CURRICULUM VITAE

PERSONAL DATA

NAME:	María Isabel Colombo
CITIZENSHIP:	Argentine
PLACE OF BIRTH:	Mendoza, Argentina
HOME ADDRESS:	Emilio Civit 417- PB -Depto 3 (5500) Mendoza, Argentina
PLACE OF WORK:	Instituto de Histología y Embriología (IHEM)-CONICET Facultad de Ciencias Médicas-Universidad Nacional de Cuyo (5500) Mendoza, Argentina.
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PROFESSIONAL DATA:

a) Present Position:

- Professor of Cell and Molecular Biology, Departamento de Morfofisiología, Facultad de Ciencias Médicas, Universidad Nacional de Cuyo, Mendoza, Argentina.
- Group Leader- Investigador Superior CONICET- Instituto de Histología y Embriología (IHEM), Facultad de Ciencias Médicas, Universidad Nacional de Cuyo, Mendoza, Argentina.

b) Education

Year	Degree obtained	University
1976	Farmacéutica Nacional (Pharmacist)	"Juan A. Maza", Mendoza, Argentina
1980	Bioquímica (Biochemist)	"Juan A. Maza", Mendoza, Argentina
1986	Doctor en Bioquímica* (PhD in Biochemistry)	"Juan A. Maza", Mendoza, Argentina
2005	Especialista en Docencia Superior Specialist in Higher Education	"Juan A. Maza", Mendoza, Argentina

* Thesis work was done in the Instituto de Histología y Embriología (IHEM), de la Facultad de Ciencias Médicas de la Universidad Nacional de Cuyo, Mendoza, Argentina.

c) Positions held:

Institution	from	to	Position
- Universidad Juan A. Maza	1975	1977	Undergraduate Assistant
- Universidad Juan A. Maza	1980	1983	Assistant
- CONICET (National Research Council of Argentina)	1983	1986	Fellow
- CONICET (National Research Council of Argentina)	1987	1988	Post-doctoral Fellow
- Universidad Juan A. Maza	1983	1989	Assistant Professor
- Universidad Nacional de Cuyo	1985	1991	Assistant Professor
- Washington University, USA Department of Cell Biology	1989	1991	Post-doctoral Fellow
- Washington University, USA			

Department of Cell Biology - Washington University, USA	1992	1993	Instructor in Cell Biology
Department of Cell Biology	1993	1997	Research Assistant Professor
- IHEM-CONICET	1997	2004	Group leader-Investigador Independiente de CONICET
- Universidad Nacional de Cuyo	1998	2009	Associated Professor of Cell Biol.
School of Medicine - IHEM-CONICET	2005	2013	Group leader-Investigador Principal de CONICET
- Universidad Nacional de Cuyo, School of Medicine	2009	------	Professor of Cell Biology
- Universidad Nacional de Cuyo, School of Medicine	2012	2016	Chair of the PhD Program in Biology (PROBIOL).
- Universidad Nacional de Cuyo IHEM-CONICET	2012	2016	Deputy Director of the Instituto de Histología y Embriología (IHEM)
-Universidad Nacional de Cuyo IHEM-CONICET	2017	2022	Director of the Instituto de Histología y Embriología (IHEM),

d) <u>Awards:</u>

- **Honors award** for the best average grades and Golden Medal:
  "Diploma de Honor y Medalla de Oro" .1976- Universidad "J. A. Maza", Mendoza, Argentina
- **Honors award** for the best average grades and Golden Medal:
  "Diploma de Honor y Medalla de Oro" .1980-Universidad. J. A. Maza. Mendoza, Argentina
- **Fellowship award**: Beca de Iniciación en la Investigación. 1983-1985. CONICET, Argentina.
- **Fellowship award**: Beca de Perfeccionamiento en Investigación. 1985-1986. CONICET, Argentina.
- **Post-Doctoral Fellowship award**: Beca de Formación Superior-1986-1989. CONICET, Argentina.
- **CEDIQUIFA AWARD 2008:** award in Scientific Research "50 ANIVERSARIO DEL CONICET", AÑO 2008, to the best scientific publication entitled "The autophagic pathway is a key component in the lysosomal dependent entry of *Trypanosoma cruzi* into the host cell".
- **"DR. BERNARDO A. HOUSSAY" AWARD 2010 CEDIQUIFA** to Dr. María Isabel Colombo and research group for her studies about the relationship between bacterial pathogens and the host cell.
- **The TWAS Prize in Biology for 2015,** announced by the Council of The World Academy of Sciences (TWAS) during the 26th General Meeting in Vienna, Austria, for outstanding contributions to the study of the autophagy pathway and its relationship with relevant human infection processes. El premio fue otorgado durante el 27th TWAS General Meeting llevado a cabo en Kigali, Rwanda, en noviembre de 2016.
- <u>2015.</u> **"Mendocinos del Año"**, awarded by the journal UNO for her studies in the Cell Microbiology field. The journal UNO distinguished every year distingue to people from Mendoza which are recognized for their compromise and activity in different areas.
- <u>2016.</u> **"RAICES 2016"**, a prize awarded every year by the Radio LV10 in recognition to her relevant activity in scientist research.

- 2020. **"Sarmiento. Aportes al conocimiento científico"-**Recognition to the scientific trajectory instituted by the Museo Sarmiento together with the CONICET, to a recognized personality in science.
- 2020- Member of the **NATIONAL ACADEMY OF SCIENCE**. Córdoba, Argentina.
- 2021. Member of the **ACADEMIA DE CIENCIAS DE AMÉRICA LATINA**.
- 2021. **PREMIO CONSAGRACIÓN Academia Nacional de Ciencias Exactas, Físicas y Naturales** - año 2021 – in the Biologycal Sciences área, awarded by the National Academy of Exact, Physics and Natural Sciences. .
- 2021. **PREMIO HOUSSAY TRAYECTORIA 2021,** award from the Ministry of Science, Technology and Innovation in the area of Biological Sciences (molecules, organims and systems) and Biochemistry.
- 2022. **DOCTOR HONORIS CAUSA**- Universidad "Juan Agustín Maza" (UMAZA). May the 12th, 2022.
- 2023. **PREMIO KONEX- Diplomas al Mérito,** award to the 100 more outstanding individuals in the last decade in Science and Technology in Argentina (2013-2023)- Konex Foundation- May 2023.

e) Grants:

- **Leukemia Society Special Fellowship**: three-year award from the Leukemia Society of America, 1993-1996.
- **American Cancer Society Institutional Research Grant**: one year award from the American Cancer Society, starting November 1994.
- **Fundación Antorchas**. Reentry grant 1997-1998
- **National Science Foundation**, Nº INT-9724821. "U.S.-Argentina Cooperative Research: Rab GTPases and Membrane Fusion". 1998/2000.
- **Agencia Nacional de Promoción Científica y Tecnológica**, **PICT 97** Nº 01-00111-02072 entitled "Factores Involucrados en el Transporte Pinocítico, Fagocítico y Autofágico", 1998/1999.
- **SECyT-ECOS-France** Collaborative Project A98B04 entitled "La maquinaria molecular en el proceso de reciclaje: secreción de exosomas". Período 1999-2001.
- **CONICET** -PIP Nº 0695/98 "La maquinaria molecular que regula el transporte mediado por vesículas" 1999-2001.
- **Agencia Nacional de Promoción Científica y Tecnológica PICT 99** Nº 1-6058 "La maquinaria molecular que regula la autofagocitosis y el proceso de reciclaje desde el compartimiento fagocítico", 2000/2002.
- **CONICET-CNRS** Collaborative Project with Institut Curie (Paris, France), "Estudios funcionales para caracterizar la GTP-proteína Rab24", 2001-2002.
- **Ministerio de Salud de la Nación "Ramón Carrillo-Arturo Oñativia"** Basic Research "La maquinaria Molecular en la Vía Autofágica". 2002-2003.
- **Agencia Nacional de Promoción Científica y Tecnológica PICT 2002**- Nº 01-11004 titulado "Interacciones de Patógenos Intracelulares con la vía autofágica", 2004-2006.
- **SECyT-ECOS-France,** Collaborative Project A03S02 "Estudio funcional de la GTPase Rab24: identificación de proteínas con las que interacciona". 2004-2006
- **European Molecular Biology Organization (EMBO**) EMBO World Programme Practical Course "Phagocytosis and Intracellular Microorganisms", August 2004.
- **AMSUD-PASTEUR** International workshop on "Phagocytosis and Intracellular Microorganisms" August 2004.
- **AIDS Fogarty International Research Collaboration Award** (AIDS FIRCA) R03 TW006982-01. 2004-2006.
- **CONICET** PIP 5943- "Mecanismos moleculares que participan en etapas específicas del transporte intracelular. 2005-2006.

- **Agencia Nacional de Promoción Científica y Tecnológica. PICT 2004.** Project # 20711 entitled "Bases Moleculares del Transporte Vesicular: papel de proteínas involucradas en la vía autofágica". 2005-2008.
- **Agencia Nacional de Promoción Científica y Tecnológica. PICT 2005**. Project # 38420 entitled "Intracellular pathogens and the autophagic pathway". 2007-2010.
- **Agencia Nacional de Promoción Científica y Tecnológica PME** Project # 00306-2006- **"**Consolidación de una red en Biología Celular para la resolución de problemas en salud humana y animal"-.Equipments acquisition. $ 1.050.000.
- **Agencia Nacional de Promoción Científica y Tecnológica. PICT 2008.** Project # 0192 entitled "Mecanismos moleculares del transporte intracelular mediado por vesículas: papel de proteínas involucradas en la vía autofágica." 2010-2012.
- **Agencia Nacional de Promoción Científica y Tecnológica- PICT 2013**. Project # 0305 entitled "La maquinaria molecular involucrada en el transporte intracelular mediado por vesículas y su relación con la vía autofágica". 2014-2017.
- **Secretaría de Ciencia, Técnica y Posgrado de la Universidad Nacional de Cuyo**. Proyect entitled: "Mecanismos moleculares del transporte intracelular mediado por vesículas: la vía autofágica y su relación con microorganismos patógenos". 2015-2017.
- **Agencia Nacional de Promoción Científica y Tecnológica**. **PICT 2016**. Project # 0443 entitled " Mecanismos moleculares de la respuesta autofágica de la célula hospedadora ante la invasión de patógenos intracelulares". 2017-2020.
- **Agencia Nacional de Promoción Científica y Tecnológica. PICT 2018**. Project # 04427 entitled " Componentes moleculares involucrados en el transporte intracelular mediado por vesículas y su relación con la vía autofágica". 2019-2022.
- **Agencia Nacional de Promoción Científica y Tecnológica. PICT 2020**. Project# 00106 entitled "Invasión de patógenos intracelulares: componentes moleculares involucrados en la respuesta autofágica. 2021-2025.
- **MINCYT** (Ministry of Science and Technology) "PROGRAMA DE ARTICULACIÓN Y FORTALECIMIENTO FEDERAL DE LAS CAPACIDADES EN CIENCIA Y TECNOLOGÍA COVID-19", project entitled: "Uso de plasma de convalecientes para el tratamiento de pacientes con COVID-19. Director: María Isabel Colombo- Project ID: MEN 7- Resolution# 170/2020.
- **PICT-2021-CAT-II-00029-MINCYT** (Ministry of Science and Technology), Project entitled **"**Desarrollo de técnicas de edición genómica que eviten la aparición de tumores en mamíferos". RESOL-2022-317-APN-DANPIDTYI#ANPIDTYI- Participant scientists: María I. Colombo, Marina Uhart, Exequiel Barrera y Mariano Polo. Head of the Project: Mariano Polo.

f) Papers published in the last ten years (Total number of papers published: 139). **h index:49 (Scopus) with more than 18,000 citations.**

1. Campoy, E. Mansilla, M.E. and Colombo, M.I. Endocytic SNAREs are involved in optimal *Coxiella burnetii* vacuole development". *Cell Microbiol*. 2013 Jun;15(6):922-41.
2. Militello R.D., Munafó, D.B., Berón, W., López, L. A., Monier, S. Bruno Goud and Colombo, M.I."Rab24 is required for normal cell division". *Traffic.* 2013 May;14(5):502-18. doi: 10.1111/tra.12057. Epub 2013 Mar 8.
3. Vanrell MC, Cueto JA, Barclay JJ, Carrillo C, Colombo MI, Gottlieb RA, Romano PS. Polyamine depletion inhibits the autophagic response modulating *Trypanosoma cruzi* infectivity". *Autophagy.* 2013 May 6;9(7).
4. Delgui, L.R., Rodríguez, J.F. and Colombo, M.I. The endosomal pathway and the Golgi complex are involved in the *Infectious Bursal Disease Virus* life cycle. *J Virol*. 2013 Aug; 87(16):8993-9007.

5. Rovetta, A.I., Peña, D., Hernández Del Pino, R.E., Recalde, G., Pellegrini, J., Bigi, F., Musella, R.M., Palmero, D. J., Colombo, M.I.*, and García, V.E.* IFNG-mediated immune responses enhance autophagy against *Mycobacterium tuberculosis* antigens in patients with active tuberculosis. *Autophagy* 2014 Dec 2;10(12):2109-21.* corresponding authors. https://www.ncbi.nlm.nih.gov/pubmed/25426782.
6. Peixoto,E., Atorrasagasti, C., Aquino,J., Militello, R., Bayo,J., Fiore, E., Piccioni, F., Salvatierra,E., Alaniz, L., Garcia,M., Bataller, R., Corrales, F., Gidekel, M., Podhajcer, O., Colombo, M.I. and Mazzolini, G. (2014). SPARC (Secreted Protein Acidic and Rich in Cysteine) knockdown protects mice from acute liver injury by reducing vascular endothelial cell damage. *Gene Ther*. 2015 Jan; 22(1):9-19.
7. Gimenez MC, Rodríguez Aguirre JF, Colombo MI*, Delgui LR*. Infectious bursal disease virus uptake involves macropinocytosis and trafficking to early endosomes in a Rab5-dependent manner. *Cell Microbiol*. 2015 Jan 7. doi: 10.1111/cmi.12415. * corresponding authors.
8. Salinas,R.P., Distel,I. S., Ortiz Flores,R.M,., Aguilera,M.O., Colombo,M.I., and Berón, W. Coxiella burnetii phagocytosis is regulated by GTPases of the Rho family and the RhoA effectors mDia1 and ROCK. *PLoS One*. 2015 Dec 16;10(12):e0145211. doi: 10.1371/journal.pone.0145211.
9. Fader, C.M., Vergara A., Salassa, B., Moor, F. and Colombo, M.I. "Hemin induces mitophagy in a leukemic erythroblast cell line". *Biol Cell*. 2016 Apr;108(4):77-95. doi: 10.1111/boc.201500058. https://www.ncbi.nlm.nih.gov/pubmed/26773440
10. Amaya, C., Militello, R., Calligaris, S., and Colombo, M.I. "Rab24 interacts with the Rab7/RILP complex to regulate endosomal degradation", *Traffic* 2016 Aug 23. doi: 10.1111/tra.12431. https://www.ncbi.nlm.nih.gov/pubmed/27550070.
11. Cueto, J.A., Vanrell, M.C., Salassa B.N., Nola S., Galli T, Colombo, M.I. and Romano. P.S. SNARE proteins required during *Trypanosoma cruzi* parasitophorous vacuole development. Cell Microbiol. 2016 Dec 19. doi: 10.1111/cmi.12713. https://www.ncbi.nlm.nih.gov/pubmed/27992096.
12. Tateosian, N., Pellegrini, J., Amiano, N., Rolandelli, A., Casco, N., Palmero, D., Colombo, M.I., García V. IL17 augments autophagy in *Mycobacterium tuberculosis* infected monocytes from patients with active tuberculosis in association with the severity of the disease. Autophagy. 2017 Jul 3;13(7):1191-1204. doi:10.1080/15548627.2017.1320636. Epub 2017 Jun 5. https://www.ncbi.nlm.nih.gov/pubmed/28581888
13. Mansilla Parejas, M.E., Bongiovanni, A., Lafont, F., and Colombo, M.I. Alterations of the *Coxiella burnetii* replicative vacuole membrane integrity and interplay with the autophagy pathway. *Front Cell Infect Microbiol*. 2017 Apr 24;7:112. doi: 10.3389/fcimb.2017.00112 https://www.ncbi.nlm.nih.gov/pubmed/28484683
14. Mariana Melani, Ayelén Valko, Nuria M. Romero, Milton O. Aguilera, Julieta M. Acevedo, Zambarlal Bhujabal, Joel Perez-Perri, Rocío V. de la Riva-Carrasco, Maximiliano J. Katz, Eleonora Sorianello, Cecilia D'Alessio, Gabor Juhász, Terje Johansen, María I. Colombo and Pablo Wappner. Zonda is a novel early component of the autophagy pathway in *Drosophila***.** *Mol Biol Cell.* 2017 Nov 1;28(22):3070-3081. doi: 10.1091/mbc.E16-11-0767. Epub 2017 Sep 13. https://www.ncbi.nlm.nih.gov/pubmed/28904211
15. María Milagros López de Armentia, María Celeste Gauron and María Isabel Colombo. *Staphylococcus aureus* alpha-toxin induces the formation of dynamic tubules labelled with LC3 within host cells in a Rab7 and Rab1b-dependent manner. *Frontiers in Cell. and Infect. Microbiol* 2017 Oct 4;7:431. doi: 10.3389/fcimb.2017.00431. https://www.ncbi.nlm.nih.gov/pubmed/29046869.
16. Gimenez MC, Zanetti FA, Terebiznik MR, Colombo MI, Delgui LR. *Infectious Bursal Disease Virus* hijacks endosomal membranes as the scaffolding structure for viral

replication. J Virol. 2018 Mar 14. pii: JVI.01964-17. doi: 10.1128/JVI.01964-17. https://www.ncbi.nlm.nih.gov/pubmed/29540593

17. Dias, BRS, de Souza, CS, Almeida, NJ, Lima, JGB, Fukutani, KF, Dos Santos, TBS, França-Cost, J, Brodskyn, CI, de Menezes, JPB, Colombo, MI, Veras, PST.Autophagic induction greatly enhances *Leishmania major* intracellular survival compared to *Leishmania amazonensis* in CBA/j-infected macrophages. *Front Microbiol.* 2018 Aug 15; 9:1890. doi: 10.3389/fmicb.2018.01890. eCollection 2018. https://doi.org/10.3389/fmicb.2018.01890

18. E. Silva, P. Villar, I. Niechi, C. Trigo, J. Muñoz, P. Pérez, F. Aguayo, V. Burzio, M. Varas-Godoy, A. Castro, E. Caamaño, M. Colombo and J. Tapia. CK2 inhibition with silmitasertib promotes methuosis-like cell death associated to catastrophic massive vacuolization of colorectal cancer cells". *Cell Death and Disease*. 2018 Cell Death Dis. 2019 Jan 25;10(2):73. doi: 10.1038/s41419-019-1306-x.IF: 5.64

19. Grosso RA, Caldarone PVS, Sánchez MC, Chiabrando GA, Colombo MI, Fader CM. Hemin induces autophagy in a leukemic erythroblast cell line through the LRP1 receptor.Biosci Rep. 2019 Jan 3;39(1). pii: BSR20181156. doi: 10.1042/BSR20181156. Print 2019 Jan 31.

20. M. E. Mansilla Pareja, M. C. Gaurón, E. Robledo, M. Aguilera, and M. I. Colombo. The cAMP effectors, Rap2b and EPAC, are involved in the regulation of the development of the *Coxiella burnetii*-containing vacuole by altering the fusogenic capacity of the vacuole. PLOS ONE 2019 Feb 14;14(2):e0212202. doi: 10.1371/journal.pone.0212202.

21. Casassa AF, Vanrell MC, Colombo MI, Gottlieb RA, Romano PS. Autophagy plays a protective role against *Trypanosoma cruzi* infection in mice. Virulence. 2019 Dec;10(1):151-165. doi: 10.1080/21505594.2019.1584027. **IF: 3.95 Q1.** www.ncbi.nlm.nih.gov/pubmed/30829115

22. Roldán JS, Candurra NA, **Colombo MI**, Delgui LR.*Junín Virus* Promotes Autophagy to Facilitate Viral Life Cycle.J Virol. 2019 May 22. pii: JVI.02307-18. doi: 10.1128/JVI.02307-18. [Epub ahead of print]. www.ncbi.nlm.nih.gov/pubmed/31118257.

23. Pellegrini, J. M., Sabbione, F., Morelli, MP., Tateosian, N.L., Castello, F.A., Amiano, N.O., Palmero, D., Levi, A., Ciallela, L., **Colombo, M. I**., Trevani, A.S., and García, V.E.. Neutrophil autophagy during human active tuberculosis is modulated by SLAMF1. *Autophagy* (under revision).

24. Wojnacki J., Nola, S., Bun, P., Cholley, B., Filippini, F., Pressé, M., Lipecka, J., Man Lam, S., N'guyen, J., Simon, A., Ouslimani, A., Shui, G., Fader, C.M., **Colombo, M.I**., Chiara Guerrera, I., and Galli, T. Role of VAMP7-dependent secretion of Reticulon 3 in neurite growth. *Cell reports* 2020, 33(12):108536 10.1016/j.celrep.2020.108536. **IF: 8.109 Q1.**

25. Gimenez, C., Issa, M., Sheth, J., **Colombo**, M.I., Terebiznik, M.R., Delgui, L.R. Phosphatidylinositol 3-phosphate mediates the establishment of *infectious bursal disease virus* replication complexes in association with early endosomes. *Journal of Virology* 2020. DOIU: 10.1128/JVI.02313-20.**IF: 4.501 Q1.**

26. Gauron, M.C., Newton, A.C. and **Colombo, M.I.** PKCα is recruited to Staphylococcus aureus-containing phagosomes and impairs bacterial replication by inhibition of autophagy. *Front. Immunol.* Microbial Immunology 2021. 12:662987.doi: 10.3389/fimmu.2021.662987. **IF: 5.085 Q1.**

27. Pellegrini1,J.M, Martin, C., Morelli, M.P., Schander, A.J., Tateosian, N. L., Amiano, N.O., Rollandelli, A., Palmero, D.J., Levi, A., Ciallella, L., **Colombo, M.I**., García, V.E. PGE2 displays immunosuppressive effects during human active tuberculosis. *Scientific Reports* Sci Rep. 2021 Jun 30;11(1):13559. doi: 10.1038/s41598-021-92667-1. **IF: 4.379 Q1.**

28. Gimenez, M. Cecilia, Frontini-López, Jesica, Pocognoni, Cristian, Roldán, Julieta, Garcia Samartino, Clara, Uhart, Marina, Colombo, María I., Terebiznik, Mauricio and Delgui,

Laura. Rab1b-GBF1-ARF1 secretory pathway axis is required for Birnavirus replication ". *Journal of Virology* 2021 (in press). **IF: 4.501 Q1.**

29. Aguilera, M.O., Robledo, E., Melani, M. Wappner, P., and Colombo, M.I. FKBP8 is a novel molecule that participates in the regulation of the autophagy pathway. *BBA-Molecular Cell research*, 2022, 1869(5), 119212.DOI:10.1016/j.bbamcr.2022.119212 **IF: 4.739 Q1.**
30. Germanó, M.J., Giai, G., Cargnelutti, D.E., **Colombo**, M.I., Blanco,S., Konigheim, B., Spinsanti, L., Aguilar, J., Gallego, S., Valdez, H.A., Mackern-Oberti, J. P., Sanchez, M.V. Receptor-binding domain-based SARS-CoV-2 vaccine adjuvanted with cyclic di-adenosine monophosphate enhances humoral and cellular immunity in mice. *J. Medical Viro*l. 2023;95:e28584. https://doi.org/10.1002/jmv.28584. **IF: 20.7 Q1**
31. Giai, C[#]., Salassa, B.N[#]., Zarelli, V., Bello, O., Vanrell, M.C., Ojeda, D., Gamarnik, A., and **Colombo, M. I.** Comparative analysis of humoral immune response upon the three first vaccines applied in Argentina: IgG production and neutralizing capacity against SARS-CoV-2. *Heliyon* 9(5):e15211- April 2023 10.1016/j.heliyon.2023.e15211 **IF: 3.78 Q1**.

g) Reviews and book chapters (last ten years)

1. Mestre, MB. and Colombo MI. (2013). Autophagy and Toxins: A Matter of Life or Death. *Curr Mol Med.* Feb;13(2):241-51. https://www.ncbi.nlm.nih.gov/pubmed/23228127..
2. Militello R.D. and Colombo, M.I. (2013). Small GTPases as regulators of cell division, *Comm. Integr Biol.* 2013 Sep 1;6(5):e25460.
3. Mansilla, M.E. and Colombo, M.I. (2013). Autophagic clearance of bacterial pathogens: molecular recognition of intracellular microorganisms. *Front Cell Infect Microbiol.* 2013 Sep 30;3:54. https://www.ncbi.nlm.nih.gov/pubmed/24137567.
4. Kepp O., et al., (2014). Consensus guidelines for the detection of immunogenic cell death. *Oncoimmunology* Dec 13;3(9):e955691. eCollection 2014 Oct. Review.
5. Fader, C., Aguilera, M.O. and Colombo, M.I. (2014). Autophagy response: manipulating the mTOR controlled machinery by amino acids and pathogens. *Amino Acids* 2014 Sep 19. https://www.ncbi.nlm.nih.gov/pubmed/25234192.
6. Recalde, G., and Colombo, M.I. (2015). *Mycobacterium tuberculosis* and the autophagic pathway. In Autophagy, Infection, and the Immune Response. Chapter 14, page 233-245 Editorial: John Wiley and Sons Ltd, ID: 3110366.
7. López de Armentia, MM and Colombo, M.I. (2015). "Intracellular Pathogen Invasion of the Host Cells: Role of the Alpha Hemolysin-Induced Autophagy." en el libro Autophagy: Cancer, Other Pathologies, Inflammation, Immunity, Infection, and Aging. (Elsevier Publishing Company).
8. Miserey-Lenke, S. and Colombo, M.I. Small RAB GTPases regulate multiple steps of mitosis. *Front Cell Dev Biol.* 2016 Feb 17;4:2
9. Amaya, C., Fader, C.M. and Colombo, M.I. (2015). Autophagy and proteins involved in vesicular trafficking. *FEBS letters* 589:3343-3353. https://www.ncbi.nlm.nih.gov/pubmed/26450776.
10. López de Armentia MM, Amaya C, Colombo MI. Rab GTPases and the Autophagy Pathway: Bacterial Targets for a Suitable Biogenesis and Trafficking of Their Own Vacuoles. *Cells.* 2016 Mar 8;5(1). https://www.ncbi.nlm.nih.gov/pubmed/27005665.
11. Laura R. Delgui and María I. Colombo. (2017). A novel mechanism underlying the innate immune response induction upon viral-dependent replication of host cell mRNA: a mistake of +sRNA viruses' replicases. *Front Cell Infect Microbiol.* 2017 Jan 20;7:5. doi: 10.3389/fcimb.2017.00005. eCollection 2017. Review.
12. Simon, Hans-Uwe; Friis, Robert; and Colombo, María I. (February 2017) Autophagy. In: eLS. John Wiley & Sons, Ltd: Chichester. DOI: 10.1002/9780470015902.a0021581.pub2

13. Galluzi et al., (2017).Molecular definitions of autophagy and related processes. EMBO J. 2017 Jul 3;36(13):1811-1836. doi: 10.15252/embj.201796697. Epub 2017 Jun 8. Review. https://www.ncbi.nlm.nih.gov/pubmed/28596378.

14. Amaya, C. and Colombo, MI. (2017). Protein interactions in the last steps of the endosomal degradative pathway. *J. of Cell Signaling* (*in press*).

15. Grosso R, Fader CM, Colombo MI. Autophagy: A necessary event during erythropoiesis. *Blood Rev*. 2017 Sep;31(5):300-305. doi: 10.1016/j.blre.2017.04.001. Epub 2017 Apr 22. Review. https://www.ncbi.nlm.nih.gov/pubmed/28483400.

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h) <u>Membership of Scientific Societies:</u>

- American Society for Cell Biology (ASCB)**.** Until 2018.
- Sociedad Argentina de Investigaciones Bioquímicas SAIB (Argentine Society for Biochemical Research).
- Asociación Argentina de Microbiología (Argentine Association for Microbiology), Argentina.
- Academia Nacional de Ciencias (National Academy of Science), Córdoba, Argentina. Member since 2020.
- Academia de Ciencias de América Latina (Academy of Sciences from Latin America). Member since 2021.
- Asociación Argentina para el Progreso de las Ciencias (AAPC). Member since 2021.