

Dept Microbiologia y Zoología Médica

8 Peer Reviewed publications

1. Borges-Vélez G, et al **Meléndez LM**. Decreased CSTB, RAGE and Axl receptor is associated with Zika infection in the human placenta. *Cells* 2022, 11, 3627. <https://doi.org/10.3390/cells11223627> (**Dr Loyda Melendez Lab**)
2. Reynoso-García, et al and **Godoy-Vitorino**, A complete guide to human microbiomes: body niches, transmission, development, dysbiosis and restoration, *Front. Syst. Biol.*, 2022 22 july 2022, <https://doi.org/10.3389/fsysb.2022.951403> **All authors are grad students in human microbiome class (**Dr Godoy's Lab**)
3. Nguyen TT, et al **Godoy-Vitorino F** Reshaping the tumor microenvironment with oncolytic viruses, positive regulation of the immune synapse, and blockade of the immunosuppressive oncometabolic circuitry. *Journal for ImmunoTherapy of Cancer* PMID: 35902132 (**Dr Godoy's Lab**)
4. Dickerson, F., Dilmore, A.H., **Godoy-Vitorino**, F., Nguyen, T.T., Paulus, M., Pinto-Tomas, A.A., Moya-Roman, C., Zuniga-Chaves, I., Severance, E.G., Jeste, D.V., 2022. The Microbiome and Mental Health Across the Lifespan, in: *Curr Topics Behav Neurosci.* PMID: 35947353 (**Dr Godoy's Lab**)
5. Sahana Kuthyar, Karli Watson, Shi Huang, Lauren J.N. Brent, Michael Platt, Julie Horvath, Janis Gonzalez, Melween Martínez, **Filipa Godoy-Vitorino**, Limited microbiome differences in captive and semi-wild primate populations consuming similar diets, *FEMS Microbiology Ecology*, 2022 PMID: 36047944 (**Dr Godoy's Lab**)
6. Ortiz Ana P., Acosta-Pagán Kimil T **Godoy-Vitorino Filipa**; *Oral microbiota and periodontitis severity among Hispanic adults*, *Frontiers in Cellular and Infection Microbiology* 12,2022, (**Dr Godoy's Lab**)
7. Sandra Lee, Benjamin Bolanos-Rosero, Lieran Wang, Filipa Godoy-Vitorino, Nicolás Rosario Matos, Leyao Wang, **Prenatal exposure to Hurricane Maria is associated with an altered infant nasal microbiome** *J Allergy Clin Immunol Glob.* 2022 August (**Collab Bolaños and Godoy**)
8. Measurement Report: An Exploratory Study of Fluorescence and CCN Activity of Urban Aerosols in San Juan. Puerto Rico Benjamin Bolanos Rosero. Mendeley, DOI: 10.17632/t26dctfk7t.1 (**Bolaños Lab**)

The screenshot displays eight academic publications from various journals:

- Cells**: Article titled "Decreased CSTB, RAGE, and Axl Receptor Are Associated with Zika Infection in the Human Placenta". Authors: Gabriel Borges-Vélez, Juan A. Arroyo, Yadira M. Cantres-Rosario, Ana Rodriguez de Jesus, Abiel Roche-Lima, Julio Rosado-Philippi, Lester J. Rosario-Rodriguez, María S. Correa-Rivas, Maribel Campos-Rivera, and Loyda M. Meléndez. DOI: 10.3390/cells11223627. Published on July 22, 2022.
- FEMS Microbiology Ecology**: Article titled "Limited microbiome differences in captive and semi-wild primates consuming similar diets". Authors: Sahana Kuthyar, Karli Watson, Shi Huang, Lauren J.N. Brent, Michael Platt, Julie Horvath, Janis Gonzalez, Melween Martínez, and Filipa Godoy-Vitorino. DOI: 10.1093/femsec/fics044. Published on July 22, 2022.
- frontiers in behavioral neurosciences**: Article titled "Reshaping the tumor microenvironment with oncolytic viruses, positive regulation of the immune synapse, and blockade of the immunosuppressive oncometabolic circuitry". Authors: Nguyen TT, Dickerson, F., Dilmore, A.H., Godoy-Vitorino, F., Nguyen, T.T., Paulus, M., Pinto-Tomas, A.A., Moya-Roman, C., Zuniga-Chaves, I., Severance, E.G., Jeste, D.V. DOI: 10.3389/fnbeh.2022.951403. Published on August 11, 2022.
- Current Topics in Behavioral Neurosciences**: Article titled "The Microbiome and Mental Health Across the Lifespan". Authors: Dickerson, F., Dilmore, A.H., Godoy-Vitorino, F., Nguyen, T.T., Paulus, M., Pinto-Tomas, A.A., Moya-Roman, C., Zuniga-Chaves, I., Severance, E.G., Jeste, D.V. DOI: 10.3389/fnbeh.2022.954735. Published on August 11, 2022.
- HHS Public Access**: Article titled "Prenatal exposure to Hurricane Maria is associated with an altered infant nasal microbiome". Authors: Sandra Lee, MPH, RD^a, Ai Zhang, MS^a, Midnela Acevedo Flores, MD^b, David de Angel Solá, MD^c, Lijuan Cao, PhD^d, Benjamin Bolanos-Rosero, PhD^d, Lieran Wang, MS^e, Filipa Godoy-Vitorino, PhD^e, Nicolás Rosario Matos, MD^f, Leyao Wang, PhD, MPH^f. DOI: 10.1016/j.jaci.2022.05.001. Published on August 11, 2022.
- frontiers in systems biology**: Article titled "A complete guide to human microbiomes: Body niches, transmission, development, dysbiosis, and restoration". Authors: Reynoso-García, N., Oforiwa, N., Democritus University of Thrace, Greece, Jagiellonian University, Poland, Drina Shema, Stanford Healthcare, United States, and Filipa Godoy-Vitorino, Research Institute of Biomedicine, Zaragoza, Spain. DOI: 10.3389/fsystems.2022.951403. Published on August 11, 2022.
- frontiers in integrative genomics**: Article titled "Correspondence to Dr Juan Fueyo: fjufeyo@mdanderson.org". Authors: Gomez-Manzano, C., Diaz-Rodríguez, E., and Filipe Godoy-Vitorino. DOI: 10.3389/fgene.2022.951403. Published on August 11, 2022.
- frontiers in systems biology**: Article titled "An integrated approach to study the relationship between the gut microbiome and mental health". Authors: Borges-Vélez, G., Arroyo, J.A., Cantres-Rosario, Y.M., Rodriguez de Jesus, A., Roche-Lima, A., Rosado-Philippi, J., Rosario-Rodriguez, L.J., Correa-Rivas, M.S., Campos-Rivera, M., and Meléndez, L.M. DOI: 10.3389/fsystems.2022.951403. Published on August 11, 2022.

Dept Microbiología y Zoología Médica

22 Conferences, Posters and Seminars

- 5 Conference Presentations -(Local, national, Int) – **Serrano's Lab**
- 3 Conference Presentations –(National) **Dorta's Lab**
- 2 Conference Presentations –(National) **Loyda's Lab**
- 3 Conference Presentations –(Local/National) **Bolaños Lab (1 as keynote speaker)**
- 9 Conference Presentations - (Local, national, Int) **Godoy's lab (3 as keynote speaker)**



SACNAS

UNIVERSIDAD DE PUERTO RICO- RIO PIEDRAS

SIMPOSIO DE AEROBIOLOGÍA

- Conferencia Magistral: Dr. Benjamín Bolaños, PhD.
- Los estudiantes del curso CIBI 4105 (Secc. 003-004) presentarán sus seminarios finales de investigación

A promotional poster for the 'SIMPOSIO DE AEROBIOLOGÍA' at the University of Puerto Rico-Río Piedras. It features a collage of scientific images (microscopy slides of microorganisms), a scientist in a lab coat, and text in Spanish encouraging attendance.

COMPARTE ESTA EXPERIENCIA CIENTÍFICA

Viernes 9 de Diciembre 2022
Auditorio 2- Estudios Generales
8:00 AM- 4:00 PM

ACOMPAÑANOS



Dept Microbiologia y Zoologia Medica

6 new Grant Awards

DORTA's Lab

U54 CA096297 UPR/MDACC IMPACT Dorta (PI) 09/01/2022 – 08/30/2024

Title: Immune and microbial signatures for treatment response in Hispanics with cervical cancer

Amount: \$60,000/year

U54GM133807 Alliance Dorta (PI) 10/03/2022 – 09/30/2022

Title: Interplay between microbial and immune cells in HPV-positive oropharyngeal cancer

Amount: \$50,000

GODOY's Lab

U54 CA096297 UPR/MDACC IMPACT GODOY(PI) 09/01/2022 – 08/30/2024

Title: The gut microbiome as a therapeutic strategy for modulating the efficacy of viroimmunotherapy against malignant glioma

Amount: \$120,000/year

2U54MD007600-36 8538 RCMI GODOY(PI) 9/20/2022 – 5/31/23

Title: The Microbiome as a risk factor for hr-HPV persistence and Cervical Cancer

Amount: \$319,086

1R21ES034191-01 NIH-NIEHS SIERRA D/GODOY-VITORINO (MPI) 09/01/2022-09/ -08/ 2024

Title: Effects of environmental contaminants on anxiety-like and fear behaviors, and gut microbiota in rodents

Amount: \$409,750

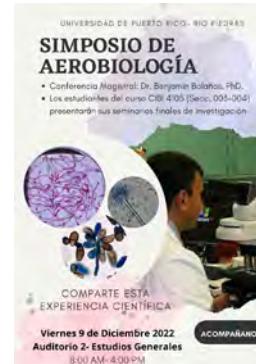
BOLANOS Lab Abarca Better Community Health. \$10,000

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SPECIAL ACTIVITIES AND HONORS

Bolaños Lab:

- AAAAI International Aerobiology Course Asunción Paraguay. Aug 28, 2022
- TOTAAL App will report the Caguas station in addition to the San Juan. With the support of the Abarca programmers volunteer work
- Formal collaboration with Caguas City Major and SANOS for the transport of the slide of the Caguas station.



Serrano's Lab:

- Expert International Evaluator; PhD Program in Salud y Desarrollo en los Trópicos, U de Salamanca, España
- Ad hoc Reviewer for PRHSJ, ASM Spectrum

Godoy's Lab:

- Godoy appointed Honorary Fellow of Applied Microbiology International / Society for Applied Microbiology (UK) <https://sfam.org.uk/>
- NIH STUDY SECTION: Center for Scientific Review Special Emphasis Panel PAR21-326 Modern Equipment for Shared-use Biomedical Research Facilities: Advancing Research-Related Operations R24
- Editorial Board member Microbes and Infection (IF 9.5)
- Invited co-author of Human Microbiome chapter in Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases, 10th edition
- Invited member Sigma Xi

Applied
Microbiology
International



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Student Achievements

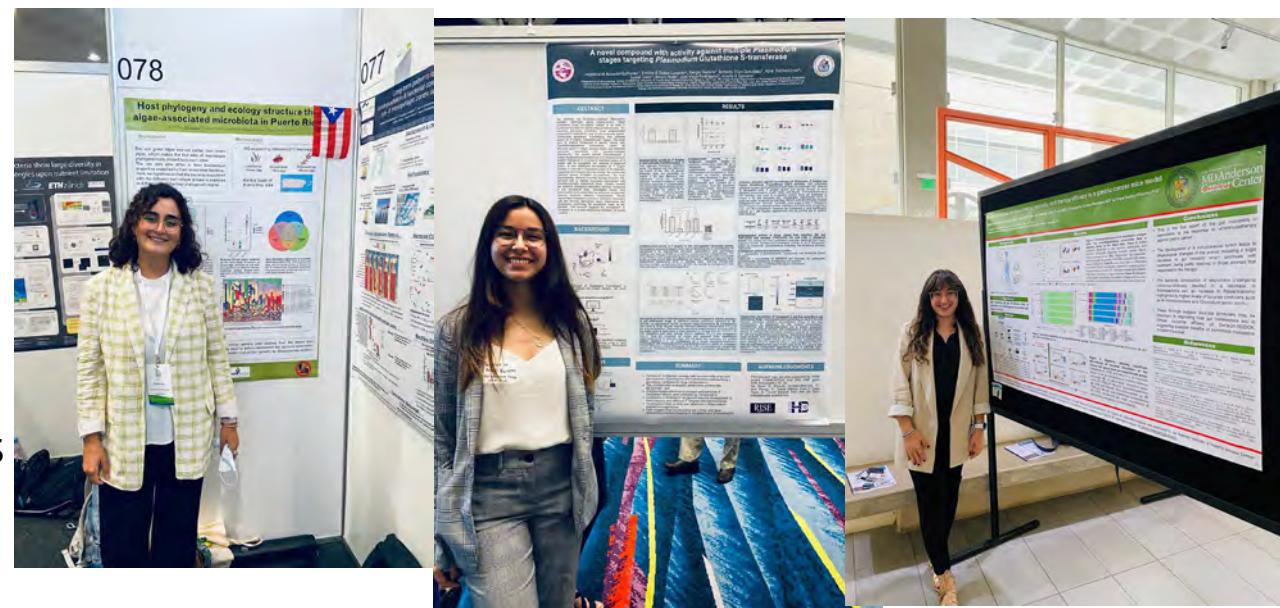
- 2022 **Travel Award** International Society for Microbial Ecology Lausanne Switzerland to Eduardo Tosado
- 2022 Eduardo Tosado **2nd place Graduate Poster** Competition, American Association for the Advancement of Sciences (AAAS) Caribbean Division
- 2022 Elif Kardas received the **Mitel Award** for her poster “Life history traits, in addition to Social Behaviour, influence gut microbiota of bees in Puerto Rico”, oct 2022 Forward Research Symposium
- Angelica Rosado (Serrano's Lab)
- Natalie Melendez (Godoy's Lab) – many presentations including oral conferences as invited speaker!!!
- Elif Kardas (Godoy's Lab)



Eduardo Tosado 2nd place
Graduate Poster AAAS
ISME Lausanne Travel Award



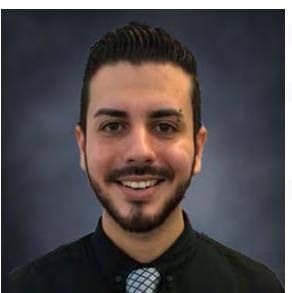
Elif Kardas Mitel Award



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Student publications jul-dec 2022

Several students!



Article

Decreased CSTB, RAGE, and Axl Receptor Are Associated with Zika Infection in the Human Placenta

Gabriel Borges-Vélez ¹, Juan A. Arroyo ², Yadira M. Cantres-Rosario ³, Ana Rodriguez de Jesus ⁴, Abiel Roche-Lima ⁴, Julio Rosado-Philippi ¹, Lester J. Rosario-Rodríguez ¹, María S. Correa-Rivas ⁵, Maribel Campos-Rivera ⁶ and Loyda M. Meléndez ^{1,4,*}



frontiers | Frontiers in Systems Biology

Review
Front. Syst. Biol. 22 July 2022
doi: 10.3389/fysb.2022.951401

A complete guide to human microbiomes: Body niches, transmission, development, dysbiosis, and restoration

Jelissa Reynoso-García¹, Angel E. Miranda-Santiago², Natalee M. Meléndez-Vázquez², Kimil Acosta-Pagán², Mitchell Sánchez-Rosado², Jennifer Diaz-Rivera³, Angélica M. Rosado-Quiñones^{1,2}, Luis Acevedo-Márquez², Lorna Cruz-Roldán², Eduardo L. Tosado-Rodríguez², María Del Mar Figueroa-Gispert² and Filipa Godoy-Vitorino^{4*}

¹Department of Biology, UPR Rio Piedras Campus, San Juan, PR, United States; ²Department of Microbiology and Medical Zoology, UPR School of Medicine, San Juan, PR, United States



Article

Infection order outweighs the role of CD4⁺ T cells in tertiary flavivirus exposure



Natalia M. Meléndez-Vázquez, Cintia Gómez-Colino, López Cruz, Ángela K. Pinto, James D. Brink, Caitlin A. Strohl



frontiers | Frontiers in Cellular and Infection Biology

Original Research
Front. Cell. Infect. Biol. 14 November 2022
doi: 10.3389/fcimb.2022.955159

Oral microbiota and periodontitis severity among Hispanic adults

Ana P. Ortiz^{1,2}, Kimil T. Acosta-Pagán³, Carla Oramas-Sepúlveda⁴, Maira A. Castañeda-Avila⁵, Brayan Vilanova-Cuevas¹, Jeslie M. Ramos-Cartagena⁶, José A. Vivaldi¹, Josué Pérez-Santiago¹, Cynthia M. Pérez⁷ and Filipa Godoy-Vitorino^{1*}

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Thesis proposal defense

- Maria del Mar Figueroa Gispert (Espino/Godoy)



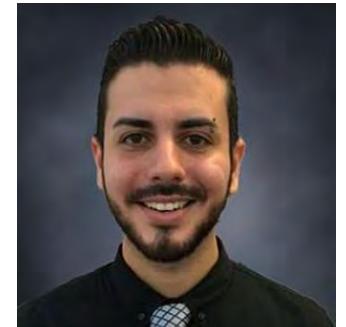
- Jennifer Diaz (Dorta/Godoy)



- Michael Gonzalez (Dorta)



Dissertation Defense: Dr. Gabriel Borges



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Congratulations to Jennifer Díaz!
accepted as 2023 *Janssen Scholar of Oncology*
Diversity Engagement Program



Scholars of Oncology
Diversity Engagement Program

The program provides mentorship from senior industry leaders to develop scientific skills inside and outside an industry setting

Mentor: **Stephanie M. Dorta Estremera, Ph.D.**

Co-Mentor: **Filipa Godoy**

Microbiology and Medical Zoology Department – UPR MSC

Cancer Biology - CCCUPR



CENTRO COMPRENSIVO DE
CÁNCER
UNIVERSIDAD DE PUERTO RICO



Student Achievements

- Participation in ISME18 Lausanne, Switzerland
- SACNAS 2022
- Microbial Ecology Course at Casa Pueblo



Halloween party fun!



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GRACIAS STUDENT CHAPTER!!



Martinez' Lab



Dorta Lab



Espino Lab



Sariol Lab



Godoy Lab



Bolaños Lab



BEAUTIFUL WORK Y'ALL!!