IN THE SUPREME COURT OF CALIFORNIA

ANTONIO AGUILAR, et al.,

Plaintiffs, Appellants, Petitioners

VS.

EXXONMOBIL CORPORATION, et al.,

Defendants and Respondents.

"LOCKHEED LITIGATION CASES" (GROUP 4 AND 5 RETRIAL PLAINTIFFS)

On Appeal from the Judicial Council Coordination Proceeding 2967 Honorable John A. Torribio, Judge Case No. JCCP2967

AFTER A DECISION BY THE COURT OF APPEAL SECOND APPELLATE DISTRICT, DIVISION THREE CASE NO. B166347

APPLICATION FOR LEAVE TO FILE BRIEF AND BRIEF OF THE CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA AS AMICUS CURIAE IN SUPPORT OF DEFENDANTS/RESPONDENTS

National Chamber Litigation Center, Inc.

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Pursuant to Rule 29.1(f) of Title One of the California Rules of Court, the Chamber of Commerce of the United States of America (the "Chamber") respectfully moves for permission to file the attached brief as amicus curiae. The Chamber files this brief in support of Defendants/
Respondents ExxonMobil Corporation and Union Oil Company of California dba Unocal (collectively "Respondents"), and urges this Court to affirm the judgment of the Court of Appeal for the Second Appellate District.

The Chamber, a nonprofit corporation organized under the laws of the District of Columbia, is the world's largest business federation. The Chamber represents an underlying membership of more than three million companies and professional organizations of all sizes, in every sector of industry, and from every region of the country. The Chamber regularly advocates the interests of its members in legal matters involving issues of national concern to the American business community. To that end, the Chamber regularly files *amicus curiae* briefs in cases that raise issues of vital concern to the nation's business community.

The Chamber is filing this brief because the outcome of this appeal will greatly influence the quality of the expert testimony deemed admissible in California courts. Specifically, this case addresses the role the trial courts have in screening non-novel expert testimony for threshold reliability and the standards the courts must employ to conduct that assessment. As with other questions of admissibility, the trial courts should have the power – indeed the duty – to act as gatekeepers to ensure relevance and probity of expert evidence; in this context, this principle requires that trial courts ensure that expert testimony in California is based on reliable reasoning and methods and further that such testimony fits the facts of the case. While the weight of California authority reflects this approach, including the Court of Appeal's decision here, California courts have not been uniform in all cases in their approach to the admissibility of scientific evidence. See Roberti v. Andy's Termite & Pest Control, Inc., 113 Cal.App.4th 893 (2003) (eschewing a reliability requirement). This Court should affirm that the California courtroom doors are not open to

expert opinion testimony that is scientifically or technically unreliable – i.e., "junk science."

It is difficult to overstate the importance of this issue to the Chamber and its members. The Chamber's members routinely face lawsuits that turn significantly and sometimes completely on expert opinion testimony, such as the toxic-tort case at issue here. These lawsuits can threaten the very existence of the business involved, especially in the case of small businesses (more than 96% of the Chamber's members are small businesses with less than 100 employees). Moreover, the admission of speculative expert testimony unsupported by sound science threatens the rationality and predictability of litigation outcomes, which, in turn, impedes the ability of businesses in California and across the nation to prosper.

The Chamber's substantial and diverse membership, which includes businesses of all sizes across the country, allows the Chamber to assist the Court in understanding the very real consequences for the business community raised by this case. Because business in the information age rarely confines itself to a single jurisdiction, consistency of judicial approaches to the admissibility of scientific and technical evidence across the country – whether in federal or state courts – is of paramount concern to business. In this regard, the Chamber, in its brief, urges the Court to endorse the principles and standards enunciated by the United States Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S.

579 (1993) – standards that have been accepted wholly or substantially by the majority of state courts, and which have proven workable, effective, and consistent with the purpose of allowing appropriate expert testimony to be provided to the finder of fact. The Court should adopt the *Daubert* approach for assessing the admissibility of non-novel scientific and technical expert testimony in California.

Accordingly, the Chamber respectfully requests that the Court grant this application to file the Chamber's *amicus curiae* brief.

October 7, 2005

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BRIEF OF THE
CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA
AS AMICUS CURIAE IN SUPPORT OF DEFENDANTS/RESPONDENTS

INTEREST OF THE AMICUS CURIAE

The Chamber of Commerce of the United States of America (the "Chamber") is the world's largest federation of business organizations and individuals. The Chamber represents an underlying membership of more than three million businesses of every size, in every sector, and from every geographic region of the country, including many members in California. One of the Chamber's primary missions is to represent the interests of its members by filing *amicus curie* briefs in cases involving issues of national concern to American business. This case directly raises important issues regarding whether California trial courts should screen proposed scientific and technical expert testimony for reliability and the appropriate framework

for doing so. The interest of *amicus curiae* Chamber of Commerce of the United States of America is more fully described in the accompanying motion for leave to file this brief.

STATEMENT OF THE CASE

The Chamber adopts the Respondents' Statement of the Case. (See Respondents' Answer Brief ("Resp. Br.")¹ at 3-18).

SUMMARY OF THE ARGUMENT

In this case, the trial court – on a well-developed record – excluded expert opinion testimony on toxic causation that was not reliably supported by the materials the expert purported to rely upon. California trial courts must continue to have the discretion to screen and filter out expert testimony that is unreliable before it is thrust upon and allowed to mislead the jury. Indeed, courts should have the duty to do so.

A cornerstone purpose of evidence law is to ensure the reasonable reliability of the information submitted for a jury's consideration. The law demands, for example, that documents be authentic, hearsay be supported by indicia of reliability, and witnesses' testimony be based on personal knowledge. In the case of expert testimony, the need for preliminary reliability is particularly acute because, by definition, expert testimony concerns matters beyond the ordinary experience and understanding of

¹ Citations to the Petitioners' Opening Brief are in the form "Pet. Br. __."

Citations to Petitioners' Reply Brief are in the form "Pet. Rep. Br. __."

juries. Thus, expert testimony intrinsically has powerful potential to mislead. The reason why the law demands preliminary reliability is plain: reliable evidence helps juries discharge their duty effectively and reach correct and just results. To the Chamber and its members, the reliability of expert testimony is particularly important because junk science and unreliable expert testimony lead to unpredictable and irrational litigation outcomes, which threaten businesses' productivity and sometimes their very existence.

There should be no question that California law requires non-novel scientific and technical expert opinion testimony to be based on reliable methods and reasoning. The California Evidence Code provides for preliminary review of the admissibility of such evidence by the trial court (the gatekeeping function) and the Code and case law provide that expert testimony must be reasonably reliable. Thus, the Petitioners' insistence that *Daubert* principles do not apply is both unavailing (because the Code provides for a threshold reliability review) and overstated (because this Court has not explicitly ruled on the issue of *Daubert's* applicability to non-novel expert testimony).²

Indeed, the merits of the present dispute provide an object lesson in why California trial courts must have the discretion to filter out unreliable

² Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993).

expert testimony that is not based on sound science. Dr. Teitelbaum's causation opinions, including his "weight of the evidence methodology," are not new to toxic tort cases. In 1997, the United States Supreme Court affirmed the exclusion of a toxic causation opinion by Dr. Teitelbaum that was based on methods and data that closely resemble those underlying his opinion here. See Gen. Elec. Co. v. Joiner, 522 U.S. 136 (1997). In this case, the trial court also found, and the Court of Appeal affirmed, that Dr. Teitelbaum's medical causation opinion was not supported by the underlying data. Neither Petitioners nor Dr. Teitelbaum himself explained how he could reliably extrapolate from the underlying data to the causation opinion offered. The trial court's exclusion of Dr. Teitelbaum's testimony is entirely consistent with a large body of case law from courts that have applied a reliability standard to exclude expert opinions founded on similar, scientifically unsound methods and reasoning. California courts have no different basis for admitting unreliable and potentially misleading evidence than did other courts that have wisely excluded it.

This appeal raises the additional question of what framework should govern a trial court's assessment of the admissibility of expert testimony.

California law is unsettled on the particular framework and standards for making the threshold reliability determination, and particularly whether Daubert provides useful guidance in this regard. The Chamber urges this Court to make clear that the criteria laid out in Daubert reflect the same

many good reasons to do so. *Daubert* has proved to provide workable standards that effectively balance the interests of the litigants and the court system as a whole. Because *Daubert* provides the governing standards in the federal system and has been adopted, in whole or in large part, by the majority of the states, endorsing *Daubert* also will promote consistency among different fora. In contrast, if California follows the reckless approach advocated by Petitioners and adopts no reliability threshold, then California may become a magnet for weak cases lacking scientific and technical support, including cases with little factual connection to California.

Accordingly, the Chamber respectfully submits that the Court should affirm that the trial court must act as gatekeeper to ensure that scientific and technical expert testimony submitted to a jury is both relevant and reliable. To this end, the Court also should endorse the framework provided by *Daubert* as the guideline for assessing the reliability of non-novel expert opinion testimony. In so doing, the Court will take important steps towards enhancing the rationality, consistency, and predictability of litigation outcomes in the California court system and will assist California juries in reaching correct and just results in the vast majority of cases.

ARGUMENT

In Justice Breyer's words, "there is an increasingly important need for law to reflect sound science." Stephen G. Breyer, *The Interdependence of Science and Law*, 280 Sci. 537, 538 (1998). There is perhaps no greater or more important intersection between the law and science than in the determination of the admissibility of expert testimony based on scientific and/or complex technical principles, such as in the instant case.

Here, the trial court was faced with an expert's (Dr. Teitelbaum's) opinion on medical causation that the expert purported to base on scientific principles and had the superficial appearance of a scientific opinion -i.e., accompanied by citations to epidemiological studies, animal studies, and other miscellaneous information and data. The trial court, however, did not blindly open the courtroom doors to this opinion, but rather undertook a critical examination of the methodology and underlying data supporting the proffered opinion to determine whether it was based on sound science. The trial court proceeded carefully and with due consideration. The trial court accepted extensive briefing including declarations, held a hearing where Dr. Teitelbaum testified, and, after a tentative ruling, provided the Petitioners yet another opportunity to provide proof to support Dr. Teitelbaum's methodology and reasoning, an opportunity that the Petitioners actually declined. (Typed opn. 5-6, 8-9).

Based on this record, the trial court essentially found that Dr.

Teitelbaum's opinion was not based on scientifically reliable principles. At its core, the Petitioners' position is that the California courts lack the authority to critically examine the methodology and bases underlying an expert's opinion. But neither California law nor logic suggests that a trial court lacks authority to exclude unreliable science from the courtroom.

Admissibility cannot turn on the *ipse dixit* of the testifying expert.³ Indeed, this Court should take the opportunity, squarely presented by this case, to make clear that California courts have a *duty* to conduct a preliminary and critical examination of expert testimony and that the *sine qua non* of expert testimony is *reliability*.

- I. RELIABILITY IS AND SHOULD BE THE ESSENTIAL ELEMENT OF ADMISSIBLE EXPERT TESTIMONY.
 - A. Consistent with the Purpose of the Evidence Rules, the Reliability of Expert Testimony Is an Integral and Necessary Component of a Sound, Credible Legal System.

A critical purpose of historical and modern evidence rules is to ensure that reliable, high quality evidence is presented to the factfinder for consideration. The common law of evidence insisted "upon 'the most reliable sources of information." Fed. R. Evid. § 602 advisory committee's note (quoting Charles T. McCormick, McCormick on Evidence

³ See Gen. Elec. Co. v. Joiner, 522 U.S. 136, 146 (1997) ("Nothing in either Daubert or the Federal Rules of Evidence requires a district court to

§ 10 at 23 (3d ed. 1984)); see Daubert, supra, 509 U.S. at 590 n.9 (quoting advisory committee note). This overarching principle of "evidentiary reliability," Daubert, 509 U.S. at 590 n.9, remains a deeply embedded principle of modern evidence rules.

For example, hearsay is typically admissible only if it is accompanied by sufficient indicia of reliability. *See* Evid. Code §§ 1220-1380. Documents are admissible only if they are shown to be authentic. Evid. Code § 1401. Lay witnesses may testify only on matters about which they have personal knowledge. Evid. Code § 702. The purpose of these and other threshold evidentiary requirements is plain: to ensure that the jury is presented with reliable and sound information to enable accurate truth-finding and just results in the vast majority of cases.

In the case of expert opinion testimony based on scientific or technical knowledge, the need for underlying reliability is especially important. Experts are granted privileges not afforded to other witnesses. *People v. Johnson,* 19 Cal.App.4th 778, 789-90 (1993) (expert is an "unusually privileged interloper" in the courtroom) (*quoting* Peter Huber, *Galileo's Revenge: Junk Science in the Courtroom* 204 (2d ed. 1993)); *see Daubert*, 509 U.S. at 592 (experts are given "wide latitude"). They may testify about matters that are not based on personal knowledge. Evid. Code

admit opinion evidence that is connected to the existing data only by the *ipse dixit* of the expert.").

§§ 702(a), 801(b). Their opinions may be based on inadmissible matters, such as hearsay. Evid. Code § 801(b). Their opinions can be based on the opinions of others, even when that other person is unavailable for cross-examination. Evid. Code § 804(a) & (d). In addition, experts can offer opinions about the ultimate issue in the lawsuit. *Id.* at § 805.

Moreover, because the very nature of expert testimony creates a dynamic where juries are likely to accept the testimony as authoritative, expert testimony has a very powerful potential to mislead the jury absent some threshold of reliability. By definition, expert opinion testimony must relate to a matter that is beyond the common experience of the trier of fact. Evid. Code § 801; see People v. Cole, 47 Cal.2d 99, 103 (1956). Not surprisingly, the jury can have "difficulty evaluating it." Daubert, supra, 509 U.S. at 595 (quotation omitted); E.I. du Pont de Nemours & Co. v. Robinson, 923 S.W.2d 549, 553-54 (Tex. 1995) (same); see Korsak v. Atlas Hotels, Inc., 2 Cal.App.4th 1516, 1523 (1992) ("Unquestionably, expert witnesses can be very persuasive to jurors on topics unfamiliar to the layperson."). A jury may also give the testimony undue deference because of the expert's credentials and his or her designation as an "expert." Robinson, supra, 923 S.W.2d at 553; see also Ake v. Oklahoma, 470 U.S. 68, 81 n.7 (1985) ("[t]estimony emanating from the depth and scope of specialized knowledge is very impressive to a jury. The same testimony from another source can have less effect.") (quotation omitted). Over a

century ago, Judge Learned Hand observed that expert testimony gives rise to a number of "serious practical difficulties" including the risk that the expert ends up "confusing" jurors and effectively "take[s] the jury's place if they believe him." Learned Hand, Historical and Practical Considerations Regarding Expert Testimony, 15 Harv. L. Rev. 40, 50, 52, 53 (1901); see also Charles R. Richey, Proposals to Eliminate the Prejudicial Effect of the Use of the Word "Expert" Under the Federal Rules of Evidence in Civil and Criminal Jury Trials, 154 F.R.D. 537, 541 (1994) (stating that jurors often "abdicate their fact-finding obligations" and simply "adopt" the expert's opinion). Thus, while quality expert testimony can assist the jury, unreliable expert testimony can confuse and mislead.

Compounding these concerns is the "enormous increase in the use of scientific evidence" in litigation in the state and federal courts.

Developments in the Law: Confronting the New Challenges of Scientific Evidence, 108 Harv. L. Rev. 1481, 1485 (1995). Moreover, the scientific theories advanced by experts "have increased in complexity and have become more crucial to the outcome of the case." Robinson, supra, 923

S.W.2d at 553. This increased use and importance of expert testimony has, in turn, prompted public "[c]oncerns with the abuse of the litigation process" to be "voiced ever more loudly." Braun v. Lorillard Inc., 84 F.3d 230, 233 (7th Cir. 1996) (Posner, C.J.). Peter Huber's 1991 book, Galileo's Revenge: Junk Science in the Courtroom, raised public awareness of this

problem and spurred public and judicial debate. Subsequently, the United States Supreme Court's decisions in *Daubert, Joiner*, and *Kumho Tire* signaled an important judicial movement towards more actively monitoring the quality and reliability of expert testimony in the courts, and particularly helping to ensure that scientific expert testimony reflects sound science.⁴

The fundamental judicial technique for ensuring the quality of expert opinion testimony is for the trial court to act as "gatekeeper." As gatekeeper, the trial court assesses the bases of the expert's testimony to ensure that the testimony is predicated on reliable *methods* and *reasoning*.

Daubert, supra, 509 U.S. at 592-93. The trial court also examines the methodology and reasoning to verify that it can properly be applied to (i.e. "fits") the facts of the particular case. Id.

The trial court does not substitute its view of the evidence for that of the jury – its assays the proposed evidence to see whether it is admissible (as opposed to assessing whether the conclusion is right). The particular framework (the standards and factors) the courts may employ vary from jurisdiction to jurisdiction, but the basic paradigm is judicial screening for

⁴ Daubert, supra, 509 U.S. 579 (holding that trial court acts as a gatekeeper to ensure that scientific expert opinion testimony is reliable and establishing framework for reliability analysis); Joiner, supra, 522 U.S. 136 (holding that trial court's decision to exclude expert testimony is reviewed under abuse of discretion standard); Kumho Tire Co. v. Carmichael, 526 U.S. 137 (1999) (holding that Daubert applies to expert testimony based on technical or other specialized knowledge).

underlying reliability. Of course, this paradigm is neither novel nor new, but is simply a particular application of the timeless role of the trial judge under the evidence rules – to ensure that the evidence submitted to the fact finder is reasonably reliable.

Undoubtedly, ensuring that expert opinion testimony is reliable – *i.e.*, based on a reliable and trustworthy methodology – improves the quality of litigation outcomes. Quality input leads to quality output. Filtering out unreliable expert testimony does not invade or conflict with the jury's fact-finding function (see Resp. Br. 37-45); rather, it enhances and complements that function by ensuring that juries have the quality material they need to reach an accurate and just result in the vast majority of cases. Of course, rational and well-supported outcomes are not only important to the individual litigants who are relying on the legal system to justly resolve their disputes, but also to the legal system itself:

[T]he best way in which to preserve the credibility of the legal system is for judges to insist upon evidence sufficient to support the conclusions that jurors are permitted to draw...

If judges perform this function effectively, only disputes well-grounded in evidence will be resolved by jury verdict, and the legal system will remain a credible source of truth.

Charles Nesson & John Demers, Gatekeeping: An Enhanced Foundational Approach to Determining the Admissibility of Scientific Evidence, 49 Hastings L.J. 335 (1998).

B. To the Chamber and its Members, the Reliability of Expert Testimony Is Especially Important.

The reliability of expert opinion testimony is of special concern to the Chamber and its members. Business values predictability and stability. When unreliable expert testimony is permitted in the courtroom, litigation results become arbitrary. Businesses have difficulty planning to cover potential losses or to purchase appropriate levels of insurance. They cannot effectively conform their behavior to avoid liability because unsound science does not set identifiable boundaries. Businesses can be bogged down by strike suits.

Moreover, unreliable expert testimony can lead to substantial and damaging losses that cannot be rationalized under any technical or scientific principle. This threatens businesses' ability to be productive contributors, and this in turn sparks frustration and cynicism towards the legal system.

Damage from irrational litigation outcomes can be especially harmful to small businesses, which constitute a large portion of the Chamber's membership. And junk science in the courtroom can push even large corporations into bankruptcy or force useful products off the market. See, e.g., Joseph Sanders, From Science to Evidence: The Testimony on Causation in the Bendectin Cases, 46 Stan. L. Rev. 1, 7-9, 27 (1993) (noting that science did not support causation in the Bendectin cases, but

the manufacturer pulled the drug from the market, citing litigation).

Moreover, liability concerns can stifle the development of new, innovative products.

The costs at stake are real and they are large. In 2003, the United States's tort system was estimated to cost over \$246 billion dollars, or \$845 per person. Towers Perrin Tillinghast, *U.S. Tort Costs: 2004 Update Trends and Findings on the Cost of the U.S. Tort System.* This represents 2.23% of GDP. *Id.* at 5. Over a 52-year period, the average annual increase in tort costs has been 9.7%. *Id.* at 2. These costs exact a toll on business. Unfortunately, consumers also shoulder the burden in the form of higher prices and increased healthcare costs. Demanding that expert testimony be based on reliable methods and reasoning will moderate tort costs by discouraging baseless suits and tethering tort liability to instances where causation is supported by sound science.

Thus, the Chamber believes that it is vitally important that judges exclude unreliable scientific and other inappropriate expert testimony from the courtroom "so that they help assure that the powerful engine of tort liability, which can generate strong financial incentives to reduce or eliminate production, points towards the right substances and does not destroy the wrong ones." *Joiner*, *supra*, 522 U.S. at 146 (Breyer, J. concurring).

C. California's Evidence Code Requires the Trial Court to Determine Whether the Proffered Expert Opinion Testimony Is Reliable.

There should be no real controversy that expert testimony is admissible in California only if shown to be "reliable" – that is, derived from a reliable and trustworthy methodology. As a general matter, California courts have repeatedly examined scientific and other expert opinions for threshold reliability before admitting it, even if the term "reliability" is not always used in the opinions.⁵

Nevertheless, Petitioners argue that "ordinary expert testimony is not subject to screening for substantive reliability under California law." (Pet. Rep. Br. 3). Under Petitioners' view, an expert's opinion is admissible so long as an expert has cited some materials that an expert in the field typically would consult and the particular materials relied upon provide some hint of support for the proposition. (*Id.* at 4). As a simple hypothetical illustrates, however, Petitioners' articulation of the applicable standard would require admission of opinions based on scientifically *unreliable* methodology or based on scientifically *invalid* principles in California courts. Assume that an expert relies upon one poorly designed epidemiology study that shows a non-statistically significant, small

⁵ People v. Gardeley, 14 Cal.4th 605, 618 (1996) (stating that the section 801 of the Evidence Code establishes a "threshold requirement of reliability"); see Resp. Br. 24-30 (citing cases).

increased risk of a disease from exposure to a substance. Under Petitioners' proposal, the expert's causation opinion would be admissible despite a scientific consensus – based on five other studies, all well-founded and well-designed, that showed no increased risk from exposure – that no causal relationship existed. Petitioners' standard is simply not tenable.

Perhaps recognizing that their non-reliability standard is a non-starter, Petitioners contend that the issue is "a simple question of statutory interpretation" (Pet. Rep. Br. 1), which turns upon the meaning of the words "of a type" in the Evidence Code § 801(b) ("section 801(b)"). While section 801(b) is relevant to this dispute, Petitioners' construction of that provision is myopic and based on three words taken out of context.

The provisions of a statute must be interpreted as a whole.⁶ The phrase "of a type" does not expand and relax the kinds of matter an expert may rely upon to include information that does not reliably support the opinion offered. Rather, the statute requires that the bases (the types of

⁶ See Lahin v. Watkins Associated Indus., 6 Cal.4th. 644, 658-59 (1993) ("The meaning of a statute may not be determined from a single word or sentence; the words must be construed in context, and provisions relating to the same subject matter must be harmonized to the extent possible"); People v. Valencia, 82 Cal.App.4th 139, 145 (2000) ("Statutes are to be construed as a whole"). Here, section 801(b) limits expert testimony to opinions "[b]ased on matter . . . that is of a type that reasonably may be relied upon by an expert forming an opinion upon the subject to which his testimony relates") (emphasis added).

matter) underlying the expert's opinion must be strong enough that an expert can reasonably rely upon them in forming the opinion. If the subject of an expert's opinion is, for example, that Bendectin causes birth defects, the type of matter cited by the expert must allow the expert to reasonably conclude that Bendectin causes birth defects. *See Lockheed Litigation Cases*, 115 Cal.App.4th 558, 564 (2004) ("An expert opinion has no value if its basis is unsound. . . . We construe [section 801(b)] to mean that the matter relied on must provide a reasonable basis for the particular opinion offered"). Moreover, there must be a reliable connection between the foundational material and the opinion offered. (*See* Resp. Br. 26-27 (citing cases)). When the relevant field is science, like the present case, the Evidence Code implies that the opinion's underlying methodology and reasoning must be scientifically valid.

The requirement of underlying reliability is reinforced by section 803 – which provides that the opinion shall be excluded (on objection) if it is based "on matter that is not a proper basis for such an opinion." An expert cannot simply hold up some epidemiology studies, for example, and have his opinion admitted. Those proffered studies must reliably support (*i.e.*, be a "proper basis for") the opinion offered.

Finally, sections 310, 402, and 405 of the Evidence Code authorize the trial court to find threshold facts necessary to determine the admissibility of the proffered expert testimony. Thus, they empower the court to conduct a gatekeeping function. (*See* Resp. Br. 37-39). In short, the Petitioners' interpretation is unavailing; the Evidence Code requires a threshold reliability determination.

D. The Court's Decision in *People v. Leahy* Is Consistent with the Reliability Standard for the Admission of Non-Novel Expert Testimony.

Citing *People v. Leahy*, 8 Cal.4th 587 (1994), Petitioners assert that California does not apply *Daubert* and that a threshold reliability determination is reserved solely for expert testimony based on novel scientific techniques. (Pet. Rep. Br. 1). Petitioners assume that the *Leahy* Court's affirmation of the "general acceptance" *Kelly* standard⁷ for determining the reliability of novel scientific techniques means that all other forms of expert testimony are subject to no reliability threshold whatsoever. Petitioners' logic has two fundamental flaws: (1) *Leahy* is not inconsistent with – and in fact provides support for – a reliability threshold for expert testimony not based on a novel device or technique⁸; and (2) this Court has not spoken on the issue of *Daubert's* applicability to the vast majority of expert testimony, which falls outside of *Kelly*.

In *Kelly*, this court affirmed that the admissibility of expert testimony based on *novel* scientific devices or techniques would be

⁷ People v. Kelly, 17 Cal.3d 24 (1976).

measured under the *Frye* standard, which requires that the technique is "sufficiently established as to have gained general acceptance in the particular field in which it belongs." *Kelly*, 17 Cal.3d at 30 (*quoting Frye v. United States*, 293 F. 1013, 1014 (D.C. Cir. 1923)) (emphasis omitted). The *Kelly* court acknowledged criticism that a "general acceptance" threshold requirement is "too conservative" because it can exclude relevant evidence, but found that there is "ample justification" for "judicial caution" with new scientific techniques. *Id*.

In Leahy, the Court reexamined Kelly in view of the then-recent Daubert decision. Citing stare decisis, this Leahy court reaffirmed the Frye-Kelly test for determining the reliability of testimony based on novel scientific techniques. Leahy, supra, 8 Cal.4th at 601. The Court again acknowledged criticism that Kelly-Frye was too conservative, id. at 602, but reiterated that Kelly "set[s] forth the various reasons why the more 'conservative' Frye approach . . . represents an appropriate one." Id. at 604. As such, the general acceptance test is intended "to interpose a substantial obstacle to the unrestrained admission of evidence based upon new scientific principles." Kelly, supra, 17 Cal.3d at 31. Other decisions have emphasized that Kelly applies to a very narrow band of expert

⁸ Both parties appear to agree that expert testimony based on a novel device or technique, within the meaning of *Kelly* and its progeny, is not at issue in this case.

testimony. See, e.g., People v. Stoll, 49 Cal.3d 1136, 1155 (1989) (technique must be new to the science and the law and must purport to "provide some definitive truth").

Thus, contrary to Petitioners' assumption, *Leahy* does not address the standards for determining the admissibility of scientific or other expert testimony *not* based on novel device or technique. Nor does *Leahy* imply that the vast majority of expert testimony that falls outside of *Kelly* need not be based on reliable principles and methods. To the contrary, there are several aspects of *Leahy* and *Kelly* that support a reliability standard for other expert testimony. First, the Court specifically stated that Sections 720 and 801 of the Evidence Code "seem the functional equivalent of [Fed. R. Evid. § 702], as discussed in *Daubert*." *Leahy*, 8 Cal.4th at 598 (emphasis added). In the context of the *Leahy* decision, this statement confirms that the terms of the Evidence Code support a reliability standard generally, and the *Daubert* framework particularly. (See also, supra part I.C. of this brief).

Second, in utilizing what was considered a conservative standard, the court observed that "lay jurors tend to give considerable weight to 'scientific' evidence when presented by 'experts' with impressive credentials." *Kelly, supra,* 17 Cal.3d at 31-32 (quoted in *Leahy, supra,* 8 Cal.4th at 595). This rationale applies generally to *all* forms of scientific expert testimony, including the science at issue in the present case.

Third, *Kelly's* application of the general-acceptance test to novel techniques simply represents a particular application of a threshold reliability test – *i.e.*, one that is tied to the general acceptance of the technique in the relevant field. Moreover, it would be illogical for one narrow band of scientific expert testimony to be subject to a rigorous reliability test (general acceptance) while all other scientific testimony is subject to no reliability screening at all. Rather, the Evidence Code requires that all expert testimony be based on reliable methodology or reasoning.

II. THE MERITS OF THIS APPEAL ILLUSTRATE WHY IT IS IMPORTANT FOR THE TRIAL COURT TO EXAMINE THE RELIABILITY OF PROFFERED EXPERT TESTIMONY.

The merits of this case provide an object lesson in why trial courts should act as gatekeepers and screen putative scientific and other technical expert testimony for reliability. In 1997, the United States Supreme Court reversed a federal court of appeals and affirmed a district court's exclusion of Dr. Teitelbaum's opinion that an electrician's cancer was caused by occupational exposure to PCBs. *Joiner*, *supra*, 522 U.S. at 146; *see also Nat.'l Bank of Commerce*, *v. Associated Milk Producers*, *Inc.*, 22 F. Supp.2d 942, 967 (E.D. Ark. 1998) (excluding Dr. Teitelbaum's opinion that plaintiff's laryngal cancer was caused by occupational exposure to a toxin in contaminated milk, and noting that plaintiff's experts' "flawed logic is no substitute for reliable scientific proof of causation"), *aff'd*, 191

F.3d 858 (8th Cir. 1999). Dr. Teitelbaum's excluded opinion in *Joiner* bears a close resemblance to his excluded opinion here: Dr. Teitelbaum employed a "weight of the evidence" methodology and relied heavily on off-point epidemiology studies and an animal study. *See Joiner*, *supra*, 522 U.S. at 144-47 & 152 (Stevens, J., dissenting) (noting the experts' reliance on a "weight of the evidence" methodology).

Dr. Teitelbaum's opinion in this case was not scientifically reliable and was properly excluded from the finder of fact. As stated by the Court of Appeal, the trial court here looked at the materials Dr. Teitelbaum cited "both individually and collectively." (Typed Opn. 14). The trial court determined, and the Court of Appeals affirmed, that these materials did not provide a reasonable basis for Dr. Teitelbaum's opinion that the solvents at issue can cause the diseases at issue. (See Typed Opn. 14, 16-17, 24-27). Ample case law from jurisdictions requiring threshold reliability strongly supports the trial court's conclusion here.

typically an important component of showing that a particular substance can cause a disease. See, e.g., Glastetter v. Novartis Pharms. Corp., 252 F.3d 986, 992 (8th Cir. 2001) (while not an absolute prerequisite, lack of epidemiology "limited the available tools with which [plaintiff] could prove causation," and is a factor to be considered in evaluating the reliability of plaintiff's experts' methodology); Brock v. Merrell Dow Pharms., Inc., 874

F.2d 307, 313, modified, 884 F.2d 166, 167 (5th Cir. 1989) ("lack of conclusive epidemiological proof" held "fatal to the [plaintiff's] case"); Novak v. United States, 865 F.2d 718, 725 (6th Cir. 1989) (opinions of plaintiff's experts concerning causation were "merely conjectural" in the absence of "adequate studies clearly support[ing] the thesis that they advocate"). Of course, a causation opinion is not scientifically sound if the epidemiological studies relied upon do not provide actual, reliable support for the opinion offered. See, e.g., Joiner, supra, 522 U.S. at 145-46 (reviewing four different epidemiological studies relied upon by Dr. Teitelbaum and determining that they were "no help" to his theory of causation).

Here, Dr. Teitelbaum cites only to mixed solvent studies involving numerous chemicals in addition to the specific ones at issue here. It is simply rank speculation to assume that any association shown in these studies was attributable to the particular chemicals actually made by the defendants. Moreover, Petitioners' argument (Pet. Reply Br. 11) that these studies are probative because the substances are in the same broad class (organic solvents) also is speculation and conjecture, not science. See, e.g., Glastetter, supra, 252 F.3d at 990 (rejecting attempt to determine effects of a chemical by analogizing it to other chemicals in its class); Mitchell v. Gencorp, Inc., 165 F.3d 778, 782 (10th Cir. 1999) (rejecting extrapolations from benzene for lack of "testimony explaining exactly what these

similarities are and how the similarities can cause the human body to respond to Defendant's chemicals in a manner similar to benzene"); Schudel v. Gen. Elec. Co., 120 F.3d 991, 997 (9th Cir. 1997) ("[s]mall differences in molecular structure often have significant consequences") overruled on other grounds by Weisgram v. Marley Co., 582 U.S. 440 (2000); Caraker v. Sandoz Pharms. Corp., 188 F. Supp. 2d 1026, 1038-39 (S.D. Ill. 2001) (rejecting "guilt by association" theory as scientifically unreliable); Nelson v. Am. Home Prods. Corp., 92 F. Supp. 2d 954, 972 & n.5 (W.D. Mo. 2000) (extrapolations from data on drugs with metabolical structure similarities "depend on numerous logical shortcuts and inferential leaps" and are neither scientifically reliable nor relevant to drug-specific questions at hand); Cavallo v. Star Enter., 892 F. Supp. 756, 766 (E.D. Va. 1995) (similar), rev'd in part, aff'd in relevant part, 100 F.3d 1150; DeLuca v. Merrell Dow Pharms., 791 F. Supp. 1042, 1054 (D.N.J. 1992) (similar), aff'd, 6 F.3d 778 (3d Cir. 1993); Hoffman v. Sterling Drug, Inc., 374 F. Supp. 850, 862-63 (M.D. Pa. 1974) (excluding evidence of "chemically related" drugs).

2. Animal Studies. Dr. Teitelbaum failed to explain why he could reliably extrapolate from animal studies to establish causation in humans (species extrapolation) or from the high doses used in animal studies to the possible exposure levels in plaintiffs (dosage extrapolation). (Typed Opn. 24). Before the Court of Appeal, Petitioners likewise did not

explain why these animal studies were probative of causation in humans, instead arguing "categorically that animal studies generally are reliable for this purpose, particularly when combined with other evidence." (*Id.*). This same categorical argument was rejected by the United States Supreme Court in *Joiner*. 522 U.S. at 144 ("Of course, whether animal studies can ever be a proper foundation for an expert's opinion was not the issue. The issue was whether these experts' opinions were sufficiently supported by the animal studies on which they purported to rely"); *Dunn v. Sandoz Pharms. Corp.*, 275 F. Supp. 2d 672, 683 (M.D.N.C. 2003) (rejecting animal studies as basis for expert's opinion where expert failed to explain how the results could be extrapolated to humans).

Further, cases finding that animal studies were *not* a scientifically reliable basis for the causation opinion offered are legion. *See*, *e.g.*, *Hollander v. Sandoz Pharms. Corp.*, 289 F.3d 1193, 1202 (10th Cir. 2002) (animal studies at different dosages on which the plaintiff's experts rely were "too dissimilar to the facts" presented to be reliable bases for opinion); *Glastetter*, *supra*, 252 F.3d at 991 n.5 (similar); *Allison v. McGhan Med. Corp.*, 184 F.3d 1300, 1313-14 (11th Cir. 1999) (expert "failed to explain the correlation of the results . . . to symptoms in a human patient"); *Allen v. Pa. Eng'g Corp.*, 102 F.3d 194, 197 (5th Cir. 1996) (rejecting causation opinions where animal studies were inconclusive and no testimony showed that plaintiff's dosage levels were comparable to the

animal studies); Conde v. Velsicol Chem. Corp., 24 F.3d 809, 814 (6th Cir. 1994) (finding document that relied on animal studies was not probative of causation); Richardson v. Richardson-Merrell, Inc., 857 F.2d 823, 830-32 (D.C. Cir. 1988) (animal studies insufficient).

3. Case reports. Case reports do not provide reliable evidence of toxic causation and, in fact, can be quite misleading. They are simply anecdotal reports of medical events that occur some point after taking a drug or exposure to a substance:

A case report is simply a doctor's account of a particular patient's reaction to a drug or other stimulus, accompanied by a description of the relevant surrounding circumstances. Case reports make little attempt to screen out alternative causes for a patient's condition. They frequently lack analysis. And they often omit relevant facts about the patient's condition.

Glastetter, supra, 252 F.3d at 989-90. Because case reports may show a temporal association, they are used for hypothesis generation. However, that temporal association "is not scientifically valid proof of causation." Id. at 990; Casey v. Ohio Med. Prods., 877 F. Supp. 1380, 1385 (N.D. Cal. 1995) ("case reports are not reliable scientific evidence of causation").

Moreover, case reports and anecdotal information can be misleading because they do not and cannot attempt to compare the *rate* at which the disease occurs in the general population or in a defined control group. *See*, *e.g.*, *Soldo v. Sandoz Pharms. Corp.*, 244 F. Supp. 2d 434, 540 (W.D. Pa. 2003) ("case reports and other anecdotal reports are unreliable because they

do not take into account the known background risk of a disease."). As a hypothetical example, case reports might surface reporting that patients who took aspirin had a heart attack shortly thereafter. However, well-designed, controlled epidemiology studies subsequently might show that the *rate* of heart attacks in patients taking aspirin is significantly *lower* than the rate of heart attacks in the control group who did not take aspirin (*i.e.*, a protective effect). Thus, the case reports in this example would lead a pliant expert to exactly the *opposite* conclusion than the conclusion founded on sound scientific methods.

Not surprisingly, a long line of authority rejects case reports as a scientifically reliable basis for a determination of toxic causation. See, e.g., McClain v. Metabolife Int'l Inc., 401 F.3d 1233, 1250 (11th Cir. 2005) ("[u]ncontrolled anecdotal information offers one of the least reliable sources to justify opinions about both general and individual causation"); Glastetter, supra, 252 F.3d at 989-90 (case reports not reliable); Turner v. Iowa Fire Equip. Co., 229 F.3d 1202, 1209 n.5 (8th Cir. 2000) ("case reports are generally not considered reliable evidence of causation"); Casey, supra, 877 F. Supp. at 1385 (rejecting reliance on case reports because they "simply described reported phenomena without comparison to the rate at which the phenomena occur in the general population or in a defined control group; do not isolate and exclude potentially alternative causes; and do not investigate or explain the mechanism of causation."); see

also Willert v. Ortho Pharm. Corp., 995 F. Supp. 979, 980 (D. Minn. 1998) (similar); Hall v. Baxter Healthcare Corp., 947 F. Supp. 1387, 1411 (D. Or. 1996) (similar); Jones v. United States, 933 F. Supp. 894, 899 (N.D. Cal. 1996), aff'd, 127 F.3d 1154 (9th Cir. 1997) (similar); Muzzey v. Kerr-McGee Chem. Corp., 921 F. Supp. 511, 519 (N.D. Ill. 1996) (similar); Wade-Greaux v. Whitehall Labs., Inc., 874 F. Supp. 1441, 1453 (D.V.I (similar), aff'd, 46 F.3d 1120 (3d Cir. 1994) (table).

trial court determined that Dr. Teitelbaum could not reasonably rely on a variety of second-hand sources for his causation opinion because these sources did not provide data supporting their statements, sometimes did not distinguish between transitory and permanent injuries, sometimes listed adverse events as only "possible," sometimes contained disclaimers, and sometimes did not disclose the strength of the association required before listing adverse events. (Typed Opn. 26). On appeal, the Court of Appeal concluded that Petitioners failed to explain why these materials were probative, "particularly in light of the court's expressed concerns and the paucity of other support for Dr. Teitelbaum's opinion." (Id.)

Trial courts must have the discretion to exclude expert opinions based on second-hand information when there is no showing that the primary data upon which these sources are based are, in fact, reliable. See, e.g., Glastetter v. Novartis Pharms. Corp., 107 F. Supp. 2d 1015, 1035 n.18

(E.D. Mo. 2000) (rejecting expert's reliance on medical treatise and journals because, *inter alia*, these texts are no more reliable than the case reports on which they rely), *aff'd*, 252 F.3d 986 (8th Cir. 2001); *Swallow v. Emergency Med. of Idaho, P.A.*, 67 P.3d 68, 73-74 (Idaho 2003) (affirming trial court's exclusion of Physician Desk Reference information that merely summarized speculative information contained in adverse event reports).

Moreover, second-hand statements and guidelines from government agencies present the additional problem that the standards governing regulatory actions are not the same standards that govern causation in a court of law. See McClain, supra, 401 F.3d at 1249-50 ("Because a number of protective, often 'worst case' assumptions . . . are made in estimating allowable exposures for large populations, these criteria and the resulting regulatory levels . . . generally overestimate potential toxicity levels for nearly all individuals") (citation omitted); Rider v. Sandoz Pharms. Corp., 295 F.3d 1194, 1201 (11th Cir. 2002) ("risk-utility analysis" involves a much lower standard than that which is demanded by a court of law [because a] regulatory agency . . . may choose to err on the side of caution"); Mitchell, 165 F.3d at 783 (plaintiff's reliance on state classifying substance as a "carcinogen" was "largely misplaced" because regulatory standards differ from tort standards); Pa. Eng'g Corp., 102 F.3d at 198 (agency's threshold of proof is lower than in tort law as a result of "the preventive perspective that the agencies adopt"); Sutera v. Perrier Group of Am., Inc., 986 F. Supp. 655, 664 (D. Mass. 1997) (regulatory levels reflect statutory standards and are not "a measure of causation"). In short, the trial court acted well within its discretion in concluding that Petitioners failed to show that Dr. Teitelbaum reasonably relied on the treatises and miscellaneous, second-hand information.

the "weight of the Evidence Methodology. Petitioners' argue that the "weight of the evidence" supports Dr. Teitelbaum's opinion (see Pet. Br. 7, 19). This same methodology was considered and rejected by the United States Supreme Court in Joiner. 522 U.S. at 146 ("it was within the District Court's discretion to conclude that the studies upon which the experts relied were not sufficient, whether individually or in combination, to support their [causation conclusions]") (emphasis added). A collection of weak and unreliable data remains, at its core, weak and unreliable.

Caraker, supra, 188 F. Supp. 2d at 1040 (expert's opinion based on various data "amounts to a hollow whole of hollow parts").

* * *

In sum, Dr. Teitelbaum's opinion relied upon matters of a type that numerous courts, on similar records, have determined do not provide scientifically reliable bases for opinions of toxic causation. It would be anomalous for a California court to lack the power to exclude unreliable scientific opinion testimony when its sister courts can and do exclude comparable testimony. There is no basis to believe the legislature intended

for California to uniquely permit the admission of unreliable evidence. There is no basis to believe that the legislature intended that juries remain empanelled longer to hear irrelevant, unreliable testimony from so-called experts. To promote rational litigation outcomes that are in harmony with sound science, this Court should affirm that California courts have the power and duty to act as a gatekeeper to ensure that proffered expert testimony is reliable and that the methodology and reasoning is reliably applied to the facts of the case.

III. THE COURT SHOULD ENDORSE THE DAUBERT FRAMEWORK FOR DETERMINING THE RELIABILITY OF NON-NOVEL EXPERT TESTIMONY.

As discussed in part I of this brief, California law requires the trial court to exclude unreliable expert testimony. However, there appears to be some confusion in the intermediate appellate courts regarding the test for admissibility. *See Roberti v. Andy's Termite & Pest Control, Inc.*, 113 Cal.App.4th 893, 904 (2003) (declining to examine the reliability of the methodology and principles used by the expert). Further, the framework for making the threshold reliability determination is not well defined. Thus, this appeal presents one more important issue – the framework that the trial courts should utilize to assess the reliability of proffered expert testimony.

This Court should endorse the framework set forth in *Daubert v*.

Merrell Dow Pharmaceuticals. Since the United States Supreme Court

decided *Daubert* in 1993, the majority of states have adopted both: (i)

Daubert's fundamental principles that scientific evidence must be reliable to be admissible and that the trial court must actively screen proposed expert testimony to filter testimony based on unreliable methodologies; and (ii) some variation of the test established by the Supreme Court for conducting this reliability analysis.⁹

Because the relevant provisions of the California Evidence Code "seem the functional equivalent" to the Federal Rules of Evidence

⁹ Reichert v. Phipps, 84 P.3d 353, 356 (Wyo. 2004); Gilbert v. Diamlerchrysler Corp., 685 N.W.2d 391, 408 (Mich. 2004), cert. denied. S.Ct. (2005); USGen New England, Inc. v. Rockingham, 862 A.2d 269, 275-76 (Vt. 2004); Mississippi Transp. Comm'n v. McLemore, 863 So. 2d 31, 39-40 (Miss. 2004); Christian v. Gray, 65 P.3d 591, 597, 600 (Okla. 2003); Malinski v. State, 794 N.E.2d 1071, 1084 (Ind. 2003); Baker Valley Lumber, Inc. v. Ingersoll-Rand Co., 813 A.2d 409, 415 (N.H. 2002); Kemp ex rel. Wright v. State, 809 A.2d 77, 86 (N.J. 2002); State v. Henning, 569 S.E.2d 204, 208-09 (W.Va. 2002); People v. Shreck, 22 P.3d 68, 77-78 (Colo. 2001); State v. Vliet, 19 P.3d 42, 53, 54 (Haw. 2001); Schafersman v. Agland Coop, 631 N.W.2d 862, 874-76 (Neb. 2001); State v. Hartman, 754 N.E.2d 1150, 1165-66 & n.1 (Ohio 2001); State v. Corey, 624 N.W.2d 841, 845 n.2 (S.D. 2001); Farm Bureau Mut Ins. Co. v. Foote, 14 S.W.3d 512, 519 (Ark. 2000); State v. Coon, 974 P.2d 386, 393-95 (Alaska 1999); M.G. Bancorporation, Inc. v. Le Beau, 737 A.2d 513, 521-22 (Del. 1999); State v. Torres, 976 P.2d 20, 28 (N.M. 1999); DiPetrillo v. Dow Chem. Co., 729 A.2d 677, 686 (R.I. 1999); State v. Council, 515 S.E.2d 508, 517-18 (S.C. 1999); State v. Merwin, 962 P.2d 1026, 1030 (Idaho 1998) (see also State v. Konechny, 3 P.3d 535, 542-43 (Idaho Ct. App. 2000)); State v. Porter, 698 A.2d 739, 746 (Conn. 1997); McDaniel v. CSX Transp., Inc., 955 S.W.2d 257, 265 (Tenn. 1997); Mitchell v. Commonwealth, 908 S.W.2d 100, 101-102 (Ky. 1995), overruled on other grounds by Fugate v. Commonwealth, 993 S.W.2d 931 (Ky. 1999); State v. O'Key, 899 P.2d 663, 680 (Or. 1995); E.I. du Pont de Nemours Co. v. Robinson, 923 S.W.2d 549, 556 (Tex. 1995); Commonwealth v. Lanigan, 641 N.E.2d 1342, 1349 (Mass. 1994); State v. Foret, 628 So. 2d 1116, 1123 (La. 1993).

regarding expert testimony, Leahy, 8 Cal.4th at 598, there is no impediment to this Court's endorsement of Daubert as an appropriate framework for determining the threshold reliability of scientific and technical expert testimony. (See also part I.C. of this brief). Endorsing Daubert's framework would advance the important policy benefits that are derived from a reliability standard. (See Part I.A. & I.B. of this brief). Daubert would also eliminate confusion in the lower courts. In addition, there are many other good reasons to endorse the Daubert framework for determining threshold reliability.

A. Daubert's Framework Provides Both Clear and Flexible Standards for Determining Admissibility.

An advantage of *Daubert's* framework is that it unequivocally establishes that reliability is the touchstone of admissibility and that the trial court must serve as a gatekeeper to keep unreliable expert testimony from the jury:

[U]nder the Rules the trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable.

[O]ur reference here is to *evidentiary* reliability – that is, trustworthiness. . . . In a case involving scientific evidence, *evidentiary reliability* will be based upon *scientific validity*.

Faced with a proffer of expert scientific testimony, then, the trial judge must determine at the outset, pursuant to Rule 104(a), whether the expert is proposing to testify to (1)

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scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue. This entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue.

* * * * *

To summarize: ... the Rules of Evidence – especially Rule 702 – do assign to the trial judge the task of ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand. Pertinent evidence based on scientifically valid principles will satisfy those demands.

509 U.S. at 589, 590 n.9, 592-93, 597 (footnotes omitted) (emphasis in original).

Another advantage of *Daubert's* framework is that its factors are flexible. Namely, the Supreme Court identified four non-exclusive factors that trial courts could consider: (1) whether the expert's theory can and has been tested; (2) whether the expert's theory has been subjected to peer review and publication; (3) the known potential rate of error of the expert's theory and the existence and maintenance of standards controlling the technique's operation; and (4) whether the theory has found "general acceptance" within the pertinent scientific or medical community. ¹⁰ *Id.* at 592-94.

The last factor, of course, incorporates the *Frye* standard. However, under *Daubert*, this factor is simply one consideration, rather than the sole determinative factor.

Daubert recognized that all four factors may not apply in all cases and to different types of testimony, and thus the Supreme Court declined to establish a definitive checklist. Id at 593-94; see Kumho Tire, supra, 526 U.S. at 151-52 (applying Daubert to expert testimony based on technical and specialized knowledge and emphasizing the flexible nature of its framework). Daubert thus balanced the need for a framework of analysis that would greatly facilitate the consistency of results among different trial courts with the need for sufficient flexibility to avoid miscarriages of justice in particular cases. Because the factors are non-exclusive and no one factor is necessarily determinative, the Daubert framework also has the flexibility to grow with judicial experience in California.

B. Daubert's Framework Promotes Consistency Across Fora, is Well-Developed, and Has Been Proven Over Time.

In addition to providing clear direction and standards, there are other institutional advantages in adopting *Daubert's* framework for determining threshold reliability. *First*, it promotes consistency between fora. Both federal and state courts in California would be using the same standards for determining evidentiary reliability. Similarly, because the majority of states have adopted *Daubert* in whole or in substantial part, California's endorsement of the *Daubert* framework would minimize interstate differences between California and other state courts. Conversely, if California were to reject a reliability standard, then California would be an

attractive forum for cases based on junk science, cases that could not successfully be brought in the federal system or in the majority of state courts. This also encourages the filing of cases in California courts that have little or no real factual connection to California.

Second, the Daubert framework is well developed. Because Daubert has been a part of the federal system for a dozen years and has been adopted by numerous states, there is a robust body of case law from federal and state courts applying Daubert to a wide variety of evidentiary questions and problems. There is, in short, a wellspring of judicial experience from which to draw upon in deciding scientific and technical questions surrounding reliability. While such cases are only persuasive authority in the California courts, this experience nevertheless should be useful to trial judges, make litigation more efficient, and assist the parties in evaluating their cases and add predictability to litigation outcomes.

Third, the Daubert framework is proven. Daubert has increased the quality of evidence submitted to the factfinder. Rider, supra, 295 F.3d at 1197 ("Daubert . . . has greatly improved the quality of the evidence upon which juries base their verdicts."); Schafersman v. Agland Coop., 631 N.W.2d 862, 876 (Neb. 2001) ("We are convinced that by shifting the focus to the kind of reasoning required in science – empirically supported rational explanation – the Daubert/Joiner/Kumho Tire Co. trilogy of cases greatly improves the reliability of the information upon which verdicts and other

legal decisions are based. . . . the better information the fact finders have, the more likely that verdicts will be just.").

Time and experience have proven that *Daubert* strikes an appropriate balance in the admissibility of evidence, excluding evidence that is unreliable without going overboard by rejecting evidence that does rest on a sound foundation. *See* Fed. R. Evid. § 702 advisory committee's note (2000 Amendments) ("A review of case law after *Daubert* shows that the rejection of expert testimony is the exception rather than the rule"). *Daubert* has been applied in thousands of cases with no indication that the standards are unbalanced, ineffective, or unworkable. In short, the *Daubert*'s framework is sound and tested. This Court should endorse it as the appropriate framework for determining the threshold reliability of expert testimony.

CONCLUSION

For the reasons set forth above, the Court should affirm the judgment. In addition, the Court should endorse *Daubert's* framework for

assessing the threshold reliability of non-novel expert testimony.

October 7, 2005

National Chamber Litigation Center

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