

# Margarita Teran-Garcia, M.D., Ph.D., FTOS

## I. EDUCATION, HONORS AND WORK EXPERIENCE

### A. Educational Background

1996-2001 **Ph.D. in Metabolism/Nutrient-gene interactions.** University of Texas at Austin, TX. USA.

1992-1995 **Pediatric Residency.** National Institute of Pediatrics, Mexico City. Mexico. Thesis:

- 1) Biotin supplementation affects lymphocyte carboxylases and plasma biotin in severe protein-energy malnutrition
- 2) Bacterial resistance of nosocomial and community strains in four services of the National Institute of Pediatrics (intensive therapy, infectious diseases, neonatology and emergency care).

1986-1992 **Medical Degree.** 4.0 GPA. Universidad Nacional Autónoma de México. Mexico City, Mexico

### B. Academic Positions

**2008-current Assistant Professor**

Department of Food Science and Human Nutrition  
Division of Nutritional Sciences /Associate in the Department of Psychology  
University of Illinois at Urbana-Champaign

**2006-2008 Associate Scientist. Human Genomics Laboratory.**

Co-Director Cell Culture Core Laboratory. Pennington Biomedical Research Center, LSU system, LA.

**2001-2005 Post-Doctoral fellow in Genetic Epidemiology**

Human Genomics Laboratory. Pennington Biomedical Research Center, LSU system, LA.

1999-2000 Teaching Assistant. Introductory Nutrition course and Laboratory, The University of Texas at Austin, TX.

1996-2001 Research Assistant. The University of Texas at Austin, TX.

**1995-1996 Pediatrician (Research Associate/Clinical work).** National Institute of Pediatrics (INP), Mexico.

**1992-1995 Pediatric Residency/Clinical fellow.** Instituto Nacional de Pediatría (INP), Mexico City. Mexico.

**1991-1992 Research Assistant. Unidad de Genética de la Nutrición,**

Area of study: malnutrition/inborn errors of metabolism.  
National University Autonomous of Mexico (UNAM), Mexico City.

### C. Professional Societies

#### Society's Membership:

American Society for Nutrition, American Diabetes Association, American Physiological Society, The Obesity Society Fellow.

#### Society's Service:

**2011-2014** Elected Council member at large for Mexico at the Obesity Society

**2010-2013** Member of the Minority Affairs Committee at the American Society for Nutrition

**2012-** Interim Council Liaison for the Diversity Section at the Obesity Society

**2010-2011** Chair-Elect for the Latin American Affairs Section at the Obesity Society

**2010-** Member of Education Task Force of the Medical Nutrition Council at the American Society for Nutrition

**1992-1993** Founder and President of the Society of Residents and Ex-residents of the National Institute of Pediatrics, Mexico

### D. Editorial Boards And Publication Review Contributions

2010-2012 Journal of Nutrigenetics and Nutrigenomics, editorial board.

*Ad hoc* reviewer for: BMC Medical Genetics, European Journal of Nutrition, Journal of Diabetes and Its Complications, Journal of Nutritional Biochemistry, Journal of Nutrition, Journal of Sports Sciences, Gene, Nutrition Research, Nutrients, Obesity, PLOs ONE, Nutrition Reviews.

## II. RESEARCH DISSEMINATION Peer-Reviewed Journal Publications

1. Velázquez A., **Terán M.**, Baez A., Gutiérrez J. and Rodríguez R. Biotin supplementation affects lymphocyte carboxylases and plasma biotin in severe protein-energy malnutrition. *Am J Clin Nutr* 1995; 61(2): 385-391.
2. Tusié-Luna M.T., Ramírez-Jiménez S., Ordoñez-S. M.L., Cabello-V. J., Altamirano-B. N., Calzada-L. R., Robles-V. C., Mendoza-M., Méndez J.P. and **Teran-Garcia M.** Low frequency of deletion alleles in patients with steroid 21-hydroxylase deficiency in a Mexican population. *Hum Genet* 1996; 98: 376-379.
3. **Teran-Garcia M.**, Ibarra I. and Velázquez A., Urinary organic acids in infant malnutrition. *Pediatric Research* 1998; 44(3): 386-391.
4. Rufo C., Gasperikova D., Clarke S.D., **Teran-Garcia M.** and Nakamura M.T. Identification of novel enhancer sequence in the distal promoter of the rat fatty acid synthase gene. *Biochem Biophys Res Commun* 1999; 261: 400-405.

5. Rufo C., **Teran-Garcia M.**, Nakamura M.T., Koo S.H., Towle H.C. and Clarke, S.D. Involvement of a unique carbohydrate-responsive factor in the glucose regulation of rat liver fatty-acid synthase gene transcription. *J Biol Chem* 2001; 276 (24): 21969-75.
6. Xu J., **Teran-Garcia M.**, Park J.H., Nakamura, M.T. and Clarke, S.D. Polyunsaturated fatty acids suppress hepatic sterol regulatory element-binding protein-1 expression by accelerating transcript decay. *J Biol Chem* 2001; 276 (13): 9800-7.
7. **Teran-Garcia M.**, Rufo C., Nakamura M.T., Osborne T.F., and Clarke S.D. NF-Y involvement in the polyunsaturated fat inhibition of fatty acid synthase gene transcription. *Biochem Biophys Res Commun* 2002; 290 (4): 1295-9.
8. **Teran-Garcia M.**, Després, J.P, Couillard, C., Tremblay, A. and Bouchard, C. Effects of Long-Term Overfeeding on Plasma Lipoprotein Levels in Identical Twins. *Atherosclerosis* 2004; 173 (2):277-83.
9. An P., **Teran-Garcia M.**, Rice T., Rankinen T., Weisnagel J.S., Bergman R.N., Boston R.C., Mandel S., Stefanovski D., Leon A.S., Skinner J.S., Wilmore J.H., Rao D.C. and Bouchard, C. Quantitative Trait Loci for prediabetes phenotypes in response to endurance training on chromosomes 6p, 7q and 19q in nondiabetic Whites and Blacks: The HERITAGE Family Study. *Diabetologia* 2005;48 (6): 1142-9.
10. **Teran-Garcia M.**, Rankinen T., Koza R., Rao D.C. and Bouchard, C. Endurance training- induced changes in insulin sensitivity and gene expression. *Am J Physiol Endocrinol Metab* 2005; 288 (6): E1168-78.
11. **Teran-Garcia M.**, Santoro N., Rankinen T., Bergeron J., Rice T., Leon A.S., Rao D.C., Skinner J. S., Wilmore J.H., Bergman R. N., Després J.P. and Bouchard C. Hepatic Lipase Gene Variant -514C>T is associated with lipoprotein and insulin sensitivity response to regular exercise: The HERITAGE Family Study. *Diabetes* 2005; 54 (7): 2251-2255.
12. Adamson A.W., Suchankova G., Rufo C., Nakamura M.T., **Teran-Garcia M.**, Clarke S.D. and Gettys T.W. Hepatocyte nuclear factor-4alpha contributes to carbohydrate-induced transcriptional activation of hepatic fatty acid synthase. *Biochem J.* 2006; 399 (2): 285-95.
13. **Teran-Garcia M.**, Adamson A.W., Yu G, Rufo C., Suchankova G., Dreesen T.D., Tekle M, Clarke S.D. and Gettys T.W. Polyunsaturated fatty acid suppression of fatty acid synthase (FASN): evidence for dietary modulation of NF-Y binding to the Fasn promoter by SREBP-1c. *Biochem J.* 2007; 402 (3):591-600.
14. **Teran-Garcia M.**, Rankinen T., Rice T., Leon A.S., Rao D.C., Skinner J.S. and Bouchard C. Variations of the Four and a half LIM domain 1 gene (FHL1) are associated with fasting insulin and insulin sensitivity responses to regular exercise. *Diabetologia* 2007; 50(9):1858-66.
15. **Teran-Garcia M.** and Bouchard C. Genetics of the Metabolic Syndrome. Review. *Appl. Physiol. Nutr. Metab* 2007; 32: 89-114.
16. **Teran-Garcia M.**, Després J.P., Tremblay A. and Bouchard C. Effects of Cholesterol Ester Transfer Protein (CETP) gene polymorphisms on adiposity in response to long-term overfeeding in identical twins. *Atherosclerosis* 2008; 196(1):455-460.
17. Ukkola O., **Teran-Garcia M.**, Tremblay A., Després J.P. and Bouchard C. Adiponectin Concentration and Insulin Indicators Following Overfeeding in Identical Twins. *J Endocrinol Invest* 2008; 31(2):132-7.
18. **Teran-Garcia M.**, Rankinen T. and Bouchard C. Genes, Exercise, Growth and the Sedentary, Obese Child. *J Appl Physiol* 2008; 105:988-1001.
19. Argyropoulos G., Stütz A.M., Ilnytska O., Rice T., **Teran-Garcia M.**, Rao DC, Bouchard C. and Rankinen T. KIF5B Gene Sequence Variation and Response of Cardiac Stroke Volume to Regular Exercise. *Physiol Genomics* 2009; 36:79-88.
20. Stütz A.M., **Teran-Garcia M.**, Rao D.C., Rice T., Bouchard C. and Rankinen T. Functional identification of the promoter of SLC4A5, a gene associated with cardiovascular and metabolic phenotypes in the HERITAGE Family Study. *Eu J Hum Genetics* 2009; 17(11): 1481-9.
21. Rankinen T., Rice T., **Teran-Garcia M.**, Rao D.C. and Bouchard C. FTO genotype is associated with exercise training-induced changes in body composition. *Obesity* 2010; 18(2):322-6.
22. Rice T.K., Sarzynski M.A., Sung Y.J., Argyropoulos G., Stütz A.M., **Teran-Garcia M.**, Rao D.C., Bouchard C., Rankinen T. Fine Mapping of a QTL on chromosome 13 for submaximal exercise capacity training Response: the HERITAGE Family Study. *Eur J Appl Physiol.* 2012; 112(8):2969-78.
23. **Teran-Garcia, M.**, Andrade, F. C. D., Aradillas-Garcia, C. et al. Life-style, family environment, obesity and related risk factors among Mexican college student enrollees. *Obesity* 2010; 17: S161 Suppl. 2.
24. Harrison K., Bost K.K., McBride B.A., Donovan S.M., Grigsby-Toussaint D.S., Kim J., Liechty J.M., Wiley A., **Teran-Garcia M.** and Jacobsohn G. C. Toward a developmental conceptualization of contributors to weight imbalance in childhood: The Six-Cs model. *Child Development Perspectives.* 2010; 5(1):50-58.
25. Andrade, F. C. D., Vazquez-Vidal, I., Flood, T., Aradillas-Garcia, C. , Vargas Morales, J., **Teran-Garcia, M.** One-year changes in weight are associated with changes in blood pressure in Mexican young adults. *Obesity*, 2010;18: S-225 Suppl. 2.

26. Cramer J.M., **Teran-Garcia M.**, Jeffery E.H. Enhancing sulforaphane absorption and excretion in healthy men through the combined consumption of fresh broccoli sprouts and a glucoraphanin-rich powder. *Br J Nutr.* 2012; 107(9):1333-8.
27. Andrade F.C., Raffaelli M., **Teran-Garcia M.**, Jerman J.A., Aradillas-Garcia C. and Up Amigos 2009 Study Group. Weight status misperception among Mexican young adults. *Body Image.* 2012 Jan;9(1):184-8.
28. Grigsby-Toussaint DS, Chi SH, Fiese BH; STRONG Kids Project Writing Group. Where they live, how they play: neighborhood greenness and outdoor physical activity among preschoolers. *Int J Health Geogr.* 2011;10:66. doi: 10.1186/1476-072X-10-66.
29. Andrade, F. C. D., Vazquez-Vidal, I., Flood, T., Aradillas-Garcia, C., Vargas Morales, J., **Teran-Garcia, M.** and Up Amigos 2009 Study Group. One-year changes in weight are associated with changes in blood pressure in Mexican young adults. *Public Health.* 2012; 126(6):535-40.
30. Mosley M., Andrade F.C.D., Aradillas-Garcia C., **Teran-Garcia M.** Consumption of Dairy and Metabolic Syndrome Risk in a Convenient Sample of Mexican College Applicants. *Food and Nutrition Sciences,* 2013; 4(1):56-65.
31. Wang A.A., Paige K.N., Gaskins H.R., **Teran-Garcia M.** An Improved Method for Collecting Breath From 3- to 7-Year-Old Children. *J Parenter Enteral Nutr.* 2013. DOI: 10.1177/0148607113483178, PMID: 23538295.
32. **Teran-Garcia M.**, Andrade F.C.D., Vazquez-Vidal I., Mosley M., Medina-Cerda E., Aradillas-Garcia C., and the UP AMIGOS 2009 Study Group. FTO genotype is associated with body mass index and waist circumference in Mexican young adults. *Open Journal of Genetics.* 2013; 3:44-48.
33. Hammons A, Wiley A, Fiese B, **Teran-Garcia M.** Six week Latino family prevention pilot program effectively promotes healthy behaviors and reduces obesogenic behaviors. *Journal of Nutrition Education and Behavior.* 2013. JNEB-D-11-00414R6.
34. Marcela Raffaelli M., Andrade F.C.D., Poppe E.M., Sanchez-Armass O., Vazquez-Vidal I., Aradillas-Garcia C. Gender and age-related differences in depressive symptoms and health behaviors among Mexican youth. *Revista Interamericana de Psicología / Interamerican Journal of Psychology.* 2013; 47(1):83-90.
35. Caetano-Anolles, K., **Teran-Garcia, M.**, Raffaelli, M., Alvarado Sanchez, B., Mellado Garrido, M.R. Depression, Family Support, and Body Mass Index in Mexican Adolescents. *Revista Interamericana de Psicología/Interamerican Journal of Psychology.* 2013; 47(1):139-146.
36. Dev, D.A., McBride, B.A., Harrison, K., Bost, K., Donovan, S., Grigsby-Toussaint, D., Liechty, J., Wiley, A., **Teran-Garcia, M.**, Fiese, B.H. Academy of Nutrition and Dietetics Benchmarks for Nutrition in Child Care 2011: Are Child-Care Providers across Contexts Meeting Recommendations? *Journal of the Academy of Nutrition and Dietetics.* 2013; 113(10):1346-1353.
37. Musaad, S.M.A., Paige, K.N., **Teran-Garcia, M.**, Donovan, S.M., Fiese, B.H. Childhood overweight/obesity and pediatric asthma: The role of parental perception of child weight status. *Nutrients.* 2013; 5(9):3713-3729.
38. Wang, Y., Wang, A.A., Donovan, S.M., **Teran-Garcia, M.** Individual genetic variations related to satiety and appetite control increase risk of obesity in preschool-age children in the strong kids program. *Human Heredity.* 2013;75:152-159.

#### OTHER GROUP PUBLICATIONS

39. Dev, D.A., McBride, B.A., Fiese B.H., Jones B.L., Strong Kids Research Team. Risk Factors for Overweight/Obesity in Preschool Children: An Ecological Approach. *Child Obes.* 2013; 9(5):399-408.
40. Shim JE, Kim J, Mathai RA; STRONG Kids Research Team (Harrison K, Bost KK, McBride BA, Donovan SM, Grigsby-Toussaint DS, Kim J, Liechty JM, Wiley A, **Teran-Garcia M**, Fiese B, Bailey AB). Associations of infant feeding practices and picky eating behaviors of preschool children. *J Am Diet Assoc.* 2011;111(9):1363-8.
41. Wiley AR, Flood TL, Andrade FC, Aradillas C, Cerda EM. Family and individual predictors of physical activity for older Mexican adolescents. *J Adolesc Health.* 2011; 49(2):222-4. doi: 10.1016/j.jadohealth.2010.11.258. PMID: 21783059
42. Grigsby-Toussaint DS, Chi SH, Fiese BH; STRONG Kids Team. Where they live, how they play: neighborhood greenness and outdoor physical activity among preschoolers. *Int J Health Geogr.* 2011;10:66. doi: 10.1186/1476-072X-10-66.
43. Sánchez-Armass O, Drummond-Andrade FC, Wiley AR, Raffaelli M, Aradillas-García C; UP AMIGOS 2008 Study Group. Evaluation of the psychometric performance of the SCOFF questionnaire in a Mexican young adult sample. *Salud Publica Mex.* 2012;54(4):375-82.
44. Fiese BH; The STRONG Kids Team. Context Matters in Pediatric Obesity: Commentary on Innovative Treatment and Prevention Programs for Pediatric Overweight and Obesity. *J Pediatr Psychol.* 2013; Sep 6. [Epub ahead of print]. PMID: 24014068.