

Wenchi Hsu

Education Summary

- August 2006 to present, University of Maryland at Baltimore, Ph.D. in Pharmaceutical Sciences with a concentration on Pharmaceutics and Drug Delivery Technology; supervised by Dr. Richard N. Dalby.
- August 2002 to May 2006, University of Maryland at College Park, B.S. in Biological Resources Engineering with a citation in Environmental Studies.

Academic Research

- May 2007 to present, Richard Dalby Lab, University of Maryland at Baltimore.
- January 2007 to May 2007, Richard Dalby Lab rotation, University of Maryland at Baltimore. Evaluated the effect of volunteer study-derived actuation parameters on sprayed droplet size from nasal sprays.
- August 2006 to December 2006, Hamid Ghandehari Lab rotation, University of Maryland at Baltimore. Determination of the size and size distribution of novel inorganic nanoparticles, and evaluation of the cytotoxicity of nanoparticles against a model breast cancer cell line.
- October 2005 to May 2006, Yang Tao Lab internship, University of Maryland at College Park. Assisted Ph.D. students with daily tasks relating to bio-imaging and machine vision research.

Employment Summary

- August 2006 to present, Graduate Teaching Assistant—Compounding and Pharmaceutics Pharm.D. Courses, University of Maryland at Baltimore. Prepare and facilitate lab sessions, proctor and grade exams.
- May 2007 to August 2007, Student Intern, U.S. Food and Drug Administration—Center for Devices and Radiological Health—Office of Device Evaluation—Division of Anesthesiology, General Hospital, Infection Control, and Dental Devices—Anesthesiology and Respiratory Devices Branch, Rockville MD. Scientific reviewer of 510(k) submissions and INDs relating to respiratory devices.
- May 2006 to August 2006, Student Intern, U.S. Food and Drug Administration—Center for Devices and Radiological Health—Office of Science and Engineering Laboratories—Division of Chemistry and Materials Science, Rockville MD. Investigation of the effects of manufacturing variability on the microstructure and release profile of drug-eluting stents.
- January 2004 to May 2006, Student Intern, Joint Institute for Food Safety and Applied Nutrition of the University of Maryland at College Park with research conducted at the U.S. Food and Drug Administration—Center for Food Safety and Applied Nutrition—Office of Operations—Office of

Food Additive Safety—Division of Chemistry Research and Environmental Review, College Park MD. Chemical analysis of direct and indirect additives in food samples, and investigation of the stability of selected toxins to varying storage conditions of fruit punch for a food defense project.

Research Skills

HPLC, LC-MS, UV-Vis Spectroscopy, Malvern Zetasizer, Malvern Mastersizer S, Pump Actuation and Weight Station (PAWS, InnovaSystems), Hand Actuation Monitor (HAM, InnovaSystems), DSC, TGA, SEM, USP Dissolution Apparatus, Microscopy, Sonic Sieve Sifter, MTT Cytotoxicity Assays, Cell Culturing Techniques

Computer Skills

Microsoft Windows, Microsoft Office Applications, LabVIEW, PSpice, OrCad, Matlab, AutoCAD, AutoDesk Inventor, Minitab

Publications

- Noonan G.O., Warner C.R., **Hsu W.**, Begley T.H., Perfetti G.A., Diachenko G.W. The Determination of Semicarbazide (N-aminourea) in Commercial Bread Products by Liquid Chromatography-Mass Spectrometry. *J. Agri. Food Chem.* 2005, 53(12): 4680-4685.

Posters

- **Hsu W.**, Doughty D.V., Dalby R.N. The Effect of Volunteer Study-derived Parameters on Sprayed Droplet Size. American Association of Pharmaceutical Scientists Annual Meeting, 2007, San Diego, CA.
- **Hsu W.**, McDermott M.K., Saylor D.M., Dair B.J., Patwardhan D.V. Characterization of Bioabsorbable Polymers for Use in Drug-Eluting Stents. FDA OSEL Student Poster Exhibits, 2006, Rockville and White Oak MD.
- Begley T.H., **Hsu W.**, Diachenko G.W. Characterizing Perfluorochemical Migration from Food Contact Paper. 12th Annual FDA Science Forum, 2006, Washington D.C.
- Warner C.R., Noonan G.O., Sugimoto N., Beisaw A., **Hsu W.**, Perfetti G.A., Begley T.H., Diachenko G.W. Investigation of Flour Tortillas Implicated in Episodes of Illness Associated with School Lunches. 12th Annual FDA Science Forum, 2006, Washington D.C.
- Noonan G.O., Warner C.R., **Hsu W.**, Begley T.H., Perfetti G.A., Diachenko G.W. The Determination of Semicarbazide (N-aminourea) in Commercial Bread Products. 11th Annual FDA Science Forum, 2005, Washington D.C.
- Noonan G.O., Warner C.R., **Hsu W.**, Begley T.H., Perfetti G.A., Diachenko G.W. The Determination of Semicarbazide in Baked Products Using HPLC/MS. Bioscience Research and Technology Review Day hosted by the University of Maryland, 2004, College Park MD.

Honors and Awards

- Rho Chi Honor Society (inducted 2008)
- A. James Clark Engineering Scholarship (2005-2006)
- Sigma Xi Certificate of Recognition (2005)
- JIFSAN Outstanding Student Poster Award at 11th Annual FDA Science Forum (2005)
- National Collegiate Engineering Award (2004)

Organizations

- Chinese Students and Scholars Association, Secretary (2007 to present)
- American Association of Pharmaceutical Scientists—UMB Student Chapter, Student Member (2006 to present)
- Biological Resources Engineering Society, Member and Engineering Student Council Representative (2003 to 2006)
- The National Society of Collegiate Scholars, Member (joined 2003)
- Phi Sigma Theta—National Honor Society, Member (joined 2002)

Interests

- Cheering/Fearing the Turtle