Hugo Pomares-Millan, MD, MPH, PhD

hugo.pomares@gmail.com

linkedin.com/in/hugo.pomares-millan

Mobile: (603) 322 - 1960

Google scholar profile / Dartmouth Research profile

Education & Training

2023 – present	Postdoctoral research fellow, Geisel School of medicine – Dartmouth, NH, US: Conceptualize and conduct original and independent research; provide collaborative support for grant applications; Assisted identifying opportunities for external funding sources, prepare grant proposals, and evaluate research findings for potential entrepreneurial venues and clinical applications. Engage in scientific and medical education as Instructor for the Epi course at Geisel Medical school.
2022	Visiting Research scientist at Christensen lab, Geisel School of medicine – Dartmouth, NH, US: Analyze data, interpret results, and
2018 – 2022	Doctoral Studies (PhD), Genetic and Molecular Epidemiology unit, Lund University, Sweden. Thesis: *Optimizing Exposome-wide Assessments in Cardiometabolic Risk*
2016 – 2018	Master's in Public Health, Lund University, Sweden.
2011 – 2013	Specialization in Occupational Health (Hons), National University of Mexico (UNAM).
2005 – 2011	Medical Doctor (MD), National University of Mexico (UNAM).

Work & Employment

2018	Research assistant, Genetic and Molecular Epidemiology unit, Lund University, Sweden: Between the Master's and Doctoral programs, I conducted literature reviews, collected and analyze data descriptively. Prepare scientific and medical materials and presentations for grant agencies and foundations.
2015 – 2016	Manager of the New Molecules department, Regulatory agency, Ministry of Health, Mexico: Responsible for technical assessments and medical/regulatory affairs of new drugs applications (NDA) and meetings with the industry. Prepare technical guidance in accordance with international guidelines for preclinical and clinical dossier.

2014 – 2015 Medical Officer, Regulatory agency, Ministry of Health, Mexico: Conducting medical evaluations to authorization dossier, technical and administrative variations and extensions of allopathic drugs, biotechnological products, and Vaccines.

2012 – 2014 Medical Reviewer, Regulatory agency, Ministry of Health, Mexico: Conducting regulatory drug assessments, evaluation of the medical dossier of allopathic drugs, biotechnological products, and vaccines; Medical judge for external legal cases; Implemented procedures for COFEPRIS certification with 2012 Pan-American Health Organization (PAHO) and 2014 World Health Organization (WHO).

2010 – 2011 Occupational Health trainee, Unilever Mexico.

Publication list

First authorship (**contributed equally)*

- Prinz N*, **Pomares-Millan H** *, Dannemann A, Giordano GN, Joisten C, et al. Who profits most from outpatient lifestyle intervention? – An IMI-SOPHIA study on the heterogeneous treatment response of children and adolescents living with overweight/obesity. *Obesity* 2023 Aug 6.
- **Pomares-Millan H**, Poveda A, Atabaki-Pasdar N, Johansson I, Björk J, Ohlsson M, Giordano GN, Franks PW. Predicting Sensitivity to Adverse Lifestyle Risk Factors for Cardiometabolic Morbidity and Mortality. *Nutrients*. 2022 Jan;14(15):3171.
- **Pomares-Millan H**, Atabaki-Pasdar N, Coral D, Johansson I, Giordano GN, Franks PW. Estimating the Direct Effect between Dietary Macronutrients and Cardiometabolic Disease, Accounting for Mediation by Adiposity and Physical Activity. *Nutrients*. 2022 Mar 13;14(6):1218.
- Mutie PM*, **Pomares-Millan H***, Atabaki-Pasdar N, Jordan N, Adams R, Daly NL, Tajes JF, Giordano GN, Franks PW. An investigation of causal relationships between prediabetes and vascular complications. *Nature communications*. 2020 Sep 14;11(1):1-1. (**contributed equally)*
- Franks PW, **Pomares-Millan H**. Next-generation epidemiology: the role of high-resolution molecular phenotyping in diabetes research. *Diabetologia*. 2020 Dec;63(12):2521-32.

Co-author

- Dhanasekaran B, Morton W R, Santhakumar V, Nakabuye M, **Pomares-Millan H**, et al. Impact of individual and environmental factors on dietary or lifestyle interventions to prevent type 2 diabetes development: a systematic review. *Communications Medicine.* 2023:3(133).

- Tobias, Deirdre K., Jordi Merino, Abrar Ahmad, Catherine Aiken, Jamie L. Benham, Dhanasekaran Bodhini, Amy L. Clark et al. Second international consensus report on gaps and opportunities for the clinical translation of precision diabetes medicine. *Nature Medicine* (2023): 1-20.
- Mutie PM, **Pomares-Millan H**, Atabaki-Pasdar N, Coral D, Fitipaldi H, Tsereteli N, Tajes JF, Franks PW, Giordano GN. Investigating the causal relationships between excess adiposity and cardiometabolic health in men and women. *Diabetologia*. 2023 Feb;66(2):321-35
- Coral DE, Fernandez-Tajes J, Tsereteli N, **Pomares-Millan H**, Fitipaldi H, Mutie PM, Atabaki-Pasdar N, Kalamajski S, Poveda A, Miller-Fleming TW, Zhong X. A phenome-wide comparative analysis of genetic discordance between obesity and type 2 diabetes. *Nature Metabolism*. 2023 Feb;5(2):237-47.
- Tura A, Grespan E, Göbl CS, Koivula RW, Franks PW, Pearson ER, Walker M, Forgie IM, Giordano GN, Pavo I, Ruetten H. Profiles of glucose metabolism in different prediabetes phenotypes, classified by fasting glycemia, 2-hour OGTT, glycated hemoglobin, and 1-hour OGTT: an IMI DIRECT study. *Diabetes*. 2021 Sep 1;70(9):2092-106.
- Bizzotto R, Jennison C, Jones AG, Kurbasic A, Tura A, Kennedy G, Bell JD, Thomas EL, Frost G, Eriksen R, Koivula RW. Processes underlying glycemic deterioration in type 2 diabetes: an IMI DIRECT study. *Diabetes Care*. 2021 Feb 1;44(2):511-8.
- Bar N, Korem T, Weissbrod O, Zeevi D, Rothschild D, Leviatan S, Kosower N, Lotan-Pompan M, Weinberger A, Le Roy CI, Menni C. A reference map of potential determinants for the human serum metabolome. *Nature*. 2020 Dec 3;588(7836):135-40.
- Atabaki-Pasdar N, Ohlsson M, Viñuela A, Frau F, **Pomares-Millan H**, Haid M, Jones AG, Thomas EL, Koivula RW, Kurbasic A, Mutie PM. Predicting and elucidating the etiology of fatty liver disease: A machine learning modeling and validation study in the IMI DIRECT cohorts. *PLoS medicine*. 2020 Jun 19;17(6):e1003149.
- Dawed AY, Zhou K, van Leeuwen N, Mahajan A, Robertson N, Koivula R, Elders PJ, Rauh SP, Jones AG, Holl RW, Stingl JC. Variation in the plasma membrane monoamine transporter (PMAT)(encoded by SLC29A4) and organic cation transporter 1 (OCT1)(encoded by SLC22A1) and gastrointestinal intolerance to metformin in type 2 diabetes: an IMI DIRECT study. *Diabetes Care*. 2019 Jun 1;42(6):1027-33.
- Riano I, **Pomares-Millan H**, Prasongdee K, Kiel L, Park R, Florez N. Evaluating Internal Medicine Residents' Awareness on Cancer Survivorship Care Plan: A Pilot Survey. *Journal of Community Hospital Internal Medicine Perspectives*. 2022;12(6):12.

- Patel SR, Riano I, Abuali I, Ai A, Geiger G, Pimienta J, Ramirez Roggio A, Dhawan N, Dizman N, Lizette Salinas A, **Pomares-Millan H**. Race/Ethnicity and Gender Representation in Hematology and Oncology Editorial Boards: What is the State of Diversity? *The Oncologist*. 2023 Apr 29:oyad103.

On the pipeline

- **Pomares-Millan H**, Stella K, Baris D, Schwenn M, Johnson A, Rothman N, Silverman DT, Karargas MR, Passarelli MN. Lifetime Water Arsenic, Genetic Susceptibility, And Bladder Cancer In The New England Bladder Cancer Study (under preparation) 2024.
- **Pomares-Millan H**, Saxby MS, Al-Mashadi SD, Karargas MR, Passarelli MN. Dietary glycemic index, glycemic load, sugar, and fiber intake in association with breast cancer risk: An updated meta-analysis (under preparation) 2024.
- **Pomares-Millan H**, Karargas MR, Passarelli MN. Lipid-lowering therapies, adiposity traits, and breast cancer risk: Univariable and multivariable Mendelian randomization analyses (under preparation) 2024.
- Atabaki-Pasdar N, **Pomares-Millan H**, Koivula RW, Tura A, Brown A, Vinuela A, Agudelo L, Coral D, van Oort S, Allin K, Chabanova E. Inferring causal pathways between metabolic processes and liver fat accumulation: an IMI DIRECT study. *medRxiv*. 2021.

Oral (O) & Poster (P) Presentations

- **Pomares-Millan H**. 4th Annual Symposium for the Vermont Center for Cardiovascular and Brain Health June 6-7, 2024; University of Vermont Davis Center (O).
- **Pomares-Millan H**, Koutros S, Rothman N, Baris D, Schwenn M, Johnson A, Silverman DT, Karagas MR; Passarelli MN. Gene-environment interactions for lifetime water arsenic exposure and bladder cancer risk in the New England Bladder Cancer study. Cancer Research 84, no. suppl 6:6140 (2024) (P)
- **Pomares-Millan H**. 57th EASD Annual Meeting of the European Association for the Study of Diabetes . Diabetologia 64, 1–380 (2021) (O).
- **Pomares-Millan H**. 56th EASD Annual Meeting of the European Association for the Study of Diabetes Diabetologia 63, 1–485 (2020) (O).
- **Pomares-Millan H**. Working Conditions of the University Professor Associated to Burnout Syndrome and Mood Disorder. American Occupational Health Conference (AOHC) 2013, USA (P).

Workshops & Leadership

2023	Society for Epidemiologic Research (SER) Team Mentoring program coordinator 2023
2020	Member of the ADA/EASD initiative, "Precision prevention" working group, LU Sweden.
2018	Member of the IMI-DIRECT (Diabetes research on patient stratification) and IMI-SOPHIA (Stratification of obese phenotypes to optimize future obesity therapy) consortium.
2015	Representative of the Ministry of Health in the VI and VII Latin Association of Nonprescription Medications (ILAR), Workshop about OTC switch, Argentina and Brazil.
2014	Representative of the Ministry of Health to the Screening Seminar GCP and ethical aspects of research, development of a new thematic network in the vicinity of the network of competent authorities on drugs in Latin America, Colombia.
2014	Representative of the Ministry of Health to the workshop of vaccines WHO: Workshop on the regulatory requirements for the preclinical / non-clinical and clinical evaluation of vaccines (human, live attenuated and inactivated), Thailand.

Teaching/Instructor

2024	Instructor of MD program: MDED 118 Patients & Populations, Geisel School of medicine – Dartmouth, NH, US.
2019 – 2020	Public Health: Epidemiology & Biostatistics, Fall term. Master's in Public Health, Lund University.
2015	Trainer of authorized third-party verification units: "Workshop of medical review and writing, effective literature research, and critical analysis of research papers", Ministry of Health, Mexico.
2015	Instructor of "Industry Guidance: OTC Switch and New Molecules", Ministry of Health, Mexico.
2014	Speaker in the 1st Seminar: "Current Scenario of Professional Chemical Pharmaceutical Sciences: Pharmaceutical regulatory perspectives", National College of Pharmaceutical Chemical Biologists, Mexico.

Grants, Awards & Honors

2024	Postdoc Professional Development Award, Guarini School of Graduate and Advanced Studies, Dartmouth, Hanover, NH, USA
2023	Epidemiology department Travel award for Advanced Gene mapping course at Rockefeller university , NY, USA.
2020 – 2022	Travel award (x3), Faculty of medicine, Lund University, Sweden
2016 – 2018	Lund Global Scholarship, Sweden
2013 – 2011	Specialization in Occupational Health (Honors), UNAM, Mexico

Membership in professional societies

2022 – present	Member of the Society for Epidemiologic research (SER).
2014 – present	Founding member of the Colegio Ramazzini de Mexico A.C

Statistical & programming skills

Encryption for data sharing. Proficient in Microsoft packages (e.g., Excel, Teams). Expertise in STATA and proficient in R software for data science, i.e., data processing, wrangling, visualization, and exploratory analysis. Machine Learning: classification, regression, clustering, feature engineering. Observational inferential methods; Linear, logistic regression, mixed effects and repeated measures methods (i.e., Hierarchical models).

Intermediate in Python software, UNIX-like command tools for deep learning (neural networks) and genetic analysis (GCTA, FastLMM, PLINK, MR).

Medical writing skills: Writing of research grants and research collaboration proposals (IMI-DIRECT consortia).

Languages: I speak English (functionally native), Swedish (intermediate), and Spanish (native).