

Cuerpo académico del Programa

Dr. David Andrade Andrade

Trayectoria académica

- Profesor de Educación Física, Universidad de los Lagos, Osorno, Chile 2011.
- Magister en Ciencias Biomédicas con mención en Fisiología Aplicada, Universidad de Antofagasta, Chile 2015.
- Magister en Ciencia Biológicas con Mención en Ciencias Fisiológicas, Pontificia Universidad Católica, Santiago, Chile 2015
- Doctor en Ciencias Biológicas con Mención en Ciencias Fisiológicas, Pontificia Universidad Católica, Santiago Chile 2018
- Postdoctorado en el control neural de función Cardiovascular, Pontificia Universidad Católica, Santiago Chile 2018



Trayectoria profesional

- *Profesor de Morfofisiología, Licenciatura en Educación Física. Universidad de Antofagasta desde 08/2012 a 12/2012.*
- *Profesor de Fisiología del Ejercicio, Licenciatura en Educación Física. Universidad de Antofagasta desde 08/2012 a 12/2012.*
- *Profesor de Actividad Física de Base, Licenciatura en Educación Física. Universidad de Antofagasta desde 03/2013 a 06/2012.*
- *Profesora de Fisiología Humana, Licenciatura en Nutrición. Universidad de Antofagasta desde 03/2013 a 06/2012.*
- *Profesor de Fisiología Humana, Licenciatura en Odontología. Universidad de Antofagasta desde 03/2013 a 06/2012.*
- *Profesora de Morfofisiología, Licenciatura en Educación Física. Universidad de Antofagasta desde 07/2013 a 12/2013.*
- *Profesor de Fisiología del Ejercicio, Licenciatura en Educación Física. Universidad de Antofagasta desde 07/2013 – 12/2013.*
- *Profesora de Fisiología Humana, Licenciatura en Enfermería. Universidad de Antofagasta desde 07/2013 a 12/2013.*

- *Consultor en Fisiología, Clínica MEDS desde 03/2014 a 05/20152.*
- *Profesor de Fisiología Humana, Facultad de Medicina, Universidad Autónoma de Chile desde 03/2017 a 12/2017.*
- *Instructor adjunto, Pontificia Universidad Católica de Chile, Chile desde 06/2018 a 06/2019.*
- *Profesor Asistente, Universidad Mayor, Chile desde 06/2018 a 12/2020.*
- *Profesor asistente, Departamento de Biomédica, Facultad de Ciencias de la Salud, Universidad de Antofagasta, Antofagasta, Chile desde 01/2021 a 03/2022.*
- *Profesor asociado del Departamento de Biomedicina, Facultad de Ciencias de la Salud, Universidad de Antofagasta, Antofagasta, Chile desde 03/2022 hasta la fecha.*
- *Director del Centro de Investigación en Medicina y Fisiología de Altura, Universidad de Antofagasta desde 01/2023 hasta fecha.*

Links páginas web de productividad:

<https://orcid.org/0000-0003-2006-1444>

Líneas de investigación:

- Rol de reflejos periféricos sobre la respuesta cardiorrespiratoria, metabólica y muscular en condiciones de estrés fisiológico ambiental, tales como ejercicio, hipoxia hipobárica de gran altitud y microgravedad simulada.

Proyectos de investigación:

- Title: Role of chemoreceptors as microgravity sensors: an approach from preclinical model to human performance and spaceflight.
Funding agency: US Air Force grant (GRANT14116787)
Role: Principal Investigator
Years: 3 (2024-2027)
- Title: RENEW: Retarding Aging Exercise-Induced Changes in Microbiome to Ease Inflammaging, Nurturing Well-being.
Funding agency: ANID-FONDECYT (Major Chilean Funding Agency for Research) and U.S. National Academy of Medicine.
Role: Principal Investigator
Years: 2 (2024-2025)

- Title: The autonomic control as a cornerstone associated with regulating physical performance in hypobaric-hypoxia.
Funding agency: Minera Escondida Ltda. (One of the principal mining company)
Role: Principal Investigator
Years: 3 (2021-2023)
- Title: Elucidating the potential role of peripheral chemoreceptors as metabolic sensors during exercise.
Funding agency: ANID-FONDECYT (Major Chilean Funding Agency for Research)
Role: Principal Investigator
Years: 3 (2022-2024)
- Title: Cyber-physical systems for personalized healthcare: a data-driven approach for improved management of diabetes and hypertension
Funding agency: ANID-FONDECYT (ANILLO)
Role: Co-Investigator
Years: 4 (2021-2024)
- Title: Influence of hypoxic chemoreflex on voluntary apnea time in highly trained swimmers.
Funding agency: Universidad Catolica Silva Henriquez (Interdisciplinary research)
Role: Co-Investigator
Years: 1 (2021)
- Title: Ventilatory chemoreflex as a respiratory adaptative mechanism in highly trained swimmers.
Funding agency: Universidad Mayor (Puentes Grant)
Role: Co-Investigator
Years: 2 (2019-2020)
- Title: Baroreflex control during acute exposure to high-altitude: implications to parasympathetic modulation.
Funding agency: Universidad Catolica Silva Henriquez (Interdisciplinary research)
Role: Co-Investigaor
Years: 1 (2019)
- Title: Role of exercise training on cardiac function and autonomic control in rats with heart failure with preserved ejection fraction.

Funding agency:
Research)

ANID-CONICYT (Major Chilean Fellowship Program for

Role:

Principal Investigator

Years:

3 (2016-2018)

Publicaciones:

1. Revista:

- Alvarez C, Fuentes C, Ramos M, Marchant C, Ibacahe P., Martínez L., Angarita L., Delgado-Floody P., Andrade D.C. (2025) Skeletal muscle and body fat interact with blood pressure in peripheral and cerebral vascular disease: results from the national health survey 2016-17. *Nut. Hosp* (Accepted).
- Salazar-Ardiles, C., Paredes, K., & Andrade, D. C. (2025) Amoebas: the omnipotent organism and silent assassin. *Mol Biol Rep* 52, 160
<https://doi.org/10.1007/s11033-025-10256-1>
- Andrade D. C. (2025). Peripheral chemoreceptor, a new player in metabolic sensing during physical exertion: a hypothetical scenario. *Journal of neurophysiology*, 133(1), 193–202. <https://doi.org/10.1152/jn.00503.2024>
- Salazar-Ardiles, C., Cornejo, C., Paz, C., Vasquez-Muñoz, M., Arce-Alvarez, A., Rodriguez-Fernandez, M., Millet, G. P., Izquierdo, M., & Andrade, D. C. (2024). Effect of chronic exogenous oxytocin administration on exercise performance and cardiovagal control in hypobaric hypoxia in rats. *Biological research*, 57(1), 88. <https://doi.org/10.1186/s40659-024-00573-3>
- Alvarez C, Peñailillo L, Ibacache-Saavedra P, Jerez-Mayorga D, Campos-Jara C, Andrade DC, Guimarães GV, Gomes-Ciolac E, Delgado-Floody P, Izquierdo M, Gurovich AN. Six weeks of a concurrent training therapy improves endothelial function and arterial stiffness in hypertensive adults with minimum non-responders. *Hipertens Riesgo Vasc*. 2024 Jul 29;S1889-1837(24)00085-0. doi: 10.1016/j.hipert.2024.07.001.
- Alvarez-Araos P, Jiménez S, Salazar-Ardiles C, Núñez-Espinosa C, Paez V, Rodriguez-Fernandez M, Raberin A, Millet GP, Iturriaga R, Andrade DC. Baroreflex and chemoreflex interaction in high-altitude exposure: possible role on exercise performance. *Front Physiol*. 2024 Jun 4;15:1422927. doi: 10.3389/fphys.2024.1422927.
- Arce-Álvarez A, Zaio Á, Salazar-Ardiles C, Álvarez C, Merino-Muñoz P, Vasquez-Muñoz M, Izquierdo M, Castro M, Andrade DC. Detraining's Effects on Cardiorespiratory Fitness and Maximal and Explosive Strength in Army Soldiers: Does Age Matter? *Sports*. 2024; 12(7):183. <https://doi.org/10.3390/sports12070183>
- Álvarez, C., Peñailillo, L., Ibacache-Saavedra, P., Tuesta, M., Jerez-Mayorga, D., Domaradzki, J., Andrade, D. C., Andrade-Mayorga, O., Cano-Montoya, J., &

- Delgado-Floody, P. (2024). Exercise training is effective for arterial stiffness and blood pressure rehabilitation in hypertensive adults. *Retos*, 56, 301-311. <https://doi.org/10.47197/retos.v56.104740>
- Cortés M, Avendaño P, Encalada O, Salazar-Ardiles C, Andrade DC, Gómez-Silva B, Contreras D, Toro N, Arias D, Escudero LV. Uncovering Hidden Microbial Diversity in Nitrate/Iodide Deposits (NIDs) in the Domeyko District, Atacama Desert, Chile. *Soil Systems*. 2024; 8(2):46. <https://doi.org/10.3390/soilsystems8020046>
 - Langarica S, de la Vega D, Cariman N, Miranda M, Andrade DC, Nunez F, Rodriguez-Fernandez M. Deep Learning-Based Glucose Prediction Models: A Guide for Practitioners and a Curated Dataset for Improved Diabetes Management. *IEEE Open J Eng Med Biol*. 2024 Feb 13;5:467-475. doi: 10.1109/OJEMB.2024.3365290.
 - Arias D, Saldaña M, Botero YL, Dinamarca F, Paredes B, Salazar-Ardiles C, Andrade DC, Cisternas LA, Carrasco J, Santos C, Dorador C, Gómez-Silva B. Exploring the potential of the halotolerant bacterial strain *Bacillus subtilis* LN8B as an ecofriendly sulfide collector for seawater flotation. *J Appl Microbiol*. 2024 Jan 2;135(1):lxad313. doi: 10.1093/jambio/lxad313.
 - Cornejo-Guerra C, Salazar-Ardiles C, Morales P, Andrade DC. Consequences of Exposure to Hypobaric Hypoxia Associated with High Altitude on Spermatogenesis and Seminal Parameters: A Literature Review. *Cells*. 2024 Mar 29;13(7):592. doi: 10.3390/cells13070592.
 - Andrade DC, Arce-Álvarez A, Salazar-Ardiles C, Toledo C, Guerrero-Henriquez J, Alvarez C, Vasquez-Muñoz M, Izquierdo M, Millet GP. Hypoxic peripheral chemoreflex stimulation-dependent cardiorespiratory coupling is decreased in swimmer athletes. *Physiol Rep*. 2024 Jan;12(1):e15890. doi: 10.14814/phy2.15890.
 - Mardokhi M, Rahman Rahimi M, Saedmocheshi S, Andrade DC. (2023) L-arginine supplementation does not provide an advantage combined with HIIT on anaerobic performance in trained female handball players: a single-blind study. *Journal of Human Kinetics* (accepted)
 - Salazar-Ardiles, C., Asserella-Rebollo, L., Cornejo C., Vasquez-Muñoz, M., Arias, D., Toledo, C., & Andrade, D. C. (2023) Molecular diagnostic approaches for sars-cov-2 detection and pathophysiological consequences. *Molecular Biology Reports*. <https://doi.org/10.1007/s11033-023-08844-0>
 - Alvarez, C., Campos-Jara, C., Gomes Ciolac, E., Vega-Guimaraes, G., Andrade-Mayorga, O., Cano-Montoya, J., C. Andrade, D., Delgado-Floody, P., Alonso-Martínez, A., Izquierdo, M. ., & Cigarroa, I. Hypertensive patients show higher heart rate response during incremental exercise and elevated arterial age estimation than normotensive adult peers: VASCU-HEALTH PROJECT. *Retos*, 50, 25–32. <https://doi.org/10.47197/retos.v50.99716>
 - Oyarzo-Aravena, A., Arce-Alvarez, A., Salazar-Ardiles, C., Ramirez-Campillo, R., Alvarez, C., Toledo, C., Izquierdo, M., & Andrade, D. C. (2023). Cardiorespiratory optimal point as a submaximal evaluation tool in endurance athletes: An exploratory study. *Frontiers in physiology*, 14, 1087829.

- Fernandez, F., Vazquez-Muñoz, M., Canals, A., Arce-Álvarez, A., Salazar-Ardiles, C., Álvarez, C., Ramírez-Campillo, R., Millet, G. P., Izquierdo, M., & Andrade, D. C. (2023). Intrahospital supervised exercise training improves survival rate among hypertensive patients with COVID-19. *Journal of applied physiology* (Bethesda, Md. : 1985), 134(3), 678–684.
- Andrade, D. C., Ardigò, L. P., Aguer, C., & Leicht, A. S. (2023). Editorial: Rising stars in exercise physiology. *Frontiers in physiology*, 14, 1177745.
- Álvarez, C., Guede-Rojas, F., Ramírez-Campillo, R., Andrade, D. C., Vásquez-Gómez, J., Rodríguez-Rodríguez, F., Ciolac, E. G., Caamaño-Navarrete, F., & Delgado-Floody, P. (2022). Characterizing the interindividual postexercise hypotension response for two order groups of concurrent training in patients with morbid obesity. *Frontiers in physiology*, 13, 913645.
- Andrade, D. C., Gómez-Silva, B., Batista-García, R. A., & Millet, G. P. (2022). Editorial: Adaptive response of living beings to extreme environments: Integrative approaches from cellular and molecular biology, biotechnology, microbiology to physiology. *Frontiers in physiology*, 13, 1068287.
- Arias, D., Salazar-Ardiles, C., Andrade, D. C., Rivas, M., Panico, A., Race, M., Cisternas, L. A., & Dorador, C. (2023). The microbial world in copper sulfide flotation plants (CSFP): Novel insights into bacterial communities and their application as potential pyrite bioreagents. *Environmental research*, 218, 114904.
- Delgado-Floody, P., Chirisa-Ríos, L., Caamaño-Navarrete, F., Valdés-Badilla, P., Herrera-Valenzuela, T., Monsalves-Álvarez, M., Núñez-Espinosa, C., Castro-Sepulveda, M., Guzmán-Muñoz, E., Andrade, D. C., & Álvarez, C. (2022). Concurrent training and interindividual response in women with a high number of metabolic syndrome risk factors. *Frontiers in physiology*, 13, 934038.
- Salazar-Ardiles, C., Asserella-Rebollo, L., & Andrade, D. C. (2022). Free-Living Amoebas in Extreme Environments: The True Survival in our Planet. *BioMed research international*, 2022, 2359883.
- Vásquez-Muñoz, M., Arce-Álvarez, A., Álvarez, C., Ramírez-Campillo, R., Crespo, F. A., Arias, D., Salazar-Ardiles, C., Izquierdo, M., & Andrade, D. C. (2022). Dynamic circadian fluctuations of glycemia in patients with type 2 diabetes mellitus. *Biological research*, 55(1), 37.
- Toledo, C., Andrade, D. C., Diaz-Jara, E., Ortolani, D., Bernal-Santander, I., Schwarz, K. G., Ortiz, F. C., Marcus, N. J., Oliveira, L. M., Takakura, A. C., Moreira, T. S., & Del Rio, R. (2022). Cardiorespiratory alterations following intermittent photostimulation of RVLM C1 neurons: Implications for long-term blood pressure, breathing and sleep regulation in freely moving rats. *Acta physiologica* (Oxford, England), 236(3), e13864.
- Arce-Álvarez A, Salazar-Ardiles C, Cornejo C, Paez V, Vásquez-Muñoz M, Stillner-Vilches K, Jara CR, Ramirez-Campillo R, Izquierdo M, Andrade DC. Chemoreflex Control as the Cornerstone in Immersion Water Sports: Possible Role on Breath-Hold. 2022 *Frontiers in Physiology*.
- Toledo C, Díaz-Jara E, Diaz HS, Schwarz KG, Pereyra KV, Las Heras A, Rios-Gallardo A, Andrade DC, Moreira T, Takakura A, Marcus NJ, Del Rio R. Medullary astrocytes

mediate irregular breathing patterns generation in chronic heart failure through purinergic P2X7 receptor signalling. *EBioMedicine*. 2022 Jun;80:104044.

- Valdés-Badilla P, Herrera-Valenzuela T, Guzmán-Muñoz E, Delgado-Floody P, Núñez-Espinosa C, Monsalves-Álvarez M, Andrade DC. 2022 Effects of Olympic Combat Sports on Health-Related Quality of Life in Middle-Aged and Older People: A Systematic Review. *Frontiers in Psychology*
- Ramirez-Campillo R, Andrade DC, Clemente FM, Afonso J, Pérez-Castillo A, Gentil P. 2022 A proposed model to test the hypothesis of exercise-induced localized fat reduction (spot reduction), including a systematic review with meta-analysis Human movement.
- Schwarz KG, Pereyra KV, Toledo C, Andrade DC, Díaz HS, Díaz-Jara E, Ortolani D, Rios-Gallardo A, Arias P, Las Heras A, Vera I, Ortiz FC, Inestrosa NC, Vio CP, Del Rio R. 2021 Effects of enriched-potassium diet on cardiorespiratory outcomes in experimental non-ischemic chronic heart failure. *Biological Research*.
- Andrade DC, Flores-Opazo M, Peñailillo L, Delgado-Floody P, Cano-Montoya J, Vásquez-Gómez JA, Alvarez C. 2021 Similar Adaptations to 10 Weeks Concurrent Training on Metabolic Markers and Physical Performance in Young, Adult, and Older Adult Women. *Journal of Clinical Medicine*.
- Castillo-Aguilar M, Valdés-Badilla P, Herrera-Valenzuela T, Guzmán-Muñoz E, Delgado-Floody P, Andrade DC, Moraes MM, Arantes RME, Núñez-Espinosa C. 2021 Cardiac Autonomic Modulation in Response to Muscle Fatigue and Sex Differences During Consecutive Competition Periods in Young Swimmers: A Longitudinal Study. *Frontiers in physiology*.
- Alvarez C, Ciolac EG, Guimarães GV, Andrade DC, Vasquez-Muñoz M, Monsalves-Álvarez M, Delgado-Floody P, Alonso-Martínez AM, Izquierdo M. 2021 Residual Impact of Concurrent, Resistance, and High-Intensity Interval Training on Fasting Measures of Glucose Metabolism in Women With Insulin Resistance. *Frontiers in physiology*
- Andrade DC, Melipillan C, Toledo C, Rios-Gallardo A, Marcus NJ, Ortiz FC, Martinez G, Muñoz Venturelli P, Del Rio R. Heart rate and cardiac autonomic responses to concomitant deep breathing, hand grip exercise, and circulatory occlusion in healthy young adult men and women. *Biol Res*. 2021 Sep 26;54(1):32. doi: 10.1186/s40659-021-00355-1. .
- Torres-Banduc M, Ramirez-Campillo R, Andrade DC, Calleja-González J, Nikolaidis PT, McMahon JJ, Comfort P. Kinematic and Neuromuscular Measures of Intensity During Drop Jumps in Female Volleyball Players. *Front Psychol*. 2021 Sep 20;12:724070. doi: 10.3389/fpsyg.2021.724070.
- Andrade DC, Díaz-Jara E, Toledo C, et al. Exercise intolerance in volume overload heart failure is associated with low carotid body mediated chemoreflex drive. *Sci Rep* 11, 14458 (2021). <https://doi.org/10.1038/s41598-021-93791-8>
- Díaz-Jara E, Díaz HS, Rios-Gallardo A, Ortolani D, Andrade DC, Toledo C, Pereyra KV, Schwarz K, Ramirez G, Ortiz FC, Andía ME, Del Rio R. Exercise training reduces brainstem oxidative stress and restores normal breathing function in heart failure.

Free Radic Biol Med. 2021 Jun 30;172:470-481.

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- Ramirez-Campillo R, Andrade DC, García-Pinillos F, Negra Y, Boullosa D, Moran J. Effects of jump training on physical fitness and athletic performance in endurance runners: A meta-analysis. J Sports Sci. 2021 May 6:1-21. doi: 10.1080/02640414.2021.1916261.
- Vasquez-Muñoz M, Arce-Alvarez A, von Igel M, Veliz C, Ruiz-Esquide G, Ramirez-Campillo R, Alvarez C, Ramirez-Velez R, Crespo FA, Izquierdo M, Del Rio R, Andrade DC. Oscillatory pattern of glycemic control in patients with diabetes mellitus. Sci Rep. 2021 Mar 11;11(1):5789. doi: 10.1038/s41598-021-84822-5.
- Arce-Álvarez A, Veliz C, Vasquez-Muñoz M, Von-Igel M, Alvarez C, Ramirez-Campillo R, Izquierdo M, Millet GP, Del Rio R, Andrade DC. Hypoxic respiratory chemoreflex control in young trained swimmers. Frontiers in Physiology, 2021, 12:632603. doi: 10.3389/fphys.2021.632603
- Sole S, Ramirez-Campillo R, Andrade DC, Sánchez J. Plyometric Jump Training Effects on the Physical Fitness of Individual-Sport Athletes: A Systematic Review with Meta-analysis. PeerJ 9:e11004 <https://doi.org/10.7717/peerj.11004>
- Pereyra KV, Schwarz K, Andrade DC, Toledo C, Rios-Gallardo A, Díaz-Jara E, Bastias SS, Ortiz F, Ortolani D, Del Rio R. Paraquat herbicide diminishes chemoreflex sensitivity, induces cardiac autonomic imbalance and impair cardiac function in rats. Am J Physiol Heart Circ Physiol. 2021 Jan 29. doi: 10.1152/ajpheart.00710.2020. Epub ahead of print. PMID: 33513085.
- Díaz HS, Andrade DC, Toledo C, Schwarz KG, Pereyra KV, Díaz-Jara E, Marcus NJ, Del Rio R. Inhibition of Brainstem Endoplasmic Reticulum Stress Rescues Cardiorespiratory Dysfunction in High Output Heart Failure. Hypertension 2021 ;77(2):718-728. doi: 10.1161/HYPERTENSIONAHA.120.16056.
- Andrade DC, Toledo C, Diaz HS, Pereyra KV, Schwarz KG, Diaz-Jara E, Melipillan C, Rios-Gallardo AP, Uribe-Ojeda A, Alcayaga J, Quintanilla RA, Iturriaga R, Richalet J-P, Voituron N, Del Rio R. Carbamylated form of human erythropoietin normalizes cardiorespiratory disorders triggered by intermittent hypoxia mimicking sleep apnea syndrome. J Hypertens 2021 doi: 10.1097/HJH.0000000000002756.
- Pereyra KV, Andrade DC, Toledo C, Schwarz KG, Uribe-Ojeda A, Ríos-Gallardo AP, Quintanilla RA, Contreras A, Mahn A, Del Rio R. Dietary supplementation of a sulforaphane-enriched broccoli extract protects the heart from acute cardiac stress. Journal of Functional Foods 2020. 75:104267. Doi: <https://doi.org/10.1016/j.jff.2020.104267>
- Delgado-Floody P, Izquierdo M, Ramírez-Vélez R, Caamaño-Navarrete F, Moris R, Jerez-Mayorga D, Andrade DC, Álvarez-Lepín C. Effect of High-Intensity Interval Training on Body composition, Cardiorespiratory Fitness, Blood Pressure, and Substrate Utilization During Exercise among Prehypertensive and Hypertensive Patients with Excessive Adiposity. Front. Physiol. 2020. 11: 558910. doi: 10.3389/fphys.2020.558910

- Beltran AR, Arce-Alvarez A, Ramirez-Campillo R, Vasquez-Muñoz M, Ramirez M, Del Rio R, Andrade DC. Effect of high altitude exposure on baroreflex control in normal rats. *Frontiers in Physiology* (accepted)
- Ramirez-Campillo R, Pereira LA, Andrade DC, Méndez-Rebolledo G, de la Fuente C, Castro-Sepulveda M, García-Pinillos F, Freitas TT, Loturco I. Tapering strategies applied to plyometric jump training: a systematic review with meta-analysis of randomized-controlled trials. *J Sports Med Phys Fitness*. 2020 Jul 16. Online ahead of print. doi: 10.23736/S0022-4707.20.11128-9. PMID: 32674540
- Andrade DC, Arce-Alvarez A, Parada F, Uribe S, Gordillo P, Dupre A, Palumbo F, Castro G, Vasquez-Muñoz M, Del Rio R, Ramirez-Campillo R, Izquierdo M. Acute effects of high intensity interval training session and endurance exercise on pulmonary function and cardiorespiratory coupling. *Physiological Reports* 1(1):10. 10.14814/phy2.14455 (Accepted).
- Jain V, Kimbro S, Kowalik G, Milojevic I, Dowling NM, Lloyd Hunley A, Hauser K, Andrade DC, Del Rio R, Kay MW, Mendelowitz D. Intranasal Oxytocin Increases Respiratory Rate and Reduces Obstructive Event Duration and Oxygen Desaturation in Obstructive Sleep Apnea Patients: a Randomized Double Blinded Placebo Controlled Study. *Sleep Medicine*.
<https://doi.org/10.1016/j.sleep.2020.05.034> (In press)
- Ramirez-Campillo R, Andrade DC, Nikolaidis PT, Moran J, Clemente FM, Chaabene H, Comfort P. Effects of Plyometric Jump Training on Vertical Jump Height of Volleyball Players: A Systematic Review with Meta-Analysis of Randomized-Controlled Trial. *Journal of Sports Science and Medicine* (2020) 19, 489 – 499.
- Santos-Consejero J, Gonzalez-Mahino F... Andrade DC, Del Rio R, Ramirez-Campillo R... et al. Commentaries on Viewpoint: Physiology and Fast Marathons. *Journal of Applied Physiology* 128(4):1069-1085. 10.1152/japplphysiol.00167.2020
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- Díaz HS*, Toledo C*, Andrade DC*, Marcus NJ, Del Rio R (2019). Neuroinflammation in heart failure: new insights for an old disease. *J Physiol* ISSN 1469-7793; doi: 10.1113/JP278864

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- Toledo C, Lucero C, Andrade DC, Díaz HS, Schwarz KG, Pereyra KV, Arce-Álvarez A, López NA, Martínez M, Inestrosa NC, Del Rio R. Cognitive impairment in heart failure is associated with altered Wnt signaling in the hippocampus. Aging (Albany NY). 2019 Aug 25;11(16):5924-5942. doi: 10.18632/aging.102150
- Toledo C, Andrade DC, Díaz HS, Inestrosa NC, Del Rio R. Neurocognitive Disorders in Heart Failure: Novel Pathophysiological Mechanisms Underpinning Memory Loss and Learning Impairment. Mol Neurobiol. 2019 Dec;56(12):8035-8051. doi: 10.1007/s12035-019-01655-0.
- De la Fuente, C., Henriquez, H., Andrade, D. C., & Yañez, A. (2019). Running footwear with custom insoles for pressure distribution are appropriate to diminish impacts after shin splints. Asian Journal of Sports Medicine, 10(3), Article e82461. <https://doi.org/10.5812/asjsm.82461>
- Arce-Alvarez A, Melipillán C, Andrade DC, Toledo C, Marcus NJ, Del Rio R. Heart rate variability alterations in infants with spontaneous hypertonia. Pediatr Res. 2019 Jul;86(1):77-84. doi: 10.1038/s41390-019-0318-7.
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