

Curriculum Vitae

Postdoctoral training:

- Postdoctoral Research Associate (May 2003 to July 2008).
Nutritional Genomics Laboratory, Food Science and Human Nutrition Department,
University of Florida, Gainesville, Florida.

Research Interests:

- Trace elements (Zinc and Iron).
- Alcohol abuse.
- Alcoholic liver disease.
- Autophagy.
- Bioactive compounds.
- Zinc transporters.
- Inflammation.
- Nanoparticles.
- Aging.

Education:

Ph.D. Cellular Biology: University Central de Venezuela.

MS. Nutrition: University Simón Bolívar.

BS. Nutrition and Dietetics: University Central de Venezuela.

Teaching experience:

- Associate professor (August 2008 to present)
Department of Dietetics and Nutrition. Florida International University, Miami, Florida.

Courses taught: Principles of Nutrition (HUN2201), Nutrition and Biochemistry (HUN 4240), Functions of Vitamins (HUN 6335), Graduate Seminar in Dietetics and Nutrition (DIE 6937), Proteins (HUN 6325) and Nutrition and Biochemistry (HUN 5245).

Society Memberships:

American Society for Nutritional Sciences (2005 to present)

North America Chinese Society for Nutrition (北美华人营养学会) (2016 to present)

Editorial Board:

Preventive Nutrition and Food Science (2013 to present)

Active Research Support (Funding):

1R03AA022451-01 (NIH/NIAAA)

8/1/13 - 07/31/16

Role: Principal Investigator

Title: Role of zinc in autophagy during ethanol exposure.

Presentation as Invited Speaker:

Congreso Latinoamericano de Nutricion. Title of presentation "Zinc signaling and transport". Santiago, Chile, 2009.

Trace elements for Man and Animals 13" (TEMA13). Title of the presentation "Zinc research current status and future perspectives." State of the art lecture. Pucon, Chile, 2008.

2006 FASEB Summer Research Conferences. Trace Element Metabolism: Integrating Basic and Applied Research. Title of presentation: "Mammalian zinc transporters in homeostasis and signaling". Snowmass, Colorado, 2006.

The American College of Nutrition 45th annual meeting: September 30-October 3, 2004. Title of presentation: "Understanding Zinc Transport. Long beach, California, 2004.

Book Chapters:

Liuzzi JP and Cousins RJ (2004) Mammalian zinc transporters. **Annu Rev Nutr** 24: 151-172.

Peer-Reviewed Publications

Klionsky DJ, Abdelmohsen K, Abe A, Abedin MJ..... **Liuzzi JP**.... et al (2016). Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). **Autophagy**. 12:1-222.

Cheema AK, Li T, **Liuzzi JP**, Zarini GG, Dorak MT, Huffman FG (2015). Genetic Associations of PPARGC1A with Type 2 Diabetes: Differences among Populations with African Origins. **J Diabetes Res**. 2015:921274. doi: 10.1155/2015/921274.

Cheema AK, Li T, **Liuzzi JP**, Zarini GG, Dorak MT, Huffman FG (2015). Peroxisome Proliferator-Activated Receptor Gamma Coactivator-1 Alpha (PPARGC1A) Polymorphism Linked With Microalbuminuria in Hypertensive Haitian Americans with Type 2 Diabetes. **IJHSR**. 5: 295-303.

Liuzzi JP, Guo L, Yoo C, Stewart TS (2014). Zinc and autophagy. **Biometals**. 27(6):1087-96. doi: 10.1007/s10534-014-9773-0.

Yoo C, Ramirez L, **Liuzzi J** (2014). Big data analysis using modern statistical and machine learning methods in medicine. **Int Neurorol J** 18:50-7. doi:10.5213/inj.2014.18.2.50.

Liuzzi JP (2014). Up-regulation of miR-34a by zinc deficiency. **Vitam Miner**. 3:1

Liuzzi JP, Yoo C (2013). Role of zinc in the regulation of autophagy during ethanol exposure in human hepatoma cells. **Biological Trace Element Research.** 156:350-6.

Liuzzi JP, Wong CP, HO E and Tracey A (2013). Regulation of hepatic SOCS3 by zinc. **J Nutr Bioch.** 24:1028-33.

Pinilla-Tenas JJ, Sparkman BK, Shawki A, Illing AC, Mitchell CJ, Zhao N, **Liuzzi JP**, Cousins RJ, Knutson MD and Mackenzie B (2011). Zip14 is a complex broad-scope metal-ion transporter whose functional properties support roles in the cellular uptake of zinc and nontransferrin-bound iron. **Am J Physiol Cell Physiol.** 301:C862-71

Cao JJ; Gregoire BR; Sheng XM; **Liuzzi JP (2010).** Pinto bean hull extract supplementation favorably affects markers of bone metabolism and bone structure in mice. **Food Res Intern.** 43: 560-566.

Guo L, Lichten LA, Ryu MS, **Liuzzi JP**, Wang F, Cousins RJ (2010). STAT5-glucocorticoid receptor interaction and MTF-1 regulate the expression of ZnT2 (Slc30a2) in pancreatic acinar cells. **Proc Natl Acad Sci U S A.** 107:2818-23.

Adeymir TB , **Liuzzi JP** and Cousins RJ (2009). Zinc transporter ZIP8 (SLC39a8) influences human T cell activation. **J Leukoc Biol.** 8:337-48.

Lichten LA, **Liuzzi JP** and Cousins RJ (2009) Interleukin-1beta contributes via nitric oxide to the upregulation and functional activity of the zinc transporter Zip14 (Slc39a14) in murine hepatocytes. **Am J Physiol Gastrointest Liver Physiol.** 296:G860-7.

Liuzzi JP, Guo L, Chang SM, and Cousins RJ (2009) Krüppel-like factor 4 regulates adaptive expression of the zinc transporter ZIP4 (Slc39A4) in mouse small intestine. **Am J Physiol Gastrointest Liver Physiol.** 296:G517-23

Ryu M, Litchen L, **Liuzzi JP** and Cousins RJ (2008). Zinc transporters ZnT1 (Slc30a1), Zip8 (Slc39a8) and Zip10 (Slc39a10) in mouse red blood cells are differentially regulated during erythroid development and by dietary zinc deficiency. **J Nutr** 138:2076-83.

Li M, Zhang Y, Liu Z, Bharadwaj U, Wang H, Wang X, Zhang S, **Liuzzi JP**, Chang SM, Cousins RJ, Fisher WE, Brunicardi FC, Logsdon CD, Chen C, Yao Q (2007). Aberrant expression of zinc transporter ZIP4 (SLC39A4) significantly contributes to human pancreatic cancer pathogenesis and progression. **Proc Natl Acad Sci U S A.** 104:18636-41.

Liuzzi JP, Aydemir F, Nam H, Knutson MD and Cousins RJ (2006) Zip14 (Slc39a14) mediates non-transferrin-bound iron uptake into cells. **Proc Natl Acad Sci U S A.**103:13612-7.

Cousins RJ, **Liuzzi JP** and Lichten LA (2006) Mammalian zinc transport, trafficking, and signals **J Biol Chem.** 281:24085-9.

Liuzzi JP, Lichten LA, Rivera S, Blanchard RK, Adeymir TB, Knutson MD, Ganz T, and Cousins RJ (2005). Interleukin-6 regulates the zinc transporter Zip14 in liver and contributes to the hypozincemia of the acute phase response. **Proc Natl Acad Sci USA**. 102:6843-6848.

Liuzzi JP, Bobo JA, Lichten LA, Samuelson DA and Cousins RJ (2004). Responsive transporter genes within the murine intestinal-pancreatic axis from a basis of Zn homeostasis. **Proc Natl Acad Sci USA** 101:14355-14360.

Cousins RJ, Blanchard RK, Moore JB, Cui L, Green CL, **Liuzzi JP**, Cao J, Bobo JA (2003). Regulation of zinc metabolism and genomic outcomes. **J Nutr**. 133:1521S-1526S.

Liuzzi JP, Bobo JA, Cui L, McMahon RJ, and Cousins RJ (2003). Zinc transporters 1, 2 and 4 are differentially expressed and localized in rats during pregnancy and lactation. **J Nutr**. 133: 342-351.

Avila AV, **Liuzzi JP**, Cioccia AM and Hevia P (2003). Interactions among indicators of B1, B2, B6 and vitamin C status in university students. **Arch Lat. Nutr**. 53:238-242.

Cao J, Bobo JA, **Liuzzi JP** and Cousins RJ (2001). Intracellular zinc depletion of THP-1 cells and cultured human mononuclear cells decreases methallothionein expression, increases ZIP2 expression and induces apoptosis. **J Leuk Biol**. 70:559-566.

Liuzzi JP, Blanchard RK and Cousins RJ (2001) Differential regulation of zinc transporter 1,2 and 4 mRNA expression by dietary zinc in rats. **J Nutr**. 131:46-52.

Liuzzi JP, Cioccia A.M and Hevia P (1998). In well-fed young rats, lactose-induced chronic diarrhea reduces the apparent absorption of vitamins A and e and affects preferentially vitamin E status. **J Nutr**. 128: 2467-2472.

Selected abstracts presented in conferences:

- **Liuzzi JP**, Liu X, Doan H and Sruthi N (2016). Effect of dietary zinc on ethanol induced autophagy in mice FASEB J. 30:lb367
 - **Liuzzi JP** and Sruthi N (2015). Induction of autophagy by zinc during acute ethanol intoxication in mice. FASEB J. 29:913.6.
 - **Liuzzi JP** (2014). Autophagy induced by zinc confers protection against ethanol toxicity. The 15th International Symposium on Trace Elements in Man and Animals (TEMA 15). Page 22. http://www.conference.ifas.ufl.edu/TEMA15/Abstract_Book.pdf.
 - **Liuzzi JP**, Menzel L and Yoo C (2014). Induction of autophagy by zinc during acute ethanol exposure. FASEB J. 28:122.1.
 - **Liuzzi JP** and Tracey A (2012). Regulation of the suppressor of cytokine signaling 3 (SOCS3) by zinc. 14th Annual Biomedical and Comparative Immunology Symposium. Florida International University.
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- **Liuzzi JP** and Tracey A (2012). Regulation of the suppressor of cytokine signaling 3 (SOCS3) by zinc. *FASEB J.* 26:lb276.
 - **Liuzzi JP**, Valencia K, Cao J, Gonzales A* (2011). Zinc deficiency increases miR-34a expression in mice. *FASEB J.* 25:977.1.
 - **Liuzzi JP**, Modi HP, Zarini GG, and Huffman F (2010). Comparison of Vitamin D status in Cuban-Americans with and without type 2 diabetes. *FASEB J.* 24:932.9.
 - **Liuzzi JP**, Masmouei H, Zarini GG, and Huffman F (2009). Association of the Slc30a8 rs13266634 polymorphism with type 2 diabetes and central obesity in a Cuban-American population. *FASEB J.* 23:LB517.
 - Pinilla Tenas JJ, Sparkman BK, Illing AC, **Liuzzi JP**, Cousins RJ, Knutson MD, and Mackenzie B (2009). Properties of the zinc transporter ZIP14 suggest a role in cellular uptake of nontransferrin-bound iron (NTBI) characteristic of iron-overload conditions. *FASEB J.* 23:975.1.
 - Lichten LA, **Liuzzi JP**, and Cousins RJ (2007). Zinc suppresses hepatic Zip10 expression through activation of MTF-1. *FASEB J.* 21:361.1
 - Nam H, **Liuzzi JP** and Knutson MD (2007) Iron deficiency increases Zip14 expression in hepatocytes. *FASEB J.* 21:859.5.
 - Nam H, Gunshin H, **Liuzzi JP** and Knutson MD (2007) Zip14 expression in hepatic iron overload. *FASEB J.* 21:859.3
 - **Liuzzi JP**, Aydemir F, Knutson MD and Cousins RJ (2006) Overexpression of the zinc transporter Zip14 increases non-transferrin-bound iron uptake in cells. *FASEB J.* 20: A131-A132.
 - **Liuzzi JP**, Lichten LA, Lanata T and Cousins RJ (2005) Zip14 protein is induced in mouse liver by endotoxin and turpentine and functions as a zinc transporter *FASEB J.* 19: A974-A974.
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