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EDUCATION

2010 Ph.D., Biochemistry. Purdue University, West Lafayette, IN
2005 M.S., Chemistry. Texas A&M University-Kingsville. Kingsville, TX
2002 B.S., Biology. Texas A&M University-Kingsville. Kingsville, TX

EMPLOYMENT

2018-Pres Assistant Professor, NNTRC Department of Chemistry, Texas A&M University-Kingsville (TAMUK)
2014-2018 Research Fellow, Massachusetts General Hospital/Harvard Medical School
2011-2014 Postdoctoral Scholar, Institute for Research in Immunology and Cancer (IRIC) University of Montreal, Montreal, QC, Canada
2005-2011 Research Assistant, Purdue Cancer Center
2003-2005 Research Associate, NNTRC, Kingsville, TX
1999-2003 Undergraduate Research Assistant, NTRC, Kingsville, TX

HONORS AND AWARDS

1. National Institute of Health (NIH) T32 Training Grant 2014-2017
2. Fonds de Recherche du Québec - Santé (FRQS) Fellowship 2013- 2014
3. G.E. Healthcare Prize, 3rd Place Oral Presentation 2012
4. Canadian Institutes of Health Research (CIHR) Fellowship 2011-2013
5. Fonds de Recherche du Québec - Santé (FRQS) Fellowship (declined) 2011
6. Henry A. Moses Award, 2010
7. A. K. Balls Award, 2010
8. National Institute of Health (NIH) Supplement 2008-2010
9. Midwest Crossroads Alliance Graduate Education Grant 2008-2009
10. 1st place poster award, Purdue Cancer Prevention Retreat 2008
11. 2nd Place Team Project Award MAES Latinos in Science 2007
12. Purdue Agriculture Fellowship 2006-2008
13. Undergraduate Research Poster Award SACNAS 2002
14. Minority Biomedical Research Support (MBRS) 2000-
15. McNair Research Fellowship 1999-2000

PUBLICATIONS

Refereed Journal Articles

1. *Laflamme C, ***Galan JA**, Ben El Kadhi K, Carreno S, Emery G, and Roux PP (2017). Proteomics screen identifies class I Rab11-FIPs as key regulators of cytokinesis. *Mol Cell Biol.* 37(3) 1-16 * Co-First Authors
2. Borja M, **Galan JA**, Cantu E Jr, Zugasti-Cruz A, Rodríguez-Acosta A, Lazcano D, Lucena S, Suntravat M, Sánchez EE. (2017). Morulustatin, A Disintegrin that Inhibits ADP-Induced

Platelet Aggregation, Isolated from the Mexican Tamaulipan Rock Rattlesnake (*Crotalus lepidus morulus*). *Rev Cient.* 26(2) 86-94

3. Paradis JS, Ly S, Blondel-Tepaz É, **Galan JA**, Beutraït A, Scott M, Enslin H, Marullo S, Roux PP, Michel Bouvier (2015). Receptor sequestration in response to β arrestin-2 phosphorylation governs steady-state levels of GPCR cell surface expression. *PNAS.* 112(37) 5160-8
4. **Galan JA**, Geraghty KM, Lavoie G, Kanshin E, Tcherkezian J, Calabrese V, Turk BE, Ballif BA, Blenis J, Thibault P, and Roux PP. (2014). Phosphoproteomic Analysis Identifies the Tumor Suppressor PDCD4 as a RSK Substrate Negatively Regulated by 14-3-3. *PNAS.* 11(29) 2918-27
5. Wang P, **Galan JA**, Bonneil E, Roux PP, Thibault P, Archambault V (2013). Spatial Regulation of Greatwall Kinase Is Required in the Cell Cycle. *J Cell Biol.* 202 (2) 277-93
6. Huang R, Hyunju O, **Galan J**, Tao WA, Borch RF, and Geahlen RL (2013). Intracellular Targets for a Phosphotyrosine Peptidomimetic include the Mitotic Kinesin, MCAK. *Biochemical Pharmacology* 86, (5) 597-611
7. Zhang X, Lavoie G, Fort L, Huttlin EL, Tcherkezian. J, **Galan JA**, Gu H, Gygi SP, Carreno S, and Roux PP (2013). Gab2 phosphorylation by RSK inhibits Shp2 recruitment and cell motility. *Mol Cell Biol.*33 (8):1657-70
8. Puchulu-Campanella E, Chu H, Anstee DJ, **Galan JA**, Tao WA, and Low PS (2013). Identification of the components of a glycolytic enzyme metabolon on the human red blood cell membrane. *J Biol Chem.* 288(2):848-58
9. Ray H, Romeo Y, Lavoie G, Dél ris P, Tcherkezian J, **Galan J**, Roux PP (2012). RSK facilitates G2 DNA damage checkpoint silencing and promotes melanoma chemoresistance. *Oncogene* 32(38):4480-9
10. Chu H, Puchulu-Campanella E, **Galan JA**, Tao WA, Low PS, and Hoffman JF (2012). Identification of cytoskeletal elements enclosing the ATP pools that fuel human red blood cell membrane cation pumps. *Proc Natl Acad Sci U S A.* 109 (31) 12794-99
11. Xue L, Wang WH, Iliuk A, Hu L, **Galan JA**, Yu S, Hans M, Geahlen RL, and Tao WA (2012). Sensitive kinase assay linked with phosphoproteomics for identifying direct kinase substrates. *Proc Natl Acad Sci U S A.* 109(15) 5615-20
12. Hu L, Iliuk A, **Galan JA**, Hans M, and Tao WA (2011). Identification of Drug Targets in vitro and in Living Cells by Soluble Nanopolymer-based Proteomics. *Angewandte Chemie;* 50 (18) 4133-6
13. **Gal n JA**, Paris LL, Zhang H, Geahlen RL, and Tao WA (2011). Quantitative proteomics analysis of Syk-interacting proteins complexes in chicken B cells using novel labeling reagent and GFP-nanotrap. *JASMS;* 22(2) 319-28
14. Estrella A, S nchez EE, **Gal n JA**, Tao WA, Guerrero B, Navarrete LF, Rodr guez-Acosta A (2011). Characterization of toxins from the broad-banded water snake *Helicops angulatus* (Linnaeus, 1758): isolation of a cysteine-rich secretory protein, Helicopsin. *Arch Toxicol.* 85 (4) 305-13
15. Gir n ME, Rodr guez-Acosta A, Salazar AM, S nchez EE, **Gal n J**, Ibarra C, and Guerrero B (2011). Isolation and Characterization of two new Non-Hemorrhagic Metalloproteinases with Fibrinolytic activity from the Maparnare (*Bothrops colombiensis*) venom. *Toxicon* 57(4):608-18
16. Paris LL, Hu J, **Galan J**, Ong SS, Martin VA, Ma H, Tao WA, Harrison ML and Geahlen RL (2010). Regulation of Syk by phosphorylation on serine in the linker insert *The Journal of Biological Chemistry.* 285(51), 39844-54
17. S nchez EE, Lucena SA, Reyes S, Soto JG, Cantu E, Lopez-Johnston JC, Guerrero B, Salazar AM, Rodr guez-Acosta A, **Gal n JA**, Tao WA, P rez JC (2010). Cloning, Expression, and Hemostatic activities of a disintegrin, r-Mojastin 1, from the Mohave

- rattlesnake (*Crotalus scutulatus scutulatus*) *Thrombosis Research* 126(3), 211-9
18. Salazar AM, Guerrero B, Cantu B, Cantu E, Rodríguez-Acosta A, Pérez JC, **Galán JA**, Tao WA, Sánchez EE (2009). Venom variation in hemostasis of the southern Pacific rattlesnake (*Crotalus oreganus helleri*): Isolation of hellerase. *Comp Biochem Physiol C Toxicol Pharmacol.* 149 (3), 307-16
 19. **Galán JA**, Sánchez E E, Rodríguez-Acosta A, Soto JG, Brashir S, McLane MA, Paquette-Straub C, and Pérez JC (2008). Inhibition of lung colonization and cell migration with the disintegrin Crotatroxin 2 isolated from the venom *Crotalus atrox*. *Toxicon* 51 (7), 1186-96
 20. **Galán J**, Guo M, Sánchez EE, Cantu E, Rodríguez-Acosta A, Pérez JC, and Tao WA, (2008). Quantitative analysis of snake venom by soluble polymer-based isotope labeling. *Mol Cell Proteomics.* (7), 785-799
 21. Guo M, **Galán J**, and Tao WA (2007). A novel quantitative proteomics reagent based on soluble nanopolymers. *Chem. Commun.* (12) 1251-1253
 22. Zhou F, **Galán J**, Geahlen RL, and Tao WA (2007). A novel quantitative proteomics strategy to study phosphorylation-dependent Peptide-protein interactions. *J Proteome Res.* 1, 133-40
 23. Sánchez EE, **Galán JA**, Russell WK, Soto JG, Russell DH, and Pérez JC (2006). Isolation and characterization of two disintegrins inhibiting ADP-induced human platelet aggregation from the venom of *Crotalus scutulatus scutulatus* (Mohave Rattlesnake). *Toxicol Appl Pharmacol.* 212(1), 59-68
 24. **Galán JA**, Brashir S, Sánchez EE, and Pérez JC (2005). Characterization and identification of disintegrins in *Crotalus horridus* venom by liquid chromatography and tandem matrix-assisted laser desorption ionization - quadrupole ion trap time-of-flight (MALDI-QIT-TOF) mass spectrometry. *Can. J. Chem./Rev. can. chim.* 83(8), 1124-1131
 25. Sánchez EE, **Galán JA**, Powell RL, Reyes SR, Soto JG, Russell WK, Russell DH, and Pérez JC (2005). Disintegrin, hemorrhagic, and proteolytic activities of Mohave rattlesnake, *Crotalus scutulatus scutulatus* venoms lacking Mojave toxin. *Comp Biochem Physiol C Toxicol Pharmacol.* 141(2), 124-32
 26. **Galán JA**, Sánchez EE, Rodríguez-Acosta A, and Pérez JC (2004). Neutralization of venoms from two Southern Pacific rattlesnakes (*Crotalus helleri*) with commercial antivenoms and endothermic animal sera. *Toxicon*, 43 (7), 791-799
 27. Sánchez EE, **Galán JA**, Rodríguez-Acosta A, Chase PB, and Pérez JC (2003). The efficacy of two antivenoms against the venom of North American snakes. *Toxicon*, 41 (3), 357-365
 28. Sánchez EE, Ramírez MS, **Galán JA**, López G, Rodríguez-Acosta A, and Pérez JC (2003). Cross reactivity of three antivenoms against North American snake venoms. *Toxicon*, 41 (3), 315-320

Review articles

1. Galan JA and Avruch J (2016). The MST1/MST2 Protein Kinases: Regulation and Physiologic Roles. *Biochemistry.* 4;55 (39):5507-5519
2. Iliuk A, Galan J, and Tao WA (2009). Playing tag with quantitative proteomics. *Anal Bioanal Chem.* 393 (2), 503-13
3. Guo M, Galán J, and Tao WA (2007). Soluble nanopolymers-based phosphoproteomics for studying protein phosphatase. *Methods*, 42(3), 289-297

Book Chapters

1. Galan J, Iliuk A, and Tao WA. Quantitative Proteomics by Mass Spectrometry, in Protein and Peptide Mass Spectrometry in Drug Discovery 2011, John Wiley & Sons, Inc. p. 101-128

INVITED ORAL PRESENTATIONS

1. Galan JA. Novel Applications for Snake Venom Disintegrins. EU-International Society on Toxinology, Yerevan, Armenia September 26, 2018. (*Selected abstract for oral presentation*)
2. Galan JA and Avruch J. Understanding the role of MST1 in B cell signaling. University of Minnesota-Mankato State, Department of Biology. Mankato, Minnesota. March 9th. 2017. *Invited Speaker*
3. Galan JA, Geraghty KM, Tcherkezian J, Kanshin E, Lavoie G, Turk BE, Ballif BA, Blenis J, Thibault P, and Roux PP. Global quantitative phosphoproteomic analysis of RSK-dependent signal transduction. Indiana School of Medicine, Department of Biochemistry. Indianapolis, Indiana May 9th. 2017. *Invited Speaker*
4. Galan JA, Geraghty KM, Tcherkezian J, Kanshin E, Lavoie G, Turk BE, Ballif BA, Blenis J, Thibault P, Roux PP. Global quantitative phosphoproteomic analysis of RSK-dependent signal transduction. Signaling Quebec, Montreal. May 21-23. 2014.
5. Galan JA, Geraghty KM, Tcherkezian J, Kanshin E, Lavoie G, Turk BE, Ballif BA, Blenis J, Thibault P, and Roux PP. Global quantitative phosphoproteomic analysis of RSK-dependent signal transduction American Society of Mass Spectrometry, Minneapolis, MN June 9-13. 2013. (*Selected abstract for oral presentation*)
6. Galan JA, Geraghty KM, Tcherkezian J, Kanshin E, Lavoie G, Turk BE, Ballif BA, Blenis J, Thibault P, and Roux PP. Global quantitative phospho-proteomic analysis reveals the tumour suppressor PDCD4 as a novel RSK substrate in melanoma. Montreal Mass Spectrometry Meeting. Montreal, QC, Canada. 2013. (*Selected abstract for oral presentation*)
7. Galan JA, Geraghty KM, Tcherkezian J, Kanshin E, Lavoie G, Turk BE, Ballif BA, Blenis J, Thibault P, and Roux PP. Global quantitative phospho-proteomic analysis reveals the tumour suppressor PDCD4 as a novel RSK substrate in melanoma. IRIC Scientific Symposium. Montreal, QC, Canada. 2013. (*Selected abstract for oral presentation*)
8. Galan JA, Wang WH, Iliuk A, Martin VA, Geahlen RL, and Tao WA. A proteomic approach to screen and identify spleen tyrosine kinase (Syk)-binding partners and substrates. Gordon Research Conference. Purdue Biochemistry Retreat, Oral Presentation. Brookston, IN Oct 13, 2010. (*Selected abstract for oral presentation*)
9. Galán JA, Paris LL, Zhang H, Geahlen RL, and Tao WA. Quantitative proteomics analysis of Syk-interacting proteins complexes in chicken B cells using novel labeling reagent and GFP-nanotrap. Purdue Biochemistry Retreat, Oral Presentation. Brookston, IN Oct 13, 2008. (*Selected abstract for oral presentation*)
10. Galán JA, Minjie G, and Tao WA. Metabolic Syndrome Biomarkers: the Ossabaw swine Project. SACNAS National Conference, Tampa Florida, Oct 1-3, 2006. (*Selected abstract for oral presentation*)

Poster Presentations

1. Galan, J. A., Wang, W.H., Iliuk, A., Martin, V.A., Geahlen, R.L., and Tao W.A. A proteomic approach to screen and identify Spleen Tyrosine Kinase (Syk)-binding partners and substrates. Gordon Research Conference. Lewiston, ME, Aug 1-4. 2011.
2. Galán JA, Zhang H, Wang L, Teng H, Sturek M, and Tao WA. Identification and quantification of plasma biomarkers for metabolic syndrome in Ossabaw swine. American Society of Mass Spectrometry, Salt Lake City, UT May 23-27. 2010.

3. Galán JA, Paris LL, Zhang H, Geahlen RL and Tao WA. Quantitative proteomics analysis of Syk-interacting proteins complexes in chicken B cells using novel labeling reagent and GFP-nanotrap. American Society of Mass Spectrometry, Poster. Philadelphia, PA June 1-5. 2009.
4. Galán JA, Paris LL, Zhang H, Geahlen RL. and Tao WA. Quantitative proteomics analysis of Syk-interacting proteins complexes in chicken B cells using novel labeling reagent and GFP-nanotrap. Keystone Symposium, Poster. Breckenridge, CO, Jan 26, 2009.
5. Galán JA, Paris LL, Zhang H, Geahlen RL, and Tao WA. Quantitative proteomics analysis of Syk-interacting proteins complexes in chicken B cells using novel labeling reagent and GFP-nanotrap. Turkey Run Analytical Conference, Poster. Monroe, IN. Sept 12, 2008.
6. Galán JA, Whisner C, Mobley S, and Tao WA. Proteomic approaches for detection of metabolic syndrome in obese adults. American Society of Mass Spectrometry, Poster. Denver Co June 1-5. 2008.
7. Galán JA, Iliuk A, Alicie B, Geahlen RL and Tao WA. Application of Functional Nanopolymers in Cancer Research. Purdue Cancer Prevention Retreat, Poster. April 11, 2008. *Awarded best Poster first Prize*
8. Galán JA, Minjie G, and Tao WA. Serum Proteomics in the Ossabaw swine. American Society of Mass Spectrometry, Indianapolis, IN June 1-5. 2007.
9. Galán JA, Sánchez EE, Powell R, and Pérez, JC. Disintegrins in the venom of the Mohave Rattlesnake (*Crotalus scutulaus scutulatus*). SACNAS National Conference, Austin, Texas. October 12-15, 2004.
10. Galán JA, Sánchez EE, and Pérez JC. Comparison and characterization of two snake venoms from the Southern Pacific rattlesnake (*Crotalus helleri*). Texas Academy of Science, Kerrville, Texas, March 4-6, 2004.
11. Galán JA, Sánchez EE, and Pérez JC. Comparison and characterization of two snake venoms from the Southern Pacific rattlesnake (*Crotalus helleri*). SACNAS National Conference, Albuquerque, New Mexico. September 26-29, 2003.
12. Galán JA, Sánchez EE, and Pérez JC. Isolation and Characterization of Proteins in *Bothrops colubrioides* (Mapanare) Venom Affecting Hemostasis, SACNAS National Conference, Anaheim, California. September 26-29, 2002. *Awarded Poster Prize.*
13. Galán JA, Sánchez EE, Ramírez MS, Zepeda K, López G, and Pérez JC. The efficacy of three antivenoms on snake venoms in the United States. 2nd Biennial NIH/RIMI Symposium, Baltimore, Maryland. March 15-18, 2002.

RESEARCH AND CREATIVE ACTIVITIES

Ongoing Research Support

1. 5 P40 OD010960-02 (PI: E. Sanchez)

05/01/2018 – 04/30/2019

NIH/OD

“Viper Resource Center at Texas A&M University - Kingsville (TAMUK)”

This is an NIH Animal and Biological Material Resource Center Grant (P40) to support the operation of the National Natural Toxin Research Center (NNTRC) at Texas A&M University – Kingsville. Funding from this award supports the operation of the Perez Serpentarium, the collection and distribution of snake venoms and snake venom-derived reagents to academic and commercial researchers world-wide. The award also supports studies directed toward the characterization of the biological activity of certain snake venom toxins.

Role: Co-Investigator

2. 5 P40 OD010960-02 (PI: E. Sanchez)

05/01/2019 –04/30/2024

NIH/OD “*Viper Resource Center at Texas A&M University - Kingsville (TAMUK)*”

This is an NIH Animal and Biological Material Resource Center Grant (P40) to support the operation of the National Natural Toxin Research Center (NNTRC) at Texas A&M University – Kingsville. Funding from this award supports the operation of the Perez Serpentarium, the collection and distribution of snake venoms and snake venom-derived reagents to academic and commercial researchers world-wide. The award also supports studies directed toward the characterization of the biological activity of certain snake venom toxins.

Role: Co-Investigator

Amount: TBD