



1. Productividad el NAB en el área de Salud Pública

Los miembros del NAB han participado activamente con el desarrollo y difusión de estudios dedicados al conocimiento y desarrollo de soluciones de enfermedades que afectan la salud Pública.

PRODUCTIVIDAD – SALUD PÚBLICA

**PRODUCTIVIDAD DR. ÁLVARO DIAZ
BADILLO**
. (2018-2019).

Participaciones en congreso.

1. 2018 UTRGV SOM International Research Symposium. Oral Session: The Disease Modifying I113 Haplotype Is Associated with Allelic Expression Imbalance. Oral Session: Sarcopenic Obesity and Its Paradoxical Association with Cardiometabolic Risk Factors in Mexican Americans. Poster Session: Genetics of Bone Mass Related Phenotypes and their Correlation with Cardiometabolic Traits in Mexican American Children. Poster Session: Role of RNA Binding Protein HUR In CCL2 Allelic Expression Imbalance. Poster Session: Serum Carotenoids and Pediatric Adiposity Index Predict Insulin Sensitivity in Mexican American Children.
2. 3rd International Conference on Border Studies, 2018. OGE-UTRGV. Chair of Session Four: Health, Education, and Identity on the US-Mexico Border. Talk: Dengue in Texas-Mexico Border. How to understand the epidemiological panorama.
3. 2019 UTRGV SOM International Research Symposium. Poster Session: RNA Binding Protein HUR Regulates CCL2 Allelic Expression Imbalance. Poster Session: Obesity Associated with Decreased Hemoglobin in University Students from Reynosa, Tamaulipas. Poster Session: Obesity and Insulin Resistance Predict Liver Dysfunction in Mexican American Children. Poster Session: Biomarkers of Nonalcoholic Fatty Liver Disease (NAFLD) Exhibit Genotype-by-Environment Interaction Effects on Metabolic Abnormalities in Mexican American Children. Poster Session: Validation of Questionnaire for Food Preferences in College Students. Poster Session: Effect of Gender and Body Mass Index on Food Preferences in College Students. Pilot Study. Poster Session: Early Detection of Liver Abnormalities in Adolescents and Youth from Tamaulipas, Mexico.
4. American Diabetes Association (ADA), 79th Annual Scientific Sessions in San Francisco, California, from Friday, June 7, through Tuesday, June 11, 2019. Poster Presentation: 1337-P: Prediction of Insulin Sensitivity Using Serum Carotenoid Concentrations and Pediatric Metabolic Index in Mexican-American Children. Poster Presentation: 1770-P: Further Evidence Supporting a Potential Role for ADH1B in Obesity. Poster Presentation: 2093-P:



Acanthosis Nigricans as a Composite Marker of Cardiometabolic Risk and Its Complex Association with Obesity and Insulin Resistance in Mexican-American Children.

The Obesity Society (TOS) and the American Society for Metabolic and Bariatric Surgery (ASMBS), Obesity Week in Las Vegas, NV, November 3-7. Poster Presentation: T-P-3318, Sarcopenic Obesity and Metabolic Risk in Mexican-Americans: Paradoxical Role of Adiponectin. Poster Presentation: T-P-3317, Relative Contributions of Obesity and Alcohol to Liver Abnormalities In Young University Students. Poster Presentation: T-P-3050, Patterns of BMI Over the Lifespan and Cardiometabolic Disease Risk.

5. Díaz-Badillo A, Muñoz ML, Morales-Gómez MC, Martínez-Ezquerro JD, Quispe-Siccha RM, López-Alvarenga JC. Diagnostic tests for COVID-19 detection: A hybrid methodology. *Cir Cir.* 2020;88(5):537-541. doi: 10.24875/CIRU.M20000068. PMID: 33064682
6. Díaz-Badillo Á, Ramírez-Pfeiffer C, López-Alvarenga JC. Social networks, machine learning and cladistics in the time of COVID-19. *Cir Cir.* 2020;88(4):395-398. doi: 10.24875/CIRU.M20000065. PMID: 32567584
7. Lopez-Alvarenga JC, Chittoor G, Paul SFD, Puppala S, Farook VS, Fowler SP, Resendez RG, Hernandez-Ruiz J, Diaz-Badillo A, Salazar D, Garza DD, Lehman DM, Mummidi S, Arya R, Jenkinson CP, Lynch JL, DeFronzo RA, Blangero J, Hale DE, Duggirala R. Acanthosis nigricans as a composite marker of cardiometabolic risk and its complex association with obesity and insulin resistance in Mexican American children. *PLoS One.* 2020 Oct 15;15(10):e0240467. doi: 10.1371/journal.pone.0240467. eCollection 2020. PMID: 33057385
8. Mummidi S, Farook VS, Reddivari L, Hernandez-Ruiz J, Diaz-Badillo A, Fowler SP, Resendez RG, Akhtar F, Lehman DM, Jenkinson CP, Arya R, Lynch JL, Canas JA, DeFronzo RA, Hale DE, Blangero J, Lopez-Alvarenga JC, Duggirala R, Vanamala JKP. Serum carotenoids and Pediatric Metabolic Index predict insulin sensitivity in Mexican American children. *Sci Rep.* 2021 Jan 13;11(1):871. doi: 10.1038/s41598-020-79387-8. PMID: 33441626

Publicaciones Internacionales.

1. The ADRA2A rs553668 variant is associated with type 2 diabetes and five variants were associated at nominal significance levels in a population-based case-control study from Mexico City. Totomoch-Serra A, Muñoz ML, Burgueño J, Revilla-Monsalve MC, Perez-Muñoz A, **Díaz-Badillo Á.** *Gene.* 2018 Aug 30; 669:28-34. doi: 10.1016/j.gene.2018.05.078. Epub 2018 May 22. PMID: 29800730.
2. Pilot genome-wide association study identifying novel risk loci for type 2 diabetes in a Maya population. Domínguez-Cruz MG, Muñoz ML, Totomoch-Serra A, García-Escalante MG, Burgueño J, Valadez-González N, Pinto-Escalantes D, **Díaz-Badillo Á.** *Gene.* 2018 Nov 30; 677:324-331. doi: 10.1016/j.gene.2018.08.041. Epub 2018 Aug 18. PMID: 30130595.
3. Association of common polymorphisms in the VEGFA and SIRT1 genes with type 2 diabetes- related traits in Mexicans. Totomoch-Serra A, Muñoz ML, Burgueño J, Revilla-Monsalve MC, **Díaz- Badillo A.** *Arch Med Sci.* 2018



- Oct;14(6):1361-1373. doi: 10.5114/aoms.2018.74757. Epub 2018 Mar 28. PMID: 30393491.
4. Maya gene variants related to the risk of type 2 diabetes in a family-based association study. Domínguez-Cruz MG, Muñoz ML, Totomoch-Serra A, García-Escalante MG, Burgueño J, Valadez-González N, Pinto-Escalante D, **Díaz-Badillo A.** Gene. 2020 Mar 10; 730:144259. doi: 10.1016/j.gene.2019.144259. Epub 2019 Nov 21. PMID: 31759989.
 5. Data on a genome-wide association study of type 2 diabetes in a Maya population. Totomoch- Serra A, Domínguez-Cruz MG, Muñoz ML, García-Escalante MG, Burgueño J, **Díaz-Badillo Á,** Valadez-González N, Escalante DP. Data Brief. 2019 Nov 22; 28:104866. doi: 10.1016/j.dib.2019.104866. eCollection 2020 Feb. PMID: 31872004.