

SCIENTIFIC AND TECHNOLOGICAL PROFILE OF THE GROUP

		RICORS Code RD21/0012/0021
Thematic area:	PRIMARY CARE, CHRONICITY AND HEALTH PROMOTION	
Programme name:	PRIMARY CARE PROMOTION OF MATERNAL, CHILD AND WOMEN'S HEALTH FOR PREVENTION OF ADULT CHRONIC DISEASES	
Group leader:	María Luz Couce Pico	
Applicant Institution:	Health Research Institute of Santiago de Compostela- IDIS	
Working Institution:	University Clinical Hospital of Santiago de Compostela	
PI Work Institution:	University Clinical Hospital of Santiago de Compostela	

Participants

Researcher	Family Name (s)	First Name (s)	Work Institution	Position
1	María Luz	Couce	University Clinical Hospital of Santiago de Compostela	Statutory staff
2	Alejandro	Pérez-Muñuzuri	University Clinical Hospital of Santiago de Compostela	Statutory staff
3	Adela	Urisarri Ruiz de Córdazar	University Clinical Hospital of Santiago de Compostela	Statutory staff
4	Miguel	López	University of Santiago de Compostela	Statutory staff
5	Olalla	López Suarez	University Clinical Hospital of Santiago de Compostela	Statutory staff
6				Select
7				Select
				Select

PUBLICATIONS

Up to twenty selected publications related to the RICORS's Thematic Area (published in the last five years)

1. Pérez-Mato M, Iglesias A, Rujido S, Da Silva-Candal A, Sobrino T, **Couce ML**, Fraga JM, Castillo J, Campos F. POTENTIAL PROTECTIVE ROLE OF ENDOGENOUS GLUTAMATE-OXALOACETATE TRANSAMINASE (GOT) AGAINST GLUTAMATE EXCITOTOXICITY IN FETAL HYPOXIC-ISCHEMIC ASPHYXIA. *Dev Med Child Neurol*. 2016; 58: 57- 62. PMID: 26205194. Research article. IF (JCR) 2016: 3,116; Ca: Pediatrics. 16/121, Q1. References: 6
2. Martínez de Morentin P, **Urisarri U**, **Couce ML**, **López M**. MOLECULAR MECHANISMS OF APPETITE AND OBESITY: A ROLE FOR BRAIN AMPK. *Clin Sci* 2016; 130: 1697-1709. PMID: 27555613. Review. IF(JCR) 2016: 4,936;Ca: Medicine-Research & Experimental. 14/128, Q1. References: 22
3. Hurtado JA, Maldonado -Lobón JA, Díaz- Roperro MP, Flores-Rojas K, Uberos J, Leante JL, Affumicato L, **Couce ML**, Garrido JM, Olivares M, Fonollá J. PROLAC group. ORAL ADMINISTRATION TO NURSING WOMEN OF LACTOBACILLUS FERMENTUM CECT 5716 PREVENTS LACTATIONAL MASTITIS DEVELOPMENT: A RANDOMIZED CONTROLLED TRIAL. Research article. *Breastfeed Med*. 2017; 12: 1-8 IF (JCR) 2017: 1,951; Ca: Pediatrics. 52/124, Q2. References: 36
4. Iglesias-Deus A, Campos F, Correa-Paz C, Sobrino T, Fraga JM, Castillo J, **Couce ML**. HEPATIC DAMAGE AND GLUTAMATE OXALOACETATE TRANSAMINASE ELEVATIONS DURING FETAL ASPHYXIA. *Dev Med Child Neurol* 2017; 59: 232-234. PMID: 28044319; Original article. IF (JCR) 2017: 3,289; Ca: Pediatrics. 11/124, Q1D1. References: 2
5. Sánchez-Pintos P, De Castro MJ, Roca I, Rite S, **López M**, **Couce ML**. SIMILARITIES BETWEEN ACYLCARNITINE PROFILES IN LARGE FOR GESTATIONAL AGE NEWBORNS AND OBESITY. *Sci Rep* 2017; 7: 16267 PMID: 29176728; Original article. IF(JCR): FI (JCR) 2017: 4,122. Ca: Multidisciplinary Sciences. 12/64, Q1. References:7
6. Alshweki A, **Pérez-Muñuzuri A**, **López-Suárez O**, Baña A, **Couce ML**. RELEVANCE OF URINARY S100B PROTEIN LEVELS AS A SHORT-TERM PROGNOSTIC BIOMARKER IN ASPHYXIATED INFANTS TREATED WITH HYPOTHERMIA. *Medicine (Baltimore)*. 2017; 96(44):e8453 PMID: 29095291. Original article. IF (JCR) 2017: 2,028. Ca: Medicine, General & Internal, 56/154, Q2. References. 20
7. Fernández-Marmiesse A, Gouveia S, **Couce ML**. NGS TECHNOLOGIES AS A TURNING POINT IN RARE DISEASE RESEARCH, DIAGNOSIS, AND TREATMENT. *Curr Med Chem*. 2018;25:404-43 PMID: 28721829. Review. IF (JCR) 2018: 3,894. Ca: Chemistry & Medicinal. 12/61, Q1. References: 63
8. Rodríguez-Blanco S, Oulego-Eroz I, Gautreaux-Minaya S, **Pérez-Muñuzuri A**, **Couce-Pico ML**. EARLY NT-PROBNP LEVELS AS A SCREENING TOOL FOR THE DETECTION OF HEMODYNAMICALLY SIGNIFICANT PATENT DUCTUS ARTERIOSUS DURING THE FIRST WEEK OF LIFE IN VERY LOW BIRTH WEIGHT INFANTS. *J Perinatol* 2018; 38:881-888 PMID: 29785059. Original article. IF (JCR) 2018:2,046. Ca: Pediatrics. 52/123, Q2. References: 8
9. **Mandiá N**, **Pérez-Muñuzuri A**, **López-Suárez O**, López-Sanguos C, Bautista Casanovas A, **Couce ML**. CONGENITAL INTESTINAL ATRESIAS WITH MULTIPLE EPISODES OF SEPSIS. A CASE REPORT AND REVIEW OF LITERATURE. *Medicine (Baltimore)* 2018; 97: e10939. PMID: 29879038. Review. IF(JCR)2018: 1,870. Ca: Medicine, General & Internal. 69/160, Q2. References: 5

10. Zozaya C, Avila-Alvarez A, Arruza L, García-Muñoz F, Fernández Pérez C, Castro A, Cuesta MT, Vacas B, **Couce ML**, Vento Torres M, Sáenz de Pipaón M. THE EFFECT OF MORBIDITY AND SEX ON POSTNATAL GROWTH OF VERY PRETERM INFANTS: A MULTICENTRIC COHORT STUDY. *Neonatology* 2019;115:348-3
PMID: 30893696. Research article. IF (JCR)2019: 2,742. Ca: *Pediatrics*. 25/128; Q1. References: 7
11. **López-Suárez O**, Concheiro-Guisán A, Sánchez-Pintos P, Cocho JA, Fernández Lorenzo JR, **Couce ML**. ACYLCARNITINE PROFILE IN NEONATAL HYPOXIC-ISCHEMIC ENCEPHALOPATHY: THE VALUE OF BUTYRYLCARNITINE AS A PROGNOSTIC MARKER. *Medicine (Baltimore)*. 2019; 98(15):e15221
PMID: 30985723. IF(JCR) 2019: 1,552. Ca: *Medicine, General & Internal*. 89/165, Q3. References. 4
12. Zozaya C, Avila-Alvarez A, **Couce ML**, García-Muñoz Rodrigo F, Arruza L, Fernandez-Perez C, Castro A, Cuesta MT, Vacas B, Vento M, Saenz de Pipaón M. COHORT STUDY SHOWED THAT GROWTH RATE INCREMENT HAS NOT BEEN ENOUGH TO PREVENT GROWTH RETARDATION OF PRETERM INFANTS AND RAISED CONCERNS ABOUT UNBALANCED GROWTH. *Acta Paediatr*. 2019; 108(10):1793-1800.
PMID: 31002411. Original article. IF (JCR) 2019: 2,111. Ca: *Pediatrics*. 49/128, Q2. References: 3
13. Prieto-González D, Castilla-Rodríguez I, González E, **Couce ML**. TOWARDS THE AUTOMATED ECONOMIC ASSESSMENT OF NEWBORN SCREENING FOR RARE DISEASES. *J Biomed Inform*. 2019; 95:103216 .
PMID: 31128259. Original article. IF (JCR) 2019: 3,526. Ca: *Medical Informatics* 7/27, Q2. References. 1
14. Goyanes A, Madla CM, Umerji A, Piñeiro GD, Montero JMG, Diaz MJL, Barcia MG, Taherali F, Sánchez-Pintos P, **Couce ML**, Gaisford S, Basit AW. AUTOMATED THERAPY PREPARATION OF ISOLEUCINE FORMULATIONS USING 3D PRINTING FOR THE TREATMENT OF MSUD: FIRST SINGLE-CENTRE, PROSPECTIVE, CROSSOVER STUDY IN PATIENTS. *Int J Pharm*. 2019; 567:118497.
PMID: 31279771. Original article. IF (JCR)2019: 4,845. Ca: *Pharmacology & Pharmacy*. 31/270, Q1. References: 49
15. Chinea Jiménez B, Cabrera Lafuente M, **Couce ML**, Madero R, Vento M, Villarino Marín A, Saenz de Pipaon M. SUPPLEMENTATION OF MOTHER'S OWN MILK WITH DONOR HUMAN MILK ON THE DURATION OF PARENTERAL NUTRITION AMONG PRETERM INFANTS: A RETROSPECTIVE STUDY. *J Hum Lact* 2020;36(2):245-253
PMID: 31913755. Original article. IF (JCR) 2019: 2.205. Ca: *Nursing* . 14/123, Q1
16. Zozaya C, García González I, Avila-Alvarez A, Oikonomopoulou N, Sánchez Tamayo T, Salguero E, Saenz de Pipaón M, García-Muñoz Rodrigo F, **Couce ML**. INCIDENCE, TREATMENT AND OUTCOME TRENDS OF NECROTIZING ENTEROCOLITIS 2 IN PRETERM INFANTS: A MULTICENTER COHORT STUDY. *Front Pediatr*. 2020 ;8:188
PMID: 32478014 Original article. IF(JCR) 2019: 2,634. Ca: *Pediatrics*. 29/128, Q1. References: 2
17. De Castro MJ, González-Vioque E, Barbosa-Gouveia S, Salguero E, Rite S, **López Suárez O**, **Pérez-Muñuzuri A**, **Couce ML**. RAPID PHENOTYPE-DRIVEN GENE SEQUENCING WITH THE NEOSEQ PANEL: A DIAGNOSTIC TOOL FOR CRITICALLY ILL NEWBORNS WITH SUSPECTED GENETIC DISEASE. *J Clin Med* 2020; 9: 2362 .
PMID: 32718099. IF(JCR) 2019: 3,303. Ca: *Medicine, General & Internal*. 36/165; Q1. references: 1
18. **Pérez-Muñuzuri A**, **López-Suárez O**, Mandiá-Rodríguez N, López-Sanguos C, Blanco-Teijeiro MJ, **Couce ML**. VALIDATION OF AN IGF1 SCREENING METHOD FOR RETINOPATHY OF PREMATURITY. *Front. Pediatr*. 8:615716.
PMID: 33381481. IF (JCR) 2019: 2,634. Ca: *Pediatrics*. 29/128, Q1.

19. Avila-Alvarez A, **Urisarri A**, Fuentes Carballal J, Mandiá-Rodríguez N, Sucasas-Alonso A, **Couce ML**. METABOLIC BONE DISEASE OF PREMATURITY: RISK FACTORS AND ASSOCIATED SHORT-TERM OUTCOMES. *Nutrients* 2020; 12(10):301
PMID: 33321828. IF (JCR)2019: 4,546. Ca: Nutrition&Dietetics. 17/89, Q1. References: 1
20. Walter Mihatsch W, Dorronsoro Martín I, Barrios-Sabador V, **Couce ML**, Martos-Moreno GA, Argente J, Quero J, Saenz de Pipaon M. BONE MINERAL DENSITY, BODY COMPOSITION, AND METABOLIC HEALTH OF VERY LOW BIRTH WEIGHT INFANTS FED IN HOSPITAL FOLLOWING CURRENT MACRONUTRIENT RECOMMENDATIONS DURING THE FIRST 3 YEARS OF LIFE NUTRIENTS. *Nutrients* 2021; 13:1005.
PMID: 33804764. IF (JCR)2019: 4,546. Ca: Nutrition&Dietetics. 17/89, Q1

RICORS Code RD21/0012/0021

INTERNATIONAL AND NATIONAL RESEARCH PROJECTS

(Funded in the last five years)

1. Project ID: 667224

Partner in Spain: Maximo Vento

PI Centre: M^a Luz Couce Pico

Effect of allopurinol in addition to hypothermia for hypoxic-ischemic brain injury on neurocognitive outcome- a blinded randomized placebo-controlled multicenter trial.

Funding Agency: Unión Europea Horizonte 2020

Amount 6 307 599,50 €

Duration. 1/1/2016 until 31/12/2020

2. MPS2019

PI: M^a Luz Couce

Development of a new lysosomal drug delivery system of elosulfase A for enzyme replacement therapy of Morquio A.

Funding Agency: National MPS Society for the 2019 Research Grant Initiative in EEUU

Amount: 76000€

Duration. 1/10/2019 until 30/9/2021

3. PI20/01150

PI: M^a Luz Couce.

Evaluation of a rapid genomic diagnosis protocol complemented with a study of the transcriptome in patients admitted to neonatal intensive care units

Funding Agency: FIS/ISCIII

Amount: 89700€

Duration. 1-1-21 until 31-12-23

4. INVEST-AEP 2020

PI: M^a Luz Couce

Identification and characterization of the molecular signaling mechanisms of extracellular vesicles (exosomes) in breast milk and their relationship with prematurity

Funding Agency: Spanish Paediatrics Foundation

Amount: 23000€

Duration. 1/6/2020 until 31/12/2021

5. Merck 2020

PI: M^a Luz Couce Pico

3D printing of medicines for rare metabolic diseases.

Funding Agency : Merck Research Grant 2020

Amount: 30,000€

Duration. 1/1/2020 until 31/12/2021

6. IV Research Grant FEDER

PI: M^a Luz Couce Pico

Use of the Nanostring nCounter platform to detect mutations affecting gene expression in patients with undiagnosed rare diseases.

Funding Agency: FEDER Foundation

Amount: 20,000€

Duration. 1-1-2019 until 31-12-2020

7. PI17/01294

PI: María Luz Couce Pico

NICU_GENOMICS project: Evaluation of a protocol for selective neonatal screening by genomic analysis in 72 hours for patients in neonatal intensive care units with suspected genetic disease

Funding Agency: FIS/ISCIII

Amount: 50,820 €

Duration: 1/1/2018 until 31/12/2020

8. RTI2018-101840-B-I00

PI: Miguel López

Hypothalamic AMPK α and energy balance.

Funding Agency: Ministry of Science, Innovation and Universities

Amount: 435,600€

Duration: 1/1/2019 until 31/12/2021

RICORS Code RD21/0012/0021

PATENTS

(Granted and licensed patents in the last five years. Include also licensed know-how)

1. NANOSTRUCTURE LIPID SYSTEM. CÓDIGO: EP 18 382 513.2

Inventors: ÁLVAREZ GONZÁLEZ, José Víctor, OTERO ESPINAR, Francisco Javier, COUCE PICO, M^a Luz, LUZARDO ÁLVAREZ, Asteria, COLÓN MEJERAS, Cristobal, LEIS TRABAZO, M^a Rosaura²

Patent office: European Patent Office (EPO)

Application number: EP19736745

Application date: 05 February 2021

Grant date: not granted yet

Exploitation: Not applicable

Patent office: United States Patent and Trademark Office (USPTO)

Application number: US 17/259,110

Application date: 08 January 2021

Grant date: not granted yet

Exploitation: Not applicable

RICORS Call: Scientific and Technological Profile of the Participating Groups

Aim: describe the major contributions of the different participating groups in terms of papers, funding and patents.

! The structure of this template has been designed to ensure that the important aspects of your scientific and technological profile are presented in a way that will enable experts to make an effective assessment against the evaluation criteria.

! The font type and size recommended is Arial 9 points. Please respect the page limits and do not take it as a target either! It is in your interest to keep your text as concise as possible, since experts rarely view unnecessarily long documents in a positive light.

Section 1. List of Participating Groups. PI participants.

! Remember

PI's Family Name | PI's First name(s) | PI's Work Institution | **Position ***

***Position:** officer, statutory staff; contracted; fellow

Section 2. Papers

Indicate: Authors; Title; Journal; PMID; Type of paper; Publication year; Impact Factor (JCR Thomson Reuters) and times cited.

Section 3. International and National Research Projects

! Do not include regional or privately funded projects.

Indicate: Project ID; Name of the PI; Title; Funding Agency; Amount of Funding & Duration.

Section 4. Patents

Indicate: Applicant; Title; Inventors; Patent Office; Date of application number; Date of grant and Entity-Organization Exploiting the Patent.