

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF MISSISSIPPI
GREENVILLE DIVISION**

DYAMONE WHITE; DERRICK SIMMONS;
TY PINKINS; CONSTANCE OLIVIA
SLAUGHTER HARVEY-BURWELL,

Plaintiffs,

vs.

STATE BOARD OF ELECTION
COMMISSIONERS; TATE REEVES *in his
official capacity as Governor of Mississippi;*
LYNN FITCH *in her official capacity as
Attorney General of Mississippi;* MICHAEL
WATSON *in his official capacity as
Secretary of State of Mississippi.*

Defendants.

4:22-cv-00062-MPM-JMV

**MEMORANDUM OF LAW IN SUPPORT OF PLAINTIFFS' MOTION PARTIALLY TO
EXCLUDE DR. DAVID A. SWANSON AS AN EXPERT**

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PRELIMINARY STATEMENT

Plaintiffs respectfully request that this Court exclude certain portions of the expert testimony put forward by Defendant's expert, Dr. David A. Swanson, and correspondingly limit the topics on which he may testify at trial. In particular, Dr. Swanson should be precluded from offering any expert testimony regarding two subjects—electoral map drawing, and ecological inference analysis—in which he concededly has no training, relevant publications, expertise, or experience.

Dr. Swanson is an expert in demography. Swanson Expert Report, Ex. B at 5; Swanson Deposition, Ex. A at 52:16–17. He received a Ph.D. in Population Studies, is currently an emeritus professor of demography, and his academic publications are all in the field of demography. Swanson Expert Report, Ex. B at 5, 147–150; Swanson Deposition, Ex. A at 12:21–25, 13:1–12. He admits he is not an expert in electoral map drawing or in voting behavior. Swanson Deposition, Ex. A at 52:18–21. He has never held any appointment in any political science department. *Id.* at 12:12–15. He has not published any scholarly work on electoral map drawing or voting behavior. *Id.* at 12:21–25, 13:1–12. Nor does he have relevant experience that might make him an expert in those areas. He has never drawn an electoral map before. *Id.* at 19:8–9. And he also has almost no experience with ecological inference analysis—a type of probabilistic computational analysis used by political scientists to estimate voting behavior—and none at all with the type of ecological inference analysis conducted by Plaintiffs' expert in this case. *Id.* at 17:11–25, 18:1–12.

Nevertheless, in two reports produced over the course of expert discovery in this case, Dr. Swanson purports to offer opinions on electoral map drawing and on ecological inference analysis of voting behavior in Mississippi.

With respect to electoral map-drawing, in his initial report, Dr. Swanson purported to offer opinions and analysis regarding the illustrative Supreme Court districting maps proffered by

Plaintiffs' map-drawing expert, William Cooper. *See* Swanson Expert Report, Ex. B at 9–10, 15–20, 21–28, 29–42, 50–66; 84–86, 108–111. Mr. Cooper is a seasoned map drawer who has drawn illustrative plans in scores of successful Voting Rights Act cases, and whose plans have been upheld as consistent with traditional districting principles by the U.S. Supreme Court. *See, e.g., Allen v. Milligan*, 599 U.S. 1, 20–21, 31–32 (2023); *Robinson v. Ardoin*, 37 F.4th 208, 218–220, 222–223 (5th Cir. 2022); *Thomas v. Bryant*, 366 F. Supp. 3d 786, 794–797, 805 (S.D. Miss.), *vacated as moot on reh'g en banc sub nom. Thomas v. Reeves*, 961 F.3d 800 (5th Cir. 2020); *Jamison v. Tupelo, Mississippi*, 471 F. Supp. 2d 706, 709–710 (N.D. Miss. 2007); *Petteway v. Galveston Cnty.*, No. 3:22-cv-57, 2023 WL 6786025, at *6–*7 (S.D. Tex. Oct. 13, 2023). By contrast, Dr. Swanson concedes he has no training, study, background, or experience in electoral map drawing or compliance with the traditional districting principles used by electoral map drawers. Moreover, Dr. Swanson also admits that much of the mapping analysis that he included in his initial report was not conducted by him or even verified by him; instead, it was supplied by another analyst, Thomas Bryan, an associate of Dr. Swanson's whose testimony has been repeatedly rejected by federal courts as not credible. Swanson Deposition, Ex. A at 27–31, 40:19–25, 41–43, 117–119. Under these circumstances, Rule 702 provides no basis for Dr. Swanson to properly offer expert testimony on electoral map drawing or the application of traditional districting principles.

With respect to ecological inference analysis of voting behavior, Dr. Swanson's surrebuttal report purports to offer opinions on the reliability of the ecological inference analysis conducted by Plaintiffs' expert, Political Scientist Dr. Traci Burch. *See* Swanson Surrebuttal Report, Ex. C at 15–17. Dr. Burch used the ecological inference technique to estimate voter participation by race using voter history data from Mississippi's own voter file, demonstrating the White turnout

exceeded Black turnout in the 2020 election. Burch Rebuttal Report, Ex. F at 9–12. In his deposition, Dr. Swanson explained that he had only ever used any type of ecological inference analysis once, for a paper he worked on in the early 1990s regarding life expectancy at birth (not race or voting). Swanson Deposition, Ex. A at 17:13–25, 18:1–10, 275:23–276:10, 321:5–16. He explained that he had never performed the type of ecological inference analysis (called “King’s EI”) that Dr. Burch used. *Id.* at 17:14–24. He did not attempt to replicate her results. *Id.* at 305:14–24. He did not indicate that he was familiar with the type of software (“R,” a widely used programming language) that would be used to do so. *Id.* at 14:14–15. Under Rule 702, Dr. Swanson is not qualified to offer expert testimony on the reliability and accuracy of a method of analysis that he is not trained in, has not published on, cannot and did not replicate, and does not claim to fully understand.

The portions of Dr. Swanson’s reports dealing with electoral map drawing and ecological inference analysis should not come into evidence and Dr. Swanson should be precluded from offering testimony on those subjects at trial.

BACKGROUND

This is a vote dilution case brought under Section 2 of the Voting Rights Act, 52 U.S.C. § 10301(b). Plaintiffs challenge the configuration of Mississippi’s State Supreme Court districts, which, despite population changes and the passage of four Censuses, have gone unchanged since 1987. The result of this districting scheme is an unequal playing field for Black voters, such that Mississippi’s nine-member Supreme Court has never had more than a single Black Justice at a time, despite the State’s voting-age population being approximately 36% Black.

To prove a vote dilution claim, Plaintiffs must meet the *Gingles* test, a legal standard that was reaffirmed by the U.S. Supreme Court just last year in *Allen v. Milligan*. 599 U.S. 1, 18 (2023) (citing *Thornburg v. Gingles*, 478 U.S. 30 (1986)). According to the Court, “[t]o succeed in

proving a § 2 violation under *Gingles*, plaintiffs must satisfy three preconditions.” *Allen*, 599 U.S. at 18 (internal quotation marks omitted). “First, the ‘minority group must be sufficiently large and [geographically] compact to constitute a majority in a reasonably configured district.’” *See id.* (quoting *Wisconsin Legislature v. Wisconsin Elections Comm’n*, 142 S. Ct. 1245, 1248 (2022) per curiam). This precondition is typically proven up by the plaintiffs’ offering an illustrative electoral map that contains a new majority-minority district in the area of interest; for those purposes, the minority group must make up “more than 50 percent of the voting-age population in the relevant geographic area[.]” *Bartlett v. Strickland*, 556 U.S. 1, 18 (2009). “A district will be reasonably configured[] if it comports with traditional districting criteria, such as being contiguous and reasonably compact.” *See Allen*, 599 U.S. at 18 (citing *Alabama Legislative Black Caucus v. Alabama*, 575 U.S. 254, 272 (2015)). The second and third preconditions require a demonstration of racially polarized voting patterns in the area of interest: Plaintiffs must show that the minority group is “politically cohesive” and that the white majority “vote[s] sufficiently as a bloc usually to defeat the minority’s preferred candidates.” *Gingles*, 478 U.S. at 56; accord *Allen*, 599 U.S. at 18. “Finally, a plaintiff who demonstrates the three preconditions must also show, under the ‘totality of circumstances,’ that the political process is not ‘equally open’ to minority voters.” *Allen*, 599 U.S. at 18.

During discovery, Plaintiffs disclosed six expert witnesses who, along with a number of fact witnesses, will offer testimony establishing all the elements of a vote dilution claim. They include William Cooper, who has substantial experience in redistricting and electoral map-making. Mr. Cooper has been qualified as an expert in electoral maps in dozens of federal cases, including the recent *Allen v. Milligan* case, where the credibility of his testimony was affirmed by the U.S. Supreme Court. *See, e.g., Allen*, 599 U.S. at 20, 30; *see also Ardoin*, 37 F.4th at 219, 220–225

(explaining that the district court found Cooper’s testimony credible based on his “extensive experience in [the] area [of electoral-map drawing], the analytical quality of [his] report[s], [his] perceived candor, and [his] ability to respond to cross-examination persuasively”); *Jamison*, 471 F. Supp. 2d at 709–710; *Petteway*, 2023 WL 6786025, at *7, *12–*14 (explaining that “Cooper has nearly four decades of experience drawing voting plans for about 750 United States jurisdictions. . . . He has testified on redistricting and demographic analysis in federal court fifty-five times.”); *see* Cooper Expert Report, Ex. D at 2–3.

In his expert report, Mr. Cooper provides two illustrative plans for Mississippi’s state Supreme Court districts, as well as two additional “least change” plans, all of which increase the Black voting age percentage of Supreme Court District 1 above 50%. Cooper Expert Report, Ex. D at 23–35. All of his illustrative plans fulfill the first *Gingles* precondition by “comport[ing] with traditional districting criteria, such as being contiguous and reasonably compact.” *See Allen*, 599 U.S. at 18. For example, the plans better equalize the population across the three districts, as opposed to the current plan which is significantly malapportioned. *E.g.*, Cooper Expert Report, Ex. D at 12–13, 16–20, 26–31. Mr. Cooper’s plans all follow county boundaries and therefore contain no county or voting precinct splits. *E.g.*, Cooper Expert Report, Ex. D at 25–31, 33–35. As Mr. Cooper explains in his report, the plans also split fewer state-defined regional Planning and Development district boundaries. *Id.* at 27–35. Furthermore, in contrast to the challenged districting scheme, in which the Mississippi Delta is split between Districts 1 and 3, Mr. Cooper’s illustrative plans unites the Delta, an important community of interest, in a majority-Black Supreme Court District 1. *See id.* at 25, 26–28, 30–31; *see also Allen*, 599 U.S. at 21 (identifying the Alabama Black Belt as a community of interest to be preserved during redistricting). These characteristics are the hallmarks of an illustrative plan that fulfills the first *Gingles* precondition.

Plaintiffs also disclosed as an expert Dr. Traci Burch, an Associate Professor of Political Science at Northwestern University and Research Professor with the American Bar Foundation. Burch Expert Report, Ex. E at 1. Dr. Burch has led several large, long-term quantitative and qualitative research projects on political participation in the United States. *See id.* Dr. Burch has also written multiple publications on political behavior, barriers to voting, and political participation, including a book and numerous peer-reviewed articles. *See id.* at 1 & Appendix at 1–3. Dr. Burch has been qualified as an expert in multiple Voting Rights Act cases. *See, e.g., Robinson v. Ardoin*, 605 F. Supp. 3d 759, 807, 851 (M.D. La. 2022) (explaining that Dr. Burch has testified in several federal court cases related to voting rights); *Petteway*, 2023 WL 6786025, at *9–*10 (recognizing Dr. Burch as an “expert in political behavior, political participation, barriers to participating in politics, barriers to voting, race and ethnic politics, and criminal justice” and finding her “analyses, opinions, and testimony credible.”). In her expert report, Dr. Burch provided analysis on Senate Factors 5¹ and 8², which are two of the considerations that go to the “totality of the circumstances” inquiry into the equal openness of the political process. *E.g.*, Burch Expert Report, Ex. E at 3–21. Dr. Burch provided a detailed analysis demonstrating the severe disparities between Black Mississippi residents and their White counterparts in the areas of income, education, health, housing, and criminal justice. *Id.* at 3–20. For example, using data from the Mississippi Department of Education, Dr. Burch explains that in Mississippi, only 24.3% of Black girls and 17.4% of Black boys are proficient in English, as compared to 53.0% of White

¹ Senate Factor 5 requires a court to consider the extent to which minority group members bear the effects of discrimination in areas such as education, employment, and health, which hinder their ability to participate effectively in the political process in determining whether an electoral map complies with Section 2.

² Senate Factor 8 requires a court to consider whether there is a lack of responsiveness on the part of elected officials to the particularized needs of minority group members in determining whether an electoral map complies with Section 2.

girls and 47.2% of White boys. *Id.* at 8. In a similar vein, Dr. Burch’s report shows that Black Mississippi residents fare far worse than White Mississippi residents in terms of income, with median White household income nearly double the median Black household income. *See id.* at 10. Notably, Defendants’ expert does not disagree with or otherwise dispute any of those conclusions. Swanson Deposition, Ex. A at 215–217.

Dr. Burch explains (and Defendants’ expert also does not dispute) that these socioeconomic markers are all correlated with political participation. Burch Expert Report, Ex. E at 2–3, 10–11, 13–19; Swanson Deposition, Ex. A at 217:10–21, 300–301. For example, Dr. Burch shows that Black Mississippians have lower incomes and less wealth than White Mississippians, which affects political participation because “greater income can make it easier to overcome the costs of voting, such as the ability to afford time off work to go to the polls.” Burch Expert Report, Ex. E at 10. She shows that Black Mississippians have lower levels of educational attainment, especially with respect to bachelor’s and more advanced degrees, which a large body of literature shows is strongly correlated with registration and voting. *Id.* at 10. Dr. Burch also shows that Black Mississippians are less likely to own their homes than White Mississippians and discusses how homeownership is correlated with higher levels of registration and voting: Repeated changes in residency can increase the burden of voters to comply with voter residency requirements and maintain registration. *Id.* at 15–16.

Dr. Burch also directly examined voter turnout by race in Mississippi, concluding that Black voters do in fact vote at lower rates than White voters. *See* Burch Rebuttal Report, Ex. F at 1, 5–9. She ultimately relied on two different methods of assessing turnout by race in Mississippi. First, she relied on a widely used dataset called the Cooperative Election Study (“CES”), a representative survey (*i.e.*, a poll) of voters in which respondents’ registration and voting behavior

is also independently verified to avoid the problem of overreporting by survey respondents. *Id.* at 4–6.³ Dr. Burch also estimated voter turnout by race in Mississippi using ecological inference (“EI”) analysis. Developed by Harvard political scientist, Gary King, this method is known as, “King’s EI” and is commonly used for the study of voting behavior (and has been used in nearly every Voting Rights Act case to measure racially polarized voting). Burch Rebuttal Report, Ex. F at 9–10; *see also, e.g., Petteway*, 2023 WL 6786025, at *15 (“Ecological inference analysis is a reliable and standard method of measuring racially polarized voting.”); *Benavidez v. City of Irving, Tex.*, 638 F. Supp. 2d 709, 723 (N.D. Tex. 2009) (explaining that ecological inference analysis is an “accepted method of statistical analysis” in Voting Rights Act cases). Notably, Defendants’ own expert, Dr. Christopher Bonneau, testified that “courts in voting rights cases” consider ecological inference to be the “most reliable” way of estimating the voting behavior of different racial groups, and that estimates from ecological inference have been validated by other sources, such as exit polls. *See* Bonneau Deposition, Ex. G at 108:1–17, 109:7–11, 115:4–116:3, 117:10–119:22. Dr. Burch’s EI analysis was derived not from a survey but from Mississippi’s own voter history file. Burch Rebuttal Report, Ex. F at 9–10. Both of those methods (the CES’s verified voting data, and the EI analysis based on the Mississippi voter file) show that Black Mississippians have a lower voter turnout and voter participation than White Mississippians. *Id.* at 1, 4, 10.

³ Over-reporting of voting in voter surveys is common. Dr. Burch initially relied on the Current Population Survey Voting and Registration Supplement (or “CPS”), which is not independently verified, to estimate turnout by race. However, a transcription error in her initial report obscured the very high level of overreporting in the CPS’s Mississippi sample, which overstates the number of voters by hundreds of thousands. *See* Burch Rebuttal Report, Ex. F at 2-3; *see also* Swanson Dep., Ex. A at 229:13–22, 290:10–15 (admitting this level of overreporting). Dr. Swanson, Defendant’s proffered expert, identified this error in his report, and Dr. Burch subsequently determined that this high level of overreporting rendered the CPS data unreliable. *See* Burch Rebuttal Report, Ex. F at 3-4. Accordingly, Dr. Burch analyzed the data from the CES, which independently validates voter registration and turnout for respondents by matching respondents to voting data gathered from the states. Burch Rebuttal Report, Ex. F at 4-5.

Defendants disclosed two experts, one of whom is Dr. David Swanson.⁴ As noted, Dr. Swanson received a Ph.D. in Population Studies, is currently an emeritus professor of demography, and his academic publications are all in the field of demography. Swanson Expert Report, Ex. B at 5, 147–150; Swanson Deposition, Ex. A at 12:21–25, 13:1–12.

Dr. Swanson submitted two expert reports. Much of his first report responds to Mr. Cooper, attempting to analyze Mr. Cooper’s illustrative plans based on a few metrics chosen by Dr. Swanson, including compactness and “core retention,” which Dr. Swanson identified as traditional redistricting criteria. Swanson Expert Report, Ex. B at 9–10, 31–43. Dr. Swanson, who has never drawn an electoral map before and does not know how to use electoral mapping software, *e.g.*, Swanson Deposition, Ex. A at 14:14–15, 19:8–9, purports to conclude that Mr. Cooper’s illustrative plans result in low core retention and that they are “somewhat less compact” than the districts in the existing Supreme Court plan, Swanson Expert Report, Ex. B at 9–10, 31–43. Yet, when asked whether he is familiar with the principles relied on by electoral map drawers when drawing an electoral map, Dr. Swanson admitted that he was only “somewhat” familiar with them. Swanson Deposition, Ex. A at 72:3–8. He admitted he did not consider many of those principles in his report. *See, e.g., id.* at 85:18–88:5 (population equality), 98:10–22 (minority vote dilution), 129:24–130:15 (subdivision splits); 132:21–25 (communities of interest). And, as to the ones he

⁴ Defendants’ other expert, Dr. Bonneau, is a political scientist whose reports focus on racially polarized voting in Mississippi. Notably, Dr. Bonneau did not contest the conclusion of Plaintiffs’ racially polarized voting expert, Jackson State University political scientist Dr. Byron D’Andra Orey, that biracial elections in Supreme Court District 1 “exhibited very high levels of racially polarized voting.” Orey Expert Report, Ex. H at 2, 4, 12–14. Rather, Dr. Bonneau testified that he “take[s] [Dr.] Orey’s analysis as factual,” Bonneau Deposition, Ex. G at 20:13, and does not dispute Dr. Orey’s estimates of the voting patterns of Black and White Mississippians, *id.* at 88:10–89:1. Dr. Bonneau also testified that his own understanding of racial voting patterns is consistent with Dr. Orey’s estimates: that Black voters typically support preferred candidates about 90% of the time and that White voters typically support those same Black-preferred candidates less than 15% of the time. *Id.* at 89:2–89:23. Dr. Bonneau also agreed that most of the Black-preferred candidates in recent biracial elections in District 1 lost, and that more Black-preferred candidates would win if the Black voting age population in the district were higher. *Id.* at 143:2–4, 96:8–17.

did purport to consider, Dr. Swanson also admitted that, according to the sources he claimed to rely on, “core retention” is not a traditional consideration that Mississippi uses in drawing districting lines. *Id.* at 80. He further admitted that he did not conduct his own compactness analysis, and rather relied on the services of Bryan GeoDemographics (“BGD”) for that analysis and other maps and data in his report. Swanson Expert Report, Ex. B at 8; Swanson Deposition, Ex. A at 43:10–18. Dr. Swanson did not dispute that BGD’s principal, Thomas Bryan, has been repeatedly found “not credible” in redistricting cases by federal courts. *See, e.g., Singleton v. Merrill*, 582 F. Supp. 3d 924, 985 (N.D. Ala. 2022) (assigning very little weight to Bryan’s testimony); *Caster v. Merrill*, 2:21-cv-1536, 2022 WL 264819, at *42 (N.D. Ala. Jan. 24, 2020) (same); *Robinson*, 605 F. Supp. 3d at 823–824 (same); Swanson Deposition, Ex. A at 27–31. Dr. Swanson also testified that he lacked the experience or ability to visually assess the compactness of the districts at issue, Swanson Deposition, Ex. A at 107–08, even though such visual, “eyeball” assessments are commonplace in the electoral map drawing context, Cooper Responsive Declaration, Ex. I at 8–9; *see, e.g., Lopez v. Abbott*, 339 F. Supp. 3d 589, 608 (S.D. Tex. 2018) (explaining that the “eyeball test” is a method by which the court can assess the compactness of district through visual inspection); *Robinson*, 605 F. Supp. 3d at 776 (explaining that “[v]isual assessments are appropriate when assessing compactness.”).⁵

Beyond core retention and compactness, Dr. Swanson also examined the “diversity” of the Supreme Court districts with respect to socioeconomic need, but he was not able to explain how this analysis related to any traditional districting criteria. Swanson Deposition, Ex. A at 161:21–163:4; Swanson Deposition, Ex. A at 164:21–165:3. Indeed, he admitted that this “diversity”

⁵ Dr. Swanson also admitted that Mr. Cooper’s illustrative districts were more compact or comparably compact to the existing plans using some of the metrics in his report. Swanson Deposition, Ex. A at 126:1–127:16, 128:24–129:23.

analysis shows that Mr. Cooper’s illustrative plans better reflect communities of interest in Mississippi (and are thus more consistent with traditional districting principles). *Id.* at 189:4–191:3.

Dr. Swanson also submitted a surrebuttal report discussing Dr. Burch’s analysis of turnout by race using the CES dataset as well as the application of the King’s EI method to Mississippi’s voter file. In his surrebuttal, Dr. Swanson mainly criticized Dr. Burch’s ecological inference analysis because she compared White voter turnout to non-White voter turnout (and Black voter turnout to non-Black voter turnout) instead of comparing White voters to Black voters. Swanson Surrebuttal Report, Ex. C at 2; *see also* Burch Rebuttal Report, Ex. F at 9–12, 13 & n. 31.⁶ But, as Dr. Swanson conceded in his deposition, he is not a political scientist, has virtually no experience in conducting ecological inference analysis, did not attempt to replicate the ecological inference analysis, and does not understand why Dr. Burch constructed her analysis in the way she did. *See, e.g.*, Swanson Deposition, Ex. A at 12:12–15, 305:14–24, 320:1-21. Ultimately, Dr. Swanson’s complete lack of training, education, and expertise in ecological inference analysis render him unqualified to evaluate Dr. Burch’s use of that method.

ARGUMENT

To testify as an expert, a person must be qualified by their “knowledge, skill, experience, training, or education.” Fed. R. Evid. 702. The admission of expert testimony is governed by Federal Rule of Evidence 702 and the Supreme Court’s decision in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) and its progeny. Expert testimony may be admitted

⁶ Dr. Burch conducted an EI analysis of turnout by race for both District 1, and the state of Mississippi as a whole. Burch Rebuttal Report, Ex. F at 9–11. Dr. Swanson also criticized Dr. Burch’s EI analysis of turnout by race in District 1 because a single county was miscoded in the dataset. Swanson Surrebuttal Report, Ex. C at 15. But Dr. Swanson did not dispute that, when the miscoding was corrected, the result of Dr. Burch’s analysis did not change. Swanson Deposition, Ex. A at 307:5-24.

only if (1) the testimony will help the finder of fact understand the evidence or determine a fact in issue; (2) the testimony is based on sufficient facts or data; (3) the testimony is the product of reliable principles and methods; and (4) the principles and methods have been reliably applied to the facts of the case. Fed. R. Evid. 702; *Daubert*, 509 U.S. at 591–594; *see also Carlson v. Bioremedi Therapeutic Systems, Inc.*, 822 F.3d 194, 199 (5th Cir. 2016) (explaining that trial judges have a special gatekeeping function under *Daubert* to ensure any testimony admitted under FRE 702 is relevant and reliable).⁷

The party offering an expert carries the burden of establishing their qualifications and the admissibility of their testimony. *See Daubert*, 509 U.S. at 592 n. 10; *see also United States v. Hicks*, 389 F.3d 514, 525 (5th Cir. 2004) (proponent has the burden to show reliability by preponderance of the evidence).⁸ As the Fifth Circuit has explained, “[t]he district court’s responsibility is to make certain that an expert . . . employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *See Seatrax, Inc. v. Sonbeck Intern Inc.*, 200 F.3d 358, 371 (5th Cir. 2000). “A district court should refuse to allow an expert witness to testify if it finds that the witness is not qualified to testify in a particular field or on a given subject.” *Wilson v. Woods*, 163 F.3d 935, 937 (5th Cir. 1999). Thus, a district court must determine the scope of an expert’s testimony and should limit the scope to exclude subjects on which expert is unqualified. *See, e.g., In re Taxotere (Docetaxel) Products Liability Lit.*, MDL No. 16-2740, 2019 WL 3997122, at *1–*2 (E.D. La. Aug. 23, 2019); *Giusto v.*

⁷ Federal Rule of Evidence 702 was recently amended (effective December 1, 2023) to “clarify and emphasize” the requirements of Rule 702 because “many courts have [incorrectly] held that the critical questions of the sufficiency of an expert’s basis, and the application of the expert’s methodology, are questions of weight and not admissibility.” *See* Fed. R. Evid. 702 Advisory Committee Notes.

⁸ Rule 702 applies in bench trials as well as jury trials, though the Rule’s application is “generally relaxed.” *Perez v. Bruister*, 2014 WL 3729176, at *1 (S.D. Miss. 2014); *Dalrymple v. United States*, 2020 WL 9597852, at *2 (E.D. La. July 20, 2020).

International Paper Comp., 571 F. Supp. 3d 1346, 1362 (N.D. Ga. 2021) (a witness qualified as an expert in one subject may not offer expert testimony on another subject in which the witness is not qualified).

To satisfy *Daubert*'s reliability prong, an expert's opinion may be based on his or her training, education, observations, and professional experience, but cannot be based on "unsupported speculation or subjective belief." *See, e.g., Johnson v. Arkema, Inc.*, 685 F.3d 452, 459 (5th Cir. 2012) (internal quotation marks omitted). An opinion based on "insufficient, erroneous information" is not reliable. *Moore v. Int'l Paint, L.L.C.*, 547 F. App'x 513, 515 (5th Cir. 2013) (citation omitted). Thus, the *Daubert* standard is applied to expert opinions to ensure the expert's testimony is reliable at every step and in every aspect, including with respect to "the methodology [used], the facts underlying the expert's opinion, [and] the link between the facts and the conclusion." *In re Pool Prod. Distribution Mkt. Antitrust Litig.*, 166 F. Supp. 3d 654, 662 (E.D. La. 2016) (citing *Daubert*, 509 U.S. at 592–593).

I. DR. SWANSON IS NOT QUALIFIED TO TESTIFY AS AN EXPERT ON ELECTORAL MAP DRAWING

To satisfy the first *Gingles* prong, Plaintiffs have disclosed as an expert William Cooper, a highly experienced electoral map drawer. Mr. Cooper's plans demonstrate that there are multiple different ways to configure a Supreme Court district that is over 50% Black voting age population without splitting a single county or precinct—including by drawing a district modeled after the State's own recently-adopted congressional districting plan. Cooper Expert Report, Ex. D at 25–35. Mr. Cooper's plans satisfy the first *Gingles* prong because they demonstrate a Black-majority district can be drawn consistent with traditional districting principles. *See Allen*, 599 U.S. at 18 (explaining that "[a] district will be reasonably configured, our cases explain, if it comports with

traditional districting criteria, such as being contiguous and reasonably compact,” and agreeing that Mr. Cooper’s illustrative congressional map was consistent with such criteria).

While Dr. Swanson purports to opine on Mr. Cooper’s illustrative districting plans in his initial report, he lacks the knowledge, skill, education, or experience necessary to provide an expert opinion on electoral maps and their compliance with traditional districting principles, which are the crux of the *Gingles* 1 analysis. Dr. Swanson expressly stated under oath that he is not an expert on electoral map-drawing. *E.g.*, Swanson Deposition, Ex. A at 52:18–21. He agrees that he has no experience drawing electoral maps, *id.* at 19:8–9, and no specialized knowledge with respect to electoral maps, *e.g.*, *id.* at 19, 25. He does not know how to use the computer programs that electoral map drawers use. *Id.* at 14–15. He conceded that he is only “somewhat” familiar with the traditional principles of drawing electoral maps, nor does he know how those principles are applied. *Id.* at 72:3–8. Nor is he familiar with the usual practices of map-drawers. *Id.* at 107:9 (“I don’t know what map drawers do commonly.”); *id.* at 165:2-3 (“I can’t speak for other map drawers or any map drawers.”). Dr. Swanson’s knowledge of electoral map-drawing is so lacking that he does not have a working knowledge of the basic terms used in analyzing electoral maps. *Id.* at 107:16–23. Indeed, during his deposition, Dr. Swanson was unable to make a visual, “eye test” assessment of the compactness of the districts at issue—a task any electoral map-drawer would be able to do. *Id.* at 115–116; *see, e.g., Lopez*, 339 F. Supp. 3d at 608~~(b)(7)(C)~~ (discussing eye test for compactness). In fact, Dr. Swanson was not even aware of the *existence* of the “eye test.” Swanson Deposition, Ex. A at 107:5–23.

Moreover, while Dr. Swanson’s report contains analysis of certain districting principles, such as compactness and “core retention,” Dr. Swanson concedes he did not do those analyses himself and was “not capable” of independently verifying them. *E.g.*, Swanson Deposition, Ex. A

at 117–118. In addition to demonstrating his lack of relevant knowledge and skill, this concession is especially troubling because he agrees that the person that did conduct the analysis, Thomas Bryan, has been held not credible by multiple federal courts.⁹ *See, e.g., Singleton*, 582 F. Supp. 3d at 985; *Caster*, 2022 WL 264819, at *42; *Robinson*, 605 F. Supp. 3d at 823–824.

Dr. Swanson also conducted an analysis of “diversity” between the three Supreme Court districts in the various plans. Yet, he ultimately agreed that this analysis did not relate to any traditional districting principles and conceded that he had no idea if such an analysis had been done before in the context of evaluating electoral maps further demonstrating his inexperience applying traditional districting principles and understanding how they work. Swanson Deposition, Ex. A at 161:21–163:4; Swanson Deposition, Ex. A at 164:21–165:3; *Texokan Operating, Inc. v. Hess Corp.*, 89 F. Supp. 3d 903, 910–11 (S.D. Tex. 2015) (excluding expert from bench trial because he was “not aware of any peer-reviewed literature that agrees with his methodology” and there was no evidence that his “methodology has been subjected to testing”). Indeed, Dr. Swanson also agreed that this “diversity” analysis actually demonstrated that Mr. Cooper’s maps *better* adhere to the traditional districting principle of maintaining communities of interest, because they better connect and combine counties with common interests, attributes and challenges, *e.g., id.* at 189:3–191:4.

The bottom line is that Dr. Swanson has no experience, no specialized knowledge, no training or education or particular skill in electoral map drawing. He simply cannot be qualified to offer expert testimony on that subject. *See Fed. R. Evid. 702; see also Lewis v. Cain*, 605 F.

⁹ Indeed, Cooper discovered a significant error in Bryan’s analysis in this case regarding a purported polling place location analysis. When asked about the error during his deposition, Dr. Swanson did not dispute Mr. Cooper’s conclusion that Bryan’s analysis was wrong. Swanson Deposition, Ex. A at 208–209.

Supp. 3d 864, 870 (M.D. La. 2022) (excluding expert testimony from bench trial because putative expert has “no education, skill, training, or experience” on relevant subject).

II. DR. SWANSON IS NOT QUALIFIED TO OFFER EXPERT OPINIONS REGARDING ECOLOGICAL INFERENCE (EI) ANALYSIS

Dr. Traci Burch submitted extensive, unrebutted analysis demonstrating that Black Mississippians are worse off than White Mississippians along a host of socioeconomic metrics, all of which are correlated with political participation—including, especially, educational attainment. *See generally* Burch Expert Report, Ex. E at 3–20. Dr. Swanson does not contest that analysis, Swanson Deposition, Ex. A at 212–218. And he agrees that, given this socioeconomic reality, and the established correlation between markers of socioeconomic well-being and political participation, it would be a reasonable assumption that Black Mississippians vote at lower rates than White Mississippians. Swanson Deposition, Ex. A at 217:10–21.

Dr. Burch also directly examined voter turnout by race in Mississippi, using a number of different data sets and methods. Dr. Burch and Dr. Swanson disagree about two of those data sets—the CES and the CPS, both of which are surveys (*i.e.*, polls) of potential voters. Dr. Swanson’s opinions as to the CPS and the CES are not at issue here; Plaintiffs do not dispute that Dr. Swanson, as a demographer with experience analyzing survey data, can be qualified as an expert to give his opinions on the CPS and the CES.¹⁰

But Dr. Swanson is not qualified to offer testimony regarding Dr. Burch’s separate analysis of turnout by race in Mississippi using the King’s EI technique. Dr. Swanson has no experience using the King’s EI Technique relied on by Dr. Burch. Swanson Deposition, Ex. A at 17:13–25,

¹⁰ The CES’s voting information is independently verified, which is why Dr. Burch concludes that it is more reliable in light of documented and widespread overreporting, which skews the results of the CPS specifically with respect to racial gaps in turnout. Burch Rebuttal Report, Ex. F at 4–5; *see also supra* pp. 8 n.3. Dr. Swanson favors the unverified CPS, which has a larger number of respondents. *E.g.*, Swanson Surrebuttal Report, Ex. C at 4, 5.

18:1–10. His familiarity with the technique was limited to “look[ing] through what’s on the website” during his work in this case. *Id.* at 315:17-22. The one time he conducted an analysis using an EI-type technique (not using King’s EI) was in the early 1990s, decades ago. *Id.* at 305:12-16. He is not a political scientist. *Id.* at 12:12–15. He is admittedly not an expert in voting behavior. *Id.* at 52:18–19. He admittedly has no experience analyzing voting behavior, *id.* at 52:20–21, or using the software environment on which the EI program is run, *id.* at 14:14–15.

And beyond this lack of specialized training or experience or knowledge, Dr. Swanson gives no other indication that he has sufficient understanding of Dr. Burch’s EI analysis and the EI technique to offer an expert opinion on it. He admits that he did not attempt to replicate Dr. Burch’s results. Swanson Deposition at 305:14–24. And he admits that he does not understand why Dr. Burch constructed her EI analysis the way she did (*i.e.*, comparing White versus non-White and Black versus non-Black turnout) and does not know enough to say “what’s possible in the EI analysis.” *Id.* at 316:3-10, 318:7-11; *see also* 320:1-21 (“Q: It’s not a good sign because you don’t understand why she did it? A. Yes.”) (“Q: So it could be that she did it this way to ensure the accuracy of her results? A. But if that’s the case, why would that be more accurate than saying white and black and black and white? I don’t know the answer. I can’t answer what she did in the analysis. All I can do is read what she said.”).

Dr. Swanson lacks any proper basis to offer expert opinion testimony on the ecological inference analysis conducted by Dr. Burch. Those portions of his report should be excluded and his testimony should be limited to subjects where he has the requisite “knowledge, skill,

experience, training, or education” to be properly qualified under the Rules. Fed. R. Evid. 702; see *Cain*, 605 F. Supp. 3d at 870.

CONCLUSION

Dr. Swanson’s analysis or opinions regarding electoral map drawing and ecological inference analysis of voting behavior should be excluded and he should be precluded from offering expert testimony on those subjects.

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CERTIFICATE OF SERVICE

I, Jonathan Youngwood, hereby certify that on October 27, 2023, I electronically filed the foregoing with the Clerk of the Court using the ECF system which sent notification of such filing to all parties on file with the Court.

/s/ Jonathan K. Youngwood
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