[CAPTION]

MOTION TO EXCLUDE THE UNSUPPORTED OPINIONS OF STATE'S EXPERTS UNDER INDIANA RULE OF EVIDENCE 702(B)

The Defendant, by counsel, respectfully requests this Court to exclude the opinions of the State's experts [insert expert names]. In support of the Motion, defendant states the following:

- 1. Indiana Rule of Evidence 702(b) provides:
 - Expert scientific testimony is admissible only if the court is satisfied that the scientific *principles* upon which the expert testimony rests are reliable. <u>Id.</u> (emphasis added).
- Bloodstain pattern analysis is "an area of forensic science. . ." <u>Grindstead v. State</u>, 684 N.E.2d 482, 486-87 (Ind. 1997). It is an extension of scientific principles of physics, chemistry and mathematics. <u>Hampton v. State</u>, 588 N.E.2d 555, 558 (Ind.Ct.App. 1992).¹
- 3. It is the State's burden, as the proponent of such evidence, to show that the evidence is based on reliable scientific principles. Steward v. State, 652 N.E.2d 490 (Ind. 1995); West v. State, 805 N.E.2d 909 (Ind.Ct.App. 2004) (trial court erred in admitting scientific opinion where the State failed to present any evidence of the reliability of the reasoning or method behind an officer's opinion, and rather relied solely on the officer's training and experience).

¹ In fact, the National Academy of Sciences, which was commissioned by Congress to conduct a study of the forensic sciences, determined that when considering the qualifications of an alleged blood stain pattern expert, placing "experience over scientific foundations seems misguided." <u>Id.</u> at 178. The National Academy of Sciences further explained that "many sources of variability arise with the production of bloodstain patterns, and their interpretation is not nearly as straightforward as the process implies." <u>Id.</u> Thus, at a minimum, an analyst, must have, along with other qualifications, "an appropriate scientific education; . . . an understanding of applied mathematics and the use of significant figures; an understanding of the physics of fluid transfer; an understanding of the pathology of wounds; and an understanding of the general patterns blood makes after leaving the human body." Id. at 177.

- 4. The trial court has ordered the parties to disclose: 1) the identity of experts; 2) the specific subject matters on which the expert is expected to testify; 3) the substance of the facts and opinions to which the expert is expected to testify; and (4) a summary of the grounds for each opinion.
- 5. The State has disclosed the following alleged experts who will provide testimony in the area of blood stain pattern analysis:[insert expert names]. The State disclosed that their opinions were based on the following grounds: [Offer brief description such as:
 - (a) The grounds for [expert's name] opinions are his examination of the accused's shirt, including cuttings taken from the shirt and photographs of the shirt, as well as his training and experience.
 - (b) The grounds for [expert's name] opinions are his training and experience combined with his examination of the items of evidence described above and photographs of the items of evidence described above.
 - (c) The grounds for [expert's name]opinions are his examination of photographs and the items of evidence identified above, as well as his consideration of other expert opinion and his training and experience
- 6. The State's "grounds" for its experts' opinions is devoid of any reasoning, methodology, or principles. But, the law is well-settled that such "reasoning" and "methodology" is necessary for admissibility. Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 590 n. 9, 113 S.Ct. 2786, 125 L.Ed.22d 469 (1993) (the trial court "must make a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and whether that

- reasoning or methodology properly can be applied to the facts in issue."). In fact, Rule 704 requires the "principles" upon which the proffered scientific testimony is based to be reliable.
- 7. Experience does not substitute for reasoning and principals. "Allowing a self-professed expert to base his opinions merely upon his 'years of experience' would be 'inconsistent with the clear intent of [Evid. R. 702] that scientific experts demonstrate their testimony is based on reliable scientific principles." Indiana

 Mich. Power Co. v. Runge, 717 N.E.2d 216, 236 (Ind.Ct.App. 1999) (citing Lytle v. Ford Motor Co., 696 N.E.2d 465, 473 (Ind.Ct.App. 1998). Although Indiana's approach to determining the scientific reliability of an expert's opinion may be a flexible one, "[a]n expert cannot rely solely on his or her own stature, intellect or intuition to support an opinion admissible to aid the trier of fact." Id. at n. 17 (quoting Porter v. Whitehall Laboratories, 791 F.Supp. 1335, 1345

 (S.D.Ind. 1992), aff'd, 9 F.3d 607 (7th Cir. 1993)). "Experts' opinions are worthless without data and reasons." Kenosha v. Heublein, 895 F.2d 418, 420 (7th Cir. 1990); see also Elliott v. CFTC, 202 F.3d 926, 934 (7th Cir. 1998).
- 8. The risk associated with relying solely on an expert's experience is that the jury will make an "irrational finding" based on the "siren-like allure of opinions stated by highly qualified experts." Porter v. Whitehall Lab, Inc., 791 F.Supp. 1335, 1345 (S.D. Ind. 1992), aff'd by, 9 F.3d 607 (7th Cir. 1993). In a criminal case, an irrational finding by even a highly qualified expert can, and has, led to wrongful convictions. In a study of 86 wrongful convictions, 63% featured forensic scientists who were wrong, lying or both. Brandon L. Garrett & Peter J. Neufeld,

- "Invalid Forensic Science Testimony and Wrongful Convictions," 95 Va. L. Rev. 1 (2009).
- 9. Because the State has provided no reasoning or principles to support their experts' opinions, but rather has relied solely on their alleged experience, the State has failed to meet its burden of proving the reliability of the scientific testimony it intends to submit to the jury.

WHEREFORE, the Defendant, by counsel, respectfully requests an evidentiary hearing on this motion and at the conclusion of this hearing, this Court to exclude the opinions of [experts] and for all other relief just and proper in the premises.

[Signature]