

**Accomplishments Highlights for Allan Felsot
May 2008 - April 2009**

- Over the last year I have increased my commitment to teaching at WSU. As mentioned in my highlights from April 2008, I developed and taught a course called “Biotechnology & the Environment” (ESRP 490/590), and I am teaching this course again during Spring Semester 2009 (8 students enrolled). This semester I expanded the course to the Vancouver campus using the television system now called AMS (Academic Media Services). I am also presently teaching Agricultural Entomology (ENTOM 340) on both the TC and Pullman campuses (18 students enrolled, lecture & lab).
- During Fall Semester 2008 I taught “Biology and Society: Past & Present” (ENTOM 340), which is a Tier III course intended for undergraduate non-science majors (18 students enrolled). I have made a commitment to teach this course every Fall to fulfill a campus need for Tier III level science courses that are accessible to non-science majors. This course was first developed by a departmental colleague for delivery at the Pullman campus, but with her cooperation, I tailored the course specifically for the TC campus. In this course, I use a combination of historical analysis of major biological discoveries and theories and relate them to contemporary news headlines. The students are solely evaluated from their writing of three expository essays whose themes are issues surrounding major biological theories and principles suggested in contemporary news.
- During Fall Semester 2008, I also taught Applied Environmental Toxicology (ESRP 532). For the first time, I developed a separate lecture that covered nanotoxicology of nanoparticles. This subject dovetailed well with the research of one of my graduate students (Kelly Stump) who is studying the ability of nanoscale aggregates of buckminsterfullerene to pass through dialysis membranes to simulate cell membrane pores.
- I am presently serving as the chair for six graduate students working toward an M.S. degree in ESRP. One graduate student (Chris Magan) recently passed his final orals and submitted his thesis to the Graduate School. The title of his thesis is “Human Health Risk Characterization for Dietary Exposure to Polychlorinated Biphenyls (PCBs) in Fish from the Columbia Basin Irrigation Project: A Probabilistic Approach”. Chris’ research represents another new area of interest on my part, i.e., Monte Carlo analysis modeling of risk from exposure to a wide variety of contaminants. Another graduate student, Jerry Jorden, is applying Monte Carlo analysis to risks from exposure of salmon to pesticide residues found in the Yakima River tributaries. Galena York is in the early stages of a project applying Monte Carlo analysis to risks from exposure to the plastic monomer bisphenol A. Chad Dobie continues to work on his research examining the toxicity of insecticides used in potato production for control of potato tuberworm, a potentially emergent pest in the Pacific Northwest.

- At the end of July 2008, I agreed to assume the PI role for a contract WSU had with WA Closure Hanford to propagate native plants of the Columbia Basin and plant them in demonstration plots. WA Closure Hanford built a 1600 square foot greenhouse on the TC campus that we are using to propagate at least 8 or 9 native species. Another graduate student of mine, Carla Hough, has been instrumental in running this project thus far.
- During Fall 2008, I mentored an undergraduate student in BIOL 499 (Independent Study), Robin Varljean, who compared seed germination methods for *Astragalus* spp., a Genus of native leguminous plant. Presently, I am mentoring another BIOL 499 student, Jessica Enger, who is helping me do a Monte Carlo risk analysis of cumulative exposure to iodide symporter inhibitors in water and food (i.e., perchlorate, nitrate, thiocyanate).
- I have continued to volunteer as a workshop instructor for the MESA and GEAR-UP programs at the TC campus. These programs bring middle school students in to campus for a combination of interactive lectures and demonstrations. This spring I switched from giving a hands-on chemistry workshop to one on insect biology. I've been rearing Madagascar hissing cockroaches so the kids can hold live insects and realize there is nothing to fear! In addition I have been displaying insect specimens and live cockroaches at area elementary school science fairs.
- I made 27 off-campus Extension presentations, including developing new slide shows on pyrethroid insecticides history & mode of action and how herbicide applicators can validate the safety of their spray programs
- Publications: Felsot, A. S. 2009. Chemicals: Pesticides. In Information Resources in Toxicology, 4th Edition, Wexler, P, S. Gilbert, B. Hakkinen, A. Mohapatra (Ed.); Elsevier, Academic Press, San Francisco. pp. 145-158.
- Symposia Organized & Moderated: Reduced Risk Pesticides--Environmental Chemistry, Toxicology, & Compatibility with IPM. 236th National Mtg. American Chemical Society, Philadelphia, Pa. 17-21 August.
- Continued service on the Pesticide Incident Reporting & Tracking Panel (PIRT) and the WSDA Pesticide Advisory Board. Also, I continue to be active in the American Chemical Society, serving as chair of the New Investigator Award competition.
- Awards:
 - 2009 Washington State University Team Interdisciplinary Award
 - 2008 Entomological Society of America Founders Memorial Award
 - 2008 American Chemical Society Agrochemical Division Fellow Award