

Andrea Ferreira-Gonzalez, PhD



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Chair of Molecular Diagnostics
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Education

Graduate Education

1994 PhD Microbiology/Immunology

Graduate School of Arts and Science, George Washington University, Washington, DC

Licenses & Certifications

2003 - present Diplomate of American Board of Bioanalysis (ABB) - High Complexity Laboratory Director

2012 - present Diplomate of the American Board of Bioanalysis (ABB) - Clinical Consultant

Selected Awards & Honors

2020 IFCC Award for Significant Contributions in Molecular Diagnostics. This award honors an individual who has made unique contributions to promoting and understanding molecular biology and its application in Clinical Chemistry and Laboratory Medicine worldwide.

2010 AMP Leadership Award. Given by the Association for Molecular Pathology (AMP) to a member that has significantly contributed to the practice of molecular diagnostics and influenced the field of molecular pathology.

VCU Service

2024 - 2027	SOM Faculty Advisory Council
2022 - 2024	SOM Executive Committee
2020 - 2022	VCU Health System COVID-19 Response Task Force
2020 - 2022	VCU Health System COVID-19 Leadership Committee
2020 - 2022	VCU Health System Healthy Workplace/Back to Campus Committee
2018 - 2019	VCU Task Force Genomic Core Facilities at VCU

Professional Service (outside)

2025 - present	ADLM Chair, Cancer Diagnostics and Monitoring Division
2025 - present	IFCC member Molecular Diagnostics in Oncology.
2022 - present	Policy and External Advisory Core Committee. American Association for Clinical Chemistry, Member
2018 - 2024	IFCC: Committee on Clinical Molecular Biology Curriculum, Chair
2018 - 2025	AACC Molecular Pathology Division. Ad Hoc Board Member
2019 - present	Professional Relations Committee, Member. Association for Molecular Pathology

Recent Invited Presentations

2024 State of cell free DNA testing in Oncology Practice. Plenary Speaker 2nd Purple Mountain International Forum on Clinical Molecular Diagnostics (PMIF-CMD)

2024 Empowering precision oncology through localized comprehensive genomic tumor profiling 2024 OncoPrint World

2022 Molecular Diagnostics- Introduction Course in Molecular Biology – IFCC, Turkey 2022 IFCC Cappadocia, Turkey

2022 Molecular Diagnostics-Advanced Workshop on Principles and Practices MDx. International Federation of Clinical Chemistry (IFCC), Cappadocia, Turkey

2022 Quality Control in the era of Next Generation Sequencing, Annual meeting American Association of Clinical Chemistry, Chicago

2021 Exome sequencing in Rare Genetic Disease. Qiagen Corporation online seminar on demand

2021 Solid Tumor Summit - Comprehensive genomic profiling or targeted NGS panels, GenomeWeb Summitz

2020 The Roadmap to Recognition of Molecular Professionals as Qualified Healthcare Professionals. Annual Meeting Association for Molecular Pathology

Selected Publications

Peer Reviewed Papers

Martin KE, Sábato F, Lynch J, **Ferreira-Gonzalez A**, Barrie ES. Performance Evaluation of a PCR/Nanopore Assay for Carrier Screening for Cystic Fibrosis, Spinal Muscular Atrophy, and Fragile X Syndrome. *J Mol Diagn.* 2026 Mar 27:S1525-1578(26)00044-9. doi: 10.1016/j.jmoldx.2026.03.003. Online ahead of print.PMID: 41905555

Ferreira-Gonzalez A, Hocum B, Ko G, Shuvo S, Appukkuttan S, Babajanyan S. Next-Generation Sequencing Trends among Adult Patients with Select Advanced Tumor Types: A Real-World Evidence Evaluation. *J Mol Diagn.* 2024 Apr;26(4):292-303. doi: 10.1016/j.jmoldx.2024.01.005. Epub 2024 Feb 1.PMID: 38296192.

Zboril EK, Grible JM, Boyd DC, Hairr NS, Leftwich TJ, Esquivel MF, Duong AK, Turner SA, **Ferreira-Gonzalez A**, Olex AL, Sartorius CA, Dozmorov MG, Harrell JC. Stratification of Tamoxifen Synergistic Combinations for the Treatment of ER+ Breast Cancer. *Cancers (Basel).* 2023;15(12):3179. PMID: 37370789.

Boyd DC, Zboril EK, Olex AL, Leftwich TJ, Hairr NS, Byers HA, Valentine AD, Altman JE, Alzubi MA, Grible JM, Turner SA, **Ferreira-Gonzalez A**, Dozmorov MG, Harrell JC. .Discovering Synergistic Compounds with BYL-719 in PI3K Overactivated Basal-like PDXs. *Cancers (Basel).* 2023 Mar 3;15(5):1582. PMID: 36900375.

Rafferty KA, Barrie ES, Turner SA, **Ferreira-Gonzalez A**, Jackson-Cook C, Paulraj P. Severe Graft-Versus-Host Disease Following Solid-Organ Transplant Confirmed by Chimerism Studies and Cytogenetic Analyses. *Exp Clin Transplant.* 2022 Nov;20(11):1031-1034. PMID: 35297330.

Zhou L, Zhang Y, Meads MB, Dai Y, Ning Y, Hu X, Li L, Sharma K, Nkwocha J, Parker R, Bui D, McCarter J, Kramer L, Purcell C, Sudalagunta PR, Canevarolo RR, Coelho Siqueira Silva MD, De Avila G, Alugubelli RR, Silva AS, Kmeiciak M, **Ferreira-Gonzalez A**, Shain KH, Grant S. IAP, and HDAC inhibitors interact synergistically in myeloma cells through noncanonical NF- κ B- and caspase-8-dependent mechanisms. *Blood Adv.* 2021 5(19):3776-3788. PMID: 3446497.

Ferreira-Gonzalez, A. Plasma PIK3CA mutation testing in advanced breast cancer patients for personalized medicine: A value proposition. *J Applied Lab Medicine.* 2020, 5(5): 1076-1089.

Finlay-Schultz J, Jacobsen BM, Riley D, Paul KV, Turner S, **Ferreira-Gonzalez A**, Harrell JC, Kabos P, Sartorius. New generation breast cancer cell lines developed

from patient-derived xenografts. *CA. Breast Cancer Res.* 2020 Jun 23;22(1):68.
.PMID: 32576280.

Book Chapters and Monographs

Ferreira-Gonzalez, A. Section Editor Somatic Cancer Current Topics in Molecular Pathology. 3rd Ed. Tsongalis (ed). Elsevier 2020.

Ferreira-Gonzalez A. PIK3CA and Breast Cancer. In Current Topics in Molecular Pathology. 3rd Ed. Tsongalis (ed). Elsevier 2020.

Ferreira-Gonzalez A. Evidence builds for tumor mutation burden as an immunotherapy biomarker. In Current Topics in Molecular Pathology. 2nd Ed. Tsongalis (ed). Elsevier 2019.