Public Health Toxicology 187.610.01 – 1st & 2nd terms AY 2017-2018

Required Readings

Please access all reading through e-reserves.

Lecture 1
Introduction to Basic Principles
- National Library of Medicine Tutorial on Environmental Health and Toxicology – this is a free web link through the NLM
- National Geographic – Pollution Within – this is a web link to National Geographic http://ngm.nationalgeographic.com/2006/10/toxic-people/duncan-text?fs=www3.nationalgeographic.com&fs=plasma.nationalgeographic.com
- National Geographic Interactive - Toxic Homes – this is a web link to National Geographic http://ngm.nationalgeographic.com/ngm/0610/feature4/multimedia.html
- The Problem with Pods. Consumer Reports, pp. 18-19, September, 2015. (In the Online library, lecture 1 folder)

Lecture 4. Testing, Dose response, Risk Assessment
- Chemical & Engineering News (C&EN), October 14, 2013, pp. 12-19;
  o Special Report – Getting Real About Chemical Risks, pp. 12-14
  o Special Report – Risk by Association, pp. 15-17
  o Special Report – Perception Puzzle, pp. 18-19

Lecture 5. Environmental Carcinogenesis

Lecture 8. Immunotoxicology: Cutaneous and Pulmonary Hypersensitivity

Lecture 11. Persistent Organic Pollutants and Dioxins

Lecture 12. Neurotoxicology
- Background for the Neurotoxicology lecture
  o Go to http://outreach.mcb.harvard.edu/animations.htm
    - click on neurobiology
    - click on teacher animations
- click on and review anatomy of the brain
  - Which lobe is responsible for executive function (i.e. planning, problem solving etc.)?
  - Which lobe of the brain is memory?
  - Which region of the brain controls basic functions including balance, movement and posture?
  - Which region of the brain is receives tactile stimuli?
  - Also review:
    - Action potential
    - Synaptic Transmission
    - Brain Synapses

- Lead poisoning remains a global burden: https://www.youtube.com/watch?v=hByn7QiCxIM


**Lecture 14. Nanoparticle Toxicology**