

Curriculum Vitae

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1. PROFESSIONAL HISTORY

1.1 Education [in reverse chronological order]

Present Rank: Assistant Professor Microbiology and Immunology Department – Tenure Track. Join appointment as honorary member: Gratis Associate Professor Department of Pediatrics. Louisiana State University, Health Science Center, Shreveport.

Graduate Faculty Status: Ph.D.

Education

Degree	Field of Study	Year	Institution
ILM Award	Project management and Leadership	2012	University of Nottingham
PhD (cum laude)	Microbiology	2006	University of A Coruna
MS	Microbiology and Research	2002	University of A Coruna
Thesis Degree (cum Laudem)	Clinical Microbiology and Epidemiology	2001	University of A Coruna
BS	Biology	1999	University of A Coruna

1.2 Academic and Professional Positions [in reverse chronological order]

My professional career started in the study of mechanisms of antibiotic resistance at the University of Coruna where I obtained Master of Science and Doctor of Philosophy. I continued my studies for a time at the University of Coruna as a postdoctoral researcher before moving to the University of Nottingham as a postdoctoral fellow, where I was awarded a Marie Curie Fellowship. After my fellowship I started my first independent position at the National Reference Laboratory of Antibiotic Resistance and the Zurita & Zurita Laboratories in Ecuador where I both ran a research program and a diagnostic laboratory. Due to limited resource in Ecuador, I decided to move back into a postdoctoral position in the United States to gain experience using mouse models for infectious diseases. With the valuable experiences I have gained throughout my career,

I am able to envision projects that combine microbiology and immunology from a clinical and basic stand point, now I want to start again as an independent investigator in the US.

January 2020- Present	<i>Assistant Professor Tenure track.</i> Department of Microbiology and Immunology. Since October 2020 joint faculty position: Gratis Associate Professor Department of Pediatrics School of Medicine Louisiana State University. LSU Health Center, Shreveport, LA, USA.
2015- 2019	<i>Postdoctoral Research Associate.</i> Harvill Lab, Department of Infectious Diseases. College of Veterinary Medicine. University of Georgia, Athens, USA.
2014-2015	<i>Director of research and Principal Investigator.</i> Biomedical Research Unit, Zurita & Zurita Laboratories, Quito, Ecuador.
2013-2014	<i>Principal Investigator</i> (Prometeo Fellowship) Ministry of Higher Education, Ecuador.
2010-2013	<i>Marie Curie Intra-European Fellowship.</i> Center for Biomolecular Sciences. University of Nottingham, UK.
2008-2010	<i>Postdoctoral Fellowship,</i> Barrie de la Maza. Center for Biomolecular Sciences. University of Nottingham, UK.
2007-2008	<i>Postdoctoral Researcher.</i> Genetic Department of the Galician Oncology Centre, A Coruña. Spain.
2003-2006	<i>PhD Fellowship</i> Spanish Society of Infectious Diseases and Clinical Microbiology (SEIMC). Department of Microbiology and Department of Research. Complejo Hospitalario Universitario A Coruna, A Coruna, Spain.
2001-2002	<i>Master student.</i> Department of Microbiology. Complejo Hospitalario Universitario A Coruna, A Coruna, Spain.
2000-2001	<i>Thesis degree, Assistant fellowship.</i> Department of Microbiology. Complejo Hospitalario Universitario A Coruna, A Coruna, Spain.

1.3 Honors and Awards:

HONORS →

2022	Elected Executive member of the Board of Directors of the International Bordetella Society
2022	Scientific Committee of the XIII Bordetella international Symposium. Vancouver, Canada
2022	Mentor in the “Programa de mentoring científico” Escuela de Mentoring. Spain

- 2022 Nominated ASM – South Central Branch Randall Award
- 2022 Invited speaker at the Walton High School - Science National Honor Society. Atlanta, USA
- 2021 Scientific Committee of the XIII Bordetella international Symposium. Vancouver, Canada
- 2021 Organizer committee of the Southcentral branch – American Society for Microbiology Conference. Shreveport, USA
- 2021 Councilor of the Council on Microbial Sciences (COMS) <https://asm.org/Council-on-Microbial-Sciences/Council-member-Landing>
- 2021 Nominated to participate on the Infection and Immunity's (IAI) annual special Minireview edition
- 2021 ASM South Central Branch Councilor of the Council on Microbial Sciences, USA
- 2021 ASM South Central Branch Councilor, USA
- 2021 Founder of the LSUHSC-S and Fundación Barrie de la Maza – Postdoctoral Fellowship Program
- 2021 Founder of the LSUHSC-S and Fundación Barrie de la Maza – PhD Fellowship Program
- 2021 Invited speaker (of a total 3) in the first Meet-Up of “Referentes Galegas”. Online event
- 2020 Nominated to participate on the Infection and Immunity's (IAI) annual special Minireview edition
- 2020 Member of the Board of Directors “Asociación de Becarios Barrie de la Maza”
- 2020 Founder and Organizer of the International *Bordetella* Lab Meeting (monthly online seminars for the *Bordetella* spp. community since 22.September.2020)
- 2020 Founder of the LSUHSC-S and Fundación Barrie de la Maza – Undergraduate Summer Fellowship
- 2020 Ambassador “Fundación Becarios Barrie de la Maza”
- 2019 Recognized by the Career Center at UGA as a mentor who has greatly contributed to the career development of UGA graduates in the 2019 class. Athens, Georgia, USA
- 2019 Nominated and awarded “Referentes Galegas”
- 2018-2020 Policy committee member of the ASM- SEB, USA
- 2017 International Exchanges 2016/R3. “Intracellular dynamics of Bordetellae”. Royal society international travel Award, UK.
- 2014-2020 Founder member of Marie Curie Alumni Association (MCAA) grants and awards working group.
- 2010-13 *Marie Curie Intra-European FP7* Postdoctoral research fellow, microbiology, Nottingham University, UK (18% rate of success that year).

- 2008-10 Barrie de la Maza Foundation Postdoctoral fellowship, microbiology, Nottingham University, UK.
- 2006 Travel Grant From the Spanish Society of Infectious Diseases and Clinical Microbiology (SEIMC) for the “XII Conference of the Spanish Society for Infection Diseases and Clinical Microbiology Valencia 2006”. Valencia, Spain.
- 2004-06 PhD Fellowship from the Spanish Society of Infectious Diseases and Clinical Microbiology. Complejo Hospitalario Universitario A Coruna, A Coruna, Spain.
- 2002 Travels grant from the Spanish Society of Infectious Diseases and Clinical Microbiology (SEIMC) for an exchange of 3 months in another laboratory. Hospital Bellvitge, Barcelona, Spain.

AWARDS →

- 2022: Awarded the Peggy Cotter Award for early career to assist to the American Society for Microbiology Conference, Microbe 2022. June 9-13 Washington D.C., USA.
- 2019: Awarded Catalysis Award from the American Lung Association. Career type of award to perform my own independent research and promote my next step to Faculty position.
- 2019: Awarded UGA Post-Doctoral Award. With a large number of Postdoctoral students I have been awarded a recognition as the best Postdoctoral researcher in the whole UGA in 2019 (<https://research.uga.edu/research-awards/2019/03/21/monica-cartelle-gestal/>)
- 2019: Awarded UGA Foreign Travel Assistance Program in 2019. To assist the XII *Bordetella* International Symposium
- 2019: Travel Award 12th International Symposium in Bordetella in 2019. To assist the XII *Bordetella* International Symposium
- 2018: Award for Excellence in Postdoctoral Research, First Place Job Talk Presentation: “Immunomodulation of Adaptive Immunity to *Bordetella* spp. infections.” Department of Infectious Diseases, 15th Annual Retreat & Research day. 19.October.2018. UGA, Athens, USA
- 2018: ASM travel Award: To assist to the conference, Microbe 2018 ASM conference in Atlanta, USA.
- 2018: ASM Press release room: My work presented at the Microbe 2018 ASM, was requested for the press release room “Improving protection by manipulating bacterial immuno-modulators”. Microbe, 7-11 June 2018. Atlanta, USA.
- 2018: Best poster Award: “Pathogen-induced airway infections modulate host glycosylation in mice”. InterPEG 2018, San Diego California, 10-11 March 2018, USA.
- 2016: Award for Excellence and Professional Research for Oral Presentation. Department of Infectious Diseases, 13th Annual Retreat & Research day. 29.April.2016. UGA, Athens, USA
- 2004: Award for the paper published with highest impact factor of the “Complejo Hospitalario Universitario A Coruna,” (2004). High level of resistance for ceftazidime conferred by a novel CTX-M enzyme derived from CTX-M-1 through a single Asp-240-Gly substitution. Antimicrobial Agents Chemotherapy 48: 2308-2313.

Role: P.I.

- COBRE: **Center for applied immunology and pathological processes** (Yurochko, A) → **\$10,529,128**
LSUHSC-S

This grant is a 10-million-dollar proposal to build a center of excellence in immunopathology here at LSHHSC-S. The grant includes independent applications by junior investigators. I am a project leader, and my application is an R21 format grant entitled “Eosinophils facilitate bacterial clearance by mediating antibacterial T cell responses in the respiratory tract”

Role: Project 3 Leader

2.1.2 Funded Grants Inactive [reverse chronological order]

- **Center of Excellence for Arthritis and Rheumatology Research Award C.E.A.R. (Gestal, M.C.) → \$50,000**
01/01/2021-31/12/2022
LSUHSC-S
“Eosinophils modulate adaptive immune responses during bacterial respiratory infections”.
Role: P.I.
- Swanson Feline Association (Harvill, E.T. & Gestal, M.C.) → **\$50,000**
01/01/2019-01/01/2022
UGA
“Novel and more efficient vaccine against Feline Bordetellosis”.
Role: P.I.
- Catalysis Award – American Lung Association (Gestal, M.C.) → **\$50,000**
07/01/2019-06/30/2021
UGA
“Disrupting bacterial immunomodulatory pathways to increase protective immunity”
Role: P.I. **This is a transition award**
- The Royal Society UK (Harvill, E.T. & Restif O.) → **£6,000**
01/01/2019-01/01/2022
UGA / University of Cambridge
“Intracellular Dynamics of *Bordetella*”
Role: Senior Key
- Pilot Translational and Clinical Studies Program. (Harvill, Eric T & Gestal M.C.) → **\$50,000**
01/01/2018-06/30/2018
UGA
“Developing a Novel Vaccine against Whooping-Cough”

Role: co-PI

- Ministry of Public Health of Ecuador (**Gestal M.C.**) → **\$100,000**
07/01/2014-06/30/2018
Quito, Ecuador
“Development National of a laboratory for the study of antibiotic resistance and research”
Role: PI
- Intra-European Marie Curie Fellowship - “SINOPLASMID” CODE RH0735 (**Gestal M.C.**) → **172,741 €**
07/01/2010-08/31/2012
University of Nottingham, UK
“Role of the *RsmA* and Two component systems genes found in the plasmid pMBA19a, and effects in *Sinorhizobium meliloti*”.
Role: Awardee
- Post-doctoral Fellowship. Fundación Barrié de la Maza (**Gestal M.C.**) → **32,400 €**
09/01/2008-07/31/2010
University of Nottingham, UK
“Role of the transcriptional regulator *RsmA* in *Sinorhizobium meliloti*”
Role: Awardee
- Ph.D. Fellowship. Sociedad Espanola de Enfermedades Infecciosas y Microbiologia Clinica – SEIMC (**Gestal M.C.**) → **45,000 €**
01/01/2004-12/31/2006
Complejo Hospitalario Juan Canalejo, Spain
“Molecular epidemiology of extended spectrum β -lactamases (ESBL) isolates during 2001 at Juan Canalejo’s Hospital. Structure-function studies in CTX-M group I β -lactamases”
Role: Awardee
- Exchange award. Sociedad Espanola de Enfermedades Infecciosas y Microbiologia Clinica – SEIMC (**Gestal M.C.**) → **900€**
10/01/2012-12/31/2002
Complejo Hospitalario Juan Canalejo, Spain
“Development of molecular techniques for the typing and characterization of a hospital outbreak of *Klebsiella pneumoniae* with decreased sensitivity to third generation cephalosporin in the neonatal ward, as a model”
Role: Awardee
- PHARMAZAM S.A (**Gestal M.C.**) → **1,000€**
07/01/2001-12/31/2001
Complejo Hospitalario Juan Canalejo, Spain

“Multicenter national study of urinary pathogens isolated in primary care. Antibiotic usage”

Role: Awardee

- Grant Fundación Complejo Hospitalario Juan Canalejo (**Gestal M.C.**) → **6,000€**
02/01/2000-06/30/2001
Complejo Hospitalario Juan Canalejo, Spain
“Mechanisms of Resistance in Urinary Pathogens and Antibiotic usage”
Role: Awardee
- Ministry of Education Spain (**Gestal M.C.**) → **900€**
01/01/1995-01/01/2000
Universidad de A Coruna, Spain
“BSc Scholarship”
Role: Awardee
- Ministry of Education Spain (**Gestal M.C.**) → **500€**
01/01/1992-01/01/21995
Universidad de A Coruna, Spain
“Scholarship for Bacculaureate studies”
Role: Awardee

2.2 Patents

USA patent:

Patents

- Harvill E., **Cartelle M.** “*Bordetella* sigma regulator”. UGA Innovation and Gateway. U.S. Application Serial No: 62/564,934. Date of filled 28.September.2017. Submitted full patent (PCT) 30. September. 2018 (50% author)
- Fernández JL, Goyanes V, **Cartelle M**, Muriel L, Bou G, Gosálvez J. “Method for determining DNA fragmentation in microorganisms”. Micromax kit. Halotech DNA SL, Madrid, Spain. Patent number: 9212391. Patent application number 20100129803. Filed 8. November.2007/Date of the patent 23.July.2013. (3% author)

Provisional patents

- Provisional patent: “Anti-IL-1RA as treatment for long-term bacterial infection” (100% author)
- Provisional patent: “*Bordetella* spp, phage related proteins as potential antigenic vaccine candidates” (100% author)

2.3 Mentoring

2.3.1 Gestal Lab Personnel

Year	Name	Position	Current position
2022- Present	Jose Predeira Lopez	Summer Undergraduate	Current member Gestal Lab
2022- Present	Emily Cox	Summer Undergraduate	Current member Gestal Lab
2022- Present	Gabriella Miller	SMART – High School Student	Current member Gestal Lab
2022- Present	Arayajada Perkins	Biostart – High School Student	Current member Gestal Lab
2020 - present	Nicholas First	PhD candidate – Third year	Current Member Gestal Lab
2020 - present	Courtney Gregoire	MD student	She is still a MD student that was awarded in 2020 a fellowship to finish her studies. Current member Gestal Lab
Past members			
2021 - present	Connor Roan	Graduate student	Medical lab technician Veterans Hospital, Shreveport
2021 - present	Sarah Johnson	High School Student – SMART program	Undergraduate “Rice University”. She will come back in summer to continue to be participating on our research program
2021 - present	Brooklyn Butler	Middle school student	Middle School – Youree Drive Spartans
2021	Nicolas Ambrosis, PhD	Exchange Postdoctoral researcher	Researcher CONICET, Argentina
2021	Keila Belhart	Exchange PhD student	PhD Students at CONICET, Argentina
2021	Esther Calvino-Sanles	LSUHSC-S and Fundación Barrie de la Maza – Undergraduate Summer Fellowship	She is finalizing the last year of college to come back as a PhD student

2021	Manuel Rico Fernandez San Silvestre	LSUHSC-S and Fundación Barrie de la Maza – Undergraduate Summer Fellowship	He is in Medical school – University Santiago de Compostela, Spain
2021	Aine O’Nuanain	Summer undergraduate Program LSU Health Shreveport	She is in College at LSU Baton Rouge
2021	Edna Ondari, PhD	Postdoctoral Researcher	She is now a postdoctoral researcher at the University of Dundee, Scotland, United Kingdom
2020- 2021	Tyler Lynne Williams	Research Associate	Currently Studying “Laboratory Medical Sciences” LSUHSC-S
2020- 2021	Eshaan Tandon	High School Student – SMART	Currently studying “Biology” in Tulane University He continues to come every summer and he is an active member that even in the distance still works on our projects
2020- 2021	Sarah Elizabeth Gatti	High School Student – SMART	Currently studying “Biomedical engineering” in Vanderbilt University
2020- 2021	Patrick Simon	High School Student – SMART	Currently studying Biology” in Arkansas University

2.3.2 Gestal Lab Personnel accomplishments

Students’ presentations

- 1) “The host VIP/VPAC2 Signaling Promotes Colonization and Persistence of the three classical *Bordetella* in the Lower Respiratory Tract” Jose Pedreira, Nicholas First, Manuel Rico, XiaoHong Lu, and Monica C. Gestal. Fall Seminar Series, Department of Microbiology and Immunology. LSU Health, Shreveport. 24. August.2022
- 2) “Eosinophils mediate iBALT during *Bordetella* spp. infection” Emily Cox, Nicholas First, Monica Gestal. Poster Summer undergraduate Program 2022. 27.July.2022
- 3) “Disruption of the VIP/VPAC2 Axis Limits Colonization and Enhances Clearance of *Bordetella* spp. from the Lower Respiratory Tract” Nicholas First, Manuel Rico, XiaoHong Lu, Monica Gestal. ASM Microbe 2022, Washington DC, USA.9-13.June.2022
- 4) “Disruption of the VIP/VPAC2 Axis Limits Colonization and Enhances Clearance of *Bordetella* spp. from the Lower Respiratory Tract” Nicholas First, PhD student. 13th *Bordetella* International Symposium, Vancouver, Canada. 26-30.June.2022
- 5) “Eosinophils promote the formation of BALT following infection with BBmut” Nicholas First, PhD Student. Fortnight Host Pathogen Interaction, Seminar series. 8.February.2022
- 6) “Beyond hemostasis: The role of platelets during infection” Microbiology and immunology Connor Roan, Graduate Student. Seminar series. 12.January.2022

- 7) "Vasoactive intestinal peptide and its receptor 2 mediate host-pathogen interactions during *Bordetella* spp. infections" 3 Minutes thesis competition – International *Bordetella* Lab Meeting (IBLM). 20.December.2021 – **FIRST PRIZE**
- 8) "*Bordetella bronchiseptica* blocks eosinophil effector functions to disrupt adaptive immunity" Research update – Discussions in Bacteriology. Nicholas First, PhD Student. 28.October.2021.
- 9) "Gut Derived IgA+ Plasma Cells: Recently Discovered Players in Neuroinflammation and Multiple Sclerosis" Microbiology and Immunology Seminar Series. Nicholas First, PhD Student. 13.October.2021
- 10) "Phage or not Phage, *Bordetella* virulence untangled" Microbiology and Immunology Seminar Series. Esther Calvino-Sanles, Undergraduate Student. 25.August.2021
- 11) "New murine models to better understand *Bordetella* pathogenesis" Microbiology and Immunology Seminar Series. Esther Calvino-Sanles, Undergraduate Student. 25.August.2021
- 12) "Dengue Virus Manipulation of Mosquito Metabolism". Microbiology and Immunology Seminar Series. Nicholas First, PhD Student. January 7, 2021
- 13) "*Bordetella* Adenylate Cyclase Toxin Inhibits Monocyte-to Macrophage Transition and Dedifferentiates Human Alveolar Macrophages into Monocyte-like Cells" Journal Club – Discussions in Bacteriology. Nicholas First, PhD Student. April 29, 2021

High school students' accomplishments:

- 1) Nicholas First (August 2022) → His microscope photography was selected as the winner to be the cover of the Fall Graduate Research Day at LSU Health Shreveport, 2022.
- 2) Eshaan Tandon (June 2021) → JHSH Momentum grant to promote his STEM enrichment in our lab.
- 3) Eshaan Tandon (March 2021) → High School Science Fair "*Bordetella bronchiseptica* Mediates Eosinophil Trap Formation by a btrS-mediated Mechanism"
- 4) Sarah Johnson (Science Fair JSHS, 2022) → Science fair "Mechanisms of Immunomodulation in *Bordetella bronchiseptica*"
- 5) Sarah Johnson (CMHS Science Fair, 2022) → Science fair "Mechanisms of Immunomodulation in *Bordetella bronchiseptica*"
- 6) Brooklyn Butler (Science Fair 2022) → Project entitled, "Germs in the classroom". Selected to present in the Science Fair Shreveport 2022. **Second place** in the "Cellular & Molecular Biology" category at the Regionals Louisiana Region 1 Science & Engineering Fair 2022.

2.3.3 Master and PhD Students

Name	Program I have been involved in	Current position
Nicholas First	PhD Candidate – LSU Health Science Center Shreveport	
Connor Roan	Graduate student – LSU Health Science Center Shreveport	Medical Lab technician in the VA hospital, Shreveport
Claudia Soria Segarra	MSc Thesis "Determinación de beta lactamasas de espectro extendido tipo CTX-M en aislamientos urinarios de <i>Escherichia coli</i> obtenidos entre 2008 y 2013 en la ciudad de Guayaquil". Administración Nacional de Laboratorios e Institutos de Salud Dr. Carlos G. Malbrán. 2016	PhD student in University of Granada, Spain

2.3.4 Dissertation Committee since Faculty position

Name	Laboratory	End year
Bailey Mosher	Andrew Yurochko lab – LSU Health Science Shreveport	Graduated PhD 2021
Alba Mir	Juanjo Gonzalez – Val D’Hebron Spain	Graduated PhD2021
Jarred Tiller	Andrew Yurochko lab – LSU Health Science Shreveport	Left the program 2020
Amparo Martinez	Africa Gonzalez, University of Vigo, Spain	Expected 2022
Danielle Schaal	Rona Scott lab – LSU Health Science Shreveport	Expected 2025
Temitayo Bambose	Matthew Woolard Lab– LSU Health Science Shreveport	Expected 2025
Nicholas First	Monica Cartelle Gestal Lab – LSU Health Science Shreveport	Expected 2025
Lauren Henderson	Jeremy Kamil Lab– LSU Health Science Shreveport	Expected 2026
Cierra Word	Rohit Jangra Lab – LSU Health Science Shreveport	Expected 2027

2.3.5 Students prior Faculty position

Undergraduate research: Since starting my career I have mentored 26 undergraduate students with whom I have 332 poster communications at National and International conferences. These students have served as co-authors on two publications in lay-journals, 10 publications in peer-reviewed journals, and 3 more in preparation. **Prizes:** One of my undergraduate students from Ecuador was awarded First Prize in the Young Researcher Forum with research presented from my Laboratory (Gestal Lab). One of my undergraduate students at USA has been awarded the McNair Fellowship and Goldwater Scholarship, as well as she was highly recognized by her University by obtaining the Levinus Clarkson Award. Four of my undergraduate students at UGA have been awarded the CURO fellowship. And I have been recognized by the Career Center at UGA as a mentor who has greatly contributed to the career development of UGA graduates in the 2019 class.

Other: At UGA I have also supervised 6 Ph.D. rotation students between 2016-2019.

Committee activities: Listed below,

1. Committee member of Eva Torres Sangiao, with the Thesis entitled “Community-acquired methicillin resistant *Staphylococcus aureus*: Effects of subinhibitory concentrations of antibiotics on the proteome profile of USA300”. Director: Carlos Garcia-Riestra. Universidade Santiago de Compostela 2015

Students’ accomplishments:

2014: Best Poster award and first prize in the young researcher’s forum for my undergrad student’s research: to **Gestal Lab** “A look back at the situation of Ecuador. Is *Salmonella* spp. still a big problem?”. “3rd International Conference on Clinical Microbiology & Microbial Genomics”. September 24-26, 2014, Valencia, Spain.

2013: Best Poster award: **Gestal Lab** “case report: Ichthyosis in two twins in Banos” XIV International seminar of actualization in medicine, nutrition and health promotion.

2.4. Publications (h-index 20 / 1951 citations)

2.4.1. Book Chapters, Monographs, and Reviews [reverse chronological order]

- I. Bou G and **Cartelle M.** Caso 312, 2004 Casos de microbiología clínica VI:68-70. Francisco Soria-Melguizo. SEIMC. <http://www.f-soria.es/casos-de-micro.html>
- II. Holban AM, **Cartelle Gestal M.** Series Foreword in Academic Press Elsevier (2016-2017):
 - a. “Novel Approaches of Nanotechnology in Food”.
 - b. “Nutraceuticals”.
 - c. “Encapsulations”.
 - d. “Emulsions”.
 - e. “Multifunctional Systems for Combined Delivery, Biosensing and Diagnostics”.
 - f. “Water purification”.
 - g. “Nanobiosensors”.
 - h. “Food packaging”.

2.4.2. Peer-Reviewed Journal Articles [reverse chronological order].

2.4.2.1 Published manuscripts

#Corresponding author

Original research

1. Nicholas J. First, Amparo Martinez, África Gonzalez-Fernández, Sushma Bharrham, Connor Roan, Emily Cox, Jian Wang, Rona Scott, Matthew Woolard, and **Monica C. Gestal#**. “Bordetella spp. block eosinophil recruitment to suppress lung iBALT formation” (2022). BioRxiv. <https://doi.org/10.1101/2022.09.27.509784>
2. Tyler Williams, Connor Roan, Nicholas J. First, Sarah Johnson, and **Monica C. Gestal#**. “Bordetella Spp. Utilize T3SS To Promote Secretion of IL1RA Leading to Long-Term Persistent Infections” Submitted to iScience. BioRxiv. <https://doi.org/10.1101/2022.09.26.509564>
3. Claudia Soria-Segarra, Carmen Soria-Segarra, Michelle Andrade-Soriano, **Monica C Gestal**, Jose Gutierrez-Fernandez “COLISTIN AGAR- 3 µg/mL in Carbapenemase-Producing Enterobacterales for colistin resistance surveillance” Journal of Clinical Laboratory Analysis. 2022;00:e24639 (1-6). **PMID:** 35944176. <https://doi.org/10.1002/jcla.24639>
4. **Monica C Gestal#**, Laura K. Howard, Kalyan K. Dewan, Eric T Harvill. “Bbvac: A Live Vaccine Candidate That Provides Long-Lasting Anamnestic and Th 17 Mediated Immunity Against the Three Classical *Bordetella* spp.”. January/February 2022 Volume 7 Issue 1 e00892-21 mSphere. **PMID:** 35196124. <http://doi:10.1128/msphere.00892-21>
5. IH Soumana, B Linz, KK Dewan, D Sarr, **MC Gestal**, Laura K Howard, Amanda D Caulfield, Balázs Rada, Eric T Harvill. “Modeling Immune Evasion and Vaccine Limitations by Targeted

- Nasopharyngeal *Bordetella pertussis* Inoculation in Mice". *Emerging Infectious Diseases*, 2021 (8) 2107 (1-10). PMID: 34286682 <https://doi.org/10.3201/eid2708.203566>.
6. **Monica C. Gestal**[#], Uriel Blas-Machado, Hannah M. Johnson, Lily N. Rubin, Kalyan K. Dewan, Claire Bryant, Michael Tiemeyer and Eric T. Harvill. "Disrupting *Bordetella* Immunosuppression Reveals a Role for Eosinophils in Coordinating the Adaptive Immune Response in the Respiratory Tract". *Microorganisms* 2020, 8(11), 1808 (1-15). PMID: 33212993 <https://doi.org/10.3390/microorganisms8111808>.
 7. Estefania Marino-Brito, Fernando Villavicencio, Carolina Satan, Jose E Villacis, **Monica C Gestal**[#]. "Fosfomycin, Applying Known Methods and Remedies to A New Era". *Diseases* 2020 8(3), 31 (1-8). PMID: 32784746 <https://doi.org/10.3390/diseases8030031>.
 8. José E. Villacís, Jorge A. Reyes, Hugo G. Castelán-Sánchez, Sonia Dávila-Ramos, Miguel Angel Lazo, Ahmad Wali, Luis A. Boderó, Yadira Toapanta, Cristina Naranjo, Lorena Montero, Josefina Campos, Marcelo G. Galas, and **Mónica C. Gestal**[#]. "OXA-48 Carbapenemase in *Klebsiella pneumoniae* Sequence Type 307 in Ecuador". *Microorganisms* 2020, 8(3), 435 (2-10); PMID: 32204571 <https://doi.org/10.3390/microorganisms8030435>.
 9. **Monica C Gestal**[#], Katie Howard, Kalyan Dewan, Hannah M. Johnson, Mariette Barbier, Iliassou Hamidou, Israel Rivera, Bodo Linz, Clare Bryant, and Eric Harvill. "Enhancement of immune response against *Bordetella* spp. by disrupting immunomodulation". *Scientific communications Sci Rep* 9, 20261 (2019) (1-14) PMID: 31889098 <https://doi.org/10.1038/s41598-019-56652-z>.
 10. Keila Belhart¹, Maria de la Paz Gutierrez, Federico Zacca, Nicolas Ambrosis, **Monica Cartelle Gestal**, Dawn Taylor, Kurt Dahlstrom, Eric Harvill, George O'toole, Federico Sisti, and Julieta Fernandez. "*Bordetella bronchiseptica* Diguanylate Cyclase BdcA Regulates Motility and is Involved in Transmission Between Hosts." *Journal of Bacteriology*. JB00011-19. PMID: 31209073 <https://doi.org/10.1128/JB.00011-19>
 11. Kalyan K. Dewan, Dawn L. Taylor-Mulneix, Laura L. Campos, Amanda L. Skarlupka, Shannon M. Wagner, Valerie E. Ryman, **Monica C. Gestal**, Longhuan Ma, Uriel Blas-Machado, Brian T. Faddis, Eric T. Harvill. "A Model for Chronic, Transmissible Otitis Media in Mice". *PLoS Pathogens*. 15 (4), e1007696 (1-20). PMID: 30970038 <https://doi.org/10.1371/journal.ppat.1007916>.
 12. Dewan, Kalyan; Skarlupka, Amanda; Rivera, Israel; **Gestal, Monica**; Taylor-Mulneix, Dawn; Wagner, Shannon; Ryman, Valerie; Rodriguez, Coralís; Hamidou Soumana, Iliassou; Levin, Bruce; Harvill, Eric. "Development of macrolide resistance in *Bordetella bronchiseptica* associated with the loss of virulence". *Journal of Antimicrobial Chemotherapy*. 2018 Aug 10. 73(10) pages 2797-2805. PMID: 30107601 <https://doi.org/10.1093/jac/dky264>.
 13. **Monica C. Gestal**[#], Israel Rivera¹, Laura K. Howard², Kalyan K. Dewan, Iliassou Hamidou Soumana, Margaret Dedloff², Tracy L. Nicholson, Bodo Linz and Eric T. "Blood or serum exposure induce global transcriptional changes, altered antigenic profile, and increased cytotoxicity by Classical *Bordetellae*". *Frontiers in Microbiology* 07 September 2018, 9:1969 (1-10). PMID: 30245672 <https://doi.org/10.3389/fmicb.2018.01969>.

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Reviews

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 14. Alina Maria Holban, **Monica Cartelle Gestal**[#], Alexandru Mihai Grumezescu. "Control of biofilm-associated infections by signaling molecules and nanoparticles". International Journal of Pharmaceutics. (2016). Mar 2. pii: S0378-5173(16)30149-1. **PMID:** 26945736. <https://doi.org/10.1016/j.ijpharm.2016.02.044>.
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2.4.2.2. Manuscripts in preparation or in revision (# corresponding author)

1. Tyler L. Williams, Connor Roan¹, Nicholas First, Sarah Johnson, and **Monica C. Gestal[#]**. “Bordetella Spp. Utilize T3SS To Promote Secretion of IL1RA Leading to Long-Term Persistent Infections” Submitted to iScience – Cell press
2. Keila Belhart, Federico Sisti, **Mónica C. Gestal[#]**, Fernández Julieta[#]. “*Bordetella bronchiseptica* diguanylate cyclase BdcB inhibits the type three secretion system and impacts immune response” Submitted to Spectrum – ASM Journal

2.4.3 Publication in lay journals

1. Katherin Samanta Narváez Inca, José Luis Rodríguez Martínez, **Mónica Cartelle Gestal[#]**. (2014). “Síndrome de Guillain-Barré en niño de 5 años se exacerba tras proceso neumónico”. Ciencia e Investigación Médico Estudiantil Latinoamericana Vol. 19 Núm. 2 Ciencia e Investigación Médico Estudiantil Latinoamericana (CIMEL) - Casos Clínicos
2. **Cartelle M.[#]**, Alulema A. and Chico P. (2014) “Our Bacterias: From the farm to the table. Implications of the antibiotic usage in the farming in the antibiotic resistance and public health”. Revista Cubana de alimentación y nutrición. Vol24, n1: 1-16
3. **Mónica Cartelle Gestal[#]**, Jeannete Zurita. (2015) “La nanotecnología en la producción y conservación de alimentos”. Revista Cubana de Alimentación y Nutrición. Vol 25 Issue 1:184-207
4. **Cartelle Gestal M[#]**, Villacis J.E.² (2014) Superbugs, Ecuador and the future” Revista Facultad de Ciencias Médicas de la Universidad de Guayaquil. Vol 17, April, June 2014; 56-61
5. **Cartelle M.[#]** “Vencer la Resistencia a antibioticos” Investigación y ciencia. May 2013

2.4.4 Publication news media

PRINT MEDIA:

1. Meet the researchers of the American Lung Association. <https://www.lung.org/research/about-our-research/meet-the-researchers/monic-cartelle-gestal>.
2. YouTube University of A Coruna. <https://www.youtube.com/watch?v=hHAI1jJwb8>
3. Interview in the newspaper “La Fundación Barrié instaure becas de verano en el extranjero para universitarios” La voz de Galicia 25.11.2020
<https://www.lavozdeg Galicia.es/noticia/educacion/2020/11/25/fundacion-barrie-instaure-becas-verano-extranjero-universitarios/00031606289949723418677.htm>
4. Interview in the newspaper “En Luisiana los estudiantes de doctorado cobran 29.000\$” La voz de Galicia 17.Junio.2020 https://www.lavozdeg Galicia.es/noticia/coruna/2020/06/17/luisiana-estudiantes-cobran-29000-dolares-ano-doctorado/0003_202006H17C4995.htm
5. Interview in the newspaper “Los de 40 toman el mando” La Voz de Galicia. 2.February.2020
https://www.lavozdeg Galicia.es/noticia/coruna/coruna/2020/02/02/coruna-los-40-mando/0003_202002H2C2991.htm
6. Interview in the newspaper “Una científica gallega desarrolla una vacuna mas efectiva contra la Tosferina” La Voz de Galicia. 7.April.2019
https://www.lavozdeg Galicia.es/noticia/sociedad/2019/04/07/cientifica-gallega-desarrolla-vacuna-efectiva-contra-tosferina/0003_201904G7P27991.htm
7. Interview in the newspaper “International scientist finds her niche in Georgia — fighting a worldwide scourge”. Georgia Health News. 9.November.2017
<http://www.georgiahealthnews.com/2017/11/international-scientist-finds-niche-georgia-fighting-worldwide-scourge/>
8. “Ecuador el país de las oportunidades”. 43ºN 8ºW Revista Nº 18. July 2015
9. “Science in Ecuador”. N 43 Asociación de Becarios de la Fundación Barrié de la Maza”. July 2014
10. Interview in the newspaper “Faro de Vigo” page 8. “Profesores gallegos fichan por universidades de Latinoamérica con sueldos de hasta 4.300 euros” 9. December.2013
<https://www.farodevigo.es/galicia/2013/12/09/profesores-gallegos-fichan-universidades-latinoamerica-17319268.html>
11. Interview in the newspaper “La Opinión”. “La experiencia de una investigadora” 31.August.2013
<https://www.laopinioncoruna.es/coruna/2013/08/31/experiencia-investigadora-24854538.html>
12. Interview in the newspaper “La opinión”. “Ecuador ficha a una bióloga coruñesa” 27.August.2013
<https://www.laopinioncoruna.es/sociedad/2013/12/09/vine-ecuador-intentarlo-tres-anos-24820747.html>
13. Interview in the newspaper “El Faro de Vigo”. “La educación es lo que sacara a España de la crisis” Sunday 3.June.2012 <https://www.farodevigo.es/sociedad/2012/06/03/educacion-sacara-espana-crisis-17652887.html>

14. Interview in the newspaper Faro de Vigo. 9.December.2013 “Si amas la ciencia tendras tu oportunidad” <https://www.farodevigo.es/galicia/2013/12/09/monica-cartelle-amas-ciencia-tendras-17319287.html>
15. Cartelle M. “Diálogos 01: La ciencia en España” N 43 Asociación de Becarios de la Fundación Barrie de la Maza. 2011. “Diálogos 01” p 42-47
16. Interview in the newspaper “La Opinion La Coruña”. “Situation of science in Spain” Sunday 24-Oct-2010:4 <https://www.laopinioncoruna.es/coruna/2010/10/24/monica-cartelle-gestal-apoyar-progreso-25185257.html>
17. Cartelle M. “Mi experiencia como investigadora en España y en el Reino Unido” N 43 Asociación de Becarios de la Fundación Barrie de la Maza. 2010. p 53-55

RADIO AND TV:

1. Television – Television de Galicia “Bos Dias” (Regional TV). 10.January.2022. Topic: COVID new variant Omicron, IHU and antiviral treatment. <http://www.crtvg.es/tvg/a-carta/bos-dias-10-00-5473082>
2. Television – Television de Galicia “Quen anda ahi” (Regional TV) 5.March.2021. Topic: COVID one year later. <https://www.crtvg.es/tvg/a-carta/programa-242-completo-4855783>
3. Television – Television de Galicia “Quen anda ahi” (Regional TV) 24.September.2020. Topic: Dealing with COVID, how vaccines are coming along? <http://www.crtvg.es/tvg/a-carta/programa-129-4581884>
4. Television – Television de Galicia “Quen anda ahi” (Regional TV) 25.June.2020. Topic: Dealing with COVID, how efficient are current treatments? http://www.crtvg.es/tvg/a-carta/programa-109-4460393?fbclid=IwAR34pMm8wSIM0R39BeBgWMmMGGpJmRB5RieW_0LjPpyDAOMNqgiKFog54xs
5. Television – Television de Galicia “Quen anda ahi” (Regional TV) 18.June.2020. Topic: Dealing with COVID, what are the expectations for a new vaccine? <http://www.crtvg.es/tvg/a-carta/programa-104-4452329>
6. Television - Television de Galicia: “A Revista”. (Regional TV) 1.May.2020. Topic: Approaches taken by LSU Health Shreveport to combat COVID-19. <http://www.crtvg.es/tvg/a-carta/a-revista-4397045?t=6334>
7. Television - Television de Galicia: “Fun polo aire”. (Regional TV) 22.April.2020. Topic: Approaches taken by LSU Health Shreveport to combat COVID-19. <http://www.crtvg.es/tvg/a-carta/programa-348-4384937> // <http://www.crtvg.es/tvg/a-carta/programa-348-4384937?t=4410>
8. Television - Television de Galicia: “Bos dias”. (Regional TV) 7.April.2020. Topic: Approaches taken by LSU Health Shreveport to combat COVID-19. http://www.crtvg.es/informativos/monica-cartelle-non-sabemos-que-vai-pasar-condo-volvamos-a-rua-o-ideal-seria-unha-vacina-4366521?fbclid=IwAR28_7jsNJwR8aAw5r2NgsbwrXR6bjwCAOamHh8jBCjtE54HOF5rVF4PSPE
9. Television - Antena 3: “Espejo Publico”. (National Spanish TV) 6.April.2020. Topic: Approaches taken by LSU Health Shreveport to combat COVID-19. <https://www.antena3.com/programas/espejo-publico/>
10. Radio Chasqui -Radio Quito: “Bacterias Actuaciencia”. (Local Radio) March. 2013. Topic: State of the science in Ecuador. <http://bacteriasactuaciencia.blogspot.com/2015/01/monica-cartelle-gestal-microbiologa-y.html>

11. Radio – RTVG: “Efervescencia”. Topic: Celebration of the First Outreach Science day in A Coruña. I came up with the idea, got the funding, got the volunteers, organize the experiments, organize the event, have a table with experiments, and contacted visitors. (Regional Radio) 13.April.2012 <http://www.crtvg.es/rg/podcast/efervescencia-efervescencia-do-dia-14-04-2012-297665#.T5Gq7mkKvys.facebook>
12. Televisión - Television de Galicia: “A Carta”. Topic: First Science Outreach Day in A Coruña. (Regional TV) 13.April.2012 <http://www.crtvg.es/tvg/a-carta/a-revista-295298>

INTERNET

- <http://crecerenlibertadgalicia.blogspot.com.es/>
- <http://www.crtvg.es/tvg/a-carta/a-revista-295298> (min 13.20)
- <http://www.colegiomontegrande.es/educacion-primaria/404/dia-de-la-ciencia#leer>
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- <http://becariosbarrie.org/exito-del-programa-cientificos-por-un-dia>
- Palabrario Fundación Barrie « Que es el quorum sensing »

2.5 Invited Speaker at Seminars Series and Conferences National and International

2022:

1. “Bacterial molecular mechanisms for host immune suppression” 12.September.2022. Online Seminar series University of A Coruna, Spain
2. “The secret life of eosinophils” 22.August.2022. Online seminar series. International Bordetella Lab Meeting (IBLM)
3. “*Bordetella* spp. and eosinophils: the untold story”. 2.May.2022 Invited speaker to the Seminar series of the Infectious Diseases Department at University of Georgia, USA.

2021:

4. “Taking an example: *Bordetella pertussis*”. 23.August.2021 ASM- SEIMC - Webinar: Infection Medicine: new-old approaches and perspectives.
5. “Bacterial Manipulation of innate responses” 25.March.2021. Biochemistry Department at LSU Health Science Center, Shreveport – Invited by Dr. De Benedetti
6. “Bacterial manipulation of the host responses to increase persistence” 10.February.2021. Teams meeting – Cincinnati Children’s Hospital – Invited by Dr. Marc Rothenberg.

2020:

7. “Challenges as a new Assistant Professor in the COVID era” 25.June.2020. Zoom meeting – University of Georgia – Invited by Dr. Eric Harvill.
8. “Eosinophils, the forgotten immune cells. New perspectives in health and disease” Bordetella Research Day. 6.August.2020. Zoom meeting - University of Maryland – Invited by Dr. Nicholas Carbonetti.
9. “Challenges as a new Assistant Professor in the COVID era”. 25.June.2020. Zoom meeting - University of Georgia – Invited by Dr. Eric Harvill.
10. “Eosinophils Are Required for Generation of Protective Immunity in The Respiratory Tract”. 28.May.2020. Zoom meeting - University of Maryland – Invited by Dr. Nicholas Carbonetti.

2019:

11. "New insights into host-pathogen interaction: targeting immunomodulation for prevention and therapy" 14.July.2019. LSU Health, Shreveport, LA, **USA**.
12. "Mediating Immunomodulation Suppresses Immunity To Infection". Seminar Series Maine, University. 11.June.2019, **USA**.
13. "Immunomodulation Suppresses Innate And Adaptive Immunity To *Bordetella* Infection". 12th International Symposium on Bordetella, 9-12.April.2019. Brussels, **Belgium**.
14. "Transcription Factor-Mediated Immunomodulation Suppresses Innate And Adaptive Immunity To *Bordetella* Infection". Seminar Series Baylor School of Medicine. TCMC Seminar, 22.January.2019. Houston, **USA**.

2018:

15. "Immunomodulation suppresses adaptive immunity to *Bordetella* infection". ASM Southeastern Branch Meeting "Microbial Dynamics and Infection, 30 November-2 December. 2018. Atlanta, **USA**
16. "Immunomodulation of Adaptive Immunity to *Bordetella* spp. Infection". Infectious Diseases Retreat Day, 19.October.2018. Athens, **USA**.
17. "Improving protection by manipulating bacterial immuno-modulators". Seminar Series Department of Infectious Diseases College of Veterinary Medicine. Cambridge University, 25.June.2018. Cambridge, **UK**.
18. "Bacterial sigma factor manipulates host innate response". *Bordetella* science day at UGA, 7.June.2018. Athens, **USA**.
19. "Improving protection by manipulating bacterial immuno-modulators". ASM Microbe 2018 - Rapid Fire Talk, 4.June.2018. Atlanta, **USA**.
20. "Improving protection by manipulating bacterial immuno-modulators". *Bordetella* Research Day, Oral presentation, 9.April.2018, Baltimore, **USA**.
21. "Pathogen-induced airway infections modulate host glycosylation in mice". InterPEG 2018, 10-11 March 2018. San Diego California, **USA**.

2017:

22. "Disrupting immuno-modulators to induce better immune response". Georgia *Bordetella* Symposium (Selected oral presentation), 30.October.2017. Athens, GA, **USA**
23. "Disrupting immuno-modulators to induce better immune response". UGA-CVI Seminar Series Invited Speaker, 11.October.2017. Athens, **USA**

2016:

24. "Studying of Bordetella-Host-pathogen interaction by using the mice model". CDC invited guest speaker, 1.November.2016. Atlanta, **USA**
25. "Genetic determinants of intracellular survival and growth of *Bordetella*". College of Veterinary medicine. University of Cambridge, 4.October.2016. Cambridge, **UK**.

26. "Competition Between Resident Microbiota and Invading Pathogens". Retreat day-Vet Med, 29.April.2016. Athens, **USA**

2015:

27. "Study of healthy carriers of ESBL-producing enterobacteriaceae: alarming rates of resistance in Ecuador". Antibiotic resistance and antibiotics alternatives: Looking towards the future, 3-5.November.2015. London, **UK**.
28. "Resistance to carbapenems in Ecuador". XXII Latinamerican Congress of Clinical Biochemistry and Laboratory Medicine (COLABIOCLI 2015), 24-26.September.2015. Quito, **Ecuador**
29. "Detección, acción y solución de brotes hospitalarios" Semana Científica INSPI. Symposium of Infectious Diseases associated with Public Health, 8.September.2015. Guayaquil, **Ecuador**
30. "Study of the evolution of antibiotic resistance in Ecuador during the last five years". 2nd Annual Microbiology & Infectious Diseases Asia Congress, 23–24.June.2015. **Singapore**
31. "Quorum sensing as a tool to detect and treat infections". Plenary Session speaker. XXVII Panamerican conference of Infectology, 15-19.May.2015. Quito, **Ecuador**.
32. "Use of molecular techniques for the microbiology diagnosis". XXVII Panamerican conference of Infectology, 15-19.May.2015, Quito, **Ecuador**.
33. "Antibiotic stewardship and outbreak control". I meeting of the Network of vigilance of antibiotic resistance, 8-10.April.2015. Quito, **Ecuador**.
34. "Antimicrobial resistance. Actual situation in Ecuador". Ministry of Public Health of Ecuador. MSP – Invited Speaker at the Ministry of Public Health – Direction of Intelligence of health, 18.March.2015. Quito, **Ecuador**.

2014:

35. "Tyrosine - silica biostructures for improved drug delivery against *Staphylococcus aureus*". 3rd International Conference on Clinical Microbiology & Microbial Genomics, 24-26.September.2014. Valencia, **Spain**.
36. "Study of the evolution during 20 years of the tropical and zoonotic diseases in Ecuador". 3rd International Conference on Clinical Microbiology & Microbial Genomics. 24-26.September.2014. Valencia, **Spain**.
37. "The creation of a National reference Laboratory. Control of Infectious Diseases". Ministry of Public health of Ecuador. Invited for a presentation to the sub-secretary of the Minister, 25.July.2014. Quito, **Ecuador**.
38. "Resistance vs. virulence". II Latin-American Network of Molecular Epidemiology and Evolutionary, Genetics of Infectious Diseases, 21-23.July.2014. Quito, **Ecuador**.
39. "Quorum Sensing, The New Tool to Detect and Control Pathogens". Microbial & Infectious diseases Asia Congress ,10, 11.June.2014. **Singapore**.

2013:

40. "Effects of the nutrition in the intestinal flora". "XIV International conference in Medicine, Nutrition, and health promotion", 21-25.October.2013. Riobamba, **Ecuador**.

2012:

41. "Plasmids in Evolution" (2012) "Evolutionary discussion group" Queen Medical Centre, 16.March.2012. Nottingham, UK.

2004:

42. "CTX-M: Structural, enzymatic and epidemiological aspects" (2004) Hospital Juan Canalejo A Coruna, Research Core Seminar Series, Spain.

2.6 Chair of Conferences and Seminars

[reverse chronological order]

1. **Founder and organizer** of the "Allergies, Inflammation and Eosinophils Study Group – AIE". Series of seminars with the pediatrics department to enhance collaboration and brainstorming. Started May 2022
2. **Chair.** 13th International *Bordetella* Symposium. 26-30.June.2022 Vancouver, Canada. Also, online – Hybrid format.
3. **Scientific committee.** 13th International *Bordetella* Symposium. 26-30.June.2022 Vancouver, Canada. Also, online – Hybrid format.
4. **Founder, organizer, Scientific Director, and co-host.** International *Bordetella* Lab Meeting (IBLM). Online monthly seminar series focused on *Bordetella* research. (starting 28.September.2020 to present)
5. **Director and Chair of the Microbiology and Immunology Seminar Series.** Spring 2021
6. *Bordetella* Research Day. **Chair Host-Pathogen session.** 6.August.2020. Online due to COVID-19, University of Maryland, Baltimore, USA
7. **Chair** of the **afternoon session** in the "2nd Annual Microbiology & Infectious Diseases Asia Congress", 23rd – 24th June 2015. Singapore

2.7 Abstracts and Presentations at Scientific Meetings National and International

[reverse chronological order]

2022:

1. First, Nicholas; Martinez, Amparo; Roan, Connor, Bharrhan, Sushma; Wang, Jian; Scotts, Rona, Woolard, Matthew; Gonzalez, Africa; and **Gestal, Monica.** "Eosinophils and Inflammation the untold story" 13th *Bordetella* International Symposium, Vancouver, Canada. 26-30.June.2022
2. First, Nicholas; Roan, Connor; Williams, Tyler; and **Gestal, Monica.** "*Bordetella* spp. blocks eosinophils trap formation to suppress eosinophil bactericidal activity" 13th *Bordetella* International Symposium, Vancouver, Canada. 26-30.June.2022

3. First, Nicholas; Roan, Connor; Rico, Manuel; Lu, Xiao-Hong; **Gestal, Monica**. "*Disruption of the VIP/VPAC2 Axis Limits Colonization and Enhances Clearance of Bordetella spp. from the Lower Respiratory Tract*". ASM Microbe 2022. Washington, **USA**. 9-13.June.2022. (Poster presentation)
4. First, Nicholas; Roan, Connor; Rico, Manuel; Lu, Xiao-Hong; **Gestal, Monica**. "*Disruption of the VIP/VPAC2 Axis Limits Colonization and Enhances Clearance of Bordetella spp. from the Lower Respiratory Tract*". Graduate Research Day LSU Health Science Shreveport. **USA**. 9.May.2022. (Poster presentation)
5. First, Nicholas; Roan, Connor; Rico, Manuel; Lu, Xiao-Hong; **Gestal, Monica**. "*Disruption of the VIP/VPAC2 Axis Limits Colonization and Enhances Clearance of Bordetella spp. from the Lower Respiratory Tract*". XIII International Bordetella Symposium. **Vancouver, Canada / Online**. 26-30.June.2022 (Oral presentation)
6. Roan, Connor; First, Nicholas; Williams, Tyler; **Gestal, Monica**. "*Bordetella spp. blocks eosinophil trap formation to suppress eosinophil bactericidal activity.*" XIII International Bordetella Symposium. **Vancouver, Canada / Online**. 26-30.June.2022. (Poster presentation)
7. Roan, Connor; First, Nicholas; Williams, Tyler; **Gestal, Monica**. "*Eosinophils and inflammation, the untold story*". XIII International Bordetella Symposium. **Vancouver, Canada / Online**. 26-30.June.2022. (Poster presentation)

2021:

8. First, Nicholas; Roan, Connor; Rico, Manuel; Lu, Xiao-Hong; Gestal, Monica. "*Disruption of the VIP/VPAC2 Axis Limits Colonization and Enhances Clearance of Bordetella spp. from the Lower Respiratory Tract*". 3 Minutes Thesis Competition. International *Bordetella* Lab Meeting, IBLM. **USA**. 12.December.2021. (Oral presentation)– FIRST PRIZE
9. Belhart K, **Gestal MC**, Sisti F, Fernandez J. "*Bordetella bronchiseptica* diguanylate cyclase *bdcB* inhibits type three secretion system and impacts on immune response". XVI Congreso Anual de la Asociación Civil de Microbiología General-SAMIGE. **Argentina**. 1-5. November.2021. (Poster presentation)
10. O’Nuanain A., First N., Ondari E., Ambrosis N., Belhart K., **Gestal MC**. "*The Bordetella bronchiseptica* sigma factor *btrS* blocks eosinophil trap formation by inducing different cellular death". Summer Undergraduate Research Program LSUHS, **USA**. 21.July.2021. (Poster presentation)
11. Ondari E., Williams T., Gatti S., Tandon E., Lu XH., **Gestal MC**. "*The Bordetella bronchiseptica* sigma factor *btrS*, modulates eosinophil mediated bacterial persistence via the IL1RA/IL1 β axis". Graduate Research Day LSUHS, **USA**. 10.May.2021 (Poster presentation)

2020:

12. **Monica C. Gestal***, Hannah M Johnson, Margaret R. Dedloff, Kalyan K Dewan, Eric T Harvill. "Eosinophils Are Required for The Clearance of Respiratory Infections Caused By *Bordetella bronchiseptica*". ASM Microbe 2020. **Online** Conference 22.June.2020-17.August.2020 (Poster presentation)
13. Lily Rubin, **Monica C. Gestal** and Eric T. Harvill. "Determining key immune components in the clearance of *Bordetella* spp." UGA CURO symposium 2-24.April.2020. Athens, GA, **USA** (Poster presentation).
14. **Monica C. Gestal**, Hannah M Johnson, Margaret R. Dedloff, Kalyan K Dewan, Eric T Harvill. "Eosinophils Are Required For The Clearance Of Respiratory Infections Caused By *Bordetella bronchiseptica*". ASM Microbe 2020. 18-22.June.2020, Chicago, USA (Poster presentation) → **ONLINE DUE TO COVID-19**.
15. Priya Radhakrishnan, **Monica C. Gestal**, Balazs Rada, Eric T. Harvill. "*btrS* modulates neutrophil responses to *Bordetella* spp. infection" 105th Southeastern Branch meeting of the American Society for Microbiology (ASM-SEB). 21-23.February.2020. Alabama, **USA** (Poster presentation)

2019:

16. Rachel Sanchez, **Monica C. Gestal**, Eric T. Harvill. "Eosinophils are required for the generation of protective adaptive immunity in *Bordetella bronchiseptica* infections". National Veterinary Scholars Symposium, 2.August.2019, Athens, **USA** (3 minutes thesis) (Oral presentation)
 17. Rachel Sanchez, **Monica C. Gestal**, Eric T. Harvill. "Eosinophils are required for the generation of protective adaptive immunity in *Bordetella bronchiseptica* infections". National Veterinary Scholars Symposium, 25-27.July.2019, Boston, **USA** (Poster presentation)
 18. Callie Effler, Kalyan Dewan, Israel Rivera, Randy Kim, Jonny Hancock, **Monica Cartelle Gestal**, Eric Harvill. "Virulence-related characteristics of *Bordetella pertussis* mutants deficient in intracellular survival" REU Symposium 19. July. 2019, Athens, **USA**. (Poster presentation)
 19. Katie Howard, **Monica C Gestal**, Kalyan Dewan, and Eric Harvill. "Novel and Universal Vaccine Against *Bordetella* Species". ASM Southeastern Branch Meeting "12th International Symposium on Bordetella. 9-12.April.2019. Brussels, **Belgium** (Poster presentation)
 20. Israel Rivera, Bodo Linz, Kalyan Dewan, Longhuan Ma, Illiassou S. Hamidou, **Monica C. Gestal**, Eric T. Harvill. "Evolutionary conservation of genes for intracellular persistence in mammalian phagocytic cells among human and animal pathogenic *Bordetella*." 12th International Symposium on Bordetella. 9-12.April.2019. Brussels, **Belgium** (Poster presentation)
 21. Illiassou Soumana Hamidou, Kalyan Dewan, Bodo Linz, Monica C. Gestal, Demba Sarr, Eric Harvill. "Addressing the limitations of the current mouse models of *B. pertussis* infection." 12th International Symposium on Bordetella. 9-12.April.2019. Brussels, **Belgium** (Poster presentation)
 22. **Monica C. Gestal**, Ingrid McCall, Fernando Baquero, Bruce Levin, Eric Harvill. "Combined Effects of Immune Response And Antibiotics In The Selection of Antibiotic Resistance" 2nd Annual Texas Medical Center Antimicrobial Resistance and Stewardship Conference. 22-25.January.2019. Houston, **USA** (Poster presentation)
- 2018:
23. **Monica C Gestal**, Katie Howard, Kalyan Dewan, and Eric Harvill. "Novel and Universal Vaccine Against *Bordetella* Species" ASM Southeastern Branch Meeting "Microbial Dynamics and Infection". 30.November-2.December. 2018. Atlanta, **USA** (Poster presentation)
 24. Kevin E Mora, **Monica Cartelle Gestal**, Margaret R. Dedloff, Simone Kurz, Uriel Blas-Machado, Michael Tiemeyer, Eric T Harvill. "Peanuts, Parasites, and Bacteria, Oh My!". 3 minutes Thesis. 2018 GVSP Research Day, 27.July.2018. Athens, **USA** (Poster presentation)
 25. Kevin E Mora, **Monica Cartelle Gestal**, Margaret R. Dedloff, Simone Kurz, Uriel Blas-Machado, Michael Tiemeyer, Eric T Harvill. "Eosinophil-mediated clearance is blocked by a *Bordetella* blood-responsive regulon". National Veterinary Scholars Symposium, 2-4.August.2018, Texas, **USA** (Poster presentation)
 26. Kevin E Mora, **Monica Cartelle Gestal**, Margaret R. Dedloff, Simone Kurz, Uriel Blas-Machado, Michael Tiemeyer, Eric T Harvill. "Eosinophil-mediated clearance is blocked by a *Bordetella* blood-responsive regulon". Science of Vet Med Symposium, 11. October.2018, Athens, **USA** (Poster presentation)
 27. Keila Belhart, **Monica Cartelle**, Dawn Taylor, Eric T. Harvill, Federico Sisti, Julieta Fernández. "The diguanylate cyclase BdcB is involved in *Bordetella bronchiseptica* intracellular survival". Nucleotide Second Messenger Signaling in Bacteria International Symposium. 30.September-3.October.2018. Berlin, **Germany** (Poster presentation)

28. Margaret Dedloff, **Monica Cartelle Gestal**, Hira Hassan, Mariette Barbier, Clare Bryant, Olivier Restif, Eric T. Harvill. "The World's Smallest Escape Artists". REU conference 2018. 20.July.2018. **USA** (Poster and Oral presentation)
29. Israel Rivera, Bodo Linz, Kalyan Dewan, Longhuan Ma, Hamidou Illiasou, **Monica Gestal**, and Eric Harvill. "Transcriptional profiling revealed pathogenicity island activated during *Bordetella bronchiseptica* survival in macrophages". ASM Microbe 2018. 7-11.June.2018. Atlanta, **USA** (Poster presentation)
30. **Monica C. Gestal**, Laura K. Howard, Soumana Illiasou Hamidou, Eric Harvill. "Improving Protection By Manipulating Bacterial Immuno-modulators". ASM Microbe 2018. 7-11.June.2018. Atlanta, **USA** (Poster presentation)
31. Katie Howard, Coralís Rodríguez, Israel Rivera, Tracy Nicholson, Amalia Alias, Sara Hester, Laura Weyrich, Eric Harvill, **Monica C Gestal** "*Bordetella* manipulates host response by altering gene expression in response to blood". CURO conference 2018. 9.April.2018. Athens, **USA** (Poster presentation)
32. Keila Belhart, Maria de la Paz Gutierrez, Federico Zacc, Nicolas Ambrosis, **Monica Cartelle**, Dawn Taylor, Eric T. Harvill, George A. O'Toole, Federico Sisti, Julieta Fernández. "*Bordetella bronchiseptica* diguanilate cyclase BdcA regulates motility and is involved in transmission between hosts". Sensing and Signaling: From Single Molecules to Host-Microbe Interactions. 14-19. January.2018. Ventura, California, **USA** (Poster presentation)
33. Simone Kurz*, **Monica C. Gestal***, Eric T. Harvill and Michael Tiemeyer. "Pathogen-induced airway infections alter host glycosylation in mice". * Both authors contributed equally. InterPEG Conference. 10-11.March.2018. California, **USA** (Poster and also selected for ORAL presentation).

2017:

34. **Monica C Gestal**, Katie Howard, and Eric Harvill. "A *Bordetella* sigma factor mediates the response to the host and is associated with pathogenesis". 6th SM Conference on Cell-Cell Communication in Bacteria. 16-19.October 2017. Athens, GA, **USA** (Poster presentation)
35. Katie Howard, Coralís Rodríguez, Israel Rivera, Tracy Nicholson, Amalia Alias, Sara Hester, Laura Weyrich, Eric Harvill, **Monica C Gestal** "*Bordetella* manipulates host response by altering gene expression in response to blood". 6th SM Conference on Cell-Cell Communication in Bacteria. 16-19.October 2017. Athens, GA, **USA** (Poster presentation)
36. Troy M. King Jr., Katie Howard, **Monica Cartelle Gestal**, Longhuan Ma, and Eric T. Harvill "Investigation of *Bordetella bronchiseptica* genes associated with virulence in blood serum". 5th annual mid Atlantic prep/IMSD research symposium (MAPRS). 25-26.May.2017. Baltimore, **USA** (Poster presentation)
- 13 **Monica C Gestal**, Kalyan Dewan, Eric Harvill. "Study of the virulence induced by T3SS and T6SS in *Bordetella bronchiseptica*". GSPS. 17.April.2017. Athens, **USA** (Poster presentation)
- 14 Hira Hassan, **Monica Cartelle-Gestal**, Eric Harvill. "Role of a sigma factor in the intracellular survival of *Bordetella bronchiseptica*". REU Symposium. 20.July.2017. Athens, **USA** (Poster presentation)
- 15 **Monica Cartelle Gestal**, Coralís Rodríguez, Katie Howard, Eric Harvill. "Understanding sigma factors to study potential vaccine candidates". 11th Georgia Glycoscience Symposium. 25.April.2017. Athens, **USA** (Poster presentation)

- 16 Troy King, **Monica Cartelle Gestal**, Katie Howard, Longhuan Ma, Laura Cuff, Eric Harvill. "Investigation of *Bordetella bronchiseptica* genes associated with virulence in blood serum". Vet Med Retreat Day. 14.April.2017. Athens, **USA** (Poster presentation)
- 17 Troy M. King Jr., Katie Howard, **Monica Cartelle Gestal**, Longhuan Ma, and Eric T. Harvill "Investigation of *Bordetella bronchiseptica* genes associated with virulence in blood serum". 27th Annual Molecular Parasitology & Vector Biology Symposium, 27.April.2017. Athens, **USA** (Poster presentation)
- 18 Katie Howard, **Monica Cartelle Gestal**, Eric Harvill. "Genetic determinants of intracellular survival and growth of *Bordetella pertussis*". CURO conference. 3.April.2017. Athens, **USA** (Oral presentation)
- 19 **M. Cartelle Gestal**, X. Zhang, E. Harvill. "Role of sRNA in the development and progression of *Bordetella bronchiseptica* pathogenesis". ASM Microbe. 1-5.June 2017. New Orleans, **USA** (Poster presentation)

2016:

- 20 Katie Howard, Zachary Reneer, Mackenzie Blue Harvill, **Monica Cartelle Gestal** and Eric Harvill. "Role of the sRNA *bprL* in the ability of intracellular survival of *Bordetella bronchiseptica*". Vet Med Symposium 13. October 2016. Athens, **USA** (Oral presentation)
- 21 Hira Hassan, **Monica Cartelle Gestal**, Eric Harvill. "Role of the *bsr* gene in the intracellular survival of *Bordetella bronchiseptica*". REU conference 2017. 22.July.2017. UGA, **USA** (Oral and Poster presentation)
- 22 Mackenzie Blue Harvill, Laura Howard, Zachary Reneer, **Monica Cartelle Gestal**, Eric Harvill. "Blood and serum increase the expression of virulence factors in *Bordetella bronchiseptica*". Vet Med Symposium 13. October 2016. Athens, **USA** (Poster presentation)
- 23 Zurita J., M. Solis, J. Romero, D. Ortega-Paredes, P. Barba, C. González and **M. Cartelle-Gestal**. 2016. Characterization and Clinical Impact of Bacteremia Caused by ESBL-Producing *E. coli* in a Third Level Hospital in Ecuador. Abstract presented at the 26th European Congress of Clinical Microbiology and Infectious Disease (ECSMID). 9-12.April.2016. Amsterdam, **The Netherlands** (Poster presentation)
- 24 **Monica C Gestal**, Kalyan Dewan, Eric Harvill. "Study of the virulence induced by T3SS and T6SS in *Bordetella bronchiseptica*". ASM Microbe 2016. 16-20.Junio-2016. Boston, **USA** (Poster presentation)

2014:

- 25 Ariane Paz y Miño¹, Gabriela Gualpa, **Mónica Cartelle Gestal**, Cecibel González y Jeannete Zurita. "Identificación, caracterización y control de un brote hospitalario causado por *Acinetobacter baumannii*". COLIBIOCLI. 24-26.September.2014. Quito, **Ecuador** (Poster presentation)
- 26 Cecibel Gonzalez, Carolina Alulema, **Mónica Cartelle Gestal**, Jeannete Zurita. "Estudio de la prevalencia de parásitos en el Distrito Metropolitano de Quito, durante los últimos 5 años". COLIBIOCLI. 24-26.September.2014. Quito, **Ecuador** (Poster presentation)
- 27 Reyes J., Villacis E., Vasques R, Villavicencio F., Ushinha L., Escalante S, **Cartelle M.** "Perfiles de Resistencia bacteriana en el Ecuador 2014". XXVII Panamerican conference of Infectology. 15-19.May.2014. Quito, **Ecuador** (Poster presentation)
- 28 Maria Jose Alulema and **Monica Cartelle Gestal**. "Retrospective study of the situation of dengue in Ecuador for the last 20 years". 3rd International Conference on Clinical Microbiology & Microbial

- Genomics". 24-26.September.2014. Valencia, **Spain** (Poster presentation part of a context of young researchers).
- 29 Ariel Avalos, Maria Jose Alulema and **Monica Cartelle Gestal** "A look back at the situation of Ecuador. Is *Salmonella* spp. still a big problem?". 3rd International Conference on Clinical Microbiology & Microbial Genomics". 24-26.September.2014. Valencia, **Spain** (Poster presentation part of a context of young researchers → AWARDED).
- 30 Ariel Avalos and **Monica Cartelle Gestal** "Evaluation of the deparasitation and education campaigns of Ecuador against taeniasis and cysticercosis". 3rd International Conference on Clinical Microbiology & Microbial Genomics". 24-26.September.2014. Valencia, **Spain** (Poster presentation part of a context of young researchers).
- 31 Maria Jose Alulema and **Monica Cartelle Gestal** "Retrospective study of the chagas and malaria situation in Ecuador for the last 20 years". 3rd International Conference on Clinical Microbiology & Microbial Genomics". 24-26.September.2014. Valencia, **Spain** (Poster presentation part of a context of young researchers).
- 32 Maria Jose Alulema, Ariel Avalos and **Monica Cartelle Gestal** "Situation the Ecuador with the sexual transmission diseases". 3rd International Conference on Clinical Microbiology & Microbial Genomics" 24-26.September.2014. Valencia, **Spain** (Poster presentation part of a context of young researchers).
- 33 E. Toapanta Ortiz, **M. Cartelle Gestal**, R. Velez. "Ichthyosis, the XXI century pandemic of Ecuador". Accepted for publication in an electronic supplement of the European Journal of Human Genetics, European Conference of Human Genetics. 31 May–3 June.2014. Milan, **Italy** (Poster presentation)
- 34 M. J. Alulema Garces, **M. Cartelle Gestal**, M. D. Sanchez, F. A. Tama. "First case report of Seckel in Ecuador". Poster accepted and publication in an electronic supplement of the European Conference of Human Genetics European Conference of Human Genetics 2014, May 31–June 3, Milan, **Italy** (Poster presentation)
- 35 **Monica Cartelle**, Andrea E. Toapanta, Rosa Velez. "Ichthyosis, Case report. A growing problem in Ecuador". Welcome Trust. Genomic Disorders 2014. 5-7.March.2014. Cambridge, **UK** (Poster presentation)
- 36 **Monica Cartelle**, M.J. Alulema, M. D. Sanchez and F. A. Tama. "Seckel, a case report from Ecuador". Welcome Trust. Genomic Disorders 2014. 5-7.March.2014. Cambridge, **UK** (poster presentation)
- 2013:
- 37 Inca M., Chango C and **Cartelle M.** "Epidemiological study of Dengue in Ecuador during the last 14 years". XIV International conference of advances in Medicine, Nutrition and Health promotion. 21-25.October 2013, Riobamba, **Ecuador** (Poster presentation)
- 38 Calles D., Ruiz G and **Cartelle M.** "Study of risk factors associated with diabetes mellitus II in Riobamba, Ecuador". XIV International conference of advances in Medicine, Nutrition and Health promotion. 21-25.October.2013. Riobamba, **Ecuador** (Poster presentation)
- 39 Alulema MJ, Suarez R and **Cartelle M.** "Study of High blood pressure (case controls) in and indigene village in Riobamba, Ecuador". XIV International conference of advances in Medicine, Nutrition and Health promotion. 21-25.October.2013. Riobamba, **Ecuador** (Poster presentation)

- 40 Toapanta A, Velez R and **Cartelle M.** "Case report of two twins with ichthyosis with unknown etiology". XIV International conference of advances in Medicine, Nutrition and Health promotion. 21-25.October.2013. Riobamba, **Ecuador** (Poster presentation)
- 41 Mina K, **Cartelle M.** "Epidemiology of the keratosis pilaris in the province of Chimborazo, Ecuador". XIV International conference of advances in Medicine, Nutrition and Health promotion. 21-25.October.2013. Riobamba, **Ecuador** (Poster presentation)

2011:

- 42 **Cartelle M.**, Heeb S. and Camara M. "SCIENCE – Passion, Mission, Responsibilities" 26-27.September.2011. Warsaw, **Poland** (Poster and Oral presentation)

2007:

- 43 Solla M, Torres E, **Cartelle M**, Alvarez-Rocha L, Llinares P, Villanueva R and Bou. "Multiresistant microorganisms in UCI: Risk factors and molecular characterization of *Pseudomonas aeruginosa*". XII Reunion of Spanish Society of Infectious Diseases and Clinical Microbiology. *Enferm Infecc Microbiol Clin*: 93. 9-11.May.2007. A Coruna, **Spain** (Poster and Oral presentation)

2006:

- 44 Mallo S, **Cartelle M**, Pérez-Llarena FJ, Villanueva R and Bou G. "Studies of the Amino Acids from the Class C β -lactamase, FOX-4 involved in the hydrolysis of cefoxitin (FX) and ceftazidime". The 46th Interscience Conference on Antimicrobial Agents and Chemotherapy. *Antimicrob Agents Chemother* 46:62. 27-30.September.2006. San Francisco, **USA** (Poster presentation)
- 45 **Cartelle M**, Mallo S, Villanueva and Bou G. "Structure-Function studies of CTX-M Group β -lactases". The 46th Interscience Conference on Antimicrobial Agents and Chemotherapy. *Antimicrob Agents Chemother* 46:61. 27-30.September.2006. San Francisco, **USA** (Poster presentation)
- 46 Fernández A, **Cartelle M**, Gil E, Torres E, Villanueva R and Bou G. "Possible in vivo transmission of the CTX-M-32 gene between different *Enterobacteriaceae* spp". XII Conference of the Spanish Society for Infection Diseases and Clinical Microbiology. *Enferm Infecc Microbiol Clin*: 206. 10-13.May.2006. Valencia, **Spain** (Poster and Oral presentation)
- 47 **Cartelle M**, Pérez-Llarena FJ, Mallo S, Villanueva R and Bou G. "Biochemical studies on β -lactamases from the CTX-M group IX". XII Conference of the Spanish Society for Infection Diseases and Clinical Microbiology. *Enferm Infecc Microbiol Clin*: 207. 10-13.May.2006. Valencia, **Spain** (Poster and Oral presentation)
- 48 Mallo S, **Cartelle M**, Pérez-Llarena FJ, Villanueva R and Bou G. "Study of the amino acids involved in the hydrolysis of cefoxitin (FX) and ceftazidime (TZ) in the class C β -lactamase FOX-4". XII Conference of the Spanish Society for Infection Diseases and Clinical Microbiology. *Enferm Infecc Microbiol Clin* 201. 10-13.May.2006. Valencia, **Spain** (Poster and Oral presentation)

2005:

- 49 Canle D, **Cartelle M**, Lactasa C, Lasa I, Villanueva R and Bou G. "Cloning nucleotide sequencing and Functional analysis of the AcrAb-TolC Efflux pump of *Enterobacter cloacae*". 45th Interscience

Conference on Antimicrobial Agents and Chemotherapy. *Antimicrob Agents Chemother* 45:72. 16-19.December.2005. Washington, **USA** (Poster presentation)

- 50 **Cartelle M**; Villanueva R; and Bou G. "Structure-function studies at position Arg-276 of CTX-M beta-lactamases". 45th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC). *Antimicrob Agents Chemother* 45:58. 16-19.December.2005. Washington, **USA** (Poster presentation)

2004:

- 51 **Cartelle M**, Canle D, Pérez S, Domínguez L, Villanueva R and Bou G. "Structural-functional studies in CTX-M β -lactamases". 44th Interscience Conference on Antimicrobial Agents and Chemotherapy. *Antimicrob Agents Chemother* 44:74-75. 30.October-2.November.2004. Washington, **USA** (Poster presentation)
- 52 **Cartelle M**, Tomás M, Canle D, Torres E, Molina F, Villanueva R and Bou G. "Molecular epidemiology study of ESBLs in *Escherichia coli* from north western Spain". 44th Interscience Conference on Antimicrobial Agents and Chemotherapy. *Antimicrob Agents Chemother* 44:106. 30.October-2.November.2004. Washington, **USA** (Poster presentation)
- 53 **Cartelle M**, Tomás M, Molina F, Moure R, Villanueva R and Bou G. "Study of risk factors for infection or colonization by a *Klebsiella pneumoniae* strain with reduced susceptibility to third generation cephalosporins (RSKp) in a nosocomial outbreak". 44th Interscience Conference on Antimicrobial Agents and Chemotherapy. *Antimicrob Agents Chemother* 365-366. 30.October-2.November.2004. Washington, **USA** (Poster presentation)
- 54 Tomás M, **Cartelle M**, Beceiro A, Gil E, Villanueva R and Bou G. "Genetic characterization of the outer membrane proteins (OMPs) of *Acinetobacter* spp". 44th Interscience Conference on Antimicrobial Agents and Chemotherapy. *Antimicrob Agents Chemother*. 30.October-2.November.2004. Washington, **USA** (Poster presentation)
- 55 Domínguez L, **Cartelle M**, Canle D, Tomás M, Villanueva R and Bou G. "Studies on the structure-function of the group CTX-M-9 β -lactamases". XI Spanish Society for Infection Diseases and Clinical Microbiology. *Enferm Infecc Microbiol Clin* 2004:109. 16-19.Mayo.2004. Bilbao, **Spain** (Poster and Oral presentation)
- 56 **Cartelle M**, Canle D, Tomás M, Villanueva R and Bou G. "Studies on the structure-function of the group CTX-M-1 β -lactamases". XI Spanish Society for Infection Diseases and Clinical Microbiology. *Enferm Infecc Microbiol Clin* 2004:110. 16-19. Mayo.2004. Bilbao, **Spain** (Poster and Oral presentation)

2003:

- 57 **Cartelle M**, Tomás M, Moure R, Molina F, Villanueva R and Bou G. "A novel cefotaximase derived from CTX-M-1 that hydrolyses ceftazidime by a single amino acid replacement Asp-240-Gly". 43rd Interscience Conference on Antimicrobial Agents and Chemotherapy. *Antimicrob Agents Chemother* 43:80-81. 14-17.September.2003. Chicago, **USA** (Poster presentation)
- 58 **Cartelle M**, Tomás M, Beceiro A, Moraleja X, Canle D, Moure R, Villanueva R, Bou G. "Estudio de los mecanismos asociados a un bajo nivel de resistencia a los antibióticos carbapenemes en una cepa clínica de *Serratia marcescens*". VII Conference of the Spanish Society of Chemotherapy. 29-31.May.2003. Zaragoza, **Spain** (Poster presentation)

- 59 Tomás M, Beceiro A, **Cartelle M**, Gil E, Molina F, Moure R, Llinares P, Villanueva R, Bou G. "Estudio de los factores de riesgo para la infección y/o colonización por una cepa de *Acinetobacter baumannii* con un mecanismo multifactorial de resistencia a carbapenemes en un brote nosocomial". VII Conference of the Spanish Society of Chemotherapy. 29-31.May.2003. Zaragoza, **Spain** (Poster presentation).

2002:

- 60 Tomás M, Beceiro A, **Cartelle M**, Gil E, Molina F, Moure R, Llinares P, Villanueva R and Bou G. "Risk factors associated with infection or colonization by an epidemic multiresistant *Acinetobacter baumannii* clinical strain". 42nd Interscience Conference on Antimicrobial Agents and Chemotherapy. 27-30.September.2002. San Diego, **USA** (Poster presentation)
- 61 **Cartelle M**, Beceiro A, Gil E, Domínguez MA, Molina F, Eirós JM and Bou G. "Validation of use of different PCR-Based DNA Fingerprinting (REP-PCR, ERIC-PCR, RAPD) for typing strains of *Klebsiella pneumoniae* and application of the techniques to the investigation of a hospital outbreak". 42nd Interscience Conference on Antimicrobial Agents and Chemotherapy. *Antimicrob Agen Chemother* 42:143. 27-30.September.2002. San Diego, **USA** (Poster presentation)
- 62 Bou G, **Cartelle M**, Tomás M, Beceiro A, Velasco D, Gil E, Canle D, Eirós JM and Guerrero A. "Identification and broad dissemination of the CTX-M-14 Beta-lactamase in the North West area of Spain". 42nd Interscience Conference on Antimicrobial Agents and Chemotherapy. *Antimicrob Agen Chemother* 42:116-117. 27-30.September.2002. San Diego, **USA** (Poster presentation)
- 63 Gil E, **Cartelle M**, Tomás M, Moure R, Martínez-Beltrán J, Llinares P, Eirós JM and Bou G. "Molecular characterization of a nosocomial outbreak caused by a carbapenem resistant *Acinetobacter baumannii* strain with a reduction in the expression of 28-30 KDa outer membrane proteins (OMPs)". 42nd Interscience Conference on Antimicrobial Agents and Chemotherapy. *Antimicrob Agen Chemother* 43:341. 27-30.September.2002. San Diego, **USA** (Poster presentation)
- 64 Bou G, **Cartelle M**, Beceiro A, Gil E and Eirós JM. "The replacement of phenylalanine (F) 154 by tyrosine (Y) on the amino acid sequence of the beta-lactamase OXA-24 abrogates its carbapenemase activity". 42nd Interscience Conference on Antimicrobial Agents and Chemotherapy. *Antimicrob Agents Chemother* 42:79. 27-30.September.2002. San Diego, **USA** (Poster presentation)
- 65 Cañizares A, Abalde M, Velasco D, **Cartelle M**, Tomás S, Guerrero A, et al. "Resistencia primaria en las Comunidades Valenciana y Gallega. "¿Existen diferencias regionales en la resistencia primaria del VIH? Comparación entre dos comunidades españolas". SEV 2002, **Spain** (Poster presentation)

2001:

- 66 Guerrero A, Cañizares A, **Cartelle M**, Velasco D, Gimeno C, García de Lomas J. "Resistance rate of HIV in naive patients during the last 4 years in Spain". 41st Interscience Conference on Antimicrobial Agents and Chemotherapy. *Antimicrob Agents Chemother* 41:334. 16-19.December.2001. Chicago, **USA** (Poster presentation)
- 67 **Cartelle M**, Velasco D, Beceiro A, Molina F, Moure R and Guerrero A. "Clinical significance of the isolation by LCR of organisms frequently linked to contamination". IX Meeting of Spanish Society for Infect Diseases and Clinical Microbiology. *Enferm Infec Microbiol Clin* 2001: 22. 19-20.April.2001. Madrid, **Spain** (Poster and Oral presentation)

- 68 Gil E, Durán T, García P, Velasco D, Canle D, Zúñiga C, Molina F, **Cartelle M** and Guerrero A. "Incidence of fungal meningitis in the Northeast of Spain". IX Meeting of Spanish Society for Infect Diseases and Clinical Microbiology. *Enferm Infecc Microbiol Clin*: 30. 19-20.April.2001. Madrid, **Spain** (Poster and Oral presentation)

2000:

- 69 **Cartelle M**, Rodriguez P, Zuniga C, Moure R and Guerrero A. "Epidemiologia microbiana: Tasas de infecciones de determinados virus hospitalarios y de sensibilidad de patogenos bacterianos causantes de bacteriemias e infecciones multi-resistentes". Symposium Complejo Hospitalario Universitario A Coruna. 2000. A Coruna, **Spain**.

3. TEACHING ACTIVITIES

3.1 Teaching Philosophy

I believe that teaching students is a key challenge for the future of science and innovative research. I enjoy interacting with undergrad and graduate students, helping them to develop their independent and critical thinking. I think the purpose of teaching is to help guide students not only to make a connection with the material, but also to assist them in developing a path in science. I have had the unique experience of travelling around the world, mentoring and teaching students in Spain, United Kingdom, Ecuador, and now in United States of America. My mentoring ability has been shaped by the constructive feedback that I have received from students, supervisors and mentors. I now appreciate more fully my role as a facilitator and motivator, and work to expand the means by which I facilitate active learning sessions to help all types of learners.

3.2 Teaching Experience

3.2.1. Since faculty position (>2020)

A. Graduate and Faculty courses:

- 2022 Fall Micro289 Bacterial Pathogenesis (3 hours). *I lectured bacterial evasion of immune responses, septicemia, and enteric bacteria.*
- 2022 Spring – Advance Microbiology for Graduate Students Micro291 (3 hours). *I assisted and participated in all classes, prepared the questions for the test, scored and I had discussions with the students for clarifications that were needed. I lectured 3 hours of different aspects of bacterial stress responses.*
- 2022 Spring – Immunology for Graduate Students Micro297 - Director (12 hours). *I assisted and participated in all classes, prepared the questions for the test, guarded the test (6 hours each a total of 2 tests), scored and I had discussions with the students for clarifications that were needed. I lectured 12 hours of different aspects of the immune responses.*

- 2021 Fall – Immunology for Medical Students (1 hours). *I created the slides and provided a one-hour lecture on Mucosal Immunology.*
- 2021 Module I – Small Group Facilitator - Fall (16 hours) *Small group facilitator. I had 15 students and I was managing and leading the discussion of clinical cases between first year medical students.*
- 2021 Fall – Microbiology for Medical Students (3 hours). *I created the slides and provided a one-hour lectures on ITU pathogens, Respiratory pathogens and Enteric pathogens.*
- 2021 Fall microbiology and Immunology Seminar Series (18 hours). *I assisted and participated in the discussions. Moreover, I have provided feedback to all Graduate Students after their presentation using the writing form or electronic submission to improve their communication skills. My students presented in 2 of these seminars.*
- 2021 Module I – Small Group Facilitator - Fall (16 hours) *Small group facilitator. I had 10 students and I was managing and leading the discussion of clinical cases between first year medical students.*
- 2021 Fall Micro289 Bacterial Pathogenesis (3 hours). *I lectured bacterial evasion of immune responses, septicemia, and enteric bacteria.*
- 2021 Bacteriology (2 hours). *I lectured two hours of bacterial stress responses.*
- 2021 Discussions in Bacteriology/Bacteriology Research Conference (13 hours) *I assisted and participated in the weekly discussions. I did also one hour presentation.*
- 2021 Co-Director Spring Micro297 – Immunology (14 hours) *I assisted and participated in all classes, prepared the questions for the test, guarded the test, scored and I had discussions with the students for clarifications that were needed. I lectured 14 hours of different aspects of the immune responses.*
- 2021 Director Spring Microbiology and Immunology Seminar Series (23 hours) *I created the schedule, hosted, contacted the speakers, organize the event, assisted and participated in the discussions. Moreover, I have provided feedback to all Graduate Students after their presentation using the writing form or electronic submission to improve their communication skills. My student presented in one of these seminars.*
- 2021 Spanish for Medical Students (2 hours). *I lectured English native speakers to learn Spanish for the medical settings*
- 2020 Module I – Small Group Facilitator - Fall (16 hours) *Small group facilitator. I had 10 students and I was managing and leading the discussion of clinical cases between first year medical students.*
- 2020 Discussions in Bacteriology/Bacteriology Research Conference (13 hours) *I assisted and participated in the weekly discussions. I did also one hour presentation.*
- 2020 Fall microbiology and Immunology Seminar Series (18 hours) *I assisted and participated in the discussions. Moreover, I have provided feedback to all Graduate Students after their presentation using the writing form or electronic submission to improve their communication skills.*
- 2020 Fall MID (1 hour) *I created the slides and provided a one-hour lecture on Salmonella and Shigella for first year medical students.*
- 2020 Fall Micro289 Bacterial Pathogenesis (1 hour). *I created the slides and provided a one-hour lecture “Bacterial immune evasion” to graduate students.*

B. Invited lectures:

Date	Title	Title / hours	Audience

25.September.2020	BIOS490	Bacterial strategies to overcome the host immune response (1 h)	Senior Biology Students
21.October.2020	PUCE - ECUADOR	Molecular tools in the fight for COVID (1h)	Microbiology Undergraduate Students
25.November.2020	PUCE - ECUADOR	Use of transcriptomics to discover bacterial immunomodulators	Microbiology Undergraduate Students

Director of:

- 1- Immunology course for Graduate students (Spring 2022)
- 2- Immunology course for Graduate students (Spring 2021)
- 3- Seminar series Microbiology and Immunology (Spring 2021)
- 4- Summer undergraduate research program LSUHSC-Fundación Barrie de la Maza (Since 2021)

3.2.2. Prior to faculty position (<2020)

- Private students Middle and High School (2000-2008)
- Medical School and Microbiology Degree (2013-2015)
 - Immunology – 50 series of 2 hours lectures - 2013-2014
 - Genetics – 60 series of 2 hours lectures - 2013-2014
 - Epidemiology -17 series of 2 hours lecture -2014-2015
- Lectures for MD, Professors (2014-2015)
 - Introduction to research – 5 days of 8 hours lecture - 2014
 - How to write papers for peer-review journals – 5 days of 8 hours lecture - 2014
 - Project management – 5 days of 8 hours lecture – 2014
 - How to write and submit an abstract for an international conference – 5 day of 8 hours lecture - 2014
 - Rational usage of antibiotics – 2 days of 8 hours lecture and series of online session of 1 hour for 4 weeks. – 2015 and 2015
 - Mechanisms of antibiotic resistance – one week 6 hours lecture every day – 2014 and 2015

3.2 Short courses and invited lectures for students and trainees

- 2018 “How to design a new vaccine. Translational research” (1 hour) UGA Invited in Dr. Sanchez class (Undergrad)
- 2017 “How to design a new vaccine” (1 hour) UGA Invited in Dr. Sanchez class (Undergrad)
- 2014 “Antibiotic resistance”. (4 hours) Hospital Eugenio Espejo. Quito, Ecuador (MD)
- 2014 “Continuous training for professionals from provinces of Ecuador”. (10 hours) Instituto Nacional de Salud Publica (INSPI), Quito, Ecuador (MD and Health professionals)

- 2014 “Project management y dirección integrada de proyectos”. (48 hours) Facultad de ciencias de la salud. Universidad Politecnica del Chimborazo (ESPOCH). Riobamba, Ecuador. (MD, Lecturers, and Professors)
- 2014 “Antibiotic stewardship”. (10 hours) Hospital de niños de Guayaquil Dr. Roberto Gilbert E. Guayaquil, Ecuador. (MD and Health Professionals)
- 2013 Research in Microbiology (8 hours). Ambato University. (Undergrad)
- 2013 How to publish scientific papers (120 hours). Association of Professors of Health Sciences. Universidad Politecnica del Chimborazo (ESPOCH). Riobamba, Ecuador. (MD, Lecturers, and Professors)
- 2013 How to publish scientific papers (120 hours). Medicine School. Universidad Politecnica del Chimborazo (ESPOCH). Riobamba, Ecuador. (Lecturers, and Professors)
- 2013 Proteomics: Purification and modeling (8 hours. Pharmacy School). Universidad Politecnica del Chimborazo (ESPOCH). Riobamba, Ecuador. (Undergrad)

4. SERVICE ACTIVITIES

4.1 Personal Statement

I love to feel that I am part of scientific progress and as such I have always been passionate about participating in events organized by my host institution and in the local area. As a researcher and scientist, I feel it is my duty to not only conduct my research with professionalism and integrity but to also share my knowledge with a wider audience so that our position as scientists is understood and secure in the future to develop with our wider communities.

4.2. Service on Grants, Publications, and Professional society

4.2.1. Ad Hoc Grant and Conference Reviews

- 2022: Reviewer abstracts– Evaluator Annual Biomedical Research Conference for Minority Students (ABRCMS). Anaheim, California. November 9-12. USA.
- 2022: Poster Judge – Predoctoral students at the “Graduate Research Day”, Shreveport 9. May-2022. USA.
- 2022: Reviewer PhD fellowship “Graduate Women in Science” April.2022
- 2022: Scientific committee “13th International Bordetella Symposium”, June 26-30, 2022. Vancouver Canada.
- 2022: Reviewer abstracts – ASM “Microbe 2022”, Washington DC, 9-13.June-2022. USA.
- 2022: Poster Judge – Postdoctoral students at the “Center for the Conference of Cardiovascular Diseases”, Shreveport 7, February-2022. USA.
- 2021: Reviewer and Evaluator for the Predoctoral and Postdoctoral fellowships of the American Heart Association. USA.

- 2021: Poster Judge – Predoctoral students at the “Graduate Research Day”, Shreveport 10. May-2021. USA.
- 2021: Reviewer and Evaluator for the Ministry of Education and Research and the Executive Agency for Higher Education, Research, Development and Innovation Funding. PD-TE projects. Romania.
- 2020-Present: Funder, Chair and Scientific director of the monthly “*Bordetella* International Lab Meeting (IBLM)”. Monthly seminars via Zoom.
- 2020: Reviewer and Evaluator Annual Biomedical Research Conference for Minority Students (ABRCMS). Online 2020.
- 2020: Reviewer Ike Muslow Predoctoral Awards. LSU Health Science Center, Shreveport. USA.
- 2020: Reviewer and Evaluator for the Ministry of Education and Research and the Executive Agency for Higher Education, Research, Development and Innovation Funding. “Exploratory Research Projects”. Romania.
- 2020: Reviewer and Evaluator for the Research Institute of the University of Bucharest (ICUB). Postdoctoral Fellowships. Romania.
- 2020: Reviewer and Evaluator for the Ministry of Education and Research and the Executive Agency for Higher Education, Research, Development and Innovation Funding. PD-TE projects. Romania.
- 2019: Reviewer and Evaluator Annual Biomedical Research Conference for Minority Students (ABRCMS). Anaheim, California on November 13 – 16. USA.
- 2019: Reviewer and Evaluator Microbe 2019. San Francisco, CA, on June 20-24, 2019. USA.
- 2019: Budgeting and reimbursement of the “XII *Bordetella* International Symposium”. 9-12.April.2019. Brussels.
- 2018: Reviewer and Evaluator Annual Biomedical Research Conference for Minority Students (ABRCMS). Indianapolis, November 14-17, 2018. USA.
- 2017: Member of the advisory board in the “4th Annual Microbiology & Infectious Diseases Asia Congress, 10th – 11th October 2017, Singapore. Singapore.
- 2016: Member of the advisory board in the “3rd Annual Microbiology & Infectious Diseases Asia Congress”, 11th – 12th October 2016, Singapore. Singapore.
- 2016: Reviewer and Evaluator Ralph Powe Awards (USA)
- 2016 Reviewer and Evaluator for “3rd National Plan for Research, Development and Innovation for the period 2015-2020 (PNCDI III)”. Romania
- 2016: Consultant of the “Manual de realización y lectura interpretativa de antibiogramas” Ministry of Public Health. Quito. Ecuador.
- 2015: Consultant of the “Manual de realización y lectura interpretativa de antibiogramas” Ministry of Public Health. Quito. Ecuador.
- 2015: Organizer member of the new “Malla curricular” of the School of Microbiology. “Pontificia Universidad Catolica de Ecuador”, Quito. Ecuador.
- 2015: Member of the advisory board in the “2nd Annual Microbiology & Infectious Diseases Asia Congress, 23rd – 24th June 2015, Singapore”. Singapore.
- 2015: Chair on the 23rd afternoon session in the “2nd Annual Microbiology & Infectious Diseases Asia Congress”, 23rd – 24th June 2015. Singapore
- 2015: Reviewer “Proyecto Banco de ideas” form the Government of Education of Ecuador. Ecuador.
- 2015: Reviewer “Grant applications, Prometeo, SENSCYT”. Ecuador.
- 2015: Reviewer “Programs and / or scientific projects in research and development of technology” Ministry of Education, science, technology and innovation. Ecuador.

- 2015: Consultant Ministry of Public Health, Ecuador. Control campaigns and Antibiotic resistance. Control hospital outbreaks. Ecuador.
- 2014: Consultant Ministry of Public Health, Ecuador. Control campaigns and Antibiotic resistance. Control hospital outbreaks. Ecuador.
- 2013: Consultant Ministry of Public Health, Ecuador. Control campaigns and Antibiotic resistance. Control hospital outbreaks. Ecuador.
- 2013: President of the Bioethical committee of genetic advisory for the Universidad Politecnica del Chimborazo (ESPOCH). Chimborazo, Riobamba. Ecuador.
- 2013: Organizer poster session in the "XIV International conference in Medicine, Nutrition, and health promotion". 21-25 October 2013. Riobamba. Ecuador
- 2013: Judge of poster presentations. XIV International conference of advances in Medicine, Nutrition and Health promotion. 21-25.October.2013. Riobamba, Ecuador.
- 2012: Judge of oral presentations, Mol Research Day. 26.June.2012. Nottingham University.
- 2012: Judge of posters presentations in the CBS Researchers Day. 3.July.2012. Nottingham University
- 2003-6: Working with Infectious diseases department, Microbiology Department and Epidemiology Department in the "Complejo Hospitalario Universitario A Coruna" in control of nosocomial outbreaks, A Coruna, Galicia. Spain

4.2.2. Service on Publications

Ad Hoc Scientific Reviewer

2022- Present	<i>Nature Publishing group</i>
2022- Present	<i>Oxford Academic</i>
2020- Present	<i>Current Microbiology journal</i>
2020- Present	<i>Frontiers journal</i>
2020- Present	<i>BMJ journals</i>
2019- Present	<i>Scientific Reports – Nature publishing group</i>
2018- Present	<i>Journal of Antimicrobial Chemotherapy</i>
2018- Present	<i>Elsevier journals</i>
2018- Present	<i>American Society of Microbiology ASM-journals</i>
2016- Present	<i>MDPI journals</i>
2015- Present	<i>PLOS journals</i>

Editorial board

2020 – 2022:	<i>Guest Editor Frontiers in Microbiology. Special issue "Current Trends in Exploiting Molecular Signaling in Bacteria-Host Crosstalk"</i>
2020 – 2022:	<i>Guest Editor Microorganisms. Special issue "Current Trends in Exploiting Molecular Signaling in Bacteria and Host Immunomodulation"</i>
2019 – Present:	<i>Guest Editor Microorganisms. Special issue "Infectious Diseases, New Approaches to Old Problems"</i>

- 2019 – 2021: *Guest Editor Diseases. Special issue “Using state-of-the art proteomics to understand infectious diseases. Novel clinical diagnostics, biomarkers and drug targets”*
- 2019 – Present: *Editor Board member of “Biomedical Engineering International”*
- 2019 – Present: *Guest Editor Material. Special issue “Novel Fabricated Bioactive Materials: Surface Modification and Biomedical Applications”*
- 2018 – Present: *Academic editor of “PLOS ONE”*
- 2014 – Present: *Editorial Board of “Letters in Applied Nanobioscience”*
- 2013 – Present: *Associate Book editor of “De Gruyter open S.A.”*

4.2.3. Service on Professional society

- Organizer of the ASM- South central branch conference 2022, Shreveport, LA, USA.
- Executive committee, Board of Directors. International Bordetella Society (Since 2022)
- Councilor for the COMS -ASM from ASM South Central Branch (Since 2021)
- Officer ASM South Central Branch (Since 2021)
- Board of Directors of “Alumni Fundación Barrie de la Maza” (Since 2021)
- Ambassador of “Alumni Fundación Barrie de la Maza” (Since 2021)
- Collaborator in the “One Health Division” at UGA. (Since 2018)
- Policy Committee Member on the ASM-Southeastern Branch (2018-2020)
- Referente Galega (<https://executivasdegalicia.org/portfolio/monica-cartelle-gestal/>)
- Founder member of Grants and Awards Marie Curie Ex-Alumni Association (2013-2020)

4.2.3. University Service

- 2022: Communications committee. LSU Health Shreveport.
- 2022: In charge of the website of the Department of Microbiology and Immunology. LSU Health Shreveport.
- 2022: LCME committee. School of Medicine. Junior Faculty Member Committee. LSU Health Shreveport.
- 2022: Recruitment committee of Microbiology and Immunology Department at LSU Health Shreveport.
- 2022: Recruitment committee of Multidisciplinary PhD Graduate Studies at LSU Health Shreveport, Spring.
- 2021: Recruitment committee of Microbiology and Immunology Department at LSU Health Shreveport.
- 2021: Member of the Administrative Council LSU Health Shreveport.
- 2021: Recruitment committee of Graduate Studies at LSU Health Shreveport.
- 2021: Recruitment committee of Multidisciplinary PhD Graduate Studies at LSU Health Shreveport, Fall.
- 2021: Recruitment committee of Multidisciplinary PhD Graduate Studies at LSU Health Shreveport, Spring.
- 2020: Member of the Biosafety committee LUS Health, Shreveport.
- 2020: Promote the Microbiology and Immunology PhD and MD/PhD program (LSUHSC-S) with contacts in several Universities of Spain, Romania, Ecuador.
- 2014: Define the curriculum of the “Microbiology Degree in the Pontifical Catholic University of Ecuador”.

4.2.4. Community Service

- 2022: Seminars for children of Pre-K and elementary school about hand-washing. I went to see the children, talked to them about washing hands and using plates we did experiments that showed them how important is handwashing.
- 2022: Invited speaker, Walton High School - Science National Honor Society. Atlanta
- 2022: Leading two tables on IDEAS – Stem K-5 outreach day. Shreveport 26.March.2022
- 2022: Mentor “Escuela de mentoring & IMDEA”. – I mentor a PhD student located in Spain via regular videoconferences
- 2021: Mentor for a Middle School student to help her with her Science Fair Project – “The microbes of the class”.
- 2021: Organizer and Founder of the LSUHSC-S and Fundación Barrie de la Maza – PhD program.
- 2021: Organizer and Founder of the LSUHSC-S and Fundación Barrie de la Maza – Postdoctoral Program
- 2020: Organizer and Founder of the LSUHSC-S and Fundación Barrie de la Maza – Summer Undergraduate Fellowship program. This program will bring Spanish students to LSUHSC-S for 9 weeks to learn basic science techniques as well as provide them an opportunity of international exchange.
- 2020: Volunteer in the diagnostic laboratory for COVID-19 – EVT lab, at LSU Health, Shreveport (Over 300 hours), USA. This initiative was developed to help our Shreveport community, but it is now a reference center for Louisiana COVID diagnostic.
- 2017-2019: Seminars for children of Pre-K and elementary school about hand-washing. I went to see the children, talked to them about washing hands and using plates we did experiments that showed them how important is handwashing.
- 2017-2020: Volunteer in the Media Center in “David C. Barrow Elementary School” Athens, GA, USA. I was helping the elementary school media center, guiding the kids to find their books, helping to organize events and offering all support I could.
- 2012: Organizer, found sponsors, and promoter of the “First science outreach day in A Coruna”. Sponsored by “Fundación Barrie de la Maza” Volunteers obtained from my professional network. 13th April 2012, A Coruna, Galicia → Documented in TV news, newspapers and blogs. Spain. This event was done to bring kids and teenagers closer to science. We performed experiments, organize talks and offered interview in order to give the young students a better perspective of what a real scientist is like.

2010-2012: Participated on Science outreach day in Nottingham University

5. Other relevant information

5.1 Continuous training / Education

- 1998. "Normas ISO 9000, 9001 and 14000 and consulter". Spain (120 hour)
- 2000 "Biostatistics". Complejo Hospitalario Universitario (CHU) Juan Canalejo. A Coruña. 2000 "SPSS program to analyze data". CHU Complejo Hospitalario Universitario Juan Canalejo. A Coruña. Spain (40 hour)
- 2000 "Technique of sequencing of HIV". PEBiosystems. Madrid. Spain (40 hour)
- 2000 "Sequencing". Visible genetics. (Level 1) Hospital A Paz. Madrid. Spain. (Level 2) Hospital de Covadonga de Oviedo. Spain
- 2001 "Seminar of molecular Microbiology HIV". PEBiosystems. Santiago de Compostela. Spain (40 hour)
- 2001 "New techniques for the diagnosis in the laboratory and their application in epidemiology". FEGAS. Santiago de Compostela. Spain (8 hour)
- 2006 "English medium level" Euroschool of English. Cambridge. A Coruña. Spain (60 hour)
- 2010 "HPLC Training course". Centre of Biomolecular Sciences. University of Nottingham. UK (40 hour)
- 2010-11 "English". Course for Marie Curie Research. University of Nottingham. UK (60 hour)
- 2010-12 "Italian". University of Nottingham. UK (60 hour)
- 2011 "Intellectual property rights". Munich, European Patents Agency. Germany (40 hour)
- 2011-2012 "Apple women's development program". Marie Curie Researchers. University of Nottingham. UK (60 hour)
- 2011-12 "Italian". University of Nottingham. UK (60 hours)
- 2016 "A beginners guide to writing in English". Online course of University of Reading. UK (25 hour)
- 2016 ASM online course: "ASM grant writing institute on-line". Online course. USA (30 hours)
- 2016 ASM workshop: "Effective and High Impact Scientific Writing". Boston, Massachusetts. USA (25 hour)
- 2016 UGA Training: "Designing and Delivering Effective Presentations". Athens, Georgia. USA (8 hour)
- 2016 UGA Training: "UGA mart for beginners". Athens, Georgia. USA (4 hour)
- 2016 UGA Training: "Proposal process & budget development" Part 1 and 2. Athens, Georgia. USA (12 hour)
- 2016 UGA Training: "Budget development; preparation and submission". Athens, Georgia. USA (12 hour)
- 2016 UGA Training: "Promotion and Tenure Track". Athens, Georgia. USA (4 hour)
- 2016 UGA Training: "QuantStudio 5 qRT-PCR". Harvill's Lab, UGA, Athens, Georgia. USA (6 hour)
- 2016 UGA Training: "Nikon Confocal Microscopy". UGA, Athens, Georgia. USA (4 hour)

- 2016 UGA Training: "FLOW Cytometer" UGA, Athens, Georgia. USA (4 hour)
- 2017 UGA Training: Re-writing your resume". Athens, Georgia. USA (1 hour)
- 2017 UGA Training: AKTA protein purification system. CVI, UGA, Athens, Georgia. USA (1 hour)
- 2018 UGA Training: How to write a cv and cover letter. UGA, Athens, Georgia. USA (2 hours)
- 2018 UGA Training: Mentors versus Sponsors. UGA, Athens, Georgia. USA (4 hours)
- 2018 GaTech – CTSa training: "Team Science Workshop". Atlanta, Georgia. USA (8 hours)
- 2020 – LSUH-S Faculty training: "More effective methods for teaching" (24-25.January.2020 / 12 hours)
- 2020 – LSUH-S Faculty Training: "Faculty development series (1hour/monthly)" (25.Feb.2020)
- 2020 – LSU Faculty training: "Professional Writing Seminar" (3.March.2020 / 7 hours)
- 2020 – LSU Faculty Training: "Using Social Media for Science (20.March.2020 / 1 hour)
- 2020 - Connect2Science Webinar Series: "Western Blot tips and tricks: How to improve your western blots" (22.May.2020 / 1 hour)
- 2020 - Connect2Science Webinar Series: "5 steps to easier panel building for intracellular flow cytometry" (15.May.2020 / 1 hour)
- 2020 - Connect2Science Webinar Series: "Innovations in cellular imaging - from 2D cell culture imaging to 3D cell model high content real-time analysis" (13.May.2020 / 1 hour)
- 2020 - Cell Press: "How to Prepare Your Manuscripts for Publication in Top Journals" (12.May.2020 / 1 hour)
- 2020 - Connect2Science Webinar Series: "Luminex-based immunoassays for RNA and protein detection to support infectious diseases research and vaccine development" (11.May.2020 / hours)
- 2020 - Inflammazoom: International Webinar series on Inflammasome" - Zoom meeting organized by University of Cambridge - UK -Monthly meeting from September 2020 – to present
- 2020 - LSUH-S Faculty Training: "Faculty development series (1hour/monthly)" (25.Feb.2020)
- 2020 - LSU Faculty training: "Professional Writing Seminar" (3.March.2020 / 7 hours)
- 2020 - LSU Training: "Using Social Media for Science" (20.March.2020 / 1 hour)
- 2020- SMI "Eosinophilic esophagitis" Marc Rothenberg (14.July.2020 / 1 hour)
- 2020 - LSUHSC-S Continue Faculty Training: "Promotion and Tenure" (13.July.2020 / 1 hour // 27.July.2020 / 1 hour)
- 2020 – M2M program Special presentation – Dr Bruce Levin (27.July.2020 / 1 hour)
- ASM Microbe – online (summer of science / 10 hours)
- 2020 - Connect2Science Webinar Series: "Western Blot tips and tricks: How to improve your western blots" (22.May.2020 / 1 hour)
- 2020 - Connect2Science Webinar Series: "5 steps to easier panel building for intracellular flow cytometry" (15.May.2020 / 1 hour)
- 2020 - Connect2Science Webinar Series: "Innovations in cellular imaging - from 2D cell culture imaging to 3D cell model high content real-time analysis" (13.May.2020 / 1 hour)
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- 2020 - LSUH-S Faculty training: "More effective methods for teaching" (24-25.January.2020 / 12 hours)
- 2020 - LSUH-S Faculty Training: "Faculty development series (1hour/monthly)" (25.Feb.2020)
- 2020 - LSUHSC-S Continue Faculty Training: "Promotion and Tenure" (13.July.2020 / 1 hour // 27.July.2020 / 1 hour)
- 2020 - LSUHSC-S Continue Faculty Training: "Navigating Tenure and promotion" (1.October.2020 / 1 hour)

- 2020 - Fluidigm: "Intro Mass Cytometry and highly multiplexed immunohistochemistry" (24.September.2020 / 2 hours)
- 2020 - LSUHSC-S Continue Faculty Training: "Mentoring and building research teams" (5.November.2020 / 1 hour)
- 2020 - UAB School of Nursing faculty or the CCTS Training Academy: "Specific aims" (30.September.2020 / 21.October.2020 / 11.November.2020 // 12 hours)
- 2020 – to present: International *Bordetella* Lab Meeting – Online (1 hour monthly since September 2020)
- 2020 – 2021 – New faculty training - LSU Health Science Shreveport (1hour / monthly – Total 12 hours)
- 2021 – LabRoots webinar – RNAscope and its applications for animal research (7.December.2021 // 1hour)
- 2021 – Grant Writing course – LSU Health Science Shreveport (1hour / monthly – Total 7 hours)
- 2021 – New faculty training - LSU Health Science Shreveport (1hour / monthly – Total 12 hours)
- 2022 – Grant Writing course – LSU Health Science Shreveport (1hour / monthly – Total 7 hours)

5.2 Languages

	Speaking	Reading	Writing
Spanish	Mother tongue	Mother tongue	Mother tongue
Galego	Mother tongue	Mother tongue	Mother tongue
English	High	High	High
Portuguese	High	High	Fluent
Italian	Medium	Medium	Medium