BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Acosta Manzano, Pedro Pablo

eRA COMMONS USER NAME (credential, e.g., agency login): ACOSTA PEDRO

POSITION TITLE: Postdoctoral researcher

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Granada, Spain	BS	07/2014	Sport Sciences
University of Granada, Spain	MS	07/2015	Physical activity & health
University of Granada, Spain	PhD	02/2021	Biomedicine

A. Personal Statement

Dr. Acosta-Manzano is a Postdoctoral researcher working at the Institute of Human Movement Science, Sport and Health, University of Graz (Austria). He currently investigates the role of lifestyle during pregnancy in maternal-neonatal health, with the aim of optimising maternal, placental, and foetal metabolism and prevent future disorders. He is also interested in understanding the molecular basis by which maternal exercise-induced stimuli are translated into metabolic adaptations. He is also principal investigator of the MERIT1D study (UFO - Das Land Steiermark), where he is exploring which timing of exercise is more effective for optimising glycaemic control in pregnant women with type 1 diabetes mellitus, and the underlying mechanisms. In the recent past, he was also project manager of two pregnancy studies, and principal investigator of another project, where he explored the role of exercise on maternal, placental and foetal immunometabolism. He has published 53 studies. His main focus of research is exercise, metabolism, pregnancy, obesity and diabetes. Moreover, he is teaching half-time as lecturer in the bachelor's and master's degrees at the University of Graz.

Ongoing Research Support

Die MERIT1D-Studie. Das Land Steiermark

10/01/2023 - 31/11/2024

The "Maternal ExeRclse Timing to optimise postprandial glucose in Type 1 Diabetes" study
Research to determine which timing of exercise (exercise before or after lunch) is more effective to optimise postprandial glycaemic control in pregnant women with type 1 diabetes, and the underlying mechanisms.

B. Positions, Scientific Appointments, and Honors (5 last years)

- -01/03/24 Now: Lecturer (half time) and Principal Investigator (half time) at the University of Graz. Project Tittle: The MERIT1D study (Die MERIT1D-Studie).
- -10/01/23 31/08/24: Kulturförderung / Wissenschaftsförderung. Principal investigator at the University of Graz. Project Tittle: The MERIT1D study (Die MERIT1D-Studie). Funding: Stadt Graz, Kulturamt 15000 €.
- -01/12/22 31/10/24: Ausschreibung des Landes Steiermark. Unkonventionelle Forschung (UFO). Principal investigator at the University of Graz. Project Tittle: The MERIT1D study (Die MERIT1D-Studie). Funding: Das Land Steiermark. Wirtschaft, Tourismus, Wissenschaft und Forschung 100000 € (Awarded on 11/08/2022).
- -20/01/22 20/01/24: Marie Sklodowska-Curie Actions Individual Fellowship 2020. Postdoctoral researcher & project leader at the University of Graz. Project Tittle: The MERIT study. Funding: Horizon 2020 Framework Programme 174.167 € (Awarded on 08/02/2021).
- -26/02/21 14/01/22: Postdoctoral Fellowship at the Sport and Health University Research Institute. University of Granada. Funding: Spanish Ministry of Economy and Competitiveness.

-13/09/19 - 2021: Principal investigator. Project Title: Influence of sedentary time and physical activity on placental inflammatory molecules in pregnant women. University of Granada, Spain. Funding: University of Granada.

Other Experience and Professional Memberships

2023-now 2020-now 2020-now 2019-now	Liderarmas. International network in "Leadership of women in Sports Science" ACSM Special Interest Group-Pregnancy and Postpartum UCEENS, Scientific Unit of Excellence on Exercise, Nutrition & Health EFSD, European Foundation of the Study of Diabetes
Honors	
2019-24	7 oral presentations (EASD, DPSG, ECSS), 1 invited talk, 1 chaired session
2018-24	7 personal grants for research stays (USA, The Netherlands, Austria, Finland, UK)
2024	Extraordinary thesis award in Health Sciences (2020-2021). University of Granada
2023	URBI grant awarded to initiate research projects, University of Graz, 6000 €
2023	Young Investigator Travel Award (Diabetes Pregnancy Study Group)
2023	EASD Early Career Academy Mentorship Programme (Mentor: Hellen Murphy; 1000 €)
2019	Precompetitive Research Project for early excellent investigators, 3000€

C. Contributions to Science (related to the topic)

- 1. **Acosta-Manzano P**, Acosta FM, Flor-Alemany M et al. The Protective Role of Physical Fitness on Cardiometabolic Risk During Pregnancy: The GESTAtion and FITness Project. International Journal of Sport Nutrition and Exercise Metabolism. 2022, 1-14, doi:10.1123/ijsnem.2021-0274.
- Acosta-Manzano P, Leopold-Posh B, Simmons B, Devlieger R..., Desoye G, van Poppel MNM. The
 unexplored role of sedentary time and physical activity in glucose and lipid metabolism related placental
 mRNAs in overweight and obese pregnant women: The DALI Lifestyle Randomized Controlled Trial. BJOG:
 An International Journal of Obstetrics & Gynaecology. 2022; 129:708-721. doi https://doi.org/10.1111/1471-0528.16945.
- 3. **Acosta-Manzano P**, Acosta FM, Coll-Risco I et al. The influence of exercise, lifestyle behaviour components and physical fitness on maternal weight gain, postpartum weight retention, and excessive gestational weight gain. International Journal of Sport Nutrition & Exercise Metabolism, 2022; 32(6),425-438. https://journals.humankinetics.com/view/journals/ijsnem/32/6/article-p425.xml.
- 4. **Acosta-Manzano P**, Acosta FM, Femia P, Coll-Risco I, Segura-Jiménez V, et al. Association of sedentary time and physical activity levels with glycaemic, lipid and inflammatory markers in early pregnancy. The GESTAFIT Project. Scand J Med Sci Sports. 2020. 30(1):148-158. doi: 10.1111/sms.13547.
- 5. **Acosta-Manzano P**, Coll-Risco I, van Poppel MNM, Segura-Jiménez V, et al. Influence of a concurrent exercise training intervention during pregnancy on maternal, and arterial and venous cord serum inflammatory markers: the GESTAFIT Project. Journal of Clinical Medicine. 2020. 3;8(11):1862. doi: 10.3390/jcm8111862.
- 6. Aparicio VA, Ocón O, Diaz-Castro Javier, **Acosta-Manzano P**, et al. Influence of a concurrent exercise training program during pregnancy on colostrum and mature human milk inflammatory markers: Findings from the GESTAFIT Project. Journal of Human Lactation. 2018. 34(4):789-798. doi: 10.1177/0890334418759261.
- 7. **Acosta-Manzano P**, Coll-Risco I, Van Poppel MNM, Segura-Jiménez V, Femia P, Romero-Gallardo L, Borges-Cosic L, Diaz-Castro Javier, Moreno-Fernández J, Ochoa-Herrera J, Aparicio VA. Influence of a concurrent exercise training intervention during pregnancy on maternal and arterial and venous cord serum cytokines: the GESTAFIT project. Journal of Clinical Medicine. 2020; 8 (11), 1862. doi: 10.3390/jcm8111862.
- 8. Aparicio VA, Ocón O, Diaz-Castro Javier, **Acosta-Manzano P**, Coll-Risco I, Borges-Cosic M, Romero-Gallardo L, Moreno-Fernández J, Ochoa-Herrera J. Influence of a concurrent exercise training program during pregnancy on colostrum and mature human milk inflammatory markers: Findings from the GESTAFIT Project. Journal of Human Lactation. 2018; 34(4):789-798. doi: 10.1177/0890334418759261.
- 9. **Acosta-Manzano et al.**, Concurrent exercise training during pregnancy is related to more favourable maternal lipid levels when IL-8 increases (under revision in Journal of Sport Sciences).