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. The seminar still retains its Daubert roots, but its primary focus today is to provide an overview of three related topics: a) the law governing the admissibility of expert scientific testimony, b) an introduction to scientific methods, statistics, and the science supporting (or failing to support) expert testimony in several areas, including the sciences of epidemiology and toxicology and c) the interaction between scientific opinion and our adversarial system.

I have assembled a set of readings for the seminar that will be 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.
PART I: LAW

WEEK 1: From Frye to Daubert

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

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
Also worth reading

WEEK 3: Where are the States

1. The Texas Position (Civil)
   a. Du Pont v. Robinson, 923 S.W.2d 549 (Tex. 1995) (adopting Daubert)
   c. Cooper Tire & Rubber Co. v. Mendez, 204 S.W.3d 797 (2006)
2. The Texas Position (Criminal)
3. Other states

WEEK 4: The Proof of Specific Causation

PART II: SCIENCE

WEEK 5: Scientific Method and Elementary


A. Toxic Torts.

WEEK 6: Toxicology and Epidemiology

4. 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 8-9.

B. Forensic Evidence

WEEK 8: Fingerprint Identification

C. Social Science Evidence

WEEK 9: Eyewitness Identification

5. Carolina General Statutes § 15A-284.5.2

PART III. THE ADVERSARIAL SYSTEM

WEEK 10: Scientific Epistemology

2. 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 11: The Use of Experts


WEEK 12: Juries and Judges.


3. Gertner, Nancy and Joseph Sanders, *Alternatives to Traditional Adversary Methods of Presenting Scientific Expertise in the Legal System* (Daedalus, Fall 2018)


I am asked by the University to add the following:

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to the demands of a professional program, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the “Let’s Talk” program, a drop-in consultation service at convenient locations and hours around campus.

http://www.uh.edu/caps/outreach/lets_talk.html