IN THE CRIMINAL COURT FOR DAVIDSON COUNTY, TENNESSEE
AT NASHVILLE, DIVISION IV

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CRIMINAL COURT CLERK
BY:

CLAUDE GARRETT, Petitioner,	)	
v.	)	Case No. 92-B-961 Post-Conviction
STATE OF TENNESSEE, Respondent.	)	

MOTION TO RE-OPEN PETITION FOR POST-CONVICATION RELIEF

Pursuant to Tenn. Code Ann. § 40-30-117(a)(2), Petitioner Claude Garrett, who is serving a life sentence for a murder conviction, moves to reopen his postconviction petition based on new scientific evidence establishing that he is actually innocent. In 1992, a fire severely damaged Mr. Garrett's house, killing his girlfriend, Lorie Lance. At the time, fire investigators decided the fire was set intentionally, and, based on that theory, Mr. Garrett was convicted of murder. But since 1992, there have been great advances in the science of fire investigation, including especially significant studies from 2019. As every expert reviewing Mr. Garrett's case now agrees, no one versed in modern fire science and investigation could possibly decide that the fire was set intentionally or with an accelerant. Indeed, recent authoritative studies affirmatively indicate the fire was *not* started in that way.

Thus, Mr. Garrett, who has now served almost 30 years in prison, was wrongfully convicted of murder based on junk science. In this motion, he sets forth new scientific evidence of his actual innocence, and he seeks relief under the Post-Conviction Procedures Act, under Article 1, Section 8 of the Tennessee Constitution, and under the Fifth and Fourteenth Amendments of the U.S. Constitution.

TABLE OF CONTENTS

INTRODUCTION.....1

STATEMENT OF FACTS.....6

I. Heat rises until it hits a ceiling.....6

II. Lorie Lance died in the utility room as firefighters struggled to find her.....7

III. The initial investigation yielded only one, now-debunked sign of arson.....9

A. Dr. Harlan.....9

B. Detective Miller.....10

C. Fire Marshal Porter.....11

IV. Agent Cooper's later investigation yielded "proof" of arson.....11

V. Mr. Garrett's first trial was marred by the prosecutor's misconduct.....16

VI. Agent Cooper was allowed to testify as an expert although he didn't even claim to follow the scientific method.....17

VII. At the 2003 trial, Agent Cooper, clinging to his outdated analysis, testified that his expertise allowed him to conclusively determine that Mr. Garrett was guilty.....18

VIII. New scientific evidence has developed since the 2003 trial that utterly and authoritatively refutes Agent Cooper's opinions.....21

A. The 2004 rejection of the "visual interpretation" of "pour patterns".....22

B. The 2005 federal study showing radical uncertainty after flashover.....23

C. The 2013 National Institute of Justice study on the depth of charring.....24

D. The 2019 Underwriters Laboratories study on ventilation.....24

E. The 2019 carbon-deposit experiment.....25

F. The present consensus of experts in the field.....26

1. John Lentini.....26

2. Dr. Craig Beyler.....27

3. Dr. Candace Ashby.....28

4. Dr. John DeHaan.....28

5. Summation.....29

IX. No court has fully and fairly considered these scientific developments.....29

A. Initial postconviction petition.....30

B. Motion for Writ of Coram Nobis and Motion to Reopen.....32

ARGUMENT.....33

I. The Court should reopen Mr. Garrett's case in light of new scientific evidence showing he is actually innocent and it should vacate his conviction.....34

A. Freestanding claim of actual innocence.....35

B. Due process violation.....39

II. No procedural bar prevents the Court from granting relief.....42

A. Waiver, or procedural default.....43

B. The doctrine of previous determination.....45

C. Timeliness.....47

CONCLUSION.....48

CERTIFICATE OF SERVICE.....48

FORM PLEADING FOR MOTION TO REOPEN.....a

Exhibit 1: John Lentini Affidavit

Exhibit 2: John Lentini Supplemental Declaration

Exhibit 3: John Lentini CV

Exhibit 4: Dr. Candace Ashby Report

Exhibit 5: Dr. Candace Ashby CV

Exhibit 6: Dr. Craig Beyler Report

Exhibit 7: Dr. Craig Beyler CV

Exhibit 8: Dr. John DeHaan Report

Exhibit 9: Dr. John DeHaan CV

Exhibit 10: 1993 Trial Transcript (excerpts)

Exhibit 11: 2003 Trial Transcript (excerpts)

Exhibit 12: Fire Marshall Porter Report

Exhibit 13: Fire Marshall Porter Diagram

Exhibit 14: Laboratory Report

Exhibit 15: Hunt Statement

Exhibit 16: Photograph of Door

Exhibit 17: ATF Agent Cooper Report

Exhibit 18: Autopsy

Exhibit 19: *Flooded Compartments* article

Exhibit 20: Post-conviction Hearing Transcript (excerpts)

Exhibit 21: Trial Court Order

Exhibit 22: Court of Criminal Appeals Order

INTRODUCTION

In 1992, a fire severely damaged the kerosene-heated, cinder-block home where Claude Garrett and Lorie Lance lived. Mr. Garrett escaped the fire, but Ms. Lance tragically succumbed to smoke inhalation in a utility room.

Federal Agent Cooper investigated the cause of the fire. It was obvious the fire had started in the living room and had gotten so hot that it reached "flashover," which is the point where there is enough radiant heat to ignite every exposed combustible surface in a room. But Agent Cooper, like all fire investigators in 1992, operated based on rules of thumb that had not been tested scientifically and that did not take into account the effect of a fire reaching flashover. One rule of thumb said that, because fire burn upwards, the existence of charring patterns on the floor means that, absent some other source of ignition at that spot, the fire must have been started by someone pouring an accelerant on the floor and lighting it. In the lingo of the day, such charring on the floor was known as a "pour pattern," and it spelled arson.

There was deep and irregular charring on Mr. Garrett's living-room floor, located away from any electrical outlet. Agent Cooper decided the charring was a pour pattern. That decision prompted him to build a murder case against Mr. Garrett. He soon acquired other "evidence" that appeared to implicate Mr. Garrett. First, sloppy investigative procedures contaminated the scene, and suddenly, from the contaminated scene, Agent Cooper "discovered" putative evidence that kerosene was used to start the fire, even though all the initial tests had been negative for the presence of kerosene. Second, witnesses who had already given statements exculpating Mr. Garrett suddenly gave new statements that tended to inculpate him. At Mr. Garrett's trial, Agent Cooper testified that he, as an experienced expert, was completely certain based largely on the

putative pour pattern that Mr. Garrett had locked Ms. Lance in the utility room and then set the house on fire. Mr. Garrett was convicted of murder.

Due to prosecutorial misconduct in that trial, Mr. Garrett won the right to a new one, which was held in 2003. By 2003, there had been important changes in fire investigations. Investigators had generally accepted they had to follow the scientific method. And, due to a study published in 2001, they generally recognized that, when a room burns to flashover, there is so much radiant heat in the room that the floor itself can light on fire, and so charring on the floor does not necessarily mean the fire started on the floor.

Despite these developments, Agent Cooper reiterated his original conclusions when, in 2003, he testified at the second trial. Although he acknowledged flashover could cause charring on the floor, he insisted that, by visual interpretation alone, he could tell the difference between charring caused by flashover and that caused by burning an accelerant. Specifically, he claimed he could tell by sight that the charring on Mr. Garrett's floor was a "pour pattern" because it was irregular and deep. In fact, he testified he could tell the difference, by visual interpretation alone, between charring from a fire started by accidentally spilling an accelerant and charring from one started by deliberately pouring it. Further, he said V-shaped patterns by the baseboards were "red flags" of arson.

At the 2003 trial, Mr. Garrett tried to rebut Cooper's testimony with that of his own expert, who told the jury about the effects of flashover and said it was impossible to see a pour pattern. But at the time of trial—as shown by Agent Cooper's testimony and the court's decision to admit it—there was not a firm consensus in the expert community on the points Mr. Garrett's expert was making. The case became a battle of the experts, which was won by Agent Cooper

repeatedly making adamant claims about an irregular and deep "pour pattern" and about V-shaped "red flags." Mr. Garrett was convicted again of murder.

Since 2003, there have been at least four major developments in the scientific study of fire origins that combine to conclusively prove Agent Cooper's conclusion was wrong and that, in a trial today, his putative expert testimony would be inadmissible. Plus a fifth development—a new scientific experiment on evidence in Mr. Garrett's own case—likewise shows Cooper's conclusion was completely wrong.

- In 2004, the manual that governs experts in the field—NFPA 921—rejected the use of the term "pour pattern." It said "[t]he determination of the nature of an irregular pattern should not be made by visual interpretation of the pattern alone." Thus, it is now clear that Agent Cooper was wrong to think he could, by visual interpretation alone, tell that charring was a "pour pattern" based on its irregular shape.
- From 2005 to 2007, Agent Cooper's employer—the federal Department of Justice—conducted empirical studies that established that, after a fire had burned in a fully-involved state for three minutes, the likelihood of an investigator correctly determining in which quadrant of the room the fire had started was no better than that of someone guessing at random. That fact showed that an investigator of Garrett's fire—even had the scene *not* been contaminated by untrained personnel—could only guess which quadrant contained the fire's origin. Thus, it is now clear that Agent Cooper could *not* reliably pinpoint the fire's origin to the area of the putative "pour pattern"—and it did not matter that there was no electric outlet or obvious source of a fire in the area of that charring.

- In 2013, a federally-funded study which was incorporated into NFPA 921 established that accelerant-fueled fires do *not* cause charring as deep as that on Mr. Garrett's floor. Thus, it is now clear that "not only was it impossible for Agent Cooper to accurately characterize the charring as caused by something other than [flashover] radiant heat, it is possible to state that **the charring could not have been caused by an ignitable liquid."**[1]
- In 2019, the Fire Safety Research Institute of Underwriters Laboratories finished studies that show, when a fire in a room reaches full-room involvement, the *only* place that can burn is the floor. Thus, it is now clear that when a fire has reached flashover, the tell-tale signs of a low-burning fire—the V patterns by the baseboards—would be *virtually inevitable*, and hence *not* "red flags" of arson as Agent Cooper had claimed.
- In 2019, a fire investigator conducted an experiment that recreated the conditions of the fire in Mr. Garrett's house and the exposure of the utility-room lock to that fire. That experiment proved that the carbon deposits left on the lock from the fire were consistent *only* with the lock being in the unlocked position. Thus, it is now clear that it was wrong for Agent Cooper to assert the door was locked, and he was wrong to accept Firefighter Jenkins's long-after-the-fact and equivocal statement on the subject as proof inculpating Mr. Garrett. The lock was unlocked.

Due to these developments, it is now completely clear that the fire in Mr. Garrett's home cannot be classified as arson. Applying modern science and standards, many renowned experts—some working for free—have studied the Garrett file in detail and have concluded the cause of

[1] Ex. 1, Lentini Aff. at 27-28.

the fire cannot be determined. Plus, as the 2013 depth study shows, the fire was *not* started with an accelerant; as the 2019 ventilation study shows, the supposed "red flags" of arson were virtually inevitable for an accidental fire; and, as the 2019 carbon-deposits experiment shows, the utility-room door was unlocked.

These experts have also examined in detail the supposedly damning evidence that Agent Cooper came up with *only after* deciding the fire was arson. All experts agree none of Cooper's late-acquired evidence is inculpatory. As mentioned, at trial the State's theory was that Mr. Garrett had locked Ms. Lance in the utility room and then set the house on fire. But expert analysis of the burns suffered by Ms. Lance shows **she must have incurred the burns before entering the utility room**—another fact flatly contradictory to the State's theory. Plus, all experts now agree that the evidence shows **the utility-room door was not locked shut.**

In sum, new scientific evidence unquestionably refutes the State's case, and it shows that Claude Garrett is actually innocent, a victim of junk science. No court has previously addressed this collection of evidence. In Mr. Garrett's initial post-conviction litigation, the Court heard only general principles about the evolving science, not specific conclusions based on a comprehensive review of Mr. Garrett's case; nor could it have heard the important insights from the depth and ventilation studies from 2013 and 2019, which were not yet unavailable. When Mr. Garrett tried to present further evidence to this Court in 2017, the Court refused to hold a hearing, characterizing his evidence as merely new "opinions" and summarily dismissing his effort to prove his innocence. But today Mr. Garrett can readily satisfy his burden of proving that, in light of new scientific evidence, any reasonable juror would acquit him. Today, not a single expert would claim the fire was arson. Fundamental fairness dictates that Claude Garrett's freedom must be restored after 30 years of imprisonment for something that was not a crime.

STATEMENT OF FACTS

I. Heat rises until it hits a ceiling.

Heat rises. "[F]ire burns up." (Ex. 20, Lentini, PC Hr'g Tr. at 138.)[2] Accordingly, in the 1980s fire investigators assumed that when they found irregular charring on a room's floor, the charring meant that someone had started the fire by pouring a flammable liquid on the floor because otherwise, with fire burning up, there would be no reason for the floor to be so burnt. (*Id.*) Investigators called that floor charring a "pour pattern." (Ex. 17, Cooper Report, Trial Ex. 49 at 2.) And a "pour pattern" told the investigator the fire was arson. (*See id.*)

But that theory did not consider the possible effects of "flashover." (Ex. 20, Lentini, PC Hr'g Tr. at 138-39.) Flashover is when heat from the fire begins to "bank down from the ceiling" and then heats the entire room to about 1,100 degrees. (*Id.* at 138.) At that point, the fire "has enough energy to light every exposed surface in the room on fire, and then the fire really takes off." (*Id.*) The transition to flashover is "the transition from having a fire in a room to a having a room on fire." (*Id.* at 139; *see also* Ex. 1, Lentini Aff. at 15-17 (explaining flashover).)

Studies now show that, like a fire started on the floor with an accelerant, a flashover fire burns the floor and can cause the same charring on the floor as a fire set with a flammable liquid. (*Id.*) Consequently, it is now recognized to be "myth[]" that an investigator "can, by looking at the floor, determine the difference between charring done by radiation [during flashover] and charring caused by a flammable liquid." (*Id.*)

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[2] Transcripts attached as exhibits are of the relevant excerpts. Counsel will submit a complete transcript if complete copies are not already in the record accessible to the Court.

II. Lorie Lance died in the utility room as firefighters struggled to find her.

In the early morning of February 24, 1992, a fire developed in the living room of the 900-square-foot, cinder-block, kerosene-heated home in which petitioner Claude Garrett and Lorie[3] Lance lived. (Ex. 11, Jones, Trial Tr. at 172; Ex. 11, Cooper, Trial Tr. at 769; Ex. 17, Cooper Report, Trial Ex. 49, at 2.) *See also State v. Garrett,* 1996 Tenn. Crim. App. LEXIS 68, *3 (Tenn. Crim. App. Feb. 1, 1996). Shortly after 5:00 a.m., that living-room fire reached the state of "flashover." (Ex. 11, Nickens, Trial Tr. at 464; Ex. 11, Baynes, Trial Tr. at 1012.) At that point, the living-room windows burst so heat could escape. (Ex. 11, Baynes, Trial Tr. at 1031.)

Noise from the incident woke a neighbor, Ruby Alcorn. (Ex. 11, R. Alcorn, Trial Tr. at 920.) She looked across the street and saw Claude Garrett in his yard jumping up and down, yelling "Lorie!" (*Id.* at 922, 925.) Alcorn woke her husband, and then he and their son joined Mr. Garrett breaking windows and yelling. (*See id.* at 921.)

The first firetruck arrived within a few minutes at 5:09 a.m. (Ex. 11, Hunt, Trial Tr. at 516.) Even though Mr. Garrett "straight off" told firefighters a woman was inside, even though the fire was limited to just the front living room and the front bedroom, and even though those flames were easily extinguished (suggesting the fire was *not* fueled by an accelerant), it took until about 5:45 or 6:00 a.m. to find Ms. Lance. (Ex. 11, Hunt, Trial Tr. at 516; Ex. 11, Nickins, at 457-71; Ex. 11, Corbin, Trial Tr. at 957-58; Ex. 20, Bayne, PC Hr'g Tr. R.17-24, at 190-91.) She was found partially covered by some random items, lying on her left side with her head and upper body "wedged" between a washer/dryer and the back wall of a utility room in the back of

[3] Evidently mistakenly, courts have referred to Ms. Lance as "Lori" instead of "Lorie." (*See* Ex. 18, Autopsy, Trial Ex. 12 ("Lorie Lee Lance").)

the house. (Ex. 13, Porter Diagram, Trial Ex. 55; Ex. 15, Hunt Statement, Trial Ex. 2, at 2.) By the time she was found, she had died from smoke inhalation. (Ex. 11, Harlan, Trial Tr. at 318.)

Why did it take so long to find her in the small house? Due to predawn darkness and thick smoke, visibility was virtually zero. (Ex. 11, Jenkins, Trial Tr. R.17-15, at 415-17.) So firefighters crawled, stumbled, and felt their way around the entire house, flipping over furniture and anything in the way, feeling for doors and places where a person might be hiding from the fire. (Ex. 11, Nickins, Trial Tr, at 443; Ex. 11, Hunt, Trial Tr. at 499.) The utility room was in the back of the house. (Ex. 13, Porter Diagram, Trial Ex. 55.) That room was added to the house in makeshift fashion after the original construction; the room's door lacked a door handle, and it opened into the interior of house, rather than into the utility room. (Ex. 17, Cooper Report, Trial Ex. 49, at 1; Ex. 11, Jenkins, Trial Tr. at 405.) A firefighter operating by feel might not even recognize that door as a door, much less as one opening not to the backyard but instead into a makeshift room with no exit.[4]

Mr. Garrett, who smelled of alcohol, told this story about the fire: He and Ms. Lance, both of whom were smokers, had been drinking at a bar until late; they came home and fell asleep on a couch and loveseat in the living room; later, they woke and moved to their bed in the front bedroom; later still, the fire woke Mr. Garrett, and he woke Ms. Lance; he led the way to the front door, but in the living room, where the fire was raging, Ms. Lance turned back into the house while he escaped through the front door. (Ex. 11, McCormick, Trial Tr. at 558; Ex. 11, Hunt, Trial Tr. at 497; Ex. 11, Roland, Trial Tr. at 680.)

[4] As built, it appears the room initially had a large window, but that window opening had been boarded up as long as Ms. Lance's mother could remember. (Ex. 11, Jones, Trial Tr. at 180.)

III. The initial investigation yielded only one, now-debunked sign of arson.

Three authorities led the investigation: County Medical Examiner Dr. Gretal Harlan, Detective David Miller, and Fire Marshal Kevin Porter. Two questions loomed: Why did the fire start, and why was Ms. Lance in the utility room?

A. Dr. Harlan

Dr. Harlan conducted the autopsy that morning. (Ex. 11, Harlan, Trial Tr at 317; Ex. 18, Autopsy, Trial Ex. 12 at 1 (cover).) She found that Ms. Lance died of smoke inhalation probably within ten to thirty minutes, and that she had incurred nonfatal first- and second-degree burns, mainly on her face and left hand and arm. (Ex. 11, Harlan, Trial Tr. at 318, 324, 334.) Dr. Harlan believed Ms. Lance probably incurred those burns while in an upright position. (*Id.* at 344-45.) Ms. Lance, who was found lying on her side, was positioned such that her upper torso was protected by a washer/dryer while her bare legs (she wore only socks, underwear, and a shirt) were sticking out. (*Id.* at 335.) Since her legs were not burned at all yet her face and hand were, and since her legs were less protected than her upper body, Dr. Harlan acknowledged that she was burnt before getting in that position. (*Id.* at 344-47.) Ms. Lance's blood-alcohol content upon death was .06%, meaning she was probably somewhat intoxicated several hours earlier, but not significantly intoxicated at the time of her death. (*Id.* at 328-29, 354.)

There was no sign of Ms. Lance being drugged, bound, or involved in any physical struggle. (*Id.* at 350.) That is, there was no sign she had been forced into the utility room. After determining the cause of death, Dr. Harlan visited the fire scene to look for evidence of the manner of death. (Ex. 11, Harlan, Trial Tr. at 329, 372, 375.) She noticed that the utility-room door had on it a commonplace "little lock"—a small sliding bolt that would fit into a housing—and she photographed the door generally. (*Id.* at 331; see Ex. 13, Photo, Trial Ex. 13.) Because

the door opened into the house, that lock could be used only from outside the room, and so in theory the sliding-bolt lock could have been used to lock Ms. Lance in the room. (Ex. 11, Harlan, Trial Tr. at 332.) But, as Dr. Harlan observed, the lock was flimsy: Ms. Lance "should have been able to" push the door open even if it were locked from the outside. (*Id.* at 356.) These circumstances suggested Ms. Lance had been burned while upright and near the flames and then had retreated, in a panic, to the utility room and burrowed under random stuff—which is something Dr. Harlan knew to be a "frequent" behavior of fire victims. (*Id.* at 349-50.)

B. Detective Miller

Detective Miller and his assistant Mike Roland questioned witnesses, including Mr. Garrett, who gave an interview the day of the fire. (Ex. 11, Miller, Trial Tr. at 633, 664.) Detective Miller also took Mr. Garrett's shirt and pants to be tested for the presence of accelerants. (*Id.*) Those samples later tested negative. (Ex. 14, Lab Report, Trial Ex. 46A, at 2.) After the interview, Mr. Garrett was released.

That same day, Detective Miller also spoke to Otis Jenkins, the firefighter who first found Ms. Lance. (Ex. 11, Miller, Trial Tr. at 665.) Jenkins told Miller that, as best he could remember, the utility-room door was *not* locked. (*Id.* at 665.) Indeed, if any firefighter were to find a fire victim in a room that was locked from the outside, that fire fighter would not need to be interviewed to learn that fact. (Ex. 4, Ashby Report at 12-13 (reporting, from experience as a firefighter, on the ordinary behavior of firefighters).) Rather, the fire fighter would take it as an obvious sign of a crime and would report it immediately. (*Id.*) But Otis Jenkins had seen no such sign of a crime.

C. Fire Marshal Porter

Fire Marshall Porter likewise investigated that morning. (Ex. 12, Porter Report, Trial Ex. 52, at 1.)

Next to the utility-room door, he noted a plastic five-gallon canister of kerosene (the house was heated using kerosene). (*Id.* at 2.) The fire had melted holes in the top of the canister, and the scene smelled of kerosene. (*Id.* at 1-2; Ex. 11, Cooper, Trial Tr. at 821; Ex. 11, Bayne, Trial Tr. at 1034.)

In the living room, Porter saw an irregular charring or burn pattern on the floor. (Ex. 12, Porter Report, at 1.) Porter thought this was a "pour pattern." (*Id.*) Accordingly, he took five samples from the places where accelerant should appear if it had been used to start the fire. (Ex. 11, Poltorak, Trial Tr. at 738-42; Ex. 11, Porter, Trial Tr. at 904-08, 917.) Every one of those samples later tested *negative* for any accelerant. (*Id.*)

Finally, to make it easier to examine the putative "pour pattern," Fire Marshal Porter had firefighters wash out the house with a booster hose, and he also had them move furniture and debris outside. (Ex. 11, Porter, Trial Tr. at 905-06; Ex. 12, Porter Report, Trial Ex. 52, at 1; Ex. 11, Roland, Trial Tr. at 709; Ex. 11, Cooper, Trial Tr. at 848.)

In sum, none of the evidence collected to that point—Mr. Garrett's clothing samples, samples from relevant locations, or statements from eyewitnesses—signaled arson except the putative pour pattern.

IV. Agent Cooper's later investigation yielded "proof" of arson.

Detective Miller contacted James Cooper, a federal agent and member of an arson task force for the Bureau of Alcohol, Tobacco and Explosives (ATF). (Ex. 11, Cooper, Trial Tr, at 761, 767-68.)

Agent Cooper arrived at the fire scene after 6:30 p.m., which was more than 12 hours after the fire. (Ex. 11, Cooper, Trial Tr. at 767-68.) By that time, the scene was certainly contaminated. Furniture and debris had been moved, and water, presumably from the hosing down of the house, was standing on the kitchen floor, including near the refrigerator and utility-room door. (Ex. 12, Porter Report, Trial Ex. 52, at 1; Ex. 11, Cooper, Trial Tr. at 810.) That water was particularly significant because, during the chaotic rescue efforts and during the subsequent hosing down, kerosene could have leaked from the holes in the canister and been spread by the water. (Ex. 11, Bayne, Trial Tr. at 1034; Ex. 11, Cooper, Trial Tr. at 822-23 (acknowledging *kerosene was in the water on the floor* and that some kerosene came out of the canister when he picked it up).)

Plus, police had not even been sure to guard the scene throughout the day. (Ex. 11, Murphy, Trial Tr. at 930.) And so, by the time Agent Cooper investigated, there was a Bic lighter sitting on a dresser even though everyone acknowledges the lighter wasn't there during the fire—and thus was a clear sign the scene had been contaminated. (Ex. 11, Miller, Trial Tr. at 638-39; Ex. 11, Roland, Trial Tr. at 713; Ex. 11, Goodman, Trial Tr. at 969.) In short, evidence had been destroyed; kerosene could have easily mixed with the water hosed around the house; and at least one suspicious item that did not belong at the scene had appeared without explanation.

Under "disadvantage[d]" conditions, Agent Cooper began his investigation, (Ex. 11, Cooper, Trial Tr. at 834), which yielded the three pieces of crucial "evidence" that ultimately served to convict Mr. Garrett.

First, Agent Cooper looked at the charring on the living room floor and decided it was a "pour pattern." (Ex. 17, Cooper Report, Trial Ex. 49, at 2.)

Second, Cooper claims to have interviewed Jenkins, the firefighter who first found Ms. Lance; Jenkins does not remember this interview. (Ex. 11, Cooper, Trial Tr. at 835, 875; Ex. 11, Jenkins, Trial Tr. at 406-07.) According to Cooper, Jenkins told him that the utility-room door *was* "latched" (Ex. 11, Cooper, Trial Tr. at 835, 846, 875), even though Jenkins had already told Detective Miller that, as best he could remember, the door was *not* locked. (Ex. 11, Miller, Trial Tr. at 665.)[5]

In any event, Jenkins's alleged statement to Agent Cooper was not definitive because he really did not know what happened. Over the course of subsequent proceedings, Jenkins was questioned several times about what he thought he had witnessed, which can be summarized as follows.

- The house's interior was dark and smoky and he could not see anything. (Ex. 11, Jenkins, Trial Tr. at 415, 419.)
- He felt the door with his hands while wearing thick, heavy gloves. (*Id.* at 417-19.)
- The door, which opened *into the house and lacked any doorknob*, did not open right away. (*Id.* at 405, 416.)
- So he "shuffled something *or did something* to make the door open." (*Id.* at 416; *see also id.* at 398 (opened the door "through whatever procedure").)
- It is possible the door was just jammed, not locked, and he merely had to do "something" to open it despite being jammed. (*Id.*)
- It is possible that, with his gloved hand, he pushed the sliding-bolt lock shut. (*Id.* at 418.)
- He never even saw a lock. (*Id.* at 416-17.)

[5] If the door was "latched" from the outside, Ms. Lance was "locked" in the room. At the second trial, Agent Cooper tried claimed that there might be a meaningful distinction between the door being "latched" or "locked" (Ex. 11, Cooper, Trial Tr. at 846), but no such distinction could be meaningful in this context, as even Agent Cooper, who had invented the distinction, used "latch" and "lock" interchangeably. (*Id.* at 872.)

Thus, Jenkins's statement to Cooper was belated, self-contradicting (due to his previous statement to Miller), and speculative. But Cooper took that statement as definitive proof that the door was locked during the fire. (Ex. 11, Cooper, Trial Tr. at 875 ("What I care about is you actually have a fire fighter that told me that he went up there and the door was latched").)[6] The hypothesis that the door was locked was testable. General photos of the door taken by others indicate that the fire had left carbon deposits on the lock in a way *inconsistent* with it being in the locked position because, if it were in the locked position, a certain part of the sliding bolt would not be exposed to the fire and would not receive carbon deposits. (Ex. 11, Cooper, Trial Tr. at 874; Ex. 11, Bayne, Trial Tr. at 1020.) Yet Cooper did not take any close-up photos of the lock; nor did he preserve it for testing. (*See* Ex. 11, Cooper, Trial Tr. at 825 (reviewing others' photographs).) He did nothing to test Jenkins's belated and speculative statement, instead accepting it uncritically. (Ex. 11, Cooper, Trial Tr. at 875.)

Third, Agent Cooper found a bedspread in front of the utility-room door, which was by standing water and within "a foot or two" of the partly-melted kerosene container, and Cooper perceived this bedspread to be "saturated with kerosene." (Ex. 11, Cooper, Trial Tr. at 773-74, 810; *see* Ex. 11, Miller, Trial Tr. at 624.) Cooper thought this bedspread was designed to serve as a "trailer" to pull the fire from the front living room to the utility room in the back (Ex. 11, Cooper, Trial Tr. R.17-13, at 130-31), yet none of the state actors who had inspected the scene

[6] "[E]yewitnesses are notoriously prone to change or alter their memories of pertinent events when police or other first responders inform them that 'scientific evidence' supports a particular theory of the fire under investigation." Valena E. Beety and Jennifer D. Oliva, *Evidence on Fire*, 97 N.C.L. Rev. 483, 510 (March 2019). *See also* Ex. 6, Beyler Report at 9-10 ("[W]e must be cognizant of the effect of potential suggestion by investigators and prosecutors on a witness's recollection.").

before Cooper (*e.g.*, Fire Marshal Porter, Dr. Harlan, Detective Miller, Mike Roland, police photographer James Goodman) had seen this tell-tale "trailer." Indeed, Fire Marshal Porter drew a diagram of the house which included the kerosene canister but did not include any bedspread, even though Agent Cooper said he found the canister and bedspread within a foot or two of each other. (Ex. 11, Porter, Trial Tr. at 903.)

Other than supposedly speaking to Jenkins about the lock, Cooper did not interview any of the firefighters or Mr. Garrett, and thus Cooper did not probe any memories about the late-appearing bedspread or how it might have wound up where it was situated at 6:30 p.m, somewhat mysteriously like the Bic lighter. (Ex. 11, Cooper, Trial Tr. at 835-38, 850-52.)[7]

Agent Cooper did not try to reconstruct the scene, and, as mentioned, he did not interview anyone, not even the firefighters or Mr. Garrett. He did take some samples, including a piece of the bedspread and a disabled smoke alarm that was later swabbed. (Ex. 11, Miller, Trial Tr. at 584-85, 611-12; Ex. 11, Cooper, Trial Tr. at 887.) He also took a sample from the living room, which consisted of a canister containing a hodgepodge of debris and wood that he collected from near the baseboard. (Ex. 11, Miller, Trial Tr. at 611-12, 645.) That collection of debris from the living room included some cardboard even though the living room had been through flashover (*id.*), and thus had reached about 1,100 degrees and "ha[d] enough energy to light every exposed surface in the room on fire." (Ex. 20, Lentini, PC Hr'g Tr. at 138.)[8]

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[7] Also 38 negatives of photos taken by police photographer James Goodman—which presumably might have shown the pertinent floor space right after the fire—went missing—last seen when turned over to District Attorney Zimmerman (Ex. 11, Beene, Trial Tr. at 935), who committed a blatant *Brady* violation at Garrett's first trial. *See infra*, p. 20.

[8] Agent Cooper suggested that Garrett probably soaked the cardboard in kerosene and used it to start the fire in the living room, and that the cardboard somehow survived the fire. (Ex. 11, Cooper, Trial Tr. at 887-88.)

Although each of Fire Marshal Porter's samples tested negative for accelerant, each of Agent Cooper's tested positive. (Ex. 11, Poltorak, Trial Tr. at 738-48.) That "positive" indicated that the respective sample had at least one-tenth of one drop of kerosene present. (*Id.* at 743.) That meant that the bedspread sample had at least one tenth of a drop of kerosene, and one item in the canister of baseboard debris had one-tenth of one drop. (*Id.* at 748.)

In light of Agent Cooper's investigation, and in light of the prevailing faith in "pour pattern" analysis, Mr. Garrett was charged with first-degree murder. *See Garrett v. State*, 2001 Tenn. Crim. App. LEXIS 206, *2 (Tenn. Crim. App. Mar. 22, 2001).

V. Mr. Garrett's first trial was marred by the prosecutor's misconduct.

At the first trial, the State presented Cooper's opinion that the fire was arson, along with Jenkins' testimony that the utility-room door was locked. *Garrett,* 2001 Tenn. Crim. App. LEXIS at *5. Cooper was adamant that he could tell the charring pattern on the floor was a "pour pattern," meaning "somebody deliberately poured a liquid accelerant on the floor" to start the fire. (Ex. 10, Cooper, 1993 Trial Tr. at 486; *see id.* at 533 ("But my experience and my conclusion is, and I can't walk away from it, it keeps on coming back, that there's a pour pattern in the living room.").)

The prosecutor deliberately withheld from the defense the report showing that Jenkins originally had told Detective Miller the door was "*not locked.*" *Id.* at *36, *41 (emphasis in original). The Tennessee Court of Criminal Appeals held that the prosecutor's decision to withhold the "not locked" statement had violated Mr. Garrett's due process rights under *Brady v. Maryland*, 373 U.S. 83 (1963), and it restored Mr. Garrett's right to trial. *Id.* at *53.

VI. Agent Cooper was allowed to testify as an expert although he didn't even claim to follow the scientific method.

In 1993, the Supreme Court issued *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993) setting rules designed to keep "junk science" out of court. After *Daubert*, expert testimony had to be grounded in scientific knowledge, and that, "in order to qualify as 'scientific knowledge,' an inference or assertion must be derived by the scientific method." *Id.* at 590.

As late as 1997, the International Association of Arson Investigators (IAAI) argued in court *Daubert* should not apply to fire investigations because such investigations are a "'less scientific' endeavor than other types of forensic investigations." (Ex. 20, Lentini, PC Hr'g Tr. at 134 (quoting IAAI argument).) But the IAAI lost that argument, and by 2001, both the IAAI and the U.S. Department of Justice had accepted a guideline called NFPA 921,[9] which sets forth the prevailing "standard of care" for fire investigators. (*Id.*)[10] The 2001 edition of NFPA 921 required investigators to adhere to the "scientific method." (*Id.*)

But that development was recent when Mr. Garrett went to trial in 2003. In 2003, "some fire investigators, including Agent Cooper, still believed that by looking at the shape and texture of burning on the floor, they could infer the presence of ignitable liquids, even if subsequent laboratory analysis failed to reveal the presence of any such residues." (Ex. 1, Lentini Aff. at 19.) Thus, Agent Cooper said both: (1) he did not consider himself an expert in the field of fire science and did not claim to follow the scientific method (Ex. 11, Trial Tr. 98-99, 113); and yet, (2) his special expertise enabled him to see, based on visual interpretation alone, a "pour pattern" on Mr. Garrett's floor. (Ex. 7, Cooper, Trial Tr. at 830-31, 860-62; *see also id.* at 779-80, 797,

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[9] NFPA stands for "National Fire Protection Association," and NFPA 921 is entitled *Guide for Fire and Explosion Investigations.*

[10] *See* U.S. Dep't of Justice, NCJ 181584, Fire and Arson Scene Evidence: A Guide for Public Safety Personnel 6 (2000), https://www.ncjrs.gov/pdffiles1/nij/181584.pdf.

814-15, 840, 865.) Abruptly ending the *Daubert* hearing, this Court announced "this man's testimony is based on sound information and belief as far as this Court is concerned. I'm going to allow his testimony." (Ex. 11, Court, Trial Tr. at 137.) The case proceeded to trial.

VII. At the 2003 trial, Agent Cooper, clinging to his outdated analysis, testified that his expertise allowed him to conclusively determine that Mr. Garrett was guilty.

At trial, the State argued in closing: "This man murdered this woman. Agent Cooper told you how this fire was started." (Ex. 11, Seaborg, Trial Tr. at 1074.) Agent Cooper told the jury these three "facts" added up to arson.

1. At the fire's presumed origin, there was a "pour pattern."

2. The utility-room door was locked—but, as explained above, Firefighter Jenkins did not actually claim to know it was locked.[11]

3. A kerosene-soaked bedspread ran from the room towards the fire—but, as explained above, there was no proof of "soaking," and the contamination of the entire scene with kerosene explained it testing positive for the substance.[12]

(Ex. 11, Cooper, Trial Tr. at 804, 830-31, 833-34, 840-42, 872.)

By the time of trial, the fire-science community recognized, in light of a study published in 2001, that "the presence of floor [charring] patterns in a [room], which experienced post-flashover conditions, is not a reliable indicator of the presence of an ignitable liquid introduced as an accelerant." (Ex. 1, Lentini Aff. at 23.) That is, it was recognized that, since during

[11] Record evidence supporting the fact that the door was not locked: Ex. 11, Jenkins, Trial Tr. at 398, 406-07, 415-19; Ex. 11, Miller, Trial Tr. at 665; Ex. 11, Cooper, Trial Tr. at 874; Ex. 11, Bayne, Trial Tr. at 1020.

[12] Record evidence supporting the fact that the bedspread was not reliable proof of anything: Ex. 12, Porter Report, Trial Ex. 52 at 1; Ex. 11, Porter, Trial Tr. at 903; Ex. 11, Miller, Trial Tr. at 638-39; Ex. 11, Roland, Trial Tr. at 713; Ex. 11, Goodman, Trial Tr. at 969; Ex. 11, Bayne, Trial Tr. at 1034; Ex. 11, Cooper, Trial Tr. at 810, 822-23. Indeed, it bears emphasis that Agent Cooper himself had to admit that the firefighting water pooled on the floor next to the bedspread had kerosene in it. (Ex. 11, Cooper, Trial Tr. at 823.)

flashover every combustible surface can burn, the floor can be charred even absent use of an accelerant. (*Id.*)

Thus, at trial, Agent Cooper, who admitted the living room had burned beyond flashover, conceded that heat radiating down from the ceiling and filling the room (*i.e.,* radiant heat) could have burned the floor and caused charring. (Ex. 11, Cooper Trial Tr. at 811, 853-55.) But he was adamant that he could, by visual interpretation alone, tell that certain charring was a "pour pattern" caused by igniting an accelerant. (Ex. 11, Cooper, Trial Tr. at 830-31, 860-62; *see also id.* at 779-80, 797, 814-15, 840, 865.) He testified he could tell the difference because an accelerant fire's charring would be irregular and deep:

> Q: Now, how can you distinguish between radiant heat and heat [*sic*] and charring that's been created by pouring an accelerant on the floor?
>
> A: Again, radiant heat normally, normally, will burn, coming down the ceiling down, uniformly, even. **A pour pattern will be irregular and into the floor** into the wooden materials.

(*Id.* at 811 (boldface added).) He continued.

> Q: Yes, sir. That area right there [that you have labeled] a pour pattern. What is your scientific basis for [deciding that area is a pour pattern]?
>
> A: . . . This [area] was irregular. And again, looking at the fire and myself collecting, seeing, a V-pattern on baseboard, and everything. This stood out. And, from my experience, training, this is a pour pattern.
> I have set fires, Mr. Scott [defense counsel], pouring things. **I have spilt things to see the difference in accidental spill and a deliberate pour.** I have talked to other investigators, where they call radiant heat arson. They call it a pour pattern. **Through my training I can make that distinction from pour pattern versus radiant heat** . . .

(Ex. 12, Cooper, Trial Tr. at 830 (boldface added).) He repeated: "if I'm proven wrong I will admit I am wrong. But on this one, no, sir. **I was there.**[13] **I saw it with my own eyes. And, I know the difference in radiant heat and a pour pattern**, sir." (*Id.* at 831 (boldface added). *See also id.* at 779-80 (testifying he can tell the difference between a deliberate and accidental fire because the former will produce a "jagged pour pattern"); *id.* at 815 (agreeing with questioner that the fire was started "in this jagged-looking area").)

In a similar vein, Agent Cooper emphasized that the V-pattern charring on the baseboards because "a V-pattern indicates to an investigator, that's where the fire started[.]" since "[f]ire burns, normally, up and out." (Ex. 11, Cooper, Trial Tr. at 789.) He testified that the V-pattern was "**like a red flag waving at you.**" (*Id.* at 789 (boldface added); *see also id.* at 799, 814.)

Defense counsel presented the testimony of Stuart Bayne, an expert in fire science, who gave a competing expert opinion. Bayne opined the fire started from a smoldering cigarette in the loveseat; that no kerosene was involved; that there was nothing that could be called a "pour pattern;" and that Mr. Garrett and Ms. Lance were burned while in the living room together, but that Ms. Lance panicked and retreated to the utility room. (Ex. 11, Bayne, Trial Tr. at 995, 1008, 1010, 1018.) Bayne mainly testified that the similarity in Mr. Garrett's and Ms. Lance's burns proved they were both exposed to the fire together and that it was "impossible" for Ms. Lance to incur those burns in the utility room. (*Id.* at 1012; *see also* 989, 995, 1006, 1024.)

So the jury was allowed to choose between the opinions of two witnesses who had testified to expert opinions. Agent Cooper claimed to be "neutral" since he didn't "have a dog in

[13] At the time Agent Cooper "was there," *viz.*, 1992, he had no reason to be trying to distinguish between flashover charring and accelerant charring since, at that time, the studies showing that flashover fires could burn the floor had not even been conducted.

this fight," and the prosecutor painted Mr. Bayne as biased since he was paid. (Ex. 11, Cooper, Trial Tr. at 891; Ex. 11, Seaborg, Trial Tr. at 1037.)

The jury did have some other evidence to consider. Dr. Harlan testified that Ms. Lance *might* have received the burns while in the utility room, but when pressed she was unable to explain why she thought there might be enough heat in that room to cause such burns and why, if the heat in the room sufficed to burn Ms. Lance, she didn't blister everywhere. (Ex. 11, Harlan, at 333, 338 ("I'm not an expert on how hot the hot has to be . . ."), 348.) The jury also heard from the husband and son of Ruby Alcorn who claimed Mr. Garrett sprang into action only when he saw them coming. (Ex. 11, M. Alcorn, Trial Tr. at 203; Ex. 11, B. Alcorn, Trial Tr. at 270.) But that story conflicted sharply with their initial written statements, which mentioned no such suspicious behavior, and it also conflicted partially with their prior trial testimony. (Ex. 11, M. Alcorn, Trial Tr. at 249-52; Ex. 11, B. Alcorn, Trial Tr. at 301-03.) *See* Beety, *Evidence on Fire*, p. 14 n.7 *supra.* Their story also conflicted with the testimony of Ruby Alcorn, who certainly saw Mr. Garrett first and was certain she saw him jumping up and down yelling "Lorie!" (Ex. 11, R. Alcorn, Trial Tr. at 922, 925.)

The jury found Mr. Garrett guilty of first-degree murder, triggering a mandatory sentence of life. *State v. Garrett,* 2005 WL 3262933, *1 (Tenn. Crim. App. Dec. 1, 2005). The conviction was sustained on appeal. *Id.*

VIII. New scientific evidence has developed since the 2003 trial that utterly and authoritatively refutes Agent Cooper's opinions.

Since 2003, there have been at least four major developments in the scientific study of fire origins that combine to conclusively prove Agent Cooper's conclusion was wrong and that, moreover, his putative expert testimony would be inadmissible at a trial.

Recall that Agent Cooper's opinion that the fire was set intentionally was based on: (1) the idea that, by visual interpretation, he could tell the charring was caused by a fire that was deliberately set with an accelerant, rather than the radiant heat from flashover, because the charring's pattern was irregular; (2) the idea that he could tell the same thing because the charring was deep; and (3) the idea that the V-patterns at the baseboard were "red flags" of arson. Thus, he thought he could pinpoint the fire's origin to that one particular spot in the room (where there was no, *e.g.*, electrical outlet to start a fire) and to that particular cause, which was intentional and criminal. He also thought he could accept Firefighter Jenkins's long-after-the-fact statement about difficulty opening the door as conclusive proof the door was locked. As shown below, five developments refute each of these five ideas.

A. The 2004 rejection of the "visual interpretation" of "pour patterns"

NFPA 921 is the authoritative manual guiding investigations into the origin of a fire. (Ex. 1, Lentini Aff. at 12-14.) NFPA 921 mandates that investigators follow the scientific method, and its guidance rests on authoritative scientific studies. (*Id.*)

In 2004, the new edition of NFPA 921 expressly told investigators to avoid even using the term "pour pattern." (*Id.* at 20.) It did so because scientific studies had established that "'fire patterns resulting from burning ignitable liquids *are not visually unique*'" and hence certain charring patterns would not mean that a fire was started with an accelerant. (*Id.* (quoting 2004 edition of NFPA 921).) NFPA 921 stated that the determination whether an "'irregular pattern'" was caused by an accelerant fire or a radiant-heat fire "'should not be made by visual interpretation of the pattern alone.'" (*Id.*)

This change to NFPA 921 put to rest the notion that an investigator, as Agent Cooper claimed to have done, could tell a fire was started using an accelerant simply by relying on

expert powers of "'visual interpretation of the pattern.'" (*Id.*) And, specifically, an investigator cannot decide charring was caused by an accelerant-initiated fire based simply on it being irregular. This scientific development refuted a fallacy central to Agent Cooper's analysis: he could not actually tell, by seeing an irregular pattern, that the fire was started with an accelerant.

B. The 2005 federal study showing radical uncertainty after flashover

From 2005 to 2007, the federal Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) conducted a series of studies of fires burning in rooms to flashover. (Ex. 1, Lentini Aff. at 23-27.) Their findings "marked a major turning point in our understanding of fire behavior, as well as our understanding of the accuracy of fire origin determinations." (*Id.* at 23.)

The ATF study tested investigators to see if, after a fire went to flashover for two or three minutes, they could determine by visual inspection in which quadrant of the room the fire had started. (*Id.* at 24-27.) In the first study, only 3 of the 53 investigators identified the correct quadrant. (*Id.* at 24.) In the second study, 25% of the investigators identified the correct quadrant. (*Id.* at 27.) Of course, since there were only four quadrants, by being right 25% of the time they did "**no better than would be expected if the investigators had chosen the quadrant at random.**" (*Id.* (boldface in original).)

This study showed the radical uncertainty in determining, after flashover, where in a room the fire had started. As Lentini has explained, the "main problem with determining the wrong [point of] origin" of a fire, "is that the ignition source will not be there." (*Id.* at 25.) "Finding an origin without an accidental ignition source will lead investigators who do not understand science to conclude that somebody must have placed some fuel at that origin and ignited it with an open flame." (*Id.*) This is the error that Agent Cooper committed as he confidently decided the fire had started at a particular spot on the living-room floor, where, *e.g.*,

there was no electrical outlet to fail.[14] Thus, this scientific study refuted another fallacy central to Agent Cooper's analysis: his confidence in pinpointing the fire's origin was groundless.

C. The 2013 National Institute of Justice study on the depth of charring

In a study funded by the National Institute of Justice, researchers "learned . . . that ignitable liquids only burn for a very short time" and consequently the charring they cause is *not* deep. (Ex. 1, Lentini Aff. at 27.) This study was incorporated into NFPA 921 in 2014. (*Id.*)

The upshot of this study is major for Mr. Garrett's case. "The charring shown in . . . photos [of his living-room floor] is too deep to have been caused by the short-lived fire produced by burning kerosene." (*Id.*) "Thus, not only was it impossible for Agent Cooper to accurately characterize the charring as caused by something other than radiant heat, it is possible to state that **the charring could not have been caused by an ignitable liquid**." (*Id.* at 28 (boldface added).) In short, this scientific study refuted another fallacy central to Agent Cooper's analysis: he was wrong to think the depth of the burns indicated the use of an accelerant because, to the contrary, the depth indicated the fire was *not* caused by an accelerant. This development tended to affirmatively prove the cause of the fire was *not* kerosene.

D. The 2019 Underwriters Laboratories study on ventilation

From 2016 to 2019, Underwriters Laboratories, a global safety certification company seeking to advance public safety, conducted a series of full-scale fire tests that established "that once a fire becomes fully involved [*viz.*, reaches flashover], the oxygen concentration in all but the lowest levels of the room drops to the point where flaming combustion can no longer be

[14] Nor, by the time Cooper investigated, was there a loveseat in that location that could have harbored a smoldering cigarette. But that was true only because Fire Marshal Porter had removed all the furniture, shoveled out all the debris, and sprayed the house down with water before Cooper was even involved.

supported." (Ex. 2, Lentini Supp. Dec. at 5 (italics in original).) That means that "[n]ot only does *radiant heat* [from flashover] cause floors to burn like the floors in the Mr. Garrett residence, the *lack of oxygen* in a fully involved room means that **only** the floor can burn once a room is fully involved [*viz.*, reaches flashover]." (*Id.* (boldface in original).) This study showed that because the fire in Mr. Garrett's house reached flashover, charring on the floor—even absent an accelerant—is virtually inevitable. Likewise, the V-patterns on the baseboard—showing fire burning up from the floor—were likewise virtually inevitable. (*Id.* at 5-6.) This scientific study refuted another fallacy central to Agent Cooper's analysis: Cooper was wrong to claim those V-patterns were "red flags" signaling arson. (*Id.*)

E. The 2019 carbon-deposit experiment

Dr. Candace Ashby is a professional firefighter and a fire investigator. (Ex. 4, Ashby Report at 1.) She became involved in Mr. Garrett's case when a television producer sought her review of the file. In 2019, she conducted an experiment that recreated the conditions of the fire in Mr. Garrett's house. To that fire she exposed two boards with two locks like the one from Mr. Garrett's utility-room door. (*Id.* at 1.) One lock was in the closed position; the other in the open position. (*Id.*) The results of that test, coupled with photographs of the lock from the fire scene, indicated that the lock on Mr. Garrett's door "would have been in the unlocked or open position." (*Id.*)

This scientific experiment refuted another fallacy that Agent Cooper believed "crucial." Ex. 11, Cooper, Trial Tr. at 841.) Cooper was wrong to believe the door was locked, and he was wrong to accept as true Firefighter Jenkin's long-after-the-fact and equivocal statement on the subject as proof that significantly inculpated Mr. Garrett. (*Id.* at 875.) This experiment showed the door was unlocked and that the State's theory of guilt rested purely on falsehoods.

F. The present consensus of experts in the field

The foregoing post-trial scientific developments have established that Agent Cooper's claim to have supreme powers of visual interpretation was utterly misguided. The irregularity of the charring meant nothing; the depth of the charring indicated an accelerant was *not* involved; and the V-patterns were virtually inevitable after flashover. Nor could Agent Cooper pinpoint the origin of the fire to the location of the putative pour pattern, where there was no electrical outlet or other obvious source of accidental fire. Indeed, he could not pinpoint the origin even if investigating a properly preserved scene, yet he investigated a scene that was seriously contaminated by hosing it down with a leaky container present and by removing all the furniture and debris. These studies show Cooper's opinion was not based on science or reliable expertise, but instead on wrongheaded fallacies.

In light of these post-trial developments and other factors, many highly accomplished and renowned fire experts agree about the proper assessment of the fire in Mr. Garrett's home. These experts have thoroughly reviewed all available information and they have addressed the supposedly inculpatory evidence piece-by-piece. They all agree that the fire cannot possibly be called arson, and they all agree that Agent Cooper's investigation was utterly inadequate and his opinion utterly wrong. The experts are the following.

1. John Lentini

John Lentini was a principal member of the committee that publishes NFPA 921 from 1996 to 2017. (Ex. 1, Lentini Aff. at 3; *see* Ex. 3 Lentini CV.) He has chaired and served on many high-profile boards responsible for studying and establishing national guidelines for fire investigation. (*Id.*) He issued his initial report in 2016. He has concluded, among other things: (1) "the proper classification of this fire is undetermined"; (2) the "absence of kerosene on Mr.

Garrett's clothing strongly indicates that he did not distribute kerosene;" (3) the "door to the utility room where Ms. Lance was found was open at the time of the fire," as shown by a study of carbon deposits on the lock. (Ex. 1, Lentini Aff. at 6, 29-31.) He supplemented his report in 2021 regarding the ventilation study described above, which further confirmed his findings. (Ex. 2, Lentini Supp. Dec.)

2. Dr. Craig Beyler

Dr. Craig Beyler holds a Ph.D from Harvard University in Engineering Sciences. (Ex. 7, Beyler CV at 1.) He has served as chair of the International Association for Fire Safety Science, chair of the Society of Fire Protection Engineers, and has served on many governmental evaluation boards, including the National Academy of Science. (*Id.*) Working free of charge, he issued his report in 2016. He has concluded the following. There "was never any possibility of Agent Cooper conducting a complete fire investigation because most of the available data had been destroyed by [Fire Marshal] Porter." (Ex. 6, Beyler Report at 8.) "The presence of kerosene petroleum distillates [in the living room and kitchen] is consistent with loss of kerosene from the container in the kitchen and movement of the kerosene via firefighting water." (*Id.* at 12.)[15] Agent Cooper was flat wrong to think the irregular floor patterns indicated an accelerant was used. (*Id.* at 7.) Cooper was likewise wrong to assume the amount of kerosene present at the scene was large. (*Id.* at 8.) The carbon deposits on the utility-room door latch are "indicative of the latch having been in the open position during fire exposure." (*Id.* at 9.) The medical examiner, Gretel Harlan, lacked the requisite "expertise" to determine whether Ms. Lance

[15] *See also* John Black, Justin Geiman, Raymond Kuk, *The Possibility of Ignitable Liquid Contamination in Flooded Compartments*, Fire & Arson Investigator, at 30-31 (July 2016) (reporting, based on empirical study, that it is "clear" that "ignitable liquids in a flooded compartment can be re-distributed to other materials within the compartment," making it "very difficult for a fire investigator to collect a proper comparison sample") (attached as Ex. 19).

incurred her burns in the utility room, and the "directional" nature of those burns is "not consistent with having been caused in the utility room." (*Id.* at 10.) The fire could have been caused by "electrical equipment" or "discarded smoking materials," and thus "[g]iven that there are multiple accidental fire causes that cannot be eliminated, the fire cause must be considered undetermined." (*Id.* at 12." Moreover, "[s]ince there are no incendiary [intentional] fire causes consistent with the available data and several accidental fire causes are consistent with the available data, the proper fire cause classification is accidental." (*Id.*)

3. Dr. Candace Ashby

As mentioned, Dr. Candace Ashby is a professional firefighter and a fire investigator. (Ex. 4, Ashby Report at 1; *see* Ex. 5, Ashby CV.) In addition to conducting the experiment that proves the utility-door was unlocked, she reviewed the case file. She agreed that the cause of the fire must be deemed undetermined, and that Ms. Lance must have incurred her burns before going in the utility room. (Ex. 4, Ashby CV at 2, 12.) As a professional firefighter, she opined that she "did not find the actions of Mr. Garrett to be out of the ordinary as a victim of a house fire." (*Id.* at 13.) She also opined that firefighters must have "originally reported the [utility-room] door was unlocked." (*Id.* at 12.) "If a firefighter had to disengage a lock to open a door, then discovered a victim behind that locked door, he/she would have reported that discovery immediately to supervisors, the incident commander, and investigators." (*Id.*) The fact that did not happen "further substantiates" that the door was unlocked. (*Id.* at 13.)

4. Dr. John DeHaan

Dr. John DeHaan has worked as a forensic scientist for 43 years, is a former principal member of NFPA 921 committee, and is a lecturer at the University of California at Davis. (Ex. 9, DeHaan CV.) Working free of charge, he issued his report in 2021. (Ex. 8, DeHaan Report.)

He focused on comparing the burns incurred, respectively by Mr. Garrett and Ms. Lance. Based on his comparison and his expertise in the field, he opined that "both Claude Garrett and Lorie Lee Lance were exposed to the same heat and fire conditions during the fire . . . as their injuries were very similar." (*Id.* at 5.) He opined their injuries were consistent with Mr. Garrett's story that they encountered the fire in the living room at the same time. He further opined that the "injuries to Ms. Lance *would not be at all consistent* with her having been trapped in the small storeroom for the entire duration of the fire as the room evinced no fire penetration at all." (*Id.* (italics added).)

5. Summation

The upshot is this: Agent Cooper's investigation was utterly inadequate from the start. Cooper's methodology was not based in science or any reliable expertise, and his conclusions, although expressed with complete confidence, were completely wrong. Moreover, if a trial were held today, his testimony would be inadmissible because not based on specialized knowledge helpful to a jury. Tenn. R. Evid. 702. Modern scientific developments have thoroughly and authoritatively debunked the theory created by Agent Cooper and used to persuade the jury to convict Mr. Garrett. *See generally State v. Ballard,* 855 S.W.2d 557, 561 (Tenn. 1993) ("expert testimony solicits the danger of undue prejudice or . . . misleading the jury because of its aura of special reliability and trustworthiness").

IX. No court has fully and fairly considered these scientific developments.

Over the past three decades, Mr. Garrett has made many efforts to prove his conviction wrongful, but none presented both the evidence and claims now presented, and no court has given full and fair consideration to the significance of this collection of post-trial scientific developments and evidence.

A. Initial postconviction petition

In 2007, Mr. Garrett filed a postconviction petition that was denied by this Court acting through Judge Norman in 2010, and by the Court of Criminal Appeals in 2012.

Mr. Garrett's leading claim, and the only claim he pursued on appeal, alleged that his trial counsel had provided ineffective assistance, primarily by failing "to present evidence that in the ten years between the first and second trials, the methods by which the State's expert witness [Agent Cooper] reached his conclusion of arson had been discredited by the scientific community." *Garrett v. State*, 2012 Tenn. Crim. App. LEXIS 700, *46 (Tenn. Crim. App. Sept. 5, 2012). To prove that claim, Mr. Garrett presented the testimony of John Lentini. (Ex. 20, PC Hr'g Tr. at 124-45.) Lentini's testimony was brief: apart from reviewing his credentials and experience, he testified on direct examination for a total of eight pages. (*Id.* at 132-40.) He testified that NFPA 921 became the "standard of care for fire investigation" shortly prior to the 2003 trial and that it was error for Agent Cooper to believe he could "by looking at the floor, determine the difference between charring done by radiation and charring caused by a flammable liquid." (*Id.* at 135, 139.) Lentini did not describe, and Mr. Garrett did not otherwise present proof of, any scientific development or experiments that transpired after the 2003 trial, except to mention that in 2009, the National Academy of Science had said that more "research [wa]s needed" into various possibly faulty principles of fire science. (*Id.* at 136.) *See Garrett,* 2012 Tenn. Crim. App. 700 at *37 (quoting trial court's finding that Lentini's statements were too generalized to be significant). As reflected by Mr. Garrett's focus during his appeal, his presentation of scientific standards and evidence in this Court was directed at proving that his trial counsel had failed to effectively use the scientific standards and evidence already available at the time of trial in 2003. *Garrett*, 2012 Tenn. Crim. App. LEXIS 700 at *46-63. Moreover, his

claim focused on defense counsel's performance during the trial, essentially arguing that, if counsel had better used his expert resources, he could have won the battle of the experts. *Id.*

That claim failed. *Id.* On appeal, the Court of Criminal Appeals acknowledged that "[defense expert] Bayne was not questioned [at trial] specifically about NFPA 921, the evolving standards in fire investigation techniques, or about particular methodological errors in Cooper's investigation." 2012 Tenn. Crim. App. LEXIS 700 at *54. The Court "agree[d] with Petitioner that evidence of the changing standards in fire investigation methodology, to the extent they differed from Cooper's methodology, could have helped the Petitioner's case." *Id.* at *57-58. Yet it held trial counsel was not deficient for failing to bring those standards to bear because they were "evolving and unsettled." *Id.* at *56. Accordingly, it decided that, at the time of trial, experts could legitimately disagree whether one can tell by sight that post-flashover floor charring is a "pour pattern." *Id.* at *56-57. In other words, it decided there were, at the time of trial, "two possible interpretations of the burn patterns." *Id.* at *57. Thus, it concluded Mr. Garrett had not proven ineffective assistance by his lawyer at trial because, even had his lawyer brought the changing standards of fire investigation to bear, the jury still could have chosen Cooper's interpretation. *Id.*

Notably, although Mr. Garrett had asserted at the trial-court level that new scientific evidence established his innocence, he did not support that claim by citation to any legal authority, nor did he, as mentioned above, present any evidence of new scientific developments or experiments postdating his trial, and thus the claim was unsupported and not pursued on appeal. *See id.* at *37. Notably, Mr. Garrett's present claims of actual innocence and of a due-process violation rest on his new scientific proof that today it is *impossible* for an expert to interpret the floor charring and other evidence as establishing arson. *Cf. Garrett,* 2012 Tenn.

Crim. App. LEXIS 700 at *57 (concluding based on the record before it that at trial there were "two possible interpretations" of the charring and evidence). That is, in light of these new developments and experiments, Mr. Garrett now shows that there is only *one* possible interpretation of the data from the fire: its cause and origin are undetermined.

B. Motion for Writ of Coram Nobis and Motion to Reopen

In March 2017, Mr. Garrett filed a motion for a writ of error coram nobis and a motion to reopen his postconviction petition, each of which was adjudicated by this Court, again through Judge Norman. The Court summarily denied each motion twenty days after filing without response from the State. (Ex. 21, Order at 1.) The Court did not hold a hearing. (*Id.*)

The Court denied relief based on the premise that the new reports from experts were merely new opinions that reiterated, without any basis in new science, the opinion that Lentini had already given in the initial postconviction proceeding. (Ex. 21, Order at 2-3.) The Court did not address, and evidently did not notice, that Lentini's 2016 report explained the relevance of new, post-trial scientific developments and experiments. Because the Court summarily denied relief without a hearing, Mr. Garrett was not given the chance to disabuse the Court of its belief that the reports were just reiterated opinions.

When Mr. Garrett appealed, the Court of Criminal Appeals accepted this Court's premise that the reports contained "merely new opinions on already-presented evidence." *Garrett v. State,* 2018 Tenn. Crim. App. LEXIS 312, *33 (Tenn. Crim. App. Apr. 26, 2018) (denying appeal of denial of coram nobis relief). (Ex. 22, Order at 6 (denying permission to appeal the denial of Mr. Garrett's motion to reopen because Mr. Garrett supposedly relied on "nothing more than the opinions of experts" regarding already-presented evidence).)

But as explained in Section VIII *supra*, there are five post-trial scientific developments or experiments that prove Agent Cooper's opinion was utterly unreliable and wrong. Two of these scientific studies date from 2019, and thus they postdate Mr. Garrett's effort at relief in 2017. Plus another study dates from 2013, postdating his initial post-conviction litigation. All five postdate the trial. No court has reviewed these studies and developments and determined their impact on Agent Cooper's reliability. Nor has any hearing been held where Mr. Garrett could present this new evidence. Yet the evidence developed and gathered over the decades since trial makes it completely clear that Agent Cooper's opinion about the pour pattern was wrong, as were his assessments regarding the rest of the evidence, which actually supported, rather than contradicted, Mr. Garrett's own story. It is now completely clear the fire was not set intentionally and Claude Garrett is innocent. He is entitled to a hearing and to relief.

ARGUMENT

Pursuant to Tenn. Code Ann. § 40-30-117(a)(2), Claude Garrett presents two claims that mandate vacating his conviction. First, based on new scientific evidence, Mr. Garrett presents a freestanding claim of actual innocence that need not be tied to any independent constitutional violation. Second, he presents a claim that his state and federal due process rights have been violated because his conviction was predicated on unreliable and false scientific evidence. *See* Tenn. Const. Art. 1, § 8; U.S. Const. Amends. V, XIV. The gist of each claim is the same: an innocent man was wrongfully convicted because at the time of the trial, crucial scientific evidence did not exist and the State's key witness relied on methods and beliefs that no expert could possibly hold today. If a jury were presented with *accurate* scientific evidence regarding Mr. Garrett's case, it would certainly acquit him.

Postconviction relief is available "when the conviction or sentence is void or voidable because of the abridgement of any right guaranteed by the Constitution of Tennessee or the Constitution of the United States." Tenn. Code Ann. § 40-30-103. A petitioner bears the burden of proving the allegations of fact in his postconviction petition by clear and convincing evidence. Tenn. Code Ann. § 40-30-110(f). "'Clear and convincing evidence means evidence in which there is no serious or substantial doubt about the correctness of the conclusions drawn from the evidence.'" *State v. Holder*, 15 S.W.3d 905, 911 (Tenn. Crim. App. 1999) (quoting *Hodges v. S.C. Toof & Co.*, 833 S.W.2d 896, 901 n.3 (Tenn. 1992)).

I. The Court should reopen Mr. Garrett's case in light of new scientific evidence showing he is actually innocent and it should vacate his conviction.

Section 40-30-117(a)(2) allows a petitioner to file a motion to reopen a previous post-conviction petition "if the following applies:" "[t]he claim in the motion is based upon new scientific evidence establishing that the petitioner is actually innocent of the offense or offenses for which the petitioner was convicted," and it "appears" there is "clear and convincing evidence" that the conviction must be set aside. Tenn. Code Ann. §§ 40-30-117(a)(2), (4). Simply put, § 40-30-117(a)(2) "allows a petitioner to reopen the first post-conviction petition by claiming actual innocence based on new scientific evidence." *Dellinger v. State*, 279 S.W.3d 282, 291 (Tenn. 2009). "New" evidence in the context of actual-innocence litigation just means evidence "that was not presented at trial." *Schulp v. Delo,* 513 U.S. 298, 324 (1995); *accord Jones v. Calloway*, 842 F.3d 454, 461 (7th Cir. 2016) ("'New evidence in this context does not mean 'newly *discovered* evidence'; it just means evidence that was not presented at trial." (italics in original)). "Actual innocence" means "that the person in question truly did not commit the crime for which they have been convicted." *Keen v. State*, 398 S.W.3d 594, 610 (Tenn. 2012).

Mr. Garrett presents, and supports with evidence, precisely such claims in his motion to reopen. As set forth above, he has identified new scientific evidence that was not presented at trial and that, moreover, was not even available at the time of trial because it consists of post-trial scientific developments and experiments. His claims are based primarily on that new scientific evidence which shows that he "did not commit the crime for which [he has] been convicted," *id.*, since it shows there was, in fact, no crime committed. The Court should address his claims.

As mentioned, he presents two claims, and asks that the Court grant one or both of them. First, as expressly authorized by the Tennessee Supreme Court, he presents a "freestanding claim of actual innocence based on new scientific evidence." *Dellinger*, 279 S.W.3d at 290. Second, he presents a claim that his conviction violates due process because it was based on false and flawed scientific testimony that rendered his trial fundamentally unfair. *See generally Waterford v. State*, No. M2017-1968-CCA-R3-PC, 2018 Tenn. Crim. App. LEXIS 772, *49 (Tenn. Crim. App. July 17, 2018). Below, Mr. Garrett explains these two options as he proceeds under each.

A. Freestanding claim of actual innocence

In *Dellinger,* the Tennessee Supreme Court established that, in either an initial postconviction petition or a motion to reopen, a petitioner can raise a freestanding claim of actual innocence based on new scientific evidence that can succeed without showing any independent constitutional violation. *Dellinger,* 279 S.W.3d at 290; *see generally Herrera v. Collins,* 506 U.S. 390, 416-17 (1993) (discussing the possibility of a freestanding claim of actual innocence). But when it did so, the *Dellinger* Court did not elaborate on the precise standard that a petitioner must meet to prove actual innocence. *Id.* at 291.

Twelve years after the advent of *Dellinger,* the standard still is not crystal clear. But, as indicated by unpublished decisions of the Tennessee Court of Criminal Appeals, the highest

standard that could be applicable here would be the following: "To establish his 'actual innocence,' a petitioner must establish by clear and convincing evidence that no jury would have convicted him in light of the new evidence." *Cribbs v. State,* No. W2006-01381-CCA-R3-PD, 2009 Tenn. Crim. App. LEXIS 524, *97 (Tenn. Crim. App. July 1, 2009); *accord Brown v. State*, No. M2013-00825-CCA-R3-PC, 2014 Tenn. Crim. App. LEXIS 1014, at *51 (Crim. App. Nov. 6, 2014). As *Cribbs* made clear, this standard is surmountable, and it is considered an intermediate standard by the courts that *Cribbs* cited approvingly. *Id.* at *97-98 (citing *Ex parte Elizondo*, 947 S.W.2d 202, 209 (Tex. Crim. App. 1996); *Miller v. Comm'r of Corr.*, 242 Conn. 745, 700 A.2d. 1108, 1132 (Conn. 1997); *State ex rel Amrine v. Roper*, 102 S.W.3d 541, 548 (Mo. 2003); *Montoya v. Ulibarri*, 2007 NMSC 35, 142 N.M. 89, 163 P.3d 476, 483-86 (N.M. 2007)); *see also* Tenn. Code Ann. 40-30-117(a)(4) (requiring petitioner to prove eligibility under motion to reopen by "clear and convincing" evidence). That somewhat lenient standard is appropriate because state courts have a "particular interest in ensuring accuracy in criminal convictions in order to maintain credibility within the judiciary." *Montoya*, 163 P.3d at 483 (citations omitted). Due to that interest, relief is certainly warranted when a petitioner can "make a clear and convincing showing of actual innocence that undermines confidence in the correctness of the judgment." *Roper*, 102 S.W.2d at 548.

That same interest would militate in favor of adopting an even less stringent standard, which is the one commonly used in federal litigation regarding claims of actual innocence and which the Illinois Supreme Court has adopted. Under that standard, a petitioner must prove that "more likely than not, in light of the new evidence, no reasonable juror would find him guilty beyond a reasonable doubt." *House v. Bell*, 547 U.S. 518, 538 (2006); *see People v. Washington*, 665 N.E.2d 1330, 1337 (Ill. 1996) (petitioner must show actual innocence "of such conclusive

character as would probably change the result on retrial"). That standard can be stated more simply by removing the "double negative": a petitioner must prove "that more likely than not any reasonable juror would have a reasonable doubt." *House,* 547 U.S. at 538.

Mr. Garrett satisfies both of the foregoing standards. If Mr. Garrett's jury were presented the new scientific evidence that is available now, no reasonable jury would find him guilty beyond a reasonable doubt. That is clear because the government would simply have no proof sustaining its burden of proving its theory beyond a reasonable doubt. First, Agent Cooper could not testify to the cause of the fire because, in light of all the advances in fire science and investigation, his claim to expertise is bankrupt. He simply lacks specialized knowledge that would assist the jury. Tenn. R. Evid. 702.[16] Consequently, the State would not be able to present anyone to give admissible expert testimony asserting that the fire was started intentionally, and so the jury would be faced with a fire whose origin was unknown. Worse yet for the State's case, a defense expert could reliably testify that the depth of the burns shows they were *not* caused by burning an accelerant.

Second, Firefighter Jenkins's belated and equivocal statements about the position of the sliding lock would utterly fail to signal guilt because (1) scientific analysis shows that the lock was unlocked, and (2) Jenkins initially said it was unlocked and never claimed to have actual knowledge of it being locked.

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[16] An investigator, regardless his experience and training, must be prevented from testifying as to the cause of a fire in a jury trial unless he shows his investigation of the fire at issue complied with the scientific method and with NFPA 921. *Chester Valley Coach Works v. Fisher-Price, Inc.,* 2001 U.S Dist. LEXIS 15902, *25 (E.D. Pa. Aug. 29, 2001); *see also Indiana Ins. Co. v. GE,* 326 F. Supp. 844, 849-54 (N.D. Ohio 2004); *Fireman's Fund Ins. Co. v. Canon USA, Inc.,* 394 F.3d 1054, 1059 (8th Cir. 2005).

Third, the bedspread that appeared belatedly near the utility-room door would tend to prove nothing because scientific analysis indicates that it, like everything else hosed down by firefighters, was probably sullied with kerosene leaking from the melted canister. Indeed, it was found next to firefighting-water that was pooled up with kerosene on its surface.

Fourth, Agent Cooper's belatedly-taken samples showing kerosene by a baseboard and elsewhere mean nothing: again, scientific analysis indicates those areas were probably sullied with kerosene during the hose-down, and moreover, the more reliable samples that were taken initially by Fire Marshal Porter showed the *absence* of kerosene from the key locations and from Mr. Garrett himself.

Fifth, the burns on Lorie Lance's body reveal that she was burned while *outside* the utility room, which is a fact consistent with Mr. Garrett's account but inconsistent with the State's theory.

The bottom line is that Mr. Garrett was convicted on this theory: "the Petitioner light[ed] his residence on fire after locking the victim, his girlfriend in a utility closet." *Garrett v. State*, No. M2017-1076-CCA-R3-ECN, 2018 Tenn. Crim. App. LEXIS 312, *2 (Tenn. Crim. App. Apr. 26, 2018). But in light of today's scientific analysis, there is no evidence to support that theory. Indeed, meaningful evidence *affirmatively refutes* it.

Finally, it bears emphasis that the State's theory never made sense to begin with. How exactly did Mr. Garrett supposedly force Ms. Lance into the room without her being drugged or incurring any injury reflective of a struggle? If he really did lock her in the room, why didn't she just kick her way out since the lock could easily be broken that way? Why would Mr. Garrett set

the fire in a way that caused him to suffer serious burns?[17] He did in fact shout "Lorie" so loud as to wake his neighbor—but why would he do that if he had actually set the fire? Indeed, the absence of any residue of an accelerant on Mr. Garrett's clothing strongly undercut the State's theory, as did the fact that all the initial samples were negative for kerosene even though they should have been positive had kerosene been used to start the fire. Simply put, the State's theory was always implausible. The State counteracted that implausibility by invoking Agent Cooper and his complete confidence in his own bogus expertise. *See State v. Ballard,* 855 S.W.2d 557, 561 (Tenn. 1993) ("expert testimony solicits the danger of undue prejudice or . . . misleading the jury because of its aura of special reliability and trustworthiness"). On a record cleansed of false scientific evidence and false "expert" testimony, it is completely clear that a reasonable juror would have to harbor, at the very minimum, reasonable doubt against guilt. (*See also* Statement of Facts, Section VIII *supra.*) Thus, Mr. Garrett easily satisfies his burden of proving actual innocence under each of the possible standards for a *Dellinger* claim. This Court should find both standards met, and it should reopen his petition and grant substantive relief by vacating his conviction.

B. Due process violation

A conviction is unconstitutional when an error—*e.g.,* the presentation of inadmissible evidence or argument—"so infected [the defendant's] trial with unfairness as to make the resulting conviction a denial of due process." *Darden v. Wainwright,* 477 U.S. 168, 181 (1986); *accord Cooper v. Sowders*, 837 F.2d 284, 286, 288 (6th Cir. 1988); *see Spencer v. Texas,* 385

[17] It is especially implausible that someone behaving as proposed by the State would severely burn him or herself since, as even Agent Cooper had to admit, kerosene does not, under ordinary conditions, flash back when ignited. (Ex. 11, Bayne, Trial Tr. at 1012; Ex. 11, Cooper, Trial Tr. at 869.)

U.S. 554, 563-64 (1967) ("the Due Process Clause guarantees the fundamental elements of fairness in a criminal trial."). Accordingly, a conviction violates the due process clause when it is predicated on what new scientific evidence has proven to be fundamentally unreliable expert testimony. *Lee v. Glunt*, 667 F.3d 397, 403, 407-08 (3d Cir. 2012); *Han Tak Lee v. Superintendent Houtzdale SCI*, 798 F.3d 159, 166 (3d Cir. 2015); *see Gimenez v. Ochoa,* 821 F.3d 1136, 1145 (9th Cir. 2016). In such a case, false and unreliable scientific evidence has "so infected" the trial as to render "the resulting conviction a denial of due process." *Darden*, 477 U.S. at 181.

In *Lee*, the Third Circuit addressed such a claim in circumstances similar to Mr. Garrett's. Lee was convicted in 1990 on a charge that he set a fire to kill his daughter. *Lee*, 667 F.3d at 400. Like the case at hand, jurors heard from fire investigators relying on now-debunked "scientific" principles, as well as a variety of non-scientific witnesses. *Han Tak Lee*, 798 F.3d at 168. Multiple witnesses testified that Lee's demeanor was not what they expected, saying he was "nonchalant," "calm," and lacked grief. *Id.* Prosecutors also asserted there were inconsistencies in Lee's statements following the fire. *Id.*

Years later, Lee continued to fight his conviction with new fire science that refuted trial testimony regarding the cause of the fire. The Third Circuit recognized that Lee might be able to show that his incarceration "is unconstitutional because his convictions are predicated on what new scientific evidence has proven to be fundamentally unreliable expert testimony, in violation of due process." *Id.* at 403. It pointed out that this constitutional claim was a due process claim, not a freestanding innocence claim. *Id.* at 403 n.5. Remanding for further proceedings, the court set forth the applicable constitutional test:

> If Lee's expert independent analysis of the fire scene evidence—applying principles from new developments in fire science—shows that the fire expert

> testimony at Lee's trial was fundamentally unreliable, then Lee will be entitled to federal habeas relief on his due process claim.

Id. at 407-08. Lee ultimately prevailed on this claim, as the courts decided that Lee had been plainly "'prejudiced'" by the admission of the flawed expert fire-science testimony and that the State lacked "'ample other evidence of guilt.'" *Han Tak Lee v. Superintendent Houtzdale SCI*, 798 F.3d 159, 166 (3d Cir. 2015) (quoting *Lee*, 667 F.3d at 403 & 407 n.13); *see Gimenez v. Ochoa*, 821 F.3d 1136, 1144 (9th Cir. 2016) ("We join the Third Circuit in recognizing that habeas petitioners can allege a constitutional violation from the introduction of flawed expert testimony at trial if they show that the introduction of this evidence 'undermined the fundamental fairness of the entire trial") (quoting *Han Tak Lee*, 798 F.3d at 162). Citing *Han Tak Lee*, the Tennessee Court of Criminal Appeals endorsed the view that a petitioner can prove a constitutional violation in these circumstances upon showing "the challenged conduct undermined the fundamental fairness of the entire trial." *Waterford*, 2018 Tenn. Crim. App. LEXIS 772 at *49.

As explained in Section VIII of the Statement of Facts *supra*, new scientific evidence has proven Agent Cooper's supposed expert testimony was fundamentally unreliable and, in fact, false. First, Cooper thought the irregular shape of the charring on Mr. Garrett's living-room floor meant the fire had been intentionally started with an accelerant. On the contrary, that irregular shape meant nothing. Second, Cooper thought the depth of the charring in Mr. Garrett's house signaled use of an accelerant. On the contrary, the depth showed the charring was *not* caused by an accelerant-fueled fire. Third, Cooper thought the V-patterns were "red flags" of arson. On the contrary, they were the virtually inevitable byproduct of the fire burning at flashover. Fourth, Cooper thought he could pinpoint the fire's origin, which would help him rule out other causes. On the contrary, his "pour pattern" claim was utterly unreliable and he could only guess at the

fire's origin, especially after the contamination of the scene. Fifth, Cooper thought he could rely on a statement as vague and sketchy as Firefighter Jenkins's to decide the lock was locked. On the contrary, scientific analysis of the lock proves it was unlocked—a fact entirely consistent with Jenkins's *initial* statement. Finally, Cooper thought the bedspread that tested positive for one-tenth of a drop of kerosene was significant, but to think that he had to ignore the fact the bedspread was next to firefighting water pooled up with kerosene on its surface. As in *Han Tak Lee*, the State's expert testimony regarding the origin of the fire has been proven to be plainly unreliable yet it "'constituted the principal pillar of proof tying Lee to the arson fire and death of his daughter.'" *Han Tak Lee*, 798 F.3d at 167 (quoting *Han Tak Lee v. Tennis*, 2014 U.S. Dist. LEXIS 110766, *7 (M.D. Pa. Aug. 7, 2014)). This deeply flawed expert testimony was highly prejudicial to Mr. Garrett.

As in *Lee*, there is not "ample other evidence of guilt." *Han Tak Lee*, 798 F.3d at 166 (internal quotation marks omitted). First, the neighbors and firefighters claimed, ultimately, that Mr. Garrett's behavior was suspicious in some respects. But their stories were of only marginal value at best, and, moreover, they changed over time. Second, as just discussed, firefighter Jenkins's equivocal and wavering statements fall far, far short of proving the door was locked: he never even claimed to *know* it was locked (having initially said it was unlocked), and now scientific evidence proves it was unlocked. Like the supposed "other evidence of guilt" in *Han Tak Lee*, this other evidence "was almost certainly colored by the now-debunked fire-science evidence." *Han Tak Lee*, 798 F.3d at 168. *See* Beety, *Evidence on Fire*, *supra* p. 14 n.7 (explaining how putative scientific evidence can alter perceptions and memories). As in *Han Tak Lee*, this other evidence is negligible and presents no barrier to relief. The Court should find that Mr. Garrett's conviction violates due process under both the Tennessee and federal constitutions.

II. No procedural bar prevents the Court from granting relief.

A post-conviction petitioner potentially faces three procedural hurdles: (1) waiver, (2) the doctrine of previous determination; and (3) timeliness. Mr. Garrett can clear all three.

A. Waiver, or procedural default

"A ground for relief is waived if the petitioner . . . failed to present it for determination in any proceeding before a court of competent jurisdiction in which the ground could have been presented[.]" Tenn. Code Ann. § 40-30-106(g). The waiver doctrine—also known as procedural default—does not apply to Mr. Garrett's present claims for at least three reasons.

First, Mr. Garrett has already established actual innocence. *See* Argument, Section I.A *supra.* Under doctrine set forth in *Van Tran v. State*, 66 S.W.3d, 790 (Tenn. 2001), his showing of actual innocence carries him over the waiver hurdle. The *Van Tran* Court reiterated that "'[t]he importance of correctly resolving constitutional issues suggests that constitutional issues should rarely be foreclosed by procedural technicalities.'" *Id.* at 799 (quoting *In re Adoption of E.N.R.*, 42 S.W.3d 26, 32 (Tenn. 2001)). Adhering to that principle, the *Van Tran* Court held it could address a petitioner's post-conviction claims raised in a motion to reopen based on new scientific evidence of actual innocence even though those claims had been waived. *Id.*; *Keen*, 398 S.W.3d at 607-08 (following *Van Tran* and excusing the apparent waiver because the petitioner presented new scientific evidence of actual innocence). *Cf. Van Tran*, 66 S.W.3d at 816 (Barker, J., dissenting) (explaining that the petitioner's claim "has been *waived* because the petitioner failed to raise it in his original post-conviction petition" but that nonetheless the majority excused the waiver due to constitutional concerns (italics in original)).

Second, the waiver doctrine will not apply if the State refrains from asserting the waiver defense. *Walsh v. State*, 166 S.W.3d 641, 645 (Tenn. 2005) ("we conclude that the State's waiver

argument has itself been waived" in postconviction context); *Yarbro v. State,* No. W2017-125-CCA-R3-PC, 2018 Tenn. Crim. App. LEXIS 704, *21 (Tenn. Crim. App. Sept. 17, 2018) ("because the State failed to object in the post-conviction court, it has waived its claim of procedural default in this court"); *see generally Miller v. Genovese*, 994 F.3d 734, 746 (6th Cir. 2021) ("When the state makes an 'explicit and deliberate waiver' of a procedural-default defense, we cannot revisit the issue."). Sound reasons explain this policy, such as allowing the prosecution to waive default if it recognizes that a petitioner is innocent or that it has an ethical obligation to correct a wrongful conviction. Here, it is reasonable to think the State will refrain from asserting the waiver defense since the State intends to agree Mr. Garrett should be granted relief in light of new scientific evidence. In that case, the State's waiver of waiver would serve as a second and independent reason why the waiver doctrine would be inapplicable.

Finally, even if the waiver doctrine were applicable, Mr. Garrett has not waived his claim because he did not have the chance to present a great deal of his new evidence in any previous litigation. Just as the field of fire science has made gradual advances over a period of many years, so too the new scientific evidence showing Mr. Garrett's innocence has mounted gradually over time. Thus, Mr. Garrett's present claim of actual innocence is based in significant part on evidence that has developed in recent years, including evidence developed after the litigation ending in 2018. As Lentini explains, the 2019 ventilation study proves that the charring on the living-room floor and the V-patterns which Agent Cooper took as "red flags" of arson were virtually inevitable after flashover and thus not even suggestive of arson. (Ex. 2, Lentini Supp. Report at 5-6.) This development is important to Mr. Garrett's claim because it refutes Agent Cooper's methods and conclusion. Likewise, the test that Dr. Ashby performed on the utility-room door lock in 2019 is a substantial development, establishing the lock must have been

unlocked. John DeHaan's new opinions, especially about Ms. Lance's burns, serve as important proof of Mr. Garrett's innocence. Due to these new developments, Mr. Garrett did not, in any event, waive his present claim.[18]

In sum, several doctrines independently make the waiver doctrine inconsequential here: Mr. Garrett's showing of actual innocence, the State's presumed waiver of this defense, and the fact that Mr. Garrett's has not actually failed to present it when possible.

B. The doctrine of previous determination

The courts usually do not address a claim that has been "previously determined." *See Allen v. State,* No. M2009-2151-CCA-R3-PC, 2011 Tenn. Crim. App. LEXIS 287, *22 (Tenn. Crim. App. Apr. 26, 2011); Tenn. Sup. Ct. R. 28, § 2(F)(4) (allowing for dismissal of a "previously determined" claim). A claim "is previously determined if a court of competent jurisdiction has ruled on the merits after a full and fair hearing." Tenn. Code Ann. § 40-30-106(h). "A full and fair hearing has occurred when the petitioner is afforded the opportunity to call witnesses and otherwise present evidence[.]" *Id.*; Tenn. Sup. Ct. R. 28, § 2(E) ("A claim for relief is previously determined if a court of competent jurisdiction has ruled on the merits of the claim after a full and fair hearing at which petitioner is afforded the opportunity to call witnesses and present evidence.").

This rule does not bar consideration of Mr. Garrett's claims of actual innocence based on the new scientific evidence he obtained in 2016 and later. That is so because when Mr. Garrett

[18] It bears mention that no court assessed the impact of the new scientific evidence that Garrett presented in his 2017 pleadings. That was not due to any "fail[ure]" on his part, Tenn. Code Ann. § 40-30-106(g), but rather due to the failure of this Court, acting through Judge Norman, to hold a hearing or to recognize that Lentini supported his new opinion with citation to specific, new scientific developments and experiments. *See* Statement of Facts, Section IX.B *supra.* Thus, Garrett has not waived his right to have the Court consider the substance of the new scientific evidence discussed in Lentini's 2016 report.

tried to present some of that evidence to this Court in 2017, his motions were denied summarily and thus without "a full and fair hearing." Tenn. Code Ann. 40-30-106(h). Indeed, as explained in the Statement of Facts, Section IX.B, *supra,* this Court erroneously assumed Lentini's report from 2016 was merely a new "opinion" but actually that report explained new, post-trial scientific developments and experiments that constitute new evidence, as Mr. Garrett could have made perfectly clear had he been afforded a full and fair hearing. Because he was not afforded any hearing, the 2017 litigation certainly did not "previously determine" his claims within the meaning of the postconviction statute. *See Draper v. State*, No. E2007-01485-CCA-R3-PC, 2008 Tenn. Crim. App. LEXIS 943, at *10-11 (Tenn. Crim. App. Dec. 5, 2008) (holding that the denial of a motion to reopen without holding a hearing did not amount to a "previous determination" because the petitioner was not afforded a full and fair hearing).

Nor did the litigation of Mr. Garrett's initial postconviction petition from 2007 to 2012 previously determine his present claims, although at that time he did receive a full and fair hearing. But in that litigation, "his sole issue [wa]s whether he received ineffective assistance of counsel." *Garrett v. State,* No. M2011-333-CCA-R3-PC, 2012 Tenn. Crim. App. LEXIS 700, *1 (Tenn. Crim. App. Sept. 5, 2012). He did not present new scientific evidence, but rather he presented an opinion from a new expert, Lentini, tending to show that if trial counsel had done his job right, he could have proven that at the time of trial most of the fire-investigation community would not have approved of Agent Cooper's methods. *See* Statement of Facts, Section IX.A *supra.* In contrast, in his current case, Mr. Garrett brings a freestanding claim of actual innocence based on new scientific developments and experiments and a claim that his conviction violates due process in light of that same new scientific evidence. *See* Argument, Section I *supra.* The 2007-to-2012 litigation did not decide those issues.

Moreover, even assuming *arguendo* that the previous-determination doctrine does somehow apply to Mr. Garrett's current motion, it would not prevent Mr. Garrett from going forward because, in Argument, Section I.A *supra,* he has shown actual innocence. "Due process concerns" can trump the previous-determination doctrine, including the paramount concern for wrongfully incarcerating some who can make a showing of actual innocence. *Allen*, 2011 Tenn. Crim. App. LEXIS *23 (citing *Phedrek T. Davis v. State*, No. M2009-1616-CCA-R3-PC, 2010 Tenn. Crim. App. LEXIS 386 (Tenn. Crim. App. May 14, 2010)). *Compare* 28 U.S.C. § 2244(b)(2)(B)(ii) (providing for an exception to the federal equivalent of the previous-determination bar upon a showing of actual innocence). As far as undersigned counsel is aware, the courts have never enforced this procedural bar against a petitioner who, like Mr. Garrett, has established actual innocence, as it would constitute a miscarriage of justice. The Court should allow Mr. Garrett to proceed.

C. Timeliness

A post-conviction petition must be filed within one year of the direct appeal becoming Tenn. Code Ann. § 40-30-102(a). Mr. Garrett filed his petition in April 2007, within one year of his conviction from the 2003 trial becoming final. The post-conviction statute does not appear to impose any timeliness requirement for filing a motion to reopen, but rather only for the initial petition. *See* Tenn. Code Ann. 40-30-102(a) (stating the petitioner "must petition for post-conviction relief under this part within one (1) year"); *see also Irick v. State,* No. E2010-01740-CCA-R28-PD, 2010 Tenn. Crim. App. LEXIS 1103, *20 (Tenn. Crim. App. Sept. 16, 2010) (explaining that the motion-to-reopen statute has "no specific limitations period . . . for the filing of claims based upon new scientific evidence establishing actual innocence" and that the

"general statute of limitations is not applicable to such motions"). A timeliness bar does not block Mr. Garrett's path to relief that is long overdue.

CONCLUSION

Claude Garrett was wrongfully convicted and he is actually innocent. Based on his showing of actual innocence, the Court should reopen his postconviction petition, grant his claims for relief, and vacate his conviction.

Respectfully submitted,

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(615) 736-5047

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Jason Gichner
Tennessee Innocence Project
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Nashville, Tennessee 37204

Counsel for Claude Garrett

Certificate of Service

I certify that a copy of the foregoing motion to reopen was hand-delivered on November 22, 2021, to the Office of the District Attorney General, 222 2nd Avenue North, Nashville, Tennessee 37201.

Michael C. Holley

Motion to Reopen Post-Conviction Petition

Mailing Address of Petitioner: Claude Garrett, c/o Tennessee Innocence Project, 700 Craighead Street, Suite 300, Nashville, TN 37204. Counsel can provide Mr. Garrett's personal address upon request.

Place of Confinement: Mr. Garrett is currently confined at Riverbend Maximum Security Institution. He has been confined since the date of his conviction on July 25, 2003.

Department of Corrections Number: TOMIS ID No. 00225779

1. *Name and location (city and county) of court which entered the judgment of conviction or sentence challenged*: Davidson County Criminal Court at Nashville, Tennessee, Division IV.

2. *Date of judgment of conviction*: July 25, 2003

3. *Case number:* 92-B-961

4. *Length of sentence:* Life sentence

5. *Offense convicted of:* First Degree Murder

6. *What was your plea?* Not guilty

7. *Give the following information in regard to the post-conviction proceeding you seek to reopen at this time:*

(a)(1) *Name and location of post-conviction trial court:* Davidson County Criminal Court at Nashville, Tennessee, Division IV

(2) *Grounds raised:* The grounds ruled upon by the trial court were: 1) new scientific evidence in forensic analysis of arson investigations; 2) ineffective assistance of counsel for failing to cross-examine Agent Cooper, failing to call Dr. Roth, failing to impeach Agent Cooper regarding inconsistent statements, failing to challenge the factual basis of

Agent Cooper's opinions, and failing to consult with the defendant about his right to trial; and 3) that the trial court abused its discretion in allowing Cooper to testify as an expert.

(3) *Did you receive an evidentiary hearing on your petition, application or motion?* Yes

(4) *Result:* The court denied Mr. Garrett's petition for post-conviction relief.

(5) *Date of Result:* September 5, 2012

(b) *Did you appeal to any appellate court the result of the action taken on that petition?* Yes.

8. *What grounds exist under Tenn. Code Ann. § 40-30-117 to justify reopening the first post-conviction petition?* There exists new scientific evidence that establishes that Mr. Garrett is actually innocent of the offenses for which he was convicted.

(b)(1) *What does the scientific evidence consist of?* (1) NFPA 921's rejection of the term "pour pattern" and the idea that one can be recognized by a charring pattern that is irregular (2004); (2) The Department of Justice study showing that, after flashover, an investigator's odds of being able to determine in which quadrant of the room the fire started are no better than guessing at random (2005-07); (3) The study funded by the National Institute of Justice showing that the charring on the floor of Garrett's home is too deep to be caused by an accelerant-fueled fire, rather than a fire after flashover (2013); (4) The study of Underwriters Laboratories showing that the V-patterns on Garrett's baseboards were not "red flags" of a fire started with an accelerant but rather the virtually inevitable byproduct of a fire at flashover; and, (5) The experiment of Dr. Candace Ashby showing that the lock on Garrett's utility-room door was unlocked (2019).

(2) *On what date did this scientific evidence come into existence?* On the dates listed in parentheses above after each piece of evidence.

(3) *How and when did you become aware of the existence of this evidence?* In short, the evidence became known to Petitioner through counsel at various times since Spring 2016. The most recent report was completed in Spring 2021.

(4) *How does this evidence establish your actual innocence?* As explained in the attached pleading these scientific developments and experiments show that virtually every key premise of Agent Cooper's fire investigation was wrong, and that affirmative evidence now indicates the fire was not fueled by an accelerant.

9. *Do you have any petition or appeal now pending in any court, either state or federal, as to the judgment under attack?* Yes.

10. *Give the name(s) and address(es), if known, of each attorney who represented you on your petition for post-conviction relief.*

(a) *In any post-conviction proceeding.*

James O. Martin III (BPR No. 18104), presently of the Federal Public Defender's Office in Nashville, TN. Mr. Martin's address is 810 Broadway Suite 200, Nashville, TN 37203

(b) *On appeal from adverse ruling in a post-conviction proceeding.*

James A. Simmons (BPR No. 10107). Mr. Simmons' address is 115 Hazel Path Ste 1, P.O. Box 2934, Hendersonville, TN 37075.

11. *Are you currently represented by counsel?* Yes.

(a) *If Yes, give name and address, if known, of the attorney representing you.*

Jessica Van Dyke
Jason Gichner
TENNESSEE INNOCENCE PROJECT
700 Craighead Street, Suite 300

Nashville, TN 37204

Michael Holley
Assistant Federal Public Defender
810 Broadway, Suite 200
Nashville, TN 37203

12. *Has any attorney assisted in drafting or given advice regarding this petition for post-conviction relief?* Only the attorneys representing me.

If Yes, give name and address of attorney(s).

13. *In the judgment you are attacking, were you sentenced on more than one count of an indictment, or on more than one indictment, in the same court and at the same time?* No.

14. *Do you have any future sentence to serve after you complete the sentence imposed by the judgment under attack?* No.

15. *What date is this petition being given to prison authorities for mailing?* Not applicable; filed by counsel.

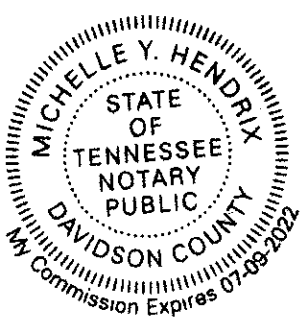
Wherefore, Petitioner prays that the Court grant petitioner's motion to reopen the post-conviction proceedings and grant any relief to which petitioner may be entitled in this proceeding.

I swear (or affirm) under penalty of perjury that the foregoing is true and correct.

Executed on Nov. 19, 2021

Signature of Petitioner

SWORN AND SUBSCRIBED before me this the 19 day of November, 2021.



Michelle Y. Hendrix
Notary Public
My commission expires: 7-9-22

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