Seminar on Scientific Evidence
Fall 2014—preliminary. (I may update the syllabus to include recent cases and articles.)

Mr. Sanders

The purpose of this seminar is to offer an overview of topics in scientific evidence with a focus on mass and toxic torts. The primary impetus for the seminar is the decision of the United States Supreme Court in Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 113 S.Ct. 2786 (1993). In that case the Court determined that the rule in Frye v. United States, 293 F. 1013 (D.C. Cir. 1923) that established the “general acceptance” test of the admissibility of scientific evidence did not survive the adoption of the Federal Rules of Evidence in 1975. The Daubert court then sketched out the factors trial courts might consider in determining admissibility. In the opinion of many, the Daubert case has opened a new period in the relationship between science and law. The district court judges have been invited to take a much more active role in determining admissibility, an invitation that a number of courts have already accepted. The Daubert opinion also has caused people to reconsider how expert testimony should be presented to courts. Although Daubert first emerged and took root in mass tort cases (Daubert concerns the drug Bendectin), its reach has steadily expanded into nearly every area of expert witnessing.

I have assembled a set of readings for the seminar that are available as a packet in the copy center.

Each person in the seminar has two obligations: a) to read the materials and participate in class, and b) to write a term paper. As to the first obligation, there is LOTS of reading. I expect everyone to have read each week’s material prior to class and to participate in the discussion. If you think this will not be possible, you should not take the course. The grade in the course will be based partly on class participation. Grades will be based primarily on the second requirement, the term paper. You should begin working on this as soon as possible. You should arrange to speak with me no later than the end of the third week of the semester to discuss possible topics.

I have made assignments for twelve weeks of the seminar. Somewhere around Week 6 or 7 I wish to take out a week or two to talk about term papers. Each person will be asked to make a short presentation (15 minutes) about their research topic.

Following is the reading list for the course. If my past experience is any indication, we will not finish the entire syllabus. We will do what we can.
PART I: LAW

WEEK 1: From Frye to Daubert

1. Frye v. United States, 293 F. 1013 (D.C. Cir. 1923)

Also Worth Reading:
   c. Daubert v. Merrell Dow Pharmaceuticals, 43 F.3d 1311 (9th Cir. 1995)

WEEK 2: Joiner and Kumho Tire: Parts Two and Three of the Daubert Revolution

   a. In re Paoli R.R. Yard PCB Litigation, 35 F.3d 717 (3rd Cir., 1994) (pp. 741-50)
2. The Scope of Daubert

3. FAIGMAN, ET AL., MODERN SCIENTIFIC EVIDENCE (2012). Chapter 1: Admissibility of Scientific Evidence. (This long chapter is a resource. You should not read it closely. Just scan through it.)

Also Worth Reading:
   a. Goodyear Tire & Rubber Co. V. Rios, 143 S.W.3d 147 (Tex. App. 2004)(a Texas case with facts similar to Kuhmo Tire)
   b. Milward v. Acuity Specialty Products Group, Inc., 639 F.3d 11, 18 n. 7 (1st Cir. 2011). (Milward picks up on the idea in Stevens’ dissent in Joiner).

WEEK 3: Time Out for Science


WEEK 4: Where are the States

1. The Texas Position (Civil)
   a. Du Pont v. Robinson, 923 S.W.2d 549 (Tex. 1995) (adopting Daubert)
   b. Merrell Dow Pharmaceuticals, Inc. v. Havner, 953 S.W.2d 706 (Tex. 1997)
   d. Cooper Tire & Rubber Co. v. Mendez, 204 S.W.3d 797 (2006)

2. The Texas Position (Criminal)

3. Other states
   a. Castillo v. E.I. Du Pont De Nemours & Co., 854 So.2d 1264 (Fla. 2003) (a middle ground)
Also worth reading:

a. People v. Leahy, 8 Cal.4th 587, 34 Cal.Rptr.2d 663, 882 P.2d 321 (1994) (sticking with Frye)


f. Marsh v. Valyou, 977 So.2d 543 (Fla. 2007) (In which Florida passes on an opportunity to retreat from Frye)


WEEK 5: The Proof of Specific Causation


5. Guinn v. Astrazeneca Pharmaceuticals LP, 602 F.3d 1245 (11th Cir. 2010) (Seroquel and diabetes) (excluded).


Also Worth Reading:


b. Westberry v. Gislaved Gummi AB, 178 F.3d 257 (4th Cir. 1999)


g. Gary E. Marchant, Genetic Data in Toxic Tort Litigation, 14 J. Law & Policy 7 (2006)

PART II: SCIENCE

A. Toxic Torts.

WEEK 6: Toxicology and Epidemiology

1. FAIGMAN, ET AL., MODERN SCIENTIFIC EVIDENCE (2012) . Chapter 23: Epidemiology
2. FAIGMAN, ET AL., MODERN SCIENTIFIC EVIDENCE(2012). Chapter 22: Toxicology

WEEK 7: A Case Study: Silicone Implants

1. Hopkins v. Dow Corning Corp., 33 F.3d. 1116 (9th Cir. 1994).
4. Institute of Medicine, Safety of Silicone Breast Implants, Executive Summary, Ch 8, Ch 9.

Also worth reading:

b. Lubit, Beverly, The Time Has Come For Doing Science: A Call For Rigorous Application of Daubert Standards For the Admissibility of Expert Evidence in the Impending Silicone Breast Implant Litigation, 42 N.Y.L. Sch. L. Rev. 147 (1998)

B. Forensic Evidence

WEEK 8: Fingerprint Identification


Also worth reading


c. Cole, Simon A. Et al., *Beyond the Individuality of Fingerprints: A Measure of Simulated Computer Latent Print Source Attribution Accuracy*, 7 Law, Probability & Risk 165 (2008) (I will discuss Figure 9 in class.)


C. Social Science Evidence

WEEK 9: Eyewitness Identification


4. North Carolina General Statutes § 15A-284.52

Also Worth Reading


eyewitness testimony).


d. Steblay, Nancy K. et al., Sequential Lineup Lapses and Eyewitness Accuracy, 35 Law & Hum. Behav. 262 (2011)


PART III. THE ADVERSARIAL SYSTEM

WEEK 10: Scientific Epistemology

3. Milward v. Acuity Specialty Products Group, Inc., 639 F.3d 11, 18 n. 7 (1st Cir. 2011). (Milward picks up on the idea in Stevens’ dissent in Joiner).

Also Worth Reading


f. David, S. Caudill and Lewis S. LaRue, Why Judges Applying the Daubert Trilogy Need to Know About the Social, Institutional, and Rhetorical – and not Just the Methodological – Aspects of Science, 45 B.C.L.Rev. 1 (2003).


h. For a blow-by-blow deconstructive opinion, see DeLuca v. Merrell Dow

WEEK 11: The Use of Experts


Also worth reading.


WEEK 12: Juries.


4. Sanders, Joseph, *The Merits of the Paternalistic Justification for Restrictions on

Also worth reading.

