

GEORGIA traffic PROSECUTOR

A PUBLICATION OF THE PROSECUTING ATTORNEYS' COUNCIL OF GEORGIA TRAFFIC SAFETY PROGRAM

>>> OUR MISSION

The goal of PAC's Traffic Safety Program is to effectively assist and be a resource to prosecutors and law enforcement in keeping our highways safe by helping to prevent injury and death on Georgia roads.

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The DUI Defense bar is hard at work touting a recent trial court decision out of Carroll County, Maryland as the death-knell for NHTSA's Drug Recognition Expert Program. In this edition of the GTP, Traffic Safety Resource Prosecutor Todd Hayes analyzes the Maryland trial court order and finds that, despite defense claims to the contrary, it has little to no impact on Georgia DREs.

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Maryland v. Brightful: It Does not Mean What they Say it Means

By Todd Hayes, Traffic Safety Resource Prosecutor, Prosecuting Attorneys' Council of Georgia

As the incidence of drug-impaired driving in the United States continues to soar, the importance of successful prosecution of drugged drivers is becoming more and more important.¹ Some of the most powerful and effective resources available to traffic prosecutors in drugged driving cases are "Drug Recognition Experts" (DREs). These highly trained police officers receive specialized and advanced training in the recognition of the signs and symptoms of drivers who are under the influence of drugs other than, or in addition to, alcohol.² DREs provide a wealth of valuable and desperately needed information to traffic prosecutors regarding the causes and extent of a particular driver's impairment, and can mean the difference between conviction and acquittal in hotly-contested DUI-drugs cases. As a result, the scientific integrity of the National Highway Traffic Safety Administration's (NHTSA) Drug Evaluation and Classification Program (DEC) (the program overseen by NHTSA and the International Association of Chiefs of Police [IACP] that provides DREs with their advanced training) and the processes DREs use in the field are of vital importance to traffic prosecutors across the nation.

On March 5, 2012, Judge Michael M. Galloway, of the Carroll County, Maryland Circuit Court³, dealt what seemed to be a serious blow to the scientific reliability of the DEC program and to the credibility of DREs in courts throughout the country. Judge Galloway consolidated the cases of 27 drugged-driving defendants for the purposes of determining "whether the drug recognition expert protocol and drug recognition expert testimony are admissible in the State of Maryland for prosecutions of persons suspected of driving under the influence of drugs of controlled dangerous substances." *Maryland v. Brightful, et al*, No. K-10-04-259, Cir. Ct. for Carroll County, MD at 2-3 (March 5, 2012). Following a 10-day evidentiary hearing, the judge issued a 37-page order concluding that the DEC Program is a novel scientific technique not generally accepted as reliable by "the relevant scientific com-

munity," and that DREs are not qualified to render an opinion regarding possible drug-impaired of a suspect, despite their NHTSA/IACP certification. Furthermore, the judge found that DRE testimony is both irrelevant to determining whether a suspect is impaired by drugs and substantially more prejudicial to suspected drugged drivers than it is probative on the issue of their alleged impairment. *Id.* at 34-37. This unappealable and unreported trial court ruling has (predictably) been hailed by DUI defense attorneys across the country as a landmark decision exposing the DEC program as junk science unworthy of belief.⁴ However, such claims fail to explore obvious deficiencies in Judge Galloway's findings and ignore the substantial body of case law that acknowledges the reliability of DEC. By taking a closer look at this aberrant Maryland ruling and placing it in proper context with other DRE court opinions, thoughtful traffic prosecutors can gain a clearer understanding of how little the order means outside of the geographic confines of Carroll County, Maryland.

The *Brightful* Expert Witnesses: A One-Sided View

Judge Galloway's uneven treatment of the expert witnesses that testified in *Brightful* is one of the most striking features of his order. The judge denigrated the education and training of every State's expert presented, while failing (either by choice or because of a lack of information) to recognize the biases of the defense experts. The stark contrast between the court's treatment of state's expert Dr. Karl Citek and defense expert Dr. Francis Gengo amply illustrates the inequity inherent in the analysis of the experts.

Dr. Citek, who (a) obtained his Doctor of Optometry degree from the State University of New York in 1993; (b) holds masters and doctorate degrees in Vision Science from the same institution; (c) is a tenured Professor of Optometry at Pacific University College of Optometry in Forest Grove, Oregon; (d) has published numerous peer reviewed articles

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in reputable optometric journals;⁵ and (e) has been qualified to testify as an expert in at least a half-dozen states, had his credentials summarized by Judge Galloway in this manner:

Dr. Karl Citek . . . is an optometrist who is also a primary care physician. He testified that **he did not attend medical school**. He testified that he is a **member of the adjunct faculty at the Institute of Police Technology and Management** and teaches a course called Medical Foundations of Visual System Testing, a three-day course on the medical and scientific background behind the DRE protocol. Dr. Citek testified that he has given presentations and lectures to DREs for which he has **received some compensation** and has observed DRE certification training in Oregon, Florida and Louisiana on at least 100 occasions. *Brightful* at 6 (citations omitted; *emphasis added*).

Apparently, none of Dr. Citek's other qualifications carried much weight with Judge Galloway. On the other hand, his assessment of Dr. Gengo's expertise almost glows:

Dr. Francis Gengo . . . is a clinical pharmacologist with a post doctoral fellowship in pharmacokinetics and pharmacodynamics. Dr. Gengo has held various academic appointments at SUNY Buffalo including Associate Professor of Pharmacy, Associate Professor of Neurology in the School of Medicine and a courtesy appointment in the Department of Neurosurgery where he lectures to neurosurgery residents about the use of medications in patients who have acute neurologic problems. He currently holds two positions at the Dent Neurologic Institute: Director of Clinical Research for the Dent Neurologic Group and Chief Science Officer for the Dent Neuroscience Research Center. Dr. Gengo teaches medical and pharmacology students as part of a clinical rotation from SUNY Buffalo. Dr. Gengo . . . is responsible for medication therapy management and conducts comprehensive reviews of patient records to determine specific efficacy and toxicity of patient medications and eliminate redundant medications.

Dr. Gengo has authored 65 peer reviewed and published articles and three of those articles are specifically in the area of drug impaired driving. He has contributed to text books in the field of clinical pharmacology, e.g., *Neurology In Clinical Practice*, *Clinical Pharmacokinetics*, and *Drug Effects on Human Function*. *Id.* at 12 (citations omitted).

Whether as a purposeful omission or as a result of having incomplete information presented to him, Judge Galloway wholly overlooked the fact that Dr. Gengo has taught at DUI defense seminars for more than a decade.⁶ He utterly fails to reference the undeniable fact that Dr. Gengo's name appears in almost every national listing of DUI defense expert witnesses.⁷ In addition, though it seems

to have been important to the judge that Dr. Citek "did not attend medical school," *Brightful* at 6, he fails to similarly point out that Dr. Gengo acknowledged that he is "not a physician." *Brightful* transcript, 9-28-10 at 28. Similarly, while taking pains to point out that Dr. Citek "received some compensation" for "presentations and lectures to DREs," the judge made no mention of the fact that Dr. Gengo himself admitted to at least \$10,000 in expert witness fees for the *Brightful* case alone. *Brightful* transcript, 9-28-10 at 93.

None of the other State's experts fared better. Michelle Spirk, the Toxicology Technical Supervisor for the Arizona Department of Public Safety's Scientific Analysis Bureau—who holds a Master's degree in Medical Sciences/Biochemistry from the University of Nebraska and has more than 20 years of experience in blood alcohol, breath alcohol, and drug toxicology—was limited to testifying about "the possible effects of a drug, but not the effect on driving." *Brightful* at 7. William Tower III, one of the driving forces behind the development and standardization of the Drug Evaluation and Classification program, had his comments about the relationship between a DRE's conclusions and the limitations of toxicological testing programs taken out of context and misconstrued as a statement of blind adherence to DRE findings in the face of evidence that disproves them. *Id.* at 9. Given the disparate treatment of the expert witnesses that is readily apparent from the text of *Brightful*, the conclusions the court reached are not surprising.

The Frye Standard: Dimly Applied in Brightful

Another remarkable feature of *Brightful* is the misapplication of Maryland's standards for determining the admissibility of scientific evidence. In Maryland, courts reviewing expert testimony that involves new or novel scientific principles must first determine whether the evidence satisfies the state's "Frye-Reed" standard of scientific reliability pursuant to *Reed v. Maryland*, 283 Md. 374 (1978). The court must then apply Maryland Rule of Evidence 5-702, which provides that "[e]xpert testimony may be admitted in form of an opinion or otherwise if the court determines that the testimony will assist the trier of fact to understand the evidence or to determine a fact in issue. In making that determination, the court shall determine (1) whether the witness is qualified as an expert by knowledge, skill, experience, training, or education, (2) the appropriateness of the expert testimony on the particular subject, and (3) whether a sufficient factual basis exists to support the expert tes-

timony." Only when the novel scientific evidence satisfies both standards will it be admitted by a Maryland court. On the other hand, expert testimony regarding scientific evidence that is *not* new or novel is assessed only under Rule 5-702, without reference to the *Frye-Reed* standard.

In the context of these evidentiary rules, the first determination Judge Galloway had to make in *Brightful* was whether or not NHTSA's DEC protocols were a "new or novel scientific technique" under Maryland law. *Brightful* at 22. According to *Reed*, "before a scientific opinion will be received as evidence at trial, the basis of that opinion must be shown to be generally accepted as reliable within the expert's particular scientific field."



Carroll County, Maryland Courthouse courtesy www.msa.md.gov

283 Md. at 381. Obviously, in order for such a determination to be made, it is imperative to correctly identify the "particular scientific field" from which to inquire about the reliability of a scientific technique. As noted in *Arizona Ex. Rel. Collins*, 132 Ariz. 180, 199 (1980), it is "disinterested and impartial experts, knowledgeable in the scientific specialty which deals with and uses such procedures or techniques" that will usually comprise the "particular scientific field" in question.

The *Brightful* decision indicates that Judge Galloway clearly understood each of these principles of law (see e.g. *Brightful* at 28), but his application of them to the facts before him is questionable. The Judge concluded that "under the *Frye-Reed* standard the drug recognition protocol is a new and novel technique because it purports to create a protocol for police officers to render a medical diagnosis." *Brightful* at 34. The determination that the DEC protocols are scientific techniques subject to review under *Frye* is not problematic, in and of itself, and is in line with the factual findings of some other courts. See e.g., *New York v. Quinn*, 580 N.Y.S.2d 818 (1991); *Washington v. Baity*, 991 P.2d 1151, 1160 (2000) (finding that "the DRE protocol . . . [has] scientific elements meriting evaluation under *Frye*"); *Oregon v. Sampson*, 6 P.3d 543, 496 (2000) (holding that the DRE protocol "is scientific evidence subject to the judicial gatekeeping function"). However, Judge Galloway failed to appreciate the distinction between *scientific methodology* and the conclusions experts draw based upon scientific methods in light of their

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training and experience. The Supreme Court of Florida made this distinction clear in the context of a *Frye* hearing regarding pesticide toxicity, noting that “when the expert’s opinion is based upon generally accepted scientific principles and methodology, it is not necessary that the expert’s deductions based thereon and opinion also be generally accepted as well.” *United States Sugar Corp. v. Henson*, 823 So. 2d 104, 109-110 (2002).⁸ Later in the decision, the Court further developed this distinction, stating as follows:

We wish to highlight the principle that under *Frye*, the inquiry must focus only on the general acceptance of the scientific principles and methodologies upon which an expert relies in rendering his or her opinion. Certainly, the opinion of the testifying expert need not be generally accepted as well. Otherwise, the utility of expert testimony would be entirely erased, and “opinion” testimony would not be opinion at all—it would simply be the recitation of recognized scientific principles to the fact finder . . . We reaffirm our dedication to the principle that once the *Frye* test is satisfied through proof of **general acceptance of the basis of an opinion**, the expert’s opinions are to be evaluated by the finder of fact and are properly assessed as a matter of weight, not admissibility. *Id.* at 110 (emphasis added).

Correctly making this distinction is the crux of a correct application of the *Frye* standard because without it, trial court judges allow themselves—usually inadvertently—to substitute their own judgments about the soundness of an expert’s opinion for that of the ultimate finder-of-fact. “Trial courts must resist the temptation to usurp the jury’s role in evaluating the credibility of experts and choosing between legitimate but conflicting scientific views. A challenge to the *conclusions* of [expert witnesses] as to causation, rather than the *methods* used to reach those conclusions, is a proper issue for the trier of fact.” *Marsh v. Valyou*, 977 So. 2d 543, 549 (Fla. 2007) (emphasis added.)

This was the first fundamental error Judge Galloway made in his application of the *Frye* standard to the *Brightful* case. On pages 28-29 of *Brightful*, the judge points out that the 12-step DEC protocol consists of both standardized field sobriety evaluations (HGN, Walk and Turn, and One Leg Stand) and “scientific procedures and techniques” (including blood pressure, pupil reactivity, pupil size, nystagmus, pulse rate, body temperature, and muscle tone). However, at no point in the opinion was the scientific foundation of ANY component of the protocol questioned. Instead, portions of defense expert testimony were cited in support of the notion that DREs using the protocols were reaching the wrong conclusions—precisely the sort of judgment calls the Florida courts warned against! For example, on page 30 of the opinion, Judge Galloway recites the testimony of defense expert Dr. Neal Adams in support of the idea that DREs misuse the HGN evaluation when forming a conclusion

about drug impairment without ever assessing whether vision science experts have a consensus about the types of substances that will (or will not) produce HGN. Again on page 33, the court uses the testimony of defense expert Dr. Jeffrey Janofsky to discredit the notion that “nystagmus, pupil size, reaction to light, lack of convergence, pulse rate, blood pressure or body temperature (all separate components of the DRE)” correlate with drug-impaired driving. Use of Dr. Janofsky’s testimony in this way reveals that Judge Galloway missed the point of the *Frye* hearing, which was to determine if reliable scientific principles demonstrate that ingestion of specific known drugs will consistently produce specific demonstrable physiological effects. The point was NOT to assess whether DREs observing those effects were drawing appropriate conclusions in light of their training and experience! As the Florida Supreme Court correctly pointed out, such determinations are for the ultimate fact-finder and are properly subject to rigorous attacks on the weight of the expert’s conclusions. Instead, Judge Galloway failed to consider the science underlying the DEC program entirely and substituted his personal opinion of the weight of the expert testimony for that of the jury.

The second fundamental error in Judge Galloway’s application of the *Frye* standard in this case involves his selection of the “relevant scientific community.” Perhaps in part because of his misapprehension of the DRE protocol medical diagnostic tool (discussed below), the judge defined the relevant scientific community “to include disinterested medical professionals.”⁹ *Brightful* at 34. He later expanded his definition to include “pharmacologists, neurologists, ophthalmologists¹⁰, toxicologists, behavioral research psychologists, forensic specialists and medical doctors.” *Id.* at 36. On the surface, that seems to be logical, but it overlooks the practical realities surrounding how scientists in general choose to study things and for what reasons they do so. As noted by the Arizona Supreme Court, “the relevant scientific community that must be shown to have accepted a new scientific procedure is often self-selecting. Scientists who have no interest in a new scientific principle are unlikely to evaluate it, even if a court determines they are part of a relevant scientific community.” *State v. Superior Court*, 149 Ariz. 269, 277 (1986). Phrased in terms of the DEC, this means that a “disinterested medical professional” who has never chosen to study the specific physiological effects caused by the ingestion of known drugs has little insight to offer a court regarding the reliability of the DEC methodology, and (s)he certainly cannot be expected to produce a peer-reviewed study about it.

Compounding the problem with this overbroad definition is the fact that Judge Galloway specifically *excluded* scientists who have evaluated the DEC program under the auspices of the NHTSA or the IACP from the relevant scientific community on the basis that they are “long-time proponents of the DRE program [with] a vested interest in its acceptance and use.” *Brightful* at 28. This im-

plies inherent bias in the studies performed by those scientists. Faced with the same issue in the context of HGN reliability, the Arizona Supreme Court came to a dramatically different conclusion:

We disagree with the defendant’s implication that those in the field of highway safety or law enforcement are necessarily biased. We believe the National Highway Traffic Safety Administration’s interest in funding research to identify the drunk driver is not subject to question in this instance . . . The purpose of NHTSA’s program was to develop a test battery to assist officers in discriminating between those drivers who are in violation of [impaired driving] laws and those who are not. Furthermore, it is not to the advantage of law enforcement in the highway safety field to have an unreliable field sobriety test. It is inefficient to arrest and transport a driver for chemical testing, only to find that he is not in violation of the law. We believe that the work of highway safety professionals and behavioral psychologists who study effects of alcohol on behavior is directly affected by the claims and application of the HGN test, so that both these groups must be included in the relevant scientific community. *State v. Superior Court* at 277-278.

The bottom-line result of Judge Galloway’s poor definition of the “relevant scientific community”—including scientists who have no interest in studying or publishing about the DEC program while at the same time excluding scientists who do have such an interest on the basis of a bias that is nebulous at best—is that it caused him to look in the wrong place and to the wrong people for an assessment of the reliability of the program. It is no wonder his findings of fact missed the mark.

DREs: Not *Brightful* Enough to Testify

After deciding that the DEC program represented a novel scientific technique that was not regarded as reliable by a poorly-defined “relevant scientific community,” Judge Galloway went on to make findings relating to the qualifications of DREs to offer expert testimony under Maryland Rule of Evidence 5-702. Specifically, the judge found that “a drug recognition expert is not sufficiently qualified to render an opinion, that the testimony is not relevant, and the probative value of the evidence is substantially outweighed by its prejudicial effect.” *Brightful* at 35. It is important to note that the Judge did not need to address DRE qualifications under Rule 5-702, given his conclusion about the novelty and unreliability of the DEC program as a whole. However, the fact that he chose to articulate those findings—despite their notable brevity—reveals a great deal about another crucial misstep in his analytical process.

In finding the DEC program to be unreliable, Judge Galloway specifically stated that the “drug recognition protocol . . . purports to

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create a protocol for police officers to render a medical diagnosis.” *Brightful* at 34. This conclusion seems to be the product of the judge’s (mis)understanding of the expert testimony presented (at least insofar as can be discerned from his summaries on pages 6-21 of his order), but it badly mischaracterizes the stated purpose of the DEC program¹¹ and implies that only practicing physicians are capable of administering its’ component parts. Indeed, the court’s focus on the status of the experts as having a medical degree¹² or being classified as “physicians,”¹³ coupled with its selection of “disinterested medical professionals”¹⁴ as the relevant scientific community in terms of *Frye-Reed* reveals a predetermined and fixed belief that witnesses without formal medical training are incapable of administering a DEC evaluation. This is not so, and is indicative of the judge’s misapprehension of what a DRE actually does.

According to the American Prosecutors Research Institute (APRI), the DEC “enables police officers who are certified as Drug Recognition Experts or Drug Recognition Evaluators (DRE) to determine whether a suspect is under the influence of alcohol and / or drugs and, if so, what category of drugs, by combining basic medical knowledge about drug pharmacodynamics with validated psychomotor tests.” Stephen K. Talpins & Chuck Hayes, *The Drug Evaluation and Classification (DEC) Program: Targeting Hardcore Impaired Drivers* 1 (2004). Furthermore, “[d]rug recognition training is not designed to qualify police officers as a scientist, but to train them as observers. The training is intended to refine and enhance the skill of acute observation, which is the hallmark of any good police officer, and to focus that power of observation in a particular situation.” *Florida v. Williams*, No. 245998, Dade County Ct. (January 19, 1995). To facilitate their observations, DREs are trained to use long-standing and indisputably reliable medical techniques such as blood pressure, pulse rate, nystagmus, and muscle tone, which do not require advanced medical training to be administered. Indeed, as noted in *New York v. Quinn*, 580 N.Y.S.2d 818, 826 and 828 (1991), “nothing contained in the protocol is a new invention. It is rather a compilation of tried and true procedures utilized by medical science and the law enforcement community in similar contexts for many years . . . the protocol’s underlying principles are not so hyper-technical nor the skills required so specialized as to require professional medical training.”

For whatever reason, Judge Galloway completely failed to appreciate the simple facts about the purposes and practical realities of the DEC program. As a result, he was misled by the defense experts into the belief that—in the words of defense expert Janofsky—“if the DRE is allowed to testify to a reasonable degree of a police officer’s certainty that based on [the DEC classification] matrix the person is intoxicated, the Court will be receiving inaccurate and false evidence and will be convicting the wrong people.” *Brightful* transcript, 9-27-10 at 86. At the heart of this inaccurate

determination lies the judge’s preconceived notion that police officers have no business of offering what he believed to be medical opinion testimony reserved for doctors. In light of that preconception, it becomes easy to understand why his analysis of DRE expertise under Rule 5-702 was so dismissive of the wealth of training and experience DREs possess. A DRE is not a doctor, and for Judge Galloway, that was all it took to discount the value of the entire DEC program.

The Cheese Stands Alone: Brightful in Context

It is important for traffic prosecutors to keep in mind that, in the final analysis, the *Brightful* order represents nothing more than one trial court judge’s aberrant conclusions about DEC. Virtually every other court that has evaluated the reliability and admissibility of DEC evidence—whether under a *Frye* analysis, a *Daubert* analysis, or a state’s own unique standards—has reached conclusions that are diametrically opposed to Judge Galloway’s. A summary of cases from across the nation in which courts have upheld the reliability and admissibility of DEC evidence is available on pages 9-12 of *The Drug Evaluation and Classification (DEC) Program: Targeting Hardcore Impaired Drivers*, a monograph authored for APRI by Stephen K. Talpins & Chuck Hayes in 2004.¹⁵ Though not at all an exhaustive list, traffic prosecutors should also review and consider the following cases:

State v. McFarland, 191 P.3d 754 (2008). In the context of reversing a drug-impaired driving conviction, the Oregon Court of Appeals held that the full 12-step DEC protocol as performed by a certified DRE results in reliable scientific evidence that is relevant and admissible.

Wooten v. State, 267 S.W.3d 289 (2008), citing *Bumgarner v. State*, 2006 Tex. App. LEXIS 6066 (July 12, 2006) (unpublished opinion). After satisfying Texas’s *Daubert*-like *Kelly* standard for the admissibility of scientific evidence and Texas Rule of Evidence 705 as a result of extensive training and experience, a DRE was allowed to offer testimony regarding general factors considered when determining whether a person is under the influence of a particular drug and testified to the effects of alcohol and that drug on a person’s driving skills.

When all is said and done, Judge Galloway and his *Brightful* determinations—like the farmer’s cheese—are all by themselves on an island.

Not In My Backyard: Why Georgia DREs are Unaffected by Brightful

In the context of Georgia evidence law, the *Brightful* order is utterly meaningless and carries no weight whatsoever. As an initial matter, Georgia has its’ own unique methodology for assessing the reliability of “scientific” procedures and techniques. Georgia’s standard,

as articulated in *Harper v. State*, 249 Ga. 519, 525-526 (1982), is as follows:

[I]t is proper for the trial judge to decide whether the procedure or technique in question has reached a scientific stage of verifiable certainty, or in the words of Professor Irving Younger, whether the procedure “rests upon the laws of nature.” The trial court may make this determination from evidence presented to it at trial by the parties; in this regard expert testimony may be of value. Or the trial court may base its determination on exhibits, treatises or the rationale of cases in other jurisdictions. See *United States v. Lopez*, 328 F.Supp. 1077 (E.D.N.Y. 1971); *McCormick on Evidence*, “Judicial Notice,” p. 757, 764 . . . the trial court makes this determination based on the evidence available to him rather than by simply calculating the consensus in the scientific community. Once a procedure has been recognized in a substantial number of courts, a trial judge may judicially notice, without receiving evidence, that the procedure has been established with verifiable certainty, or that it rests upon the laws of nature.

Because the *Harper* standard has little in common with Maryland’s *Frye-Reed* approach, Judge Galloway’s reasoning has little bearing on the determinations a Georgia trial court would have to make in a review of DEC reliability. Even after Georgia’s new rules of evidence go into effect on January 1, 2013, the *Harper* standard will remain in criminal cases, though the new evidence rule codified at O.C.G.A. § 24-7-707 will also play a role in the admission of expert testimony on that date. However, it seems clear from the face of the rule that it is intended to be broadly construed to admit a wide range of expert testimony.¹⁶

Currently, Georgia lacks case law directly evaluating the reliability and admissibility of DEC evidence through the testimony of a DRE. Only seven Georgia cases even mention the term “drug recognition expert.”¹⁷ However, in those seven cases, the trial courts have routinely admitted the testimony of a DRE, without ever passing on the reliability of the DEC program itself. Implicitly, at least, Georgia seems to be allowing DREs to testify based on their training and experience.

Furthermore, if Georgia prosecutors are ever confronted with a case in which they have to demonstrate the reliability of DEC, they have more tools available to do so than the *Brightful* prosecutors did. This is because, in addition to being able to call expert witnesses as happened in *Brightful*, Georgia’s *Harper* standard specifically allows Georgia prosecutors to direct the trial court to the rationale and findings of other courts across the nation that have addressed DEC reliability, and to use the findings of those courts as the basis for judicial notice of the “verifiable certainty” of the DEC protocols. *Harper* at 525-526. In this regard, based upon the general consensus of courts across the country about the reliability of the DEC program, Georgia prosecutors should be in good shape *despite* the *Brightful* order.

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Conclusion

Except in the case of traffic prosecutors in Carroll County, Maryland, the *Brightful* order poses no real threat to the outstanding work being done by DREs across the nation. The order itself is based upon a misunderstanding of the purpose of the DEC program and a misapplication of Maryland law to the facts before the court. Among the obvious flaws inherent in Judge Galloway's analysis of the DEC program under the *Frye-Reed* standard are a complete lack of analysis of the science underlying the protocols despite a finding that they represent a "new or novel" scientific technique; failure to correctly distinguish between consensus about the reliability of a scientific procedure and the opinions experts can form based on a reliable procedure; misidentification of the relevant scientific community that could speak to DEC reliability; and the unfounded belief that only doctors or medical professionals are capable of administering the simple components of DEC. Each of these missteps caused Judge Galloway to look in the wrong place and to the wrong people when considering the DEC program's reliability, and ultimately resulted in his substitution of his own personal opinion about the conclusions DREs draw based on the DEC protocols for those of the ultimate fact-finder. Traffic prosecutors who correctly understand what *Brightful* really means—and more importantly, what it **DOES NOT** mean—will be in an excellent position to deal effectively with DUI defense attorneys who attempt to make it more significant and persuasive than it actually is. ETP

ENDNOTES

¹ Kaustuv Basu, "DUIs Involving Prescription Drugs Difficult to Prove," U.S.A. Today, October 17, 2010,

available at http://www.usatoday.com/news/nation/2010-10-17-dui-drugs_N.htm.

² Stephen K. Talpins & Chuck Hayes, *The Drug Evaluation and Classification (DEC) Program: Targeting Hardcore Impaired Drivers 2* (2004).

³ In Maryland, Circuit Courts are "the highest common-law and equity courts of record exercising original jurisdiction within the State. Each has full common-law and equity powers and jurisdiction in all civil and criminal cases within its county, and all the additional powers and jurisdiction conferred by the Constitution and by law, except where by law jurisdiction has been limited or conferred exclusively upon another tribunal." Md. COURTS AND JUDICIAL PROCEEDINGS Code Ann. § 1-501. They are roughly equivalent to Georgia's Superior Courts.

⁴ See, e.g., http://www.marylandduilawyerblog.com/2012/03/drug_recognition_expert_dre_ev_1.html; <http://www.thetruthaboutforensicscience.com/?s=drug+recognition+expert>.

⁵ See, e.g. *Virgin Islands v. Carela*, 44 V.I. 11 at 13 (2001); *Nebraska v. Daly*, 278 Neb. 903 at 922 (2009).

⁶ See, e.g., http://scacdl.org/site/index.php?option=com_content&view=article&id=82:south-carolina-association-of-criminal-defense-lawyers; <http://www.duiseminars.com/2006-winter-session-amelia-island-florida.htm>; <http://www.padiublog.com/pa-dui/pennsylvania-dui-lawyer-to-present-at-the-2011-acs-expo/>; <http://ncaj.fastcde.com/store/seminar/seminar.php?seminar=3668>; <http://www.duiseminars.com/2005-MSE-Agenda.htm>.

⁷ See, e.g., http://www.californiaduihelp.com/dui_experts/list_of_experts.php, # 17 on list; <http://www.sandiegoduihelp.com/duiblog/2006/07/nationwide-expert-witnesses-for-drunk.html>, # 18 on list; <http://www.michigan-drunk-driving.com/expertwitnesses.html>; http://www.nocuffs.com/dui/expert_witnesses/list_of_dui_expert_witnesses.php, #17 on list; http://www.owiddefenselaw.com/Print/Resources_DUI_Attorney_Directory.html.

⁸ Indeed, Judge Van Orsdel made this clear in *Frye* itself, holding that "while courts will go a long

way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, **the thing from which the deduction is made** must be sufficiently established to have gained general acceptance in the particular field in which it belongs." *Frye v. United States*, 293 F. 1013, 1014 (D.C. Cir. 1923) (emphasis added).

⁹ As discussed previously, any reference to Dr. Francis Gengo a "disinterested" medical professional given his long history of affiliation with the DUI defense bar borders on incomprehensible.

¹⁰ Judge Galloway's specific reference to *ophthalmologists* and the deliberate omission of *optometrists* leaves Dr. Karl Citek out of the relevant scientific community.

¹¹ It is safe to say that Judge Galloway at least heard what the actual purpose of the DEC program is, as he referenced it on pages 4 and 5 of the *Brightful* order.

¹² See e.g., *Brightful* at 6, 7, 12, and 14.

¹³ See e.g., *Brightful* at 6, 10-11, 14, 17, and 28.

¹⁴ *Brightful* at 34.

¹⁵ The monograph can be accessed in its entirety at http://www.ndaa.org/pdf/drug_evaluation_classification_dec.pdf.

¹⁶ The new O.C.G.A. § 24-7-707 provides that "[i]n criminal proceedings, the opinions of experts on any question of science, skill, trade, or like questions shall always be admissible; and such opinions may be given on the facts as proved by other witnesses."

¹⁷ Those cases are: *Poole v. State*, 249 Ga. App. 409 (2001); *McKee v. State*, 258 Ga. App. 99 (2002); *Stewart v. State*, 280 Ga. App. 366 (2006); *Maloy v. State*, 293 Ga. App. 648 (2008); *Bravo v. State*, 304 Ga. App. 243 (2010); *Duncan v. State*, 305 Ga. App. 268 (2010); and *Steed v. State*, 309 Ga. App. 546 (2011).



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An Update on Synthetic Cannabinoids

By David E. Golz, D-FTCB, Forensic Toxicologist

Over the past several years there has been a dramatic increase in the reported number of individuals using synthetic cannabinoids to attain a 'legal' high and to circumvent existing drug laws¹. Synthetic cannabinoids are a group of chemicals that interact with the same parts of the brain as THC (tetrahydrocannabinol), the active component in marijuana. Synthetic cannabinoids were first synthesized in the 1980's for medical research and recently have found a new purpose in the recreational drug market. There were hundreds of these drugs created for research purposes, so the recreational drug market has a vast pool of similar drugs to choose from. Many of the drug names include the initials of the scientist who first created them, the prefixes JWH and AM being the most common. The chemicals are first dissolved in an organic solvent and sprayed onto a small amount of leafy plant material. The products are marketed as compounds such as incense and potpourri and are smoked in a similar fashion as marijuana. The names K2 and

Spice were originally brand names, but have since become synonymous with any product containing a synthetic cannabinoid.

Commonly used synthetic cannabinoids can be 40-50 times more potent than THC², and can have an effect on an individual at very low concentrations. The length of time these drugs remain in the body is also very short; in some cases the drug will be undetectable a few hours after use³. The low concentrations and rapid elimination from the body make toxicology testing for these drugs challenging.

Observable effects are similar to marijuana and include lack of convergence, increased perception of time for the Romberg evaluation, increased pulse, increased body temperature, elevated blood pressure, restlessness, anxiety, disorientation, and lack of motor coordination⁴. Seizures, blackouts, post-intoxication fatigue, and psychosis have been noted in some individuals after consuming synthetic cannabi-

noids⁵. Other clues include the colorful mylar bag these products come in and the presence of smoking paraphernalia.

At this time, blood is the only acceptable biological sample to test for synthetic cannabinoids



K2 or "Spice"

continued >

at the GBI Crime Lab. To have blood samples tested for synthetic cannabinoids, request “Spice,” “K2,” or “synthetic THC” on the submission form. If there is any leafy material suspected to be a synthetic cannabinoid, it should be submitted for drug identification analysis. Some packages of “Spice” do not contain any synthetic cannabinoids, but instead contain other chemicals or designer drugs. Having a reference of what an individual may have consumed can greatly assist in testing. Positive results will include both the shorter common name and a longer chemical name; for example:

Positive for: JWH-018 (1-pentyl-1H-indol-3-yl)-1-naphthalenyl-methanone.

On March 27, 2012, Governor Nathan Deal signed into effect Chase’s Law (SB 370). This law expands the list of Schedule I drugs to include synthetic cannabinoids and other designer drugs (i.e. “bath salts”). Instead of listing specific chemicals and drugs, the law lists certain chemical base structures and bans any drug that contains that base structure⁶. In the past, a minor change to the chemical structure of a drug would change its legal status. The new legislation will include any new drugs that have minor changes to an already banned base structure, but major changes to the chemical structure still have the possibility of circumventing the existing drug laws. The new legislation takes a more comprehensive approach to regulation of controlled substances and bans entire classes of designer drugs; however, as drug trends change, legislative updates will likely occur.

Since the enactment of SB 370, there has been a newer generation of synthetic cannabinoids being marketed and sold that are not scheduled under the current legislation. On June 11, the Georgia Board of Pharmacy adopted an emergency rule (Rule 480-34-.04) that allows for the seizure of products suspected of containing a synthetic cannabinoid as a matter of public health and safety⁷. The emergency rule does not allow for arrests or prosecution because it is a regulatory matter and not legislation. The emergency rule became effective immediately and will be valid for 120 days⁸. Packages suspected of containing a synthetic cannabinoid(s) should be submitted to the GBI Crime Lab for drug identification analysis to identify the contents so that its legal status can be determined. 

ENDNOTES

¹ National Forensic Laboratory Information System. Special Report: Synthetic Cannabinoids and Synthetic Cathinones Reported in NFLIS, 2009-2010. September 2011. http://www.deadiversion.usdoj.gov/nflis/2010rx_synth.pdf

² J. W. Huffman, G. Zengin, M. J. Wu, et al. Structure-activity relationships for 1-alkyl-3-(1-naphthoyl)indoles at the cannabinoid CB₁ and CB₂ receptors: steric and electronic effects of naphthoyl substituents. New highly selective CB₂ receptor agonists. *Bioorg. Med. Chem.* 13, 89-112 (2005).

⁴ J. Teske, J.P. Weller, A. Fieguth, T. Rothamel, Y. Schulz, and H.D. Troger. Sensitive and rapid quantification of the cannabinoid receptor agonist naphthalene-1-yl-(1-pentylindol-3-yl)methanone (JWH-018) in human serum by liquid chromatography-tandem mass spectrometry. *J. Chromatogr. B Analyt. Technol. Biomed. Life Sci. Int.* 878: 2659-2663 (2010). Logan, Barry K. “K2 and Beyond: a Synthetic Cannabinoid Primer.” NMS Labs. Sept 16, 2010. <http://www.nmslab.com/about-webinars-K2-primer>

⁵ Every-Palmer, Susanna. Letter. “Warning: legal synthetic cannabinoid-receptor agonists such as JWH-018 may precipitate psychosis in vulnerable individuals.” *Addiction.* 105: 1859-1860 (2010).

⁶ O.C.G.A. § 16-13-25(12) (effective date March 27, 2012).

⁷ Georgia Board of Pharmacy. Controlled Substances Chapter 480-34, Rule 480-38.04, available at [http://sos.georgia.gov/plb/pharmacy/Emergency%20Rule%20Adoption%20Notice%20of%20Hearing%20Pharmacy%20480-34%2004%20\(3\)\[1\].pdf](http://sos.georgia.gov/plb/pharmacy/Emergency%20Rule%20Adoption%20Notice%20of%20Hearing%20Pharmacy%20480-34%2004%20(3)[1].pdf).

⁸ While the emergency rule is effective for 120 days, it is anticipated that the Georgia Board of Pharmacy may act to make this a permanent rule prior to its expiration.

Synthetics vs. “Real” Marijuana: a Comparison

Because of their unpredictable effects and the rapid pace with which new forms are being developed, synthetic cannabinoids (also known as K2, Spice, Bath Salts, etc.) have emerged as one of the most deadly drugs currently being abused. But how do the effects of synthetics differ from the effects of “traditional” marijuana, and what new dangers are posed by these ever-evolving substances? The chart below provides some answers.

SYNTHETIC CANNABINOIDS

MARIJUANA

Unregulated mixture of chemical compounds	Same basic compound (THC)
Mixed/unpredictable symptoms	Well-known symptoms
Longer half-life (prolonged high)	Well-known duration
Reports of addiction/withdrawal	Less physically addictive
Not able to detect in blood or urine	Able to detect in blood or urine
Onset 5-10 minutes	Almost immediate onset
Severe hallucinations	No hallucinations
Intense paranoia	Little to no paranoia
Extreme anxiety	Relaxing
Rigid muscle tone	Normal muscle tone
Normal pupil size	Dilated pupils
Possible Horizontal/Vertical Gaze Nystagmus	No Horizontal/Vertical Gaze Nystagmus
Lack of Convergence	Lack of Convergence
Normal light reaction	Normal light reaction
Increased heart rate/BP	Increased heart rate/BP
Bloodshot/red eyes	Bloodshot/red eyes

*Courtesy of “K2 Drug Facts,” <http://www.k2drugfacts.com/comparison.html>

PAC Presents Lethal Weapon in September

PACGA's Traffic Safety Resource Program will bring NHTSA's "Lethal Weapon: DUI Homicide" course back to Georgia this fall, and interested law enforcement officers and prosecutors responsible for the investigation and prosecution of Vehicular Homicide and related crimes are encouraged to attend. Attendees will receive advanced training on accident reconstruction and toxicology methodologies and techniques, *and* will have the chance to see the Georgia State Patrol's

Specialized Collision Reconstruction Team (SCRT) in action.

Completion of the course will allow prosecutors and officers alike to better investigate, understand and analyze automobile crashes and to report their findings more effectively. In addition, prosecutors will better understand how to cross-examine defense reconstruction experts and how to communicate more efficiently with the officers investigating crashes

in their jurisdictions. To preregister, call Debbie Brown at (404) 969-4036 or watch the PAC website for the upcoming registration link on the Training page! 

Lethal Weapon: DUI Homicide
Georgia Public Safety Training Center
1000 Indian Springs Drive
Forsyth, Georgia 31029
September 11-13, 2012

Bon Voyage, Kathy



The editors of the *Georgia Traffic Prosecutor* and the Prosecuting Attorney's Council take this opportunity to express our appreciation to Kathy Dean for the valuable contribution she has made to growth and success of this newsletter.

Kathy, a graduate of the Grady College of Journalism and Mass Communication at the University of Georgia, joined the staff of PAC in 2004.

The GTP has become an invaluable source of knowledge for those involved traffic enforcement and prosecution and has been used as a model newsletter that other jurisdictions emulate.

Kathy Dean has taken a position with the Georgia Public Safety Training Center in Forsyth, Georgia and we are pleased that her knowledge and expertise will continue to benefit prosecutors and law enforcement officers in Georgia. 

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DID YOU KNOW?

There were 298 alcohol related fatalities in Georgia in 2010—this represents approximately 24% of all 2010 roadway fatalities, and an overall decrease in alcohol related fatalities of 34% (454) since 2006. The percentage of drivers with BACs of 0.08 or higher in fatal crashes was highest for pickup truck drivers (24%).

Courtesy: NHTSA

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>>> fact:

Every day, 32 people in the United States die in motor vehicle crashes that involve an alcohol-impaired driver. This amounts to one death every 45 minutes. The annual cost of alcohol-related crashes totals more than \$51 billion.

-Statistics courtesy NHTSA (www.nhtsa.gov)

The "Georgia Traffic Prosecutor" addresses a variety of matters affecting prosecution of traffic-related cases and is available to prosecutors and others involved in traffic safety. Upcoming issues will provide information on a variety of matters, such as ideas for presenting a DUI/Vehicular Homicide case, new strategies being used by the DUI defense bar, case law alerts and other traffic-related matters. If you have suggestions or comments, please contact Editors Fay McCormack or Todd Hayes at PAC.