CURRICULUM VITAE

José A. González Feliciano, PhD

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Education	PhD, Biology, University of Puerto Rico, Río Piedras Campus. 2005-2013 GPA 3.93/4.0 Bachelor of Science**,** Biology, Major in Biomedical Sciences, University of Puerto Rico, Aguadilla Campus. 2000 - 2005 GPA 3.77/4.0
Professional Objective	Experienced molecular biology scientist in the academy and analytical tools applicable to biomedical and biochemistry issues that require independent interpretation and implementation of new approaches. Extensive research and teaching experience working with courses design, graduate/undergraduate mentoring, proposal writing, analytical protocols, troubleshooting, data collection and statistical analysis. Skilled in building long-term relationship with students and laboratory staff. My commitment as a PhD scientific is to increase scientific knowledge, transmit knowledge to other scientists and students, help in finding solutions to diseases and apply this knowledge to improve the quality of life in my community.
Teaching Experience	Molecular Genetics (Biol 5398) Universidad de Puerto Rico-Río Piedras Campus San Juan, Puerto Rico Adjunct Professor January-May 2015 Supervisor: Dr. Tugrul Giray Biology (Biol 3101) Universidad de Puerto Rico-Río Piedras Campus San Juan, Puerto Rico Adjunct Professor August-December 2014 Supervisor: Dr. Tugrul Giray Immunology Pontificia Universidad Católica Madre y Maestra, Santiago, Dominican Republic Professor-January –July 2013 Supervisor: Prof. Jorge Tallaj Cell Biology and Genetics Pontificia Universidad Católica Madre y Maestra, Santiago, Dominican Republic Professor-January-May 2013 Supervisor: Prof. Jorge Tallaj Laboratory of Biochemistry Pontificia Universidad Católica Madre y Maestra, Santiago, Dominican Republic Professor-January-July 2013 Supervisor: Prof. Jorge Tallaj Biochemistry Pontificia Universidad Católica Madre y Maestra, Santiago, Dominican Republic Professor-May-July 2013 Supervisor: Prof. Jorge Tallaj

Advising and Mentorship Experience at UPR-RP	**Professor**: Dr. Gabriel Barletta (Chemistry Professor at UPR-Humacao). In a collaborative work I advised and taught Dr. Barletta on how to grow human cells and transfected it with siRNAs. **PhD Graduate Students:** Marimar Hernandez (PhD student at University of Puerto Rico Medical Sciences) and Marina Martinez (PhD student at University of Puerto Rico Medical Sciences). **Undergraduate Students**: Brenda Cadiz, Daisy Colón, Armando Lopez, Melba Vazquez and Laura Burgos. **Lab Technician**: Valerie Badillo (Lab technician at UPR-Humacao). **High School Students**: Ruben García and Karla Sanabria.
Post-Doctoral Research Experience	2014-Present University of Puerto Rico, San Juan, PR. **Associate Investigator,** HIV Vaccine Project. • Project title: A center for the rapid generation of clinical-grade biologic reagents in Puerto Rico • Laboratory experience includes: Mass spectrometry analysis; Protein hydrodynamic radius determination by Dynamic Light Scattering, Octet-Biomolecular binding interactions; Protein Simple-Isoelectric focusing; and Glycan profiling. • Maintained mammalian cell culture (e.g. CHO cells) transfected plasmids containing HIV-1 vaccine candidates. • Implemented and standardized different techniques to determine the impact of HIV glycoproteins in cell viability and cytotoxicity. • Contributed in the implementation of SOPs for the HIV vaccine production under Good Manufacturing Procedures (GMPs). • Identified and characterized N-linked glycans in the HIV-1 vaccine candidates. • Designed and developed an IEF method development report and SOP for a contract manufacturing organization. • Supervisors: José A. Lasalde Dominicci, Ph.D.; Abel Baerga Ortiz, Ph.D. 2014-2015 University of Puerto Rico, San Juan, PR. ***Research Assistant***, Molecular Biology Laboratory. • Developed a research project entitled: Identification of Adenine Uridine Rich Elements (AREs) and its *trans-acting* factors on the post-transcriptional regulation of Interleukin-3 on human cells. • Implemented and standardized the electrophoretic mobility shift assays and RNA-based affinity purification techniques for the identification of AREs binding proteins. • Laboratory experience includes: Affinity chromatography-Flag and Ni-NTA matrix protein purification; Gene manipulation, including yeast gene replacement and siRNA knockdown in mammalian cells; fluorescence microscopy; and preparation of cytoplasmic and nuclear protein extracts from mammalian cells. • Maintained mammalian cell culture and radioactive laboratory facilities and equipment. • Supervised and mentored 4 graduate and 5 undergraduate students. • Supervisor: Carlos I. González, Ph.D.
Ph.D. Experience	2005-2013 University of Puerto Rico, Rio Piedras Campus **Principal investigator**: Dr. Carlos I. Gonzalez

	Research title: Identification of Adenine/Uridine-Rich Elements (AREs) and its *trans-acting* factors on the post-transcriptional regulation of human Interleukin-3 on human cells **Project Description**: Human Interleukin-3 (hIL-3) is a lymphokine that is member of a class of transiently expressed mRNAs that harbor an Adenosine/Uridine-Rich Elements (ARE) in their 3' untranslated regions (3'-UTRs). The regulatory effects of AREs are often mediated by specific ARE-binding proteins (ARE-BPs). The aim of the project was to understand how the interactions between ARE-BPs and AREs in the 3'-UTR of the IL-3 mRNA regulate its expression.
Undergraduate Research Experience	2003-2005 University of Puerto Rico, Aguadilla Campus **Principal Investigator**: Dr. Liza V. Jiménez **Research Title**: Insecticide Resistance in Aedes aegypti populations. **Project Description**: The aim was to determine the acetylcholinesterase and glutathione transferase (two enzymes involve in insecticide resistance) activity in Aedes aegypti populations from Puerto Rico and compare it with the Rockefeller strain (mosquito control). 2004-2005 University of Puerto Rico, Aguadilla Campus **Principal Investigator**: Dr. José M. Planas **Research Title**: Identification of Heat Shock Proteins in *Bacillus spp* **Project Description**: Characterize the heat shock proteins expression patterns in different *Bacillus spp* that were exposed to heat shock.
Summer Internships	2012 Whitehead Institute for Biomedical Research at Massachusetts Institute of Technology (MIT), Cambridge, Massachusetts **Principal Investigator**: Harvey F. Lodish **Research Title**: Identification and Characterization of Intergenic Long non-coding RNAs (lincRNAs) Involved in Erythropoiesis **Project Description**: Whole transcriptome shotgun sequencing (WTSS) showed that lincRNAs are differentially expressed during erythroid differentiation (BFUs-CFUs-TER-119+). Based on these observations, our aim was to determine which lincRNAs are crucial for erythroid differentiation. We isolated mouse erythroid progenitors and performed a siRNA knockdown of different lincRNAs utililizing retroviral vectors. Defects in erythroid differentiation (enucleation) were determined by flow cytometry. 2004 Purdue University, West Lafayette, Indiana **Principal Investigator**: Dr. David Sanders **Research Title**: Establishing an Assay for Screening Compounds that Inhibit Ebola Glycoprotein-pseudotyped Retrovirus Entry **Project Description**: In order to identify chemicals that could inhibit the cell entry of the Ebola virus a high-throughput analysis system was established. The Ebola virus glycoprotein, a protein that the virus uses for cell entry, was inserted in a pseudotyped retrovirus harboring a Green Florescence Protein (GFP) reporter. Then, the Ebola Glycoprotein-pseudotyped Retrovirus was added to the cells and its cell entry was confirmed by measuring the GFP activity.
Peer-Reviewed Publications	1. **González-Feliciano, J.A.,** Akamine, P., Capó-Vélez, C.M., Delgado-Vélez, M., Dussupt, V., Krebs, S.J., Wojna, V., Polonis, V.R., Baerga-Ortiz, A. and Lasalde-Dominicci, J.A. A recombinant gp145 Env glycoprotein from HIV-1 expressed in two different cell lines: effects on glycosylation and antigenicity. Submitted to Plos ONE, March 2020, Preprint Doi: 10.1101/2020.03.31.018408

2. Díaz-Cartagena, D.C., Hernández-Cancel, G., . Bracho-Rincón, D.P., **González-Feliciano, J.A.**, Cunci, L., González, C.I., Cabrera, C.R. Label-Free Telomerase Activity Detection via Electrochemical Impedance Spectroscopy. October 2019. DOI: 10.1021/acsomega.9b00783

3. Santillán-Mercado, J.A. Yaiel G. Rodríguez-AvilésSamir A. BelloJosé A. **González-Feliciano, J.A.**, Nicolau, E. Electrospun Cellulose and Nanocellulose Composites as a Biomaterial. Electrospun Biomaterials and Related Technologies pp 57-107, January 2018. Doi: 10.1007/978-3-319-70049-6_3

4. Diaz-Cartagena.,D.C., Hernández., G., Bracho-Rincon., D.P., **González-Feliciano, J.A.**, Cunci Perez,L., González, C.I., Cabrera, Carlos Jr. Development of an Electrochemical Impedimetric Biosensor for the Detection of Telomerase Activity in Cancer Cells. The Electrochemical Society,2017 volume 77, issue 11, 1833,-1840. Doi: 10.1149/07711.1833ecst

5. Vega-Figueroa, K., Santillán, García, C., **González-Feliciano, J.A.**, Bello, S.A., Rodríguez, Y.G., Oortiz-Quiles, and Nicolau, E. Assessing the Suitability of Cellulose-Nanodiamond Composite As a Multifunctional Biointerface Material for Bone Tissue Regeneration. ACS Biomaterials Science and Engineering. ACS Biomater. Sci. Eng., April 3, 2017. DOI:10.1021/acsbiomaterials.7b00026

6. Herdocia-Lluberes, C.S., Laboy-Lopez, S., Morales, S., Gonzalez-Roobles, T.J., **González-Feliciano, J.A**., and Nicolau, E. Evaluation of synthesized nanohydroxyapatitenanocellulose composites as biocompatible scaffold for applications in bone tissue engineering. Journal of Nanomaterials, December 2015. DOI:10.1155/2015/310935

7. Dias-Diestra., Daisy, Beltran-Huarac, Juan, Bracho-Rincon, Dina P., **González-Feliciano, J.A.**, González, Carlos I., Weiner, Brad R., and Morell, Gerardo. Direct water-synthesized ZnS:Mn quantum dots for multiple biological detection and enzyme immobilization: An emerging biomaterial. *Journal of Nanoparticle Research, December 2015*. DOI: 10.1007/s11051-015-3269-x.

8. Habiba, K., Bracho, D.P., **Gonzalez-Feliciano, J.A.**, Resto, Oscar, Makarov, V. I., Ortiz., D., Avalos, J., González, C.I., Morell, G. and Weiner, B.R.. Synergistic Antibacterial Activity of PEGylated Silver-Graphene Quantum Dots Nanocomposites. *Applied Materials Today*, October 2015. DOI: 10.1016/j.apmt.2015.10.001

9. **González-Feliciano, J.A.**, Hernández-Perez , M., Estrella, L., Colón, D., López, A., Maurás, K.R., Lasalde, C., Martínez, D., Araujo, F., González **,** C.I.The Role of HuR in the Post-transcriptional Regulation of Interleukin-3 in T cells. *PLOS ONE, 2014*, DOI: 10.1371/journal.pone.0092457.

10. Lasalde, C., Rivera, A, Leon, A, **Gonzalez-Feliciano, J.A.**, Estrella, L., Rodriguez-Cruz, E.; Correa, M, Cajigas, I, Bracho, D, Vega, I, Wilkinson, M, Gonzalez, C. I. Identification and Functional Significance of Novel Phosphorylation Sites in the NMD Protein Upf1. *Nucleic Acids Research, 2013, 1-14 doi: 10.1093/nar/gkt1049.*

11. Castillo, B., Bromberg, L., López Corcino, X.Y., Badillo, V., **González-Feliciano, J.A.**, González, C.I., Hatton, T.A., Barletta, G. Intracellular delivery of siRNA by polycationic superparamagnetic nanoparticles. Journal of Drug

Delivery, vol. 2012, Article ID 218940, 12 pages, 2012. doi:10.1155/2012/218940

Oral Presentations

1. González, J., López, A., Estrella, L., Hernández, M., Almodóvar, N., Martínez, M., González, C.I. Post-transcriptional Regulation of Human IL-3 ARE in Jurkat Leukemic T cells. 7th Annual RISE Area Conference and Retreat. Verdanza Hotel, Carolina, PR. March 18-19, 2011.
2. González, J., López, A., Estrella, L., Hernández, M., Martínez, M., González, C.I. Identification and Characterization of RNA Binding Proteins that Bind to Human IL-3 ARE in Jurkat Leukemic T cells. XXX Foro Anual de Investigación y Educación RCM, San Juan, PR. March 24-26, 2010.
3. González-Feliciano, J.A., Gorenstein, N., Sanders, D.A., and Avalos, E. Establishing an Assay for Screening Compounds that Inhibit Ebola Glycoprotein-pseudotyped Retrovirus Entry. 25th Puerto Rico Interdisciplinary Scientific Meeting (PRISM). UPR Mayaguez , PR; March 2005.
4. González-Feliciano, J.A., Gorenstein, N. David Avram Sanders, D.A., and Avalos, E. Establishing an Assay for Screening Compounds that Inhibit Ebola Glycoprotein-pseudotyped Retrovirus Entry. 5th Undergraduate Research Symposium. UPR Aguadilla, PR; March 3, 2005.
5. González-Feliciano, J.A., Cubero, M. and Jiménez. L.V. Acércate a la Universidad. Evaluation of the Malathion and Sevin Insecticides Resistance in Natural Populations of *Aedes aegypti*. San Juan, PR. April, 2004.
6. González-Feliciano, J.A., Cubero, M. and Jiménez. L.V. Evaluation of the Malathion and Sevin Insecticides Resistance in Natural Populations of *Aedes aegypti*. 4th Undergraduate Research Symposium. UPR Aguadilla, PR; March 9, 2004.

Poster Presentations

1. González, J., López, A., Estrella, L., Hernández, M., Almodóvar, N., Martínez, M., González, C.I. Post-transcriptional Regulation of Human IL-3 ARE in Jurkat Leukemic T cells. 8th RISE Area Conference: Aptamers in Research. San Juan, PR. March 17, 2012.
2. González, J., López, A., Estrella, L., Hernández, M., Martínez, M., González, C.I. Identification and Characterization of RNA Binding Proteins that Bind to Human IL-3 ARE in Jurkat Leukemic T cells**.** 6th RISE Area Conference. University of Puerto Rico at Río Piedras Campus. April 23-24, 2010.
3. González, J., López, A., Estrella, L., Hernández, M., Martínez, M., González, C.I. Identification and Characterization of RNA Binding Proteins that Bind to Human IL-3 ARE in Jurkat Leukemic T cells. Fifteenth Annual Meeting of the RNA Society, Seattle, Washington. June 22-26, 2010.
4. González, J., Hernández, M., Colón, D., Estrella, L. and González, C.I. Post-transcriptional Regulation of Human Interleukin-3 mRNA by the Adenosine/Uridine Rich Element. 5th RISE Area Conference**.** University of Puerto Rico at Río Piedras Campus. April 3-4, 2009.
5. González-Feliciano, J.A., Colón, D., Martínez, D., Maurás, K.R., Estrella, L. and González, C.I. Post-transcriptional Regulation of Human Interleukin-3 mRNA by the Adenosine/Uridine Rich Element. Experimental Biology**.** San Diego Convention Center, San Diego, California. April 5-9, 2008.
6. González, J., López, A., Maurás, K.R., Estrella, L., Martínez, D., Lazaro, M., González, C.I. Translational Control of Human Interleukin-3 mRNA by the Adenosine/Uridine Rich Element. Twelfth Annual Meeting of the RNA Society. Madison, Wisconsin. May 29- June 3, 2007.
7. González, J., López, A., Maurás, K.R., Brasey, A., Estrella, L., Martínez, D., Araujo, F., Sonenberg, N. and González, C.I. Translational Control of Human Interleukin-3 mRNA by the Adenosine/Uridine Rich Element. Translational Control. Cold Spring Harbor Laboratory, New York. September 6-10, 2006.

8. González-Feliciano, J., López, A., Maurás, K.R., Brasey, A., Estrella, L., Martínez, D., Araujo, F., Sonenberg, N. and González, C.I. Translational Control of Interleukin-3 mRNA: Involvement of the Adenosine/Uridine-Rich Element. Second Transdisciplinary Research Conference. Mayaguez Resort, Puerto Rico. May 5, 2006.
9. González-Feliciano, J.A., M., Estrella, L., Maurás, K.R., Brasey, A., Martínez, D., Araujo, F., González**,** C.I.Translational Control of Interleukin-3 mRNA: Involvement of the Adenosine/Uridine-Rich Element. 26th Puerto Rico Interdisciplinary Scientific Meeting. University of Puerto Rico at Cayey Campus. March 11, 2006.
10. González-Feliciano, J.A., Gorenstein, N. David Avram Sanders, D.A., and Avalos, E. Avalos. Establishing an Assay for Screening Compounds that Inhibit Ebola Glycoprotein-pseudotyped Retrovirus Entry. 26th Puerto Rico Interdisciplinary Scientific Meeting (PRISM). UPR Mayaguez, PR; March 2005.
11. González-Feliciano, J.A., Gorenstein, N. David Avram Sanders, D.A., and Avalos, E. Establishing an Assay for Screening Compounds that Inhibit Ebola Glycoprotein-pseudotyped Retrovirus Entry. Purdue MARC/AIM Program Summer Research Poster Session. Purdue University, Indiana. July 2004.

Honors and Awards

NIH Research Initiative for Scientific Enhancement (RISE) Fellowship
University of Puerto Rico – Río Piedras Campus
(August 2009 - 2012)

RNA Society Poster Prize Award
American Society for Biochemistry and Molecular Biology (ASBMB) meeting
San Diego, California 2008

DEGI (Decanato de Estudios Graduados e Investigación) Travel Award
University of Puerto Rico – Río Piedras Campus
(March- 2008)

Puerto Rico-Louis Stokes Alliance for Minority Participation (PR-LSAMP)
University of Puerto Rico – Río Piedras Campus
(August 2005- 2007)

SACNAS (Advancing Hispanics/Chicanos & Native Americans in Science) Travel Award
(October 2006)

Affiliations

University Environmental Society (SAU), UPR Aguadilla
American Chemistry Society (ACS), UPR Aguadilla Chapter
The RNA Society

Laboratory Skills

Cell Culture

- Bacterial and yeast transformations.
- Cell viability and cytotoxicity assays.
- Cell culture of *Escherichia coli* and *Saccharomyces cerevisiae*.
- Gene manipulation, including yeast gene replacement and siRNA knockdown in mammalian cells.
- Magnetic cell sorting.
- Mammalian cells transfection using different transfection reagents (*e.g.* Lipofectamine 2000/LTX, Fugene 6/HD and Dharmaphect Duo) and electroporation.
- Culture of mammalian cells such as CHO-K1 (Chinese hamster ovary cells), Jurkat (T cell lymphocytes), HeLa (cervical cancer cells), 3T3 (mouse fibroblasts), MCF-7 (breast cancer cells), K-562, HL-60, DU-145 and 293T (human embryonic kidney cells) cell lines.

	– Isolation and primary culture of erythroid progenitor cells from mouse fetal liver. – Isolation of human peripheral blood mononucleated cells (PBMCs). – Virus production and cell transduction. Protein Analysis and Purification – Affinity chromatography-Flag and Ni-NTA matrix protein purification. – Analysis of Protein Glycan Composition – Determination of protein concentrations using Bradford assay and BCA. – Dual luciferase assays. – Dynamic Light Scattering – Fast protein liquid chromatography (FPLC) – Isoelectric Focusing (IEF) – Peptide mass fingerprinting (PMF) – Preparation of cytoplasmic and nuclear protein extracts from mammalian cells. – Protein molecular mass determination by MALDI TOF/TOF – RNA-based affinity purification. – SDS-PAGE gel electrophoresis. – Size exclusion chromatography (SEC) – Western Blotting. RNA/DNA Analysis – Gene cloning and site-directed mutagenesis – *In-vitro* transcription. – IP/RTPCR – Polysome profiles. – Recombinant DNA techniques – Reverse transcriptase PCR. – RNA Electrophoretic Mobility Shift Assays – RNA isolation. – RNA quantification via northern blot and Real time PCR
Community Service	Universidad Metropolitana (UMET) -January 2009 DNA isolation workshop for high school students Supervisor: Dr. Carlos I. González Josefita Monserrate de Selles Elementary School- April 2010 DNA isolation workshop for 6th graders Supervisor: Dr. Carlos I. González
Special qualifications	• Ability to work with minimal supervision. • Excellent interpersonal skills. • Radioactive protection training. • Advanced Open Water Diver-PDIC certification.
Computer Skills	GraphPad Prism 4, Quantity One, End Note, Microsoft Word, Excel, Power Point, Adobe Photoshop, others.
Languages	Spanish: Native English: Proficient