

Producció científica derivada de les tesis defensades en el programa de Doctorat en Nutrigenòmica i Nutrició Personalitzada

1. Doctorands de la UIB

Any de defensa	Doctorand/a	Títol de la tesi
2016	Rubén Díaz Rúa	Identificación de alteraciones metabólicas y marcadores moleculares asociados a la ingesta prolongada de dietas desequilibradas

Contribucions científiques derivades:

1. **Díaz Rúa, R.**, García Ruiz, E., Caimari, A., Palou, A., i Oliver P. (2014). Sustained exposure to diets with an unbalanced macronutrient proportion alters key genes involved in energy homeostasis and obesity-related metabolic parameters in rats. *Food funct, Dec.*, 5(12): 3117-31. doi: 10.1039/c4fo00429a, PMID: 25266916, I.F. 2,791; Q1
2. **Díaz Rúa, R.**, Keijer, J., Caimari, A., van Schothorst, E. M., Palou, A., i Oliver, P. (2015). Peripheral blood mononuclear cells as a source to detect markers of homeostatic alterations caused by the intake of diets with an unbalanced macronutrient composition. *J Nutr Biochem, Apr*, 26(4): 398-407. doi: 10.1016/j.jnutbio.2014.11.013. Epub 2015 Jan 13, PMID: 25660595, I.F. 4,668; Q1
3. **Díaz Rúa, R.**, van Schothorst, E. M., Keijer, J., Palou, A., Oliver, P. (2016). Isocaloric high-fat feeding directs hepatic metabolism to handling of nutrient imbalance promoting liver fat deposition. *Int J Obes (Lond)*, Aug, 40(8): 1250-9. doi: 10.1038/ijo.2016.47. Epub 2016 Mar 22, PMID: 27089994, I.F. 5,487; D1
4. **Díaz Rúa, R.**, Palou, A., i Oliver, P. (2016). Cpt1a gene expression in peripheral blood mononuclear cells as an early biomarker of dietrelated metabolic alterations. *Food Nutr Res*, Nov, 23(60): 33554. doi: 10.3402/fnr.v60.33554. eCollection 2016, PMID: 27885970, I. F. 2,039; Q2
5. **Díaz Rúa, R.**, Keijer, J., Palou, A., van Schothorst, E. M., i Oliver, P. (2017). Long-term intake of a high-protein diet increases liver triacylglycerol deposition pathways and hepatic signs of injury in rats. *J Nutr Biochem*, Aug, 46: 39-48. doi: 10.1016/j.jnutbio.2017.04.008. PMID: 28454041, I.F. 4,414; Q1

Any de defensa	Doctorand/a	Títol de la tesi
2016	Yuriy Nozhenko	New metabolic aspects of Leptin: muscle cell activity and biological rhythms

Contribucions científiques derivades:

1. Sánchez, J., **Nozhenko, Y.**, Palou, A., i Rodríguez, A. M. (2013). Free fatty acid effects on myokine production in combination with exercise mimetics. *Mol Nutr Food Res. Aug, 57(8)*: 1456-67. doi: 10.1002/mnfr.201300126. Epub 2013, May 5, PMID: 23650203, I.F. 4, 909, D1
2. **Nozhenko, Y.**, Asnani Kishnani, M., Rodríguez, A. M., i Palou, A. (2015). Milk leptin surge and biological rhythms of leptin and other regulatory proteins in breastmilk. *PLoS One, Dec 17;10(12)*: e0145376. doi: 10.1371/journal.pone.0145376. eCollection 2015, PMID: 26680765, I. F. 3,057, Q1
3. **Nozhenko, Y.**, Rodríguez, A. M., Palou, A. (2015). Leptin rapidly induces the expression of metabolic and myokine genes in C2C12 muscle cells to regulate nutrient partition and oxidation. *Cell Physiol Biochem, 35(1)*: 92-103. doi: 10.1159/000369678. Epub 2015 Jan 2, PMID: 25547246, I. F. 4,652; Q1
4. García Carrizo, F., **Nozhenko, Y.**, Palou, A., i Rodríguez, A. M. (2016). Leptin effect on acetylation and phosphorylation of Pgc1 α in muscle cells associated with Ampk and Akt activation in high-glucose medium. *J Cell Physiol, Mar, 231(3)*: 641-9. doi: 10.1002/jcp.25109. PMID: 26218179, I. F. 4,080, Q1

Any de defensa	Doctorand/a	Títol de la tesi
2017	Andrea Arreguín Coronado	Nuevos mecanismos y biomarcadores de la interacción de la vitamina A con el metabolismo lipídico y energético y su papel en la programación metabólica

Contribucions científiques derivades:

1. Tourniaire, F., Musinovic, H., Gouranton, E., Astier, J., Marcotorchino, J., **Arreguin, A.**, Bernot, D., Palou, A., Bonet, M. L. , Ribot, J., i Landrier, J. F. (2015). All-trans retinoic acid induces oxidative phosphorylation and mitochondria biogenesis in adipocytes. *J Lipid Res, Jun, 56(6)*: 1100-9. doi: 10.1194/jlr.M053652, Epub 2015 Apr 25, PMID: 25914170, I. F. 4,368, Q1

2. **Arreguín, A.**, Ribot, J., Mušinović, H., von Lintig, J., Palou, A., Bonet, M. L. (2018). Dietary vitamin A impacts DNA methylation patterns of adipogenesis-related genes in suckling rats. *Arch biochem biophys*, Jul, 15, 650: 75-84. doi:10.1016/j.abb.2018.05.009, Epub 2018, May 11, PMID: 29758201, I. F. 3,559, Q2
3. Amengual, J., García Carrizo, F. J., **Arreguín, A.**, Mušinović, H., Granados, N., Palou, A., Bonet, M. L., i Ribot, J. (2018). Retinoic acid increases fatty acid oxidation and irisin expression in skeletal muscle cells and impacts irisin in vivo. *Cell physiol biochem*, 46(1): 187-202. doi: 10.1159/000488422, Epub 2018 Mar 21, PMID: 29587291, I. F. 5,500, D1
4. Ribot, J., **Arreguín, A.**, Kuda, O., Kopecky, J., Palou, A., i Bonet, M. L. (2019). Novel markers of the metabolic impact of exogenous retinoic acid with A focus on acylcarnitines and amino acids. *Int J Mol Sci*, Jul 25, 20(15). pii: E3640. doi:10.3390/ijms20153640. PMID: 31349613, I. F. 4,183, Q1

Any de defensa	Doctorand/a	Títol de la tesi
2018	Margalida Maria Cifre Calafat	An emerging approach using blood cells as an in vivo and in vitro tool to asses the impact of food on health

Contribucions científiques derivades:

1. Reynés, B., Díaz Rúa, R., **Cifre, M.**, Oliver, P., i Palou, A. (2015). Peripheral blood mononuclear cells as a potential source of biomarkers to test the efficacy of weight-loss strategies. *Obesity (silver spring)*, Jan, 23(1): 28-31. doi: 10.1002/oby.20918. Epub 2014 Oct 8, PMID: 25294800, I. F. 3,614, Q1
2. **Cifre, M.**, Díaz Rúa, R., Varela Calviño, R., Reynés, B., Pericàs Beltran, J., Palou, A., Oliver, P. (2016). Human peripheral blood mononuclear cell in vitro system to test the efficacy of food bioactive compounds: effects of polyunsaturated fatty acids and their relation with BMI. *Mol Nutr Food Res*, 2016 Apr, 61(4). doi: 10.1002/mnfr.201600353. Epub 2016 Dec 30, PMID: 27873461, I. F. 5,151, D1
3. **Cifre, M.**, Palou, A., i Oliver P. (2018). Cognitive impairment in metabolically-obese, normal-weight rats: identification of early biomarkers in peripheral blood mononuclear cells. *Mol neurodegener*, 2018 Mar 22, 13(1): 14. doi: 10.1186/s13024-018-0246-8. PMID: 29566703, I. F. 8,274, D1

Any de defensa	Doctorand/a	Títol de la tesi
2018	Catalina Amadora Pomar Oliver	Factores determinantes y mecanismos en la programación metabólica de una dieta obesogénica

Contribucions científiques derivades:

1. **Pomar, C. A.**, van Nes, R., Sánchez, J., Picó, C., Keijer, J., i Palou, A. (2017). Maternal consumption of a cafeteria diet during lactation in rats leads the offspring to a thinoutside-fat-inside phenotype. *Int J Obes (Lond)*. 2017 Aug, 41(8): 1279-1287. doi: 10.1038/ijo.2017.42. Epub 2017 Feb 13, PMID: 28190874, I. F. 5,159, D1
2. **Pomar, C. A.**, Kuda, O., Kopecky, J., Rombaldova, M., Castro, H., Picó, C., Sánchez, J., i Palou, A. (2019). Alterations in plasma acylcarnitine and amino acid profiles may be indicative of poor nutrition during the suckling period due to maternal intake of an unbalanced diet and predict later metabolic dysfunction. *FASEB J*. 2019 Jan, 33(1): 796-807. doi: 10.1096/fj.201800327RR. Epub 2018 Aug 6, PMID: 30080446, I. F. 5, 391, Q1
3. **Pomar, C. A.**, Castro, H., Picó, C., Serra, F., Palou, A., Sánchez, J. (2019). Cafeteria diet consumption during lactation in rats, rather than obesity per se, alters miR-222, miR-200a and miR-26a levels in milk. *Mol Nutr Food Res*. 2019 Apr, 63(8): e1800928. doi: 10.1002/mnfr.201800928. Epub 2019 Feb 7, PMID: 30698333, I. F. 4, 653, D1
4. **Pomar, C. A.**, Castro, H., Picó, C., Palou, A., i Sánchez, J. (2019). Maternal overfeeding during lactation impairs the metabolic response to fed/fasting changing conditions in the postweaning Offspring. *Mol Nutr Food Res*. 2019 Oct, 63(20): e1900504. doi: 10.1002/mnfr.201900504. Epub 2019 Sep 6, PMID: 31419033, I. F. 4,653, D1
5. **Pomar, C. A.**, Kuda, O., Kopecky, J., Rombaldova, M., Castro, H., Picó, C., Sánchez, J., i Palou, A. (2019). Maternal diet, rather than obesity itself, has a main influence on milk triacylglycerol profile in dietary obese rats. *Biochim biophys acta Mol Cell Biol Lipids*. 2019 Oct 31,1865(2): 158556. doi: 10.1016/j.bbalip.2019.158556. PMID: 31678620, I. F. 4, 402, Q1

Any de defensa	Doctorand/a	Títol de la tesi
2019	Sebastià Galmés Monroig	Estudio nutrigenético de la obesidad en la población de Mallorca

Contribucions científiques derivades:

1. **Galmés, S.**, Serra, F., i Palou, A. (2018). Vitamin E metabolic effects and genetic variants: a challenge for precision nutrition in obesity and associated disturbances. *Nutrients*, 2018 Dec 4, 10(12). pii: E1919. doi: 10.3390/nu10121919, Review, Free PMC article, PMID: 30518135, I. F. 4, 171, Q1
2. **Galmés, S.**, Cifre, M., Palou, A., Oliver, P., i Serra, F. (2019). A genetic score of predisposition to low-grade inflammation associated with obesity may contribute to discern population at risk for metabolic syndrome. *Nutrients*, 2019 Jan 30, 11(2). pii: E298. doi: 10.3390/nu11020298, Free PMC article, PMID: 30704070, I. F. 4, 171, Q1

Any de defensa	Doctorand/a	Títol de la tesi
2020	Agustí Sabater Bibiloni	Investigación industrial dirigida al desarrollo de conocimiento para avalar nuevos productos alimenticios. Enfoque en su aplicabilidad en función del genotipo, necesidades nutricionales específicas y poblaciones diana

Contribucions científiques derivades:

- 1: **Sabater AG**, Ribot J, Priego T, Vazquez I, Frank S, Palou A, Buchwald-Werner S.

Consumption of a Mango Fruit Powder Protects Mice from High-Fat Induced Insulin Resistance and Hepatic Fat Accumulation.

Cell Physiol Biochem. 2017 Jun 5;42(2):564-578

I.F. 5,500; D1