

NATHALIE T. PHAM

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EDUCATION

University of California, Davis, CA

Ph.D. in Pharmacology and Toxicology, 2011

Dissertation: Characterization of Urinary Protein/Peptide Adducts as Markers of Reactive Naphthalene Metabolite Formation

University of California, Davis, CA

M.S. in Pharmacology and Toxicology, 2008

University of California, Los Angeles, CA

B.S. in Biochemistry, Minor in Asian American Studies, 2006

EMPLOYMENT

Office of Environmental Health Hazard Assessment

Staff Toxicologist; 6/2014 - present

- Research and develop expertise in the use of new approaches for toxicological testing and computational tools
- Provide toxicological consultation to the California Regional Water Quality Control Boards and other state and local government entities.
- Assist in the toxicological, scientific and medical literature research and analysis for the development of health criteria for school site risk assessment.
- Perform scientific/technical peer reviews and facilitate public reviews of chemical risk assessment.

Office of Environmental Health Hazard Assessment

Associate Toxicologist; 9/2012 – 6/2014

- Review and evaluate risk assessment documents
- Provide toxicological consultation to the California Regional Water Quality Control Boards and other state and local government entities.
- Perform scientific/technical peer reviews and facilitate public reviews of chemical risk assessment.

CDM Smith

Environmental Scientist; 1/2012 – 8/2012

- Soil and water sampling in environmental remediation sites: Santa Susana Field Laboratory Testing Site; Superfund Libby Asbestos Site.
- Assigned as human health risk assessor: Black Butte Mine Superfund Site (evaluated mercury contamination at abandoned mine sites); East

Waterway Harbor Island (lead contamination in soil, groundwater, and sediments).

- Reviewed risk assessment data for chemical contamination sites across the United States.
- Updated environmental impact reports for chemicals in LAX.
- Gathered data for ecological risk for international sites.

RESEARCH EXPERIENCE

Dept. of Veterinary Molecular Biosciences, University of California, Davis, CA

Postdoctoral Scholar; 9/2011 – 1/2012

- Identified and characterized protein and peptide biomarkers of naphthalene exposure by mass spectrometry.
- Biomarkers were used to assess differences in routes of exposure and differences in pathways of metabolic activation.

Ph.D. Candidate; 8/2008 – 9/2011

- Investigated urinary protein and peptide adducts as markers for the adduct formation with naphthalene in target tissues.
- Trained others in mass spectrometry (Orbitrap, MALDI) and proteomics (2D-electrophoresis).

Graduate Student Researcher; 9/2006 – 8/2008

- Characterized naphthalene reactive and water-soluble metabolites using analytical chemistry techniques.

Dept. of Molecular and Medical Pharmacology, University of California, Los Angeles, CA

Staff Research Associate I; 6/2005 – 6/2006

- Trained in brain morphometry and evaluated regions-of-interest of methamphetamine users with positron emission tomography (PET).

Staff Research Associate I; 8/2004 – 6/2005

- Tested single nucleotide polymorphisms in candidate genes to study neurobehavioral phenotypes of bipolar disorder.

Lab Assistant; 9/2003 – 8/2004

- Investigated relationship between nitrogen oxides and glutathione.

PUBLICATIONS

- Silva M, Pham N, Lewis C, Iyer S, Kwok E, Solomon G, Zeise L (2016). Using ToxCast™ to Explore Chemical Activities and Hazard Traits: A Case Study with ortho-Phthalates. *Toxicological Sciences* 154 (1).
- Silva M, Pham N, Lewis C, Iyer S, Kwok E, Solomon G, Zeise L (2015). A Comparison of ToxCast Test Results with In Vivo and Other In Vitro Endpoints for Neuro, Endocrine, and Developmental Toxicities: A Case Study Using Endosulfan and Methidathion. *Developmental and Reproductive Toxicology: Birth Defects Research Part B* 104 (2): 71-89.

PUBLICATIONS (CONT.)

- OEHHA (2014). Updated Public Health Goals for Chemicals in California Drinking Water: Chlorobenzene, Endothall, Hexachlorocyclopentadiene, Silvex, Trichlorofluoromethane. Office of Environmental Health Hazard Assessment, California Environmental Protection Agency.
- OEHHA (2013). Recent Research on Climate Change: An annotated bibliography. Office of Environmental Health Hazard Assessment, California Environmental Protection Agency.
- Pham N, Morin D, Jewell W, Buckpitt A (2012). Analysis of naphthalene adduct binding sites in model proteins by tandem mass spectrometry. *Chemico-Biological Interactions* 199(2): 120-128.
- Pham N, Morin D, Jewell W, Jones A, Buckpitt A (2012). Characterization of model peptide adducts with reactive metabolites of naphthalene by mass spectrometry. *PLOS ONE* 7(8).
- Pham N, Shields CD, Morin D, Buckpitt A (2008). Urinary protein/peptide adducts as markers of reactive naphthalene (NA) metabolite formation in male mice. *FASEB journal*.

AWARDS, FELLOWSHIPS, AND HONORS

James G. Wilson Award Publication Award **(6/2016)**

Superfund Research Traineeship **(9/2009 – 3/2010)**

NIEHS Superfund Basic Research Traineeship **(9/2008 – 3/2009)**

Floyd and Mary Schwall Medical Fellowship **(9/2006 – 7/2008)**

UCLA Undergraduate Research Scholars Program (URSP) **(9/2004 – 3/2005)**

UCLA Science, Engineering, and Math Research Fellowship **(6/2004 – 8/2004)**

UCLA Undergraduate Research Fellows Program (URFP) **(12/2003 – 3/2004)**

UCLA CARE Fellows Program **(9/2003 – 12/2003)**

NIH/CARE Biomedical Science Enrichment Program (BISEP) **(6/2003 – 8/2003)**

INTERNSHIPS

OEHHA (Cal-EPA), Sacramento, CA; 2009 – 2011

- Served on Project Team for Cumulative Impacts and Precautionary Approaches and contributed to early stages of Cal-EPA Cumulative Impacts Handbook.
- Contributions:
 - Hamilton and Hardy's Industrial Toxicology (6th Ed).
 - Public Health Goals update of 1,2-dichloropropane and hexachloropentadiene.

Environmental Leaders Program, University of California, Davis, CA; 2008 – 2009

- Investigated effects of fish contamination in the Sacramento River on Southeast Asian population.

CONFERENCE PRESENTATIONS

- *“Considering Possible Mechanisms of Toxicity for Phthalates on California’s Proposition 65 List Using BioSeek Data from ToxCast”* (2016). Society of Toxicology, New Orleans, LA.
- *“Using ToxCast™ in Considering Chemical Activities and Hazard Traits: A Case Study with the Chemical Class Phthalates”* (2014). Second ToxCast Data Summit, Chapel Hill, North Carolina.
- *“Characterization of Model Protein Adducts with the Reactive Metabolites of Naphthalene by Mass Spectrometry”* (2011). Society of Toxicology, Washington DC.
- *“Characterization of Model Peptide Adducts with Reactive Metabolites of Naphthalene”* (2010). Superfund Research Program Annual, Portland, OR.
- *“Tandem MS Analysis of Model Peptide Adducts from Reactive Metabolites of Naphthalene”* (2010). Lung Symposium, Davis, CA.
- *“Covalently Bound Urinary Peptide Adducts as Markers of Naphthalene Metabolite Formation in Mice”* (2009). Society of Toxicology, Baltimore, MD.
- *“Urinary Protein/Peptide Adducts as Markers of Naphthalene Metabolite Formation in Male Mice”* (2008). Speaker’s Platform Session. Experimental Biology ASPET, San Diego, CA.

PROFESSIONAL ACTIVITIES

Society of Toxicology **(2006 to present)**

Society of Environmental Toxicology and Chemistry **(2008–2011)**

Pharmacology and Toxicology Committee for Educational Policy **(2009–2010)**

Pharmacology and Toxicology Graduate Admissions Committee **(2007–2009)**

Alpha Chi Sigma **(2003–2006)**