

Education

2009 Ph.D. Biochemistry-**University of California, San Diego**

2000 B.S. Biochemistry-**University of New Mexico**

Peer-Reviewed Publications:

Gertsman I, Johnson WS, Nishikawa C, Gangoiti JA, Holmes B, Barshop BA. Diagnosis and Monitoring of Cystinosis Using Immunomagnetically Purified Granulocytes. *Clin Chem*. 2016 May;62(5):766-72.

LaBarge SA, Migdal CW, Buckner EH, Okuno H, **Gertsman I**, Stocks B, Barshop BA, Nalbandian SR, Philp A, McCurdy CE, Schenk S. p300 is not required for metabolic adaptation to endurance exercise training. *FASEB J*. 2016 Apr;30(4):1623-33.

Gertsman I, Gangoiti JA, Nyhan WL, Barshop BA. Perturbations of tyrosine metabolism promote the indolepyruvate pathway via tryptophan in host and microbiome. *Mol Genet Metab*. 2015 Mar;114(3):431-7.

Gertsman I, Barshop BA, Panyard-Davis J, Gangoiti JA, Nyhan WL. Metabolic Effects of Increasing Doses of Nitisinone in the Treatment of Alkaptonuria. *JIMD Rep*. 2015;24:13-20.

Gertsman I, Gangoiti JA, Barshop BA. Validation of a dual LC-HRMS platform for clinical metabolic diagnosis in serum, bridging quantitative analysis and untargeted metabolomics. *Metabolomics*. 2014 Apr 4;10(2):312-323.

Roos WH, **Gertsman I**, May ER, Brooks CL 3rd, Johnson JE, Wuite GJ. Mechanics of bacteriophage maturation. *Proc Natl Acad Sci U S A*. 2012 Feb 14;109(7):2342-7.

Huang RK, Khayat R, Lee KK, **Gertsman I**, Duda RL, Hendrix RW, Johnson JE. The Prohead-I structure of bacteriophage HK97: implications for scaffold-mediated control of particle assembly and maturation. *J Mol Biol*. 2011 May 6;408(3):541-54.

Gertsman I, Fu CY, Huang R, Komives EA, Johnson JE. Critical salt bridges guide capsid assembly, stability, and maturation behavior in bacteriophage HK97. *Mol Cell Proteomics*. 2010 Aug;9(8):1752-63.

Gertsman I, Komives EA, Johnson JE. HK97 maturation studied by crystallography and H/2H exchange reveals the structural basis for exothermic particle transitions. *J Mol Biol*. 2010 Mar 26;397(2):560-74.

Gertsman I, Gan L, Guttman M, Lee K, Speir JA, Duda RL, Hendrix RW, Komives EA, Johnson JE. An unexpected twist in viral capsid maturation. *Nature*. 2009 Apr 2;458(7238):646-50.

Conference presentations/abstracts

Gertsman I, Gangoiti JA, Barshop BA. 2014. Validation and Application of a LC-HRMS platform for simultaneous absolute quantification and biomarker discovery in the clinical laboratory. 20 minute talk presented at MSACL conference.

Gertsman I, Gangoiti JA, Barshop BA. 2014. Validation and Application of a LC-HRMS Platform for Simultaneous Quantification and Biomarker Discovery in the Clinical Laboratory. 15 minute talk at Society of Inherited metabolic disorders conference.

Gertsman I, Gangoiti JA, Barshop BA. 2014. Metabolomic and proteomic studies of cystinotic fibroblasts. 30 minute talk at the Cystinosis Research Symposium.

Gertsman I, Gangoiti JA, Barshop BA. 2012. Identifying protein thiol redox changes and modifications in cystinotic fibroblasts. 30 minute talk at Cystinosis Research Foundation conference.

Gertsman I, Gan L, Speir J, Johnson JE. 2009. Twists and Turns in Viral Capsid Maturation. 20 minute talk at the 19th West Coast Protein Crystallography meeting.

Gertsman I, Komives EA, Johnson JE. 2008. Structural mechanism of HK97 capsid expansion monitored by x-ray crystallography and H²H exchange coupled with MALDI. 20 minute talk presented at the 56th ASMS Conference on Mass Spectrometry and Allied Topics.