

Faculty

School of Pharmacy
Medical Sciences Campus
University of Puerto Rico



Contact Information

School of Pharmacy
Office #36 Annex Door 425
4th Floor
School of Pharmacy
Medical Sciences Campus
San Juan, PR 00931

PO Box 365067
San Juan, PR 00936-5067

Phone: 787-758-2525 Ext. 3727
Fax: 787-754-6995

marisol.lopez@upr.edu

Rank/Discipline

Assistant Professor
Department of Pharmacy
Practice

Education & Specialty Certification

Doctor of Pharmacy (PharmD)
Shenandoah University,
Winchester, VA
Master of Public Health (MPH) UPR
Bachelor of Pharmaceutical
Sciences (BSPHarm) UPR
Licensed Pharmacist: PR & GA

Marisol López-Nieves, PharmD, MPH,
BSPHarm, RPh.

Research Areas and Active Projects

Research Areas

Dr. López-Nieves is committed to advancing pharmacy education, promoting regulatory excellence, and preparing future pharmacists to deliver safe, effective, and patient-centered compounded therapies. Her research interests focus on the development, quality assessment, and physical stability of compounded formulations, particularly for special populations and in climate-sensitive environments. She has authored peer-reviewed publications and presented her research at national and international scientific meetings.

- Pharmaceutical compounding (sterile and non-sterile)
- Quality assurance and regulatory compliance (USP standards)
- Physical stability and quality evaluation of compounded formulations
- Personalized and precision medicine
- Compounding for special populations (pediatrics, geriatrics, palliative care)
- Pharmacy education and experiential learning

Active Projects

- Lopez-Nieves, M., Dahiya, S., Rios, C., Carrillo, O.; Development and Physical Stability Assessment of an Extemporaneous Formulation of Fluconazole Oromucosal Viscous Suspension, 2025. Research project in progress, anticipated completion in Dec. 2026
- López-Nieves, M., Dahiya, S., Vega, I., Vélez, P., Hernández, C. (2025). Climatic zone-based evaluation of quality and physical stability in pediatric compounded sildenafil suspensions. *Manuscript in revision; anticipated submission by December 2026 to the International Journal of Pharmaceutical Compounding.*

Awards

- Victor H. Morgenroth, Jr. Memorial Award, American College of Apothecaries Research & Education Foundation. 2023.
- 25th anniversary achievement award, Shenandoah University School of Pharmacy (May 2022). Award presented to a graduating student who has contributed positively to the school's student-centered learning community.

- Member of the Year Award, American College of Apothecaries 2018
- Innovative Pharmacist – Excellence in Innovation Award, Colegio de Farmacéuticos de Puerto Rico, Upsher-Smith Laboratories. 2014

Publications

- López-Nieves M., Delgado-Díaz J., Figueroa-Morales S., González-Jiménez K. Development and Physical Stability Assessment of an Extemporaneous Formulation of Gabapentin Lozenges. *International Journal of Pharmaceutical Compounding*, 2025; 29(5):387–404.
- Martínez-Jiménez J. E., Sathisaran I., Reyes Figueroa F., Reyes S., López-Nieves M., et al. A review of precision medicine in developing pharmaceutical products: Perspectives and opportunities. *International Journal of Pharmaceutics*, 2025; 670:125070.
- Nogales LM, Jiménez LL, Abarca LE, Gil MM, López-Nieves M. Cocamidopropyl Betaine Surfactant 0.075% Solution in Physiological Serum for Hygiene Process of COVID-19 Intubated Patients. *Int J Pharm Compd*. 2020 Sep-Oct;24(5):358-364
- López-Nieves M. Compounding Pharmacy in Puerto Rico. *International Journal of Pharmaceutical Compounding*, 2009; 13(4):350–351.
- López-Nieves M., Compounding in Puerto Rico. *International Journal of Pharmaceutical Compounding*, 2008; 12(2):110–111.
- López-Nieves M., El cuidado farmacéutico a través de las preparaciones extemporáneas. *Revista Farmacéutica*, 2004; 63(3):14–18.

Poster Presentations

- López-Nieves M., Dahiya S., Vega I., Vélez P., Hernández C. Climatic Zone-Based Evaluation of Quality and Physical Stability in Pediatric Compounded Sildenafil Suspensions. 2024, Puerto Rico Pharmacy Association Annual Meeting, San Juan, P.R., Second Place Scientific Award.
- López-Nieves M., Dahiya S., Vega I., Vélez P., Hernández C. *Stability and Quality Evaluation of Sildenafil in Compounded Oral Suspension Formulations*. 2024, Puerto Rico Pharmacy Association Annual Meeting, San Juan, P.R. Third Place Scientific Award.
- López-Nieves M., Delgado-Díaz J., González-Jiménez K., Figueroa-Morales S. Development and Physical Stability Assessment of an Extemporaneous Formulation of Gabapentin Lozenges. 2024, International Congress of Individualized Medication (LASEMI), Santiago de Compostela, Spain.

- López-Nieves M., Delgado-Díaz J., González-Jiménez K., Figueroa-Morales S. Development and Physical Stability Assessment of an Extemporaneous Formulation of Gabapentin Lozenges, 2023, P.R. Pharmacy Association Annual Meeting, San Juan, P.R. First Place Scientific Award.

Oral Presentations and Workshops

- June 19–21, 2025- Invited Lecturer – Master Program in Pharmaceutical Compounding Università degli Studi “G. d’Annunzio” Chieti–Pescara · Chieti, Italy
- Lopez, M., Dahiya, S., Vega, I., Velez, P., & Hernandez, C. (2025). Climatic zone-based evaluation of quality and physical stability in pediatric compounded sildenafil suspensions. Oral presentation at the School of Pharmacy, Medical Sciences Campus, University of Puerto Rico, May 2025.
- May 1, 2025 – San Juan, Puerto Rico - Invited Speaker Symposium: Advancing Precision-Based, Integrative, and Individualized Healthcare in Puerto Rico, Hosted by the Puerto Rico Public Health Trust (a program of the Puerto Rico Science, Technology and Research Trust)
Presentation Topic: “Precision and Innovation: The Pharmacist’s Impact on Personalized Care and the Role of Pharmaceutical Compounding in Puerto Rico’s Culturally Attuned Healthcare.
- Guía práctica para el cumplimiento de las actualizaciones de los Estándares USP <795> y USP <800> vigentes a partir de 2023. 2024, School of Pharmacy, University of Puerto Rico, San Juan, Puerto Rico.
- USP <797> & <800> Compliance: Pathways to Competency and Accreditation Essentials. 2024, Colegio de Farmacéuticos de Puerto Rico Annual Meeting, San Juan, Puerto Rico.
- Compounding Sterile Ophthalmic Medications and Injectables: Compounding International Practices Based on USP Standards and Italian Guidelines.2023, Scuola di Galenica Pratica e Teorica Dr. Peter Jäger, Cortona, Italy.
- Congreso Internacional del Medicamento Individualizado – International Compounding Round Table.Honor Committee Member and Round Table Participant, 2022, LASEMI, Cádiz, Spain.
- Cursos y desarrollos de la profesión en Estados Unidos: nuevas tendencias para el medicamento personalizado. 2020, Universidad San Jorge, Zaragoza, Spain.
- La Formulación Magistral Internacional: Actualización de los Estándares de la USP.2019, Universidad San Jorge, Zaragoza, Spain.
- *United States Pharmacopeia (USP) <800>: Hazardous Drugs – Handling in Healthcare Settings. Analysis and Applications to Community Pharmacies.* 2019, P.R. Compounding Academy, Caguas, Puerto Rico.

- Impacto en la práctica de farmacias de comunidad y de hospitales sobre las formulaciones estériles y no estériles según los nuevos capítulos de USP. 2019, Farmacias Aliadas Meeting, San Juan, P.R.
- Impact on Sterile Compounding Practice Based on USP Standards. 2019, SPS Specialty Pharmacy Services, Caguas, Puerto Rico.
- López-Nieves M. Drug Formulation for Cancer Patients with Oral Mucositis Problems. 2019, Universidad San Jorge, Zaragoza, Spain.
- 2nd Compounding Congress in Argentina: Análisis de la Formulación Magistral Internacional – Retos para Implementar Cambios. 2019, Colegio de Farmacéuticos de la Provincia de Buenos Aires, La Plata, Argentina.
- La Formulación Magistral Internacional: Regulación en Estados Unidos y Puerto Rico. 2018, Universidad San Jorge, Zaragoza, Spain.
- Compounding Overview Course: Compounding Internationally and Good Compounding Practices Based on USP Standards and Italian Guidelines.
- 2018, Scuola di Galenica Pratica e Teorica Dr. Peter Jäger, Cortona, Italy.
- United States Pharmacopeia (USP) Reference Standards: Implementation in Pharmaceutical Compounding in the U.S. and Internationally. 2018, 1st Global Congress of Pharmacy Faculties, Salamanca, Spain.
- López-Nieves M. Formulation of Medicated Powders for Topical Use for the Treatment of Ulcers and Wounds. 2018, Universidad San Jorge, Zaragoza, Spain.
- Knowledge and Perspectives of Physicians in the Northern Metropolitan Area of Puerto Rico about Compounding Pain Management Therapy. 2018, School of Pharmacy, University of Puerto Rico, San Juan, Puerto Rico.
- Mentoring and Training in Compounding: Empowering the Pharmacy Profession. 2018, American College of Apothecaries Annual Conference, Ponte Vedra, Florida, USA.
- La técnica aséptica en la preparación de medicamentos estériles: Seguridad del paciente. 2014, Convención del Colegio de Farmacéuticos de Puerto Rico, Puerto Rico.