IN THE DISTRICT COURT OF CLEVELAND COUNTY
STATE OF OKLAHOMA

STATE OF OKLAHOMA, ex rel., MIKE HUNTER, ATTORNEY GENERAL OF OKLAHOMA, Plaintiff, vs. (1) PURDUE PHARMA L.P.; (2) PURDUE PHARMA, INC.; (3) THE PURDUE FREDERICK COMPANY; (4) TEVA PHARMACEUTICALS USA, INC.; (5) CEPHALON, INC.; (6) JOHNSON & JOHNSON; (7) JANSSEN PHARMACEUTICALS, INC.; (8) ORTHO-MCNEIL-JANSSEN PHARMACEUTICALS, INC., n/k/a JANSSEN PHARMACEUTICALS; (9) JANSSEN PHARMACEUTICA, INC., n/k/a JANSSEN PHARMACEUTICALS, INC.; (10) ALLERGAN, PLC, f/k/a ACTAVIS PLC, f/k/a ACTAVIS, INC., f/k/a WATSON PHARMACEUTICALS, INC.; (11) WATSON LABORATORIES, INC.; (12) ACTAVIS LLC; and (13) ACTAVIS PHARMA, INC., f/k/a WATSON PHARMA, INC., Defendants.	Case No. CJ-2017-816 Judge Thad Balkman

DEFENDANTS' MOTION TO EXCLUDE THE TESTIMONY OF STATE EXPERT DR. DAVID COURTWRIGHT

Pursuant to 12 O.S. § 2702 and *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993), Defendants[1] move to exclude the testimony of State expert Dr. David Courtwright.

I. INTRODUCTION

An expert's opinion is inadmissible and must be excluded unless he is qualified to offer that specific opinion, and the opinion is relevant to adjudicating the case. Dr. Courtwright, a historian, seeks to opine about the history of opiate addiction, opiate-addiction crises, narcotics regulation, and prescribing behavior in the United States. (Exhibit N to Disclosures.) But that history has no bearing here because it predates what this case is about—opioid-related issues allegedly caused by the Defendants' conduct *from the late 1990s onward* and currently afflicting the State of Oklahoma. Dr. Courtwright's history lesson about opioids generally is therefore irrelevant to this case.

Dr. Courtwright confirmed that all of his testimony will consist of, and be based exclusively on, his knowledge of historic events and opioid epidemics that are outside of the relevant time period in this action and are materially different from the opioid-related issues currently affecting the State of Oklahoma. Indeed, Dr. Courtwright confirmed during his deposition that his testimony will consist solely of his opinions as to opioid epidemics in different time periods, involving different opioids, with different actors, and under different regulatory systems than those present in Oklahoma today—which is the only relevant scenario in this litigation. Simply put, Dr. Courtwright's testimony will not be relevant, much less useful, to resolving any of the issues in this action. And whatever marginal probative value the State will argue Dr. Courtwright's opinions hold, it is vastly outweighed by the near-certain waste of this

[1] "Defendants" includes Defendants Teva Pharmaceuticals USA, Inc., Cephalon, Inc., Watson Laboratories, Inc., Actavis LLC, Actavis Pharma, Inc., Johnson & Johnson, Janssen Pharmaceuticals, Inc., Ortho-McNeil-Janssen, Pharmaceuticals, Inc., N/K/A Janssen Pharmaceuticals, Inc., and Janssen Pharmaceutica, Inc., N/K/A Janssen Pharmaceuticals, Inc.

Court's time that will come from introducing testimony about historical events that are materially different from what is relevant in this action.

Worse yet, Dr. Courtwright improperly seeks to rely on his historical opinions to opine on the supposed cause and foreseeability of the current opioid-related issues facing the State of Oklahoma. But he lacks any qualifications or reliable basis to opinion current opioid-related issues in Oklahoma, much less on their causes and foreseeability specifically. He is not an economist, a statistician, or a public health expert. He is a historian, with no training, education, or experience in analyzing the origins of a statewide public health epidemic. Dr. Courtwright's conclusions as to the purported causes and foreseeability of current opioid issues are nothing more than speculative guess-work based on zero data or analysis of any Oklahoma-specific facts, and should be excluded. Indeed, Dr. Courtwright himself admits that he has not studied the current situation in Oklahoma in any detail.

Seemingly recognizing that he is not qualified to testify on these topics, Dr. Courtwright stated during his deposition that he does not intend to testify as to what caused the current opioid-related issues in Oklahoma. Defendants agree that he should not be permitted to testify on that topic. But Dr. Courtwright also contradictorily states that he plans to testify as to foreseeability. This makes no sense. Foreseeability is one of the very elements of causation—an opinion as to foreseeability is *necessarily* an opinion as to causation. Thus, the Court should make it clear that Dr. Courtwright cannot testify about either.

For all these reasons, Dr. Courtwright's testimony should be excluded in its entirety.

II. LEGAL STANDARD

Oklahoma courts evaluate the admissibility of expert testimony using the standards established by the United States Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*,

509 U.S. 579 (1993), and its progeny. *Christian v. Gray*, 2003 OK 10, ¶ 14, 65 P.3d 591, 600. The Oklahoma statute governing expert testimony, 12 O.S § 2702, is "identical in substance" to Federal Rule 702, *id.*, 2003 OK 10, ¶ 6, 65 P.3d 591, 597, and provides that:

> If scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education may testify in the form of an opinion or otherwise, if (1) [t]he testimony is based on sufficient facts or data; (2) [t]he testimony is the product of reliable principles and methods; and (3) [t]he witness has applied the principles and methods reliably to the facts of the case.

12 O.S. § 2702. These three requirements to admissibility are commonly known as "qualification," "reliability," and "fit." The State, as the party offering the expert testimony, has the burden of proving admissibility by a preponderance of the evidence. *Daubert*, 509 U.S. at 592.

Daubert requires this Court to perform a "screening function" to ensure that Dr. Courtwright's testimony is "not only relevant, but reliable." *Id.* at 589, 592. The purpose of the reliability analysis is to "make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Kumho*, 526 U.S. at 152. In order to survive this requirement, the "proposed testimony must be supported by appropriate validation—*i.e.,* 'good grounds,' based on what is known." *Daubert*, 509 U.S. at 590. Thus, an expert's opinion must "rest on a reliable foundation." *Id.* at 662. When the expert opinion is inadequately supported by reliable data, methodology, or studies, "there is simply too great an analytical gap between the data and the opinion proffered," and the trial court should exclude the expert testimony. *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997).

In performing its gatekeeping role, the trial court also must determine whether the proffered expert testimony is relevant, that is, whether it has "any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it

would be without the evidence." 12 O.S. § 2402; *Ross v. Otis Elevator*, 1975 OK 105, 539 P.2d 731, 733-34. Evidence of collateral or other facts which do not affect the facts and legal issues in dispute is irrelevant and inadmissible. *Id.* Additionally, relevant evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice and confusion of the issues, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence. 12 O.S. § 2403; *see Madill Bank & Trust Co. v. Hermann*, 738 P.2d 567, 571 (Okla. Civ. App. 1987).

Under these basic evidentiary principles, Dr. Courtwright's testimony about U.S. history and the cause and foreseeability of the current opioid-related issues in Oklahoma is inadmissible and must be excluded.

III. ARGUMENT

A. Dr. Courtwright's Opinions On Opioids And Opioid Epidemics Other Than The Opioids and Current Opioid-Related Issues In Oklahoma Should Be Excluded.

Dr. Courtwright seeks to opine about U.S. history. But the historical events he describes are not relevant to this case in any way. The State's basic claim in this case is that Defendants' *post-1996* marketing of FDA-regulated prescription opioid medications in Oklahoma caused a *current* opioid epidemic in that state. *See* (Order of Special Discovery Master on State's First Motion to Compel, attached hereto as **Exhibit 1**) (holding that the "relevant time period" is "from May 1, 1996 to present"); (Petition ¶¶ 2, 21, 55). Dr. Courtwright's opinions about opioid epidemics in different times, involving different opioids, with different actors, and under different regulatory systems than those present in Oklahoma since 1996 are simply not relevant or helpful in resolving any factual or legal issue in this case. Further, whatever imagined minor relevance the State will argue exists is vastly outweighed by the near-certainty that introduction of testimony will waste this Court's time. Dr. Courtwright's testimony should be excluded.

Dr. Courtwright effectively admits that his historical testimony is not relevant to the subject matter of this action. According to Dr. Courtwright, he seeks to testify about "[t]he history of opiate addiction and opiate crises in the United States" and "the history and development of narcotics laws and regulations" from "[r]oughly . . . the mid-19th century to 1980." And he seeks to opine about "the history and development of the American medical professions' attitudes towards prescribing opioids" from "[r]oughly 1870 to 1980." (Courtwright Dep. Tr. at 52:11-53:12.) But he admits that he is "not testifying about matters after 1980, . . . includ[ing] [in] Oklahoma." (*Id.* at 69:10-69:13.) His testimony is thus nearly two decades removed from what even the State believes is the relevant time period in this action.

Dr. Courtwright also concedes that the historical opioids and opioid epidemics he has studied are materially different from those alleged to be currently affecting Oklahoma. First, none of the opioids that form the basis of Dr. Courtwright's testimony involve the kind of time-released opioid medications at issue in this action. (Courtwright Dep. Tr. at 73:17-22.) Indeed, as Dr. Courtwright candidly admits, he seek to testify about times and events where OxyContin did not even exist. (Courtwright Dep. Tr. at 146:17-22.). Second, the regulatory landscape that is part of Dr. Courtwright's proposed testimony is materially different from what is relevant to this action. As Dr. Courtwright admits, he seeks to testify about a time where neither the U.S. Drug Enforcement Administration nor the U.S. Food and Drug Administration existed, much less the FDA-approved labels that accompany every opioid medication at issue in this action. (Courtwright Dep. Tr. at 58:11-59:9; 151:22-152:5.) Instead, Dr. Courtwright seeks to testify about a time where opioids were regulated federally by the U.S. Bureau of Narcotics and Dangerous Drugs—an entity that has not existed since 1973. Third, the most "recent" opioid epidemics that Dr. Courtwright seeks to testify about are "two *non-medical* heroin epidemics in the mid-twentieth century"

(Exhibit N to Disclosures) (emphasis added), whereas the State's entire case is premised on the notion that the Oklahoma's current opioid-related issues stem from *medical* use of prescription medications.

The expert testimony of historians has been held admissible when, among other things, it is relevant to the history of an issue in the litigation. *See Burton v. Am. Cyanamid*, No. 07-CV-0303, 2018 WL 3954858, at *11 (E.D. Wis. Aug. 16, 2018) (holding historian's expert testimony admissible where historian testified to the market share history of various paint manufacturers *in Wisconsin*, where issue was manufacturers' liability regarding the presence of harmful paint used *in Wisconsin*). Examples of history relevant to this case would be, for example, the history of the current opioid epidemic in Oklahoma, or the history of pharmaceutical manufacturers' opioid-related marketing in Oklahoma. But this is not the kind of history Dr. Courtwright seeks to introduce.

Instead, Dr. Courtwright seeks to opine on the history of opioid epidemics during different times, involving different opioids, with different actors, and under different regulatory systems than those present in Oklahoma. This history is simply not relevant nor useful in resolving any issue as to the State of Oklahoma. Where, as here, the history sought to be introduced is completely removed from any issue in the litigation, courts have routinely held that it is inadmissible. For example in *Linde v. Arab Bank, PLC*, 920 F. Supp. 2d 282 (E.D.N.Y. 2011), a case brought by victims of terrorists attacks in Israel against a Jordanian bank for allegedly transferring funds to a terrorist organization, the court held that expert testimony relating to the history of the Israeli-Arab conflict was not relevant. As the court explained, the expert's "lengthy history of social, political, economic, and diplomatic factors relating to [that] conflict" were "so far afield from the specific allegations and statutory elements at issue" they were inadmissible. *Id.* at 286.

Similarly, in *Cook v. Rockwell International Corp.*, 580 F. Supp. 2d 1071 (D. Colo. 2006), the court excluded a historian's expert testimony that the federal government had offered to justify an ongoing nuisance that was allegedly important to national security. The court explained that "[the] proffered testimony regarding the 'dawn of the nuclear age' in World War II, the origins of the Cold War armament race and related Soviet espionage, has little to no probative value here," which, in any event, was substantially outweighed by the danger of unfair prejudice and confusion of the issues, and [of] needlessly wast[ing] trial time." *Id.* at 1167.

Dr. Courtwright's testimony is inadmissible for the same reasons. The State's case alleges that there is an opioid epidemic today, caused by recent misconduct. The trial should not be protracted for even one day for an unnecessary detour into the eighteenth and mid-nineteenth century.

B. Dr. Courtwright's Opinions On The Current Opioid-Related Issues In Oklahoma Should Be Excluded.

By his own account, Dr. Courtwright is not qualified to testify about the alleged current opioid epidemic in Oklahoma. Nevertheless, Dr. Courtwright seeks to testify about its cause and foreseeability. Dr. Courtwright's "knowledge, skill, experience, training [and] education," however, do not qualify him to offer that "specific" opinion. 12 O.S. § 2702; *Whiting v. Boston Edison Co.*, 891 F. Supp. 12, 24 (D. Mass. 1995). His testimony about a current opioid epidemic in Oklahoma must be excluded.

As explained above, Dr. Courtwright admits that (1) his expertise is limited to the time period *before* 1980—whereas the relevant time period in this action is 1996 and onwards, and (2) that Oklahoma's current opioid-related issues are materially different from those he has studied. *See* Section III.A. Dr. Courtwright also admits that he has failed to conduct any research to supplement these deficiencies. Indeed, aware of his inability to provide an expert opinion as to

Oklahoma after 1980, much less 1996 and onwards, when asked during his deposition if he intended to "testify about anything specific to Oklahoma after 1980?" Dr. Courtwright responded "No . . .." (Courtwright Dep. Tr. at 69:9-17.)

Yet, Dr. Courtwright seeks to introduce testimony on how historical perspective can inform the cause and foreseeability of what is arguably the most complex modern public health phenomenon—the alleged opioid epidemic currently affecting the State of Oklahoma. (Courtwright Dep. Tr. at 145:23-146:6.) Specifically, Dr. Courtwright seeks to opine that "[a]ny person in a position of authority in the pharmaceutical industry in the early 1980s" would "have understood four things":

- First, tens of millions of Americans suffered from some form of chronic pain for which no sure and convenient treatment was available.
- Second, despite a half century of trying, researchers had failed to find the holy grail of a narcotic analgesic that carried virtually no risk of addiction or other adverse consequences of long-treatment for CNP [chronic non-malignant pain].
- Third, if they could market a new narcotic analgesic as if it were this holy grail, they could make a fortune.
- Fourth, if the new narcotic analgesic was not in fact the holy grail, and if it retained the risks historically associated with the use of opiates (especially potent opiates) in the long-term treatment of CNP, there was every likelihood of a substantial increase in the incidence of iatrogenic addiction, the epidemic's size correlating with the amount of the narcotic sold.

(Exhibit N to Disclosures.)

As an initial matter, Dr. Courtwright cannot provide an opinion as to what "any" person of authority in the pharmaceutical industry would know because he concedes that he has not talked or interviewed any such person.[2] More fundamentally, Dr. Courtwright's experience with ***past***

[2] (Courtwright Dep. Tr. at 113:19-24) ("**Q:** But you haven't talked to anybody about that from the pharmaceutical industry? **A:** At the time, no, I did not interview anyone in the -- I was interviewing drug addicts in the early 1980s. I was not talking to the pharmaceutical executives.")

opioid epidemics—involving different opioids, during different times, with different actors, and under different regulatory systems—does ***not*** qualify him as an expert on anyone would know about the ***current*** opioid epidemic in Oklahoma, much less on its causes or its foreseeability.[3] Dr. Courtwright's opinions as to these issues is unreliable and should be excluded.

As explained in more detail in Section III.A, Dr. Courtwright himself admits that the current opioid epidemic in Oklahoma is unlike those he has studied. Dr. Courtwright seek to testify about a time where Oxycontin did not exist and neither did the DEA or FDA, much less the FDA-approved labels that are present in every opioid medication at issue in this litigation. The differences between the current opioid epidemic in Oklahoma and those Dr. Courtwright has studied are made worse by the fact that Dr. Courtwright has taken no steps to research or educate himself on the current opioid issues in Oklahoma. Indeed, Dr. Courtwright conceded at various times that he has not studied the current situation in Oklahoma in any detail:

> **Q:** Did you speak to any doctors in the State of Oklahoma in the preparation of your expert disclosure?
>
> **A:** No.

(Courtwright Dep. Tr. at 28:3-5.)

> **Q:** Did you speak to any patients from the State of Oklahoma who said they'd been prescribed opioids in preparation when you prepared your expert disclosure in this matter?
>
> **A:** No.

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[3] To the extent the State may attempt to argue that Dr. Courtwright is simply opining as to what a hypothetical person would know about a hypothetical future, this would make Dr. Courtwright's testimony even more irrelevant and attenuated from the facts of this case than it already is. Further, this is directly contrary to Dr. Courtwright's testimony that he is indeed opining as to the foreseeability of the current opioid epidemic in Oklahoma. (Courtwright Dep. Tr. at 145:23-146:6) ("**Q:** . . . Are you opining on whether the current opioid epidemic was foreseeable? **A:** . . . I suppose the answer is yes.")

(Courtwright Dep. Tr. at 28:19-23.)

Q: And you're not aware of the Oklahoma state statutes and regulations related to the prescription of opioids after 1980, right?

A: Not having had cause to consult those statutes because of the limitations of my testimony, I have not read them, no.

Q: And you're not aware of any legislative efforts that have taken place in the past few years in Oklahoma in connection with the prescription of opioids?

A: I have not made a study of that subject, no, again, because there was no need to do so having been told my testimony would be limited to the pre-1980 period.

(Courtwright Dep. Tr. at 77:10-22.)

Q: So would any person in the position of authority at the FDA in the early 1980s who surveyed the recent past understood the four things you list in this paragraph?

* * *

Q: And the State of Oklahoma public health officials would have known about it, as well?

A: In the 1970s, it's not something I've done research into . . .

(Courtwright Dep. Tr. at 110:24-112:7.)

Q: Are you aware of states that have required physicians to attend certain particular types of continuing medical education?

A: Not to my certain knowledge, no. That's not something I've currently researched, so I don't know. I'm sorry. I can't answer that question.

Q: Okay.

A: I don't have certain knowledge of that, and I couldn't tell you which states.

Q: Are you aware if Oklahoma has done that?

> **A:** No, I am not aware of whether Oklahoma has imposed that requirement, and nor did I think it necessary to bone up on current Oklahoma requirements because it's never been my intention to speak to this current situation.

(Courtwright Dep. Tr. at 93:14-94:1.)

To Defendants' knowledge, no court has ever held that an individual with no relevant education or experience on a topic—as Dr. Courtwright admits is true with regards to his knowledge of the current opioid-related issues in Oklahoma—may provide an expert opinion on that same topic. For good reason. Such testimony violates both the letter and spirit of *Daubert*. Dr. Courtwright's unqualified and unreliable testimony about the current alleged opioid epidemic in Oklahoma should be excluded.

IV. CONCLUSION

For the multiple, independent reasons described above, Defendants respectfully request that this Court exclude the testimony of Dr. Courtwright in its entirety.

Dated: April 23, 2019

Respectfully submitted,

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CERTIFICATE OF MAILING

Pursuant to 12 O.S. § 2005(D), and by agreement of the parties, this is to certify on April 23, 2019, a true and correct copy of the above and foregoing has been served via electronic mail, to the following:

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EXHIBIT 1

IN THE DISTRICT COURT OF CLEVELAND COUNTY
STATE OF OKLAHOMA

STATE OF OKLAHOMA, ex rel., MIKE HUNTER, ATTORNEY GENERAL OF OKLAHOMA,	)	
Plaintiff,	)	
	)	**Case No. CJ-2017-816**
vs.	)	
	)	**Judge Thad Balkman**
(1) PURDUE PHARMA L.P.;	)	
(2) PURDUE PHARMA, INC.;	)	
(3) THE PURDUE FREDERICK COMPANY;	)	
(4) TEVA PHARMACEUTICALS USA, INC.;	)	
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(8) ORTHO-MCNEIL-JANSSEN PHARMACEUTICALS, INC., n/k/a JANSSEN PHARMACEUTICALS;	)	
(9) JANSSEN PHARMACEUTICA, INC., n/k/a JANSSEN PHARMACEUTICALS, INC.;	)	
(10) ALLERGAN, PLC, f/k/a ACTAVIS PLC, f/k/a ACTAVIS, INC., f/k/a WATSON PHARMACEUTICALS, INC.;	)	
(11) WATSON LABORATORIES, INC.;	)	
(12) ACTAVIS LLC; and	)	
(13) ACTAVIS PHARMA, INC., f/k/a WATSON PHARMA, INC.,	)	
Defendants'.	)	

STATE OF OKLAHOMA }
CLEVELAND COUNTY } S.S
FILED
APR 04 2018
In the office of the
Court Clerk MARILYN WILLIAMS

ORDER OF SPECIAL DISCOVERY MASTER ON STATE'S FIRST MOTION TO COMPEL

NOW on this 4th day of April, 2018, the above and entitled matter comes on for determination on State's first motion to compel. Having reviewed State's motion to compel, various Defendants' objections thereto, and hearing with argument having been held on March 29, 2018, the following **Orders** are entered:

1. Purdue's motion to strike is overruled.
2. It is the undersigned's understanding and belief that the scope of this motion to compel is limited to the State's requests for production (RFP)

and any objected-to interrogatory to which an Order responsive to a specific RFP would determine;

3. The likely relevant time period for discovery in this case is found to be from May 1, 1996 to present, with Teva/Cephalon marketing time period beginning in 1999. Purdue's and Teva Defendants (to include the Acquired Actavis Entities) specific objections to Relevant Time Periods is overruled. The State has stipulated and agreed it will acknowledge and recognize as the Relevant Time Period any other Defendants' known start marketing date that may be later than May 1, 1996.
4. Various Defendants' argument attempting to limit the scope of discovery based upon statutes of limitation is overruled.
5. Purdue's objection/attempt to limit production relevant only to OxyContin or as to any Defendants' attempt to limit production to documents responsive only to FDA requests is overruled.
6. Following the date of this Order, all parties shall specifically identify any production item by its best descriptive title in Order to preserve an objection to production. Failure to do so, may result in summary denial of an objection.
7. The undersigned recognizes the discovery burden unique to this case and encourages the parties to further develop the "rolling basis" for production process by "meet and confer" in Order to lessen the burden and still employ an efficient discovery process that complies with discovery deadlines.

Requests For Production

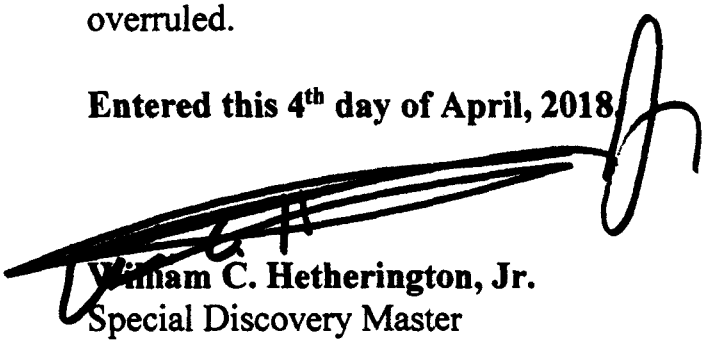
RFP No. 1 – State's motion to compel is sustained to the extent production shall include any information about public, nonpublic or confidential governmental investigations or regulatory actions pertaining to any Defendants that have been produced previously in any other case;
RFP No. 2 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 3 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 4 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 5 – State's motion to compel is sustained with objections thereto overruled;

RFP No. 6 – State's motion to compel is sustained with objections thereto overruled, except such production need not include any preliminary drafts of written materials;
RFP No. 7 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 8 – State's motion to compel is sustained with all Defendants Ordered to produce any documentation evidence known to them supporting, promoting or seeking to "influence" the marketing of unbranded advertisements. Such production need not include any preliminary drafts;
RFP No. 9 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 10 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 11 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 12 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 13 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 14 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 15 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 16 – State's motion to compel is sustained to the extent that all Defendants are Ordered to provide any documentation related to compensation or incentive plans for any sales representatives and/or sales managers, contractors or third-party sales representatives in Oklahoma responsible for the sale of opioids. The scope of this Order does not include any other personal, sensitive and confidential information that is not related to or relevant to incentive sales plans;
RFP No. 17 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 18 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 19 – State's motion to compel is sustained to the extent that Defendants are Ordered to produce call notes, field contact reports, medical services correspondence, if any, with Oklahoma health care professionals and pharmacies, all other communications with Oklahoma health care professionals and pharmacies involving medical liaisons and managed-care account executives. Purdue shall produce a report of Oklahoma prescribers

who are identified as part of Purdue's "Abuse and Diversion Detection Program" (ADD) with notations as to those placed on the "no call" or "region zero" list. Purdue is Ordered to produce documents from the "ADD program" files of Oklahoma prescribers on the "ADD list" and documents from the Order Monitoring System Program, MedWatch reports, Clinical Supply Product Complaint reports and any product complaint reports related to Purdue marketed opioids.
RFP No. 20 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 21 – State's motion to compel is sustained to the extent that all Defendants are Ordered to produce all documents concerning "CME's" sponsored by any Defendant in whole or in part related to opioids and/or pain treatment held in Oklahoma. Production shall include a list of promotional speaker programs, product theaters, and other promotional programs related to any marketed opioids or disease awareness to include all attendee and presenter lists, dates and locations for events, final training and presentation materials for any such CMEs put on, sponsored or promoted by any Defendant herein;
RFP No. 22 – State's motion to compel is sustained with objections thereto overruled;
RFP No. 23 – State's motion to compel is sustained to the extent that all Defendants are Ordered to produce all documents (not limited to a bibliography), if any, concerning all opioid research conducted, commissioned, sponsored, funded or promoted by any Defendant. Purdue shall also and in addition to, produce the "New Drug Application" files regarding the original formulation of OxyContin and the abuse-deterrent reformulation of OxyContin which contain documents that analyze or discuss risks and benefits associated with those particular medications. This Order also encompasses an Order to produce all documents purporting to show any opioids to be addictive, highly addictive or addiction occurs in greater than 1% of patients being treated with opioids; nonaddictive, virtually nonaddictive or addiction occurs in less than 1% of patients being treated with opioids;
RFP No. 24 – State's motion to compel is sustained to the extent that all Defendants shall produce all internal communications and communications between them and any third parties concerning research, studies, Journal articles, and/or clinical trials regarding opioids and/or pain treatment. Such production need not include preliminary drafts of such communications;
RFP No. 25 – State's motion to compel is overruled with a finding that this RFP is covered within the scope of the Order in RFP No. 23;

RFP No. 26 – State's motion to compel is overruled with the finding that this RFP is covered within the scope of the Order in RFP No.23;
RFP No. 27 – State's motion to compel is sustained to the extent that this RFP is not covered in RFP No. 19 as it relates to Purdue and OxyContin abuse and diversion programs;
RFP No. 28 - State's motion to compel is sustained with objections thereto overruled.

Entered this 4th day of April, 2018.



William C. Hetherington, Jr.
Special Discovery Master

2

EXHIBIT 2

IN THE DISTRICT COURT OF CLEVELAND COUNTY

STATE OF OKLAHOMA

STATE OF OKLAHOMA, ex rel.,
MIKE HUNTER, ATTORNEY GENERAL
OF OKLAHOMA,

Plaintiff,

vs. Case No. CJ-2017-816

PURDUE PHARMA, L.P.; et al.,

Defendants.

VIDEOTAPED DEPOSITION OF:	DAVID T. COURTWRIGHT, PH.D.
DATE TAKEN:	March 22, 2019
TIME:	9:05 a.m. to 2:47 p.m.
PLACE:	Lexington Hotel 1515 Prudential Drive Jacksonville, FL 32207
BEHALF OF:	The Defendant(s)
REPORTER:	Michelle R. Hordinski, RMR, CRR

VON AHN ASSOCIATES, INC., a U.S. LEGAL SUPPORT COMPANY
Registered Professional Reporters
2271 McGregor Boulevard, Second Floor
Fort Myers, Florida 33901
Phone: (239) 332-7443 FAX: (239) 332-4066
Offices in Naples * South Fort Myers * Punta Gorda

deposition today?

A. No.

Q. In preparing your expert report or your expert disclosure, did you speak with any employees of the State of Oklahoma?

A. No, unless Mr. Duck as representing the State of Oklahoma is considered to be an employee of the State of Oklahoma.

Q. I don't consider Mr. Duck to be -- I don't think Mr. Duck considers himself to be an employee of the State of Oklahoma. I understand he's been retained -- he and his firm have been retained to represent the State of Oklahoma.

A. I mean, that's an honest question.

Q. I understand. No, no, no.

A. I don't know how to answer that.

Q. No, no, no. Okay. We'll -- besides Mr. -- besides your lawyers, who are -- unless Mr. Duck objects to this, but I don't believe he considers himself to be an employee of the State of Oklahoma.

A. No. I was in touch with no public official or any other state employee in Oklahoma with respect to this matter.

Q. Speaking of doctors, licensed to practice in the State of Oklahoma in preparation for your

deposition?

A. I did not.

Q. Did you speak to any doctors in the State of Oklahoma in the preparation of your expert disclosure?

A. No.

Q. Did you speak to any opioid patients in the State of Oklahoma in preparation for your deposition today?

A. No.

MR. DUCK: Objection. Form.

THE WITNESS: No.

BY MR. BARTLE:

Q. Did you -- I can rephrase.

Did you speak to any patients -- any individuals in the State of Oklahoma who told you they'd been prescribed opioids in preparation for your deposition today?

A. No.

Q. Did you speak to any patients from the State of Oklahoma who said they'd been prescribed opioids in preparation when you prepared your expert disclosure in this matter?

A. No.

Q. Did you review any documents from the State of Oklahoma in preparation for the deposition today?

A. Not in preparation for the deposition. I did receive a complaint. In my historical research I did -- yes, I did consult material from Oklahoma when I was doing the research for my book.

Q. Which book?

A. Oh, Dark Paradise. I'm sorry.

Q. Did you consult that research for Oklahoma before the first edition was issued?

A. It was while I was writing my dissertation.

Let me -- let me establish the chronology here. This might be helpful. I was a graduate student at Rice University from 1974 to 1979. I completed -- that's the book. That's the second edition of the book.

Q. I want to tell you, Doctor, you're going to get a royalty out of this. I bought a copy of it for this deposition.

A. I have not --

Q. There is a benefit to you, this deposition.

A. Indeed.

I -- look, I published my dissertation in 1979. I revised and expanded it. I turned it into a book. That book was published as a hardcover book in 1982.

In the process of doing the research for the doctoral dissertation that became the book, I did use

not include the rendering of opinions as to what happened in the particular history that's being studied?

A. Could you reformulate that question?

Q. Sure.

Is it your testimony that historians don't include opinions as to what worked --

A. Historians -- I'm sorry. I interrupted you.

Q. No. That's all right.

A. Go ahead.

Q. Is it your testimony that historians don't have differing opinions about what happened in a particular historical period?

A. It's the word "opinions" that gives me pause. Historians argue all the time about the causes of particular events, how much weight should be assigned to particular causes.

Yes, there are arguments about explanations, but the word "opinion" seems to imply that they're just that, they're opinions, they're not based on hard evidence.

And, yes, there are -- there are historiographical disputes, and, yes, judgments do shift over time, as, for example, new evidence becomes available.

Q. Well, you're not testifying that all

opinions -- all historians have the same opinion as to why a certain historical event happened?

A. No -- as a generality?

Q. Yeah.

A. I would -- let me put it this way. Do historical interpretations of important events differ? The answer is yes.

Q. And --

A. As is the case with legal scholars and the case with scientists and others.

Q. I think people's opinions differ on a lot of different things, Doctor.

With regard to these three bullet points on the first page of Exhibit C, are you -- are there any other areas of expert testimony that you're going to give besides those three bullet points?

A. In this case, no.

Q. And let's go to the first bullet point. The history of opiate addiction and opiate crises in the United States, can you give me the time frame for which you're prepared to give testimony?

A. Yes. Roughly from the mid-19th century to 1980.

Q. What about the history and development of narcotics laws and regulations in the United States,

what's the time frame you're prepared to give testimony on that?

A. Same.

Q. And the last bullet point, the history and development of the American medical professions' attitudes towards prescribing opioids particularly in the treatment of chronic non-malignant pain prior to the early 1980s, what --

A. So I would say -- sorry. Go ahead.

Q. What's the time period for that, that you're prepared to give testimony about?

A. Roughly 1870 to 1980.

MR. BARTLE: We're about an hour.

THE WITNESS: May we take a break after you finish your next question?

MR. BARTLE: I was just about to suggest that we take a break --

MR. DUCK: Perfect.

MR. BARTLE: -- if Mr. Duck's fine with that.

MR. DUCK: Yeah.

MS. SUAZO: We're off the video record at 10:10 a.m.

(A short recess was taken.)

MS. SUAZO: And we're back on the video record at 10:19 a.m.

BY MR. BARTLE:

Q. Doctor, what I'd like to go through now is I'd like to go through -- do you still have Exhibit 3 in front of you?

A. Yes, sir.

Q. What I'd like to do is go through certain statements made in here starting under the subheading B, Dr. Courtwright is expected to testify about the following facts and opinions, among others.

Do you see that?

A. Yes.

Q. The first sentence you write, There have been at least three opiate addiction crises in the United States prior to the current opioid addiction crisis.

Do you see that?

A. Yeah.

Q. How do you define opiate? Let me spell it. Before you answer that question, let me spell it. O-P-I-A-T-E. How do you define that?

A. Okay. So this is -- this is in response to a shift in medical terminology. It's a question I became interested in. Why is the current epidemic usually referred to as the opioid addiction epidemic? Whereas almost universally the substances were referred to as opiates in the time period that I was studying.

about morphine in a medical journal, and they refer to that substance as an opioid, that would be standard practice now. It wasn't 30 years ago.

Q. Can you give me some examples of what opioids -- what -- of some opioids?

A. Sure. You mean as the term is currently used?

Q. Correct.

A. Codeine is an opioid, morphine is an opioid, thebaine is an opioid, hydrocodone is an opioid, oxycodone is an opioid, fentanyl is an opioid.

Q. Heroin?

A. Yes. It's a semisynthetic derivative of morphine, correct.

Q. And some of those opioids that you described or you identified, some of them are licit and some of them are illicit, correct?

A. Those drugs are scheduled differently, yes.

Q. Well, heroin is an illicit?

A. Heroin is a Schedule I controlled substance. Yes, it's an illicit drug. That is a fair definition of an illicit drug. If it's in Schedule I, it's illicit.

Q. When you say "Schedule I," what are you talking about?

A. The Controlled Substances Act of 1970 and its five schedules.

Q. And those schedules are set forth by the DEA, correct?

A. In consultation with the FDA, yes.

Q. And when I refer to DEA, you understand that I'm referring to the Drug Enforcement Administration, correct?

A. Sir, I do.

Q. And the FDA is the Food and Drug Administration, right?

A. Correct.

Q. And the DEA and the FDA -- in consultation with the FDA is responsible for determining what schedule a particular drug falls under, correct?

A. Well, now, although back at the time of the passage of the Controlled Substances Act, it was actually the Bureau of Narcotics and Dangerous Drugs, which was the predecessor agency.

And I'm not prepared to testify about -- I'm going to pause because there's a technical problem that's interrupting the deposition.

MR. BARTLE: Could we go off the record for a second?

MS. SUAZO: We're off the video record at 10:26 a.m.

(A discussion was had off the record.)

MS. SUAZO: We're back on the video record at 10:28 a.m.

BY MR. BARTLE:

Q. Doctor, before we got interrupted, I was asking you a question about, in the DEA, in consultation with the FDA, is responsible for determining what schedule a particular drug falls under, correct?

A. Yes, although that's beyond the scope of my testimony.

Q. But you're aware of that in the course of your -- your --

A. Yes.

Q. -- 30 years of studying drug use in the United States?

A. 40, and, yes, I am aware of that.

Q. I did not mean to take off a decade of your career.

If we move back to Exhibit 3 --

A. That's good because I earned every one of them.

Q. I'm sure you did.

If we turn back to Exhibit 3, Doctor, that sentence I was reading, we were talking about the first part of it before the call-in. And I'm also going to ask you a question about, how do you define opioid

addiction crises?

A. Well, they generally are periods of public and official alarm surrounding the rapid increase in the number of new cases of opiate addiction, which -- for that matter other drugs which invariably prompts a policy response, discussion in newspapers, speeches in Congress, and so on.

Q. Anything else?

A. So -- well, sure. I mean, practitioners become alarmed. Practitioners detect an increase in incidents, and they sometimes report those increases in incidents.

Official agencies such as the CDC, which publishes morbidity and mortality weekly reports, which is sort of like the DEW line of emerging diseases will report when there's an increase in incidents. And if it's sustained, that can lead to a kind of crisis of medical attention and concern.

So there are multiple actors, medical, government, political, journalistic, whose attention is drawn to rapid increase in abuse and addiction to drugs, opioids included.

Q. That includes state governments?

A. Yes.

Q. Local governments?

medications. And that is why I think the prevalence of medical morphine addiction was declining from 1895 on, as a rate, of course, relative to population.

And, again, there are several examples of those kinds of conservative pronouncements in the book.

Q. And --

A. Would you like me to continue?

Q. Let me ask you a question about your answer so far. You're talking about the mid-19th century in the United States, correct?

A. No. I'm talking about the period from 1870 to 1895, which I would define as the late 19th century.

Q. I would too.

You mentioned that this prescribing conservative -- or this -- this physician conservative --

A. No. My phrase is narcotic conservatism.

Q. Narcotic conservatism. All right. I'll use your phrase.

This narcotic conservatism made its way into medical school curricula, right?

A. Yes.

Q. And you're not here to give any opinion as to what has been taught at the University of Oklahoma medical school in the past 15 years with regard to

narcotic conservatism, right?

A. Yes, sir, that is correct.

Q. You're also not here to give an opinion about what has been taught at the Oklahoma State University Medical Center or medical school as to narcotic conservatism in the past 15 to 20 years, are you?

A. I'm not here to testify about anything after 1980.

Q. And are you here to testify about anything specific to Oklahoma after 1980?

A. After 1980? No. I mean, in general, I'm not testifying about matters after 1980, so that would include Oklahoma.

Q. With regard to the medical opiate addiction epidemic in the late 19th century that you cite here, was there one or more factors that contributed to that epidemic?

A. Well, the primary driver was, as I've already mentioned, the introduction of this new medical technology and its enthusiastic -- enthusiastic embrace by the medical profession, its overuse, and the ensuing spread of iatrogenic morphine addiction.

There are several statistical studies in the late 19th and early 20th century that show that this was the single most common origin of medical addiction.

However, there were other sources of medical opiate addiction.

The Civil War was a factor. The Civil War -- and, in fact, for many years people tended to regard the Civil War as the primary source of the problem. Oh, all of those soldiers that were traumatized or lost limbs and so on. And there was something to it. Opiates were used extensively during the Civil War mainly in oral form, and, of course, there were crippled veterans after the Civil War.

But I discovered -- and in 1978 published in the journal of Civil War history an article which showed that the Civil War itself could not possibly have been the primary cause of this wave of medical opiate addiction because the majority -- by every survey, the majority of late 19th century medical opium and morphine addicts were female. All right. So right away that tells me that there's something else going on.

And women were more likely to seek out professional medical care than men, so they were more exposed to doctors and their medications. That was part of it.

I should mention, also, as I do in the book, that self-medication plays a role. Opiates were commonly used in the 19th century not only to treat

origin of this condition.

Q. Thank you.

If you move to the next sentence in your disclosure, it begins, In the course of the epidemic of opiate addiction in the late 19th century, medical and pharmaceutical professionals learned that it's dangerous to prescribe narcotic drugs to patients suffering from what is now called chronic non-malignant pain. The principal risk of such treatment was addiction.

A. Uh-huh.

Q. How do you define chronic non-malignant pain?

A. Well, in the 19th century, it basically meant noncancer pain.

All right. So during this entire period that I'm covering, it's clear in the medical literature, there's a clear distinction between the appropriateness of prescribing narcotic drugs in cases of terminal cancer as opposed to other kinds of nonterminal cases.

So there's never -- there's never any question, if someone is dying in agony from cancer, about the appropriateness of morphine. The key word there is non-malignant. And if one reads the medical literature from the late 19th century and the early 20th century, the authors make it clear that they're not referring to cancer. And they also make it clear that

there are other short-term situations where the use of these drugs is perfectly appropriate.

I want to be clear that physicians regarded these drugs as valuable medications and in surgical situations, in cases where patients were delirious and desperately needed a night's sleep, trauma, that there were cases where the judicious use of these medications, including injections, was appropriate.

The problem was, what do you -- what happens when you're dealing with a person who has a bad case of dysmenorrhea, menstrual cramps, and they keep coming back to the doctor and saying, Doctor, I'm in terrible pain. Please treat me.

What do you do with someone who has chronic dysentery? What do you do with someone who has arthritis? What one sees in the medical literature -- and I'm paraphrasing, but this is the gist of it -- is, if you continue to treat these people with these drugs, they will become addicted. Even worse is to leave the hypodermic apparatus with the patient with instructions for self-administration because that's virtually the sure road to addiction.

Now, I understand the temptation to do it. Remember, this is an era before doctors had automobiles, and they were still expected to use their horse and

buggy to go visit patients. And considering, you know, a morphine might last four, at most six hours, it's very difficult for doctors to constantly go back, especially in bad weather, to administer these drugs. So there was a temptation to say -- to leave the syringe with the family or with the patient and say, well, if you have pain again, use this drug. But then the patients would continue to use, and they would become physically dependent and ultimately addicted.

Q. Thank you.

You used the phrase "pharmaceutical professionals" in that sentence?

A. Let's see. Yes.

Q. What did you mean by that?

A. Pharmacists.

Q. Okay. Would you agree with me, Doctor, that the scientific and medical view of the appropriate medical uses of opioids has changed over time?

A. Well, I would agree that, in the time period to which I have recently been referring between 1870 and, say, 1930, there was a definite change in attitudes in the direction of narcotic conservatism.

Q. And that, in part, is because of medical research and experience, right?

A. Well, yes, of course. I mean, if by research

I have to tell you, I can't think of a single American historian who has published refereed scholarship in this area who would disagree with that generalization.

Q. With regard to the 19th century?

A. Yeah. The profession had its fingers burned in the late 19th century. Once you have your fingers burned, you become more cautious.

Q. And state governments understood that, too, right?

MR. DUCK: Objection.

THE WITNESS: Correct.

MR. DUCK: Sorry. Answer the question. I just need to get my objection --

THE WITNESS: State -- in the late 19th century, state governments, including Oklahoma, which became a state in, what, 1907, enacted laws that did things like require the possession of a prescription for drugs like morphine. Oh, and also required pharmacists to keep, indefinitely, records of those purchases. See the Oklahoma statutes for 1910.

BY MR. BARTLE:

Q. Have you looked at those statutes?

A. I have.

Q. When did you look at them last?

A. I was recently reviewing -- there's an article by -- this was in the context of reviewing state statutes generally. There was an article -- oh, gosh -- by M.I. Wilbur, Martin I. Wilbur, which appeared in public health reports in 1915, which has a digest of state laws. It goes through state by state and says, these are the pertinent regulations with respect to narcotic drugs.

And I recently reread that article.

Q. And you're not aware of the Oklahoma state statutes and regulations related to the prescription of opioids after 1980, right?

A. Not having had cause to consult those statutes because of the limitations of my testimony, I have not read them, no.

Q. And you're not aware of any legislative efforts that have taken place in the past few years in Oklahoma in connection with the prescription of opioids?

A. I have not made a study of that subject, no, again, because there was no need to do so having been told my testimony would be limited to the pre-1980 period.

Q. If you'd move to the next paragraph, Doctor.

A. Certainly.

Q. You write, The knowledge of the addictive

danger of prescribing narcotics for CNP was significant, lasting, and institutionalized.

A. Yes.

Q. You're talking about the 19th century, correct?

A. No. Here I'm referring to both the 19th and the 20th centuries.

Q. Pre-1980?

A. Correct.

Q. And when you say "institutionalized," you're talking about within the medical community, right?

A. That's one way it was institutionalized, yes.

Q. You're talking about within law enforcement, right?

A. Correct.

Q. You're talking about within public health, the public health community?

A. Yes.

Q. What other institutions besides the ones we've mentioned would you say also institutionalized the addictive nature of prescribing narcotics for CNP?

A. State medical boards.

Q. Any others?

A. It might -- it might help here and also give you fair notice as to what I'm going to testify about if

Narcotic addiction was overwhelmingly nonmedical in character. It involved heroin, and it didn't involve states like Oklahoma.

So Oklahoma apparently had the problem well in hand by the 1930s.

Q. With regard to opiates?

A. That is correct. That's -- this -- this particular book that you're referencing didn't -- although I subsequently looked at other kinds of drugs and other research, that's just about opiates.

Q. If you -- if you move to the next paragraph, Doctor, you're talking about heroin addiction epidemics, and then you have a sentence that reads, They nonetheless reminded medical and governmental authorities that increases in the supply and potency of opiates increased the incidence of narcotic addiction and underscored the importance of controlling these class of drugs.

Do you see that?

A. Uh-huh.

Q. When you're talking about governmental authorities, you're talking about authorities like the State of Oklahoma, correct?

MR. DUCK: Objection to form.

THE WITNESS: I would say authorities at all

levels of the government. Look, the argument here is that the number of people who are addicted has a lot to do with supply, okay? And the -- and that -- this applies to both licit and illicit drugs.

If you -- if you greatly increase the exposure of people who have never used opiates before, some of them are going to get into trouble with the drugs. And that's the whole premise behind the supply system, which is both state and national in nature.

And the point I'm trying to make here is that this big increase in heroin addiction in the late 1960s and early 1970s reminded both the medical profession and people who are involved in narcotic law enforcement that, boy, if you have a big increase in supply, you're going to have a big increase in addiction and emergency room visits and so on, even though, just to be clear, even though I'm not claiming that this 1960s increase was iatrogenic in character. In fact, I'm saying the opposite. It was basically nonmedical.

But I would -- I would, as a generalization, I think that a person's not going to become addicted to opiates unless they're exposed to them. And

that goes for both licit and illicit opiates.

BY MR. BARTLE:

Q. And with regard to the governmental authorities, you would agree that the FDA would also be aware that an increase in supply would potentially raise the increase in addiction, right?

A. In what time period are we referring to?

Q. What time period are you talking about here?

MR. DUCK: Objection to form.

THE WITNESS: Well, this paragraph deals with the late 1960s and the early 1970s.

BY MR. BARTLE:

Q. The FDA was not in -- are you saying the FDA was not --

A. Of course the FDA was not paying attention to heroin because it was -- it was a banned substance. It was beyond the purview of the FDA in the late 1960s and early 1970s. It was a matter for the Bureau of Narcotics.

Q. So you're saying the FDA wasn't aware of the -- of your assertion that an increase in supply would lead to an increase in addiction?

MR. DUCK: Objection to form.

THE WITNESS: Let me make a distinction between being officially charged with doing

something and being aware of it. And let me also admit that I'm speculating here.

What I can tell you with certainty is that the FDA had no official charge with respect to heroin in the late 1960s and early 1970s. Heroin was de facto a -- a Schedule I controlled substance prior to 1970 and then de jure a Schedule I controlled substance after the passage of the Controlled Substances Act.

However, I can well imagine that a D -- I'm sorry, an FDA official, Food and Drug Administration official, reading a newspaper article in the New York Times saying that there had been an increase in supply in heroin from southeast Asia or southwest Asia might have thought, oh, yeah, supply is increased, and, therefore, we've got more heroin addiction.

But what I said earlier is true. That's not something that I have researched. I haven't gone through letters of FDA officials saying, oh, yeah, I read the New York Times today and, gee, guys, heroin supply is increasing, and, boy, that reenforces my belief that supply is a crucial variable.

of federal regulators saying no to companies like Endo when they had proposed to market synthetics in certain ways. And here I'm referring back to the 1940s and 1950s, although those episodes would have been within the living memory of people in the industry by the early -- by the early 1980s.

You had, as another example, standard -- and I think maybe this is in some ways the most important example -- standard medical textbooks like Goodman and Gilman's Pharmacological Basis of Therapeutics, which was first issued in 1941 and became almost universally used in American medical schools, which very much conveyed this doctrine of narcotic conservatism. That, by the way, is not just my judgment. That's the judgment of other historians such as Professor Caroline Acker, who has written on this subject.

These -- these are examples of repositories. There were reprint editions of classic works which warned of the dangers of medical addiction such as Charles Terry and Mildred Pellens, The Opium Problem, which was initially published in 1928, which had an extensive historical section and which was reprinted, I believe, by Patterson Smith, a New Jersey publisher, in 1970.

There was -- there was lots and lots of

information available, not least, of course, was the admonitions of the Bureau of Narcotics and the -- its successor agencies.

Anyway, that's enough. That's the point I want to make here, is there was -- there was plenty of information available to anyone who bothered to walk into a library, that there were serious dangers associated with the liberal prescribing of powerful narcotic drugs to treat chronic non-malignant pain, and that body of information had continued to grow. It originated in the 19th century, and it continued to expand and, as I say, had been institutionalized through regulatory practice in the mid-20th century.

Q. And the FDA would have been aware of that body of knowledge and research, as well, right?

MR. DUCK: Objection to form.

THE WITNESS: Had -- had it -- had it been a matter of professional interest, had there been a reason for someone in the FDA to go back and consult the accumulated body of medical knowledge about the dangers of iatrogenic addiction that would have been available to them in the 1970s.

BY MR. BARTLE:

Q. So would any person in the position of authority at the FDA in the early 1980s who surveyed the

recent past understood the four things you list in this paragraph?

MR. DUCK: Objection to form.

THE WITNESS: We had the issue arisen had someone come forward with a new drug application or had there been reason to do this research, I imagine -- I mean, what's the FDA? I mean, somebody who's in the division that looks at new antibiotics wouldn't have had particular reason to consult this body of literature.

But, yes, this -- let me -- let me simplify this. The point I want to make is that this literature was available to everybody, including people in the pharmaceutical industry by the early 1980s. A lot of information about the dangers of this course of action had accumulated.

That's what I see as a professional historian.

BY MR. BARTLE:

Q. But it wasn't just the pharmaceutical industry that would have been aware of these things, right?

A. That's correct. I'm not in the pharmaceutical industry, and I was able to tap into this body of information when I did the research that led to Dark Paradise.

Q. And the State of Oklahoma public health

officials would have known about it, as well?

A. In the 1970s, it's not something I've done research into. I presume the answer is correct because if Professor Morgan in Norman, Oklahoma can walk into a library, find these sources and anthologize them, I assume that someone in the public health establishment of the State of Oklahoma could do the same thing.

Q. But getting back to my first question, which was, have you talked to anybody who was in a position of authority in the pharmaceutical industry in the early 1980s about what they did or did not know?

A. Have I interviewed someone in the pharmaceutical industry who was considering this in the early 1980s? I've not personally interviewed such a person. That, however, is not the claim that I am making here.

The claim I am making is that any responsible medical professional or researcher would have had at his or her disposal this body of information. It's almost -- it's almost as if you asked an aircraft designer in the early 1980s, you know, what do you -- do you or do you not know? You would know certain basic aerodynamic principles that would go into the design of a good plane and what made a safe airplane. It would be ordinary professional knowledge.

But did I personally interview somebody in -- in 1980 in the pharmaceutical industry saying, you know, how does the landscape look from your perspective, and is this a direct quotation? No.

But this -- but what I can say with confidence is that this information was widely available and widely published at this time.

Q. I understand that, Doctor, but you say here, Any person in a position of authority in the pharmaceutical industry in the early 1980s who surveyed the recent past would have understood.

You used the term "understood," not available. So I'm a little unclear as to, is your opinion that this information was available to anybody who looked at it?

A. They would have been -- well, excuse me for interrupting -- would have been generally aware of the following propositions that are outlined in the remainder of the paragraph.

Q. But you haven't talked to anybody about that from the pharmaceutical industry?

A. At the time, no, I did not interview anyone in the -- I was interviewing drug addicts in the early 1980s. I was not talking to the pharmaceutical executives.

Q. What about subsequently, after the 1980s, have

you interviewed a pharmaceutical industry executive about what he or she understood in the early 1980s?

A. I have been reading about the subject, but it's not something I can go into.

Q. Have you interviewed anyone from the pharmaceutical industry in the early 1980s?

A. No.

Q. Thank you.

And then the next sentence of this paragraph is, First, tens of millions of Americans suffer from some form of chronic pain for which no sure and convenient treatment was available.

Do you see that?

A. Yes.

Q. That includes people in the state of Oklahoma?

A. Yes -- well, I don't know if there were tens of millions. This reference is to Americans, but I have no reason to suspect that the prevalence of chronic pain -- or that the market for remedies for such was different in the state of Oklahoma.

Q. And you're saying here that there was no sure or convenient treatment available to those individuals, correct?

A. That is correct. That is based on my research and to the history of pain treatment, and also,

them generally seems to be favorable. I suppose that's a nonexpert opinion.

Q. Are you opining on whether the current opioid epidemic was foreseeable?

MR. DUCK: Objection to form.

THE WITNESS: If I may return to my actual statement, I have cited a number of types of evidence to the effect that the -- there's a substantial body of research that suggested that a significant increase in the supply of an addictive psychoactive substance would lead to a significant increase in addiction and related problems and that that was, in fact, established by the 1970s.

BY MR. BARTLE:

Q. My question was, are you opining on whether the current opioid epidemic was foreseeable?

MR. DUCK: Same objection.

THE WITNESS: I would ask you to restate the question.

BY MR. BARTLE:

Q. I don't understand how -- what's -- what's -- what's unclear about that, Doctor?

Are you opining on whether the current opioid epidemic was foreseeable?

A. I'm having trouble with the word "opining."

What I see is a body of accumulated medical evidence that indicated that, if you do this, the likely outcome will be this and that that was well established and widely recognized by the late 1970s.

If that, in your mind, constitutes opining that this was foreseeable, I suppose the answer is yes.

Q. Well, you know what the word "opining" means, right?

A. Actually, as a layman, I'm wondering if you're using that in a legal sense with which I'm not familiar, and I would appreciate --

Q. What's your -- sure.

A. -- an explanation of that.

Q. What's your understanding of the definition of the word "opine"?

A. To offer an opinion on.

Q. Are you offering an opinion on whether the current opioid epidemic was foreseeable?

A. I'm offering an opinion on something that is more general. You have to remember that, in the late 1970s, OxyContin didn't exist. Nobody knew what the future was.

However, I think that anyone who had bothered to consult the literature in the late 1970s would know that a very significant increase in supply, whether it

was in the form of hydrocodone or oxycodone or some other opioid, would in all likelihood lead to an increase in addiction.

When you say the current opioid epidemic, you mean a highly specific thing in which there's -- certain drugs are the most commonly-abused drugs. I don't think anybody in the late 1970s would have been in a position to foresee that people were driving down Interstate 75 from Kentucky to Florida to buy Roxicodone in pill mills and go back to Kentucky. I mean, that degree of specificity of foreknowledge would have been impossible in the late 1970s.

What I do mean to opine is that any -- any reasonable person with access to this information would have anticipated an increase in the overall level of addiction and related problems given a significant increase in supply, particularly of potent narcotics.

Q. And that would include the FDA?

MR. DUCK: Objection to form.

THE WITNESS: That would include --

BY MR. BARTLE:

Q. The FDA?

A. I would say that everybody in the medical profession would have access to this, and -- this body of knowledge.

A. Oh, no.

Q. You mentioned a number of times over the course of this --

A. Although I -- I'm sorry to interrupt you, but I should interject that my testimony today is not yet complete, so there may be other things that come out, but --

Q. Correct.

What you've testified to already?

A. Yes.

Q. Were you asked to stop your expert research and analysis in the early 1980s?

MR. DUCK: Wait. Are you talking about for this case?

MR. BARTLE: For this case.

MR. DUCK: So to the extent that requires you to divulge anything that you or I or any other attorney that you've worked with has discussed, you don't have to answer the question.

BY MR. BARTLE:

Q. Let me ask it this way. Have you done any historical research and analysis of post -- of the opioid epidemics post-1980?

MR. DUCK: Same instruction.

MR. BARTLE: Well, that's -- that's different.

BY MR. BARTLE:

Q. Have you done any research and analysis of opioid epidemics post-1980 for this case?

A. Under instruction of my attorney, I decline to answer the question.

Q. But you're not going to offer any opinion or testimony with regard to anything that happened post-19 -- early 1980s?

A. In this case, I am not.

Q. Have you been identified as a testifying expert in any other cases?

A. I have not been qualified as an expert witness in any other cases as of today.

Q. That's not what I asked. I asked have you been identified as an expert witness in any other cases.

A. I have not yet been disclosed as an expert witness in any other cases.

Q. Okay.

A. Is that the correct word?

MR. DUCK: Yeah.

BY MR. BARTLE:

Q. That is the correct word.

Doctor, with regard to the prior iatrogenic -- well, strike that.

With regard to the iatrogenic opioid epidemics

that you -- the one that you discussed today, did that involve opioids that had FDA-approved labels?

A. The federal -- the Food and Drug Administration did not exist in the late 19th century. The answer is no.

MR. BARTLE: I have no further questions. I pass the witness.

CROSS-EXAMINATION

BY MR. FRANKLIN:

Q. Good afternoon, Dr. Courtwright.

A. Good afternoon.

Q. I just have a few questions about the nature of your opinion in this -- in this action.

Are you giving any opinions related to any marketing or promotion efforts by Janssen Pharmaceuticals, Inc.?

MS. SUAZO: Stand by real quick. Harvey, could you pass that mic down.

THE WITNESS: I think you need to repeat your question so it'll pick up on the audio.

BY MR. FRANKLIN:

Q. It's on the transcript, but just to be clear, I'll ask it again.

Are you giving any opinions in this case related to any marketing or promotional efforts by

Janssen Pharmaceuticals, Inc.?

A. No, sir, I am not.

Q. Are you giving any opinions in this case regarding marketing or promotional efforts by Janssen Pharmaceutica, Inc.?

A. No, sir, I am not.

Q. Are you giving any opinions in this case related to any marketing or promotional efforts by Ortho-McNeil Janssen Pharmaceuticals, Inc.?

A. In this case, no, sir, I am not.

Q. Are you giving any opinions in this case with regard to any marketing or promotional efforts by Johnson & Johnson?

A. In this case, no, sir, I am not.

MR. FRANKLIN: I have no further questions.

MR. DUCK: Ben, you got any questions?

MR. MCANANEY: I have no questions. Pass the witness.

MR. DUCK: All right. I've just got a few questions myself for you, Dr. Courtwright, and then we'll get out of here.

CROSS-EXAMINATION

BY MR. DUCK:

Q. Now, you're generally aware that there is in this country, and including in the state of Oklahoma, an

3

EXHIBIT 3

IN THE DISTRICT COURT OF CLEVELAND COUNTY
STATE OF OKLAHOMA

STATE OF OKLAHOMA, ex rel., MIKE HUNTER, ATTORNEY GENERAL OF OKLAHOMA,	§	
Plaintiff,	§	
vs.	§	
(1) PURDUE PHARMA L.P.; (2) PURDUE PHARMA, INC.; (3) THE PURDUE FREDERICK COMPANY; (4) TEVA PHARMACEUTICALS USA, INC.; (5) CEPHALON, INC.; (6) JOHNSON & JOHNSON; (7) JANSSEN PHARMACEUTICALS, INC.; (8) ORTHO-McNEIL-JANSSEN PHARMACEUTICALS, INC., n/k/a JANSSEN PHARMACEUTICALS, INC.; (9) JANSSEN PHARMACEUTICA, INC., n/k/a JANSSEN PHARMACEUTICALS, INC.; (10) ALLERGAN, PLC, f/k/a ACTAVIS PLC, f/k/a ACTAVIS, INC., f/k/a WATSON PHARMACEUTICALS, INC.; (11) WATSON LABORATORIES, INC.; (12) ACTAVIS LLC; and (13) ACTAVIS PHARMA, INC., f/k/a WATSON PHARMA, INC.,	§	Case No. CJ-2017-816 JURY TRIAL DEMANDED
Defendants.	§	

THE STATE'S EXPERT WITNESS DISCLOSURES

Pursuant to 12 O.S. 3226(B)(4)(a)(3) and the Court's Scheduling Order of September 11, 2018, the State of Oklahoma (the "State"), by and through the undersigned attorneys, hereby provides these expert disclosures subject to the following reservations of rights;

1. The State reserves the right to amend and supplement these disclosures as necessary and as required by the Oklahoma Code of Civil Procedure (a) as discovery continues, (b) after additional documents, evidence, and data is produced, (c) after new facts, data, analysis, conclusions, and findings are published by researchers, scientists, academicians, research groups,

courts, non-profit groups, and/or governmental agencies or departments, (d) after receiving Defendants' expert disclosures and/or expert disclosures, (e) after deposing Defendants' expert witnesses; and (f) after depositions of fact witnesses and corporate representatives have been completed;

2. To the extent not expressly referenced or cited in the particular disclosure for each expert contained herein, the State's expert witnesses have reviewed and relied upon, in varying degrees, the materials produced by the State and/or the Defendants and the depositions testimony provided to date in forming their expert opinions, and the State's experts may continue to do so as appropriate;

3. The State's experts incorporate all materials that have been produced or will be produced in the future by the State and/or Defendants as a possible ground or basis for their testimony and opinions.

4. Because discovery is ongoing, the State further reserves the right to amend and supplement these disclosures in response or rebuttal to any expert disclosures, testimony, and/or opinions offered by the Defendants in this litigation, including any and all data, documents, and evidence relied upon by Defendants' expert witnesses.

5. As expressly contemplated in 12 O.S. §32236(B)(4)(a)(3), these disclosures are not intended to supplant or replace the taking of expert depositions, which deposition testimony, if any, is incorporated into these disclosures as if fully set forth herein; nor are these disclosures intended or required to be an exhaustive recitation of every matter upon which each expert is expected to testify at deposition or trial; nor are these disclosures intended or required to contain an exhaustive list of all materials each expert relied upon in forming their opinions;

6. The State further reserves the right to solicit expert testimony or opinions from fact witnesses and/or corporate representatives who may be deposed or called at trial to the extent such fact witnesses and/or corporate representatives are qualified to offer expert testimony or opinions;

7. The State further reserves the right to offer additional expert testimony or opinions in the form of calling the Defendants' expert witnesses at trial or otherwise;

8. Nothing disclosed or stated in these disclosures is intended to or does in fact alter, amend, or modify the State's Petition or the statutory, common law, and/or equitable claims alleged therein;

9. Subject to the reservations herein and other protections available under the Oklahoma Code of Civil Procedure and/or the Orders of the Court, the following expert witnesses, whom the State intends to call at trial, are disclosed herein:

1. Dr. Jason Beaman – *See* Exhibit A
2. Dr. Daniel Clauw – *See* Exhibit B
3. Dr. David Courtright – *See* Exhibit C
4. Dr. Julie Croff – *See* Exhibit D
5. Dr. John Duncan – *See* Exhibit E
6. Dr. Adrienne Fugh-Berman – *See* Exhibit F
7. Dr. James Gibson – *See* Exhibit G
8. Mr. Ty Griffith – *See* Exhibit H
9. Ms. Jessica Hawkins – *See* Exhibit I
10. Dr. Andrew Kolodny – *See* Exhibit J
11. Dr. Erin Krebs – *See* Exhibit K
12. Dr. Samuel Martin – *See* Exhibit L
13. Dr. Danesh Mazloomdoost – *See* Exhibit M
14. Dr. Bill McAllister – *See* Exhibit N
15. Mr. Gary Mendell – *See* Exhibit O
16. Dr. Claire Nguyen – *See* Exhibit P
17. Dr. Mel Pohl – *See* Exhibit Q
18. Dr. Julio Rojas – *See* Exhibit R
19. Dr. Chris Ruhm – *See* Exhibit S
20. Dr. Susan Sharp – *See* Exhibit T
21. Mr. Renzi Stone – *See* Exhibit U
22. Dr. Art Van Zee – *See* Exhibit V
23. Commissioner Terri White – *See* Exhibit W

10. Any expert witnesses previously disclosed by the State not listed above are no longer testifying experts but are subject to the applicable protections under 12 O.S. §3226(B)(4)(c).

Dated December 21, 2018

Respectfully submitted,

/s/ Michael Burrage

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/s/ Michael Burrage

Michael Burrage

EXHIBIT C

Exhibit C - Dr. David Courtwright, Ph. D., B.A.

A. Dr. Courtwright is expected to testify about the following subject matter:

- The history of opiate addiction and opiate-addiction crises in the United States.
- The history and development of narcotic laws and regulations in the United States.
- The history and development of the American medical profession's attitudes toward prescribing opioids, particularly in the treatment of chronic nonmalignant pain, prior to the early 1980s.

B. Dr. Courtwright is expected to testify about the following facts and opinions, among others:

There have been at least three opiate addiction crises in the United States prior to the current opioid addiction crisis: a medical opiate addiction epidemic in the late nineteenth century and two non-medical heroin epidemics in the mid-twentieth century.

In the course of the epidemic of opiate addiction in the late nineteenth century medical and pharmaceutical professionals learned that it was dangerous to prescribe narcotic drugs to patients suffering from what is now called chronic nonmalignant pain (CNP). The principal risk of such treatment was addiction.

The knowledge of the addictive danger of prescribing narcotics for CNP was significant, lasting, and institutionalized. It was significant because it helped end, through primary prevention, the country's first major opiate addiction epidemic. It was lasting because warnings against prescribing narcotics for CNP became a fixture of medical instruction and literature. It was institutionalized because it was expressed in laws and regulations enforced by federal agencies that oversaw the licit narcotics trade.

Regulators warned pharmaceutical manufacturers and distributors of the addictive potential of new semi-synthetic and synthetic products that they proposed to market. This cautionary knowledge and these institutions prevented further large-scale epidemics of iatrogenic narcotic addiction until the end of the twentieth century.

While there were subsequent *heroin* addiction epidemics, notably from the late 1940s to the early 1950s, and again from the late 1960s to the early 1970s, these episodes were nonmedical in character. They nonetheless reminded medical and governmental authorities that increases in the supply and potency of opiates increased the incidence of narcotic addiction, and underscored the importance of controlling this class of drugs.

The precondition for the restoration of a mass market for prescription narcotics and, consequently, for a second large-scale epidemic of medical narcotic addiction was that cautionary axioms about treating CNP with opioids had to be revised or rendered irrelevant.

Any person in a position of authority in the pharmaceutical industry in the early 1980s who surveyed the recent past would have understood four things. First, tens of millions of Americans suffered from some form of chronic pain for which no sure and convenient treatment was available. Second, despite a half century of trying, researchers had failed to find the holy grail of a narcotic analgesic that carried virtually no risk of addiction or other adverse consequences of long-treatment for CNP. Third, if they could market a new narcotic analgesic *as if it were this holy grail*, they could make a fortune. Fourth, if the new narcotic analgesic was not in fact the holy grail, and if it retained the risks historically associated with the use of opiates (especially potent opiates) in the long-term treatment of CNP, there was every likelihood of a substantial increase in the incidence of iatrogenic addiction, the epidemic's size correlating with the amount of the narcotic sold.

C. Summary of the grounds for each opinion

David T. Courtwright is Presidential Professor in the Department of History at the University of North Florida, where he teaches courses in U.S., world, and medical history. He earned a Ph.D. in History from Rice University, where he wrote a dissertation on the history of narcotic addiction in the United States. The dissertation was the basis of *Dark Paradise* (1982, revised and expanded ed. 2001), published by Harvard University Press. During his career he has authored or coauthored several other books on drug history and drug policy, including *Forces of Habit: Drugs and the Making of the Modern World* (Harvard, 2001), and *Addicts Who Survived: An Oral History of Narcotic Use in America before 1965* (rev. ed., U. of Tennessee Press, 2012). Dr. Courtwright's research has been recognized with fellowships from the American Council of Learned Societies and the National Endowment for the Humanities, which named him an inaugural recipient of its Public Scholar Award. He has also received the Media Award of the College of Problems on Drug Dependence.

D. Dr. Courtwright's Compensation

Dr. David Courtwright is being compensated at the following rate: $450 per hour for testimony and preparation. In addition, a payment of $2,500 was made to the University of North Florida to fund a teaching assistant position so that Dr. Courtwright could take time away from the classroom to work on this case.

E. Dr. Courtwright's Qualifications

For Dr. Courtwright's *curriculum vitae* please see Exhibit C-1.

F. Dr. Courtwright's Publications

For Dr. Courtwright's publications in the preceding ten years please see Exhibit C-2.

G. Dr. Courtwright's Prior Testimony

Dr. Courtwright has not testified or been deposed as an expert in litigation in the past ten (10) years.

EXHIBIT C-1

DAVID T. COURTWRIGHT, CURRICULUM VITAE

CURRENT AND PAST POSITIONS

Presidential Professor, University of North Florida, 2005-present; full prof. of history since 1988.
Associate Professor of History, University of Hartford, 1985-1988.
Assistant Professor of History, University of Hartford, 1979-1985.
Faculty Associate in Epidemiology, University of Texas School of Public Health, 1978-1979.

EDUCATION

Ph.D. Rice University, History, 1979. Dissertation: "Opiate Addiction in America, 1800-1940."
B.A. University of Kansas, English, *summa cum laude* and Phi Beta Kappa, 1974.

SELECTED AWARDS AND HONORS

NEH: Public Scholar Grant, 2016-2017; Fellowship, 1998-1999 (to write *Forces of Habit*).
University of Richmond: Douglas Southall Freeman Professor of History, 2015.
UNF: John A. Delaney Presidential Professorship, 2005; Outstanding Scholarship Award, 2002, 2012; Teaching Awards, 1998, 1999, 2001, 2002, 2005; Distinguished Professor, 1998.
College on Problems of Drug Dependence: Media Award, 2002 (for *Forces of Habit*).
American Council of Learned Societies: Fellowship, 1993-1994 (to write *Violent Land*).

BOOKS BEARING ON THE HISTORY OF DRUG USE AND DRUG POLICY

The Age of Addiction: How Bad Habits Became Big Business (Belknap Press of Harvard University Press, May 2019).
Addicts Who Survived: An Oral History of Narcotic Use before 1965, rev. ed. (Tennessee, 2012).
No Right Turn: Conservative Politics in a Liberal America (Harvard, 2010)
Forces of Habit: Drugs and the Making of the Modern World (Harvard, 2001). Multiple translations.
Dark Paradise: A History of Opiate Addiction in America, exp. ed. (Harvard, 2001).
Violent Land: Single Men and Social Disorder from the Frontier to the Inner City (Harvard, 1996).

REFEREED ARTICLES AND CHAPTERS ON DRUGS, ALCOHOL, AND TOBACCO

"Preventing and Treating Narcotic Addiction—A Century of Federal Drug Control," *New England Journal of Medicine* 373 (2015): 2095-2097.
"The Prescription Opioid and Heroin Crisis: A Public Health Approach to an Epidemic of Addiction," *Ann. Rev. of Public Health* 36 (March 2015): 559-574; second author.
"Addiction and the Science of History," *Addiction* 107 (2012): 486-492, reprinted with commentaries and response in "Addiction, History, and Historians: A Symposium," *Points*, https://pointsadhsblog.wordpress.com/2012/03/02/addiction-and-historians-a-symposium/.

"Modernity and Anti-Modernity: Drug Policy and Political Culture in the United States and Europe in the Nineteenth and Twentieth Centuries," *Drugs and Culture: Knowledge, Consumption and Policy*, ed. Geoffrey Hunt et al. (Farnham: Ashgate, 2011), 213-224; principal author.

"The NIDA Brain Disease Paradigm: History, Resistance, and Spinoffs," *BioSocieties* 5 (2010): 137-147.

"Mr. ATOD's Wild Ride: What Do Alcohol, Tobacco, and Other Drugs Have in Common?" *Social History of Alcohol and Drugs* 20 (2005): 105-140, with commentaries.

"'Carry on Smoking': Public Relations and Advertising Strategies of American and British Tobacco Companies since 1950," *Business History* 47 (2005): 421-432.

"The Controlled Substances Act: How a Big Tent Reform Became a Punitive Drug Law," *Drug and Alcohol Dependence* 76 (2004): 9-15.

"The Roads to H: The Emergence of the American Heroin Complex, 1898-1956," *100 Years of Heroin*, ed. David F. Musto et al. (Westport, Conn.: Auburn House, 2002), 3-19.

"Morality, Religion, and Drug Use," *Morality and Health*, ed. Allan M. Brandt and Paul Rozin (New York: Routledge, 1997), 231-250.

"The Prepared Mind: Marie Nyswander, Methadone Maintenance, and the Metabolic Theory of Addiction," *Addiction* 92 (1997): 257-265.

"The Rise and Fall and Rise of Cocaine in the United States," *Consuming Habits: Drugs in History and Anthropology*, ed. Jordan Goodman, Paul E. Lovejoy, and Andrew Sherratt (London: Routledge, 1995), 206-228. Revised and republished in the 2nd ed. (London: Routledge, 2007).

"The Hidden Epidemic: Opiate Addiction and Cocaine Use in the South, 1860-1920," *Journal of Southern History* 49 (1983): 57-72.

"Opiate Addiction as a Consequence of the Civil War," *Civil War History* 24 (1978): 101-111. Awarded the Mary Hayes Ewing Publication Prize in Southern History, 1979.

RELATED PROFESSIONAL ACTIVITIES

President, Alcohol and Drugs History Society, 2009-2011.

Editorial Board, *Bulletin of the History of Medicine*, 2017-present.

Member, Institute of Medicine Substance Abuse Coverage Committee, 1988-1990. The committee investigated the adequacy of drug abuse treatment in the U.S. and made recommendations to Congress in *Treating Drug Problems*, 2 vols. (Washington, D.C.: National Academy Press, 1990, 1992).

Expert witness in federal district courts in Florida, Georgia, and Missouri in 1993 and 1994. I testified about the historical background of U.S. drug laws in relation to constitutional challenges to crack-cocaine sentencing provisions.

CONTACT INFORMATION

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EXHIBIT C-2

DAVID T. COURTWRIGHT

PUBLISHED RESEARCH SINCE FALL 2008

NOTE: I DO NOT LIST WORKS LIKE BOOK REVIEWS OR MINOR ARTICLES IN MY CURRICULUM VITAE. TO COMPILE THIS LIST, I EXTRACTED THE SCHOLARSHIP ENTRIES FROM MY ANNUAL REPORTS TO THE UNF HISTORY DEPARTMENT FOR THE LAST TEN YEARS. PLEASE FEEL TO REARRANGE THE LIST AS NEEDED.

Publications in 2008-2009

Chapter

"The Roads to H: The Emergence of an American Heroin Complex, 1898-1956," in *The Praeger International Collection of Addictions*, vol. 1, ed. Angela Browne-Miller (Praeger, 2009): reprint of a chapter that originally appeared in *One Hundred Years of Heroin*, ed. David Musto (Westport, Conn.: Auburn House, 2002).

Book and Media Reviews

The Quest for Drug Control: Politics and Federal Policy in a Period of Increasing Substance Abuse, 1963-1981, by David F. Musto and Pamela Korsmeyer: (New Haven: Yale University Press, 2002), in *Social History of Alcohol and Drugs* (2008): 102.

Drugs and Empires: Essays in Modern Imperialism and Intoxication, c.1500-c. 1930, ed. James H. Mills and Patricia Barton (Palgrave MacMillan, 2007), in *Social History of Medicine* 21 (2008): 404-405.

The Opium Debate and Chinese Exclusion Laws in the Nineteenth-Century American West (U. of Nevada Press, 2007), in *Bulletin of the History of Medicine* 82 (2008): 916-917.

"Not a Cough in a Carload: Images from the Tobacco Industry Campaign to Hide the Hazards of Smoking," Stanford University Web exhibit, in *Bulletin of the History of Medicine* 82 (2008): 916-917.

On Speed: The Many Lives of Amphetamine, by Nicolas Rasmussen (NYU Press), in *Journal of American History* 95 (2009): 1211-12.

"Why Soldiers Fight—or Flee," review of Dora L. Costa and Matthew E. Kahn, (Princeton U. Press, 2009), for *Wall Street Journal*, January 13, 2009, A15.

Publications in 2009-2010

Articles

"The NIDA Brain Disease Paradigm: History, Resistance, and Spinoffs," *BioSocieties* 5 (2010): 137-147.

"NIDA, This is Your Life," *Drug and Alcohol Dependence* 107 (2010): 116-118.

"American Alcohol Studies Matures: The Class of 1979, Thirty Years of Reflection," *Social History of Alcohol and Drugs* (Winter 2010): 39-41.

Review Essay

"Bearing Witness: Tobacco, Public Health, and History," *Addiction* 104 (2009): 1260-1263.

Reprinted Work

"David T. Courtwright on DeLillo as a Nomothetic Historian," *Don DeLillo*, ed. Harold Bloom (New York: Chelsea House, 2003), 89-91, reprinted in the Ebsco 2009 online version.

Publications in 2010-2011

Book

No Right Turn: Conservative Politics in a Liberal America (Harvard University Press, 2010).

Article

"The Difference a Word Makes: A Short History of 'Prohibition,'" *Addiction* 105 (2010): 1174-1175. Commentary on Wayne Hall, "What are the Policy Lessons of National Alcohol Prohibition in the USA, 1920-1933?"

Encyclopedia Entry

"Psychoactive Drugs," Berkshire Encyclopedia of World History , 2nd ed., William McNeill et al. eds. (Great Barrington, Mass.: Berkshire, 2011), 812-817. This is a republication in an updated second edition.

Book reviews

Rightward Bound: Making America Conservative in the 1970s, ed. Bruce J. Schulman and Julian E. Zelizer (Cambridge, Mass.: Harvard University Press, 2008), reviewed in *The Historian* 72 (2010): 446-447.

Smack: Heroin and the American City, by Eric C. Schneider (Philadelphia: University of Pennsylvania Press, 2008), reviewed in *Addiction* 105 (2010): 1500-1501.

Publications in 2011-2012

Chapters and Articles

"Modernity and Anti-Modernity: Drug Policy and Political Culture in the United States and Europe in the Nineteenth and Twentieth Centuries," *Drugs and Culture: Knowledge, Consumption and Policy*, ed. Geoffrey Hunt, Maitena Milhet, and Henri Bergeron (Farnham: Ashgate, 2011), 213-224, as principal author.

"Is 'Right Turn' the Wrong Frame for American History after the 1960s?" *Historically Speaking* 12 (June 2011): 6-8.

"The Cultural Harmonies of Capitalism," *Hedgehog Review* 13 (Fall 2011): 68-69.

"Language-Use Disorder: Comment on DSM-V's Proposed 'Addiction and Related Disorders' and Charles O'Brien's 'Addiction and Dependence in DSM-V,'" *Addiction* 106 (2011): 878-879.

"David F. Musto (1936-2010)" [obituary], *Addiction* 106 (2011): 1188-1189.

"Addiction and the Science of History," *Addiction* 107 (March 2012): 486-492.

"Addiction Neuroscience, the Progressive Implosion of Pathology, and Historical Explanation," *Points*, March 13, 2012, http://pointsadhsblog.wordpress.com/2012/03/13/addiction-history-and-historians-david-courtwright-replies/. "Addiction and the Science of History," above, produced four formal responses in Points. The editor invited me to reply, which I did in this essay.

Book Reviews

Perversion for Profit: The Politics of Pornography and the Rise of the New Right, by Whitney Strub (New York: Columbia University Press, 2011), reviewed in *The Journal of American History* 98 (2011): 907-908.

A History of Drugs: Drugs and Freedom in the Liberal Age, by Toby Seddon (Routledge: Abingdon, 2010), reviewed in *Criminology and Criminal Justice* 12 (2012): 219.

Publications in 2012-2013

Book

Addicts Who Survived: An Oral History of Narcotic Addiction in America before 1965, as first author. Knoxville: University of Tennessee Press. This is an expanded paperback edition of a book first published in 1989.

Articles and Foreword

Morality, Public Policy, and Partisan Politics in American History: An Introduction," *Journal of Policy History* 25 (2013): 1-11.

"A Short History of Drug Policy, or Why We Make War on Some Drugs but Not on Others," *Governing the Global Drug Wars: LSE Ideas Special Report* (London: London School of Economics, October 2012), 17-24; also available in Spanish translation.

"Forgotten but Not Gone: A Century of the Drug War." Foreword to *Substance Abuse in America: A Documentary and Reference Guide*, ed. James A. Schwartz (Santa Barbara, Calif. Greenwood, 2012), xiii-xiv.

Encyclopedia Articles

"Drug Use," *The New Encyclopedia of Southern Culture*, vol. 22: *Science of Medicine*, ed. James G. Thomas Jr. and Charles Reagan Wilson (Chapel Hill: University of North Carolina Press, 2012), 57-62.

"Drugs, Illicit." *The Oxford Encyclopedia of American Political and Legal History* (New York: Oxford University Press, 2012), ed. Donald T. Critchlow and Philip R. VenderMeer. Hardcover edition 2012, online version 2013, http://www.oxfordreference.com/abstract/10.1093/acref/9780199754618.001.0001/acref-9780199754618-e-0138?rskey=st7Ydu&result=141.

Drugs, Illicit." *The Oxford Encyclopedia of American Social History* (New York: Oxford University Press, 2012), ed. Lynn Dumenil. Hardcover edition 2012, online version 2013, http://www.oxfordreference.com/abstract/10.1093/acref/9780199743360.001.0001/acref-9780199743360-e-0128?rskey=Yz68oP&result=131.

Reviews

"Booze and Pilots: *Flight*," *Points*, November 27, 2012, https://pointsadhsblog.wordpress.com/2012/11/27/booze-and-pilots-flight/.

"'The American Disease Turns Forty,'" *Points*, January 28, 2013, https://pointsadhsblog.wordpress.com/2013/01/28/the-american-disease-turns-forty/.

Publications in 2013-2014

Chapter and Foreword

"Road Movie: The Legacies of *Easy Rider*," in Klaus Benesch, ed., *Culture and Mobility* (Heidelberg: Heidelberg University Press, 2013), 91-102.

"Drug Use and Prohibition: Three Reform Traditions," foreword to *Prohibition, Religious Freedom, and Human Rights: Regulating Traditional Drug Use*, ed. Beatriz Caiuby Labate and Clancy Cavnar (Berlin: Springer, 2014), v-viii.

Reviews and Review-Essays

Review-essay: Thomas Dormandy, *Opium: Reality's Dark Dream*; Hans Derks, *History of the*

Opium Problem: The Assault on the East; and Ian Tyrrell, *Reforming the World: The Creation of America's Moral Empire*, for the *Journal of the History of Medicine and Allied Sciences* 68 (2013): 688-94.

Review-essay: Jeffrey Frank, *Ike and Dick: Portrait of a Strange Political Marriage*, for *The Hedgehog Review* 15 (Fall 2013): 103-106.

Review: Natasha Dow Schüll, *Addiction by Design: Machine Gambling in Las Vegas*, for *Addiction* 108 (1913): 2033.

Review-essay: *James Mills, Cannabis Nation: Control and Consumption in Britain, 1928-2008*, for *Reviews in History* http://www.history.ac.uk/reviews/print/review/1520, Dec. 12.

Publications in 2014-2015

Book Translation

China CITIC Press published a new Chinese language edition of *Forces of Habit: Drugs and the Making of the Modern World* (first published Harvard, 2001).

Chapters and Articles

"The Prescription Opioid Crisis and Heroin Crisis: A Public Health Approach to an Epidemic of Addiction," *Annual Review of Public Health* 36 (2015), 559-74, as second author.

"Conservatives and Conservatism," *American Political Culture: An Encyclopedia*, ed. Michael Shelly-Jensen (Santa Barbara: ABC-CLIO, 2015), 205-213, as third author.

"The NIDA Brain Disease Paradigm: History, Resistance, and Spinoffs," *Expanding Addiction: Critical Essays*, ed. Robert Granfield and Craig Reinarman (New York: Routledge, 2015), 62-69. This chapter originally appeared as an article in *BioSocieties*, referenced above.

"The Hidden Epidemic: Opiate Addiction and Cocaine Addiction in the South, 1860-1920," *The American Drug Scene: Readings in a Global Context*, 7th ed., ed. James A. Inciardi and Karen McElrath (New York: Oxford University Press, 2015), 24-35. This chapter originally appeared as an article in the *Journal of Southern History*.

Reviews

Review of Kathleen Frydl, *The Drug Wars in America, 1940-1973* (New York: Cambridge University Press, 2013), *Journal of American History* 101 (2014): 327-28.

Review of Virginia Berridge, *Demons: Our Changing Attitudes to Alcohol, Tobacco, and Drugs* (Oxford: Oxford University Press, 2013), *Social History of Medicine* 28 (2015): 221-223.

Publications in 2015-2016

Articles

"The Cycles of American Drug Policy," *American Historian* (August 2015): 24-29.

"Preventing and Treating Narcotic Addiction—A Century of American Drug Policy," *New England Journal of Medicine* 373 (2015): 2095-2097.

"Scientists Want to Study Marijuana. Big Pot Just Wants to Sell It," *Washington Post*, https://www.washingtonpost.com/news/in-theory/wp/2016/04/29/scientists-want-to-study-marijuana-big-pot-just-wants-to-sell-it/, April 29.

Review

Review of *Thai Stick: Surfers, Scammers, and the Untold Story of the Marijuana Trade*, by Peter Maguire and Mike Ritter, for *Pacific Historical Review* 83 (August 2014): 400-401.

Publications in 2016-2017

Reviews

Gendered Drugs and Medicine: Historical and Socio-Cultural Perspectives, ed. Teresa Ortiz-Goméz and María Jesús Santesmases (Farnham: Ashgate, 2014), in *Bulletin of the History of Medicine* 90 (2016): 565-566.

Alan Meyer, *Weekend Pilots: Technology, Masculinity, and Private Aviation in Postwar America* (Baltimore: Johns Hopkins U. Press, 2015), in *AHR* 121 (2016): 1688-89.

Publication in 2017-2018

Book

Redwood Audiobooks released *Sky as Frontier* (2004) on audio, link available at Audible, https://www.audible.com/pd/History/Sky-as-Frontier-Audiobook/B01LXMJDVY.