

Fernando Jose Garcia Marques

Basic Life Research Scientist, Rad/Canary Center at Stanford for Cancer Early Detection

Bio

LINKS

- Researchgate: https://www.researchgate.net/profile/Fernando_Garcia-Marques

Publications

PUBLICATIONS

- **YB-1 inhibition suppresses osteosarcoma growth and reverses tumor immunosuppression.** *Molecular cancer therapeutics*
Malhotra, S. V., Stefan, K., Lee, J. M., Tailor, D., Dheeraj, A., Rolig, A. S., Khou, S., Grau, B. W., Garcia-Marques, F. J., Bermudez, A., Davis, L. E., Pitteri, S. J.
2026
- **YB-1 small-molecule inhibitor improves chemotherapy success in treating high-grade serous ovarian carcinoma**
Tailor, D., Garcia-Marques, F. J., Bermudez, A., Li, W., Rolig, A., Tsai, C., Liu, T., Pejovic, T., Pitteri, S., Malhotra, S. V.
AMER ASSOC CANCER RESEARCH.2026
- **Erratum to "Establishing and characterizing the molecular profiles, cellular features, and clinical utility of a patient-derived xenograft model using benign prostatic tissues" (Lab Invest 2024 Oct;104(10):102129).** *Laboratory investigation; a journal of technical methods and pathology*
Polasko, A. L., Zhang, D., Ramraj, A., Chiu, C. L., Garcia-Marques, F. J., Bermudez, A., Kapp, K., Peterson, E., Qiu, Z., Pollack, A. S., Zhao, H., Pollack, J. R., Pitteri, et al
2026; 106 (2): 104275
- **Identification of serum protein biomarkers for clear cell renal cell carcinoma using patient-derived xenografts.** *The Journal of clinical investigation*
Zhang, D., Chiu, C., Garcia Marques, F. J., Bermudez, A., Hoerner, C. R., Hadi, N., Wang, E., Metzner, T. J., Trabanino, L., Leppert, J. T., Zhao, H., Tibshirani, R., Fan, et al
2026; 136 (1)
- **Non-orthosteric inhibition of enolase 1 impedes growth of triple-negative breast cancer.** *Cell reports. Medicine*
Tailor, D., Garcia-Marques, F. J., Bermudez, A., Rolig, A. S., Grau, B., Dheeraj, A., Nambiar, D. K., Li, W., Stefan, K., Campbell, S., Pitteri, S. J., Malhotra, S. V.
2025: 102451
- **FTO inhibition attenuates renal fibrosis by downregulating ferroptosis activator ACSL4 and profibrotic factor TGFBI.** *iScience*
Zhang, D., Chiu, C. L., Wen, R., Qiu, Z., Garcia-Marques, F., Bermudez, A., Zhao, M., Zhao, H., Dixon, S. J., Peehl, D. M., Rankin, E. B., Pitteri, S., Brooks, et al
2025; 28 (10): 113515
- **A microneedle device for rapid dermal interstitial fluid sampling.** *Science advances*
Hung, A. H., Kamat, N. U., Bermudez, A., Boczek, S. M., Garcia-Marqués, F. J., Tan, Y. L., Hwang, J. L., Sinawang, P. D., Ilyin, D., Jacobson, G. B., Demirci, U., Poplack, S. P., Pitteri, et al
2025; 11 (39): eadx5492
- **FTO inhibition attenuates renal fibrosis by downregulating ferroptosis activator ACSL4 and profibrotic factor TGFBI** *ISCIENCE*

- Zhang, D., Chiu, C., Wen, R., Qiu, Z., Garcia-Marques, F., Bermudez, A., Zhao, M., Zhao, H., Dixon, S. J., Peehl, D. M., Rankin, E. B., Pitteri, S., Brooks, et al
2025; 28 (10)
- **Extracellular Domain Shedding of TROP2 Activates EGFR Signaling to Drive Prostate Cancer Metastasis.** *Cancer research*
Liu, S., Hsu, E. C., Aslan, M., Garcia-Marques, F., Shen, M., Hartono, A. B., Solano, F., Le, K., Hwang, H., Lee, C. S., Bermudez, A., Nolley, R., Peehl, et al
2025
 - **Identification of Molecular Subtypes of Clear-Cell Renal Cell Carcinoma in Patient-Derived Xenografts Using Multi-Omics.** *Cancers*
Qiu, Z., Zhang, D., Garcia-Marques, F. J., Bermudez, A., Zhao, H., Peehl, D. M., Pitteri, S. J., Brooks, J. D.
2025; 17 (8)
 - **The olfactory receptor OR51E2 regulates prostate cancer aggressiveness and modulates STAT3 in prostate cancer cells and in xenograft tumors.** *BMC cancer*
Thomsen, M. T., Busk, M., Zhang, D., Chiu, C. L., Zhao, H., Garcia-Marques, F. J., Bermudez, A., Pitteri, S., Borre, M., Brooks, J. D., Nyengaard, J. R.
2025; 25 (1): 535
 - **A subcellular map of translational machinery composition and regulation at the single-molecule level.** *Science (New York, N.Y.)*
Zhang, Z., Xu, A., Bai, Y., Chen, Y., Cates, K., Kerr, C., Bermudez, A., Susanto, T. T., Wysong, K., Garcia Marques, F. J., Nolan, G. P., Pitteri, S., Barna, et al
2025; 387 (6738): eadn2623
 - **Intact Glycopeptide Analysis of Human Prostate Tissue Reveals Site-Specific Heterogeneity of Protein Glycosylation in Prostate Cancer.** *Glycobiology*
Kapp, K. L., Garcia-Marques, F., Totten, S. M., Bermudez, A., Tanimoto, C., Brooks, J. D., Pitteri, S. J.
2025
 - **Sialylated glycoproteins suppress immune cell killing by binding to Siglec-7 and Siglec-9 in prostate cancer.** *The Journal of clinical investigation*
Wen, R. M., Stark, J. C., Marti, G. E., Fan, Z., Lyu, A., Garcia Marques, F. J., Zhang, X., Riley, N. M., Totten, S. M., Bermudez, A., Nolley, R., Zhao, H., Fong, et al
2024
 - **Ubiquitin C-terminal hydrolase L1 is a regulator of tumor growth and metastasis in double-negative prostate cancer.** *American journal of clinical and experimental urology*
Liu, S., Garcia-Marques, F. J., Shen, M., Bermudez, A., Pitteri, S. J., Stoyanova, T.
2024; 12 (5): 306-322
 - **Identification of a 5-gene signature panel for the prediction of prostate cancer progression.** *British journal of cancer*
Shen, M., Garcia-Marques, F., Muruganantham, A., Liu, S., White, J. R., Bermudez, A., Rice, M. A., Thompson, K., Chen, C. L., Hung, C. N., Zhang, Z., Huang, T. H., Liss, et al
2024
 - **A Multiplexed Quantitative Proteomics Approach to the Human Plasma Protein Signature.** *Biomedicines*
Nunez, E., Gomez-Serrano, M., Calvo, E., Bonzon-Kulichenko, E., Trevisan-Herraz, M., Rodriguez, J. M., Garcia-Marques, F., Magni, R., Lara-Pezzi, E., Martin-Ventura, J. L., Camafeita, E., Vazquez, J.
2024; 12 (9)
 - **Establishing and characterizing the molecular profiles, cellular features, and clinical utility of a patient-derived xenograft model using benign prostatic tissues.** *Laboratory investigation; a journal of technical methods and pathology*
Polasko, A. L., Zhang, D., Ramraj, A., Chiu, C. L., Garcia-Marques, F. J., Bermudez, A., Kapp, K., Peterson, E., Qiu, Z., Pollack, A. S., Zhao, H., Pollack, J. R., Pitteri, et al
2024: 102129
 - **Inhibition of protein translational machinery in triple-negative breast cancer as a promising therapeutic strategy.** *Cell reports. Medicine*
Dheeraj, A., Garcia Marques, F. J., Tailor, D., Bermudez, A., Resendez, A., Pandrala, M., Grau, B., Kumar, P., Haley, C. B., Honkala, A., Kujur, P., Jeffrey, S. S., Pitteri, et al
2024: 101552
 - **Identification and characterization of intact glycopeptides in human urine.** *Scientific reports*

- Garcia-Marques, F., Fuller, K., Bermudez, A., Shamsher, N., Zhao, H., Brooks, J. D., Flory, M. R., Pitteri, S. J.
2024; 14 (1): 3716
- **UCHL1 is a potential molecular indicator and therapeutic target for neuroendocrine carcinomas.** *Cell reports. Medicine*
Liu, S., Chai, T., Garcia-Marques, F., Yin, Q., Hsu, E. C., Shen, M., Shaw Toland, A. M., Bermudez, A., Hartono, A. B., Massey, C. F., Lee, C. S., Zheng, L., Baron, et al
2024: 101381
 - **Ubiquitin C-terminal hydrolase L1 is a regulator of tumor growth and metastasis in double-negative prostate cancer** *AMERICAN JOURNAL OF CLINICAL AND EXPERIMENTAL UROLOGY*
Liu, S., Garcia-Marques, F., Shen, M., Bermudez, A., Pitteri, S. J., Stoyanova, T.
2024; 12 (5)
 - **Guanylate-binding protein 1 modulates proteasomal machinery in ovarian cancer.** *iScience*
Tailor, D., Garcia-Marques, F. J., Bermudez, A., Pitteri, S. J., Malhotra, S. V.
2023; 26 (11): 108292
 - **The role of GCNT1 mediated O-glycosylation in aggressive prostate cancer.** *Scientific reports*
Hodgson, K., Orozco-Moreno, M., Scott, E., Garnham, R., Livermore, K., Thomas, H., Zhou, Y., He, J., Bermudez, A., Garcia Marques, F. J., Bastian, K., Hysenaj, G., Archer Goode, et al
2023; 13 (1): 17031
 - **Lineage plasticity in SCLC generates non-neuroendocrine cells primed for vasculogenic mimicry.** *Journal of thoracic oncology : official publication of the International Association for the Study of Lung Cancer*
Pearsall, S. M., Williamson, S. C., Humphrey, S., Hughes, E., Morgan, D., García Marqués, F. J., Awanis, G., Carroll, R., Burks, L., Shue, Y. T., Bermudez, A., Frese, K. K., Galvin, et al
2023
 - **Proteomics analysis of urine and catheter-associated biofilms in spinal cord injury patients.** *American journal of clinical and experimental urology*
Garcia-Marques, F. J., Zakrasek, E., Bermudez, A., Polasko, A. L., Liu, S., Stoyanova, T., Brooks, J. D., Lavelle, J., Pitteri, S. J.
2023; 11 (3): 206-219
 - **Siglec-7/9 are novel immune checkpoints for prostate cancer**
Wen, R., Stark, J. C., Marti, G., Garcia-Marques, F., Zhao, H., Nolley, R., Bertozzi, C. R., Pitteri, S. J., Brooks, J. D.
AMER ASSOC IMMUNOLOGISTS.2023
 - **Original Proteomics analysis of urine and catheter-associated biofilms in spinal cord injury patients** *AMERICAN JOURNAL OF CLINICAL AND EXPERIMENTAL UROLOGY*
Garcia-Marques, F. J., Zakrasek, E., Bermudez, A., Polasko, A. L., Liu, S., Stoyanova, T., Brooks, J., Lavelle, J., Pitteri, S. J.
2023; 11 (3): 206-219
 - **Integrated transcriptome-proteome analyses of human stem cells reveal source-dependent differences in their regenerative signature.** *Stem cell reports*
Ganguly, A., Swaminathan, G., Garcia-Marques, F., Regmi, S., Yarani, R., Primavera, R., Chetty, S., Bermudez, A., Pitteri, S. J., Thakor, A. S.
2022
 - **Siglec-7/9-sialic acid interactions inhibit T cell immune response in prostate cancer**
Wen, R. M., Stark, J., Garcia-Marques, F., Nolley, H., Bertozzi, C. R., Pitteri, S. J., Brooks, J. D.
AMER ASSOC CANCER RESEARCH.2022
 - **Interplay between the Chd4/NuRD Complex and the Transcription Factor Znf219 Controls Cardiac Cell Identity** *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*
El Abdellaoui-Soussi, F., Yunes-Leites, P. S., Lopez-Maderuelo, D., Garcia-Marques, F., Vazquez, J., Redondo, J., Gomez-del Arco, P.
2022; 23 (17)
 - **Inhibition of triple negative breast cancer metastasis via Enolase-1 modulation**
Tailor, D., Dheeraj, A., Garcia-Marques, F., Pandrala, M., Bermudez, A., Pitteri, S., Malhotra, S. V.
AMER ASSOC CANCER RESEARCH.2022
 - **SU086, an inhibitor of HSP90, impairs glycolysis and represents a treatment strategy for advanced prostate cancer.** *Cell reports. Medicine*

- Rice, M. A., Kumar, V., Tailor, D., Garcia-Marques, F. J., Hsu, E., Liu, S., Bermudez, A., Kanchustambham, V., Shankar, V., Inde, Z., Alabi, B. R., Muruganantham, A., Shen, et al
2022; 3 (2): 100502
- **Protein signatures to distinguish aggressive from indolent prostate cancer.** *The Prostate*
Garcia-Marques, F., Liu, S., Totten, S. M., Bermudez, A., Tanimoto, C., Hsu, E. C., Nolley, R., Hembree, A., Stoyanova, T., Brooks, J. D., Pitteri, S. J.
2022
 - **Engineered Cell-Derived Vesicles Displaying Targeting Peptide and Functionalized with Nanocarriers for Therapeutic microRNA Delivery to Triple-Negative Breast Cancer in Mice.** *Advanced healthcare materials*
Bose, R. J., Kumar, U. S., Garcia-Marques, F., Zeng, Y., Habte, F., McCarthy, J. R., Pitteri, S., Massoud, T. F., Paulmurugan, R.
2021: e2101387
 - **Multi-omics analysis of spatially distinct stromal cells reveals tumor-induced O-glycosylation of the CDK4-pRB axis in fibroblasts at the invasive tumor edge.** *Cancer research*
Bouchard, G., Garcia-Marques, F. J., Karacosta, L. G., Zhang, W., Bermudez, A., Riley, N. M., Varma, S., Mehl, L. C., Benson, J. A., Shrager, J. B., Bertozzi, C. R., Pitteri, S. J., Giaccia, et al
2021
 - **Identifying a novel glycolytic inhibitor for treatment of aggressive prostate cancer.**
Stoyanova, T., Rice, M. A., Kumar, V., Tailor, D., Garcia-Marques, F., Bermudez, A., Kanchustambham, V., Shankar, V., Inde, Z., Pandrala, M., Nolley, R., Ghoochani, A., Liu, et al
AMER ASSOC CANCER RESEARCH.2021
 - **Y box binding protein 1 inhibition as a targeted therapy for ovarian cancer.** *Cell chemical biology*
Tailor, D., Resendez, A., Garcia-Marques, F. J., Pandrala, M., Going, C. C., Bermudez, A., Kumar, V., Rafat, M., Nambiar, D. K., Honkala, A., Le, Q., Sledge, G. W., Graves, et al
2021
 - **Discovery of CASP8 as a potential biomarker for high-risk prostate cancer through a high-multiplex immunoassay.** *Scientific reports*
Liu, S. n., Garcia-Marques, F. n., Zhang, C. A., Lee, J. J., Nolley, R. n., Shen, M. n., Hsu, E. C., Aslan, M. n., Koul, K. n., Pitteri, S. J., Brooks, J. D., Stoyanova, T. n.
2021; 11 (1): 7612
 - **MCM2-7 complex is a novel druggable target for neuroendocrine prostate cancer.** *Scientific reports*
Hsu, E. C., Shen, M., Aslan, M., Liu, S., Kumar, M., Garcia-Marques, F., Nguyen, H. M., Nolley, R., Pitteri, S. J., Corey, E., Brooks, J. D., Stoyanova, T.
2021; 11 (1): 13305
 - **Oncogene-mediated metabolic gene signature predicts breast cancer outcome.** *NPJ breast cancer*
Aslan, M., Hsu, E. C., Garcia-Marques, F. J., Bermudez, A., Liu, S., Shen, M., West, M., Zhang, C. A., Rice, M. A., Brooks, J. D., West, R., Pitteri, S. J., Gyórfy, et al
2021; 7 (1): 141
 - **Plectin is a regulator of prostate cancer growth and metastasis.** *Oncogene*
Buckup, M., Rice, M. A., Hsu, E., Garcia-Marques, F., Liu, S., Aslan, M., Bermudez, A., Huang, J., Pitteri, S. J., Stoyanova, T.
2020
 - **A Network of Macrophages Supports Mitochondrial Homeostasis in the Heart** *CELL*
Nicolas-Avila, J. A., Lechuga-Vieco, A. V., Esteban-Martinez, L., Sanchez-Diaz, M., Diaz-Garcia, E., Santiago, D. J., Rubio-Ponce, A., Li, J., Balachander, A., Quintana, J. A., Martinez-de-Mena, R., Castejon-Vega, B., Pun-Garcia, et al
2020; 183 (1): 94-+
 - **Functional role of respiratory supercomplexes in mice: SCAF1 relevance and segmentation of the Q(pool)** *SCIENCE ADVANCES*
Calvo, E., Cogliati, S., Hernansanz-Agustin, P., Loureiro-Lopez, M., Guaras, A., Casuso, R. A., Garcia-Marques, F., Acin-Perez, R., Marti-Mateos, Y., Silla-Castro, J. C., Carro-Alvarellos, M., Huertas, J. R., Vazquez, et al
2020; 6 (26): eaba7509
 - **Complement C5 Protein as a Marker of Subclinical Atherosclerosis** *JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY*
Martinez-Lopez, D., Roldan-Montero, R., Garcia-Marques, F., Nunez, E., Jorge, I., Camafeita, E., Minguez, P., Rodriguez de Cordoba, S., Lopez-Melgar, B., Lara-Pezzi, E., Fernandez-Ortiz, A., Ibanez, B., Manuel Valdivielso, et al

2020; 75 (16): 1926–41

- **Trop2 is a driver of metastatic prostate cancer with neuroendocrine phenotype via PARP1.** *Proceedings of the National Academy of Sciences of the United States of America*
Hsu, E. C., Rice, M. A., Bermudez, A. n., Marques, F. J., Aslan, M. n., Liu, S. n., Ghoochani, A. n., Zhang, C. A., Chen, Y. S., Zlitni, A. n., Kumar, S. n., Nolley, R. n., Habte, et al
2020
- **Reconstructed Apoptotic Bodies as Targeted "Nano Decoys" to Treat Intracellular Bacterial Infections within Macrophages and Cancer Cells.** *ACS nano*
Bose, R. J., Tharmalingam, N. n., Garcia Marques, F. J., Sukumar, U. K., Natarajan, A. n., Zeng, Y. n., Robinson, E. n., Bermudez, A. n., Chang, E. n., Habte, F. n., Pitteri, S. J., McCarthy, J. R., Gambhir, et al
2020
- **Genomic analysis of Vascular Invasion in Hepatocellular Carcinoma (HCC) Reveals Molecular Drivers and Predictive Biomarkers.** *Hepatology (Baltimore, Md.)*
Krishnan, M. S., Rajan Kd, A. n., Park, J. n., Arjunan, V. n., Garcia Marques, F. J., Bermudez, A. n., Girvan, O. A., Hoang, N. S., Yin, J. n., Nguyen, M. H., Kothary, N. n., Pitteri, S. n., Felsher, et al
2020
- **Discovery of PTN as a serum-based biomarker of pro-metastatic prostate cancer.** *British journal of cancer*
Liu, S. n., Shen, M. n., Hsu, E. C., Zhang, C. A., Garcia-Marques, F. n., Nolley, R. n., Koul, K. n., Rice, M. A., Aslan, M. n., Pitteri, S. J., Massie, C. n., George, A. n., Brooks, et al
2020
- **NOTCH Activation Promotes Valve Formation by Regulating the Endocardial Secretome.** *Molecular & cellular proteomics : MCP*
Torregrosa-Carrión, R., Luna-Zurita, L., García-Marqués, F., D'Amato, G., Piñeiro-Sabarís, R., Bonzón-Kulichenko, E., Vázquez, J., de la Pompa, J. L.
2019; 18 (9): 1782-1795
- **APOA1 oxidation is associated to dysfunctional high-density lipoproteins in human abdominal aortic aneurysm** *EBIOMEDICINE*
Martinez-Lopez, D., Camafeita, E., Cedo, L., Roldan-Montero, R., Jorge, I., Garcia-Marques, F., Gomez-Serrano, M., Bonzon-Kulichenko, E., Blanco-Vaca, F., Miguel Blanco-Colio, L., Michel, J., Carles Escola-Gil, J., Vazquez, et al
2019; 43: 43–53
- **SanXoT: a modular and versatile package for the quantitative analysis of high-throughput proteomics experiments** *BIOINFORMATICS*
Trevisan-Herraz, M., Bagwan, N., Garcia-Marques, F., Manuel Rodriguez, J., Jorge, I., Ezkurdia, I., Bonzon-Kulichenko, E., Vazquez, J.
2019; 35 (9): 1594–96