

# Acceptance in the Scientific Community

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# Acceptance in the Scientific Community

## Table of Contents

First Circuit .....	139	Sixth Circuit .....	153
<i>Ruiz-Troche v. Pepsi Cola of Puerto Rico</i>		<i>Downs v. Perstorp Components, Inc.</i> .....	153
<i>Bottling Co.</i> .....	139	<i>Kurncz v. Honda N. Am.</i> .....	153
<i>L.B. Corp. v. Schweitzer-Mauduit Int'l, Inc.</i> .....	139	<i>Nelson v. Tennessee Gas Pipeline Co.</i> .....	154
<i>Saia v. Sears Roebuck &amp; Co.</i> .....	140	<i>Isely v. Capuchin Province</i> .....	154
<i>Coffin v. Orkin Exterminating Co.</i> .....	140	<i>Coffey v. Dowley Mfg.</i> .....	155
<i>Sutera v. The Perrier Group of America, Inc.</i> .....	140	<i>Berry v. Crown Equip. Corp.</i> .....	155
<i>Shahzade v. Gregory</i> .....	141	Seventh Circuit .....	156
Second Circuit .....	141	<i>Dhillon v. Crown Controls Corp.</i> .....	156
<i>Campbell v. Metropolitan Property &amp; Cas.</i>		<i>Nutrasweet Co. v. X-L Eng'g Co.</i> .....	156
<i>Ins. Co.</i> .....	141	<i>Lennon v. Norfolk &amp; W. Ry. Co.</i> .....	157
<i>Wills v. Amerada Hess Corp.</i> .....	142	Eighth Circuit .....	157
<i>Martin v. Shell Oil Co.</i> .....	142	<i>Lauzon v. Senco Prods.</i> .....	157
<i>Colon v. BIC USA, Inc.</i> .....	143	<i>Turner v. Iowa Fire Equip. Co.</i> .....	158
<i>Coleman v. Dydula</i> .....	143	<i>Pestel v. Vermeer Mfg. Co.</i> .....	158
<i>Frank v. New York</i> .....	143	<i>Metropolitan St. Louis Equal Hous.</i>	
<i>Golod v. Hoffman La Roche</i> .....	144	<i>Opportunity Council v. Gordon A.</i>	
Third Circuit .....	145	<i>Gundaker Real Estate Co.</i> .....	158
<i>Wade-Greaux v. Whitehall Lab.</i> .....	145	<i>Mattis v. Carlon Elec. Prods.</i> .....	159
<i>Eclipse Elecs. v. Chubb Corp.</i> .....	145	<i>Dickie v. Shockman</i> .....	159
<i>Magistrini v. One Hour Martinizing</i>		Ninth Circuit .....	160
<i>Dry Cleaning</i> .....	146	<i>Nadell v. Las Vegas Metro. Police Dep't</i> .....	160
<i>In re TMI Litig. Cases Consolidated II</i> .....	146	<i>S.M. v. J.K.</i> .....	160
<i>In re TMI Litig. Cases Consolidated II</i> .....	147	Tenth Circuit .....	161
<i>In re TMI Litig. Cases Consolidated II</i> .....	148	<i>Summers v. Missouri Pac. R.R. Sys.</i> .....	161
Fourth Circuit .....	149	<i>Lovato v. The Burlington Northern &amp; Santa</i>	
<i>Ruffin v. Shaw Indus.</i> .....	149	<i>Fe Ry. Co.</i> .....	161
<i>Adams v. NVR Homes, Inc.</i> .....	149	<i>Miller v. Pfizer, Inc.</i> .....	162
<i>Samuel v. Ford Motor Co.</i> .....	150	Eleventh Circuit .....	163
<i>Hartwell v. Danek Med., Inc.</i> .....	150	<i>Allison v. McGhan Med. Corp.</i> .....	163
<i>Ballinger v. Atkins</i> .....	151	<i>Brasher v. Sandoz Pharms. Corp.</i> .....	163
Fifth Circuit .....	151	<i>Allstate Ins. Co. v. Hugh Cole Builder, Inc.</i> .....	164
<i>Pipitone v. Biomatrix, Inc.</i> .....	151	<i>Siharath v. Sandoz Pharms. Corp.</i> .....	164
<i>Wooley v. Smith &amp; Nephew Richards, Inc.</i> .....	152	<i>Edwards v. Safety-Kleen Corp.</i> .....	165
<i>Vice v. Northern Telecom, Inc.</i> .....	152	<i>Allapattah Servs. v. Exxon Corp.</i> .....	165
		<i>Wheat v. Sofamor, S.N.C.</i> .....	166

<i>White v. Chicago Pneumatic Tool Co.</i> .....	166	<i>Groobert v. President &amp; Dirs. of</i>	
<i>Cartwright v. Home Depot U.S.A.</i> .....	166	<i>Georgetown College</i> .....	168
D.C. Circuit .....	167	<i>Dyson v. Winfield</i> .....	168
<i>Raynor v. Merrell Pharms.</i> .....	167	Judicial Lessons And Helpful Hints To Be	
<i>Lakie v. Smithkline Beecham</i> .....	167	Learned Regarding General Acceptance .....	169

# Acceptance in the Scientific Community

## First Circuit

### *Ruiz-Troche v. Pepsi Cola of Puerto Rico Bottling Co.*

161 F.3d 77 (1st Cir. 1998)

#### Factual Summary

Minor child who suffered permanent brain damage in an automobile accident sued various defendants, including the tractor-trailer driver, his employer, and the consignor. At trial, Defendants sought to admit the toxicology section of the automobile driver's (plaintiff's father) autopsy report and expert testimony regarding the significance of these findings. Dr. O'Donnell was prepared to testify, based on the autopsy report, that the automobile driver had snorted 200 milligrams of cocaine within an hour prior to the accident. He would have also testified that cocaine impairs senses and capabilities affecting driving, diminishes perception, and increases the willingness to take risks. The district court excluded Dr. O'Donnell's testimony and the toxicology results. The First Circuit reversed. Expert: Dr. James O'Donnell (pharmacologist).

#### Key Language

- Dr. O'Donnell's opinion regarding the amount of cocaine the automobile driver ingested was supported by a standard textbook and an article published in a prestigious peer-reviewed medical journal, which demonstrates a measure of acceptance of the methodology within the scientific community. *Id.* at 84.
- "While the literature does not irrefutably prove the accuracy of Dr. O'Donnell's dosage conclusions, it furnishes a sufficient underpinning for those conclusions to fend preclusion of his testimony as unreliable." *Id.* at 85.

### *L.B. Corp. v. Schweitzer-Mauduit Int'l, Inc.*

121 F. Supp.2d 147 (D. Mass. 2000)

#### Factual Summary

Plaintiff filed suit seeking compensation for damage to its real property allegedly caused by defendants, an abutting landowner and the previous owner of the land. Plaintiff's expert would testify that contaminants leached into wells on its property. The district court denied defendants' motion to exclude this testimony. Expert: Peter Shanahan (hydrogeologist).

#### Key Language

- "Defendants have produced no evidence that the methodology lacks scientific validity, or that it fails to exhibit a level of rigor generally accepted in the field of hydrogeology." *Id.* at 156.
- The fact that defendants' own expert "relied on essentially the same methods as a plaintiff's expert to conclude that the landfill was not the source of the contamination" significantly undercuts defendants' argument that plaintiff's expert's theory is not generally accepted. *Id.* at 156.

*Saia v. Sears Roebuck & Co.*

47 F.Supp.2d 141 (D. Mass. 1999)

**Factual Summary**

Plaintiff suffered a severe injury to his right index finger while assembling a ping-pong table and sued the manufacturer and seller of the table. Plaintiff's expert, Dr. Smith, was prepared to testify regarding the monetary value of the life of a "statistically average person." According to Dr. Smith, the average value of a life is 3.3 million dollars, which is based on an average 32 year-old individual with a remaining life expectancy of approximately 45 years. The district court granted Defendants' motion to exclude Dr. Smith's testimony. Expert: Dr. Stan V. Smith (economist).

**Key Language**

- "The willingness-to-pay model on the issue of calculating hedonic damages is a troubled science in the courtroom, with the vast majority of published opinions rejecting the evidence." *Id.* at 146.
- "Dr. Smith testified that only twenty-five percent of his profession uses hedonic damages analysis, 'up from zero percent ten years ago.'" *Id.* at 147.
- "Despite many favorable articles, the sociology and economic foundations of hedonic damages have been as often assailed as lacking any verifiable basis." *Id.* at 148.

*Coffin v. Orkin Exterminating Co.*

20 F.Supp.2d 107 (D. Me. 1998)

**Factual Summary**

Plaintiff sued exterminating company for injuries allegedly suffered as a result of its application of pesticides. Dr. Phillips was prepared to testify that as a result of plaintiff's exposure to pesticides applied in her office building, she contracted multiple chemical sensitivity ("MCS"). Defendants move to exclude all evidence relating to MCS, including the testimony of Dr. Phillips. The district court granted the motion. Expert: Dr. David L. Phillips II.

**Key Language**

- Adopting the reasoning employed in other cases, the court concluded that MCS has not gained general acceptance in the medical or toxicological community. *Id.* at 110-11.

*Sutera v. The Perrier Group of America, Inc.*

986 F.Supp. 655 (D. Mass. 1997)

**Factual Summary**

Plaintiff sued mineral water producer after contracting acute promyelocytic leukemia ("APL") alleging that the bottled water was contaminated with benzene. Dr. Jacobson would testify that because benzene is a known mutagenic carcinogen, any level of exposure to benzene, including the trace amounts found in defendants' bottled water, probably caused plaintiff's APL. The district court granted defendants' motion to exclude plaintiff's expert testimony. Expert: Dr. Robert Jacobson (oncologist and hematologist).

**Key Language**

- "[A]lthough there is evidence that one camp of scientists... believes that a non-linear model is appropriate basis for predicting the risks of low-level exposures to benzene, there is no scientific evidence

that the linear no-safe threshold analysis is an acceptable scientific technique used by experts in determining causation in an individual instance.” *Id.* at 666.

### *Shahzade v. Gregory*

923 F. Supp. 286 (D. Mass. 1996)

#### **Factual Summary**

Plaintiff claims that defendant sexually assaulted her more than 47 years prior to the filing of her complaint. She claims that these episodes of assault had been completely blocked out and that she had no memory of them until she recovered so-called “repressed memories” during psychotherapy in 1990. Plaintiff’s expert was prepared to testify regarding the validity of repressed memory evidence. The district court denied defendant’s motion to exclude Dr. van der Kolk’s testimony. Expert: Dr. Bessel van der Kolk (psychiatrist).

#### **Key Language**

- According to Dr. van der Kolk, “the majority of clinical psychiatrists recognize the theory of repressed memories and do not find the theory itself controversial.” *Id.* at 288.
- “The American Psychiatric Association . . . recognizes the theory of repressed memories and believes it to be very common among people who have experienced severe trauma.” *Id.* at 289.
- DSM-IV also recognizes the concept of repressed memories. *Id.* at 289.

## **Second Circuit**

### *Campbell v. Metropolitan Property & Cas. Ins. Co.*

239 F3d 179 (2d Cir. 2001)

#### **Factual Summary**

Children diagnosed with lead poisoning claim exposure from lead-based paint in insured’s apartment building. A declaratory judgment action was filed seeking a determination that onset of bodily injury occurred during the policy period in effect when the children moved into the building. After examining the children and reviewing their medical records and the Health Department report on the apartment building, Dr. Rosen testified at trial that the children had sustained lead-paint-exposure injuries during the first policy period. The district court determined that bodily injury occurred during that period and entered judgment for the plaintiffs. Defendant appeals, arguing that Dr. Rosen’s testimony was not admissible under *Daubert*. The Second Circuit affirmed the court’s decision admitting this testimony. Expert: Dr. John F. Rosen (Professor of Pediatrics).

#### **Key Language**

- “Dr. Rosen’s theories plainly were widely accepted.” *Id.* at 186.
- Dr. Rosen wrote several sections in the air-lead-criteria document published by the EPA. He was chairperson of the Centers for Disease Control’s advisory committee on the reports published in 1985 and 1991 on preventing lead poisoning in young children, which are used nationally by departments of health as well as pediatricians for treatment, diagnosis, and management of childhood lead poisoning.

*Id.* at 186. Dr. Rosen testified that the opinions he was giving at trial were consistent with these reports and articles. *Id.* at 186.

### *Wills v. Amerada Hess Corp.*

2002 WL 140542 (S.D.N.Y. Jan. 31, 2002)

#### **Factual Summary**

Plaintiff brought wrongful death action due to husband's death allegedly caused by exposure to toxic chemicals while working on defendants' vessels. Plaintiff's expert would testify that decedent's exposure to Amerada Hess petroleum products caused him to contract squamous cell cancer based on the oncogene or no-threshold theory, not a dose-response determination. The district court granted defendants' motion *in limine* to exclude Dr. Bidanset's testimony. Expert: Dr. Jesse H. Bidanset (forensic toxicologist).

#### **Key Language**

- "Dr. Bidanet admits that the 'generally accepted' theory is the dose-response relationship and that the oncogene theory that he is using is controversial." *Id.* at 14.
- The generally accepted method for determining whether a person's illness was caused by a specific toxin entails ascertaining the level of exposure to the toxin in question. Dr. Bidanset admitted that he did not quantify plaintiff's level of exposure to benzene or PAHs. *Id.* at 14.
- As noted by other courts, to the extent that the linear non-threshold model has been subjected to peer review and publication, it has been rejected by the overwhelming majority of the scientific community. *Id.* at 14.

### *Martin v. Shell Oil Co.*

180 F. Supp.2d 313 (D. Conn. 2002)

#### **Factual Summary**

Methyl tertiary-butyl ether (MTBE) was discovered in groundwater near a Shell service station. Plaintiffs, who live on property near the service station, allege that MTBE found in their wells was attributable to Shell. Dr. Shkuda would testify that MTBE contamination from the Shell station had migrated to contaminate Plaintiffs' property. Dr. Mehlman was prepared to testify that the MTBE contamination on plaintiffs' property caused plaintiffs' health symptoms. The district court denied defendant's motion to exclude this testimony. Experts: Dr. Gregory Shkuda (environmental consultant with a Ph.D. in organic chemistry); Dr. Myron Mehlman (toxicologist with a Ph.D. in chemistry).

#### **Key Language**

- Dr. Shkuda uses accepted techniques in analysis of chemical migration in groundwater flow. Although his analysis is based on an analysis of the geology and groundwater flow of the Nutmeg River Valley, and not the Norwalk River Valley where the properties are located, "accepted scientific principles justify the relevance of the Nutmeg Study given the similarity of the geological setting of the contamination site and the study." *Id.* at 319.
- "Mehlman's report provides a basis for concluding that the MTBE contamination on the plaintiffs' property affected the plaintiffs' health and property, and he uses accepted techniques in toxicology." *Id.* at 319.

*Colon v. BIC USA, Inc.*

199 F. Supp.2d 53 (S.D.N.Y. 2001)

**Factual Summary**

Mother and minor child sued manufacturer of disposable butane cigarette lighter with a “Child Guard” safety latch, alleging that child had ignited his shirt and suffered severe burns as a result of playing with a disposable lighter. Apparently, the safety latch had been removed at the time of the child’s injury. Plaintiffs advocate a failsafe lighter design which renders the lighter inoperable when the safety feature is removed or broken. Plaintiffs’ expert would testify that defendant’s failure to use failsafe technology, which was feasible, renders the lighter unreasonably dangerous and that the lighter’s bright color and small size constitutes a defect because these characteristics make the lighter attractive to children. The district court excluded Nelson’s testimony. Expert: John Nelson (engineer).

**Key Language**

- Nelson offers no testable methodology. “There is no general acceptance in the engineering community for a methodology that omits testing of a hypothesis.” *Id.* at 78.
- Nelson’s methodology, which involves slight revisions to Defendant’s patents, does not satisfy “general acceptance” requirement when Plaintiffs offer “no evidence indicating that revising patented designs by conjecture is an accepted engineering method.” *Id.* at 79.

*Coleman v. Dydula*

139 F. Supp.2d 388 (W.D.N.Y. 2001)

**Factual Summary**

Plaintiff was involved in an automobile accident with defendant. Dr. Reiber would testify regarding plaintiff’s lost future wages, future costs of health care coverage, and worklife expectancy. In order to calculate plaintiff’s lost future wages and health insurance costs, Dr. Reiber made inferences based on the Consumer Price Index for Urban Consumers and the Medical Price Index. Dr. Reiber concluded that plaintiff would have worked until the age of 66 based on the fact that plaintiff did not have a pension plan and plaintiff’s statement that she intended to work until her 66th birthday. The district court denied defendant’s motion to exclude this testimony. Expert: Dr. Ronald Reiber (professor of economics).

**Key Language**

- “Reiber’s testimony and the NAFE [National Association of Forensic Economists] Survey indicate that there may be several acceptable analytical approaches when it comes to projecting future economic trends.” *Id.* at 394-95.
- Although economists may not generally agree on future rates of inflation, it is sufficient that they generally accept a certain method for projecting rates of inflation. *Id.* at 395.

*Frank v. New York*

972 F. Supp. 130 (N.D.N.Y. 1997)

**Factual Summary**

Plaintiffs claimed injuries due to occupational exposure to pesticides in state office buildings. This exposure rendered plaintiffs hypersensitive to normal levels of airborne environmental chemicals and pollutants and their condition manifests itself in symptoms including fatigue, severe headaches, numbness, respiratory

infections, vomiting, insomnia, anxiety, and depression. Plaintiffs allege that the State failed to make reasonable accommodations for their disabilities. Plaintiffs' experts would testify that plaintiffs suffer from physical or mental impairments that substantially limit their ability to work, namely multiple chemical sensitivity (MCS), caused by their exposure to chemicals at work. Experts: Dr. Michael Lax, Dr. Eckardt Johanning, Dr. Carol Burgess, Dr. Mark Schimelma, and Dr. Stuart Erner.

#### Key Language

- "MCS's status in the medical community is a far cry from general acceptance." *Id.* at 135. Reviews of MCS literature reveals little scientific evidence substantiating the existence of MCS or an established cause and effect relationship between MCS and chemicals. *Id.* at 135 (citation omitted).
- "MCS also has failed to gain acceptance in the field of toxicology" *Id.* at 136.
- "Every federal court that has addressed the issue of the admissibility of expert testimony on MCS under *Daubert* has found such testimony too speculative to meet the requirements of 'scientific knowledge.'" *Id.* at 136.

#### *Golod v. Hoffman La Roche*

964 F. Supp. 841 (S.D.N.Y. 1997)

#### Factual Summary

Plaintiff sued drug manufacturer after losing vision in one eye after long term use of a drug called Tegison. Plaintiff's expert was prepared to testify that, with chronic use, Tegison accumulates in the body and can rise to toxic levels that will persist even after the drug is discontinued because it continues to be released from storage in body fat and the liver. Dr. Barasch concluded that this continuing toxicity resulting from the release of Tegison or its metabolite from the liver and body fat into the bloodstream in combination with continued oral ingestion was responsible for plaintiff's injuries. Drs. Oksman and Friedman concluded that based on differential diagnoses, plaintiff's injuries were caused by Tegison. The district court allowed testimony based on differential diagnoses but excluded Dr. Barasch's testimony regarding his theory of prolonged Tegison toxicity. Experts: Dr. Barasch (unspecified); Dr. Henry Oksman (ophthalmologist); Dr. Alan Friedman (ophthalmologist).

#### Key Language

- The methodology of differential diagnosis is accepted in this Circuit. *Id.* at 858.
- Although Dr. Barasch's testimony that Tegison is stored in the fat and the liver appears to have support in the medical literature, his theory that the release of Tegison from storage in body tissues, in combination with continued oral ingestion of Tegison, can raise the concentration of circulating Tegison to extremely toxic levels and that such levels of Tegison persist and cause more extreme ocular consequences has not achieved any acceptance in the medical community. *Id.* at 860.

## Third Circuit

### *Wade-Greaux v. Whitehall Lab.*

874 F. Supp. 1441 (D.V.I. 1994)

#### Factual Summary

Mother of child born with limb deformation sued the manufacturer of Primatene Tablets and Mist, over-the-counter asthma medications, which she consumed during pregnancy. Plaintiff offered five expert witnesses to testify regarding the teratogenicity of Primatene Tablets and Mist in humans at therapeutic doses. According to her experts, sympathomimetics and methylxanthines, active ingredients in the drugs, are potentially teratogenic in humans. The district court granted defendant's motion for summary judgment. Experts: Dr. Enid F. Gilbert-Barnes, M.D. (pediatric pathologist, developmental pathologist, and genetic pathologist); Dr. Alan K. Done, M.D. (pediatrician, pharmacologist, and toxicologist); Dr. John A. Tilelli, M.D. (pediatric and intensive care physician); Dr. Stuart A. Newman, Ph.D. (professor of cellular biology and anatomy); Dr. John D. Palmer, M.D., Ph.D. (pharmacologist and toxicologist).

#### Key Language

- Although plaintiff's expert witnesses do not hold themselves out as teratologists, because each offers an opinion with respect to human birth defects and their causes (*i.e.*, the field of teratology), their methodologies must be compared with the methodology generally accepted by the community of teratologists. *Id.* at 1478.
- “[A]n essential element of the generally accepted methodology [of teratology] is that exposure during pregnancy should be associated with an increased frequency of distinctive pattern of birth defects, as shown through repeated, consistent human epidemiological studies.” *Id.* at 1478.
- Plaintiff's expert witnesses' extrapolation from animal data to humans to prove causation without supportive positive epidemiological studies “is scientifically invalid because it is inconsistent with several universally accepted and tested scientific principles.” *Id.* at 1480.
- “Anecdotal human data . . . have inherent biases that make them unreliable. . . . [Such anecdotal human data do not represent the type of data reasonably relied upon by experts in the field. . . .]” *Id.* at 1483.

### *Eclipse Elecs. v. Chubb Corp.*

176 F. Supp.2d 406 (E.D. Pa. 2001)

#### Factual Summary

Plaintiff stored its entire inventory of electronic connectors at Eastern America Warehouse. After 18 months of storage, plaintiff learned of severe damage to the inventory. Chubb, plaintiff's insurer, refused to pay plaintiff's claim on the basis that a significant part of the inventory remains undamaged and retains a large portion of its original value. Mr. Peel would testify that plaintiff's entire inventory of connectors was ruined by humidity and gases, and as a result had no market value. Mr. Peel's conclusion was based on the *Battelle Study*, which creates four separate classifications that mirror real world environmental conditions. Because the conditions at the warehouse mirrored conditions present in a *Battelle* “Class III” testing environment, Mr. Peel opines that plaintiff's connectors would have suffered damage similar to the kinds observed in the *Battelle* experiments. The district court denied defendant's motion to exclude this testimony. Expert: Max Peel.

### Key Language

- The standards articulated in the *Battelle Study* have gained general acceptance as evidenced by their adoption by the Electronics Industries Alliance, the American Society of Testing and Materials, and the Instrumentation Society of America. *Id.* at 410.
- “The *Battelle Study* is unquestioned in the industry and Peel’s customers such as IBM, Intel, Compaq, Tyco, and Dell rely on the use of similar studies.” *Id.* at 410.

### *Magistrini v. One Hour Martinizing Dry Cleaning*

180 F. Supp.2d 584 (D.N.J. 2002)

#### Factual Summary

While working at defendant’s dry cleaners between 1977 and 1979, plaintiff was exposed to perchlorethylene (PCE). After being diagnosed with acute myelomonocytic leukemia (AMML) in 1981, plaintiff sued defendant. Defendants’ expert, Dr. Jandl, was prepared to testify that plaintiff’s leukemia was not caused by exposure to any dry cleaning agent used in the course of her employment. Plaintiff’s expert, Mr. Stanton, would testify that plaintiff was regularly exposed to at least 200 ppm of PCE based on an “odor threshold methodology.”

Plaintiff moved to exclude Dr. Jandl’s testimony and defendants moved to exclude Mr. Stanton’s testimony. The district court denied both motions. Experts: George Stanton (certified industrial hygienist and engineer for plaintiff); Dr. James Jandl (hematologist for defendant).

### Key Language

- In forming his opinion, Dr. Jandl relied on his extensive knowledge of the peer-reviewed medical literature on chemical leukemogens, the causes of leukemia, his review of the data on PCE and leukemia, his decades of clinical experience, and his research and experience comprising his tome *Blood*, which is a classic work on blood-borne diseases. *Id.* at 612.
- “Dr. Janl’s method is both generally accepted and has been widely used in a non-judicial setting by scientists and medical doctors. Additionally, the widespread use of his treatise demonstrates Dr. Janl’s prominence in the field of hematology.” *Id.* at 612.
- Mr. Stanton’s estimation of PCE based on odor level tables provided in the industrial hygiene literature and the technical literature issued by Defendant Dow Chemical and various dry-cleaning trade associates is a generally accepted way of estimating exposure levels in the absence of actual air sampling. *Id.* at 614.
- Although Mr. Stanton’s methodology is not the most reliable method (air sampling is more reliable), defendants should not be allowed to capitalize on their own past failure to perform required air sampling to deprive plaintiff of the ability to offer evidence of PCE exposure levels. *Id.* at 614.

### *In re TMI Litig. Cases Consolidated II*

911 F. Supp. 775 (M.D. Pa. 1996)

#### Factual Summary

Residents living near the Three Mile Island nuclear reactor sought damages for alleged exposure to radioactive gases during a reactor accident. Plaintiffs put forward numerous experts to establish that they were exposed to sufficient doses of radiation to cause injury. Dr. Vergeiner was offered to testify regarding plume

dispersion and dose estimates based upon his plume dispersion models. Professor Neuwirth was prepared to testify regarding his analysis of TMI soil samples and his half life calculations for each of the samples. Dr. Wing's proffered testimony related to his cancer incidence study, which is a reanalysis of a prior study of cancer incidence in the TMI area that had concluded that radiation exposure had not caused an increase in post-accident cancer incidence. Based on his statistical analysis of the data, Dr. Wing concluded that the increases in cancer in the post-accident period are "consistent with allegations that the magnitude of radiation doses from the TMI accident were much higher than was assumed in the past." Dr. Crawford-Brown was offered by plaintiffs to review the totality of the evidence and to render a final opinion as to whether plaintiffs' experts, as a whole, considered the types of evidence necessary to establish what dose or doses of radioactivity were delivered to the TMI area residents. Experts: Dr. Ignaz Vergeiner (meteorologist); Victor J. Neuwirth (professor of chemistry); Dr. Steven B. Wing (epidemiologist); Dr. Douglas Crawford-Brown, Ph.D. (nuclear science and health physics).

### Key Language

- Dr. Vergeiner's plume dispersion and dose estimate methodologies cannot be categorized as generally accepted based upon Dr. Vergeiner's discarding of standard mathematical computer models (specifically the Gaussian Plume model) often used to estimate concentrations when actual concentration measurements are unavailable. *Id.* at 796. Further, Dr. Vergeiner failed to provide a sufficient scientific explanation for his decision to discard these generally accepted methods in favor of his self-styled models, for which there was no independent evidence of general acceptance. *Id.* at 797.
- Although Dr. Neuwirth's soil extraction techniques followed generally accepted principles, calculating the half life of each soil sample as a whole rather than calculating the half lives of specific radionuclides within each soil sample was not generally accepted. *Id.* at 803.
- Defendants' claim that Dr. Wing's cancer incidence study does not follow generally accepted methodology because it produces conclusions at odds with what is generally known and accepted about cancer latency periods goes to the weight of the testimony rather than its admissibility. *Id.* at 822.
- While exposure assessment is a generally accepted and helpful methodology, Dr. Crawford-Brown's failure to develop a testable hypothesis demonstrates his failure to follow a generally accepted methodology. *Id.* at 825-26. Dr. Crawford-Brown could have performed a full exposure assessment analysis, including an evaluation of the relative strength or weakness of each of the strands of evidence available to him. *Id.* at 825.

### *In re TMI Litig. Cases Consolidated II*

922 F. Supp. 997 (M.D. Pa. 1996)

### Factual Summary

See above. Dr. Molholt reviewed the medical histories of 11 test plaintiff cases to determine whether or not the cancers they developed after the TMI accident were caused by radiation exposures from that accident. Dr. Molholt was prepared to testify that the radionuclide releases from the TMI accident were causally related to the subsequently observed statistically significant increases in birth defects and cancers among exposed populations. Based on his evaluation of lymphocyte data and the ancillary evidence, Dr. Molholt concluded that "[a]s a direct consequence of the accident, individual off-site exposures exceeded 100 rems for many persons, which conclusion also exceeds official estimates of dose by over three orders of magnitude."

Dr. Fajardo reviewed the clinical records of several plaintiffs and concluded that plaintiffs exhibited the stated neoplasms and that such neoplasms can be induced by ionizing radiation.

Defendants moved to exclude Dr. Molholt's and Dr. Fajardo's testimony. The district court granted the motion with respect to Dr. Molholt and denied the motion with respect to Dr. Fajardo. Experts: Dr. Bruce Molholt (toxicologist); Dr. Luis F. Fajardo (pathologist).

### Key Language

- Dr. Molholt's assessment of exposure based on his lymphocyte back-calculation methodology and other "ancillary evidence" is not generally accepted. *Id.* at 1029-30.
- "The accepted toxicological methodology would first ascertain exposure and dose, and then utilize deductive clinical reasoning to make the causal link between exposure and subsequent illness." *Id.* at 1029-30. Dr. Molholt blurred the distinction between these steps by using substantially the same information to back-calculate dose that he uses to support his finding of a causal link. *Id.* at 1030.
- Further, in contravention of the Reference on Scientific Evidence, Dr. Molholt finds that the plaintiffs' neoplasms are causally related to exposure during the TMI accident without quantifying a dose for any of the plaintiffs. *Id.* at 1030.
- To the extent that Dr. Fajardo's methodology is characterized as a differential diagnosis, it satisfies the general acceptance prong of *Daubert*. *Id.* at 1035. Dr. Fajardo's review of clinical records, ruling out of other potential etiologies, and consideration of relevant latency periods reflects a generally accepted form of the differential diagnosis technique. *Id.* at 1035.
- "To the extent that Dr. Fajardo claims that he can with medical certainty identify the etiology of a specific neoplasm as exposure to ionizing radiation based upon a medical evaluation, his methodology is not generally accepted." *Id.* at 1036.
- Because Dr. Fajardo's methodology appears to be a hybrid of accepted and unaccepted methodologies, the general acceptance factor will weigh neither in favor nor against the admission of his testimony. *Id.* at 1036.

### *In re TMI Litig. Cases Consolidated II*

922 F. Supp. 1038 (M.D. Pa. 1996)

### Factual Summary

See above. Dr. Winters was prepared to testify that, based upon his review of all of the test plaintiffs' medical records, and his personal examination of the living test plaintiffs, each of the test plaintiffs' neoplasms was caused by their exposure to ionizing radiation during the TMI accident. Dr. Zakrewski concluded that the various forms of cancer plaintiffs suffered from were most likely caused by exposure to radiation released during the TMI accident. In forming his opinion, Dr. Zakrewski relied on the diagnosis supplied by plaintiffs' physicians, reviewed summary sheets for each plaintiff prepared by plaintiffs' counsel, and testified that he was provided the data prior to constructing his methodology. Experts: Dr. Thomas Winters, M.D. (internal and occupational medicine); Dr. Sigmund Zakrewski, Ph.D. (biochemistry).

### Key Language

- It is not generally accepted to infer a causal relationship between a possible exposure to ionizing radiation and a subsequent health effect based solely upon a differential diagnosis. *Id.* at 1044. However, to the extent that Dr. Winters' proffered testimony will be supported at trial by evidence that the test Plaintiffs

were exposed to sufficient doses of ionizing radiation, Dr. Winters' testimony satisfies the general acceptance factor. *Id.* at 1045.

- The data considered by Dr. Zakrewski is not the type that reasonable experts would rely upon in performing a risk assessment to determine the likelihood that a given individual's cancer was induced by radiation exposure. *Id.* at 1050.
- Dr. Zakrewski failed to subscribe to the guidelines propagated by any of several internationally respected organizations for conducting risk assessments where there has been a known or potential exposure to ionizing radiation. *Id.* at 1050. Were Dr. Zakrewski's risk assessment to bear some resemblance to any of these guidelines, his testimony would be admitted and any challenges to the methodology could be brought out on cross examination. *Id.* at 1050.

## Fourth Circuit

### *Ruffin v. Shaw Indus.*

149 F.3d 294 (4th Cir. 1998)

#### Factual Summary

Plaintiffs, a mother and daughter, began experiencing physical symptoms such as nosebleeds, rashes, extreme sweating, chills, sleeplessness, and racing of the heart following the installation of new carpet in their home. Plaintiffs sued carpet manufacturer, alleging the chemicals in the carpet installed in their home caused them severe toxic injuries. Dr. Anderson was prepared to testify that based on her testing, the carpet sample was biologically active and produced sensory irritation, pulmonary irritation, and neurological changes in mice, which are indicative that human beings would suffer similar biological responses. The district court granted defendant's motion to strike the affidavit and testimony of Dr. Anderson. The Fourth Circuit affirmed. Expert: Dr. Rosalind C. Anderson, Ph.D. (physiology).

#### Key Language

- The fact that EPA study and Anderson Labs studies, which were conducted simultaneously but separately, reached radically different results and conclusions indicate that Anderson's technique is not generally accepted in the relevant scientific community.
- According to the EPA, "despite our best efforts, which were considerable... we have not been able to independently replicate the severe toxicity described by Anderson Laboratories." *Id.* at 297
- EPA's protocol used a clean air source and added water to it before it entered the carpet chamber, while Anderson's protocol used ambient air. An EPA researcher defended use of clean air source as necessary for achieving a standard, controlled set of conditions and that the EPA's protocol was endorsed by a neutral group of peer reviewers prior to commencement of the carpet study. *Id.* at 298.

### *Adams v. NVR Homes, Inc.*

141 F. Supp.2d 554 (D. Md. 2001)

#### Factual Summary

Purchasers of home constructed over former sand quarry brought suit against builder after they discovered methane gas seepage caused by an organic fill. Defendants filed a motion *in limine* to exclude several of

plaintiffs' experts, including Thomas Jones who reviewed aerial photographs of the building site that had been taken between 1964 and 1998 to determine when and where there had been a disruption of normal surface cover. The district court excluded the testimony of Mr. Jones. Expert: Thomas Jones (certified mapping scientist).

#### Key Language

- Expert's failure to view stereographic photographs, as opposed to aerial photographs, did not comport to generally accepted scientific methodology in light of expert's admission that "to do a really complete analysis of the site, he would need to look at stereographic photographs." *Id.* at 566.

#### *Samuel v. Ford Motor Co.*

96 F. Supp.2d 491 (D. Md. 2000)

#### Factual Summary

The 1993 Ford Aerostar van in which the plaintiffs were riding rolled over after it was involved in an accident. Plaintiffs sued Ford, claiming that the Aerostar was defective and unreasonably dangerous due to its propensity to roll over. Plaintiffs' expert, Dr. Michael A. Kaplan, was prepared to testify that the Ford Aerostar van has a propensity to roll over based on the Mechanical Systems Analysis Inc. ("MSAI") Accident Avoidance Maneuver ("AM") Test. Defendant Ford moved to exclude his testimony, arguing that the MSAI AM test subjected the tested vehicle to conditions which greatly exceed what reasonably can be expected when a vehicle is driven under real world emergency conditions. In addition, Ford claims that the MSAI AM test is similar to the Consumers Union Short Course Test, which has not been accepted within the automotive industry or the NHTSA. The district court granted the motion. Expert: Dr. Michael A. Kaplan, Ph.D.

#### Key Language

- The fact that the automobile industry may use various forms of AM testing does not confer general acceptance on the specific format of Dr. Kaplan's MSAI AM test. *Id.* at 500.
- Steering angles and rates used by Dr. Kaplan in MSAI test were in some instances within a range that NHTSA concluded was excessive. *Id.* at 500-01.
- That steering angles employed in Dr. Kaplan's MSAI test are comparable to those used in other AM testing is unpersuasive given the different methodologies of "J-Turn" and "Fishhook" tests. *Id.* at 501.
- A 1999 study designed to measure steering angles and rates for non-professional drivers forced to employ accident avoidance maneuvers when confronted with unexpected, realistic crash-imminent situations demonstrated that the non-professional drivers' steering angles were substantially below those reported in Dr. Kaplan's MSAI test and the average maximum steering rates were substantially lower than the rates reported in Dr. Kaplan's test when a professional driver experienced tip ups. *Id.* at 501.
- Other than the U.S. Air Force, no government agency or automotive manufacturer uses the MSAI test to evaluate a vehicle for roll over resistance. *Id.* at 503.

#### *Hartwell v. Danek Med., Inc.*

47 F. Supp.2d 703 (W.D. Va. 1999)

#### Factual Summary

Plaintiffs filed suit against manufacturer of spinal fixation device following unsuccessful spinal fusion

surgeries. Plaintiffs' experts were prepared to testify that the Texas Scottish Rites Hospital Devices (TSRH devices) were defective and that these defects caused plaintiffs' injuries. The district court granted defendant's motion for summary judgment because plaintiffs' experts' testimony on causation was not sufficiently reliable. Expert: Dr. Lance O. Yarus.

#### Key Language

- Plaintiffs' experts' failure to examine the Plaintiffs and to rule out other causes for Plaintiffs' painful conditions did not follow generally accepted practice.
- "It is simply inconceivable that the scientific community would, to any degree, find it acceptable to make dramatic diagnoses of the type at issue here simply by reviewing the operative notes of other doctors and briefly familiarizing oneself with the procedures performed." *Id.* at 713.
- Other than Dr. Yarus, all doctors have testified that "the most important indicators they have for correctly diagnosing a patient's conditions are the patient's own words, the results of their own physical examination of the patient, and the imaging studies produced during the course of the patient's treatment." *Id.* at 713.

#### *Ballinger v. Atkins*

947 F. Supp. 925 (E.D. Va. 1996)

#### Factual Summary

After ingesting NutraSweet in connection with the Atkins Diet Program, which is a ketogenic diet that focuses on high-protein, low-carbohydrate intake, Plaintiff alleged that he suffered from a series of chronic hypoglycemic-type symptoms. Dr. Sears was prepared to testify that the combination of a ketogenic diet with consumption of large amounts of NutraSweet contributed to significant and permanent neurological damage caused by an inability of the brain to remove excessive levels of aspartic acid. The district court granted defendant's motion to exclude Dr. Sears' testimony. Expert: Dr. Barry Sears, Ph.D. (biochemistry).

#### Key Language

- Dr. Sears' acknowledgement that there has been no study ever done which concludes that NutraSweet is unsafe when ingested as part of a low carbohydrate diet and admission that his "working hypothesis" is not "well accepted" in any scientific field, indicate that Dr. Sears has failed to demonstrate any acceptance within the relevant scientific community. *Id.* at 927-28.

### Fifth Circuit

#### *Pipitone v. Biomatrix, Inc.*

288 F.3d 239 (5th Cir. 2002)

#### Factual Summary

Plaintiff contracted salmonella after receiving an injection of Synvisc to treat severe osteoarthritic pain in his knee. Synvisc is a replacement synovial fluid manufactured by defendant and is made from rendered rooster combs. Dr. Coco would testify that plaintiff's salmonella was caused by the injection of Synvisc. The district court granted defendant's motion *in limine* to exclude the testimony of Dr. Coco. The Fifth Circuit reversed. Expert: Dr. Jeffrey Coco (infectious disease specialist).

### Key Language

- “Dr. Coco based his opinion . . . in large part on accepted medical knowledge of the ways in which salmonella functions as an organism and how it infects humans.” *Id.* at 246.
- “Dr. Coco’s elimination of various alternative causes . . . , such as infection through gastro-intestinal tract or the blood stream, were based on generally accepted diagnostic principles related to those conditions” and “Dr. Coco personally examined [Plaintiff] and found him to be lacking in the symptoms that a physician would expect to find if salmonella had been introduced into the body through one of these alternative routes.” *Id.* at 246-47.

### *Wooley v. Smith & Nephew Richards, Inc.*

67 F. Supp.2d 703 (S.D. Tex. 1999)

#### Factual Summary

Plaintiff underwent back surgery in which a pedicle screw device was implanted into his spine using a Simmons Spinal Plating System, a surgical product designed, manufactured, and sold by defendant. Plaintiff filed suit against defendant, alleging that the Simmons Plating System caused his back pain to persist after his spinal fusion surgery. Plaintiff’s expert, Dr. Yarus, was prepared to testify that the implanted devices caused plaintiff’s progressive impairment disability. The district court granted defendant’s motion to exclude Dr. Yarus’ testimony. Expert: Dr. Lance Yarus (general orthopedic practitioner).

### Key Language

- Dr. Yarus has never personally examined plaintiff, spoken with any of his treating physicians, or reviewed X-rays of plaintiff’s surgical site. “No expert orthopedic surgeon would attempt to make an accurate and complete diagnosis to the probable cause of postoperative spinal injury without interviewing or examining the patient, or considering the entirety of a patient’s records.” *Id.* at 709.
- The materials on which Dr. Yarus relied—litigation reports and lawyer prepared summaries—are not of a type reasonably relied upon by experts. *Id.* at 708.

### *Vice v. Northern Telecom, Inc.*

1996 WL 200281 (E.D. La. Apr. 23, 1996)

#### Factual Summary

Plaintiff filed suit against manufacturer of computer equipment she used while working as a telephone directory assistance operator. Plaintiff alleged that a defect in the keyboard caused her “repetitive stress disorders.” Dr. Pascarelli was prepared to testify that the awkward posture produced by these standard features, when combined with the repetitive and/or forceful movements required of keyboard users, increase the user’s risk of developing RSI. Dr. Punnett would testify that the operation of video display terminals and data entry keyboards conveys an elevated risk of musculoskeletal disorders to the operators. The district court denied defendant’s motion for summary judgment. Experts: Dr. Emil Pascarelli (senior attending physician and professor of clinical medicine); Dr. Laura Punnett (occupational epidemiologist and ergonomist).

### Key Language

- “[T]he theory that keyboard use causes RSI does appear to be gaining general acceptance among physicians and ergonomists.” *Id.* at 8.

- Defendant's expert, Michael J. Smith, does not attest in his affidavit that plaintiff's theory is unsound. *Id.* at 8.
- Defendant has offered no articles or studies criticizing or repudiating the theory in response to the numerous peer reviewed articles offered by plaintiff that favorably discuss the theory. *Id.* at 8.

## Sixth Circuit

### *Downs v. Perstorp Components, Inc.*

126 F. Supp.2d 1090 (E.D. Tenn. 1999)

#### Factual Summary

In suit against chemical manufacturer, plaintiff alleged that during his work, he spilled a chemical called Rubiflex on himself. Dr. Kilburn diagnosed plaintiff with "chemical encephalopathy," which caused plaintiff severe facial pain, sensory abnormalities, visual field losses, impaired balance, slowed reaction time, and recall-memory impairment. Dr. Kilburn was prepared to testify that based on his differential diagnosis, plaintiff's single exposure to Rubiflex was responsible for these injuries. Defendant filed a motion *in limine* to exclude Dr. Kilburn's testimony. The district court granted the motion. Expert: Kaye Kilburn, M.D. (professor of medicine).

#### Key Language

- "Dr. Kilburn ignored many of the accepted methods of toxicology. He did not know the source of the Rubiflex. . . . Dr. Kilburn had no idea of the amount of the chemical to which plaintiff was exposed, nor did he have any idea if the dose received by the plaintiff was sufficient to cause a medical condition." *Id.* at 1124.
- Dr. Kilburn could point to no scientific or medical literature that suggests that Rubiflex could lead to neurological problems. *Id.* at 1125.
- According to Defendant's expert, Dr. Schaumburg, Dr. Kilburn's methodology violated four of the seven fundamental tenets of neurotoxicology: (1) 2½ month delay in the onset of injury following one exposure; (2) requirement of repeated exposure to hazardous chemicals to produce any kind of persistent effect; (3) neurotoxins do not affect only one side of the face and only one eye (as plaintiff claims); and (4) the experienced neurologist (Dr. William Paulsen) who examined plaintiff shortly after his exposure found no neurological damage. *Id.* at 1128-29.

### *Kurncz v. Honda N. Am.*

166 F.R.D. 386 (W.D. Mich. 1996)

#### Factual Summary

Plaintiff suffered injuries while riding a Honda ATC, a three-wheeled recreation vehicle. In his suit against Honda, plaintiff claims that he has been denied enjoyment of life. Plaintiff's expert, Stan Smith, was prepared to testify regarding the value of life using a "willingness to pay" model. Defendant filed a motion *in limine* to exclude his testimony, which the district court granted. Expert: Stan Smith (economist).

### Key Language

- “The willingness to pay model on the issue of calculating hedonic damages is a troubled science in the courtroom, with the vast majority of published opinions rejecting the evidence.” *Id.* at 388.
- Although Mr. Smith’s method has been subject to peer review and he is well published, “there has been no basic agreement among economists as to what elements ought to go into the life evaluation. There is no unanimity on which studies ought to be considered.” *Id.* at 389.
- Despite plaintiff’s offering of affidavits of other experts who believe Mr. Smith’s approach is generally accepted, the “eyeballing” inherent in selecting a statistical life value from the broad range of values that a study might reveal lacks scientific reliability in the sense of producing consistent results. Thus, while Mr. Smith’s general approach may be accepted by economists, the specific choices or reasons for the specific choices within the methodology are not.

### *Nelson v. Tennessee Gas Pipeline Co.*

1998 WL 1297690 (W.D. Tenn. 1998)

#### Factual Summary

Plaintiffs, who lived in close proximity to defendants’ natural gas pipeline compressor station, filed suit alleging that defendants’ release of PCBs into the soil, groundwater, and atmosphere caused them immune and nervous system impairments, bone degeneration, and related learning disorders. Dr. Kilburn was prepared to testify plaintiffs suffered from encephalopathy due to PCB exposure from defendants’ facility. The district court granted defendants’ motion to exclude Dr. Kilburn’s testimony. Expert: Kaye Kilburn, M.D. (professor of medicine).

#### Key Language

- “[T]he opinions expressed by Dr. Kilburn are ‘novel,’ to say the least, and do not enjoy general acceptance.” *Id.* at 7.
- Dr. Kilburn’s admission that he knew of no scientific literature to support his opinion that PCBs can cause encephalopathy mitigated against general acceptance. *Id.* at 7.
- Studies that discuss the toxicity of PCDDs, PCDFs, and TCDD are not relevant as “extrapolation from studies of chemicals different from those at issue does not rise to the level of accepted methodology.” *Id.* at 7.

### *Isely v. Capuchin Province*

877 F. Supp. 1055 (E.D. Mich. 1995)

#### Factual Summary

Plaintiff alleging sexual abuse while at seminary sought admission of expert testimony to establish post-traumatic stress disorder and repressed memory. Defendant filed motions *in limine* to exclude the testimony relating to repressed memory generally and to preclude Dr. Hartman from testifying as to the truth of the matters asserted by plaintiff (*i.e.*, that he was sexually abused). The district court denied the motion regarding testimony relating to repressed memory but granted the motion regarding Dr. Hartman’s vouching for the truth plaintiff’s allegations of sexual abuse. Expert: Dr. Carol Hartman (psychologist).

### Key Language

- While not universal, the concept of repressed memory has gained some adherents in the field of psychology. *Id.* at 1065.
- Dr. Hartman testified that “there is a fair degree of acceptance of the concept of repressed memory in the field” and that “the majority of clinicians accept the concept.” *Id.* at 1065.
- According to Dr. Hartman, “the greatest controversy with respect to repressed memory is specifically in the area of elicitation of repressed memories, not with the concept itself.” *Id.* at 1065-66.

### *Coffey v. Dowley Mfg.*

187 F. Supp.2d 958 (M.D. Tenn. 2002)

### Factual Summary

Plaintiff was injured while using a complex automotive tool known as the Super Hub Shark (“SHS”) manufactured by Dowley Manufacturing. Dr. Wilson would testify that based on a computerized finite element modeling analysis (he did not perform physical testing on an exemplar), the design of the SHS is defective because when the puller is configured for removing hubs and rotors, the tensile and bending loads will cause the small bolts connecting the body and jaws to fail. The district court granted motion to exclude Dr. Wilson’s testimony. Expert: Dr. Dale Wilson (professor of mechanical engineering).

### Key Language

- Dr. Wilson’s approach is not generally accepted because finite element analysis is not often used when actual physical testing is an option. *Id.* at 978.
- Dr. Wilson also failed to comply with various ASTM standards, notably ASTM E-1188-95 (Standard Practice for Collection and Preservation of Information and Physical Items by a Technical Advisor), which counsels the expert “to obtain and preserve items as early as possible,” 860-97 (Standard Practice for Examining and Testing Items that are or may become Involved in Litigation), and 678-98 (Standard Practice for Evaluation of Technical Data). *Id.* at 978.

### *Berry v. Crown Equip. Corp.*

108 F. Supp.2d 743 (E.D. Mich. 2000)

### Factual Summary

Plaintiff was injured when while driving a stand-up forklift, her left foot, which was resting outside of the operator’s compartment, was crushed when the forklift struck a steel beam. Plaintiff’s expert would testify that Crown Equipment defectively designed the forklift by failing to include doors enclosing the operator compartment to prevent the operator’s foot from extruding outside the compartment. The district court excluded Mr. Bombyck’s testimony and granted defendants’ motion for summary judgment. Expert: George Bombyk (safety consultant).

### Key Language

- Mr. Bomyk’s theory was not generally accepted in the forklift manufacturing and design community. He acknowledged that open compartments are standard in the industry and knows of no government, industry, or internal company standard of a user that either requires or recommends doors on stand-up forklifts. *Id.* at 753.

- Mr. Bombyk also could not identify anyone else who agreed with his opinion that a rear door should be added to the forklift as standard equipment. *Id.* at 753.

## Seventh Circuit

### *Dhillon v. Crown Controls Corp.*

269 F.3d 865 (7th Cir. 2001)

#### Factual Summary

While operating a stand-up forklift, plaintiff's leg slipped out of the operator's compartment and became pinned between a steel beam and the truck. Plaintiff's experts would testify that defendant's failure to equip the forklift with a rear door was the proximate cause of plaintiff's injuries. On defendant's motion, the district court found the experts' testimony failed to satisfy *Daubert* and excluded their testimony. The Seventh Circuit affirmed. Experts: John B. Severt (mechanical engineer); Dr. Gerald Harris (biomechanical engineer).

#### Key Language

- Neither expert provided any evidence that the rear door proposal has been generally accepted in the relevant communities. *Id.* at 870.
- "Plaintiff could not point to even one forklift manufacturer that has installed rear doors for general application or even one regulatory body or standards organization that requires or recommends a rear door on forklift stand-up trucks." *Id.* at 870.
- Although Mr. Severt has twice attempted to persuade the American National Standards Institute committee to require a rear door, the committee has rejected the idea. *Id.* at 870-71.

### *Nutrasweet Co. v. X-L Eng'g Co.*

227 F.3d 776 (7th Cir. 2000)

#### Factual Summary

NutraSweet owned environmentally contaminated property and sued X-L Engineering, a neighboring property owner, under CERCLA to recover cleanup costs. To calculate the amount of VOCs for which X-L was liable, Plaintiff's expert conducted various tests to determine that the same type of VOCs were on both NutraSweet and X-L sites. The expert then analyzed historical aerial photographs of the sites to further confirm the dumping sequence. The district court entered judgment in favor of NutraSweet and found that X-L was 100 percent responsible for the VOCs on NutraSweet's property. X-L appealed *inter alia*, the district court's admission of Dr. Ball's testimony, arguing that it is speculation to look at a sequence of aerial photos to determine dumping history. The Seventh Circuit affirmed. Expert: Dr. Roy Ball.

#### Key Language

- "[T]he district court did not abuse its discretion in concluding that photographic analysis is a well-accepted technique in this area so as to bear a sufficient indicia of reliability." *Id.* at 788.
- According to Dr. Ball, "historical analysis of aerial photographs is an accepted tool in his field and that in fact the EPA requires the historical analysis of such photos and has its own team for doing this." *Id.*

*Lennon v. Norfolk & W. Ry. Co.*

123 F.Supp.2d 1143 (N.D. Ind. 2000)

**Factual Summary**

Railroad worker sued railroad to recover for injuries sustained in a fall. Dr. Romain diagnosed Plaintiff with multiple sclerosis and would testify that plaintiff's MS occurred or was exacerbated as a result of his fall. Expert: Dr. Louis Romain (neurologist).

**Key Language**

- “Without question it may fairly be said that the overwhelming weight of authority suggests the notion that there has been no conclusive showing demonstrating a link between trauma and the onset or exacerbation of MS.” *Id.* at 1151.
- “The only study referenced by Dr. Romain was the McAlpine study of 1952, which . . . has since been undermined by its own author because of a lack of a sufficient statistical proof.” *Id.* at 1152.
- “The other literature reviewed by Dr. Romain . . . appear to all predate the most recent (and apparently generally accepted) studies—most by many years and some by decades.” *Id.* at 1152.
- Although differential diagnoses enjoy widespread acceptance in the medical community, Dr. Romain's differential diagnosis of plaintiff is not reliable because “he has not reviewed the recent and indeed most compelling epidemiological studies which show a lack of correlation between trauma and MS.” *Id.* at 1153-54.

**Eighth Circuit**

*Lauzon v. Senco Prods.*

270 F.3d 681 (8th Cir. 2001)

**Factual Summary**

Carpenter was injured while using a Senco Products bottom-fire pneumatic nailer, model SN2. Plaintiff's expert, H. Boulter Kelsey, would testify that the design of the SN2 is defective because of the propensity to double-fire and that plaintiff's injuries were the result of a double-fire. Mr. Kelsey also would testify that the sequential-fire pneumatic nailer is commensurate in its use to the bottom-fire nailer but is much safer because its design ensures a double-fire cannot occur. The district court excluded the opinion testimony of Mr. Kelsey. The Eighth Circuit reversed. Expert: H. Boulter Kelsey (forensic engineer).

**Key Language**

- It is generally accepted that bottom-fire pneumatic nailers have the tendency to double-fire. Numerous articles indicate that bottom-fire pneumatic nailers are known for problems associated with double-fires throughout the industry. In addition, Plaintiff's employer testified that the particular SN2 used by Plaintiff had a tendency to double-fire. *Id.* at 691.
- Kelsey's testimony regarding alternative design satisfies the general acceptance requirement. A report prepared by the State of Washington “recognizes the hazardous propensities of the bottom-fire pneumatic nailer and recommends use of sequential-fire pneumatic nailers in their stead.” *Id.* at 692. In ad-

dition, “the use of a sequential-fire pneumatic nailer does not diminish the efficiency of the tool in comparison to the bottom-fire pneumatic nailer,” as reported in a *Fine Homebuilding* survey. *Id.* at 691.

*Turner v. Iowa Fire Equip. Co.*

229 F.3d 1202 (8th Cir. 2000)

**Factual Summary**

Plaintiff sued manufacturer of fire extinguisher following exposure to discharge from extinguisher. Dr. Hof, who treated Plaintiff, was prepared to testify that plaintiff suffered from reactive airways disorder (RADS) as a result of her exposure to baking soda—the primarily ingredient of the extinguisher—from the discharge of the extinguisher. Defendants moved to strike Dr. Hof’s opinion that baking soda caused plaintiff’s RADS. Expert: Dr. David Hof, M.D. (pulmonary specialist).

**Key Language**

- Although a medical opinion regarding causation that is based upon a differential diagnosis is sufficiently reliable to satisfy *Daubert*, the differential diagnosis conducted by Dr. Hof was not based upon a methodology that was generally accepted in the medical community. *Id.* at 1208.
- Dr. Hof failed to systematically rule out all other possible causes of Plaintiff’s condition. *Id.* at 1208.
- Dr. Hof’s conclusion that baking soda caused plaintiff’s condition was an afterthought, occurring only after he learned that he was mistaken in his belief that the fire extinguisher contained  $\text{NH}_4\text{H}_2\text{PO}_4$ , which he identified as the substance most likely to injure plaintiff’s airways. *Id.* at 1208.

*Pestel v. Vermeer Mfg. Co.*

64 F.3d 382 (8th Cir. 1995)

**Factual Summary**

Plaintiff sued manufacturer of stump cutter after suffering injuries when his foot went into the cutter wheel. Plaintiff retained Mr. Vidal to determine whether a safety-bar could be made for the stump cutter that would have protected plaintiff’s foot from the cutter wheel. After viewing a video prepared by defendant demonstrating Mr. Vidal’s safety guard, Mr. Vidal admitted that his guard needed further refinement. The district court barred plaintiff’s use of Mr. Vidal’s guard, finding it was not relevant as he admitted he would not use the guard in its present state. The Eighth Circuit affirmed. Expert: Keith Vidal (mechanical engineer).

**Key Language**

- The district court did not abuse its discretion in finding that plaintiff failed to demonstrate that there was general acceptance of safety guards for stump cutters. *Id.* at 384-85.
- The expert did not perform a patent search to determine whether other guards existed or whether guards for stump cutters were feasible, nor did he talk to any operators who worked with stump cutters. *Id.* at 384.

*Metropolitan St. Louis Equal Hous. Opportunity Council v. Gordon A. Gundaker Real Estate Co.*

130 F. Supp.2d 1074 (E.D. Mo. 2001)

**Factual Summary**

EHOC and City of Florissant filed suit against realtor for violations of the FHA, namely committing the practice of “steering.” Plaintiffs’ expert, Shanna Smith, would testify that race can be identified conclusively

over the telephone. The district court granted Defendant's motion to exclude Ms. Smith's opinion testimony. Expert: Shanna Smith (executive director of the National Fair Housing Alliance).

#### Key Language

- Expert's bare claim that her own experience has shown that people can guess race or nationality by voice alone does not satisfy general acceptance component of *Daubert* analysis. *Id.* at 1085.
- Expert has no specific training in voice identification especially with regards to race and is unfamiliar with the various dialects of the St. Louis region. Further, Ms. Smith has never talked to any testers in this case to ascertain whether any tester's voice was strongly indicative of race, and she has never heard any of the conversation of the testers and other people involved in this case. *Id.* at 1085.
- The authors of an article Ms. Smith cites as supportive of her opinion acknowledge that while the Federal Rules of Evidence allow for voice identification as to a particular person, there is no support that "a person's race can be identified by voice, especially over a telephone." *Id.* at 1086.

#### *Mattis v. Carlon Elec. Prods.*

114 F. Supp.2d 888 (D.S.D. 2000)

#### Factual Summary

After applying Carlon All Weather Quick-Set Clear Cement to bind together sections of PVC pipe, plaintiff began to experience nausea, headaches, and shortness of breath. Ultimately, Dr. Hansen diagnosed plaintiff with reactive airways dysfunction (RADS). Dr. Hansen was prepared to testify that plaintiff's RADS was caused by exposure to Carlon Cement fumes. Plaintiff's second expert, Roger Wabeke, was prepared to testify that fumes from Carlon Cement, which contains acetone, cyclohexanone, methyl ethyl ketone and tetrahydrofuran (all organic solvents), caused plaintiff to suffer from RADS. The district court denied Defendant's motions to exclude this testimony. Experts: Dr. Lori Hansen (pulmonologist); Roger Wabeke (industrial hygienist).

#### Key Language

- The article on which Mr. Wabeke bases his opinion has been generally accepted in the relevant scientific and medical communities. *Id.* at 895.
- Defendants' own expert agrees both with the methodology in the article relied upon by Wabeke and with the conclusion that Carlon Cements can cause RADS if they are present in high enough concentrations. *Id.* at 895.

#### *Dickie v. Shockman*

2000 WL 33339623 (D.N.D. 2000)

#### Factual Summary

Plaintiff was severely burned, while working on a farm, from a fire caused by a leak in an underground pipe which connected two underground propane tanks with a grain dryer. Plaintiff brought suit against the seller and installer of the pipe for supplying a defective pipe and the suppliers of the propane gas for failing to detect the leak. Plaintiff's expert would testify how long it would take for a pinhole to develop in the pipe using a normal rate of corrosion. The district court denied defendants' motion to exclude Dr. Loper's testimony. Expert: Dr. Loper (metallurgical engineer).

### Key Language

- “General rates of corrosion and the properties and characteristics of steel pipe are undoubtedly known to metallurgical engineers.” *Id.* at 3.
- According to Dr. Loper such a technique is generally accepted in the metallurgical engineering community and would be used by other metallurgical engineers faced with the same circumstances. *Id.* at 3.

## Ninth Circuit

### *Nadell v. Las Vegas Metro. Police Dep't*

268 F.3d 924 (9th Cir. 2001)

#### Factual Summary

Individual who was arrested by city police department brought a §1983 action against police officers and the city police department for excessive force, false arrest, unreasonable search and seizure, and unlawful retaliation in response to her exercise of her First Amendment rights. In support of claim that the police officer's use of excessive force caused her physical injury, plaintiff sought to call an expert witness who had performed a quantitative electroencephalogram (“QEEG”) on her. The district court granted defendants' motion to exclude this testimony based on its finding that the QEEG test lacked the requisite reliability. Plaintiff appealed. Expert: Dr. Michael Krieger.

#### Key Language

- The district court properly excluded the expert's testimony based on testimony by the leader of a joint task force of the American Academy of Neurology and the American Clinical Neurophysiology Society, who testified that the subjectivity and tendency to produce false positives of the QEEG technique have prevented the QEEG technique from becoming generally accepted for the clinical diagnosis of closed head injuries. *Id.* at 928.

### *S.M. v. J.K.*

262 F.3d 914 (9th Cir. 2001)

#### Factual Summary

Plaintiff sued employer for attempted sexual assault. Plaintiff alleged that after the attempted assault, her family life and the emotional well being of herself, her husband, and their son was shattered, and that she has been emotionally distressed as the assault brought back violence and sexual abuse she endured as a child. Plaintiff's expert testified at trial that plaintiff suffered from post-traumatic stress disorder (PTSD) as a result of the attempted assault. At the time of his diagnosis of PTSD, psychiatrists were relying on DSM-III-R, which required a “distressing event . . . outside the range of usual human experience” to trigger PTSD. *Id.* at 921. Despite this requirement, the expert testified that the triggering event could be less severe. The jury returned a verdict in favor of plaintiff, and defendant appealed. The Ninth Circuit affirmed. Expert: Dr. Gerald McKenna.

#### Key Language

- Because practicing mental health professionals frequently disagree on major diagnostic characteristics, “a

variance from the DSM's diagnostic criteria will not automatically result in an unreliable diagnosis." *Id.* at 921.

- DSM-IV's subsequent omission of the requirement that the triggering event be outside the range of normal human experience indicates that the expert's diagnostic criteria now enjoy general acceptance. *Id.* at 922.

## Tenth Circuit

### *Summers v. Missouri Pac. R.R. Sys.*

132 F.3d 599 (10th Cir. 1997)

#### Factual Summary

Two railroad employees were exposed to diesel fumes while riding in a locomotive. Dr. Johnson diagnosed plaintiffs with toxic exposure to diesel fumes resulting in injury to the central nervous and respiratory systems, causing chemical sensitivity, which rendered plaintiffs totally and permanently disabled. The district court excluded Dr. Johnson's testimony. The Tenth Circuit affirmed the decision excluding Dr. Johnson's testimony. Expert: Dr. Alfred Johnson.

#### Key Language

- The district court did not abuse its discretion in excluding Dr. Johnson's testimony where he performed none of the tests used to confirm whether or not a patient is suffering from chemical sensitivity, but instead relied on the patient's history, a physical examination, and the results of "Spect" and "Booth" tests. *Id.* at 604.
- "Spect" and "Booth" tests have been subject to much criticism by the scientific community as not having met acceptable scientific levels of methodology and criteria, and are not designed to test for the recognized medical condition of chemical sensitivity. *Id.* at 604.
- Accordingly, "the record does not demonstrate that Dr. Johnson has made a valid diagnosis of the generally accepted condition of chemical sensitivity based on objective testing." *Id.* at 604.

### *Lovato v. The Burlington Northern & Santa Fe Ry. Co.*

2002 WL 1424599 (D. Colo. 2002)

#### Factual Summary

Plaintiff brought suit against Railway under the Federal Employers Liability Act for injuries he allegedly sustained from cumulative trauma caused by his job duties. Plaintiff's experts were prepared to testify that plaintiff's work tasks present ergonomic risk factors which were known to defendant and which easily could have been alleviated. In addition, the experts would further testify that plaintiff was injured as a result of these ergonomic risk factors. Defendant moved to strike plaintiff's experts, challenging the reliability and relevance of their testimony. The district court allowed the expert to testify regarding plaintiff's exposure to risk factors and the effects of risk factors, but not as to causation. Expert: Stephen Morrissey, Ph.D., PE, CPE.

#### Key Language

- Dr. Morrissey's testimony that plaintiff, in the course of his normal daily activities as a carman, was rou-

tinely and regularly exposed to ergonomic risk factors and that these ergonomic risk factors *generally* are associated with the development of significant injuries to the forearms, elbows, neck, and shoulders would be allowed as the opinion is based upon a reliable methodology and published studies generally accepted in the field of ergonomics. *Id.* at 7. Based on other *Daubert* factors, the court precluded Dr. Morrissey's testimony that the risk factors present in plaintiff's work site caused plaintiff's injuries.

### *Miller v. Pfizer, Inc.*

196 F. Supp.2d 1062 (D. Kan. 2002)

#### **Factual Summary**

Thirteen year old boy committed suicide after taking Zoloft, a prescription drug manufactured by Pfizer designed to treat depression. The parents of the boy filed suit against Pfizer, alleging that their son's suicide was caused by taking Zoloft. Plaintiffs' expert, Dr. David Healy, proposed to testify that Zoloft can cause depressed persons to commit suicide and that Zoloft caused Plaintiffs' child to commit suicide. In support of his opinion, Dr. Healy relied primarily on his own "Healthy Volunteer Study," his statistical analysis of pre-existing Pfizer data (Pfizer Meta-Analysis), his application of Koch's Postulates, and his evaluation of three other studies, the Hindmarch study, and two challenge-dechallenge-rechallenge studies. Defendant moved to exclude Dr. Healy's testimony. Following a *Daubert* hearing, the district court granted the motion. Experts: Dr. David Healy (psychiatrist and academic neuropsychopharmacologist). The court appointed two independent experts to assist in evaluating Dr. Healy's opinions, Dr. John Concato and Dr. John M. Davis.

#### **Key Language**

- View that Zoloft generally causes suicide is a "distinctly minority view." The American College of Neuropsychopharmacology, the FDA's Psychopharmacological Drug Advisory Committee, and the Medicines Control Agency in the United Kingdom all have reached contrary conclusions. *Id.* at 1067.
- "Healthy Volunteer Study" does not represent a generally accepted methodology for testing the hypothesis that Zoloft causes suicide because: (1) it failed to use a placebo control; (2) its sample size (26 individuals) was too small from which to calculate any statistically significant relative risk; and (3) Dr. Healy's personal recruitment of study subjects from his own department and the fact that volunteers generally knew of Healy's expected outcome compromised integrity of study. *Id.* at 1076.
- Dr. Healy's reliance on two challenge-dechallenge-rechallenge studies, which are basically case reports of 9 individuals who developed suicidal ideation or behavior during treatment with Prozac was not in accordance with generally accepted methodology, which disfavors heavy reliance on case reports for determining strength of association. *Id.* at 1076-77.
- Independent experts' inability to replicate Dr. Healy's relative risk calculation of 2.19 (suicidal acts on Zoloft compared to placebo and corrected for exposure times) based on information supplied by Dr. Healy required the conclusion that calculations do not represent generally accepted methodology. *Id.* at 1077.
- Dr. Healy's focus on the association between SSRI drugs and akathisia rather than the direct association between SSRI drugs and suicide in applying Koch's Postulates was not generally accepted by the scientific community. *Id.* at 1078. Koch's Postulates are a series of factors designed to assist in determining general causation and whether a drug may cause a certain reaction. These factors include: (1) strength of association, (2) consistency with other research, (3) alternative explanations, (4) temporal relationship, biological plausibility, (5) specificity of association, and (6) dose response relationship.

## Eleventh Circuit

### *Allison v. McGhan Med. Corp.*

184 F.3d 1300 (11th Cir. 1999)

#### Factual Summary

Woman with silicone breast implants brought products liability action against manufacturer of implants. Plaintiff claimed that her breast implants caused or exacerbated numerous conditions, including Hashimoto's thyroiditis, Type I diabetes mellitus, Sjogren's syndrome, and fibromyalgia. Plaintiff's expert, Dr. Gershwin was prepared to testify that silicone breast implants cause or exacerbate systemic conditions in some women. Plaintiff's second expert, Dr. Shanklin, a pathologist, was prepared to testify regarding his conclusions after microscopic examination of plaintiff's tissue slides. The district court rejected Dr. Shanklin's entire testimony based on his belief that a positive result to a silicone sensitivity test (SST), which he and another scientist developed, is evidence that silicone causes disease, even though Dr. Shanklin did not intend to testify about an SST because plaintiff never had the test. Finding that the testimony of plaintiff's experts lacked reliability and relevancy, the district court precluded the experts from testifying. The Eleventh Circuit affirmed. Experts: Dr. Eric Gershwin, M.D.; Dr. Douglas Shanklin, M.D.

#### Key Language

- “[T]he district court did not abuse its discretion by considering that the proffered conclusions in studies with questionable methodologies were out of synch with the conclusions in the overwhelming majority of the epidemiological studies presented to the court.” *Id.* at 1316.
- With respect to Dr. Shanklin, it was not an abuse of discretion for the court to consider the general merits of an expert's work in the field in which he will be offering testimony, even if he will not be speaking specifically to each point the court scrutinizes. *Id.* at 1318. The district court found that Dr. Shanklin's SST was flawed because it used crystalline silica rather than silicone and he failed to produce any studies supporting his theory that silicone in the body breaks down to silica and then acts as an antigen. *Id.* at 1318. Further, other scientists had called the reliability of the SST into serious question. *Id.* at 1317 n. 18.
- With respect to Dr. Shanklin's theory that chronic inflammation around a breast implant and granulomas found in breast capsule tissue trigger autoimmune process, “his testimony is based more on personal opinion than on scientific knowledge and was not generally accepted by the scientific community and was unsupported by other studies.” *Id.* at 1319.

### *Brasher v. Sandoz Pharms. Corp.*

160 F. Supp.2d 1291 (N.D. Ala. 2001)

#### Factual Summary

Two women sued pharmaceutical manufacturer, alleging that they suffered ischemic strokes as a result of post-partum ingestion of Parlodel. Plaintiffs' experts would testify that Parlodel can cause vasoconstriction and vasospasm, which in some people is severe enough to obstruct blood flow and actually cause ischemic strokes, as in the cases of the plaintiffs. Defendant filed a motion for summary judgment on medical causation, which the trial court denied on the basis that the expert opinions are reliable. Experts: Dr. Patricia Coyle and Dr. Kenneth Kulig.

### Key Language

- Although there is no reliable epidemiological study showing an increased risk of stroke associated with bromocriptine (Parlodel), reliable evidence has been presented to support such an association, “and that evidence here consists of animal studies, the medical literature reviews, the ADRs reported to the FDA, and the ‘general acceptance’ of the association between stroke and Parlodel, reflected in several neurology and toxicology textbooks and treatises. These all are recognized and accepted scientific methodologies, used for assessing the possible side-effects and hazards associated with particular drugs and the causes of disease.” *Id.* at 1298.
- “Plaintiffs’ experts cite as a foundation for their opinions animal studies that have shown ergot alkaloids similar to Parlodel to have vasoconstrictive effect; the same studies were relied upon and acknowledged in internal Sandoz documents.” *Id.* at 1297-98.

### *Allstate Ins. Co. v. Hugh Cole Builder, Inc.*

137 F.Supp.2d 1283 (M.D. Ala. 2001)

#### Factual Summary

Insurance company, as subrogee of the homeowner, sued construction contractor to recover amounts the insurer had paid to homeowner for damage resulting from a fire allegedly caused by a gas fire starter installed by a heating contractor. According to the insurer’s expert, the fire was caused by the conduction of heat through the fire starter pipe to the wood framing. The expert’s theory is that the pipe slid through the hole in the firebox, touched the wood framing, and conducted heat from the fireplace, thereby igniting the wood framing. Defendant filed a motion *in limine* seeking to exclude the expert’s testimony regarding the cause of the fire. The district court denied the motion. Expert: Ralph A. Boyer (fire investigator).

#### Key Language

- Because expert’s theory of causation is based on NFPA 921, which is the accepted authority on fire investigation, “[his] theory has been subject to peer review and is generally accepted in the scientific community.” *Id.* at 1287-88.

### *Siharath v. Sandoz Pharms. Corp.*

131 F.Supp.2d 1347 (N.D. Ga. 2001)

#### Factual Summary

Two women brought products liability actions against manufacturer of Parlodel, a drug designed to suppress postpartum lactation. Plaintiffs’ experts proposed testimony is that Parlodel caused plaintiffs’ seizures and hemorrhagic strokes. Their theory is as follows: (1) Parlodel’s active ingredient is bromocriptine, which is an ergot alkaloid; and (2) ergot alkaloids are a class of drugs that can cause hypertension, seizures, and ischemic strokes and, therefore, likely cause hemorrhagic strokes, also. The district court excluded the testimony of plaintiffs’ experts and granted summary judgment to defendant. Expert: Dr. Maurice N.G. Dukes and Dr. Kenneth Kulig.

#### Key Language

- Plaintiff’s reliance on an FDA report that calls into question the safety of bromocriptine for the prevention of physiological lactation is unacceptable and “ignores the lower standard of proof for agency determinations based upon a risk-utility analysis than the standard of proof required for the imposition of

tort liability.” *Id.* at 1366. “The report fails to state affirmatively that a connection exists between bromocriptine and the type of injuries suffered in these cases . . . [and] was motivated not simply by concerns with bromocriptine, but also by the relative risks and benefits of available alternative.” *Id.* at 1366.

- Excerpts from learned treatises that were based on case reports “provide no more support than the case reports themselves . . . [and] do not add any additional scientific knowledge.” *Id.* at 1370.

### *Edwards v. Safety-Kleen Corp.*

61 F. Supp.2d 1354 (S.D. Fla. 1999)

#### **Factual Summary**

In a wrongful death action, plaintiff alleges that the decedent’s death from myelodysplastic syndrome (MDS) was due to his workplace exposure to the chemical benzene while using defendant’s product, SK-105, a machine parts cleaner. Plaintiff’s expert was prepared to testify that decedent was exposed to benzene in the workplace, that the benzene was in the defendant’s product, that benzene can cause MDS, and that the decedent’s exposure to benzene from the product caused his MDS. The defendant’s expert witness, an oncologist, was prepared to testify that because the decedent’s cytogenetic studies indicated a normal karyotype and did not indicate any breakage of chromosomes 5 and 7, his MDS could not have resulted from benzene exposure. The district court granted the parties’ respective motions to exclude these expert witnesses. Experts: Dr. Melvyn Kopstein (for plaintiff); Dr. Harvey M. Golomb (oncologist for defendant).

#### **Key Language**

- Although plaintiff’s expert employed standard textbook formulae in reaching his conclusions, there is “no indication in the record that [the expert’s] approach of applying a standard formula or combination of formulae in the manner outlined in his affidavit is in fact followed by other experts in the industry.” *Id.* at 1357.
- While the literature and hypotheses advanced by defendant’s expert “show a possibility of future general acceptance,” at present, the theory is not scientifically reliable. *Id.* at 1360.

### *Allapattah Servs. v. Exxon Corp.*

61 F. Supp.2d 1335 (S.D. Fla. 1999)

#### **Factual Summary**

This case involves a class action lawsuit brought by oil refiner’s dealers against refiner for breach of contract. The dealers alleged that the refiner had failed to reduce wholesale prices charged to dealers in order to offset credit-card fees imposed on dealers, as contractually promised. Dealer’s expert witness was prepared to testify that Refiner’s contention that it complied with the obligation to provide the offset through the discount for cash adjustment in its price monitor system was not supported. The district court overruled Refiner’s motion to exclude the Dealer’s expert’s testimony. Expert: Dr. Raymond P.J. Fishe.

#### **Key Language**

- Dealer’s expert’s “before and after” test and “initial conditions” analysis “are accepted economic analyses used to evaluate causes and effects associated with the introduction of new or extraneous market events or conditions.” *Id.* at 1348. These tests “have standard acceptance in the relevant scientific community.” *Id.*

*Wheat v. Sofamor, S.N.C.*

46 F. Supp.2d 1351 (N.D. Ga. 1999)

**Factual Summary**

Surgery patients brought products liability action against manufacturer of bone screw devices used in spinal implant surgeries. The court excluded the testimony of plaintiff's causation expert, a board certified anesthesiologist. Expert: Dr. J. Antonio Aldrete (anesthesiologist).

**Key Language**

- Following the Ninth Circuit's opinion in *Lust*, "[w]hen a scientist claims to rely on a method practiced by most scientists, yet presents conclusions that are shared by no other scientist, the district court should be wary that the method has not been faithfully applied." *Id.* at 1359.
- "Although the differential diagnosis method may be generally accepted and practiced, Plaintiffs failed to show that any other expert has reached the conclusion that the mere implantation of pedicle screws causes back injuries and pain." *Id.* at 1359.

*White v. Chicago Pneumatic Tool Co.*

994 F. Supp. 1478 (S.D. Ga. 1998)

**Factual Summary**

Plaintiffs brought a products liability action against a tool company for repetitive stress injury. Plaintiffs' expert was prepared to testify that vibration causes carpal tunnel syndrome and that there is an independent neurological component of hand-arm vibration syndrome. The district court denied defendant's motion to exclude the expert's testimony. Expert: Dr. Peter Pelmeear.

**Key Language**

- "There is significant evidence that it is generally accepted in the scientific community that vibration can cause carpal tunnel syndrome." *Id.* at 1480. This theory has been subjected to numerous scientifically valid tests.
- Although defendant's expert (Dr. Nortin Hadler, an industrial rheumatologist) may point out flaws in individual studies, the evidence as a whole and recent government studies support the admissibility of evidence that vibration causes carpal tunnel syndrome. *Id.* at 1481.

*Cartwright v. Home Depot U.S.A.*

936 F. Supp. 900 (M.D. Fla. 1996)

**Factual Summary**

After painting around her home using various colors and brands of latex paint, Cartwright began suffering from nasal and respiratory distress. Subsequently, Cartwright and her adopted daughter were diagnosed with asthma. Cartwright and her daughter filed suit against the paint manufacturers alleging that the latex paints caused their asthma. Defendants filed a motion *in limine* to bar the opinion testimony of plaintiffs' expert, Dr. Roy T. McKay, who was prepared to testify that defendants' paints caused the plaintiffs' asthma based on the fact that plaintiffs were genetically unrelated and were diagnosed with asthma after prolonged exposure to latex paints, the inhalation of which can cause respiratory irritation as documented in scientific literature. The district court granted defendants' motion. Expert: Roy T. McKay (toxicologist).

### Key Language

- “The notions that long term, low level irritant exposure is a cause of asthma and that latex paint usage can provide such exposures are not outlandish or pseudo science. At present, however, they are not generally accepted theories.” *Id.* at 905-06. According to plaintiffs’ expert, “there was little known about latex paint and . . . his theory had the ‘potential’ for general acceptance.” *Id.* at 903.
- Although *Daubert* cautions against rejecting a theory because it is too particular, too new, or of too limited interest to be published, “[t]hat ground for ignoring the non-acceptance of the experts’ theories does not apply here. Latex paints have been widely used commercially and by consumers for years. Atopic individuals comprise a significant percentage of the population. If [plaintiffs’ expert] hypothesis were supportable, one would expect wide scale investigation and documented acceptance. Their absence with respect to such a commonly used product is telling.” *Id.* at 906.

### D.C. Circuit

#### *Raynor v. Merrell Pharms.*

104 F.3d 1371 (D.C. Cir. 1997)

#### Factual Summary

Plaintiffs brought products liability action against manufacturer of Bendectin, alleging that Bendectin caused child’s birth defects. Plaintiffs’ expert conducted a differential diagnosis to eliminate causes of the birth defects other than exposure to Bendectin. He relied upon family history, parental background, genetic history, physical examination, pregnancy history, and toxicology. Following a jury verdict in favor of Plaintiffs, the trial court granted defendant’s motion for JNOV, finding Plaintiffs’ expert testimony failed to satisfy *Daubert*. The District of Columbia Circuit affirmed. Expert: Dr. Thoman.

#### Key Language

- Dr. Thoman’s methodology does not enjoy general acceptance.
- “Differential diagnosis” is not capable of proving causation in human beings in the face of overwhelming contradictory epidemiological evidence.
- Dr. Thoman’s elimination of alternative explanations for birth defects was “exceedingly vague, amounting to little more than a reference to ‘family history,’ examination of the child, ‘any laboratory tests,’ and ‘genetic studies.’” *Id.* at 1376.

#### *Lakie v. Smithkline Beecham*

965 F. Supp. 49 (D.D.C. 1997)

#### Factual Summary

Denture wearer sued manufacturer of Orafix Special denture adhesive, which she applied to the roof of her mouth daily. Plaintiff claimed that she contracted the disease myelodysplastic syndrome (“MDS”) 5 q-minus, a bone marrow disorder accompanied by a deletion in the long or “q” arm of the fifth chromosome, as a result of exposure to benzene in Orafix Special. Plaintiff’s experts, who each utilized a differential diagnosis, concluded that Plaintiff’s MDS 5 q-minus was caused by her exposure to benzene from Orafix Special. The court denied defendant’s motion for summary judgment. Experts: Dr. Paul S. Swerdlow (hema-

tologist); Dr. Thomas Callender (clinical physician and researcher specializing in occupational and environmental toxicology); Dr. Charles E. Hess (clinical and research physician specializing in hematologic malignancies).

#### Key Language

- “The reliability of [a differential diagnosis methodology] is well established.” *Id.* at 55.
- All the experts, including the defendant’s expert, acknowledged that it is accepted in the medical community that in sufficient doses benzene is a bone marrow toxin which can induce MDS as well as leukemia.
- The weight of the scientific evidence connecting benzene and MDS supports the experts’ opinions that benzene causes MDS 5 q-minus. Accordingly, plaintiff’s causation theory is not opposed by an overwhelming body of evidence as in *Raynor*.

#### *Groobert v. President & Dirs. of Georgetown College*

2002 WL 1494675 (D.D.C. 2002)

#### Factual Summary

Surviving spouse brought an action for medical negligence, wrongful death, and survival following the death of his wife at defendant’s hospital, seeking in part damages for lost future earnings. Plaintiff’s experts would testify regarding the anticipated future earnings and expenses of decedent, who had worked as a stock photographer. Defendant moved for partial summary judgment regarding plaintiff’s claim for economic damages. The district court denied the motion. Experts: Jonathan Feingersh (president and owner of a production company); Pickerell (stock photographer).

#### Key Language

- Defendant’s expert’s use of the same methodology as Mr. Feingersh, despite the fact they reached different conclusions, is evidence that Mr. Feingersh’s comparative analyses and experienced-based studies are generally accepted in the industry. *Id.* at 7.
- Defendant’s expert’s testimony that he gave weight to Mr. Pickerell’s survey, that “he did not know anyone who had performed a more detailed analysis of the earnings and revenue of stock photographers,” and that “he did not know anyone else who has performed any of these surveys in the last five years bolsters Plaintiff’s experts, supports allowing plaintiff’s expert’s testimony as an expert because his methodology is ‘reasonably relied on by experts in the field.’” *Id.* at 10.

#### *Dyson v. Winfield*

113 F. Supp.2d 44 (D.D.C. 2000)

#### Factual Summary

Plaintiff brought a medical malpractice action against her OB/GYN for injuries caused to her child as a result of defendant’s prescribing of Provera during the early stages of her pregnancy. Defendant filed a motion to exclude plaintiff’s expert testimony that Provera causes birth defects. The court overruled the motion. Expert: Dr. Brian L. Strom (epidemiologist).

#### Key Language

- FDA’s approval of deletion of warnings from progestin packaging that progestins may cause non-genital birth defects does not mean that Dr. Strom’s opinion is not generally accepted in the scientific community. “The FDA . . . has itself agreed, then disagreed with the position of Dr. Strom.” *Id.* at 49.

## **Judicial Lessons and Helpful Hints to be Learned Regarding General Acceptance**

1. Differential diagnosis, a recognized methodology, by itself cannot prove causation, and if using this methodology, other possible causes must be affirmatively excluded.
2. If the plaintiff and defense experts use the same methodology, it either all comes in or all stays out.
3. If governmental entities or agencies, or well-known group associations, agree with the methodology, the evidence will likely come in.
4. Standard or recognized textbooks, articles or guidelines should support or underlie the expert's methodology or opinions in order to be found to be generally accepted.
5. If the vast majority of published or recognized works, authorities, etc., reject the method or opinion, it will likely not come into evidence.
6. The methods, models and techniques of one's expert should be subjected to peer review and the results should be reproducible in order to be generally accepted.
7. If the expert's methodology cannot be defined or tested by others, it cannot be accepted.
8. Universality of result is not necessary for an opinion to be based on generally accepted methods, but the methods employed to reach the result should be accepted.
9. If every other court to review the methodology or conclusion has rejected it, the opinion should not come in.
10. Novel opinions or methodologies can come into evidence if they emanate from some model or method that has been accepted in the relevant community.
11. Experts who opine in a recognized field must follow the generally recognized standards and methods of that discipline, and cannot avoid that requirement by calling themselves something else; a duck is a duck, and a leopard cannot change its spots.
12. A so-called expert should not be able to use animal testing to extrapolate human causation without positive, human, epidemiological studies to support their findings; but it still happens.
13. Anecdotal or case reports, without more, will not support an opinion which is generally recognized by medical science.
14. Experts who conduct extensive reviews of the peer-reviewed literature, have many years of practical experience, and/or who are well-known writers in the relevant field, can likely testify to opinions which will receive deference.
15. If your expert "wrote the book" in the field, he's the man and she's the woman!
16. An expert must follow all steps of the methodology, and not pick and choose the steps to get her where she wants to go, or the opinion will not be reliable or accepted and, hence, will not be admitted.
17. There should be independent evidence of general acceptance, not just from the proponent of the methodology or opinion.
18. Any expert who reaches an opinion first and then tries to support it by research or testing is not following any generally accepted methodology and should be barred.
19. If the case is in federal court and the expert is following methods recognized and set out in *The Reference Manual on Scientific Evidence* (Federal Judicial Center 1994), the opinions will likely be admitted.
20. If the government agencies say the expert is right, then she probably is; if the two disagree, the opinion of the government agency usually prevails in federal court. But if only one government agency says

the expert is right, and the other agencies and private industry says the expert is wrong, then the expert is probably wrong.

21. Doctors who render opinions without even meeting or examining the patient, or performing any tests, should be drawn, quartered and then barred. Relying on “facts” from lawyers and no other source will not cut it in federal court.
22. If you are going to try to bar an expert’s opinion, you had better have some peer-reviewed and recognized authorities to support your position.
23. If the expert is the only one in the world who has ever reached her conclusion, there is probably a good reason, and the opinion should be barred.
24. If the author who penned the article upon which the expert bases her conclusions recants or discredits that article, then the opinion based on that article will likely be excluded.
25. Opinions based on an expert’s personal opinion or experience, without more, should be barred.
26. Medicine, and many other disciplines, are not exact sciences, and a difference of opinion will not necessarily support exclusion of an opinion.
27. If your client or experts rely on the same models, methodology or studies as does the opposing expert, you will likely not be successful in barring the adverse party’s expert.
28. Just because the opinion or its bases are novel does not mean they are junk science, but it also does not mean they are generally accepted science. There should be some support by governmental, private or industry groups, or some support somewhere. Otherwise, even though it may not be junk, it may also not be admissible.
29. If the adverse expert says her opinion is based on recognized methods or models, but you cannot find them anywhere, there is probably a reason and the opinion should be excluded.
30. If your bunion is throbbing about what you are hearing, there is a reason, so listen and move to bar or exclude.