

1. **Villafuerte, FC**, Swietach, P. Relief with a catch: haemodilution in Chronic Mountain Sickness sparks an erythropoietin surge. *Blood RCI*. 2025. *Blood Red Cells & Iron* (2026) 2 (1): 100037.
2. MacDonald TJA, McCrone JC, Osei-Boateng C, Wideman CD, Tsioros SL, Tremblay JC, Patrician A, Howe CA, Coombs GB, Stacey BS, Simpson LL, Stembridge M, Steinback CD, Moore JP, Gibbons TD, Hoiland RL, **Villafuerte F**, Morales G, Ainslie PN, Tymko MM. Is resting muscle sympathetic nerve activity related to peripheral or cerebrovascular haemodynamics at high altitude? A retrospective analysis. *Exp Physiol*. 2026 Aug 19;10.1113/EP093530. doi: 10.1113/EP093530.
3. Vanden Berg ER, Fraser GM, Steele AR, Meah VL, Simpson LL, Berthelsen LF, Busch SA, Tymko MM, **Vizcardo-Galindo GA, Figueroa-Mujica RJ, Villafuerte FC**, Ainslie PN, Stembridge M, Moore JP, Steinback CD. α -Adrenergic regulation of blood pressure in acclimatizing lowlanders and Andean highlanders at high altitude. *Am J Physiol Regul Integr Comp Physiol*. 2026 Jul 1;331(1): R86-R101. doi: 10.1152/ajpregu.00164.2025.
4. Hulikova, A, Wang, Z, Broomfield, H, Joanna Robinson, Miryam Healy, **Figueroa-Mujica, RJ**, Gamboa, D, Torres, K, Ammanath, G, Hartono, D, Siow, RC, Engledow, S, Srinamon, K, Ghose, A, Plewes, P, Arjen M. Dondorp, Noemi B. A. Roy, **Villafuerte, FC**, Khan, H, Swietach, P. Urinary carbonic anhydrase 1 excretion is a marker of hemolysis-triggering conditions suitable for point-of-care testing. *Blood Global Hematology* (2026) 2 (1): 100058.
5. **Villafuerte, FC., Bermudez, D.** Cien años de la Enfermedad de Monge: Diagnóstico, fisiopatología, características clínicas, tratamiento y epidemiología del mal de montaña crónico. *Diagnóstico*, Vol. 64 Núm. 4 (2025).
6. **Lawrence, ES., Gu, W., Kong, MC., Fassardi, S.,** Anza-Ramirez, C., Moya, EA., Heinrich, EC., Yu, JJ., Orr, JE., Cao, SY., Sanchez-Azofra, A., Cole, AM., Hall, JE., Lin, A., DeYoung, P., **Vizcardo-Galindo, G., Macarlupu, JL., Figueroa-Mujica, R., Bermudez, D.,** Corante, N., Cavalleri, GL., Gaio, E., Evans, AM., Powell, FL., Malhotra, A., Salem, RM., **Villafuerte, FC.,** Simonson, TS. Adaptive *PRKAA1* variant in Andeans is associated with improved ventilation and sleep phenotypes. *iScience* 28, 112911, 2025. doi.org/10.1016/j.isci.2025.112911.
7. Young EV, Djokic MA, Heinrich EC, Marin T, Anza-Ramirez C, Orr JE, Gilbertson D, DeYoung PN, **Vizcardo-Galindo G, Figueroa-Mujica R, Villafuerte FC**, Malhotra A, Simonson TS. The Effects of Nocturnal Hypoxemia on Cognitive Performance in Andean Highlanders. *High Alt Med Biol*. 2024 Dec 10. doi: 10.1089/ham.2024.0077.
8. Gatterer H, **Villafuerte FC**, Ulrich S, Bhandari SS, Keyes LE, Bartscher M. Altitude illnesses. *Nat Rev Dis Primers*. 2024 Jun 20;10(1):43. doi: 10.1038/s41572-024-00526-w.
9. Lawrence ES, Gu W, Bohlender RJ, Anza-Ramirez C, Cole AM, Yu JJ, Hu H, Heinrich EC, O'Brien KA, Vasquez CA, Cowan QT, Bruck PT, Mercader K, Alotaibi M, Long T, Hall JE, Moya EA, Bauk MA, Reeves JJ, Kong MC, Salem RM,

- Vizcardo-Galindo G, Macarlupu JL, Figueroa-Mujica R, Bermudez D**, Corante N, Gaio E, Fox KP, Salomaa V, Havulinna AS, Murray AJ, Malhotra A, Powel FL, Jain M, Komor AC, Cavalleri GL, Huff CD, **Villafuerte FC**, Simonson TS. Functional *EPAS1/HIF2A* missense variant is associated with hematocrit in Andean highlanders. *Sci Adv*. 2024 Feb 9;10(6): eadj5661. doi: 10.1126/sciadv.adj5661.
10. Azad P, Zhou D, Tu HC, **Villafuerte FC**, Traver D, Rana TM, Haddad GG. Long noncoding RNA HIKER regulates erythropoiesis in Monge's disease via CSNK2B. *J Clin Invest*. 2023 Apr 6:e165831. doi: 10.1172/JCI165831. Online ahead of print.
 11. Stacey BS, Hoiland RL, Caldwell HG, Howe CA, Vermeulen TD, Tymko MM, **Vizcardo-Galindo GA, Bermudez D, Figueroa-Mujica R**, Gasho C, Tuaillon E, Hirtz C, Lehmann S, Marchi N, Tsukamoto H, **Villafuerte FC**, Ainslie PN, Bailey DM. Lifelong exposure to hypoxia in humans is associated with improved redox homeostasis and structural-functional adaptations of the neurovascular unit. *J. Physiol*. 2023 Jan 12. 601(6):1095-1120. doi: 10.1113/JP283362.
 12. Anza-Ramirez C, Gu W, **Macarlupú JL, Figueroa-Mujica R, Vizcardo-Galindo G**, Heinrich EC, Tift M, Wagner HE, Wagner PD, Simonson TS, **Villafuerte FC**. Preserved peak exercise capacity in Andean highlanders with excessive erythrocytosis both before and after isovolumic hemodilution. *J. Appl. Physiol*. 134: 36–49, 2023.
 13. Yu JJ, Non AL, Heinrich EC, Gu W, Alcock J, Moya EA, Lawrence ES, Tift MS, O'Brien KA, Storz JF, Signore AV, Khudyakov JI, Milsom WK, Wilson SM, Beall CM, **Villafuerte FC**, Stobdan T, Julian CG, Moore LG, Fuster MM, Stokes JA, Milner R, West JB, Zhang J, Shyy JY, Childebayeva A, Vázquez-Medina JP, Pham LV, Mesarwi OA, Hall JE, Cheviron ZA, Sieker J, Blood AB, Yuan JX, Scott GR, Rana BK, Ponganis PJ, Malhotra A, Powell FL, Simonson TS. Time Domains of Hypoxia Responses and -Omics Insights. *Front Physiol*. 2022 Aug 8;13:885295. doi: 10.3389/fphys.2022.885295.
 14. Sanchez-Azofra, A., **Villafuerte, FC.**, DeYoung, PN., Gilbertson, D., Gu, W., Moya, EA., **Vizcardo-Galindo, G., Figueroa-Mujica, R.**, Anza-Ramirez, C., **Macarlupú, JL.**, Pham, LV, Wagner, PD., Malhotra, A., Simonson, TS., Mesarwi, OA. Isovolemic hemodilution in chronic mountain sickness acutely worsens nocturnal oxygenation and sleep apnea severity. *J. Sleep Clin. Med*. 2022 Jul 20. doi: 10.5664/jcsm.10136.
 15. Callison WÉ, **Kiyamu M, Villafuerte FC**, Brutsaert TD, Lieberman DE Comparing high versus low-altitude populations to test human adaptations for increased ventilation during sustained aerobic activity. *Sci Rep*. 2022 Jul 1;12(1):11148. doi: 10.1038/s41598-022-13263-5.
 16. Azad P, Caldwell AB, Ramachandran S, Spann NJ, Akbari A, **Villafuerte FC, Bermudez D**, Zhao H, Poulsen O, Zhou D, Bafna V, Subramaniam S, Haddad GG ARID1B, a molecular suppressor of erythropoiesis, is essential for the prevention of Monge's disease. *Exp Mol Med*. 2022 Jun 7. doi: 10.1038/s12276-022-00769-1.
 17. Bailey DM, Culcasi M, Filipponi T, Brugniaux JV, Stacey BS, Marley CJ, Soria R, Rimoldi SF, Cerny D, Rexhaj E, Pratali L, Salmòn CS, Jáuregui CM, Villena

- M, **Villafuerte F**, Rockenbauer A, Pietri S, Scherrer U, Sartori C. EPR spectroscopic evidence of iron-catalysed free radical formation in chronic mountain sickness: Dietary causes and vascular consequences. *Free Radic Biol Med*. 2022 Apr 6;184:99-113. doi: 10.1016/j.freeradbiomed.2022.03.028.
18. Hansen, A., Amin, S., Hofstätter, F., Mugele, H., Simpson, L., Gasho, C., Dawkins, T., Tymko, M., Ainslie, P., **Villafuerte, F.**, Hearon, C., Lawley, J., Moralez, G. Global Reach 2018: Sympathetic neural and hemodynamic responses to submaximal exercise in Andeans with and without chronic mountain sickness. *Am. J. Physiol-Heart and Circ.* May 1;322(5):H844-H856. doi: 10.1152/ajpheart.00555.2021. Epub 2022 Mar 25.
 19. **Villafuerte, FC**, Simonson, TS, **Bermudez, D.**, **León-Velarde, F.** High-altitude erythrocytosis: mechanisms of adaptive and maladaptive responses. *Physiology* (Bethesda). 2022 Jul 1;37(4):0. doi: 10.1152/physiol.00029.2021. Epub 2022 Jan 10.
 20. Tymko, M., Willie, C., Howe, C., Hoiland, R., Stone, R., Tymko, K., Tymko, C., MacLeod, D., Anholm, J., Gasho, C., **Villafuerte, F.**, **Vizcardo-Galindo, G.**, **Figueroa-Mujica, R.**, TDay, D., Bird, J., Foster, G., Steinback, C., Brugniaux, J., Champigneulle, B., Stauffer, E., Doutreleau, S., Verges, S., Swenson, E., Ainslie, PN. Acid-base balance at high altitude in lowlanders and indigenous highlanders. *J Appl Physiol* (1985). 2022 Feb 1;132(2):575-580. doi: 10.1152/jappphysiol.00757.2021.
 21. **Macarlupú, JL.**, **Vizcardo-Galindo, G.**, **Figueroa-Mujica, R.**, Voituron, N., Richalet, JP., **Villafuerte, FC**. Sub-maximal aerobic exercise training reduces hematocrit and ameliorates symptoms in Andean highlanders with Chronic Mountain Sickness. *Exp. Physiol*. 2021 Sep 23. doi: 10.1113/EP089975.
 22. Patrician, A; Dawkins, T; Coombs, G; Stacey, B; Gasho, C; Gibbons, T; Howe, C; Tremblay, J; Stone, R; Tymko, K; Tymko, C; Akins, J; Hoiland, R; **Vizcardo-Galindo, G; Figueroa-Mujica, R; Villafuerte, FC.**; Bailey, D; Stembridge, M; Anholm, J; Tymko, M; Ainslie, P. GLOBAL REACH 2018: Iron infusion at high altitude reduces hypoxic pulmonary vasoconstriction equally in both lowlanders and healthy Andean highlanders. *Chest*. 2021 Sep 8:S0012-3692(21)03848-4. doi: 10.1016/j.chest.2021.08.075.
 23. Steele, A, Tymko, M, Meah, V, Simpson, L, Gasho, C, Dawkins, T, Williams, A, **Villafuerte, FC**, **Vizcardo-Galindo, G**, **Figueroa-Mujica, R**, Ainslie, PN, Stembridge, M, Moore, J, Steinback, C. Global REACH 2018: Volume regulation in high-altitude Andeans with and without chronic mountain sickness. *Am J Physiol Regul Integr Comp Physiol*. 2021 Aug 4. doi: 10.1152/ajpregu.00102.2021.
 24. Hansen, AB., Moralez, G., Sachin Bharat Amin, Simpson, LL., Hofstätter, F., Anholm, J., Gasho, C., Stembridge, M., Dawkins, TG, Tymko, MM, Ainslie, PN., **Villafuerte, FC.**, Romero, SA, Christopher M. Hearon, Jr, Lawley, JS. Global Reach 2018: The adaptive phenotype to life with chronic mountain sickness and polycythemia. *J. Physiol*. 2021 Jul 10. doi: 10.1113/JP281730.

25. Coombs GB, Akins JD, Patik JC, **Vizcardo-Galindo GA, Figueroa-Mujica R**, Tymko MM, Stacey BS, Iannetelli A, Bailey DM, **Villafuerte FC**, Ainslie PN, Brothers RM. Global Reach 2018: nitric oxide-mediated cutaneous vasodilation is reduced in chronic, but not acute, hypoxia independently of enzymatic superoxide formation. *Free Radic Biol Med*. 2021 Jun 12:S0891-5849(21)00364-6. doi: 10.1016/j.freeradbiomed.2021.06.005.
26. **Macarlupu JL**, Marchant D, Jeton F, **Villafuerte F**, Richalet JP, Voituron N. Effect of exercise training in rats exposed to chronic hypoxia: Application for Monge's disease. *Physiol Rep*. 2021 Apr; 9(7):e14750. doi: 10.14814/phy2.14750.
27. DeSouza NM, Brewster LM, Bain AR, Garcia VP, Stone R, Stockelman KA, Greiner JJ, Tymko MM, **Vizcardo-Galindo G, Figueroa-Mujica RJ, Villafuerte FC**, Ainslie PN, DeSouza CA Global reach 2018: Influence of excessive erythrocytosis on coagulation and fibrinolytic factors in andean highlanders. *Exp Physiol*. 2021 Mar 21. doi: 10.1113/EP089360.
28. Brewster, LM., Bain, A., Pacheco-Garcia, V., Fandl, H., Stone, R., DeSouza, N., Greiner, J., Tymko, M., **Vizcardo-Galindo, G., Figueroa-Mujica, R., Villafuerte, FC.**, Ainslie, P., DeSouza, C. Global Reach 2018: Dysfunctional Extracellular Microvesicles in Andean Highlander Males with Excessive Erythrocytosis. *Am. J. Physiol. Heart Circ Physiol* 2021 Mar 12. doi: 10.1152/ajpheart.00016.2021.
29. Azad, P., **Villafuerte, FC., Bermudez, D.**, Patel, G., Haddad, GG. Protective Role of Estrogen against Excessive Erythrocytosis in Monge's Disease. *Exp. Mol. Med*. 2021 Jan; 53(1):125-135. doi: 10.1038/s12276-020-00550-2. Epub 2021 Jan 20.PMID: 33473144.
30. Bilo, G., Acone, L., Anza-Ramirez, C., **Macarlupu, JL.**, Soranna, D., Zambon, A., **Vizcardo-Galindo, G.**, Pengo, MF., **Villafuerte, FC***, Parati, G* on behalf of HIGHCARE-ANDES Highlanders Study Investigators. Office and ambulatory arterial hypertension in highlanders. HIGHCARE-ANDES Highlanders Study. Hypertension 2020 Dec; 76(6):1962-1970. doi: 10.1161/HYPERTENSIONAHA.120.16010. Epub 2020 Nov 11.PMID: 33175629. *shared senior co-authorship.
31. Steele AR, Tymko MM, Meah VL, Simpson LL, Gasho C, Dawkins TG, **Villafuerte FC**, Ainslie PN, Stembridge M, Moore JP, Steinback CD. Global REACH 2018: Renal oxygen delivery is maintained during early acclimatization to 4330 m. *Am J Physiol Renal Physiol*. 2020 Sep 30. doi: 10.1152/ajprenal.00372.2020. Online ahead of print.
32. Berthelsen LF, Fraser GM, Simpson LL, Vanden Berg ER, Busch SA, Steele AR, Meah VL, Lawley JS, **Figueroa-Mujica R, Vizcardo Galindo GA, Villafuerte FC**, Gasho C, Willie CK, Tymko MM, Ainslie PN, Stembridge M, Moore JP, Steinback CD. Highs and Lows of Sympathetic Neuro-cardiovascular Transduction: Influence of Altitude Acclimatization and Adaptation. *Am J Physiol Heart Circ Physiol*. 2020 Sep 28. doi: 10.1152/ajpheart.00364.2020. Online ahead of print.
33. Tymko MM, Hoiland RL, Vermeulen TD, Howe CA, Tymko C, Stone RM, Steinback CD, Steele A, **Villafuerte F, Vizcardo G, Figueroa-Mujica RJ**, Ainslie PN. Global

REACH 2018: The carotid artery diameter response to the cold pressor test is governed by arterial blood pressure during normoxic but not hypoxic conditions in healthy lowlanders and Andean highlanders. *Exp Physiol.* 2020 Aug 23. doi: 10.1113/EP088898. Online ahead of print.

34. Tift MS, Alves de Souza RW, Weber J, Heinrich EC, **Villafuerte FC**, Malhotra A, Otterbein LE, Simonson TS Adaptive Potential of the Heme Oxygenase/Carbon Monoxide Pathway During Hypoxia. *Front Physiol.* 2020 Jul 22; 11:886. doi: 10.3389/fphys.2020.00886.
35. Oberholzer L, Lundby C, Stauffer E, Ulliel-Roche M, Hanco I, Pichon A, Lundby AK, **Villafuerte FC**, Verges S, Robach P Re-evaluation of excessive erythrocytosis in diagnosing chronic mountain sickness in men from the world's highest city. *Blood.* 2020 Jul 2: blood.2019004508. doi: 10.1182/blood.2019004508.
36. Heinrich EC, Orr, JE, Gilbertson, D, Anza-Ramirez, C, Deyoung, PN, Djokic, Corante, N, **Vizcardo-Galindo, GA**, **Macarlupu, JL**, Gaio, G, Powell, FL, Atul Malhotra, **Villafuerte, FC***, Simonson, TS*. Relationships between chemoreflex responses, sleep quality, and hematocrit in Andean men and women. *Front Physiol.* 2020 May 6; 11:437. doi: 10.3389/fphys.2020.00437. *shared senior co-authorship.
37. Tymko, MM Lawley, JS, Ainslie, PN, Hansen, AB, Hofstaetter, F, Rainer, S, Amin, S, Moralez, G, Gasho, C, **Vizcardo, G**, **Bermudez, D**, **Villafuerte, FC**, Hearon, CM Jr. Global Reach 2018: Heightened α -Adrenergic Signaling Impairs Endothelial Function During Chronic Exposure to Hypobaric Hypoxia. *Circ. Res.* 9 Apr 2020 doi.org/10.1161/CIRCRESAHA.119.316053.
38. Simpson, LL., Meah, VL., Steele, AR., Gasho, C., Howe, CA., Dawkins, TG., Busch, SA., Oliver, SJ., Moralez, G., Lawley, JS., Tymko, MM., **Vizcardo-Galindo, GA.**, **Figuerroa-Mujica, RJ.**, **Villafuerte, FC.**, Ainslie, PN., Mike Stembridge, M*, Steinback, CD*, Moore, JP*. Global REACH: Andean Highlanders, Chronic Mountain Sickness and the Integrative Regulation of Resting Blood Pressure. *Exp Physiol.* 2020 DOI:10.1113/EP088473
39. Tymko MM, Hoiland RL, Tremblay JC, Stembridge M, Dawkins T, Coombs GB, Patrician A, Howe CA, Gibbons TD, Moore JP, Simpson LL, Steinback CD, Meah VL, Stacey BS, Bailey DM, MacLeod D, Gasho C, Anholm J, Bain A, Lawley JS, **Villafuerte F**, **Vizcardo G**, Ainslie PN. The 2018 Global Research Expedition on Altitude-Related Chronic Health (REACH) to Cerro de Pasco, Peru: An experimental overview. *Exp Physiol.* 2020 Apr 1. doi: 10.1113/EP088350. Online ahead of print.
40. Busch SA, van Diepen S, Steele AR, Meah VL, Simpson LL, **Figuerroa-Mujica RJ**, **Vizcardo-Galindo G**, **Villafuerte FC**, Tymko MM, Ainslie PN, Moore JP, Stembridge M, Steinback CD. Global REACH: Assessment of Brady-Arrhythmias in Andeans and Lowlanders During Apnea at 4330 M. *Front Physiol.* 2020 Jan 22; 10:1603. doi: 10.3389/fphys.2019.01603.
41. **Vizcardo-Galindo, G.**, **León-Velarde, F.**, **Villafuerte, FC**. High-altitude hypoxia decreases plasma erythropoietin soluble receptor concentration in lowlanders. *High*

Alt Med Biol. 2020 Mar; 21(1):92-98. doi: 10.1089/ham.2019.0118. Epub 2020 Jan 23.

42. **Bermudez, D**, Azad, P., **Figueroa-Mujica, R.**, **Vizcardo-Galindo, G.**, Corante, N., Guerra-Giraldez, C., Haddad, GG., **Villafuerte, FC**. Increased hypoxic proliferative response and gene expression in erythroid progenitor cells of Andean highlanders with Chronic Mountain Sickness. *Am J Physiol Regul Integr Comp Physiol.* 2020 Jan 1; 318(1):R49-R56. doi: 10.1152/ajpregu.00250.2019. Epub 2019 Oct 16.