

## SCIENTIFIC AND TECHNOLOGICAL PROFILE OF THE GROUP

		<b>RICORS Code</b> RD21/0012/0003
<b>Thematic area:</b>	PRIMARY CARE, CHRONICITY AND HEALTH PROMOTION	
<b>Programme name:</b>	PRIMARY CARE PROMOTION OF MATERNAL, CHILD AND WOMEN'S HEALTH FOR PREVENTION OF ADULT CHRONIC DISEASES	
<b>Group leader:</b>	Maria Dolores Gómez Roig	
<b>Applicant Institution:</b>	Fundación Sant Joan de Déu	
<b>Working Institution:</b>	Hospital Sant Joan de Déu, Barcelona	
<b>PI Work Institution:</b>	Hospital Sant Joan de Déu	

### Participants

Researcher	Family Name (s)	First Name (s)	Work Institution	Position
1	Perez Cruz	Miriam	HSJD	Contracted
2	Illa Armengol	Miriam	HSJD	Contracted
3	Sabria Bach	Joan	HSJD	Contracted
4	Mazarico Gallego	Eduarne	HSJD	Contracted
5	Díaz Gomez	Sonia	ASSIR (ICS)	Statutory staff
6	Ferrero Martinez	Silvia	HSJD	Contracted
7	Pascal Capdevila	Rosalía	HSJD	Contracted
8	Ferrer Aguilar	Patricia	HSJD	Contracted

## PUBLICATIONS

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

- 1.- Arenillas-Alcón S; Costa-Faidella J; Ribas-Prats T; Gómez-Roig MD; Escera C. Neural encoding of voice pitch and formant structure at birth as revealed by frequency-following responses. *Scientific reports*. 11 - 1, pp. 6660 - 6660. 23/03/2021. ISSN 2045-2322 DOI: 10.1038/s41598-021-85799-x PMID: 33758251
- 2.- Almeida-Toledano L; Andreu-Fernández V; Aras-López R; García-Algar Ó; Martínez L; Gómez-Roig MD. Epigallocatechin Gallate Ameliorates the Effects of Prenatal Alcohol Exposure in a Fetal Alcohol Spectrum Disorder-Like Mouse Model. *International journal of molecular sciences*. 22 - 2, 13/01/2021. ISSN 1661-6596 DOI: 10.3390/ijms22020715 PMID: 33450816
- 3.- Meler E; Mazarico-Gallego E; Eixarch E; Gonzalez A; Peguero A; Martinez J; Boada D; Vellvé K; Gómez-Roig MD; Gratacós E; Figueras-Retuerta F. A 10-year experience of protocol-based management of fetal growth restriction: perinatal outcomes in late pregnancy cases diagnosed after 32 weeks. *Ultrasound in obstetrics & gynecology*. 57 - 1, pp. 62 - 69. 01/01/2021. ISSN 0960-7692 DOI: 10.1002/uog.23537 PMID: 33159370
- 4.- Torres Toda M; Miri M; Alonso L; Gómez-Roig MD; Foraster M; Dadvand P. Exposure to greenspace and birth weight in a middle-income country. *Environmental research*. 189, pp. 109866 - 109866. 01/10/2020. ISSN 0013-9351 DOI: 10.1016/j.envres.2020.109866 PMID: 32768705
- 5.- Mesa MD; Loureiro B; Iglesia I; Fernandez Gonzalez S; Llurba Olivé E; García Algar O; Solana MJ; Cabero Perez MJ; Sainz T; Martinez L; Escuder-Vieco D; Parra-Llorca A; Sánchez-Campillo M; Rodriguez Martinez G; Gómez-Roig MD; Perez Gruz M; Andreu-Fernández V; Clotet J; Sailer S; Iglesias-Platas I; López-Herce J; Aras R; Pallás-Alonso C; de Pipaon MS; Vento M; Gormaz M; Larqué Daza E; Calvo C; Cabañas F. The Evolving Microbiome from Pregnancy to Early Infancy: A Comprehensive Review. *Nutrients*. 12 - 1, (Suiza): Multidisciplinary Digital Publishing Institute (MDPI), 02/01/2020. ISSN 2072-6643 DOI: 10.3390/nu12010133 PMID: 31906588
- 6.- Sebastiani G; Andreu-Fernández V; Herranz Barbero A; Aldecoa-Bilbao V; Miracle X; Meler Barrabes E; Balada Ibañez A; Astals-Vizcaino M; Ferrero-Martínez S; Gómez-Roig MD; García-Algar O. Eating Disorders During Gestation: Implications for Mother's Health, Fetal Outcomes, and Epigenetic Changes. *Frontiers in pediatrics*. 8, pp. 587 - 587. 01/01/2020. ISSN 2296-2360 DOI: 10.3389/fped.2020.00587 PMID: 33042925
- 7.- Mazarico-Gallego E; Llurba E; Cabero L; Sanchez O; Valls-Lafon A; Martín-Ancel A; Cardenas D; Gómez-Roig MD. Associations between neural injury markers of intrauterine growth-restricted infants and neurodevelopment at 2 years of age. *Journal of maternal-fetal & neonatal medicine*. 32 - 19, pp. 3197 - 3203. 01/10/2019. ISSN 1476-7058 DOI: 10.1080/14767058.2018.1460347 PMID: 29606022

8.- Ribas-Prats T; Almeida-Toledano L; Costa-Faidella J; Plana M; Corral MJ; Gómez-Roig MD; Escera C. The frequency-following response (FFR) to speech stimuli: A normative dataset in healthy newborns. *Hearing research*. 371, pp. 28 - 39. (Holanda): Elsevier BV, 01/01/2019. ISSN 0378-5955 DOI: 10.1016/j.heares.2018.11.001 PMID: 30448690

9.- Miranda J; Simões RV; Paules C; Cañueto D; Pardo-Cea MA; García-Martín ML; Crovetto F; Fuertes-Martin R; Domenech M; Gómez-Roig MD; Eixarch E; Estruch R; Hansson SR; Amigó N; Cañellas N; Crispi F; Gratacós E. Metabolic profiling and targeted lipidomics reveals a disturbed lipid profile in mothers and fetuses with intrauterine growth restriction. *SCIENTIFIC REPORTS*. 8 - 1, pp. 13614 - 13614, 11/09/2018. ISSN 2045-2322 DOI: 10.1038/s41598-018-31832-5 PMID: 30206284

10.- Sebastiani G; Borrás-Novell C; Casanova MA; Pascual Tutusaus M; Ferrero Martínez S; Gómez-Roig MD; García-Algar O. The Effects of Alcohol and Drugs of Abuse on Maternal Nutritional Profile during Pregnancy. *Nutrients*. 10 - 8, 02/08/2018. DOI: 10.3390/nu10081008 PMID: 30072661

11.- Sabra S; Malmqvist E; Almeida-Toledano L; Gratacós E; Gómez-Roig MD. Differential correlations between maternal hair levels of tobacco and alcohol with fetal growth restriction clinical subtypes. *Alcohol*. 70, pp. 43 - 49. 01/08/2018. ISSN 0741-8329 DOI: 10.1016/j.alcohol.2018.01.001 PMID: 29778069

12.- Gómez-Roig MD; Marchei E; Sabra S; Busardò FP; Mastrobattista L; Pichini S; Gratacós E. Maternal hair testing to disclose self-misreporting in drinking and smoking behavior during pregnancy. *Alcohol*. 67, pp. 1 - 6. 01/03/2018. ISSN 0741-8329 DOI: 10.1016/j.alcohol.2017.08.010 PMID: 2928982

13.- Pérez-Cruz M; Crispi F; Fernández-Pérez MT; Parra-Hernandez JA; Valls-Lafon A; Gómez-Roig MD; Gratacós E. Cord Blood Biomarkers of Cardiac Dysfunction and Damage in Term Growth-Restricted Fetuses Classified by Severity Criteria. *Fetal diagnosis and therapy*. 44 - 4, pp. 271 - 276. 30/11/2017. ISSN 1015-3837 DOI: 10.1159/000484315 PMID: 29190628

14.- Sabra S; Malmqvist E; Saborit A; Gratacós E; Gómez-Roig MD. Heavy metals exposure levels and their correlation with different clinical forms of fetal growth restriction. *PLoS One*. 12 - 10, 06/10/2017. ISSN 1932-6203 DOI: 10.1371/journal.pone.0185645 PMID: 28985223 WOS: 000412493000007

15.- Mazarico-Gallego E; Llurba E; Cumplido R; Valls-Lafon A; Melchor JC; Iglesias M; Cabero L; Gratacós E; Gómez-Roig MD. Neural injury markers in intrauterine growth restriction and their relation to perinatal outcomes. *Pediatric research*. 82 - 3, pp. 452 - 457. 01/09/2017. ISSN 0031-3998 DOI: 10.1038/pr.2017.108 PMID: 28426650

16.- Sabra S; Gratacós E; Gómez-Roig MD. Smoking-Induced Changes in the Maternal Immune, Endocrine, and Metabolic Pathways and Their Impact on Fetal Growth: A Topical Review. *Fetal diagnosis and therapy*. 41 - 4, pp. 241 - 250. 01/01/2017. ISSN 1015-3837 DOI: 10.1159/000457123 PMID: 28249267

17.- Fernández-Blanco L; Peguero A; Eixarch E; Oltra M; Mazarico-Gallego E; Gómez-Roig MD; Gratacós E; Figueras-Retuerta F. EP13.01: Pregnancy and perinatal outcomes in a cohort of second trimester intrauterine growth restricted (IUGR) fetuses. *Ultrasound in obstetrics & gynecology*. 48 Suppl 1, pp. 320 - 320. 01/09/2016. ISSN 0960-7692 DOI: 10.1002/uog.16965 PMID: 27645316

18.- Mazarico-Gallego E; Martinez-Cumplido R; Díaz-Silva M; Sebastiani G; Ibañez-Toda L; Gómez-Roig MD. Postnatal Anthropometric and Body Composition Profiles in Infants with Intrauterine Growth Restriction Identified by Prenatal Doppler (vol 11, e0150152, 2016). *PLoS One*. 11 - 6, 03/06/2016. DOI: 10.1371/journal.pone.0157194 PMID: 27258039

19.- Mazarico-Gallego E; Martinez-Cumplido R; Díaz-Silva M; Sebastiani G; Ibañez-Toda L; Gómez-Roig MD. Postnatal Anthropometric and Body Composition Profiles in Infants with Intrauterine Growth Restriction Identified by Prenatal Doppler. *PLoS One*. 11 - 3, pp. 150152 - 150152. 03/03/2016. ISSN 1932-6203 DOI: 10.1371/journal.pone.0150152 PMID: 26938993

20.- Pichini S; Cortes L; Marchei E; Solimini R; Pacifici R; Gómez-Roig MD; García-Algar O. Ultra-high-pressure liquid chromatography tandem mass spectrometry determination of antidepressant and anxiolytic drugs in neonatal meconium and maternal hair. *Journal of pharmaceutical and biomedical analysis*. 118, pp. 9 - 16. 25/01/2016. ISSN 0731-7085 DOI: 10.1016/j.jpba.2015.10.016 PMID: 26512994

RICORS Code RD21/0012/0003

## INTERNATIONAL AND NATIONAL RESEARCH PROJECTS

(Funded in the last five years)

1.-

Project ID: H2020 - 874583

**Name of PI:** Maria Dolores Gómez Roig

Funding Agency: European Commission

**Title:** **ATHLETE\_Advancing Tools for Human Early Lifecourse Exposome research and Translation**

Dates: 01/01/2020 - 31/12/2024 Duration: 5 years

Amount: 38.375 €

2.-

Project ID: PI20/00490

**Name of PI:** Maria Dolores Gómez Roig

Funding Agency: Instituto de Salud Carlos III (ISCIII)

**Title:** **Impact of a structured prenatal intervention program to decrease alcohol intake, on perinatal and neurodevelopmental outcomes.**

Dates: 01/01/2021 - 31/12/2023 Duration: 3 years

Amount: 99.220 €

3.-

Project ID: CR-83590201

**Name of PI:** Maria Dolores Gómez Roig

Funding Agency: Health Effects Institute (HEI)

**Title:** **Traffic-related air pollution and birth weight: the roles of noise, placental function, green space, diet, physical activity, and socioeconomic status (FRONTIER)**

Dates: 01/06/2018 - 30/11/2022 Duration: 4 years and 6 months

Amount: 202.674,99 €

4.-

Project ID: PI17/00105

**Name of PI:** Maria Dolores Gómez Roig

Funding Agency: Instituto de Salud Carlos III (ISCIII)

**Title:** **Efectividad de la entrevista motivacional repetida durante el embarazo en el abandono del consumo de alcohol**

Dates: 01/01/2018 - 30/06/2022 Duration: 4 years and 6 months

Amount: 81.070 €

5.-

Project ID: RD16/0022/0014

**Name of PI:** Maria Dolores Gómez Roig

Funding Agency: Instituto de Salud Carlos III (ISCIII)

**Title:** RED SAMID\_ Salud materno-infantil y del desarrollo

Dates: 01/01/2017- 31/12/2021 Duration: 5 years

Amount: 153.005 €

6.-

Project ID: PI16/00151

**Name of PI:** Edurne Mazarico

Funding Agency: Instituto de Salud Carlos III (ISCIII)

Title: TRATAMIENTO DEL CIR PRECOZ CON HEPARINA DE BAJO PESO MOLECULAR (TRACIP): ENSAYO CLÍNICO RANDOMIZADO

Dates: 01/01/2017 - 30/06/2021 Duration: 4 years and 6 months

Amount: 42.000€

7.-

Project ID: DTS20/00130

**Name of PI:** Miriam Illa

Funding Agency: Instituto de Salud Carlos III (ISCIII) - DTS

Title: FET-SEAL: Sistema integrado de sellado de membranas fetales para cirugía fetal fetoscópica

Dates: 01/01/2021 - 31/12/2022 Duration: 2 years

Amount: 105.000 €

8.-

Project ID: PI18/01763

**Name of PI:** Miriam Illa

Funding Agency: Instituto de Salud Carlos III (ISCIII)

Title: Evaluación in vitro e in vivo de terapias neuroprotectoras en un modelo animal de restricción de crecimiento intraútero

Dates: 01/01/2019 - 31/12/2021 Duration: 3 years

Amount: 75.000 €

9.-

**Name of PI:** Jordi Sunyer - ISGLOBAL (IP HSJD Maria Dolores Gomez Roig)

Funding Agency: ERC Advanced Grant

Title: Pre-natal exposure to urban AIR pollution and pre- and post-Natal Brain development

Dates: 01/01/2018-31/12/2022.

Duration: 5 years

Amount: 2.500.000 €

RICORS Code RD21/0012/0003

## PATENTS

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

## 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.