

CURRICULUM VITAE

Amy-Joan Lorna Ham, Ph.D.

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ACADEMIC TRAINING

Postdoctoral, University of North Carolina at Chapel Hill
Studied the role of lipid peroxidation in the formation of endogenous
exocyclic DNA adducts. Developed sensitive and specific
mass spectral analysis methods for DNA adducts.
Research Advisor: James A. Swenberg, D.V.M., Ph.D.

Ph.D., Pharmacology and Toxicology, 1995, University of Arizona
Dissertation Title: Antioxidant Reactions of Vitamin E in Rat Liver
Research Advisor: Daniel C. Liebler, Ph.D.

M.S., Toxicology, 1991, University of Arizona
Thesis Title: Substrate Specificity of Rat Liver Aldehyde Dehydrogenase
with Chloroacetaldehydes
Research Advisor: Dean E. Carter, Ph.D.

B.S., Chemistry with math/physics minor, 1988, University of Arizona

PROFESSIONAL APPOINTMENTS

- 2012-present: Assistant Professor, Department of Pharmaceutical, Social and Administrative Science, College of Pharmacy, Belmont University, Nashville, TN
- 2012-present: Adjunct Research Associate Professor, Department of Biochemistry, Jim Ayers Institute for Precancer Detection and Diagnosis, Vanderbilt University School of Medicine, Nashville, TN
- 2008-2012: Research Associate Professor, Department of Biochemistry, Jim Ayers Institute for Precancer Detection and Diagnosis, Vanderbilt University School of Medicine, Nashville, TN
- 2003-2008: Associate Director, Proteomics Laboratory, Mass Spectrometry Research Center, Vanderbilt University School of Medicine, Nashville, TN
- 2003-2008: Research Assistant Professor, Department of Biochemistry, Vanderbilt University School of Medicine, Nashville, TN
- 2001-2003: Associate Research Scientist, Department of Pharmacology and Toxicology, College of Pharmacy, University of Arizona
- 1995-2001: Postdoctoral Fellow, Department of Pathology, University of North Carolina at Chapel Hill

ADDITIONAL RESEARCH EXPERIENCE

- 1989-1995: Graduate Research Associate, Department of Pharmacology and Toxicology, College of Pharmacy, University of Arizona
- 1987-1988: Student Laboratory Assistant, Department of Pharmacology and Toxicology, College of Pharmacy, University of Arizona
- 1988: Undergraduate Research Project, Department of Chemistry, University of Arizona. Worked on the synthesis of the antitumor agent deoxybouvardin. Advisor: Robert Bates, Ph.D.

TEACHING EXPERIENCE

Analytical Toxicology (1990-1994) (1 hr lecture/yr)

Biochemical Toxicology (1996-2001) (1.5 hrs lecture/yr)

Molecular and Cellular Toxicology (2003) (3 hrs lecture/yr)

Analytical Proteomics (2004-2011) (4-6 hrs lecture/yr)

Mass Spectrometric Analysis of Protein Post-Translational Modifications (2011)
(2 credit course)

-Course director, developed course with lecture and lab technique components

Anatomy and Physiology (2012) (half of 3 credit course)

Pharmacodynamics I (2012-2013) (half of 3 credit course)

Pharmacodynamics I (2014) (3 credit course)

-Course Director

Pharmacodynamics III (2013, 2014) (half of 3 credit course)

-Course Director

Pharmacodynamics IV (2013, 2014) (half of 3 credit course)

Personalized Medicine (2012, 2014) (2 credit course)

-Course Director, developed course

Toxicology (2013, 2014) (2 credit course)

-Course Director, redesigned course

Seminar (2012, 2013) (2 sections, 1 credit course)

GRADUATE STUDENT TRAINING

Kristin Carpenter – Committee member, M.S., graduated May 2012

AWARDS

- 1999: Risk Assessment Award for Best Student/Postdoctoral Paper, Society of Toxicology, Morinello, E.J., Ham, A.-J.L., & Swenberg, J.A. (1999) Molecular Dosimetry of $N^2,3$ -Ethenoguanine in Control and Vinyl Chloride-Exposed Rats. *Toxicological Sciences* 48(1-S):232.
- 1998: AACR-AFLAC Travel Award, AACR Special Conference “Endogenous Sources of Mutation”, Ham, A.-J.L., Ranasinghe, A., & Swenberg, J.A. (1998) 4-Hydroxynonenal and Ethyl Linoleate form $N^2,3$ -Ethenodeoxyguanosine from Deoxyguanosine and Calf Thymus DNA under Peroxidizing Conditions.
- 1995-1998: National Research Service Award, Postdoctoral Fellowship
- 1994: Society of Toxicology Graduate Student Awards for Meritorious Research in Mechanisms of Toxicology – Honorable Mention
- 1991-1992: Graduate Fees Scholarship, University of Arizona
- 1989: Graduate College Fellowship, University of Arizona

WORKSHOPS

- 2003-2008 Biannual/triannual workshops on interpretation of proteomic data, Proteomics Laboratory, Mass Spectrometry Research Center, Vanderbilt University School of Medicine

GRANTS AND FELLOWSHIPS

- '11-'15 1U24 CA159988-01 (Liebler), NIH/NCI, Vanderbilt Proteome Characterization Center
Role: Co-investigator
- '07-'12 5 P50 CA095103-10 (Coffey), NIH/NCI (Project 1)
SPORE in GI Cancer
Role: Co-investigator
- '10-'15 5R01 CA080195-11 (Arteaga), NIH/NCI, Erbb2 targeted antitumor strategies in Breast Cancer
Role: Co-investigator
- '09-'11 70NANB9H9001 (Liebler), NIST/Dept of Commerce, Coordinating Support Laboratory for the Clinical Proteomic Technologies Assessment for Cancer Program
Role: Co-investigator
- '10-'15 5U01CA152647-02 (Liebler), NIH/NCI, Vanderbilt Biomarker Development Laboratory
Role: Co-Investigator

- '09-'11 5U24 CA126479-04S1 (Liebler), NIH/NCI, Clinical Proteomic Technology Assessment for Cancer
Role: Co-Investigator
- '05-'10 2P50 CA098131-06 (Arteaga), NIH/NCI, SPORE in Breast Cancer, Pilot Project: Quantitation of Phosphotyrosine Signalling in Human Breast Cancer
Role: Principal Investigator
- '09-'11 3R01DK071590-02S1 (Goldenring), NIH/NIDDK, Mechanisms of Gastric Mucous Cell Metaplasia
Role: Co-Investigator
- '05-'11 5R56 DK070856-02 (Goldenring), NIH/NIDDK, Molecular Characteristics of the Apical Recycling System
Role: Co-Investigator
- '06-'11 5U24 CA126479-02 (Liebler), NIH/NCI, Clinical Proteomic Technology Assessment for Cancer
Role: Co-Investigator
- '04-'09 5P30 CA68485-12 (Pietenpol), NIH/NCI , Vanderbilt Cancer Center Core Support Grant
Role: Co-Investigator
- '06-'08 5P50 HL081009-02 (Vaughan), NIH/NHLBI, SCCOR in Hemostatic and Thrombotic Diseases
Role: Co-Investigator
- '05-'08 5P01 ES013125-03 (Porter), NIH/NIEHS, Lipid Peroxidation and Antioxidant Mechanisms
Role: Co-Investigator
- '05-'07 5R01 CA062212-11 (Arteaga), NIH/NCI, TGF-Betas and Receptors and Human Breast Cells
Role: Co-Investigator
- '05-'07 5R01 CA82556-08 (Ballard), NIH/NCI, Deregulation of Cellular I κ B Kinases by HTLV1 Tax
Role: Co-Investigator
- '97-'98 F32 ES005779-01 (Ham), NIH/NIEHS, Endogenous Adducts and Environmental Carcinogens
Role: Principal Investigator

PROFESSIONAL SOCIETIES

Society of Toxicology (SOT)
American Association for Cancer Research (AACR)
American Chemical Society (ACS)
American Society for Mass Spectrometry (ASMS)
American Association of Colleges of Pharmacy (AACP)

EDITORIAL DUTIES

Ad hoc reviewer

Biochimica et Biophysica Acta, Toxicologic Pathology, Trends in Genetics, Analytical Chemistry, Chemical Research in Toxicology, Proteomics, American Journal of Physiology-Lung Cellular and Molecular Physiology, Journal of Proteome Research, Journal of the American Society for Mass Spectrometry, Molecular and Cellular Proteomics, American Association of Colleges of Pharmacy

INVITED PRESENTATIONS

“LC-MS Based Proteomics”, Lecture at *Clinical Proteomics: Today and Tomorrow*, September 26-30, 2005, Nashville, TN

“Protein ID”, Workshop at *Clinical Proteomics: Today and Tomorrow*, September 26-30, 2005, Nashville, TN

“Post-Translational Modifications”, Workshop at *Clinical Proteomics: Today and Tomorrow*, September 26-30, 2005, Nashville, TN

“Protein Modification Mapping by LC-MS using the P-Mod and SALSA Algorithms” *Thermo Electron Proteomics Spring Seminar Series*, April 28-29, 2005, La Jolla, CA and Seattle, WA

“Mapping Protein Modifications Using LC-MS and the Pmod and SALSA algorithms” *Thermo Electron Proteomics Fall Seminar Series*, December 8, 2004, Atlanta, GA

“Proteomics approaches to identify protein targets of reactive intermediates”, *Toxicology and Risk Assessment Conference*, Cincinnati, OH April 26-30, 2004

PEER REVIEWED PUBLICATIONS

1. **Sharpe***, A.L. & Carter, D.E. (1993) Substrate specificity of rat liver aldehyde dehydrogenase with chloroacetaldehydes, *J. Biochem. Toxicol.* 8: 155-160.
2. **Ham, A.-J.L.** & Liebler, D.C. (1995) Vitamin E oxidation in rat liver mitochondria, *Biochemistry* 34: 5754-5761.
3. Liebler, D.C., Burr, J.A., Philips, L., & **Ham, A.J.L.** (1996) Gas chromatography-mass spectrometry analysis of vitamin E and its oxidation products, *Anal. Biochem.* 236: 27-34.
4. **Ham, A.-J.L.** & Liebler, D.C. (1997) Oxidative turnover of vitamin E in the perfused rat liver: product distribution and effect of dietary supplementation, *Arch. Biochem. Biophys.*, 339:157-64.
5. Liebler, D.C., **Ham, A.J.L.** & Burr, J.A. (1998) Gas chromatography-mass spectrometry analysis of vitamin E and its oxidation products. In Oxidants and Antioxidants (Packer, L., ed.) *Methods in Enzymology*, Vol. 299, Academic Press, New York, pp. 309-318.
6. Swenberg, J.A., Bogdanffy, M, **Ham, A.**, Holt, S., Kim, A., Morinello, E.J., Ranasinghe, A., Scheller, N., & Upton, P. (1999) The formation and repair of DNA adducts in vinyl chloride and vinyl fluoride carcinogenesis. *IARC Scientific Publication No. 150*:29-43.
7. **Ham, A.-J.L.**, Ranasinghe, A., Morinello, E.J., Nakamura, J., Upton, P.B., Johnson, F. & Swenberg, J.A. (1999) Immunoaffinity/gas chromatography/high resolution mass spectrometry method for the detection of $N^2,3$ -ethenoguanine. *Chem. Res. Toxicol.* 12:1240-1246.
8. Swenberg, J.A., **Ham, A.**, Koc, H., Morinello, E., Ranasinghe, A., Tretyakova, N., Upton, P. & Wu, K.-Y. (2000) Effects of low exposure to ethylene oxide, vinyl chloride and butadiene. *Mutation Res.* 464:77-86.
9. Hussain, S.P., Amstad, P., Raja, K., Ambs, S., Nagashima, M., Bennett, W.P., Shields, P.G., **Ham, A.-J.**, Swenberg, J.A., Marrogi, A.J., & Harris, C.C. (2000) Increased *p53* mutation load in noncancerous colon tissue from ulcerative colitis: A cancer-prone chronic inflammatory disease. *Cancer Res.* 60:3333-3337.
10. **Ham, A.-J.L.**, Ranasinghe, A., Koc, H., & Swenberg, J.A. (2000) 4-Hydroxy-2-nonenal and ethyl linoleate form $N^2,3$ -ethenoguanine under peroxidizing conditions. *Chem. Res. Toxicol.* 13:1243-1250.
11. Morinello, E. J., **Ham, A.-J.L.**, Ranasinghe, A., Sangaiah, R. & Swenberg, J.A (2000) Simultaneous quantitation of $N^2,3$ -ethenoguanine and $1,N^2$ -ethenoguanine with immunoaffinity/gas chromatography/high resolution mass spectrometry. *Chem. Res. Toxicol.* 14:327-334.

12. Swenberg, J.A., Georgeiva, N., **Ham, A.**, Koc, H., Morinello, E., Ranasinghe, A., Upton, P., and Walker, V. (2002) Linking pharmacokinetics and biomarker data to mechanism of action in risk assessment. *J. Human Ecological Risk Assessment*, 8(6):1315-1338.
13. Morinello, E.J., **Ham, A.-J. L.**, Ranasinghe, A., Nakamura, J., Upton, P.B., and Swenberg, J.A. (2002) Molecular dosimetry and repair of $N^2,3$ -ethenoguanine in rats exposed to vinyl chloride. *Cancer Res.*, 62:5189-95.
14. **Ham, A.-J.L.**, Koc, H., Sangaiah, R., Engleward, B.P., Meira, L.B., Samson L.D., and Swenberg, J.A. (2004) New Immunoaffinity-LC-MS/MS Methodology Reveals that *Aag* Null Mice are Deficient in Their Ability to Clear $1,N^6$ -ethenodeoxyadenosine DNA Lesions from Lung and Liver *in vivo*. *DNA Repair*, 3:257-265.
15. Manza, L.L., Stamer, S.L., **Ham, A.-J.L.**, Codreanu, S.G., and Liebler, D.C. (2005) Sample Preparation and Digestion for Proteomic Analysis Using Spin Filters. *Proteomics*, 5:1742-5
16. Hansen, B.T., Davey, S.W., **Ham, A.-J. L.** and Liebler, D.C. (2005) P-MOD: An Algorithm and Software to Map Modifications to Peptide Sequences Using Tandem MS Data. *J. Proteome Res.*, 4:358-368.
17. Vanacore, R.M., Friedman, D.B., **Ham, A.-J. L.**, Sundaramoorthy, M., and Hudson, B.G (2005) Identification of S-Hydroxylysyl²¹¹-Methionine⁹³ as the Covalent Crosslink of the Noncollagenous (NC1) Hexamer of the $\alpha 1\alpha 1\alpha 2$ Collagen IV Network: A Role for the Posttranslational Modification of Lysine²¹¹ to Hydroxylysine²¹¹ in Hexamer Assembly. *J. Biol. Chem.*, 280: 29300-29310.
18. Pedchenko, V.K., Chetyrkin, S.V., Peale, C., **Ham, A.-J. L.**, Saleem, M.A., Mathieson, P.W., Hudson, B.G. and Voziyan, P.A. (2005) Mechanism of Perturbation of Integrin-Mediated Cell-Matrix Interactions by Reactive Carbonyl Compounds and Its Implication for Pathogenesis of Diabetic Nephropathy. *Diabetes*, 54:2952-60.
19. Wu, Z.-L., Bartleson, C.J., **Ham, A.-J.L.**, and Guengerich, F.P. (2006) Heterologous expression, purification and properties of human cytochrome P450 27C1. *Arch. Biochem. Biophys.* 445:138-146.
20. Luka, Z., **Ham, A.-J.L.**, Norris, J.L., Yeo, E.-J., Yermalitsky, V., Glenn, B., Caprioli, R.M., Liebler, D.C. and Wagner, C (2006) Identification of phosphorylation sites in glycine N-methyltransferase from rat liver, *Protein Sci* 15:785-794. PMC2242492
21. Lapierre LA, Avant KM, Caldwell CM, Ham AJ, Hill S, Williams JA, Smolka AJ, Goldenring JR. (2007) Characterization of immunisolated human gastric parietal cells tubulovesicles: identification of regulators of apical recycling. *Am J Physiol Gastrointest Liver Physiol.* 292(5):G1249-62.

22. Ducharme, N. A., Hales, C. M., Lapierre, L. A., **Ham, A.-J. L.**, Oztan, A., Apodaca, G. and Goldenring, J. R. (2006) MARK2/EMK1/Par-1B α Phosphorylation of Rab11-Family Interacting Protein 2 Is Necessary for the Timely Establishment of Polarity in Madin-Darby Canine Kidney Cells. *Mol. Biol. Cell* 17, 3625-3637. PMC1525241
23. Grueter, C.E., Abiria, S.A., Dzhura, I., Wu, Y., **Ham, A.-J. L.**, Mohler, P.J., Anderson, M.E., and Colbran, R. (2006) L-Type Ca²⁺ Channel Facilitation Mediated by Phosphorylation of the β Subunit by CaMKII, *Molecular Cell*, 23:1-10. PMC1577681
24. Popescu, D. C., **Ham, A.-J. L.** and Shieh, B.-H. (2006) Scaffolding Protein INAD Regulates Deactivation of Vision by Promoting Phosphorylation of Transient Receptor Potential by Eye Protein Kinase C in Drosophila. *J. Neurosci.* 26:8570-8577. PMC1577681
25. Bender, R. P., **Ham, A. J. L.** and Osheroff, N. (2007) Quinone-Induced Enhancement of DNA Cleavage by Human Topoisomerase II α : Adduction of Cysteine Residues 392 and 405. *Biochemistry.* 46(10) : 2856 – 2864. PMC2896225
26. Tabb DL, Friedman DB, **Ham A.-J.L.** (2007) Verification of automated peptide identifications from proteomic tandem mass spectra. *Nat. Protoc.* 2006 Dec;1(5):2213-2222. PMC2819013
27. Hill K.E., Zhou J., Austin L.M., Motley A.K., **Ham A.-J.L.**, Olson G.E., Atkins J.F., Gesteland R.F., Burk R.F. (2007) The selenium-rich C-terminal domain of mouse selenoprotein P is necessary for supply of selenium to brain and testis but not for maintenance of whole-body selenium. *J. Biol. Chem.* 282(15):10972-80.
28. Myers, J. S., Zhao, R., Xu, X., **Ham, A. J.L.** and Cortez, D. (2007) Cyclin-dependent kinase 2 dependent phosphorylation of ATRIP regulates the G2-M checkpoint response to DNA damage. *Cancer Res* 67: 6685-6690. PMC2728292
29. Mohler, P. J., Zhu, M. Y., Blade, A. M., **Ham, A. J.L.**, Shelness, G. S. and Swift, L. L. (2007) Identification of a novel isoform of microsomal triglyceride transfer protein. *J Biol Chem* 282: 26981-26988.
30. Druckova, A., Mernaugh, R. L., **Ham, A.-J.L.** and Marnett, L. J. (2007) Identification of the Protein Targets of the Reactive Metabolite of Teucrin A in Vivo in the Rat. *Chem Res Toxicol* 20(10):1393-1408.
31. Donowitz, M., Singh, S., Salahuddin, F. F., Hogema, B. M., Chen, Y., Gucek, M., Cole, R. N., **Ham, A.**, Zachos, N. C., Kovbasnjuk, O., Lapierre, L. A., Broere, N., Goldenring, J., deJonge, H. and Li, X. (2007) Proteome of murine jejunal brush border membrane vesicles. *J Proteome Res* 6, 4068-4079.

32. Yang, Z., Browning, C. F., Hallaq, H., Yermalitskaya, L., Esker, J., Hall, M. R., Link, A. J., **Ham, A. J.L.**, McGrath, M. J., Mitchell, C. A. and Murray, K. T. (2008) Four and a Half LIM Protein 1: A Partner for KCNA5 in Human Atrium. *Cardiovasc Res*, 78:449-57.
33. Chetyrkin, S. V., Mathis, M. E., **Ham, A.-J.L.**, Hachey, D. L., Hudson, B. G. and Voziyan, P. A. (2008) Propagation of protein glycation damage involves modification of tryptophan residues via reactive oxygen species: inhibition by pyridoxamine. *Free Radic Biol Med* 44, 1276-1285.
34. Erickson, J.R., Joiner, M. A. Guan, X, Kutschke, W., Yang, J., Oddis, C.V., Bartlett, R.K., Lowe, J.S., O'Donnell, S., Aykin-Burns, N., Zimmerman, M.C., Zimmerman, K, **Ham, A.-J.L.**, Weiss, R.M., Spitz, D.R., Shea, M.A., Colbran, R.J., Mohler, P.J., and Anderson, M.E.^{1,9,*} A Dynamic Pathway for Calcium-Independent Activation of CaMKII by Methionine Oxidation. *Cell*, 133:462-74. PMC2435269
35. Fang, W.B., Brantley-Sieders, D.M., Hwang, Y., Ham, A.-J.L., and Chen, J. (2008) Identification and Functional Analysis of Phosphorylated Tyrosine Residues within EphA2 Receptor Tyrosine Kinase. *J Biol Chem*. 283:16017-16026. PMC2414276
36. Luo, W., Slebos, R.J., Hill, S., Li, M., Brábek, J., Amanchy, R., Chaerkady, R., Pandey, A., **Ham, A.-J.L.**, and Steven K. Hanks (2008) Global Impact of Oncogenic Src on a Phosphotyrosine Proteome. *J Proteome Res*, 7:3447-60. PMC2579752
37. Vanacore, R.M., **Ham, A.-J.L.**, Cartailier, J.P., Sundaramoorthy, M., Todd, P., Pedchenko, V., Sado, Y., Borza, D.B., and Hudson, B.G. (2008) A Role for collagen IV crosslinks in conferring immune privilege to the Goodpasture autoantigen: Structural basis for the crypticity of B cell epitopes. *J Biol Chem*. 283:22737-48. PMC2504875
38. Cao, Z., Li, C., Higginbotham, J.N., Franklin, J.L., Tabb, D.L., Graves-Deal, R., Hill, S., Cheek, K.L., Jerome, W.G., LaPierre, L.A., Goldenring, J.R., **Ham, A.-J.L.**, and Robert J. Coffey (2008) Use of Fluorescence-Activated Vesicle Sorting for Isolation of Naked2-Associated Basolaterally-Targeted Exocytic Vesicles for Proteomic Analysis. *Mol Cell Proteomics*, 7:1651-67. PMC2528074
39. Tabb, D. L., Ma, Z. Q., Martin, D. B., **Ham, A. -J.L.** and Chambers, M. C. (2008) DirecTag: accurate sequence tags from peptide MS/MS through statistical scoring. *J Proteome Res* 7, 3838-3846. PMC2810657
40. Brown, K. A., **Ham, A. -J.L.**, Clark, C. N., Meller, N., Law, B. K., Chytil, A., Cheng, N., Pietenpol, J. A. and Moses, H. L. (2008) Identification of novel Smad2 and Smad3 associated proteins in response to TGF-beta1. *J Cell Biochem* 105, 596-611. PMC2700048

41. Burgess, E.F., **Ham, A.-J. L.**, Tabb, D.L., Billheimer, D., Roth, B.J., Chang, S.S., Cookson, M.S., Hinton, T.J., Cheek, K.L., Hill, S., and Pietenpol, J.A. (2008) Prostate Cancer Serum Biomarker Discovery Through Proteomic Analysis of Alpha-2 Macroglobulin Protein Complexes. *Proteomics: Clin Appl*, 2, 1223-1233. PMC2811579
42. Kolobova, E., Efimov, A., Kaverina, I., Rishi, A. K., Schrader, J. W., **Ham, A.-J.**, Larocca, M. C. and Goldenring, J. R. (2008) Microtubule-dependent association of AKAP350A and CCAR1 with RNA stress granules. *Exp Cell Res*. 315, 542-55. PMC2606941
43. Slebos, R. J., Brock, J. W., Winters, N. F., Stuart, S. R., Martinez, M. A., Li, M., Chambers, M. C., Zimmerman, L. J., **Ham, A. J.**, Tabb, D. L. and Liebler, D. C. (2008) Evaluation of Strong Cation Exchange versus Isoelectric Focusing of Peptides for Multidimensional Liquid Chromatography-Tandem Mass Spectrometry. *J Proteome Res*. 7, 5286-94. PMC2669493
44. Falin, R. A., Morrison, R., **Ham, A. -J.L.** and Strange, K. (2009) Identification of regulatory phosphorylation sites in a cell volume- and Ste20 kinase-dependent ClC anion channel. *J Gen Physiol* 133, 29-42.
45. Raman, D., Neel, N. F., Sai, J., Mernaugh, R. L., **Ham, A.-J.L.** and Richmond, A. J. (2009) Characterization of chemokine receptor CXCR2 interacting proteins using a proteomics approach to define the CXCR2 "chemosynapse". *Methods Enzymol* 460, 315-330. PMC3140414
46. Neel, N. F., Barzik, M., Raman, D., Sobolik-Delmaire, T., Sai, J., **Ham, A- J.L.**, Mernaugh, R. L., Gertler, F. B. and Richmond, A. (2009) VASP is a CXCR2-interacting protein that regulates CXCR2-mediated polarization and chemotaxis. *J Cell Sci*. 122(Pt 11):1882-94. PMC2684839
47. Addona, T. A., Abbatiello, S. E., Schilling, B., Skates, S. J., Mani, D. R., Bunk, D. M., Spiegelman, C. H., Zimmerman, L. J., **Ham, A. J.**, Keshishian, H., Hall, S. C., Allen, S., Blackman, R. K., Borchers, C. H., Buck, C., Cardasis, H. L., Cusack, M. P., Dodder, N. G., Gibson, B. W., Held, J. M., Hiltke, T., Jackson, A., Johansen, E. B., Kinsinger, C. R., Li, J., Mesri, M., Neubert, T. A., Niles, R. K., Pulsipher, T. C., Ransohoff, D., Rodriguez, H., Rudnick, P. A., Smith, D., Tabb, D. L., Tegeler, T. J., Variyath, A. M., Vega-Montoto, L. J., Wahlander, A., Waldemarson, S., Wang, M., Whiteaker, J. R., Zhao, L., Anderson, N. L., Fisher, S. J., Liebler, D. C., Paulovich, A. G., Regnier, F. E., Tempst, P. and Carr, S. A. (2009) Multi-site assessment of the precision and reproducibility of multiple reaction monitoring-based measurements of proteins in plasma. *Nat Biotechnol* 27, 633-641. PMC2855883
48. Vanacore, R., **Ham, A.-JL.**, Voehler, M., Sanders, C. R., Conrads, T. P., Veenstra, T. D., Sharpless, K. B., Dawson, P. E. and Hudson, B. G. (2009) A sulfilimine bond identified in collagen IV. *Science* 325, 1230-1234. PMC2876822

49. Cai, Y., Xu, Z., Xie, J., **Ham, A. -J.L.**, Koury, M. J., Hiebert, S. W. and Brandt, S. J. (2009) Eto2/MTG16 and MTGR1 are heteromeric corepressors of the TAL1/SCL transcription factor in murine erythroid progenitors. *Biochem Biophys Research Comm.* 390:295-301. PMC2774815
50. Rudnick, P. A., Clauser, K. R., Kilpatrick, L. E., Tchekhovskoi, D. V., Neta, P., Blonder, N., Billheimer, D. D., Blackman, R. K., Bunk, D. M., Cardasis, H. L., **Ham, A.- JL.**, Jaffe, J. D., Kinsinger, C. R., Mesri, M., Neubert, T. A., Schilling, B., Tabb, D. L., Tegeler, T. J., Vega-Montoto, L., Mulayath Variyath, A., Wang, M., Wang, P., Whiteaker, J. R., Zimmerman, L. J., Carr, S. A., Fisher, S. J., Gibson, B. W., Paulovich, A. G., Regnier, F. E., Rodriguez, H., Spiegelman, C., Tempst, P., Liebler, D. C. and Stein, S. E. (2009) Performance metrics for liquid chromatography-tandem mass spectrometry systems in proteomic analyses and evaluation by the CPTAC network. *Mol Cell Proteomics* 9(2):225-41. PMC2830836
51. Paulovich, A. G., Billheimer, D., **Ham, A.- JL.**, Vega-Montoto, L. J., Rudnick, P. A., Tabb, D. L., Wang, P., Blackman, R. K., Bunk, D. M., Cardasis, H. L., Clauser, K. R., Kinsinger, C. R., Schilling, B., Tegeler, T. J., Variyath, A. M., Wang, M., Whiteaker, J. R., Zimmerman, L. J., Fenyo, D., Carr, S. A., Fisher, S. J., Gibson, B. W., Mesri, M., Neubert, T. A., Reginier, F. E., Rodriguez, H., Spiegelman, C., Stein, S. E., Tempst, P. and Liebler, D. C. (2009) A CPTAC inter-laboratory study characterizing a yeast performance standard for benchmarking LC-MS Platform performance. *Mol Cell Proteomics.* 9:242-54. PMC2830837
52. Liebler D.C. and **Ham A.-J.L.** (2009) Spin filter-based sample preparation for shotgun proteomics. *Nat Methods.* 6:785; author reply 785-6.
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BOOK CHAPTERS

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ABSTRACTS

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* Published and/or presented under maiden name

SERVICE

Belmont University College of Pharmacy

Admissions Committee member, 2012-2013

Assessment Committee member, 2013- present

Faculty Search Committee for Department of Pharmaceutical, Social and Administrative Sciences, 2012-2013

Search Committee, Assistant to the Dean, 2013

Instructional Resources Committee, 2014-present

Belmont University

Honors Court Faculty Advisors Committee, 2014-present

Community

Volunteer track coach for Williamson Youth Track Club, 2008-2009.

Volunteer track coach for Hillsboro Middle School's inaugural track team, 2011.

Hillsboro Tomorrow, Board Member, Chair-Oversight Committee, 2011-2013.

Hillsboro Athletic Booster Club, Board Member, Treasurer, 2011-2012 and 2012-2013 school year.

Volunteer track coach for Wings of Skill Youth Track Club, 2011-present.

Senior Olympics State Games, Volunteer track official and other duties; 2013

Senior Olympics District Qualifier, Volunteer track official and other duties; 2013

Meet Director for the annual Wings of Skill Youth Track Invitational, 2013, 2014

Meet Director for Southeastern AAU Track and Field District Qualifier, 2014