

CURRÍCULUM VITAE

Personal details

Name: Marcela Etel Díaz Ferreira
Email address: marcela@pasteur.edu.uy
Date of birth: 08/25/1985
Nationality: Uruguayan
Marital status: Married
Personal address: C street between 7th y 8th streets, M33 S4 (Parque del Plata, Canelones), Uruguay
Personal phone: (+598) 98682321
Work Address: Institut Pasteur de Montevideo (IPMONT). Mataojo 2020
Work phone: (+598) 2 5220910 int. 180



Education

Institution	Degree	Completion year	Field of study
Faculty of Science, Universidad de la República, Uruguay	B. S	2009	Biology/Neuroscience
Faculty of Science, Universidad de la República. PEDECIBA	MSc.	2013	Biology/Neuroscience
Faculty of Science, Universidad de la República. Postgraduate in Biotechnology	PhD	In progress from 2025	Biophysics/Biotechnology

I am a biologist with a Master's degree in Neurosciences. Since 2008, I have built my career in microscopy, starting as a technician at Clemente Estable Biological Research Institute in Montevideo, Uruguay, and later joining the Microscopy Unit at the Institut Pasteur of Montevideo (IPMONT) in 2013. Currently, at the Advanced Bioimaging Unit (IPMONT-Udelar), I provide imaging acquisition services, train users and scientists, support experimental planning, and manage the facility. In these years of experience, I have developed expertise in sample preparation, image processing, equipment maintenance, and core facility management. Additionally, I actively participate in imaging networks, Train-the-Trainer programs, and community development initiatives. Since 2024, I have contributed as an independent evaluator for international funding programs supporting imaging infrastructure, reinforcing my commitment to improving accessibility and advancing bioimaging in the Global South. I consider myself an Imaging Scientist with a strong foundation in optical microscopy, scientific training, and facility management. I am also currently pursuing my PhD, focusing on the biophysics of membranes and molecular crowding in host-pathogen interactions.

Positions & employment

2022 to current: Senior assistant technician at the Advanced Bioimaging Unit (UBA). IPMONT&Udelar, Montevideo, Uruguay.
2013-2021: Technical assistant level 4 in the microscopy unit, IPMONT, Montevideo, Uruguay.
2013-2021: Associate Professor in the Department of Physiology of the Faculty of Medicine, Claeu University, Punta del Este, Uruguay.
2008-2013: Technician in the Confocal-Fluorescence Microscopy Service IIBCE.
2010-2011: Researcher Grade 1 IIBCE, Montevideo, Uruguay.

Memberships and participation in Working groups

- Sociedad Uruguaya de Microscopía e Imagenología (**SUMI**)
 - Sociedad Uruguaya de Biología (**SUB**)
 - Sociedad de Neurociencias del Uruguay (**SNU**)
 - Latin America Bioimaging (**LABI**). Co-chair of the Training and education working group. <https://labi.lat/working-groups/>
 - Bioimaging North America (**BINA**)
- Global Bioimaging (**GBI**). Co-chair of the Training Core Facility Imaging Scientists working group. <https://globalbioimaging.org/working-groups> (WG-06).

Publications

1. **Díaz M.**, Cabrera A., Pannunzio B., Céspedes P., Gunther G., Malacrida L., Gómez-Machuca H. (2026). MitoDAN: A Mitochondria-Targeted Cationic Fluorophore for Sensing of Polarity and Molecular Crowding in Living Cells. *ACS Sensors*. DOI: 10.1021/acssensors.6c01544.
2. García-Ferrés M, Bottomley AL, Cole L, **Díaz M.**, Flores-Rodriguez N, Grebnev G, Guerrero A, Jacobs CA, Lejeune L, Ma X, Malacrida L, McMillan PJ, North AJ, Nowell CJ, Okugbeni N, Repetto MV, Beraldi AMR, Rossi AH, Pietrasanta LI, Singh R, Brown CM. Global impact through train-the-trainer (TtT) courses. *J Microsc*. 2026 May 28. doi: 10.1111/jmi.70116. Epub ahead of print. PMID: 42207015.
3. Kava E., Malacrida L., **Díaz M.**, Itri R., Costa-Filho A.J, Exploring the effects of Golgi Reassembly and Stacking Proteins in lipid membranes, *International Journal of Biological Macromolecules*, 2026,152408, ISSN 0141-8130, <https://doi.org/10.1016/j.ijbiomac.2026.152408>.
4. Preprint: Pannunzio B., Céspedes P., **Díaz M.**, Alí D., Rial A., Malacrida L. 2026. High-Throughput Single-Cell Spectroscopy Using Phasor Analysis of Spectral Flow Cytometry. *bioRxiv*. <http://biorxiv.org/content/early/2026/03/02/2026.02.27.708623>.
5. Thompson, K., Bischof, J., Reis, Y., Arvanitis, C., Balogun, O. A., Brown, C. M., De Niz, **M.**, **Díaz**, M., Engelbrecht, L., Fabian-Morales, E., Fazeli, E., Fletcher, G., Guerrero, A., Itano, M. S., Kable, E., Kitten, G. T., Komoto, S., Ma, X., O'Toole, P. J., ... Keppler, A. (2026). Making the invisible visible: A global examination of careers and recognition for Imaging Scientists in core facilities. *Journal of Microscopy*, 1–21. <https://doi.org/10.1111/jmi.70089>
6. **Díaz M**, Zolessi FR, Malacrida L. Spectral Phasor Analysis for Hyperspectral Imaging to Elucidate Acridine Orange Photophysics in Cells. *Microsc Res Tech*. 2026 Feb 12. doi: 10.1002/jemt.70130. Epub ahead of print. PMID: 41681089. <https://doi.org/10.1002/jemt.70130>.
7. Nieva-Muratore, L., Cesari, A. B., Reynoso, E., **Díaz, M.**, Malacrida, L., Dardanelli, M. S., & Paulucci, N. S. (2026). Advanced Preservation Strategies for Inoculants: A Lipid-Biophysical Approach to *Bradyrhizobium japonicum* Stability. *Agronomy*, 16(2), 159. <https://doi.org/10.3390/agronomy16020159>
8. **Díaz, M.**, Robello, C., Cabrera, A., & Malacrida, L. (2025). Modulation of host cell membrane biophysics dynamics by *Neospora caninum*: A study using LAURDAN fluorescence with hyperspectral imaging and phasor analysis. *Journal of Microscopy*, 1–12. <https://doi.org/10.1111/jmi.13395>.
9. **Marcela Díaz**. "From trainee to trainer: how I'm empowering imaging scientists in Latin America". *Nature Career column*. 2025. doi: <https://doi.org/10.1038/d41586-024-04252-x>.
10. Mariana Rodríguez Arzuaga, Analía G. Abraham, Leopoldo Suescun, Alejandra Medrano, Lilia Ahrné, **Marcela Díaz**, Jessica Báez, María Cristina Añón. "Storage stability of model infant formula powders produced under varying wet-mix processing conditions". *International Dairy Journal*. Volume 155, 2024,105968, ISSN 0958-6946, <https://doi.org/10.1016/j.idairyj.2024.105968>.
11. **Marcela Díaz** & Leonel Malacrida. "Advanced Fluorescence Microscopy methods to Study Dynamics of Fluorescent Proteins In Vivo". In: *Fluorescent Proteins. Methods and Protocols*. Mayank Sharma editor Mayank Sharma editor. Pp 53-74. Humana Press 2022.
12. Marisa Pedemonte, **Marcela Díaz**, Eduardo Medina-Ferret and Martín Testa (2018). Impact of sound stimulation during different sleep stages in patients with tinnitus. *Loquens*, 5(2), e053. <https://doi.org/10.3989/loquens.2018.053>

13. **Marcela Díaz**, Lucía Vaamonde y Federico Dajas. 2015. Assessment of the Protective Capacity of Nanosomes of Quercetin in an Experimental Model of Parkinson's Disease in the Rat. *General Medicine: Open Access*. 3 (5): 1-7.
14. Marisa Pedemonte, Martín Testa, **Marcela Díaz**, Diego Suárez-Bagnasco. 2014. The Impact of Sound on Electroencephalographic Waves during Sleep in Patients Suffering from Tinnitus. *Sleep Science* 7: I43-I51.
15. Dajas F., Abin-Carriquiry J.A., Arredondo F., Blasina F., **Díaz M.**, Echeverry C., Rivera F., Vaamonde L. "THE NEUROPROTECTIVE CAPACITY OF *Achyrocline satureioides* (Lam) D.C. AND ITS FLAVONOIDS. Mechanisms of action". In: "HERBAL MEDICINES FOR HUMAN HEALTH. Development and Evaluation of Plant-Derived Medicines". Eds G. Bagetta, M.T. Corasaniti, M. Cosentino, S. Sakurada. Taylor&Francis 2010.

Fellowships/grants

2026–2031 – Technical Support, Ida Holz Fund Project – ANII: "Development of a translational platform to identify predictors of efficacy of academic CAR-T therapy in diffuse large B-cell lymphoma in a clinical trial in Uruguay." Participation in PT2, focused on the metabolic and biophysical characterization of CAR-T cells using two-photon FLIM and hyperspectral imaging, and on the development and validation of an imaging spectral flow cytometry (iSFC) platform. The project is carried out in collaboration with the Advanced Bioimaging Unit, Hospital de Clínicas, Faculty of Medicine, Universidad de la República, and national and international partner institutions.

2021-2024: Grant- Project "Expanding Access to Advanced Bioimaging Technology in Latin America"- Chan Zuckerberg Initiative (CZI) - Expanding Global Access to Bioimaging award (active participation in the development of the project).

2011-2013: Postgraduate fellowship, Master's Thesis: "Neuroprotection by flavonoids in an experimental model of Parkinson's disease". Dept. of Neurochemistry, IIBCE (National Agency for Research and Innovation, ANII).

2009-2010: Fellowship for initiation in Research. "Evaluation of the protective action of a nicotinic agonist, varenicline, in an experimental Parkinson's model" (ANII).

To attend courses and congresses:

2025- Global Bioimaging Grantee to attend the GBI-BINA meeting, Exchange of Experience 2025 in Montreal, Canada. 6th to 10th October 2025.

2025- Grant from "*The company of Biologist*" to attend Workshop "Democratising microscopy in Latin America: Imaging across scales and regions", Baños de agua santa, Ecuador, 12-15 October 2025.

2023- "Montreal Light Microscopy Course" June 24-28th, Mc. Gill University, Montreal, Canada.

2023- Full Fellowship of Latin America Bioimaging (LABI) organization to visit the "Advanced Imaging Center" at Janelia Research Campus, Ashburn, Virginia, USA. job shadowing program from Global Bioimaging. (May 25th to June 9th).

2023- Fellowship to attend to Global Bioimaging course: "Facility management: Impact, facility operation, user training and image data". Cuernavaca-México (February 2023).

2016- International Course and Workshop "Optics, Forces and Development". University of Chile, Santiago, Chile.

2012- "International Society for Neurochemistry (ISN) Special Conference". Argentine Catholic University, UCA. Bs. As. Argentina.

2011- "41st Annual Meeting of the Society for Neuroscience". Washington DC, USA. Scholarship "Ricardo Miledi Neuroscience Training Program"

2010- "Advanced course in confocal microscopy". Mercedes and Martín Ferreyra Institute of Medical Research, Córdoba, Argentina.

2009- "3D fluorescence microscopy course" Faculty of Engineering, Entre Ríos, Argentina.

Peer Review & Evaluation

2025- Fellowship program evaluator for LABI (Latin American Bioimaging). Imaging Scientist internships, courses, and research experiences.

2024- 2026- Independent Expert Panel Member, Project reviewer for Imaging 4 All (i4A) funding program, Global BioImaging first call: <https://globalbioimaging.org/i4a>

2025- External reviewer of microscopy projects for the Super-resolution microscopy platform, National university of Rosario, Argentina.

Supervision and Mentoring of Visiting Researchers

2026- Scientific mentor of **Clara Inés Chungara** (CONICET–Universidad Nacional de Córdoba, Argentina), recipient of the Imaging 4 All Pro Research Track fellowship (Global BioImaging/EMBL–Wellcome Trust), during her research stay at the Advanced Bioimaging Unit, Institut Pasteur de Montevideo.

2026- Supervisor of a 10-day research internship for **Dr. Luciane Alarcão Dias-Melicio** (Department of Pathology, School of Medicine, UNESP, Brazil) at the Advanced Bioimaging Unit (UBA), providing advanced training in intravital microscopy, confocal microscopy, two-photon FLIM, image analysis, and imaging facility workflows

2026- Internship-scientific collaboration tutor: **Sofia Castaño**. Facultad de Agronomía y Agroindustrias. Universidad Nacional de Santiago del Estero, Argentina. UNUBIOLAC fellowship programme funding. Project name: “Spatial-Omics and Advanced Bioimaging Approaches for Meat Authentication and Adulteration Detection”. May to June 2026.

2025-2026- Internship-scientific collaboration tutor: **Elisa Longo**. Dept. Physics. University of Catania, Italia. Project name: Advance training in spectroscopy and bioimaging for biophysical applications. September to December 2025 & February to May 2026.

2025- Internship-scientific collaboration tutor: **Emanuel Kava**, Dept. Physics, Sao Paulo University, Ribeirao Preto, Brazil. Imaging 4 All, GBI Funding. Project name: Exploring the role of Golgi ReAssembly and Stacking Proteins in protein secretion using fluorescence microscopy. September to October 2025 and February to March 2026.

2025- Internship-scientific collaboration tutor: **Benjamín Díaz Zamora**. “Characterization of genetic circuits using in vivo hyperspectral microscopy through a single high-throughput polytransfection experiment” Lima, Perú. 2nd to 11th June.

2025- Internship-scientific collaboration tutor: **Ramiro Rodríguez**. “Application of hyperspectral and multiphoton confocal microscopy to study regulatory networks that define organ growth in plants”. Rosario, Argentina. 12nd to 17th May.

2025- Job Shadowing tutor for microscopy core facility administration and light microscope management: **Luz María Fuentealba Pérez**. 5th to 9th May.

2025- Internship-scientific collaboration tutor: “Study of the dynamics of secretory vesicles as they exit the Golgi apparatus and how they are regulated by Huntingtin” **Luciana Gallo**. Instituto de Fisiología, Biología Molecular y Neurociencias. UBA CONICET. Bs. As. Argentina. 21st to 30th April.

2025- Internship-scientific collaboration tutor: “Actinobacteria poliextremófila de Laguna de altura punoandinas” 10th to 19th March, 2025. **Natalia Alvarado**, Comprehensive Center for Electron Microscopy (CIME) - Faculty of Agronomy and Animal Husbandry - El Manantial Farm. Tucuman, Argentina.

2025- Job shadowing supervisor: **Muktar Lawan**. Research assistant and physiologist at BioRTC in Nigeria. Visit UBA from 24th February to 15th April 2025.

2024- Internship-scientific collaboration tutor: “Sensory system in freshwater fish of commercial, sporting and ecological interest. Damage caused by exposure to contaminants of anthropogenic origin”. 29th July to 7th August. **Yanina Piazza**. Laboratory of Aquatic Ecotoxicology, University of Buenos Aires, Argentina.

2024- Internship-scientific collaboration tutor: “Measuring H₂O₂ transport through aquaporins with fluorescence imaging techniques”. 15th July to 7th August. **Gerardo Zerbetto**. University of Buenos Aires, Argentina.

2024- Internship-scientific collaboration tutor: “Exploring SDS-denaturation pathways of the catalytic domain of a hyperthermophilic Cu(I) transport ATPase through fluorescence correlation

spectroscopy and phasor analysis of fluorescence lifetime data". 24th June to 19th July. **Álvaro Recoulat**. Laboratory of Molecular Biophysics, University of Buenos Aires, Argentina.

2024- Internship-scientific collaboration tutor: "Analysis of hyperspectral characteristics of unicystic ameloblastoma, odontogenic keratocyst and cyst". 2nd September to 1st October. **Luis Fernando López Hernández**. Guadalajara University, Mexico.

2024- Internship-scientific collaboration tutor: "Role of the fast-cycling GTPase RhoD in neuronal polarity and development." 18-27th November. **Clara Chungara**. National University of Córdoba.

2024- Internship-scientific collaboration tutor: Uso de la microscopia de barrido confocal láser para el estudio de características de calidad de carne de novillos Braford. 13th to 22nd May. **Sofía Castaño**. Facultad de Agronomía y Agroindustrias. Universidad Nacional de Santiago del Estero, Argentina.

2024- Internship-scientific collaboration tutor: "Síntesis y caracterización de sondas fluorescentes hidrofílicas de relajación por entorno con potencial uso en microscopía". 5th to 25th February. **Horacio Gómez**. Chile University. Santiago, Chile.

2024- Internship-scientific collaboration tutor: Efecto de trehalosa sobre la polarización generalizada de la membrana de Bradyrhizobium japonicum mediante el uso de lauridan y microscopía confocal. 13th to 22nd of March. **Luciana Nieva**, Universidad Nacional de Río Cuarto Facultad de Ciencias Exactas Físico-Químicas y Naturales, Departamento de Biología Molecular Instituto de Biotecnología Ambiental y Salud. Córdoba, Argentina.

2024- Internship-scientific collaboration tutor: Study of the Water Properties within Protein Condensates". 4th to 14th of March. **Leandro Cruz**, Department of Biological Chemistry Ranwel Caputto-CIQUIBIC, Faculty of Chemical Sciences, National University of Córdoba. Córdoba-Argentina.

2023- Job Shadowing tutor for microscopy core facility administration and light microscope management: **Lic. Isela Guerrero and Lisseth Sáenz** of the Dept. of Research in Virology and Biotechnology at the Gorgas Institute, Panama. Internship from October 2nd to 13th.

2023- Internship-scientific collaboration tutor: "Study of LRP1 expression and metabolic fingerprint as markers of papillary thyroid carcinoma progression in overweight and obese patients". 6th to 16th September. **Javier Jaldín**, Hospital Translational Knowledge Unit (UCT-H) Dr. Arturo Oñativia. Salta, Argentina.

2023- Internship-scientific collaboration tutor: "Analysis of the characteristics of hyperspectral autofluorescence in odontogenic keratocysts, dentigerous cysts, unicystic ameloblastomas with and without inflammation" August 14th to September 15th. **José Zepeda**, Guadalajara university, México.

2023- Internship-scientific collaboration tutor: "Membrane interaction of the human Golgi ReAssembly and Stacking Protein 55". 17th April to 23th May. **Emanuel Kava**, Dept. Physics, Sao Paulo University, Ribeirao Preto, Brasil.

Completed mentorships:

MSc.

- **2023-2024-** **Luis Fernando López Hernández** (co advisor with Dr. José Sergio Zepeda Nuño). Master in pathology and oral medicine, University center for health sciences. Guadalajara University, México.

Ongoing Mentorships:

BA. candidate

- **2024- in progress-** Gonzalo Maldonado. Bachelor of Biochemistry. Faculty of science. Universidad de la República, Montevideo, Uruguay.

Organization (o) and participation (p) in scientific events and dissemination

- **2026 – Scientific exchange and technology transfer**, Smithsonian Tropical Research Institute (STRI), Panama. Invited by Dr. Carlos Jaramillo to provide expertise in advanced

bioimaging methodologies, support microscopy workflows, and establish future collaborative activities with the Advanced Bioimaging Unit.

- **2026- o, p:** "Curso de Fundamentos en Microscopía Óptica (CFMO). Fundamentals of Optical Microscopy for life science". 11 to 15 th May 2026. Institut Pasteur of Montevideo. LABI Training & Education Working group initiative.

<https://pasteur.uy/cursos-y-charlas/fundamentos-de-microscopia-optica-para-ciencias-de-la-vida/>. <https://labi.lat/es/2026/03/20/cfmo-may-2026/>

- **2026- p:** Job shadowing and scientific internship at the i3S Microscopy Facility in Porto, Portugal, directed by Paula Samapaio and María Azevedo. Understanding the logistical aspects of managing the unit, focusing on training, quality control, and equipment calibration. Utilization of the DeepSIM and STED super resolution microscopes. January 12-16.

- **2026- p:** workshop "F-techniques workshops series: FLIM" organized by PPBI (Portuguese Platforms of Bioimaging) virtual event. From 13th to 15th January 2026.

- **2025- o, p:** "6th Annual Workshop in Advanced Microscopy Biophotonics", 23-28 November, Hospital de Clínicas, UBA-IPMONT & Udelar.

- **2025- p:** LABI Meeting 2025: From Data to Discovery : November 10th-12th, Buenos Aires University, Argentina. Presentation of progress in the Working Group: Training and Education.

- **2025- p:** "Democratizing microscopy in Latin America: Imaging across scales and regions". Company of Biologists workshop. Baños de agua santa, Ecuador. October 12-15, 2025.

- **2025- p:** BINA community congress. Montréal, Canada, from October 8–10, 2025.

- **2025- p:** Global BioImaging Exchange of Experience 2025 meeting. "Imaging in 2035: Sustaining Infrastructure Ecosystems". Montréal, Canada, from October 6–8, 2025.

- **2025- p:** talk in a deep dive session of the CZI Imaging the Future 2025: Focusing on Biology in Action meeting. "Intravital Microscopy in Action: Insights from Liver and Lung Imaging". September 15 to 18, San Jose, California, USA.

- **2025- o, p:** "Fundamentals Course in Optical Microscopy" Fundación Instituto Leloir, Bs. As. Argentina (August 18 to 22, Institut Pasteur de Montevideo).

- **2025- p:** Talk on experimental design in microscopy. 3rd virtual meeting in the seminar series: Exchange of Experiences in Microscopy. Organized by the LABI Training and Education working group. August 7, 2025. <https://labi.lat/es/2025/05/19/exchange-of-experiences-in-microscopy/>

- **2025-p:** 12th International Weber Symposium. 15-20 June, Genoa, Italy.

<https://www.webersymposium.com/>.

- **2025-o,p:** Second edition of the "Fundamentals Course in Optical Microscopy" UBA (April 7 to 11, Institut Pasteur de Montevideo).

<https://pasteur.uy/eventos/curso-de-fundamentos-en-microscopia-optica-2/>

- **2024-p:** CZI Imaging the Future 2024: Life Illuminated meeting. 13th to 15th November. Austin, Texas, USA.

- **2024-p:** Talk presenting the UBA and poster exposition at the BINA "Community Congress - Building Community, Tools and Expertise". 23-27th september 2024, Madison Wisconsin, USA.

https://www.youtube.com/watch?v=niVqPVd7pa0&list=PLG5nZ7mF_r1pspbfoTObNRy1-9n1h15ZM&index=17

- **2024-p:** Third LABI meeting, Rio de Janeiro, Brazil. 18 to 23 August 2024.

<https://www.labimeeting.com/copy-of-2023>

- **2024-p:** Participation as an instructor with a talk in training in Microscopy Core Facility in "Global BioImaging facility management course" Rio de Janeiro, Brazil on 14-16 August 2024.

<https://globalbioimaging.org/international-training-courses/gbi-brazil-2024-course-facility-management>

- **2024-p:** Participation with a virtual talk at GBI's spotlight Seminars on Career Paths. 29th november 2024. https://www.youtube.com/watch?v=yo_jEq4sShM

- **2024-p:** Exchange of Experience Virtual Group. Bioimaging North America. BINA & Community Translation Efforts. Presentation of my experience in giving a course on microscopy fundamentals in Spanish with the material written in English June 26th.

- **2024- o,p:** Latin America Light Microscopy – Train the Trainer. 3th to 7th June 2024, Buenos Aires, Argentina.

<https://labi.lat/2024/10/01/latin-america-light-microscopy-train-the-trainer-article/>

- **2024- o,p:** LABI Community In-Person Event. Advancing careers in Bioimaging. April 25, Facultad de Ciencias Exactas y Naturales. Bs. As. Argentina. Organization of the event and oral presentation. <https://labi.lat/es/2024/04/17/labi-community-in-person-event/>

- **2024- o,p:** First edition of the "Fundamentals Course in Optical Microscopy" UBA, PEDECIBA course (April 15 to 19, Institut Pasteur de Montevideo)
<https://www.youtube.com/watch?v=rblgLL5hgWA&list=PLoF5XITfChzCTftZevprlogvvrMwi5IEV>
- **2023- o:** 2nd Train the trainer program- Advanced instrumentation & methods adoption. 27th November to 5th December. UBA-IPMONT. Funded by our CZI project.
- **2023- p:** "OMERO hand-on workshop". June 31st to August 1st. Mc Gill University, Montreal, Canada.
- **2023- p:** Participation as a virtual speaker at the Drug Discovery event with a focus on one health. October 26th, Universidad de las Fuerzas Armadas ESPE, Quito, Ecuador.
- **2023- o,p:** "11th International Weber Symposium". January 8-13th Punta del Este, Uruguay.
- **2022- o:** 1st Train the trainer program- Advanced instrumentation & methods adoption. 28th November to 7th December. UBA-IPMONT. Funded by our CZI project.
- **2022- p:** Argentinian ZEISS LSM User Meeting. November 16-18th at Fundación Instituto Leloir, Universidad de Buenos Aires, Argentina.
- **2022-** Set-up and be part of the 1st scientific booth "UBA booth" at the III Bioscience National Congress, 19-21st October, Montevideo-Uruguay.
- **2022- o,p:** Workshop "Imaging Latin America". September 17-22nd, Montevideo, Uruguay. Co-organized by UBA & Advanced Imaging Center at Janelia Research Campus, USA.
- **2022- o,p:** The Global Bioimaging 7th edition of the Exchange of Experience, "Imaging impact & sustainable development goals". September 14-16th, Montevideo, Uruguay.
- **2022- o,p:** 1st Latin America Bioimaging meeting. "International Cooperation for Building Bioimaging Capacities in Latin America". September 12-13th, Montevideo, Uruguay.
- **2022- p:** "Theoretical-practical introduction to time-resolved microscopy (FLIM) and hyperspectral". LNMA-Cuernavaca Mexico. May 16-20th.
- **2022- o,p:** Workshop "Introduction to super-resolution and Workshop linking Scientists - Educators: "New developments in Microscopy and its potential in accessible use in educational processes". April 26-30th, UruMex Project. Uruguay-Mexico Cooperation Fund. Hospital de Clínicas, Montevideo, Uruguay.

Recurring activities

- **From 2020 to 2025- o:** "Annual Workshop on Advanced Microscopy and Biophotonics", UBA-IPMONT & Udelar.
- **From 2014 to 2026- o,p:** Annual Open day IPMONT and participation as a guide in school visits.
- **From 2007 to 2011 – o:** Open day IIBCE.
- **2006- o:** Collaboration as a guide in the ninth edition of the Conference "University of Open Doors" in the Faculty of Sciences.
- 2007-2024-** Participation as a teacher in practical sessions with the microscopes in ORT University courses (Biotechnology and Engineering careers). Sections of cell biology and section of plant biology of the Faculty of Sciences, Udelar, National Institute for Agricultural Research (INIA) La Estanzuela. Colonia, Uruguay, Labs at the IIBCE.

Works presented at congresses

- 2026-** Longo, E., Orlando, M., Paternò, G., **Diaz, M.**, Malacrida, L., & Lanzañò, L. *Multimodal FLIM-FRET and Environment-Sensitive Probes Imaging for the Study of Chromatin Architecture*. Poster presented at the XXVIII National Congress of the Italian Society for Pure and Applied Biophysics (SIBPA), Catania, Italy, July 13–16, 2026.
- 2025-** Application talk presented in the "6th Annual Workshop in Advanced Microscopy Biophotonics", 23-28 November, UBA-IPMONT & Udelar. "Modulation of host cell membrane biophysics dynamics by *Neospora caninum*: a study using LAURDAN fluorescence with Hyperspectral Imaging and Phasor Analysis".
- 2025-** . Poster presented at the LABI Meeting 2025: From Data to Discovery: "The Advanced Bioimaging Unit: From Scientific Platform to Regional Hub". November 10th-12th, Buenos Aires University, Argentina.

2025- Poster presented at Global BioImaging Exchange of Experience 2025 meeting. "Creating Synergies in Imaging Training: Projects and perspectives from the Global BioImaging Group WG6". Montréal, Canada, from October 6–8, 2025.

2025- Talk in Session 1: Global BioImaging Exchange of Experience 2025 meeting. "From Local Users to Global Networks: Mentorship and Training in Bioimaging".

2025- Poster presented at the CZI Imaging the Future 2025: Focusing on Biology in Action meeting. "The Advanced Bioimaging Unit: From Scientific Platform to Regional Hub". September 15 to 18, San Jose, California, USA.

2025- Poster presentation 12th International Weber Symposium, 15-20 June, Genoa, Italy: "Modulation of host cell membrane biophysics dynamics by *Neospora caninum*: a study using LAURDAN fluorescence with hyperspectral imaging and phasor analysis". **M. Díaz**, A. Cabrera, C. Robello, L. Malacrida.

2025- Co-author in a poster presented in the 12th International Weber Symposium: "Exploring the liquid-liquid phase separation and membrane interaction of human Golgi Reassembly and Stacking proteins". **Emanuel Kava**

2025- Co-author in a poster presented in the 12th International Weber Symposium: "Molecular Fingerprinting of Archaeological grains using an integrated phasor method for fluorescence lifetime imaging microscopy and hyperspectral analysis". **Jorge Toledo**

2025- Co-author in a poster presented in the 12th International Weber Symposium: "From Weber's DANs to DAAs and other variations" **German Gunther**

2025- Poster presented in the First Conference for Young Researchers at the Institut Pasteur de Montevideo, Uruguay. 12th June 2025. "Modulation of host cell membrane biophysics dynamics by *neosporea caninum*: a study using LAURDAN fluorescence with hyperspectral imaging and phasor analysis". **M. Díaz**, A. Cabrera, C. Robello, L. Malacrida.

2025- Poster presented in the **IV National Congress of Biosciences SUB**, Montevideo, Uruguay. 27 to 30 May 2025. "Modulation of host cell membrane biophysics dynamics by *neosporea caninum*: a study using LAURDAN fluorescence with hyperspectral imaging and phasor analysis". **M. Díaz**, A. Cabrera, C. Robello, L. Malacrida.

2025- Poster presented by Leonel Malacrida in the **IV National Congress of Biosciences SUB**, Montevideo, Uruguay. 27 to 30 May 2025. "Novel dimethylamino-naphthalene (DAN) probes for studying crowding and dipolar relaxation at spatio-temporal regime through bioimaging.". H. Gómez-Machuca, **M. Díaz**, G. Gunther, L. Malacrida.

2024- Poster presented by Andrés Cabrera at the VII International meeting of Apicomplexa in farm animals. "Modulation of host cell membrane fluidity by *Neospora caninum*: a study using LAURDAN fluorescence and hyperspectral imaging". **Díaz, M.**, Cabrera, A., Robello, C., Malacrida, L. 23-25th octubre 2024.

2024- Poster presented by Claire Brown at Global BioImaging's Exchange of Experience 2024. 29th Oct 2024. Okazaki, Japan. Emerging Collaboration Between Canada and Latin America. **Díaz, M.**, Oliveria, A., Rossi, A., Pietrasanta, L., Repetto, M.V., Garcia, M.J., Ryan, J., Da Rocha, B., Malacrida, L., Brown, C.M.

2024- Poster presented in the Third LABI meeting, Rio de Janeiro, Brazil. 18 to 23 August 2024. "The Advanced Bioimaging Facility". **M. Díaz**, L. Malacrida.

2024- "Decoding bovine leukemia virus cell-to-cell transmission: exploring the role of tunneling nanotubes" Rammauro F, Fló M, Carrión N, Salinas M, Arhancet Y, Sagasti C, **Díaz M**, Da Silva C, Olivero-Deibe N. Poster presentation in HTLV Conference, 2nd to 5th June. Imperial College London & Royal College of Physicians, London, UK.

2024- "Emerging Canada Uruguay Collaboration" Garcia, M.J., **Díaz, M.**, Oliveria, A., Ryan, J., Da Rocha, B., Malacrida, L., Brown, C.M. Poster format presented by Claire Brown. Microscopy Technology Dissemination to Underserved Communities Congress. HHMI-Janelia Research Campus, May 5-8.

2024- LABI Community In-Person Event. Advancing careers in Bioimaging. April 25, Facultad de Ciencias Exactas y Naturales. Bs. As. Argentina. Organization of the event and oral presentation. <https://labi.lat/es/2024/04/17/labi-community-in-person-event/>

2023- "Effects of diabetes on melanin-concentrating hormone (MCH) peripheral system in a murine model" Fabiana Blanco, Florencia Moliné, **Marcela Díaz**, Maximiliano Anzibar, Patricia Lagos. Poster format. PANAM Physiological Sciences 2023 meeting, 27-30 november. Puerto Varas, Chile.

2023- "An approach to nevus-melanoma differentiation through phasor analysis in hyperspectral imaging". Schuty B, Martínez S, **Díaz M**, Magliano J, Lecumberry F, Malacrida L. Poster format. 11th International Weber Symposium, 8-13th January, Punta del Este, Uruguay.

- 2022**- “Acridine orange fluorescence in cells and tissues interpreted by hyperspectral microscopy and graphs of phasors” **Díaz M.**, Zolessi F., Malacrida L. Oral presentation during the III Bioscience National Congress, 19-21st October. Montevideo-Uruguay.
- **2022**- “Hyperspectral image processing using phasor graph for nevo-melanoma differentiation by autofluorescence”. Oral presentation by Schuty B., Díaz M. (co-author). III Bioscience National Congress, 19-21st October. Montevideo-Uruguay.
- **2022**- “Image processing hyperspectral and phasor plots for differentiation nevus-melanoma from autofluorescence”. Schuty B., Martínez S., **Díaz M.**, Magliano J., Lecumberry F., Malacrida L. Poster format. Academic Week – 69th Anniversary of the Hospital de Clínicas. September 26-30th. Montevideo, Uruguay.
- 2018**- “Impacto de la estimulación sonora en diferentes etapas del sueño en pacientes con tinnitus”. M. Pedemonte, **M. Díaz**, E. Medina, M. Testa, D. Drexler. First International Congress of Medicine. CLAEH. April 25-27th. Punta del Este, Uruguay.
- 2017**- “fH-E un método rápido de coloración fluorescente para la observación de tejidos intactos mediante microscopía confocal”. **M. Díaz**, D. Prieto, C. Davison, F. Zolessi. the II Bioscience National Congress. May 12-14th, Montevideo, Uruguay.
- 2014** “*Achyrocline satureioides* (LAM) D.C. would improve sleep quality and oxidative stress in patients with obstructive sleep apnea syndrome: a pilot study” M. Pedemonte, F. Rivera, **M. Díaz**, M. Testa, E. Behar, A. Goliger, F. Dajas, R. Velluti. Poster format, XXII European Sleep Research Society Congress. Tallin (Estonia) September 17th 2014.
- 2012**- “Expresión y localización de la proteína BRCA-1 por técnica de inmunofluorescencia en el cáncer de mama esporádico”. 12^o Oncology Uruguayan Congress, S.O.M.P.U. Montevideo, Uruguay.
- 2012**- “A liposomal preparation of quercetin prevents dopamine decrease in an experimental model for Parkinson’s disease”. 5th Special conference, International Society for Neurochemistry. UCA. Bs. As., Argentina.
- **2011**- “A liposomal preparation of quercetin prevents dopamine decrease in an experimental model for Parkinson’s disease” **M. Díaz**, L. Vaamonde, F. Dajas. 41st Annual meeting of the Society for Neuroscience, Washington D.C. U.S.A (Society for Neuroscience).
- 2010**- XIII Uruguayan Society of Bioscience Meeting. Piriápolis, Uruguay. **1)** “Caracterización de un modelo de Parkinson experimental por lesión estriatal con 6-OHDA en ratas”. Díaz, M. et al. **2)** “Fagocitosis circadiana de material neuronal. El rol de los hemocitos en la plasticidad neuronal de *Drosophila melanogaster*”. Pazos, F., Ferreiro, M.J., Ruíz, S., **Díaz, M.**, Cantera, R.
- **2007** “Catecolaminas plasmáticas durante hipoxias breves en cerdos neonatos” Blasina, F; Silvera, F; Vaamonde, L; Tellechea, S; Moraes, M; Costa, G; **Díaz, M**; Bolioli, P; Godoy, C; Martell, M; Olivera, W; Dajas, F. poster format. VIII Pan American and Iberian Congress of Critical Medicine and Intensive Care. Maldonado, Uruguay.

Scientific Collaborative projects

- 2025 (submitted for financing)** Collaborator in Project, Investigación Fundamental Fondo Clemente Estable, ANII: “Comprendiendo la biofísica de la interacciónhospedero-patógeno: El impacto de Neosporacanium en la modulación metabólica y el estrés macromolecular en células vivas”. Technical-scientific manager: Dr. Leonel Malacrida.
- 2025 (submitted for financing)** Collaborator in Project, Transveral Program, Institut Pasteur de Montevideo: “Estudio de la interacción entre las infecciones por el Virus de la Leucosis Bovina y *Neospora Caninum* a nivel celular empleando imagenología avanzada”. Scientific managers of the Project: Dr. Florencia Ramauro and Dr. Andrés Cabrera.
- 2024 in progress-** Collaborator in Funded Project, Inspire Program, Institut Pasteur de Montevideo: “Determinación de la formación de un “metabolón glucolítico” en la cilia primaria” Scientific manager of the Project: Dr. Laura Romanelli, Institut Pasteur de Montevideo.
- 2023 in progress-** Collaborator in Funded Project ANII fondo Vaz Ferreira: “Estudio de los mecanismos de transmisión célula-célula del virus de la leucemia bovina”. Scientific manager of the Project: Dr. Natalia Olivero, Institut Pasteur de Montevideo.

Outreach activities

2025- Participation with a workshop in a science outreach activity for children organized by the "Escaramuza" bookstore and IPMONT. July 8, 2025.

2025- Participation with a workshop in a science outreach activity for children organized by the Montevideo Shopping Center and the IPMONT. June 30, 2025.

2024- Women and Girls in Science Day. 11 February.
<https://pasteur.uy/2024/dia-de-las-mujeres-y-las-ninas-en-la-ciencia-un-dia-en-el-laboratorio/>

2023-2025- Participation in the Cellular Biology degree course, through collaboration in a special workshop on Fluorescence and Confocal Microscopy with students.

2024- Organization and delivery of a workshop on microscopy concepts with 2nd grade primary school children at Colegio Pinares, Atlántida, Canelones, Uruguay.

2023- Women and Girls in Science Day. 11 February.

Interviews

- **2024** Interview television Uruguayan channel VTV.
<https://mediospublicos.uy/marcela-diaz-tecnica-uruguaya-destacada-por-nature-por-su-aporte-a-la-bioimagenologia/>

- **2024** Interview with EFE international agency. "Reivindicar la microscopía: la meta de una científica uruguaya destacada por Nature". January 31st, 2025.
<https://www.diariolibre.com/planeta/ciencia/2025/01/31/marcela-diaz-busca-reivindicar-la-microscopia/2984832>

- **2022** FocalPlane/Blog series/ Latin American Microscopists/ An interview with Marcela Díaz.
<https://focalplane.biologists.com/2022/06/21/an-interview-with-marcela-diaz/>

-**2021** Channel 10, Uruguayan TV program "La mañana en casa":
<https://m.facebook.com/LaMananaenCasa/photos/a.1547061725548812/3003266663261637/?type=3>