied.

B. Opinions Pertaining to P30 (or "PSA") Testing

The portions of Zilinger's underwear that had not been consumed by the CPD Crime Lab and other laboratories were transferred to SERI for testing in 2011. (Harmor Report, ¶ 16.) R. Wraxall, SERI's then-Chief Forensic Serologist and Executive Director, performed the first tests on the underwear. (Tr. 2/13/13, p. 32.) Dr. Wraxall began by cutting pieces of the underwear that could potentially contain stains. (*Id.*) He identified these pieces using both visual observation and alternative light source ("ALS") examination, which is the process of "looking"

for bod[ily] fluids that may fluoresce under different lighting conditions." (*Id.* 32, 43.) Dr. Wraxall then examined the cuttings using AP testing "to try to find any seminal fluid that might still be active for [the AP] enzyme." (*Id.* 32.) This is accomplished by moistening a piece of paper with distilled water; laying that paper on the garment; and pulling the paper away and testing it with an "AP spot test reagent" that is made fresh every day. (*Id.* 72.) The results of the AP test were negative. (*Id.* 32.) According to Harmor, this result was "not surprising" because the AP enzyme loses activity with time. (Harmor Report, ¶ 16.)

After performing the AP test, Dr. Wraxall removed seven samples from the underwear and drew from them an "extraction using an aqueous solution." (Tr. 2/13/13, p. 72.) Harmor explained that this process involves "taking a piece of the cutting cloth, putting it into fluid, soaking it and then vortexing it, mixing it really fast, then centrifuging it to remove the biological materials that dissolve into water as well as the cellular material from the fabric." (*Id.*) In July 2011, Dr. Wraxall and another SERI analyst, Marissa Meininger, conducted a PSA Card test on certain parts of the aqueous extract. (*Id.* 33.) The PSA Card test is more sensitive than the standard P30 test and was not available to crime laboratories in the mid-1990s. (*Id.*) Dr. Wraxall and Meininger drew their sample from a 6x6 millimeter cutout from a portion of the victim's underwear identified as "25a" ("Section 25a") (*Id.* 38.)

PSA Card test results are displayed in the form of a pink line known as the "T line." (*Id.* 34.) Harmor explained that "the darker the color pink, the stronger [the result], and the weaker looking, the weaker it is, the less P30 [protein] that is present." (*Id.*) SERI's July 2011 test on Section 25a of Zilinger's underwear returned a "barely visible" pink line. (*Id.*) Dr. Wraxall and Meininger interpreted this as a "very weak positive" result. (*Id.* 33–34.) That result was confirmed by Amy Lee, another SERI analyst (*Id.* 34.) Harmor testified that even a very weak

positive result is considered a positive result from a forensic perspective. (*Id.* 35–36.) He added that weak positive result in no way implies a less reliable result but "simply means that there's less [P30] in the sample, so it gives a weaker signal." (*Id.* 36.)

After conducting the PSA Card test, Dr. Wraxall engaged in a process known as "differential digest," which is used to separate sperm DNA from vaginal donor DNA. (*Id.* 37.) After detecting sperm DNA in two areas of the extract, Dr. Wraxall performed a second PSA Card test on August 24, 2011. (*Id.* 37, 78.) The August 2011 test yielded a negative result. (*Id.* 37, 79.) On July 16, 2012, Harmor performed a third PSA card test. (*Id.* 38.) This third test, like the first, yielded a positive result. 5 (*Id.*) Based on the presence P30 protein in the underwear in 2011 and 2012, it is Harmor's opinion that Doyle would have detected seminal fluid in the underwear had she performed P30 testing in 1995 the way her report indicates. (*Id.* 41–42; Harmor Report, ¶16–20.)

Defendants do not dispute that Harmor's experience and training qualify him to offer an opinion based on the results the PSA Card test. Instead, Defendants argue that Harmor's conclusion is irrelevant—in other words, unhelpful to the trier of fact—because neither CPD Crime Lab protocol nor national standards in 1995 required P30 testing after a negative result from an AP test. Indeed Harmor admitted at his deposition that both in 1995 and the present day, it is appropriate for a forensic lab to stop a semen/sperm search once the presumptive AP test returns a negative result. (Harmor Dep., Dkt. 163, Ex. 4a, pp. 162–64) Relying on this

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⁵ The third PSA test consumed all that remained of Section 25a. (*Id.* 99.)

⁶ Harmor testified that he and other scientists at SERI were personally involved in the research and development of a previous version of the P30 test, known as the "crossover test," prevalent in crime laboratories in the 1980s and "90s. (Tr. 2/13/13, pp. 30, 33.) Harmor also stated that his lab helped develop the procedures used by the majority of crime laboratories in the United States to conduct the P30 test. (*Id.* 30.)

admission and governing standards in 1995, the Defendants argue that Harmor's opinion is irrelevant to the issue of withholding exculpatory evidence and would confuse and unfairly prejudice the jury by suggesting that the CPD Crime Lab should have conducted all possible tests rather than those required under nationally accepted standards.

The Defendants' argument again unduly simplifies Cage's theory of liability. Cage's claim is not simply that Doyle failed to conduct tests that would have excluded him as a suspect. Rather, Cage alleges that Doyle, Fish, and others engaged in malicious prosecution and conspired to deprive him of his constitutional rights by "endeavor[ing] to stretch and manipulate the facts and evidence to fit the false hypothesis that he was guilty of the crime." (Second Amended Complaint, ¶ 27.) At trial, Cage seeks to prove this allegation by showing that Doyle and Fish issued a misleading report that gave prosecutors and Cage's criminal defense attorneys the false impression that P30 testing had been performed when in fact it had not. Thus in Cage's view, Doyle and Fish are liable not because the CPD Crime Lab did not test Zilinger's underwear for the P30 protein, but because they "fabricated false reports" that led his criminal defense attorneys to believe the evidence against him was more ironclad than her actual lab work suggested. (Id. ¶ 48.) Under this theory of liability, whether P30 testing was required in 1995 is neither here nor there.

The Court nevertheless recognizes Defendants' concern that Cage's criticism of Doyle for failing to perform the P30 test, taken together with Harmor's opinion that the test could have excluded Cage as a suspect, may mislead the jury into believing the Defendants should be held liable for failing to perform all available testing. However this concern does not warrant exclusion under Federal Rule of Evidence 403 for two reasons: first, testimony that P30 testing would have excluded Cage as a suspect is, for the reasons described above, highly probative to

Cage's malicious prosecution and conspiracy claims; and second, a proper jury instruction can effectively mitigate any prejudicial, misleading, or confusing impact of the testimony. Accordingly, the Defendants may, at the appropriate time, propose a limiting instruction to narrow the jury's consideration of this evidence.

Defendants next contend that Harmor's conclusion is speculative because the PSA Card tests Dr. Wraxall and Harmor performed in 2011 and 2012 were more sensitive than any P30 test available in 1995. Because SERI's test was more technologically advanced, argue the Defendants, the fact that Harmor and Wraxall obtained positive results does not support the inference that Doyle would have obtained the same result, especially given that even the more sensitive PSA Card test SERI employed could yield no better than a "weak positive."

In observance of its gatekeeper's duty, the Court must assess not only the expert's methodology but also the reliability of the expert's application of that methodology to the facts of the case. *See* Fed.R.Evid. 702(c)-(d); *Joiner*, 522 U.S. at 146; *Fuesting v. Zimmer, Inc.*, 421 F.3d 528, 536 (7th Cir. 2005), *vacated in part on other grounds*, 448 F.3d 936. Defendants' speculation objection, properly understood within the *Daubert* framework, is essentially a challenge to Harmor's application of SERI's PSA Card test results to the facts. The inquiry here requires the Court to assess the manner in which the expert has attempted to "bring it all together"; the question is whether the expert has "bridged the analytical gap" between the mere existence of his principles and methods in theory and his application of them to the specific facts of the case before the Court. *See Howell v. CSX Transp., Inc.*, No. 2:11-CV-079 JD, 2013 WL 1149599, at *6 (N.D. Ind. Mar. 18, 2013) (citing *Fuesting*, 421 F.3d at 536); *see also Joiner*, 522

⁷ While the Defendants cite general propositions from *Daubert* and its progeny throughout their briefs, they almost entirely ignore the *Daubert* framework and Federal Rule of Evidence 702 in framing their specific objections to Harmor's opinions.

U.S. at 146 ("A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered."). Thus, "any step that renders the analysis unreliable under the *Daubert* factors renders the expert's testimony inadmissible. This is true whether the step completely changes a reliable methodology or merely misapplies that methodology." *In re Paoli R.R. Yard PCB Litigation*, 35 F.3d 717, 745 (3d Cir. 1994) (emphasis removed).

At the *Daubert* hearing, Harmor admitted that the modern PSA Card test SERI used to test samples from Section 25a is "more discriminating" or "more sensitive than the P30 crossover system" used by crime laboratories in the 1980s and '90s. (Tr. 2/13/13, p. 33.) Harmor explained, however, that his conclusion that Doyle could have detected the P30 protein using then-available technology is nevertheless sound based on two theories: (1) the crotch panel of Zilinger's underwear, which was available to Doyle in 1995 but had been fully consumed by 2011, had more seminal fluid than the periphery of the underwear available to SERI because seminal material comes out of the vaginal area and collects in crotch panel after a sexual assault (the "periphery theory"); and (2) DNA degrades over time and therefore the amount of P30 protein left in the underwear fabric by 2011 was significantly lower than the amount present when Doyle tested the underwear in 1995 (the "DNA degradation theory"). (Harmor Report, ¶¶17–20.) The Court's *Daubert* hearings focused primarily on the reliability of these assumptions, both of which the Defendants challenge.

1. The Periphery Theory

By the time SERI performed the PSA Card test on Zilinger's underwear in 2011, a total of fifteen different pieces of the undergarment had been cut, removed, and consumed through prior testing. (Tr. 2/13/13, p. 42–43.) The front crotch panel of the underwear, though available to the CPD Crime Lab, Strand Laboratory, and Orchid Cellmark, was no longer available by the

time SERI obtained what remained of the fabric. This is significant, explains Harmor, because when a female sexual assault victim puts clothing on after a sexual assault, the seminal fluid is not distributed evenly but instead "drains out of the vagina onto the object of clothing that the victim is wearing, such as a pair of panties or a nightgown or a pair of blue jeans." (Id. 44.) Harmor testified that when this happens, most of the seminal material concentrates in crotch panel of the victim's garment. (Id. 43-45.) According to Harmor, this means that if Zilinger wore her underwear after the assault there would have been more seminal fluid on the evidence available to the CPD Crime Lab than on the evidence his lab tested in 2011 and 2012. (Id. 45.) Because SERI was able to detect the presence of seminal material on a less than ideal sample of underwear, it is Harmor's opinion that P30 testing in 1995 on the more concentrated portions of the underwear available to Doyle would have detected the presence of semen notwithstanding the fact that the P30 crossover system Doyle used was not as sensitive as the PSA Card test SERI utilized in 2011 and 2012. Harmor concedes that his opinion rests on the factual assumption that Zilinger put her underwear on after the assault and admits he is unaware of whether this is in fact the case. (*Id.* 120.)

Defendants argue that even if Zilinger put her underwear on after the assault, Harmor's opinion is speculative and should not be admitted because he has failed to provide any scientific support for the theory that seminal material accumulates in the crotch panel of the underwear. Harmor concedes there is no scientific test or study that supports his theory that there would have been more semen on the crotch panel. (*Id.* 130–131.) However, Harmor testified that he has performed forensic testing in several sexual assault cases and that based on his experience from those prior cases, semen tends to accumulate in and around the crotch portion of the underwear after a sexual assault. (Tr. 2/13/13, p. 44.) As the Court stated previously, Rule 702 specifically

permits the admission of expert testimony where the expert's knowledge is based on experience. *See Metavante Corp.*, 619 F.3d at 761 ("Expert[] testimony is not unreliable simply because it is founded on his experience rather than on data."); *Walker*, 208 F.3d at 591; *see also Jordan*, 2012 WL 254243, at *3 ("An expert may be qualified to render opinions based on experience alone."); *see also* Fed.R.Evid. 702 advisory committee's notes (2000 amends.) Accordingly Harmor is permitted to draw a conclusion regarding the distribution of semen in a victim's underwear following a sexual assault "from a set of observations based on [his] extensive and specialized experience" with sexual assault cases. *Kumho Tire*, 526 U.S. at 153.

The fact that Harmor cannot say with scientific certainty that there was more sperm in the crotch panel than in the periphery, (*Id.* 157), is not a basis for exclusion under Rule 702. Rule 702 does not require "that an expert's opinion testimony be expressed in terms of a reasonable scientific certainty in order to be admissible." *Stutzman v. CRST, Inc.*, 997 F.2d 291, 296 (7th Cir. 1993) (quoting *United States v. Cyphers*, 553 F.2d 1064, 1072–72 (7th Cir. 1977)); *see also Walker*, 208 F.3d at 587 ("From Dr. Pliskin's testimony, the jury could choose to infer that any electrical trauma Mr. Walker suffered caused his decline in IQ His testimony could assist the trier of fact even if he cannot say with complete certainty that electrical trauma caused Mr. Walker's declining in function."). Rather, the Seventh Circuit "adhere[s] to the rule that an expert's lack of absolute certainty goes to the weight of his testimony, not the admissibility." *Stutzman*, 997 F.2d at 296 (district court properly admitted doctor's expert testimony that plaintiff's preexisting condition could have been aggravated by an automobile accident despite the fact that the doctor testified only that aggravation was "possible," not that it was "probable").

Defendants' remaining challenges to Harmor's periphery theory and the conclusions derived therefrom do not implicate *Daubert*. At numerous points in the hearing, the Court

reminded the parties that *Daubert* hearings are limited in scope and are not to be used as a vehicle to offer the Court preview of summary judgment arguments. *See Apple, Inc. v. Motorola, Inc.*, No. 11-cv-8540, 2012 WL 1959560, at *2 (N.D. III. May 22, 2012) (Posner, J.) (stating that "even where expert testimony is admissible, it may be too weak to get the case past summary judgment.") (citing *Hirsch v. CSX Transp., Inc.*, 656 F.3d 359, 362 (6th Cir. 2011) (distinguishing between the admissibility of evidence and its sufficiency and upholding a grant of summary judgment on the ground that the expert testimony offered in opposition to a motion for summary judgment, though admissible under the *Daubert* standard, did not preclude summary judgment)). Despite the Court's instructions, both sides appeared incapable of resisting the temptation to delve into substantive matters having nothing to do with the motions presently before the Court.

First, the Defendants argue that Harmor's opinion should be excluded because Cage has failed to provide support for Harmor's factual assumption that Zilinger put her underwear on after being sexually assaulted. The law does not support exclusion on this basis. "The soundness of the factual underpinnings of the expert's analysis" is a "factual matter[] to be determined by the trier of fact, or, where appropriate, on summary judgment." *Smith v. Ford Motor Co.*, 215 F.3d 713, 718 (7th Cir. 2000). The Advisory Committee's Notes to Fed.R.Evid. 702 provide:

When facts are in dispute, experts sometimes reach different conclusions based on competing versions of the facts. The emphasis in the [Rule] on 'sufficient facts or data' is not intended to authorize a trial court to exclude an expert's testimony on the ground that the court believes one version of the facts and not the other.

Fed.R.Evid. 702, advisory committee's note (2000 amends.); see also Scott v. Shuhak & Tescon, P.C., No., 2011 WL 4462915, at *5 (N.D. Ill. 2011) ("[A]n expert opinion cannot be based on facts that are contradicted by undisputed evidence. He may, however, rely on his client's version of any disputed facts."); see, e.g., In re Ready-Mixed Concrete Antitrust Litig., 261 F.R.D. 154, 165 (S.D. Ind. 2009) (denying request to strike expert's opinion where expert assumes facts based on his review of evidence even though opponent submitted evidence contradicting his assumptions). In this case, Cage proffers that the testimony of police officers, bystanders, and Zilinger herself will support Harmor's factual assumption that Zilinger put her underwear on after the attack. On the other hand, Defendants, relying on Zilinger's deposition testimony, argue that the record contradicts Cage's version of events.⁸ There is clearly a factual dispute that falls outside the scope of the motions presently before the Court; such issues must be decided by either the trier of fact or, under limited circumstances, at summary judgment. Smith, 215 F.3d at 718; Strollings v. Ryobi Technologies, Inc., --- F.3d ----, 2013 WL 3964477, at *13 (7th Cir. Aug. 2, 2013) ("The fact that an expert's testimony contains some vulnerable assumptions does not make the testimony irrelevant or inadmissible."). Defendants will have the opportunity to highlight on cross-examination that the fact that Harmor's periphery theory rests on the

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⁸ The Court notes, though it need not decide the issue here, that Zilinger's deposition, fairly read, does not support Defendants' position in any meaningful way. Zilinger was asked at her deposition whether she ever recovered her clothes after the sexual assault, to which she responded that she recalled having her jacket and her bookbag. (Zilinger Dep., Dkt. 163 Ex. 8, pp. 188–189.) Apparently it is the Defendants' position that Zilinger's failure to mention any articles of clothing aside from her jacket establishes conclusively that she wore no other clothing following the assault. The Court refuses to draw such generous a negative inference in favor of the Defendants.

Furthermore, factual record at this stage of the proceedings remains somewhat limited because Defendants proposed to have *Daubert* matters resolved before commencing summary judgment proceedings. The Court declines Defendants' invitation to now use the Defendants' scheduling proposal against Cage by making a factual finding in favor of one party without the benefit of a proper presentation of facts in the form of Local Rule 56.1 statements.

assumption that Zilinger wore her underwear after the attack. They will also have the opportunity, at the appropriate time, to present evidence proving that assumption to be incorrect.

Second, Defendants highlighted the fact that two other laboratories, Strand Laboratory and Orchid Cellmark, both performed DNA testing on vaginal swabs from the crotch panel of Zilinger's underwear and, like the CPD Crime Lab, were unable to detect the presence of sperm. (*Id.* 121–22.) Harmor admitted that this evidence contradicts his view that there would have been more seminal material in the crotch panel. (*Id.* 122, 128, 133.) However, the fact that another laboratory obtained a different result is an issue the trier of fact may consider when determining how much weight to give to Harmor's conclusion; it does not bear on admissibility for the purposes of *Daubert. See Lapsey*, 689 F.3d at 805 ("[T]he accuracy of the actual evidence is to be tested before the jury with the familiar tools of 'vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof.'").

Furthermore, even assuming contrary results from other laboratories results were relevant for the purpose of assessing the reliability of Harmor's methodology, Defendants' position that Strand and Cellmark's results conclusively undermine Harmor's opinion appears highly debatable given that neither Strand nor Cellmark performed P30 testing. (*Id.* 131.) Instead both laboratories performed a "presumptive test" using a vaginal swab. (*Id.*) Harmor explained that by the time Strand and Cellmark tested Zilinger's underwear, the only biological material remaining would have been contained in the interior part of the cotton, which presumably would be difficult to capture using a swabbing technique. (*Id.* 121.) Thus, contrary to Defendants' suggestions, Strand and Cellmark's results do not compel the conclusion that P30 testing of the crotch panel also would have failed to detect the presence of semen. In any event, Defendants

will be free to argue and present evidence that Strand and Cellmark's results cast doubt on Harmor's theory regarding the distribution of seminal material.

Third, Defendants take issue with SERI's documentation of the tests it performed on Zilinger's underwear. Specifically, Defendants point to the fact that neither Dr. Wraxall's original report nor Harmor's addendum mention that SERI's second PSA Card test yielded a negative result. When asked to explain the omission, Harmor testified that Dr. Wraxall did not include the negative result in his report because he performed the first and second tests on different part of the underwear. (Id. 85, 92.) However, SERI's documentation of the PSA Card test does not support Harmor's explanation. To the contrary, the documentation clearly indicates that all three PSA Card tests, including the test that yielded a negative result, were conducted on the portion of Zilinger's underwear labeled "Section 25a." SERI created a map of the Zilinger's underwear in order to keep track of which parts were being cut out for each test. (Id. 89.) That map, which was a part of Dr. Wraxall's lab notes, gives no indication that the second test was performed on a different "Section 25a" than the one used in the July 2011 test. (Id. 89–90.) On cross-examination Harmor conceded that SERI should have reported the negative result along with the positive results and that SERI's documentation should have made clear the negative result was derived from a different part of the underwear. (*Id.* 85, 92, 94.)

Notwithstanding the potential weight of SERI's documentation error, Defendants have not argued, offered evidence, or elicited testimony suggesting the methodology Dr. Wraxall and Harmor employed in conducting the PSA Card tests was flawed. *See Winters v. Fru-Con Inc.*, 498 F.3d 734, 742 (7th Cir. 2007) ("The focus of the district court's *Daubert* analysis must be solely on principles and methodology, not on the conclusions they generate."). "The biggest challenge to the judge at a *Daubert* hearing ... is to distinguish between *disabling* problems with

the proposed testimony, which are a ground for excluding it, and *weaknesses* in the testimony, which are properly resolved at the trial itself on the basis of evidence and cross-examination." *Apple, Inc.*, 2012 WL 1959560, at *2 (emphasis added); *see also Paoli*, 35 F.3d at 746 ("The judge should not exclude evidence simply because he or she thinks that there is a flaw in the expert's investigative process which renders the expert's conclusion incorrect. The judge should only exclude the evidence if the flaw is large enough that the expert lacks 'good grounds' for his or her conclusion."). Here, the Defendants have highlighted weaknesses to be considered by the trier of fact in deciding how much credence to give Harmor's testimony, not "disabling problems" that warrant exclusion.

2. The DNA Degradation Theory

Harmor also opines that although the PSA Card test yielded a "weak positive" result, his conclusion that P30 testing in 1995 would have detected the presence of semen is scientifically sound because DNA degrades over time and thus Zilinger's underwear would have contained more protein (and thus more DNA) in 1995 than it did when SERI tested it in 2011. (*Id.* 51.) Specifically, Harmor testified that it is "[c]ommonly accepted wisdom in the field" of forensic serology that DNA, like P30, degrades over time. (*Id.* 53–55.) Harmor also stated that based on his experience, the ability to detect the P30 protein "starts to drop off" after about 10 years. (*Id.* 49.) In this case, Harmor measured the sample Dr. Wraxall and Meininger tested for P30 and found that it contained a total of 0.19 nanograms of male DNA. (*Id.*)

Using the 0.19 nanogram figure as a mathematical starting point, Harmor attempted to measure DNA's rate of degradation to determine how much DNA would have been available in the same sample in 1995. (*Id.* 56.) In order to calculate the degradation rate, Harmor analyzed blood samples that were "about the same age as the semen in the underwear." (*Id.* 56-57.) The

specific samples used in Harmor's experiment were extracted in 1994 from a former SERI employee. (*Id.* 57.) Harmor explained that in the past, SERI would draw blood from its employees, process it for DNA, and maintain a database of the personnel that had worked in the facility. (*Id.* 56–57.) One sample of the employee's blood was stored in a freezer; another was placed on a clean white cloth and filed in a card box at ambient temperature. (*Id.* 56–57, 101.) Harmor explained that by comparing the amount of DNA in the frozen sample, which remained fresh, to amount of DNA in the same employee's sample that was stored at ambient temperature, he was able to conclude that the DNA in the sample stored at room temperature degraded by about 75 percent between 1994 and 2011. (*Id.* 61-62.) Applying this degradation rate to the 0.19 nanogram sample available to Dr. Wraxall in 2011, Harmor concluded that there was approximately 0.57 nanograms of DNA in the same sample when Doyle performed her testing in 1995. (Harmor Report, ¶ 23; Tr. 2/13/13, p. 63.) According to Harmor, 0.57 nanograms was enough for DQ Alpha DNA testing (also known as "HLADQA1" testing), which was available in 1995, to exclude Cage as a suspect. (Harmor Report, ¶ 24–25.)

Harmor's testimony regarding the degradation of DNA is based on his experience as a serologist, which includes work with post-conviction "cold cases" that call for DNA testing on pieces of evidence that are several years old. (*Id.* 47–49.) Specifically, Harmor stated that he

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 $^{^{9}}$ It is unclear how Harmor derives the 0.57 nanogram figure from his initial starting point of 0.19 nanograms using a total degradation of 75%. If it is Harmor's opinion that the sample his lab obtained in 2011 contained 0.19 nanograms of DNA after having degraded 75%, the same sample before degradation would have contained 0.76 nanograms of DNA (0.19/(1-0.75) = 0.76). Harmor's 0.57 nanogram figure implies a degradation of 66.6% (0.19/(1-0.667) = 0.57).

¹⁰ To clarify, the 0.57 nanogram figure is derived from the 0.19 nanograms left on the currently-available portions of the underwear and thus does not take into account the "periphery theory" – that the parts of the underwear already consumed through other testing had a more concentrated presence of seminal material. In other words, if the trier of fact accepts both the periphery *and* the degradation theory, it is possible that samples available for DQ Alpha testing in 1995 had even more than 0.57 nanograms of DNA. However Harmor's estimate of the quantity of DNA is limited to the peripheral parts of the garment available to SERI in 2011.

"work[s] on old cases fairly routinely" and has observed what is called a "slope of degradation" of DNA that renders it difficult and sometimes impossible to detect DNA on old evidence. (*Id.* 55–56.) Harmor also states in his rebuttal report that "[i]t is well-accepted within the forensic biology field that DNA degrades over time. In my 20 years as a DNA practitioner, I have consistently observed evidence of DNA degradation." (Harmor Rebuttal Report, Dkt. 184, Ex. G, ¶ 18.) Based on his experience and training, Harmor is qualified to opine generally that DNA degrades over time and that the ability to detect the P30 protein declines when a sample is over ten years old. However despite these qualifications, Harmor's specific conclusions regarding the estimated degradation rate and amount of DNA that would have been present on Section 25a in 1995 must be excluded. Cage has not shown by a preponderance of the evidence that these conclusions are the product of an acceptable methodology or that the methodology used by Harmor was applied reliably to the facts of this case.

Rule 702 "imposes a special obligation upon a trial judge to 'ensure that any and all scientific testimony ... is not only relevant, but reliable." *Kumho Tire*, 526 U.S. at 147 (citing *Daubert*, 509 U.S. at 589). When an expert's "factual basis, data, principles, methods, or their application are called sufficiently into question ... the trial judge must determine whether the testimony has 'a reliable basis in the knowledge and experience of [the relevant] discipline." *Id.* at 149. (citing *Daubert*, 509 U.S. at 592). In determining whether to allow an expert to testify, the Court may consider whether: (1) the "theory or technique can be (and has been) tested"; (2) the theory or technique "has been subjected to peer review and publication"; (3) "in respect to a particular technique, there is a high 'known or potential rate of error' and whether there are 'standards controlling the technique's operation'; and (4) "the theory or technique enjoys 'general acceptance' within a 'relevant scientific community.'" *Id.* at 149–150 (quoting

Daubert, 509 U.S. at 592–594); Bielskis, 663 F.3d at 894. The 2000 Advisory Committee's Notes to Rule 702 suggest additional criteria for gauging expert reliability, including whether: (1) "maintenance standards and controls" exist; (2) the testimony relates to "matters growing naturally and directly out of research they have conducted independent of litigation," or was developed "expressly for purposes of testifying"; (3) "the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion," (4) "the expert has adequately accounted for obvious alternative explanations"; (5) "the expert is being as careful as he would be in his regular professional work outside his paid litigation consulting"; and (6) "the field of expertise claimed by the expert is known to reach reliable results for the type of opinion the expert would give." See Fuesting v. Zimmer, Inc., 421 F.3d 528, 534–35 (7th Cir. 2005), vacated in part on other grounds, 448 F.3d 936 (7th Cir. 2000) (quoting Fed.R.Evid. 702 advisory committee's note (2000));

For several reasons, Harmor's private experiment falls short of the standards as set forth in *Daubert*. First, Harmor performed his degradation experiment on blood cells, not spermatozoa. (Tr. 2/13/13, p. 114.) Harmor's testimony at the *Daubert* hearing made clear that this distinction is not insignificant. After explaining his process and conclusion, Harmor was asked whether it mattered that he derived a degradation rate using a blood sample but applied it to estimate the amount of DNA in a semen sample. (*Id.* 62.) On direct examination, Harmor's response was both vague and unhelpful:

There may be some difference between blood and semen age over the length of time, but I'm basically looking at DNA packaged in a cell and a nucleus. And they both are packaged very well inside the cell. And so – we have to struggle to get the DNA out, actually, but rupturing two membranes and processing the DNA and washing it clean. So the processes to develop DNA from the cells is the same, very similar, in each instance.

(*Id.* 62–63.) When cross-examined on this point, Harmor initially resisted the Defendants' suggestion that a degradation rate derived through tests of blood samples could not be applied to semen. (*Id.* 110.) Harmor insisted that although blood cells and sperm cells are different in many respects, both contain human DNA and thus may appropriately be compared in determining the rate at which DNA would degrade at ambient temperatures over a given period of time. (*Id.*) However, Harmor eventually conceded that sperm cells have a tougher cell membrane than blood cells and admitted he is unsure whether the difference in relative strength of cell membranes affects the degradation rate of DNA contained within the cell. (*Id.* 113–114.) Significantly, Harmor admitted that there could be a "dramatic difference" between the degradation of DNA in a sperm cell and the degradation of DNA in a blood cell. (*Id.* 112.)

In light of this testimony, the Court has serious doubts about whether Harmor's experiment can be used to reliably estimate the rate of degradation in seminal material. Despite his insistence that "DNA is DNA," Cage has failed to "bridge[] the analytical gap" between the results of Harmor's test on DNA in blood cells and the application of those results to DNA in sperm cells. *See Fuesting*, 421 F.3d at 536 ("Another indicator of unreliability is the unjustifiable extrapolation from an accepted premise to an unfounded conclusion.") (citing Fed.R.Evid. 702 advisory committee's note (2000 amends.)). In other words, Cage has not shown that Harmor's opinion flows reliably from the data on which he relies. *See United States v. Mamah*, 332 F.3d 475, 478 (7th Cir. 2003) ("It is critical under Rule 702 that there be a link between the facts or data the expert has worked with and the conclusion the expert's testimony is intended to support"); *Heller v. Shaw Indus., Inc.*, 167 F.3d 146, 159 (3d Cir. 1999) (upholding district

court's exclusion of expert's conclusion because it did not "fit" or reliably flow from the expert's data or methodology).

Second, the underwear sample to which the results of the analysis were applied, unlike the clean white cloth used in Harmor's experiment, was "dirty," "had biological material [other than sperm] all over it," and possibly even contained detergent or fabric softener. (Tr. 2/13/13, pp. 101. 109.) Harmor admitted that he did not perform the analysis on an unclean sample or a sample containing mixed fluids or detergent. (Id. 102–103.) Thus, Harmor's experiment fails to take into account whether other particles (such as dirt), chemicals (such as those contained in detergent and fabric softener), and biological material (such as vaginal DNA), had any effect on the rate of degradation. Although the Court recognizes that a perfectly comparable experiment would be difficult to duplicate—it would have required Harmor to preserve a soiled pair of underwear containing DNA for seventeen years—Harmor's failure to take into account the possibility that other variables may have affected the results of his one-time experiment leave the Court unable to conclude that he "employ[ed] the same 'intellectual rigor' " in reaching his conclusion as would be employed by an expert in his field. See Sheehan v. Daily Racing Form, Inc., 104 F.3d 940, 942 (7th Cir. 1997) (Daubert "requires the district judge to satisfy himself that the expert is being as careful as he would be in his regular professional work outside his paid litigation consulting."); Claar v. Burlington Northern R. Co., 29 F.3d 499, 502 (9th Cir. 1994) (failure to adequately take into account alternative explanations fatal to the admissibility of expert testimony under *Daubert*).

Other considerations also weigh against admitting Harmor's estimate of the amount of DNA that would have been on the sample in 1995. First, there is no indication in the record that Harmor's technique and theory has ever been tested, much less that it "enjoys general acceptance

within [the] scientific community." Kumho Tire, 526 U.S. at 149. Harmor maintains that the 75 percent figure derived from his experiment is consistent with a recent clinical analysis attempting to determine the half-life of DNA at ambient storage temperatures in the San Francisco Bay area. (Id. 66.) That analysis suggested DNA stored at ambient temperature in the Bay Area would lose half of its activity every 8 years. (Id.) According to Harmor, this means DNA stored at such temperatures for 16 years would lose half of its value twice, consistent with a degradation of 75 percent over that period of time. (Id. 66.) Though Harmor does not appear to have relied on this study in his own analysis, he stated at the hearing that it gave him greater confidence that he had employed the scientific methodology correctly in this case. (Id. 67.) However, even if this single study arguably lends credence to Harmor's intermediate finding that DNA in blood cells degrades 75 percent over 17 years, it fails to support the two crucial assumptions that buttress the application of that finding to the facts of this case: (1) that the degradation rate of DNA in blood cells can be applied to DNA in sperm cells and (2) the rate of degradation is unaffected by the presence of other particles, chemicals, and biological material. Thus the Court is not swayed by the results of that study. See Joiner, 522 U.S. at 146 (district court did not abuse its discretion in excluding expert opinions extrapolated from far-removed studies, finding that the studies were too "dissimilar to the facts presented in this litigation" to support the experts' conclusions).

Additionally, Harmor's experiment has never been peer reviewed, published, or relied upon by another expert in his field. (Tr. 2/13/13, pp. 107, 150.) Indeed Harmor agreed that his experiment, as conducted, "wouldn't even come close to meeting [the] standards" necessary to withstand peer review or the publication process. (*Id.* 107–108.) Harmor further testified that the test was performed once, and that it would be "bad science" to take the result of a one-time test on a single sample and, in the context of peer review and journal submissions, extrapolate that

result to mean the same result would obtain in the majority of cases. (*Id.* 108, 152.) Lastly, Cage has not presented any evidence regarding the potential rate of error in Harmor's experiment. *Id.* Under these circumstances, the Court cannot conclude that Harmor's experiment was reliably applied to determine—or estimate for that matter—the rate at which DNA contained in the sperm cells in Zilinger's underwear would have degraded over a 17-year period. While Cage insists that the issues described above reflect mere "weaknesses" that can be addressed through effective cross-examination, such fundamental flaws in methodology and application are precisely the type of "disabling problems" that require the Court to exercise its gate-keeping responsibility. Accordingly, Harmor's estimate of the degradation rate of DNA in sperm cells over the relevant time period and his opinion regarding the amount of DNA that would have been present on the underwear sample in 1995 is barred.

C. Harmor's Conclusions Regarding Potential Results of DQ Alpha Testing

Harmor opines that if the CPD Crime Lab were to have performed P30 testing and detected the presence of semen, DQ Alpha DNA testing, which was available in 1995, would have generated a DNA profile that would have excluded Cage as the attacker. (Tr. 2/13/13, pp. 51–52; Harmor Report, ¶¶ 24–25.) Defendants argue this opinion should be excluded because it is clear that neither 0.57 nanograms nor 0.19 nanograms were sufficient to return a valid result using DQ Alpha testing in 1995.

Like many of the attacks Defendants level against Harmor's opinions, Defendants' objection here does implicate *Daubert*. Both sides offer evidence supporting their positions regarding the capabilities and limitations of DQ Alpha testing in 1995. Defendants point to the fact that Harmor stated at his deposition that it would require approximately one nanogram of material to obtain a DNA result in 1995 and that the manufacturer of the DQ Alpha test has

indicated it cannot guarantee a result with less than 2 nanograms of material. While Harmor acknowledges that the manufacturer of the test recommends two nanograms for a "guaranteed result," he expressed no reservation in concluding that the test can be performed on smaller samples, explaining that his lab "routinely performed [the test] on less than two nanograms." (Id. 67-68.) Harmor analogized the stated requirement to labels informing that "Kodak film lasts a year, guaranteed." (Id. 68.) The fact that the label provides such a guarantee, explained Harmor, "doesn't mean you can't use it in 18 months." (Id.) Similarly, the DQ Alpha test manufacturer's guarantee, according to Harmor, simply means that "you'll get a result every time with the kit solutions that they provide if you use 2 nanograms of human DNA." (Id.) Harmor testified that the instruction does not mean a positive result will not obtain when a lab uses less than two nanograms. (Id.) Harmor also testified that the manufacturer has successfully performed the test with 0.035 nanograms (or 35 picograms) of DNA and still obtained results, albeit not "great results." (Id. 69.) Harmor stated that SERI's own Methods Manual suggests a range of "0.25 nanograms to 2 nanograms, with a target of approximately 1 nanogram if [available]." (Id 68.) Having conducted the test "thousands of times," it is Harmor's conclusion to a reasonable degree of scientific certainty that the DQ Alpha test could have obtained a reliable result in 1995 with as little as 0.25 nanograms. (*Id.* 67; Harmor Rebuttal Report, Dkt. 184-7, ¶ 14.)

It is clear from this testimony that the Defendants' objection boils down to a dispute over the accuracy of Harmor's conclusion, not his methodology. The Court reiterates that such challenges must be addressed through cross-examination and the presentation of contrary evidence. *See Daubert*, 509 U.S. at 596; *Winters*, 498 F.3d at 742. Defendants' motion to bar Harmor's opinion that DQ Alpha testing in 1995 would have generated a DNA profile and eliminated Cage as a suspect is therefore denied.

However, this denial is subject to limitations. Harmor may testify that given the 0.19 nanograms of DNA present on the undergarment sample in 2011, DQ Alpha testing would have yielded a positive result because (1) DNA degrades over time and thus there would have been more than 0.19 nanograms of DNA present in 1995 on the same sample; (2) the portions of the the underwear available to the CPD Crime Lab had more than 0.19 nanograms of DNA in 1995 based on both the periphery theory and the lack of degradation at that time; and (3) despite the manufacturer's statement that the DQ Alpha test requires two nanograms for a guaranteed result, experience teaches that a result may be obtained with as little as 0.25 nanograms. However, consistent with the Court's holding in Section I.B, Harmor may not testify that the DNA would have degraded by 75 percent or offer an opinion regarding the specific amount of DNA that would have been in the sample in 1995 when Doyle conducted her tests.

II. Defendants' Motions to Bar the Testimony of Charles Alan Keel

A. Defendants' Joint Motion No. 1 to Bar Plaintiff's Expert, Charles Alan Keel's, Testimony and Opinions (Defendants' Joint Motion No. 1)

Fish was Doyle's supervisor at the CPD Crime Lab. The Defendants do not dispute that it was Fish's responsibility to review and sign off on the Zilinger Report prior to its submission to prosecutors and Cage's criminal defense attorneys. Fish has testified that although she reviewed Doyle's work, her review was administrative, not technical. Fish has also indicated that Doyle performed her own technical review of the Zilinger Report before the CPD Crime Lab produced it to the criminal justice system. Cage's proposed expert Charles Alan Keel, a criminalist and expert in bodily fluid, defines "administrative review" as a type of review that can be accomplished either by a peer or by an administrator. (Tr. 2/11/13, p. 38.) This form of review is "clerical," not substantive, and is designed to ensure "that all the I's are dotted and the

T's are crossed, that the evidence item numbers are correct" (*Id.*) The term "technical review," on the other hand, refers to the reading of a report by a peer *and* the review of all supporting data and documents that support the findings and conclusions listed in that report. (*Id.* at 37.) Keel testified that technical review is substantive in nature and requires that the peer reviewer compare the findings and conclusions expressed in the report to the documentation in the case file to ensure that the testing performed was adequate and to determine whether the case file accurately supports the conclusions and findings in the report. (*Id.* at 38, 40.)

Keel testified that Fish's role as supervisor at the CPD crime lab was to technically review the Zilinger Report to make sure the findings and conclusions expressed therein were adequately documented in the case file and that the case file supported the report. (*Id.* at 42.) According to Keel, it was the nationally-established practice of serology labs to have supervisory personnel conduct rigorous administrative *and* technical review upon completion of lab work and prior to formal publication of a report describing the work. (*See* Keel Report, ¶ 5, Dkt. 169, Ex. 1.) Keel concludes that despite the accepted practices, Fish simply performed a "bare bones administrative review" that involved nothing more than proofreading the report. (*Id.*) This, according to Keel, does not comport with the norms and standards in the profession because standards require that a peer conduct a "comprehensive technical review." (Tr. 2/11/13, p. 42.) Specifically, Keel testified that "[p]eer review is required in every DNA case, just like it should be in every conventional serology case." (*Id.* 57.) It is Keel's opinion that this form of review is "essential" and has been the nationally accepted standard for as long as he has been in the profession, including the year 1995. (*Id.* 38, 44.)

In addition, Keel performed his own technical review of the Zilinger Report by comparing the report to Doyle's bench notes. Based on his review, Keel determined that the

Zilinger Report misled its readers about the type of testing Doyle performed on the physical evidence in Cage's criminal case. (Tr. 2/11/13, pp. 45–46.) Specifically, Keel opines that the statement "Chemical tests for the presence of semen conducted on extracts of Exhibits K7, 8, 9, 10, 11, and 12 yielded negative results" was "inaccurate on its face because it claims that there were extracts prepared from [the] specimen when, in fact, there were no extracts prepared from that specimen." (Id. 45-46, 48.) Like Harmor, Keel believes "extract" in this context is a scientific term of art that refers to the process of liquefying a stain of interest in order to perform certain chemical and microscopic testing to determine the presence of semen. (Id. 47–49; Tr. 2/12/13, p. 154.) Specifically, the preparation of an extract involves cutting from an area of interest on the fabric, placing the cutting in a micro-centrifuge tube, and adding liquid to the vessel in order to separate the seminal material from the fabric. (Tr. 2/11/13, p. 46.) Keel analogized this process to the use of a washing machine to remove stains from clothing, the only difference being that in using a washing machine "you don't bother recovering the stains that you're trying to get off the clothes. In this instance, we do try to recover the stuff. So essentially, we're trying to solubilize dried material on fabric, get that stuff off, and into a form that we can work with it in the laboratory." (Tr. 2/12/13, p. 83.) Through this process, any soluble components of the seminal fluid are dissolved into the liquid, leaving only sperm and vaginal epithelial cells. (Tr. 2/11/13, p. 46.) Once the extract is prepared, the lab is able to perform P30 testing to detect the presence of semen. (Id. 47–49.) According to Keel, the bench notes accompanying the Zilinger Report make clear that Doyle did not prepare extracts in the manner described above. (Tr. 2/11/13, p. 46.) Instead, Doyle's lab notes indicate that she used swabs to take seminal material off of the surface of the fabric and tested the swabs directly using

¹¹ Exhibit K7 represents the victim's underwear. (See Zilinger Report, Dkt. 169, Ex. 7.)

AP testing. (*Id.* 50.) Thus, based on his review of these notes, Keel concluded that the statement in the Zilinger Report stating that "chemical tests for the presence of semen [were] conducted on extracts" was false. (*Id.* 50.)

Keel opines that Fish's decision to conduct an administrative review instead of a technical review of the Zilinger Report was significant because a technical review would have uncovered the fact that the report was misleading. (*Id.* 53–54.) Specifically, Keel concludes that by performing a technical review, Fish would have: (1) identified Doyle's use of the term "extract," (2) recognized that the term implies the use of P30 testing; (3) reviewed Doyle's bench notes; and (4) observed from the notes that P30 testing was in fact not performed; and (5) concluded that the Zilinger Report did not accurately describe Doyle's work. (Tr. 2/12/13, p. 79.)

While no government body mandated technical peer review of all serology reports in 1995, Keel opines that such review was expected based on the guidelines in existence at the time as well as "the general precepts of the scientific method." (Tr. 2/11/13, pp. 61, 117–118.) To support this opinion Keel cites his own experience in the field and the standards promulgated in 1987 by American Society of Crime Lab Directors ("ASCLD"), a body of scientists who direct and administer various crime labs across the United States. (*Id.* 57, 146.) Keel testified that technical review has been performed in every serology case he has ever worked on in the six laboratories he has worked for. (Tr. 2/12/13, p. 146.) This practice is consistent with Keel's experience reviewing hundreds of cases from across the country, including over 100 post-conviction investigations. (*Id.*) Keel acknowledged that certain laboratories engage in "spot reviewing," a review process in which only a pre-determined percentage of cases are selected for full technical review. (*Id.* 62.) In Keel's opinion, however, spot review is appropriate only in "high volume" cases, such as those involving drugs, stolen vehicles, and residential burglaries.

(Tr. 2/11/13, pp. 62–63.). Keel testified that serology work does not qualify as "high volume" and thus spot-reviewing should never be applied in a rape or homicide case involving biological material. (*Id.* 62–64, 147.) Thus, it is Keel's view that any crime laboratory not engaging in technical review of every non-high volume report before issuance is violating its most basic scientific duties. (*Id.* 113–114.)

The parties also dispute whether nationally accepted practices in the field of serology require that technical review be performed by someone other than the analyst who conducted the original testing. Keel states that the notion that Doyle could have performed a technical review of her own work "makes no sense" from a scientific perspective and "flies in the face of what peer review," by definition, is supposed to involve. (*Id.* 44.) Keel also testified that in his 30 years of experience he has never heard of the concept of "self-technical review." Keel further stated that even if certain guidelines were to advise that an analyst perform a technical review of their own work, that guideline in no way discharges the obligation to have a supervisor sign off on the report after reviewing the supporting documentation. (Tr. 2/12/13, p. 153.)

At trial, Cage will ask the jury to find Fish liable for the misrepresentation in Doyle's report, either because (a) assuming she technically reviewed the report, Fish had actual knowledge of the misrepresentation and failed to correct it, or (b) Fish acted with deliberate indifference by failing to conduct a proper review in accordance with nationally-accepted standards. *See Lanigan v. Village of E. Hazel Crest*, 110 F.3d 467, 477 (7th Cir. 1997) (to be held liable under Section 1983, "supervisors must know about [their subordinate's] conduct and facilitate it, approve it, condone it, or turn a blind eye for fear of what they might see."). The Defendants seek to bar Keel's opinions regarding Fish's review of Doyle's report and nationally accepted report reviewing practices. First, Defendants argue that Keel lacks the qualifications to

render such an opinion. Second, Defendants assert that Keel's methodology in arriving at his opinion is flawed because it is based on a selective reading of Fish's deposition and on the local practices of two forensic crime laboratories. The Defendants assert that a review of Fish's entire deposition would have revealed to Keel that the CPD Crime Lab did in fact conduct technical reviews in certain cases. Third, Defendants argue that Keel's opinion should be barred because he harbors a longstanding bias against Fish. Lastly, Defendants argue that Keel's conclusions are mere "common sense" and therefore expert testimony will not assist the trier of fact.

1. Qualifications

Keel's experience as a criminalist provides a basis of specialized knowledge as contemplated under Federal Rule of Evidence 702 and qualifies him to opine on the nationally accepted practices of forensic crime labs 1995 and today. Keel began his career as a serologist in 1982 at the North Louisiana Crime Laboratory in Shreveport, Louisiana. (Tr. 2/11/13, at 28.) After one year of training and one year of independent case work in Shreveport, Keel took a position at the Oakland, California Police Department Crime Laboratory, where he worked for nine-and-a-half years. (*Id.* at 31.) Between 1993 and 1996, Keel worked as a death investigator for the Caddo Parrish Coroner and Medical Examiner's Office in Shreveport. (*Id.* at 31–32.) He also worked briefly at the Tulsa, Oklahoma Crime Laboratory. (*Id.*) In 1996, Keel was hired by the San Francisco Police Department Crime Laboratory to supervise the lab's forensic biology unit and to install forensic DNA analysis capabilities. (*Id.* at 32.) Keel left the San Francisco Police Department Crime Laboratory three years later to take a position at Forensic Science Associates, which merged with his current employer, Forensic Analytical Sciences ("FAS"), in 2011. (*Id.*)

Keel's current position at FAS is "DNA technical leader." (*Id.*) In this capacity Keel is responsible for supervising FAS's Forensic Biology section, which is responsible for the receipt of physical evidence, the examination of that evidence for bodily fluid, the recovery and genetic analysis of any bodily fluid recovered from physical evidence, the comparison of genetic data to persons of interest, and the issuance of reports. (*Id.* at 27–28.) Keel testified that the bench analyst and lab supervisor functions he performs at FAS are identical Doyle and Fish's functions at the CPD Crime Lab. (*Id.* at 30–31.) In addition, Keel is responsible for training individuals subordinate to him. (*Id.* at 34.) He is certified in general criminalistics by the American Board of Criminalistics and possesses a DNA Technical Leader qualification pursuant to the DNA Identification Act of 1994, 42 U.S.C. § 14132. (*Id.*)

Keel testified that he has become familiar with national standards in his field through (1) working in various law enforcement agencies and private laboratories throughout the country; (2) his attendance at symposiums across the nation; and (3) his experience testifying in both state and federal proceedings on over 70 occasions and in the following states: California, Washington, Arizona, Texas, Oklahoma, Louisiana, Florida, Tennessee, Illinois, Ohio, Pennsylvania, New York, and Montana. (*Id.* 34–35.) Although Keel has never been asked to conduct an audit or peer-review of another lab's practices, he has performed numerous peer reviews of work product generated by other laboratories. (Tr. 2/12/13, p. 84.). Keel is also familiar with the American Society of Crime Laboratory Directors (ASCLD) laboratory accreditation board standards (though he is not a member of ASCLD), the FBI's quality assurance standards, and the technical working group on DNA analysis method standards. (*Id.* at 36; Tr. 2/12/13, p. 84.)

Given his 29 years of experience working in multiple crime laboratories and particularly his experience in reviewing work generated by other labs, ¹² Keel is qualified to offer an opinion regarding nationally accepted practices of crime laboratories. *See Smith*, 215 F.3d at 718 ("[E]xtensive academic and practical expertise' in an area is certainly sufficient to qualify a potential witness as an expert[.]") (quoting *Bryant*, 200 F.3d at 1098); *see also Kumho Tire*, 526 U.S. at 153).

Defendants cite, without analysis, three district court decisions in support of their position that Keel is unqualified to offer the above opinions: *Moore v. P&G-Clairlol, Inc.*, 781 F.Supp.2d 694 (N.D. Ill. 2011), *Driver v. Apple Illinois, LLC.*, No. 06 C 6149, 2011 WL 4007337 (N.D. Ill. Sept. 9, 2011), and *SEC v. Lipson*, 46 F.Supp.2d 758 (N.D. Ill. 1998). These cases do not support the Defendants' position. In *Moore*, for example, the plaintiff sought to call an organic chemist with extensive education and experience in the area of chemical safety issues to testify in a product liability case in which the plaintiff alleged that she had a severe allergic reaction to the defendant's product. 781 F. Supp.2d at 696. The chemist sought to opine not only that the product was dangerous and the cause of the plaintiff's injuries, but also that the allergy test instructions the defendant provided were "vague and imprecise to the consumers, and as such, [would] lead to false negatives" of non-allergic reactions. *Id.* at 703–04. Though the expert had conducted thousands of tests involving the mixture of chemicals, he had "no background or training in psychology or any field related to the design of warnings to consumers" and "no experience in how a consumer interprets a warning or self-test instructions." *Id.* at 704. Based

¹² Although Defendants insist that Keel's pre-1995 work experience was limited to two crime laboratories, they fail to explain the basis for the premise that any experience Keel acquired after 1995 is irrelevant. The determination of whether Fish acted with deliberate indifference will be affected by the accepted practice at the time the Zilinger Report was issued. It does not follow, however, that Keel's post-1995 experience cannot inform his conclusion *today* regarding nationally accepted practices in the mid-1990s.

on this lack of experience in "psychology or human factors," the court found the expert unqualified to provide any "insight into how an average, non-scientist consumer would interpret the instructions at issue." *Id*.

In *Lipson*, the Securities and Exchange Commission alleged that the Defendant, the Chief Executive Officer of Supercuts, Inc., traded shares of Supercuts stock based non-publicly available company reports revealing poor sales performance. 46 F.Supp.2d at 760. The Defendant sought to admit the opinion of a certified public accountant who concluded that (1) the Defendant and others at Supercuts did not believe the internal financial reports were reliable; and (2) the reports were in fact not reliable. *Id.* at 763. The court barred both opinions. With respect to the first opinion, the court found that the expert's years of training and experience as an accountant did not "specially equip him to divine what the Defendant truly believed about the reliability of the reports" and that any opinions offered in that regard were, "at worst, rank speculation; at best, they are credibility choices that are within the province of the jury, not [the expert], to make." *Id.* The court also excluded the expert's opinion regarding the actual reliability of the reports on the basis that the opinion was "not sufficiently rooted in the principles and methodology in accountancy." *Id.* at 764. The court did not cite the expert's qualifications as a basis for excluding the second opinion.

Moore and Lipson support the general proposition that even a qualified individual may be barred under Rule 702 where the opinion proffered calls for speculation or expertise in a field outside of the expert's purview. However the Court fails to see—and the Defendants make literally no attempt to explain—how the circumstances in Moore and Lipson are analogous to those presented here. Cage offers Keel to opine on whether Fish's approach to peer review is consistent or at odds with nationally accepted practices as he understands them based on his

three decades of experience in multiple crime laboratories, his peer-review of the work product of other laboratories, and his technical review of reports as a supervisor at FAS. Unlike the chemist in *Moore* and the accountant in *Lipson*, Keel's opinions do not implicate subject matter outside of his realm of expertise or call upon him to speculate how a lay audience would interpret a particular piece of information. *Moore* and *Lipson* are therefore inapposite.

Driver involved class action claims alleging that the plaintiffs, former servers and bartenders at an Applebee's restaurant in Illinois, did not receive statutorily required minimum wages due to certain practices by the defendants. 2011 WL 4007337, at *1. The defendant's expert witness opined that Applebee's' practice of requiring servers to contribute 2.5% of gross sales each day to a "tip pool," from which funds are distributed to other workers, was "customary and reasonable within the casual dining segment of the restaurant industry." Id. This opinion was based on the expert's 35 years of experience in the restaurant industry, most of which was spent in management positions in casual dining chains considered to be more "upscale" than Applebee's. Id. at *6-7. The court determined that the expert's proffered opinions were "significantly broader than his experience supports." Id. at *6. In so holding, the court found significant that the entirety of the expert's relevant experience involved work for restaurant chains at the higher-end of the casual dining spectrum (specifically, the Cheesecake Factory). *Id.* Because the expert had made no effort to account for his "gap in knowledge" regarding the customary practices at more modest casual dining chains, the court could not reliably conclude that his personal experience was representative of what was "customary" in the entire casual dining segment of the restaurant industry. Id. Accordingly, the court allowed the witness to discuss the mechanics of tip pools and the tip pool percentages he had seen in his career but barred any general conclusions regarding industry-wide practices. *Id.* at *9.

Driver highlights the infirmities in the Defendants' argument regarding Keel's qualifications. Unlike the casual dining restaurant industry at issue in *Driver*, there is no indication that forensic crime laboratories in the United States are segmented in a manner that allows for different standards of peer review. While the Defendants repeatedly refer to Keel's experience as being confined to "local practices" of "local crime laboratories," they have failed to articulate a basis for this designation. Despite their repeated use of the term "local," Defendants have presented no evidence that the practices of forensic crime laboratories are in fact "localized." If by using the term "local" the Defendants are referring to crime labs that serve law enforcement agencies in their geographic vicinity, the same designation would have applied to the CPD Crime Lab. To the extent the Defendants use the term to suggest that the labs Keel has worked in did not handle the same amount of work as the CPD Crime Lab, they a have failed to establish—or even argue for that matter—that the standard for acceptable peer review is affected by the volume of cases a laboratory processes. As this Court has previously held, the mere fact that an expert draws on experience from a different jurisdiction and geographic part of the country is not a proper basis for exclusion under Daubert. See Cooper v. City of Chicago Heights, No. 09 C 3452, 2011 WL 2116394 (N.D. Ill. May 27, 2011). In Cooper, the Court rejected the argument that a veteran member of the NYPD was not qualified to opine on whether the Chicago Heights Police Department's practices comported with standard police practices because he lacked Illinois experience. *Id.* at *6. The defendants in that case, like the Defendants here, made no showing that "practices in Illinois are different from the police practices in New York City so as to make [the expert's] opinion unreliable or irrelevant under Daubert." Id. Accordingly, the Court held that the expert's "purported unfamiliarity with Illinois police practice, the division of labor ... within the CHPD, and the relationship between the CHPD and

the prosecutor's office" were proper subjects for cross-examination, not bases for exclusion. *Id.* (citing *Deputy v. Lehman Brothers., Inc.*, 345 F.3d 494, 506 (7th Cir. 2003)); *see also Lorillard Tobacco Co. v. Elston Self Service Wholesale Groceries, Inc.*, No. 03 C 4753, 2008 WL 4681917, at *3 (N.D. Ill. May 13, 2008) (expert with six years of employment in cigarette wholesaling qualified to testify regarding customs and practices in cigarette marketing industry despite his lack of experience in the geographic area at issue).

Similarly in this case, Defendants will be free to explore on cross-examination Keel's lack of experience outside of San Francisco, Tulsa, Oakland, and Shreveport. They will also be free to address the fact that Keel has never conducted a full-scale audit of another crime laboratory, has not been qualified as an expert in the sufficiency of a laboratories technical review practices in comparison to national standards, is not a member of ASCLD-LAB, and has never received a certificate, license, degree, or recognition from any forensic science organization or governmental agency recognizing his ability to opine on whether another crime laboratory practices are in compliance with nationally accepted standards. Such minor holes in Keel's curriculum vitae are not, however, a proper basis for excluding his opinion under Rule 702 and *Daubert*.

2. Methodology

Like Harmor, Keel's conclusions in this case are based primarily on his experience in the field. Specifically, Keel relies on his firsthand knowledge of the practices at six different laboratories, his experience reviewing work previously conducted by other laboratories, and his involvement in over 100 post-conviction investigations. Keel also relies on the 1987 ASCLD

With respect to the last point, Keel has testified that there are no certificates allowing one crime laboratory to pass judgment on another lab in this context. (*See* Keel Dep., Dkt. 184, Ex. G, p. 207.) Keel also testified that he has completed FBI training to be a "peer" monitor of other FQS laboratories. (*Id.* at 208.)

guidelines which, like the 1994 guidelines Harmor relied upon, set forth criteria for administrative and conclusion review. Keel's conclusions are not derived from any formula, test, survey, statistical analysis, or technical evaluation. Once again, however, the fact that an expert's conclusions are based only on his observations and extensive specialized experience does not render them inadmissible. *See supra* at Section I.A.2. This includes opinions regarding generally accepted standards in an industry within the expert's purview. *See id*.

The Defendants next argue that Keel's methodology is flawed because it is based on a selective reading of Fish's deposition and ignores other testimony that would have revealed to Keel that the CPD Crime Lab did in fact conduct technical reviews in cases involving DNA findings. However, the fact that Keel reviewed some parts of Fish's deposition and not others does not preclude his testimony at trial. See Walker, 208 F.3d at 586-87 (plaintiff's expert should not have been barred for relying on plaintiff's self-reported history that was arguably false because defendant could have "presented evidence that [the expert] had relied upon an inaccurate history and thereby called his conclusions into question"); see, e.g., Collier v. Bradley University, 113 F. Supp.2d 1235, 1244 (C.D. Ill. 2000) ("The Court is not overly concerned with Dr. Wilson having disregarded portions of witnesses' testimony in reaching her conclusions."). 14 In this case, Keel was provided the portions of Fish's testimony describing her supervisory review process. Keel compared Fish's description of her review process with nationally accepted practices as he understands them based on his experience in other crime laboratories. Furthermore, fact that the CPD Crime Lab performed technical reviews of its DNA work does not undermine Keel's conclusion. It is Keel's opinion that peer-technical review should have

¹⁴ The *Collier* court ultimately excluded the expert's testimony due to a lack of support in the record for the expert's conclusion that "people are truthful 90% of the time and self-serving the other 10%." 113 F. Supp.2d at 1246.

been performed in every serology case *as well as* every case involving DNA evidence. However, to the extent the Defendants believe other portions of Fish's deposition undermine Keel's conclusions, they will be free to explore the issue on cross-examination. *See, e.g., Smith*, 215 F.3d at 718.

As with Harmor, the Defendants displayed no hesitation in providing the Court an unsolicited preview of their summary judgment arguments during Keel's cross-examination. Specifically, the Defendants elicited testimony that: (1) no government body or agency "required" that crime labs perform technical peer-review in every case, ¹⁵ (Tr. 2/11/13, p. 119): (2) the 1987 ASCLD guidelines, upon which Keel partially relies in forming his conclusions, do not contain any language specifically stating that such reviews are required of "every serology report" issued by a forensic laboratory, (Id. 126-27); (3) the 1987 guidelines do not limit the appropriateness of spot-review to certain categories of cases, (Id. 140); (4) the 1992 ASCLD guidelines did not require all reports to be technically reviewed and in fact stated that "[i]t would be most difficult for ASCLD-LAB to require that all reports be technically reviewed," (Tr. 2/12/13, p. 74); (5) the 2005 ASCLD guidelines provide that a lab must perform technical review on only a sample of completed cases and that the sampling rate may vary depending upon the situation as defined by the laboratory's policy; (Tr. 2/11/13, pp. 129-130); (6) the 2005 guidelines further provide that that technical review of lab reports prior to their release is "recommended," but not "required," (Id. 132); (7) forensic laboratories could obtain ASCLD and FQS accreditation without conducting a technical review of all serological reports, (Id. 138– 139); (8) the California Symposium on Forensic Serology (the "California Symposium"), a

 $^{^{15}}$ In Keel's words, such review was "[r]equired by science" but "[n]ot required by government." (Tr. 2/11/13, p. 120.)

document Keel believes supports his conclusions regarding peer-technical review, set forth recommendations and not a national criteria for forensic labs across the country, (*Id.* 147–48); (9) language of the symposium limits the geographic scope of its recommendations, stating that the recommendations reflect "what forensic biologists, at least those in California, think about their practice and profession," (*Id.* 150); (10) the symposium provides that "[c]areful review of notes versus the conclusions *either by the analyst or another individual who is knowledgeable in the subject area* can catch any significant oversight," calling into question Keel's opinion that an analyst may not conduct a technical review of their own work, (Tr. 2/12/13, p. 19); and (11) the Technical Working Group on DNA Analysis Methods ("TWGDAM") guidelines, which Keel believes support his opinion that all reports must under technical peer-review, were promulgated to govern DNA testing and not more conventional serological techniques, (Tr. 2/11/13, pp. 55, 144).

Keel rebuts some (though not all) of these contentions. However, because the "[t]he soundness of the factual underpinnings of the expert's analysis and the correctness of the expert's conclusions based on that analysis" are not at issue at this stage of the proceeding, *Smith*, 215 F.3d at 718, the Court declines at this time to resolve the parties' debate over the extent to which various promulgated guidance supports or undermines Keel's conclusions. Taken together, these issues raise doubt about whether it was in fact the nationally-established practice of crime labs to conduct peer technical review of all serology reports prior to publication. At a minimum, they show that Keel's assertion that national guidelines support his conclusion is based not on the actual text of the relevant guidance but rather on his interpretation of the "spirit" of the guidelines. (*See* Tr. 2/11/13, pp. 63, 141.) However, "[t]he court must resist the temptation to evaluate the opinion's correctness—a question that must be left to the jury—

and focus instead on whether 'the methodology underlying that testimony is sound.' "Wielgus, 2012 WL 3643682, at *2–3 (quoting Smith, 215 F.3d at 719); see also Winters, 498 F.3d at 742. The contrary evidence Defendants brought forth during the Court's Daubert hearings does not establish that Keel's methodology—relying on firsthand experience in six laboratories and peer reviews of countless serology reports generated by others—was unreliable. For example, Defendants did not present evidence that crime lab practices in the United States vary so greatly based on geography or volume that Keel cannot reliably extrapolate a conclusion regarding practices nationwide based on his experience in comparatively smaller cities in the western half of the country. Thus the Defendants' evidence that the guidelines do not support Keel's conclusion is not persuasive on the issue of whether Keel's methodology was reliable.

The Defendants also argue in their written briefs that Keel's testimony should be barred because his conclusions run contrary to the consensus in the scientific community. In support of this position, the Defendants cite the testimonies of their own expert witnesses, Lucy Davis and Dan Bergman, and Cage's expert, Gary Harmor. Defendants argue that in light of the opinions contradicting Keel's, "[c]learly, Keel's opinions are not generally accepted within the forensic scientific community." (Def. Mot. No. 1, Dkt. 169, p. 17.) This argument misstates the *Daubert* inquiry. It is not the *opinion* that must be generally accepted but rather the *methodology* employed by the expert in reaching that opinion. *See Winters*, 498 F.3d at 742. Defendants' attempt to recharacterize their attack on Keel's substantive conclusions as a debate over methodology is not persuasive. Whether the Defendants seek to bar Keel's opinions because—as Cage puts it—the Defendants' own experts disagree with him, or because—as the Defendants put it—his opinions are "directly contrary to consensus in the scientific community," it remains the case that the challenges Defendants raise call into question the correctness of Keel's

conclusions, not the appropriateness of his method. The Court declines Defendants' invitation to decide which expert is correct on the merits. *See Morisch v. United States*, 653 F.3d 522, 529 (7th Cir. 2011) ("In a case of dueling experts, such as this one, 'it is left to the trier of fact, not the reviewing court, to decide how to weigh the competing expert testimony.' ") (quoting *Wipf v. Kowalski*, 519 F.3d 380, 385 (7th Cir. 2008)).

3. Helpfulness to the Trier of Fact

Third, Defendants submit that Keel's conclusions are not relevant—in other words, unhelpful to the trier of fact—because they are by Keel's own admission nothing more than "common sense." The Court agrees with Cage that this is an issue of semantics. The fact that Keel uttered the phrase "common sense" during his deposition does not take his opinions outside the purview of expert testimony. Aside from attempting to seize upon what they apparently perceive to be a "gotcha" moment, the Defendants have presented no evidence suggesting that the nationally-established practices of crime laboratories in 1995 pertaining to supervisory review of serology reports is "simplistic," "not beyond the ken of an average person," or "well within human experience." *See Roback v. V.I.P. Transport, Inc.*, No. 91 C 5902, 1994 WL 548197, at *3 (N.D. Ill. Oct. 4, 1994), *aff'd* 90 F.3d 1207 (7th Cir. 1996).

4. Bias

Lastly, Defendants argue that Keel's opinion should be barred because he harbors a longstanding bias against Fish that "seriously colors his ability to render reliable opinions about her work or that of the CPD Crime Lab in which she worked." (Pl. Mot. No. 1, p. 21.) Defendants point to Keel's deposition testimony in which he admitted that his laboratory keeps a binder characterizing opposing experts in his field as "whores" and that his colleague, Dr. Blake, asked him to tone down the language in the report he co-authored about Fish's conduct in prior

criminal cases. (*See* Keel Dep., pp. 257–59, 263.) Cage agrees that Keel has, over the course of his career, developed a bias against Fish based on his belief that she has "disgraced her profession through her repeated and consistent willingness to be complicit in lab reports that misrepresent scientific findings in favor of securing criminal convictions, regardless of the truth." (Pl. Resp., Dkt. 187, p. 16.)

However it is well-established that an expert's bias is not a proper basis to bar testimony under Daubert. See DiCarlo v. Keller Ladders, Inc., 211 F.3d 465, 468 (8th Cir. 2000) ("Determining the credibility of a witness is the jury's province, whether the witness is lay or expert, and an expert witness's bias goes to the weight, not the admissibility of the testimony, and should be brought out on cross-examination.") (citations omitted); In re Unisys Savings Plan Litigation, 173 F.3d 145, 166, n.11 (3d Cir. 1999) ("Courts have held in numerous other cases that credibility is irrelevant to determining whether a proposed expert witness's testimony is admissible under Rule 702, and particularly whether it is based on reliable methodology For example, expert witnesses cannot be excluded on the basis of bias."); In re Paoli, 35 F.3d at 749 ("[E]valuating the reliability of scientific methodologies and data does not generally involve assessing the truthfulness of the expert witnesses"); see also Baldwin Graphic Systems, Inc. v. Siebert, Inc., No. 03 C 7713, 2005 WL 4034698, *3 n.3 (N.D. Ill. Dec. 21, 2005) ("[A]lleged bias is fodder for cross-examination and impeachment, not a ground for exclusion."); Charles A. Wright & Victor J. Gold, 29 Fed. Prac. & Proc. Evid. § 6265 ("[T]he courts may not consider credibility questions such as bias when exercising their discretion as to whether a witness qualifies as an expert."). Accordingly, Keel's testimony will not be barred based on his partiality against Fish.

B. Defendants' Joint Motion No. 2 to Bar Plaintiff's Expert, Charles Alan Keel's, Tesimony Regarding Defendant Pam Fish's Alleged Fraudulent Intent/Credibility in Testifying Concerning Serological Analysis Performed in Unrelated Criminal Cases (Dkt. 171)

As noted above, Cage proceeds against Fish under two separate theories of liability. In the first instance, Cage seeks to establish that Fish's version of events—that no supervisor performed a technical review of the Zilinger Report before it was produced to the criminal justice system—is so preposterous and inconsistent with basic and universal principles for how science laboratories operate that it simply cannot be true. In other words, Cage will submit to the jury that Fish *did* conduct a technical review of the Zilinger Report, recognized Doyle's misreporting, signed off on the report anyway, and lied when she testified that her review was merely administrative. In the alternative, Cage argues that Fish must be held liable even if the jury accepts her testimony as true because her failure to conduct a technical review of the Zilinger Report in violation of nationally-established standards amounts to deliberate indifference.

If the jury accepts Cage's first argument (*i.e.*, believes that Fish was an active participant in the process that created the misleading report), Cage seeks to offer Keel's opinion that Fish's misrepresentation in the Zilinger Report was not an isolated incident but rather exemplary of a recurring pattern and practice at the CPD Crime Lab of distorting test results and misrepresenting lab reports. Specifically, if allowed to testify in this regard, Keel will state that he and a colleague, Dr. Edward Blake, analyzed testimony and reports Fish provided in previous criminal cases and concluded that Fish's submissions to the criminal justice system in those cases reflect a pattern of the type of misrepresentations, false reporting, and distortions that occurred in Cage's case. (Tr. 2/12/13, pp. 81–83.) According to Keel, these misrepresentations are always to the

detriment of the criminal defendant. (*Id.* 82, 105, 165.) Cage seeks to offer Keel's opinion regarding Fish's previous work to support his *Monell* claims against the City of Chicago and to show that Fish's lab reports were consistently scientifically unsupportable and biased in favor of the prosecution. ¹⁶

Keel and Blake performed their analysis by comparing Fish's laboratory reports and any supporting documentation with her in-court testimony corresponding to that case. (*Id.* 82.) Asked whether he was familiar with this methodology, Keel responded "Of course. I mean, that's the only way to, after the fact, go back and assess somebody's testimony as to how truthful they were being." (*Id.* 82–83.) According to Keel, this method of review is "absolutely the same" as the method he has used to conduct technical reviews throughout his career. (*Id.* 83.) Blake and Keel's conclusions are set forth in a report that was provided to attorney Kathleen Zellner in January 2001 (the "Blake/Keel Report"). (Pl. Mot. No. 2, Dkt. 171, Ex. 1.) The Blake/Keel Report states that in many of the cases listed therein, Fish "misrepresents the scientific significance of her findings either directly or by omission. The nature of these errors are such that a reasonable investigator, attorney, or fact finder would be misled concerning the ability of her work to either include or exclude relevant individuals as potential sources of biological evidence." (*Id.* at 1.) The remainder of the Report comprises of synopses of eight of Fish's prior cases. (*Id.* at 2–11.)

Many of Defendants' objections to the Keel's conclusions are either without merit or do not implicate *Daubert*. For example, the fact that Keel reviewed some portions of Fish's trial

¹⁶ Monell does not permit the inference of a policy and practice from a single "isolated" act of misconduct. See City of Oklahoma City v. Tuttle, 471 U.S. 808 (1985). One way to prove a municipal policy in a Monell claim is through evidence of "a widespread practice that, although not authorized by written law or express municipal policy, is so permanent and well settled as to constitute a 'custom or usage' with the force of law." McTigue v. City of Chicago, 60 F.3d 381, 382 (7th Cir. 1995) (citations omitted).

testimony and ignored others that arguably belie his conclusions is not a basis for exclusion. See Walker, 208 F.3d at 586-87; see also Collier, 113 F.Supp.2d at 1244. In addition, the Defendants' concern that Cage's presentation of *Monell* evidence will result in a series of minitrials over Fish's previous work does not warrant exclusion at this stage in the proceeding. By their very nature, Monell claims often require the presentation of evidence from prior cases. A "district court abuses its discretion if it so limits the evidence that the litigant is effectively prevented from presenting his or her case." Thompson v. City of Chicago, --- F.3d ----, 2013 WL 3455502, at *6 (7th Cir. July 10, 2013) (citing Cerabio LLC v. Wright Med. Tech., Inc., 410 F.3d 981, 994 (7th Cir. 2005), and Secretary of Labor v. DeSisto, 929 F.2d 789, 796 (1st Cir. 1991)). For example, in O'Hare Truck Service, Inc. v. City of Northlake, 93 C 5860, 1999 WL 528485 (N.D. Ill. July 13, 1999), the plaintiff was allowed to present, over the defendant's objection that "minitrials" would result, evidence of multiple disciplinary actions taken against other defendant employees to demonstrate that the defendant engaged in a widespread practice of retaliating against its employees based on their political statements or affiliations. Id. at *4. The court in that case determined that "given the strong probative value of the testimony on the Monell liability issue, coupled with the Court's ability to control the evidence as the trial proceeds, ... the Rule 403 balance comes out strongly in favor of admitting the comparative evidence." *Id.* Similarly, in Thompson v. City of Chicago, --- F.3d ----, 2013 WL 3455502, at (7th Cir. July 10, 2013), the court found that the district court abused its discretion by excluding under Rule 403 testimony from 11 citizen witnesses about their experiences as victims of the defendant's alleged "long-standing pattern and practice of corruption." Id. at *6–9. While the plaintiff's Monell claim was removed from the scope of the trial, the court reasoned that evidence in the form of testimony from multiple witnesses was the only way the plaintiff could prove a pattern of

conduct in support of its *Brady* claim and thus the record did not support the district court's "generalized concern that admitting th[e] evidence would entail time-consuming 'mini-trials.' " *Id.* at *9.

Keel's qualifications and methodology in creating the Blake/Keel Report are more problematic. Cage maintains that Keel's methodology in this case—reviewing test results and forming conclusions about how to report those tests in a way that is scientifically accurate—is "indistinguishable from what he does anytime he reviews another analyst's work …." (Pl. Resp., Dkt. 187, p. 18.) In other words, according to Cage, what Keel did to prepare the Blake/Keel Report was no different from any other peer technical review he has performed. This is incorrect. Keel's own definition of technical review is instructive on this point:

"Technical review" refers to the reading of a report by a peer, and then the review of all of the supporting data and documents that support the findings and conclusions that are listed in the report.

The technical reviewer will take the report and read the report and then compare the findings and conclusions that are expressed in the report to the body of work that's present in the case file to make sure that the case file adequately documents and supports the conclusions and findings that are presented in the report.

(Tr. 2/11/13, pp. 37, 40.) The Court has no doubt that Keel is equipped with the experience and training to conduct a technical review in the manner described above. However, Keel's endeavor in the cases outlined in the Blake/Keel Report was different. Keel and Blake did not simply conduct a peer-technical review of Fish's work to determine the accuracy of her lab reports. Rather, they reviewed Fish's reports and the notes supporting the conclusions set forth therein, and compared them to Fish's testimony at trial to determine whether her testimony misled investigators, attorneys, and the trier of fact.

Cage understates the significance of this distinction. In order to reliably conclude that Fish's testimony at trial that was false, misleading, or erroneous when viewed in comparison to her lab documents, Keel must understand not only the scientific bases for Fish's conclusions but also the procedural and evidentiary constraints imposed by the legal system. First, Keel would need to understand and appreciate the impact of the governing rules of evidence in order to account for possibility that certain testimony was kept from the trier of fact because it was deemed legally inadmissible. Relatedly, Keel would need to be aware of any previous court rulings, orders, or admonitions restricting Fish's testimony and have knowledge of their effect in order to properly determine whether Fish had a legitimate reason for not providing certain testimony. For example, in *Illinois v. Wright*, Fish was asked on direct examination whether the results of her tests of enzymes were consistent with her previous findings concerning the suspect and victim's blood type. (Def. Mot. No. 2, Dkt. 171, Ex. 5, p. 4.) Before she could respond, the defense attorney objected on the basis of lack of foundation. (Id.) Pursuant to a discussion that took place outside of the jury's presence, ¹⁷ the judge stated that he would strike the testimony pertaining to enzyme testing if the state could not lay the proper foundation. (Id. at 11.) It is unclear from the transcripts provided to the Court whether the testimony was ultimately excluded. According to Lucy Davis, the Defendants' counter-expert to Keel, the Judge excluded the testimony despite the fact that there was "obviously additional testing Dr. Fish conducted" (Davis Report, Dkt. 171, Ex. 4, p. 7.) Regardless of whether Davis is correct, the proceeding highlights that it is entirely possible for Fish to have performed a certain type of test and then not discuss it in her trial testimony for reasons having nothing to do with a lack of competence or intent to deceive.

¹⁷ Fish was allowed to remain in the courtroom. (Def. Mot. No. 2, Dkt. 171, Ex. 5, p. 4.)

Second, in order to form a reliable conclusion about Fish's testimony, Keel must take into account that certain evidence may not have been presented through Fish to the trier of fact because Fish was called for a more limited purpose. Keel's conclusions regarding Fish's testimony in *Illinois v. McKinley* illustrate this point. According to the Blake/Keel Report, "Fish declined to conduct conventional serology testing of rape evidence" in the *McKinley* case (Blake/Keel Report, at 17.) The language from the report clearly implies that such testing was specifically requested (or at a minimum, proposed) and that Fish refused to perform it. However, on cross-examination during the *Daubert* proceedings, Keel admitted that he was well aware at the time he wrote his report that neither the State nor the defense had asked Fish to perform such testing in the *McKinley* case and that Fish's sole purpose in testifying was to verify the presence of sperm. (Tr. 2/12/13, pp. 135–136.)

Third, a forensic scientist providing testimony at trial can only answer the questions they are being asked. For example, in the *Illinois v. Wardell/Reynolds* case, the Court conveyed to Fish the following instruction before taking the stand: "Ma'am, before you begin testifying I ask that you do not volunteer any information, only answer the questions that were asked of you" (Def. Mot. No. 2, Dkt. 171, Ex. 6, p. 3.) Thus in determining whether Fish withheld details or otherwise provided misleading testimony, Keel would have had to remain cognizant of the possibility that Fish was never asked—either due to defense counsel's oversight or for strategic reasons—questions that would have allowed her to provide a responsive answer containing the details Keel believes are missing.

Lastly, any suggestion that (1) Fish acted with intent to deceive defense attorneys and the trier of fact or (2) that the fact-finders and defense attorneys were in fact mislead are not admissible. The former constitutes rank speculation and is inadmissible under the Federal Rules

of Evidence. *See* Fed.R.Evid. 602. With respect to the latter, Keel does not possess the qualifications to opine that Fish's testimony would have misled "a reasonable investigator, attorney, or fact finder." *See, e.g., George v. Kraft Foods Global, Inc.*, 800 F.Supp.2d 928, 933 (N.D. Ill. 2011) (finding expert's report regarding defendant's state-of-mind in selecting and communicating funds in an employment benefit plan speculative and not relevant because the cause of action did not have a state of mind element); *Moore*, 781 F.Supp.2d at 696 (expert in chemistry precluded from opining that defendant's instructions were misleading due to his lack of expertise in "psychology" and "human factors").

Unlike the Defendants' contrary evidence about the accepted practices of forensic crime labs, the issues here raise serious concerns regarding Keel's methodology and ability to opine on whether another serologist's trial testimony was designed to mislead. Aside from his general familiarity with the trial process from having testified in other cases, Keel has had no exposure, much less formal training in the rules of evidence and criminal procedural that governed the cases discussed in the Blake/Keel Report. Nor is Keel sufficiently familiar with the trial process to take into account that Fish may not have provided certain details because the attorneys trying the case, for one of many possible reasons, did not elicit them. Indeed unlike Harmor, who is responsible for evaluating analyst testimony in his capacity as SERI's Chief Forensic Serologist, (See Harmor CV, Dkt. 184, Ex. A, p. 7), there is no indication in Keel's CV, report, or testimony that he is qualified to opine on the completeness of another analyst's in-court testimony or has ever done so in the past. To the contrary, the testimony revealed that this type of review is "familiar" to Keel not because he has performed it before but because he has assumed, incorrectly, that it is "absolutely the same thing" as conducting a technical review in a supervisory capacity. (Tr. 2/11/13, pp. 82–83.) Thus, due to the fact that Keel lacks the requisite

knowledge, skill, experience, training, or education to consider the multitude of intervening factors that affect the substance and presentation of a witness's testimony at trial, Keel is not qualified under Rule 702 to reach the conclusion that Fish engaged in a pattern of providing false, misleading, or erroneous testimony in the cases identified in the Blake/Keel Report.

Furthermore, by not taking into account the constraints of the legal system and the impact those constraints may have had on Fish's testimony, the Court cannot conclude that Keel employed a reliable methodology in reaching is conclusion. *See Paoli*, 35 F.3d at 746 (judge should exclude evidence if flaws in the expert's investigative process are "large enough that the expert lacks 'good grounds' for his or her conclusion"); *Claar*, 29 F.3d at 502 (failure to adequately take into account alternative explanations fatal to the admissibility of expert testimony under *Daubert*). In other words, Keel did not "consider[] enough information to make the proffered opinion reliable." *See* Charles Alan Wright & Victor James Gold, 29 Fed. Prac. & Proc. § 6266, at 41 (Supp. 2004). Lastly, Keel's opinions that Fish acted with intent to deceive defense attorneys and the trier of fact and his conclusion that the fact-finders were misled, are speculative. Any opinion testimony in this regard is also barred. However, as noted above, Keel is eminently qualified to conduct a traditional peer-technical review of another serologist's work. Thus, any opinion by Keel that Fish's laboratory reports in other cases misrepresented her underlying data and bench notes is proper and will not be excluded.

III. Lucy Davis

Lucy Davis was retained by the Defendants to rebut Keel's conclusions. Davis opines that based on her review of Fish's files and testimony, Fish provided fair and accurate information in the cases in which she testified and that there is no pattern of false testimony. In his *Daubert* motions, Cage moved to exclude the following three opinions Defendants intend to

elicit through Davis: (1) Fish's controls did not meet the CPD Crime Lab's "defined range" in the *Illinois v. Willis* case and thus it was proper for Fish to report the test as "inconclusive"; (2) Doyle did not misuse the term "extract" in the Zilinger Report; and (3) with the exception of DNA testing, forensic laboratories have the discretion to define the percentage of files that must be technically reviewed. Since filing his motion, Cage has conceded that Davis's opinion regarding nationally-acceptable lab practices and the use of the term "extract" are proper subjects for expert testimony. (*See Pl. Reply*, Dkt. 199, p. 14.) Thus only Davis's opinion regarding Fish's conduct in the *Willis* case is presently before the Court. Furthermore, Davis's qualifications are not at issue here. The Court heard testimony in this regard, (Tr. 2/12/13, pp. 199–207), and ruled orally that at the hearing that she is qualified to opine on the CPD Crime Lab's testing in the *Willis* case. (Tr. 2/12/13, p. 226.)

In *Willis*, Fish conducted an ABO typing analysis by performing an absorption inhibition test on a semen stain from a toilet paper wrapper.¹⁸ Davis summarized the test as follows:

Absorption inhibition is a test where you take a biological fluid stain. You elute it into a solution. And then you add anti-A, anti-B, anti-H antigens to see if there are antibodies, to see if there are any antigens present in the fluid. If the antigens are present, they will absorb the antibody that you put in, and then you add red blood cells to see if there's any antibody left.

(Tr. 2/12/13, p. 208.) Keel concludes that although Fish's absorption inhibition test found evidence that the semen source was likely an A secretor, she characterized the analysis of the semen evidence as "inconclusive" in her lab report and her trial testimony. ¹⁹ (Blake/Keel Report,

¹⁸ Defendants explain that prior to DNA analysis, forensic criminalists working in public crime laboratories employed absorption inhibition testing on bodily fluids (*e.g.*, semen/sperm and saliva) to determine the blood type (A, B, AB, O) of the donors. For a number of reasons, including that millions of people might share a particular blood type, ABO typing was not considered a highly discriminatory test. Nevertheless, it was regularly used and admitted as evidence throughout the country at the time. (Dkt. 171, p. 3–4.)

¹⁹ In light of the Court's holding that Keel cannot opine on whether Fish provided misleading trial

p. 2.) Fish explains that she reported the results as inconclusive because her "controls failed," which means that they failed to meet the CPD Crime Lab's "defined range." In response to Keel's conclusion, Davis opines that (1) it is appropriate for a forensic scientist to report their findings as "inconclusive" when their controls fail; and (2) that Fish's controls did in fact fail and thus her reporting was proper. Cage objects to the latter conclusion. According to Cage, Davis does not possess the knowledge to conclude that Fish's controls failed because she is unaware what that defined range was at the CPD Crime Lab. Cage argues that "all that Davis can legitimately say is that *if* we accept Fish's testimony about the controls being inconclusive, *then* it was acceptable for Fish to report the results as inconclusive." (Pl. Reply, Dkt. 199, p. 13) (emphasis added).

Davis explained that when conducting an absorption inhibition test, "a negative substrate control" is a control taken from "the item of evidence adjacent to where [the analyst] think[s] the biological fluid is" (*Id.* 209.) The analyst then observes the control to determine whether it generates a reaction. (*Id.*) A reaction between the substrate control and the chemicals being used informs the analyst that there is some form of "inhibition" taking place. (*Id.* 209–10.) In such cases, the analyst cannot be "confiden[t] that the testing ... on the particular biological stain is not being affected by the substrate it is on rather than the biological fluid that's on it." (*Id.*) Davis stated that in the *Willis* case there was a partial reaction with the substrate control. (*Id.* 210.) Based on years of experience performing absorption inhibition and having demonstrating her

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testimony previous cases, Davis's opinions rebutting those opinions are no longer relevant and any objections to them are denied as moot. However, Keel's conclusion regarding Fish's reporting in *Illinois v. Willis* also implicates the accuracy of her laboratory report in comparison to the notes from her analysis (as opposed to the accuracy of her trial testimony alone). As stated above, those opinions are the product of a more traditional peer review that Keel is qualified to perform and therefore proper. Accordingly, Davis's conclusions rebutting the same are not moot.

proficiency through testing, Davis concluded that it was appropriate for Fish, based on the fact that there was a partial reaction to the substrate control, to deem the test "inconclusive." (*Id.*)

Davis also testified that in performing the absorption inhibition test, Fish used not only a negative substrate control but also a "negative control which was just a complete blank"; in other words "a sample that has nothing in it." (*Id.* 211.) This "negative blank" control provides the analyst with a "baseline for what nothing is." (*Id.*) According to Davis, when the substrate control does not meet the baseline, there is proof of inhibition with the substrate. (*Id.* 211–12.) Davis states that although she does not know the CPD Crime Lab's defined range, she is able to reliably conclude whether Fish's controls failed by looking at the negative blank. (*Id.* 252.) Davis explained that based on her experience and knowledge of the analytical procedure involved in Fish's testing and her experience performing it, she "know[s] what the expectation is of a negative blank and what the expectation is of a substrate control." (*Id.* 253.)

The Court finds the methodology Davis applied to determine whether Fish appropriately reported an inconclusive result in the *Willis* case sufficient to satisfy *Daubert*. Although Davis was unaware—and thus did not take into account—the CPD Crime Lab's defined range in reaching her conclusion, she has demonstrated that it is possible to make the determination without the range. It may be the case that Davis's appraisal Fish's reporting would be more precise if she knew crime lab's specific threshold for an inconclusive result. However, this is a potential weakness in her testimony, not a "disabling problem." Cage will have the opportunity on cross-examination to highlight that Davis reached this conclusion without knowing the CPD Crime Lab's specific threshold for an inconclusive result. Cage will also, if the evidence presented at trial allows, be permitted to question the accuracy of Davis's conclusion given her lack of familiarity with the defined range.

IV. Barry Spector

Cage disclosed Jameson Kunz as an expert witness in the practices of criminal defense attorneys during the time period in which Cage was tried. Kunz opines that the prevailing practice of criminal defense attorneys would have been to rely on the representation in the Zilinger Report that the victim's underwear tested negative for semen without seeking independent testing. (Kunz Report, Dkt. 165, Ex. C.) In response to Kunz, Defendants disclosed their own expert, Barry Spector, who will opine on the same issue. According to Spector, a reasonably diligent attorney would have recognized an ambiguity in the Zilinger Report and taken steps to resolve the ambiguity by conducting a further investigation. (Spector Report, Dkt. 165, Ex. D.) While Cage disagrees with Spector's general conclusion, he does not dispute its admissibility under *Daubert*. Cage maintains, however, that certain aspects of Spector's report go beyond his expertise and must be barred. Specifically, Cage objects to Spector's conclusion that the record does not support Harmor's factual assumption that Zilinger wore her underwear after being sexually assaulted. (See Spector Report, ¶26.)

"The touchstone of admissibility under Rule 702 is helpfulness to the jury." *United States* v. Benson, 941 F.2d 598, 604 (7th Cir. 1991), amended on unrelated grounds, 957 F.2d 301 (7th Cir. 1992). On this issue, "[t]he crucial question is, 'On this subject can a jury from this person receive appreciable help.' "Id. (quoting 3 Jack B. Weinsten & Margaret A. Berger, Weinstein's Evidence ¶ 702[1], at 702-7 to 702-8 (1990)) (emphasis in original). "An expert's opinion is helpful only to the extent the expert draws on some special skill, knowledge, or experience to

²⁰ Cage also objected in his *Daubert* motions to Spector's opinion that Cage's criminal defense attorneys committed legal malpractice. The Defendants have since explained that they do not intend to offer Spector as a legal malpractice expert or to show comparative fault but rather to rebut Cage's *Brady* claim. Cage withdrew his objection based on that explanation. (Pl. Reply, Dkt. 199, p. 3.)

formulate that opinion; the opinion must be an expert opinion (that is, an opinion informed by the witness' expertise) rather than simply an opinion broached by a purported expert." Id. (citing United States v. Lundy, 809 F.2d 392, 395–96 (7th Cir. 1987)). Although an expert witness may provide opinions regarding factual issues, see Bielskis, 663 F.3d at 896, and rely on factual assumptions in forming those opinions, see Strollings, 2013 WL 3964477, at *13; see also LG Electronics U.S.A. v. Whirlpool Corp., No. 08 C 242, 2010 WL 3397358, at *15 (N.D. Ill. Aug. 24, 2010), the opinion must "add[] something" and not merely be a gratuitous interpretation the factual record. See United States v. Hall, 93 F.3d 1337, 1343 (7th Cir. 1996) ("Unless the expertise adds something, the expert is at best offering a gratuitous opinions, and at worst is exerting undue influence on the jury that would be subject to control under Rule 403."); Davis v. Duran, 277 F.R.D. 362, 370 (N.D. Ill. 2011) ("[E]xpert witnesses are not allowed to sort out possible conflicting testimony or to argue the implications of those inconsistencies. That is the role of the lawyer, and it [is] for the jury to draw its own conclusions from the testimony it hears."). In other words, "expert testimony does not assist the trier of fact when the jury is able to evaluate the same evidence and is capable of drawing its own conclusions without the introduction of a proffered expert's testimony." Aponte v. City of Chicago, No. 09 C 8082, 2011 WL 1838773, at *2 (N.D. Ill. May 12, 2011); see also David H. Kaye, David E. Bernstein and Jennifer L. Mnookin, The New Wigmore: A Treatise on Evidence: Expert Evidence, § 2.1.2 ("If an expert's testimony does nothing more than attorneys can do in final arguments, it is not admissible because it is providing not knowledge, but mere opinion and advocacy."); see, e.g., Hoffman v. Caterpillar, Inc., 368 F.3d 709, 714 (7th Cir. 2004) (affirming exclusion expert's testimony that the plaintiff could operate a high-speed scanner based on his viewing of a videotape because "the videotape could be played for the jury and entered into evidence and consequently, jurors could make a determination for themselves Based upon this independent assessment the jury could then draw [its own] inferences ... and expert testimony would be of no help.").

Spector's opinion is not proper expert testimony. In opining that Zilinger's deposition does not support that she put her underwear back on after the assault, Spector is effectively acting as an arbiter of facts. His opinion does not add anything that would be of help to the jury in resolving the factual dispute over whether Zilinger in fact wore her underwear after the assault. The jury will be able to hear fact testimony from both sides and reach its own determination on the issue. Spector's testimony that Defendants' interpretation of Zilinger's deposition is better than Cage's is neither necessary nor appropriate. Accordingly, the opinions set forth in paragraph 26 of Spector's report are barred.

V. Dr. Brian Cutler

Cage alleges that his due process rights were violated because the officers involved in the investigation of his criminal case employed unduly suggestive identification procedures that led to his wrongful conviction.²¹ In support of this claim, Cage offers the expert testimony and opinions of Dr. Brian Cutler, a psychologist and expert in the field of eyewitness identification. If allowed to testify, Dr. Cutler would opine that the investigating officers' procedures in the Zilinger case were unfairly suggestive and thus a causative factor in Cage's conviction. Dr. Cutler states in his report that the procedure used by Detective Andrew Jones, one of the detectives assigned to the case, "lacked many of the safeguards that are known to reduce

²¹ A police officer may be liable under Section 1983 for employing unduly suggestive techniques that taint a criminal defendant's trial. *Alexander v. City of South Bend*, 433 F.3d 550, 555 (7th Cir. 2006); *see also Hensley v. Carey*, 818 F.2d 646, 648–50 (7th Cir. 1987) (Section 1983 liability for police if, but only if, "improper identification has some prejudicial impact on an accused's defense" at trial).

suggestiveness and thereby reduce the risk of mistaken eyewitness identification and confidence inflation." (Cutler Report, Dkt. 162. Ex. A, p. 3.) Specifically, Dr. Cutler points to (1) the absence of cautionary instructions to the victim before she entered the grocery store and identified Cage, (2) the suggestion to the victim that her assailant may be present at the grocery store, and (3) Jones's failure to use "fillers" in the lineup presented to the victim. (*Id.* at 3–5.) Dr. Cutler also opines that the identification procedures used by law enforcement may have unduly inflated the victim's confidence in her own identification. (*Id.*, p. 5–6.) Lastly, Dr. Cutler points to several factors surrounding the assault itself that could have affected Zilinger's identification of her assailant, including: (1) the brief time she had to view her attacker's face; (2) "own-race bias" – the notion that witnesses find it harder to identify members of other races; (3) her stress levels during the attack; (4) the fact that the attacker wore a hat; and (5) the lighting conditions under which the attack occurred. (*Id.*, p. 6–8.)

Defendants moves to exclude Dr. Cutler's opinion testimony pursuant to Federal Rules of Evidence 402, 403, and 702. The Defendants do not take issue with Dr. Cutler's qualifications, training, skills, or experience but instead argue that his opinions do not satisfy the *Daubert* standard because (1) eyewitness identification expert testimony is generally disfavored, and (2) Dr. Cutler's opinions are irrelevant and thus will not assist the trier of fact in understanding the evidence or determining a fact in issue. Specifically, the Defendants submit that the proffered opinions are irrelevant to Cage's Section 1983 claim because the accuracy of the victim's

²² Dr. Cutler states that although the identification procedure Jones implemented resembled a lineup (in that Zilinger had multiple persons to view to determine if her assailant was present), each person in the lineup was a suspect. (Cutler Report, p. 4.) Dr. Cutler defines "fillers" as "persons known to be innocent but who are included in order to reduce the suggestiveness of the identification procedures." (*Id.*) According to Dr. Cutler, fillers increase the likelihood that an eyewitness who is merely guessing or has an unreliable memory will pick someone whom everyone knows is innocent and thus enable law enforcement to identify problems with the witness's credibility. (*Id.*)

identification, which was heavily litigated and adjudicated at Cage's criminal trial, is not at issue in this case. The Defendants also argue that Dr. Cutler's opinions should be barred because (1) he has provided no opinion on whether the investigating officers' acts and omissions that actually caused Zilinger's identification to be faulty; (2) he further admitted during his deposition that he is aware of no facts suggesting that Detectives Jones or Ervin deliberately manipulated Zilinger so that she would falsely testify against Cage; (3) all of the information upon which Dr. Cutler's opinions are based was known to Cage's defense counsel at the time of his criminal trial and thus his testimony undercuts Cage's claim that the Defendants withheld exculpatory evidence; (4) many aspects of the identification criticized by Dr. Cutler did not and could not have affected Zilinger's identification of Cage; (5) Dr. Cutler's report partially attributes the faulty identification to the circumstances of the assault itself, which were not in the officers' control and are thus irrelevant to this case; and (6) even if Dr. Cutler's testimony were to clear the Daubert threshold, it should be excluded under Federal Rules of Evidence 402 and 403 because it seeks to hold Detective Jones's handling of the identification to standards that were not established until years after Cage's arrest and conviction.

A. Eyewitness Identification Testimony in General

Expert testimony regarding the potential pitfalls of eyewitness identification has traditionally, at least in the criminal context, been excluded from trials where the defendants sought to challenge the reliability of the eyewitness identifications supporting the charges against them. *See United States v. Carter*, 410 F.3d 942, 951 (7th Cir. 2005) (district court did not abuse its discretion when excluding eyewitness identification expert who "opine[d] about factors that could affect memory, including the circumstances surrounding the event in question, the amount of stress on the eyewitness, the amount of attention paid by the witness, and the law enforcement

procedures used to elicit the witness's memory"); Hall, 165 F.3d at 1101 (no abuse of discretion where district court excluded expert testimony regarding "the scientific bases for eyewitness identification" and "factors that give rise to suggestiveness and the likelihood of mistaken identification"); United States v. Daniels, 64 F.3d 311 (7th Cir. 1995); United States v. Larkin, 978 F.2d 964 (7th Cir. 1992) (finding that the "hazards [of eyewitness identification] are well within the ken of most lay jurors" and counsel was "granted ample opportunity at trial to discuss those hazards and cast doubt upon the witnesses' eyewitness identification of his client"); United States v. Curry, 977 F.2d 1042 (7th Cir. 1992) (recognizing that expert testimony on eyewitness identification may not be "totally unhelpful" given that "most persons do not understand the intricacies of perception, retention, and recall," but holding that the district court's preclusion of such evidence was a proper exercise of discretion whether under Rule 702 or 403); United States v. Hudson, 884 F.2d 1016 (7th Cir. 1989) (district court properly excluded expert testimony designed to show (1) the effect of stress on eyewitness identification, (2) the problems associated with cross-racial identifications, (3) an overview of the memory process, and (4) the impact of a short viewing period upon the accuracy of identification); *United States v. Watson*, 587 F.2d 365, 369 (7th Cir. 1978) (cross-racial identification expert properly excluded because "expert's testimony could have been of little use to the jury" and because "work in that field still remains inadequate to justify its admission into evidence").

The presumption against admission of expert testimony on eyewitness identifications generally stems from "concerns about whether such expert testimony would actually assist the trier of fact, rather than about its reliability." *Hall*, 165 F.3d at 1101; *see also Daniels*, 64 F.3d at 315 ("Expert testimony regarding the potential hazards of eyewitness identifications will not aid the jury because it addresses an issue of which the jury is already aware, and it will not

contribute to their understanding of the particular factual issue posed.") (quoting *Larkin*, 978 F.2d at 964); *Hudson*, 884 F.2d at 1024.

However in *Hall*, Judge Easterbrook, though joining the court's decision to affirm the exclusion of expert testimony on eyewitness identification, took issue with line of cases excluding such testimony solely on the basis that "it addresses an issue of which the jury already generally is aware" and thus "will not contribute to their understanding of the particular factual issues posed." 165 F.3d at 1118 (quoting *United States v. Daniels*, 64 F.3d 311 (7th Cir. 1995)). Such reasoning, according to Judge Easterbrook, failed to take into account that:

[p]roperly conducted social science research often shows that commonly held beliefs are in error. Jurors who *think* they understand how memory works may be mistaken, and if these mistakes influence their evaluation of testimony then they may convict innocent persons. A court should not dismiss scientific knowledge about everyday subjects. Science investigates the mundane as well as the exotic. That a subject is within daily experience does not mean that jurors know it *correctly*. A major conclusion of the social sciences is that many beliefs based on personal experience are mistaken. The lessons of social science thus may be especially valuable when jurors are sure that they understand something, for these beliefs may be hard for lawyers to overcome with mere argument and assertion.

Id. at 1118 (Easterbrook, J., concurring) (emphasis in original). This was not the first time the Seventh Circuit recognized the unique dangers of seemingly credible and sincere eyewitness testimony. See Krist v. Eli Lilly & Co., 897 F.2d 293, 296–97 (7th Cir. 1990) ("An important body of psychological research undermines the lay intuition that confident memories of salient experiences ... are accurate and do not fade with time unless a person's memory has some pathological impairment The basic problem about testimony from memory is that most of our recollections are not verifiable. The only warrant for them is our certitude, and our certitude is not a reliable test of certainty.") (citations to scholarly literature omitted).

More recently, in *United States v. Bartlett*, 567 F.3d 901, 906 (7th Cir. 2009), the Seventh Circuit called into question the previously-held notion that eyewitness identification testimony should be excluded simply because the court believes "jurors know from their daily lives that memory is fallible." 567 F.3d at 906. The court explained:

The question that social science can address is *how* fallible, and thus how deeply any given identification should be discounted. That jurors have beliefs about this does not make expert evidence irrelevant; to the contrary, it may make such evidence vital, for if jurors' beliefs are mistaken then they may reach incorrect conclusions. Expert evidence can help jurors evaluate whether their beliefs about the reliability of eyewitness testimony are *correct*. Many people believe that identifications expressed with certainty are more likely to be correct; evidence that there is no relation between certitude and accuracy may have a powerful effect.

Id. The court added that "the problem with eyewitness testimony is that witnesses who *think* they are identifying the wrongdoer—who are credible because they believe every word they utter on the stand—may be mistaken." *Id.*

Nevertheless, the *Bartlett* court cautioned that "using expert testimony to explore this question may sidetrack a trial" and thus the "judge must balance the benefits of illuminating evidence against the costs of collateral inquiries." *Id.* Although the court found that the district court did not abuse its discretion in excluding the eyewitness identification testimony, it recognized, albeit implicitly, that such testimony may be of value where, as in Cage's case, a criminal conviction rests on the identification by a single eyewitness who is otherwise unfamiliar with the defendant. *Id.* at 907 (finding no abuse of discretion where eyewitness expert testimony was excluded in a criminal case where "[o]nly two of the people who identified [the defendant] were strangers to him" but "[t]he other four knew him well," noting that "the scholarly work concerns identification by *single* eyewitnesses, not the probability of error when multiple

witnesses identify the same person") (emphasis in original). Indeed even in *Carter* and *Hall*, upon which the Defendants principally rely, the Seventh Circuit's holdings that eyewitness expert testimony would be unhelpful was based at least in part on the fact that other evidence corroborated the eyewitness identifications. *See Carter*, 410 F.3d at 950 (affirming district court judge's exercise of discretion where "government had significant additional evidence," including DNA, but crediting district court for "correctly realiz[ing] that expert testimony regarding eyewitness identification, memory, and perception is not *per se* unhelpful"); *Hall*, 165 F.3d at 1107 (noting the "substantial corroborating evidence to implicate Hall" and stating that "[g]enerally speaking, the existence of corroborating evidence undercuts the need, except in the most compelling cases, for expert testimony on eyewitness identification"). Since *Bartlett*, the United States Supreme Court has recognized that one tool courts may use to ensure juries do not give eyewitness testimony more weight than it is worth is to allow "expert testimony on the hazards of eyewitness identification." *Perry v. New Hampshire*, 132 S.Ct. 716, 729 (2012); *accord United States v. Schiro*, 679 F.3d 521, 543 (7th Cir. 2012) (Wood, J., dissenting). ²³

²³ Decisions from other circuits also evince a trend toward allowing eyewitness expert testimony. *Compare* United States v. Amaral, 488 F.2d 1148 (9th Cir. 1973) (affirming refusal to admit testimony of psychological experts in the field of eyewitness identification), United States v. Brown, 501 F.2d 146 (9th Cir. 1974) (same), United States v. Brown, 540 F.2d 1048 (10th Cir. 1976) (same), and United States v. Thevis, 665 F.2d 616, 641 (5th Cir. 1982), with United States v. Brownlee, 454 F.3d 131, 140-44 (3d Cir. 2006) (reversible error to exclude expert testimony explaining problems inherent in stranger-to-stranger eyewitness identifications, finding that "expert testimony was the only method of imparting confidence in erroneous identifications"); United States v. Mathis, 264 F.3d 321, 240-42 (3d Cir. 2001) (finding an abuse of discretion where district court excluded expert testimony on eyewitness identification and rejecting government's argument that the jury did not need an expert be aware of such factors); United States v. Harris, 995 F.2d 532, 534-35 (4th Cir. 1993) (recognizing a "trend in recent years to allow such testimony" and collecting cases in which such testimony was allowed in cases involving "cross-racial identification, identification after a long delay, identification after observation under stress, and psychological phenomena as the feedback factor and unconscious transference"); cf. United States v. Rodriguez-Felix, 450 F.3d 1117, 1125 (10th Cir. 2006) (affirming district court's exclusion testimony from eyewitness identification expert where expert's report was deemed "woefully inadequate," but noting that "an expert's testimony describing how certain factors, falling outside a typical juror's experience, may affect a eyewitness's identification is the very type of scientific knowledge to which Daubert's relevance prong is addressed"); but see United States v. Lespier, --- F.3d ----, 2013 WL 3988769, at *10 (4th Cir. Aug. 6, 2013) ("[W]e agree with the government that, in the typical case, the effects of sleep deprivation, like problems with eyewitness identifications, are readily comprehended by jurors

Regardless of where the law in this Circuit currently stands in the criminal context, the Seventh Circuit has been receptive to eyewitness identification expert testimony in the civil arena. In *Newsome v. McCabe*, 319 F.3d 301 (7th Cir. 2003), the plaintiff, pardoned fifteen years after his conviction, filed suit under 42 U.S.C. § 1983, alleging police officers induced three witnesses to identify him as the killer. *Id.* at 302. On interlocutory appeal, the defendants challenged, among other things, the district court's decision to admit the testimony of an eyewitness expert who concluded that there was a strong likelihood that the police officers manipulated the witness's identifications. *Id.* at 306. The *Newsome* court began by describing the potential weaknesses of eyewitness identifications:

Most persons have difficulty remembering or describing the features of strangers. A person who sees a criminal for only a brief time takes away a vague sense of appearance and behavior—and that sense may be focused by a sketch, photograph, showup, or lineup after the events. Sometimes the witness zeroes in on the correct person, sometimes not; there is an element of chance and an opportunity for manipulation. Once the witness decides that 'X is it' the view may be unshakable. Psychological research has established that the witness's faith is equally strong whether or not the identification is correct An important body of psychological research undermines the lay intuition that confident memories of salient experiences ... are accurate and do not fade with time unless a person's memory has some pathological impairment The mere fact that we remember something with great confidence is not a powerful warrant for thinking it is true.

Id. at 305 (internal citations and quotation marks omitted).

The court then discussed jurors' tendency to overestimate the accuracy of eyewitness accounts:

Jurors, however, tend to think that witnesses' memories are reliable (because jurors are confident in their own), and this gap between the actual error rate and the jurors' heavy reliance on

and do not require an expert for their explanation.").

eyewitness testimony sets the stage for erroneous convictions when (as in [the plaintiff's] prosecution) everything depends on uncorroborated eyewitness testimony by people who do not know the accused.

Id.

With these notions in mind, the *Newsome* court found that the district did not abuse its discretion in allowing the plaintiff's eyewitness expert to testify, adding that it "would have acted precisely as did the district judge." *Id.* at 306. The court reasoned that "[b]ecause recollection is suggestible, it was important in this civil action to explore the question of whether the testimony of [the witnesses] identifying [the plaintiff] at the criminal trial was attributable to deliberate manipulation or instead to chance." *Id.* at 305.

The *Newsome* Court also suggested (though it did not hold) that previous decisions in criminal cases concerning the usefulness and admissibility of eyewitness expert testimony do not govern in civil cases:

[I]t may be prudent to avoid complicating criminal trials with general scientific evidence about the psychology of identification—though scientific evidence that a given person deviates from the norm (for example, is exceptionally suggestive) may be invaluable. No matter how criminal trials should be managed to keep the jurors' minds on the main event, however, [the eyewitness expert's] testimony was not a distraction in this civil proceeding but went to an important ingredient of the plaintiff's claim.

Id. at 306.

More recently, the Seventh Circuit has suggested that where the challenged identification technique has not been forbidden by an authoritative judicial decision, eyewitness expert testimony is not only admissible, but may even be *required* in order to support a Section 1983 claim alleging unduly suggestive identification procedures. *Phillips v. Allen*, 668 F.3d 912 (7th

Cir. 2012). In *Phillips*, the Seventh Circuit addressed a plaintiff's contention that defendant police officers' use of a photo array to identify him was unduly suggestive because the officers mentioned in the victim's presence the plaintiff's name and that he was rumored to have been involved in various robberies in the neighborhood. *Id.* at 915–16. The plaintiff argued, without presenting expert testimony, that such identification tactics were "obvious[ly]" suggestive. *Id.* at 916. The Seventh Circuit disagreed, finding that "[n]either the Supreme Court nor this court has held that, as a matter of law, mentioning a suspect's name spoils an identification." *Id.* 917. The court noted that expert testimony in "the social science of eyewitness identification" may have had a chance of convincing the court to create such a rule. *Id.* However the court was reluctant to adopt the rule without expert testimony:

[N]othing is obvious about the psychology of eyewitness Indeed, one point well established in the identification. psychology literature is that most people's intuitions on the subject of identification are wrong. See Christopher Chabris & Daniel Simons, The Invisible Gorilla: How Our Intuitions Deceive Us (2010). We held in *United States v. Williams*, 522 F.3d 809 (7th Cir. 2008), that someone who contends that a particular kind of procedure led to an unreliable identification needs evidence—if not from an expert's affidavit, then from published work such as Elizabeth F. Loftus, et al., Eyewitness Testimony: Civil and Criminal (4th ed. 2007), the standard text in this field. [The Plaintiff has not referred us to such evidence; he has only a lawyer's confidence that what [the officer] did would have produced a worthless identification. Lawyers' talk is no substitute for data.

Id. at 916–17 (emphasis added). ²⁴ Thus "[w]ithout a solid basis in the social science of eyewitness identification, a court could not appropriately create [a rule designating the officers' procedure unduly suggestive]." *Id.* at 917.

²⁴ Cage reads this passage to stand for the broad proposition that expert testimony on eyewitness identification is required to support *any* Section 1983 claim based on unduly suggestive identification procedures.

Several district courts—within the Northern District of Illinois and elsewhere—have subsequently rejected efforts by defendants to bar as unhelpful the testimony of eyewitness experts in civil cases involving allegations of suggestive identification techniques. See, e.g., Manning v. Buchan, 357 F.Supp.2d 1036, 1044–45 (N.D. III. 2004) (Kennelly, J.) (rejecting defendants' request to bar testimony of eyewitness identifications expert who would testify that photographic arrays shown to eyewitness were highly suggestive); see also Atkins v. Riverside, No. 94 C 5307, 2007 WL 4696859, at *5-6 (C.D. Cal. Mar. 20, 2007) (denying motion to bar expert testimony on whether eyewitness identification procedures were inherently suggestive in a § 1983 wrongful conviction case); Bibbins v. Baton Rouge, 489 F.Supp.2d 562, 570 (M.D. La. 2007) (following the Fifth Circuit's "modern conclusion that the admission of expert testimony regarding eyewitness identifications is proper" and finding admissible expert's eyewitness identification testimony that police show-up was impermissibly suggestive and lead to wrongful conviction in a § 1983 case) (quoting United States v. Moore, 786 F.2d 1308, 1312 (5th Cir. 1986)); Perkins v. US Airways, Inc., 8 F.Supp.2d 1343, 1356–57 (M.D. Fla. 1998) (deferring ruling on admissibility of plaintiff's expert on eyewitness testimony, but finding Eleventh Circuit cases banning expert testimony regarding eyewitness identification in criminal cases "factually distinguishable in that they all involved criminal actions").

Accordingly, the Court finds expert testimony on the subject of eyewitness identification admissible, at least in this civil case, where such testimony will assist the trier of fact in understanding the evidence or determining a factual issue.

The Court declines to adopt such an expansive reading of *Allen*. The *Allen* court simply held that where the challenged procedure was not already "forbidden by an authoritative judicial decision (that is, by the Supreme Court or the court of appeals with territorial jurisdiction)," it would not create a new rule finding a particular procedure unduly suggestive without evidence in form of expert testimony or scholarly published work. *Id.* at 917.

B. Dr. Cutler's Testimony and Cage's Section 1983 Claims

Dr. Cutler's proffered testimony is "sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute." *Daubert*, 509 U.S. at 591. Cage alleges in his Amended Complaint that the "Defendants unjustly singled out the Plaintiff, and then endeavored to stretch and manipulate the facts and the evidence to fit the false hypothesis that he was guilty of the crime." (Am. Compl. ¶ 27.) With respect to his identification as the attacker, Cage alleges that the Defendants "unlawfully manipulat[ed] witnesses to falsely implicate [him] by means of improper suggestiveness and outright coercion, all of which violated [his] constitutional rights." (Id. ¶28.) Cage further alleges that "[t]he identification procedures utilized by the Defendants, both visual and voice, were unduly suggestive and otherwise improper. As a result of these unduly suggestive and improper procedures, Plaintiff was falsely identified, both prior to and then again at trial." (Id. ¶ 33.) Cage anticipates that Zilinger will testify at trial that she identified Cage because she recognized him as her attacker when she saw him, not because of any external suggestive influences. Dr. Cutler's testimony will allow the jury to learn what the science of human memory and eyewitness identification has to say about Zilinger's testimony and thus help them assess whether Zilinger's reflections of what caused her to pinpoint Cage are correct. In other words, Dr. Cutler will allow Cage to argue that given the circumstances, Zilinger's ability to form an eyewitness memory without unduly suggestive techniques is far more suspect than she presently believes.

Defendants' first argument—that the "accuracy of the victim's identification is not at issue in this case" because it "was heavily litigated and adjudicated at [Cage's] criminal trial"—is misplaced. Cage does not seek to use Dr. Cutler's testimony to prove he was incorrectly identified as the rapist; his exoneration based on DNA evidence has already proven that

Zilinger's identification was erroneous. Instead, Cage seeks to prove that the identification procedures employed by the Defendant police officers were unduly suggestive and a causative factor in his wrongful conviction.

Next, the Defendants do not explain—nor is the Court able to discern—the significance of whether Cage's defense attorneys knew the facts upon which Dr. Cutler's opinions are based. Defendants cite no authority supporting the proposition that a law enforcement officer is absolved of liability despite having employed unduly suggestive identification techniques simply because the suspect's criminal defense attorneys were aware of the circumstances surrounding the identification. While evidence that Cage's defense attorneys knew the facts Dr. Cutler considered to create his report might be probative to the determination of whether the Defendants withheld exculpatory evidence, it does not bear on whether the defendant officers employed unduly suggestive identification techniques. Furthermore, Defendants fail to articulate why this issue is salient to their *Daubert* motion. Even if Cage's defense attorneys knew of the circumstances surrounding the identification (a contention that Cage disputes), this is an issue to be resolved at the summary judgment stage of the proceeding, not here.

Defendants also maintain that Dr. Cutler's testimony regarding troublesome aspects of the attack (*e.g.*, the brief time the victim had to view her attacker's face, the victim's stress levels, poor lighting, the fact that her attacker wore a hat, the fact that the attacker and Zilinger were of different races) are irrelevant in this case because they are not attributable to any action on their part. Obviously, Cage does not seek to fault the Defendants for the fact that rape took place under circumstances making eyewitness identification difficult. This does not, however, render Dr. Cutler's appraisal of the attack irrelevant. Evidence that the attack took place in a

manner that made identification difficult is probative because it calls into question whether Zilinger could have made the identification confidently without outside influence.

Similarly, Dr. Cutler's opinion that the Defendants boosted Zilinger's confidence in her identification is helpful to the jury notwithstanding the fact that the alleged confidence-boost occurred after the identification itself. Though this aspect of Dr. Cutler's conclusion does not bear on whether suggestive techniques helped secure Cage's conviction, it will aid the jury in assessing the credibility of Zilinger's testimony at trial that she is confident the defendant officers did not manipulate toward identifying Cage.

The Defendants next argue that Dr. Cutler's testimony should be excluded because he has no opinion on whether (1) the defendant officers deliberately manipulated Zilinger to misidentify Cage or (2) the defendant officers' acts and omissions criticized in Dr. Cutler's report actually caused Zilinger's identification to be faulty. Neither is a proper basis for exclusion. First, the fact that Dr. Cutler's opinion does not take a position on the defendant officers' state of mind is of no consequence. Indeed any opinion to that affect would be inadmissible speculation. See, e.g., George, 800 F.Supp.2d at 933 Moore, 781 F.Supp.2d at 704; Lipson, 46 F.Supp.2d at 763; see generally, Fed.R.Evid. 602. Nor is it of any import that Dr. Cutler's testimony does not establish every element Cage must prove to prevail on his claim. "When analyzing the relevance of proposed expert testimony, the district court must consider whether the testimony will assist the trier of fact with its analysis of any of the issues involved in the case. The expert need not have an opinion on the ultimate question to be resolved by the trier of fact in order to satisfy this requirement." Smith, 215 F.3d at 718 (quoting Walker, 208 F.3d at 587); see also Strollings, 2013 WL 3964477; see, e.g., Burbach Aquatics, Inc. v. City of Elgin, Ill., No. 08 C 4061, 2011 WL 204800, at *5 (N.D. Ill. Jan. 18, 2011) (rejecting plaintiff's argument that expert's testimony

should be excluded as unreliable because it did not bear on a number of issues in dispute, finding that "expert testimony need not concern the (or an) ultimate issue in the case in order to be reliable").

In *Smith*, the trial court excluded testimony from two automotive engineers in a case involving a defective steering gearbox on an automobile. 215 F.3d at 716–17. One expert proposed to testify regarding design issues, the other regarding manufacturing issues. *Id.* However neither expert was able to say whether ultimately it was defects in the design or defects in the manufacture that caused the steering box to fail. *Id.* The trial court excluded both experts' testimonies because they could not testify to this ultimate conclusion. *Id.* at 717. The Seventh Circuit reversed, holding that testimony of a qualified expert is admissible if it addresses *an* issue pertinent to the case. *Id.* at 720; *see also Bielskis*, 663 F.3d at 896 (citing *Smith* for the proposition that an expert's "inability to opine on the ultimate issue for the trier of fact did nto mean they could not testify regarding other relevant factual issues).

Similarly, in *Strollings*, the defendant challenged expert testimony in a product liability case discussing the cost to society of saw accidents. 2013 WL 3964477, at *9. The trial court excluded the evidence on the basis that the testimony did not speak to the utility of the defendant's specific saw design. *Id.* On appeal, the defendant maintained that the evidence was properly excluded because "the cost to society is only one component of the utility of the product to the public and is therefore too attenuated from the question of whether [the defendant's] saw design benefits outweigh its costs to be relevant to an issue in dispute." *Id.* at *12. The court disagreed, holding that the "expert testimony [did] not need to be conclusive to be relevant" and should have been admitted because it "would have provided the jury with a probative piece of the evidentiary puzzle." *Id.* at *12. The fact that the expert could not speak to the utility of the

saw design was, in the court's view, a weakness in the expert's testimony that went "to the testimony's weight, not its relevance or admissibility." *Id.* at *13.

Indeed the Seventh Circuit has rejected an argument nearly identical to the Defendants' in this exact context. In *Newsome*, the City of Chicago, a defendant, argued "that [the eyewitness identification expert's] testimony was irrelevant because it did not determine *how* the witness had been induced to believe that they saw [the section 1983 plaintiff] commit the murder." 319 F.3d at 306. The court rejected this argument, holding that the "testimony need not prove everything in order to be useful. As we have said, the jury had to consider the possibility that unhappy chance rather than malfeasance led to the mistaken conviction. [The expert] provided information valuable in this endeavor." *Id.* As Dr. Cutler's testimony provides "a probative piece of the evidentiary puzzle" regarding Cage's identification, his testimony will not be excluded on the basis that he does not conclude that the Defendants' techniques actually caused the faulty identification.

Finally, Defendants argue that Dr. Cutler's opinions are unfairly prejudicial and should be barred pursuant to Federal Rule of Evidence 403 because they invite the jury to hold the Defendants to standards established after Cage's 1994 identification. Specifically, Defendants take issue with (1) Dr. Cutler's suggestion that Detective Jones should have instructed Zilinger in the manner set forth by the Department of Justice in guidelines not published until 1999; and (2) Dr. Cutler's criticism of Jones for failing to use "fillers," based on the 1999 DOJ guidelines and a study published in 2009. However, Dr. Cutler explains that although the guidelines were not published until after the identification, the importance of instructions, standard presentation, and fillers as articulated in the guidelines has been understood by law enforcement prior to the

guidelines' publication. (*See* Cutler Dep., Dkt. 177, Ex. B, p. 67 – 70.) This is an issue the Defendants will be free to explore on cross-examination.

CONCLUSION AND ORDER

For the reasons stated herein, Defendants' Motion to Bar the Testimony of Gary Harmor is granted in part and denied in part. Specifically, Harmor's opinions pertaining to the use of the term "extract," the periphery theory, and DQ Alpha testing will be admitted; his estimate of the degradation rate of DNA in sperm cells over the relevant time period and his opinion regarding the amount of DNA that would have been present on the underwear sample in 1995 will be barred. Defendants' Joint Motion No. 1 to Bar Plaintiff's Expert, Charles Alan Keel's, Testimony and Opinions is denied. Defendants' Joint Motion No. 2 to Bar Plaintiff's Expert, Charles Alan Keel's Testimony Regarding Defendant Pam Fish's Alleged Fraudulent Intent/Credibility in Testifying Concerning Serological Analysis Performed in Unrelated Criminal Cases is granted in part and denied in part. Specifically, Keel will not be permitted to offer opinion testimony pertaining to the accuracy of Fish's trial testimony in prior criminal cases or whether that testimony would have misled a reasonable investigator, attorney, or finder of fact; any opinion testimony by Keel that Fish's laboratory reports in those cases misrepresented her underlying data and bench notes is proper and not barred. The Court denies Cage's Motion to bar opinion testimony from Lucy Davis that Fish acted appropriately in reporting her ABO test results as "inconclusive" in the *Illinois v. Willis* case. The Court grants Cage's Motion to bar opinion testimony from Barry Spector that Zilinger's deposition testimony indicates that she did not put her underwear on after being attacked. Defendants' Motion to Exclude the Testimony of Dr. Brian L. Cutler is denied.

Virginia M/Kendall
United States District Court Judge

Northern District of Illinois

Date: September 24, 2013