

SCIENTIFIC AND TECHNOLOGICAL PROFILE OF THE GROUP

RICORS Code
RD21/0012/0024

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| Thematic area: | ATENCIÓN PRIMARIA, CRONICIDAD Y PROMOCIÓN DE LA SALUD |
| Programme name: | PRIMARY CARE INTERVENTIONS TO PREVENT MATERNAL AND CHILD CHRONIC DISEASES OF PERINATAL AND DEVELOPMENTAL ORIGIN |
| Group leader: | IGNACIO HERRAIZ GARCÍA |
| Applicant Institution: | FUNDACIÓN PARA LA INVESTIGACIÓN BIOMÉDICA DEL HOSPITAL 12 DE OCTUBRE |
| Working Institution: | HOSPITAL UNIVERSITARIO 12 DE OCTUBRE |
| PI Work Institution: | HOSPITAL UNIVERSITARIO 12 DE OCTUBRE |

Participants

| Researcher | Family Name (s) | First Name (s) | Work Institution | Position |
|------------|------------------|----------------|--------------------------------------|-----------------|
| 1 | GALINDO | ALBERTO | HOSPITAL UNIVERSITARIO 12 DE OCTUBRE | Officer |
| 2 | HERRAIZ | IGNACIO | HOSPITAL UNIVERSITARIO 12 DE OCTUBRE | Statutory staff |
| 3 | GÓMEZ-MONTES | ENERY | HOSPITAL UNIVERSITARIO 12 DE OCTUBRE | Statutory staff |
| 4 | GARCÍA-BURGUILLO | ANTONIO | HOSPITAL UNIVERSITARIO 12 DE OCTUBRE | Officer |
| 5 | VILLALAÍN | CECILIA | HOSPITAL UNIVERSITARIO 12 DE OCTUBRE | Statutory staff |
| 6 | BARBERO | PATRICIA | HOSPITAL UNIVERSITARIO 12 DE OCTUBRE | Statutory staff |
| 7 | SOLÍS | JORGE | HOSPITAL UNIVERSITARIO 12 DE OCTUBRE | Statutory staff |
| | | | | Select |

PUBLICATIONS

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

- 1. Extending the scope of pooled analyses of individual patient biomarker data from heterogeneous laboratory platforms and cohorts using merging algorithms.** Burke O; Benton S; Szafranski P; von Dadelszen P; Buhimschi SC; Cetin I; Chappell L; Figueras F; Galindo A; Herraiz I; Holzman C; Hubel C; Knudsen U; Kronborg C; Laivuori H; Lapaire O; McElrath T; Moertl M; Myers J; Ness RB; Oliveira L; Olson G; Poston L; Ris-Stalpers C; Roberts JM; Schalekamp-Timmermans S; Schlembach D; Steegers E; Stepan H; Tsatsaris V; van der Post JA; Verlohren S; Villa PM; Williams D; Zeisler H; Redman CWG; Staff AC; for the Global Pregnancy Collaboration. **Pregnancy Hypertension 2016; 6: 53-59.**
- 2. Angiogenesis-related biomarkers (sFlt-1/PIGF) in placental mesenchymal dysplasia.** Herraiz I; Simón E; Toldos O; Rodríguez Y; Gómez-Arriaga PI; Galindo A. **J Matern Fetal Neonatal Med 2017; 30: 958-961.**
Update on the diagnosis and prognosis of preeclampsia with the aid of the sFlt-1/PIGF in singleton pregnancies. Herraiz I; Llurba E; Verlohren S; Galindo A; on behalf of the Spanish Group for the study of angiogenic markers in preeclampsia. **Fetal Diagn Ther 2018; 43: 81-9.**
- 3. Longitudinal changing values of the sFlt-1/PIGF ratio in singleton pregnancies with early-onset fetal growth restriction.** Herraiz I; Quezada MS; Rodríguez-Calvo J; Gómez-Montes E; Villalaín C; Galindo A. **Ultrasound Obstet Gynecol 2018; 52: 631-638.**
- 4. Fetal biometry and Doppler study for the assessment of perinatal outcome in stage I late-onset fetal growth restriction.** Villalaín C; Herraiz I; Quezada MS; Gómez-Arriaga PI; Gómez-Montes E; Galindo A. **Fetal Diagn Ther 2018; 44: 264-70.**
- 5. The role of angiogenic biomarkers and uterine artery Doppler in pregnant women with systemic lupus erythematosus or antiphospholipid syndrome.** Rodríguez-Almaraz E; Herraiz I; Gómez Arriaga PI; Vallejo P; Gonzalo-Gil E; Usategui A; López Jiménez EA; Galindo A; Galindo M. **Pregnancy Hypertension 2018; 11: 99-104.**
- 6. Clinical implementation of the sFlt-1/PIGF ratio to identify preeclampsia and fetal growth restriction: a prospective cohort study.** Herraiz I; Simón E; Gómez-Arriaga PI; Quezada MS; García-Burguillo A; López-Jiménez EA; Galindo A. **Pregnancy Hypertension 2018; 13: 279-85.**
Labor induction on late-onset fetal growth restriction: Foley balloon vs. vaginal dinoprostone. Villalaín C; Herraiz I; Quezada MS; Gómez-Arriaga PI; Simón E; Gómez-Montes E; Galindo A. **Fetal Diagn Ther 2019; 46: 67-74.**
- 7. Prognostic value of the aortic isthmus Doppler assessment on late onset fetal growth restriction.** Villalaín C; Herraiz I; Quezada MS; Gómez-Arriaga PI; Gómez-Montes E; Simón E; Galindo A. **J Perinat Med 2019; 47: 212 -217.**
- 8. Is it possible to predict late antepartum stillbirth by means of cerebroplacental ratio and maternal characteristics?** Morales Roselló J; Galindo A; Herraiz I; Gil M; Brik M; De Paco C; Ciammella R; Sánchez-Ajenjo C; Cañada AJ; Delgado JL; Perales A. **J Matern Fetal Neonatal Med 2020; 33: 2996-3002.**
- 9. Prognostic factors of successful cervical ripening and labor induction in late-onset fetal growth restriction.** Villalaín C; Quezada MS; Gómez-Arriaga PI; Simón E; Gómez-Montes E; Galindo A; Herraiz I. **Fetal Diagn Ther 2020; 47: 536-544.**
- 10. A more accurate prediction to rule in and out pre-eclampsia using the sFlt 1/PIGF ratio and NT-proBNP as biomarkers.** Lafuente-Ganuza P; Lequerica-Fernandez P; Carretero F; Escudero AI; Martínez-Morillo E; Sabria E; Herraiz I; Galindo A; Lopez A; Martínez-Triguero ML; and Alvarez FV. **Clin Chem Lab Med 2020; 58: 399-407.**
- 11. Angiogenesis biomarkers for the prediction of severe adverse outcomes in late-preterm**

preeclampsia. Villalaín C; Herraiz I; Cantero B; Quezada MS; López-Jiménez EA; Simón E; Galindo A. **Pregnancy Hypertension 2020; 19: 74-80.**

12. From first trimester screening to risk stratification of evolving preeclampsia in the second and third trimester of pregnancy - A comprehensive approach. Poon L; Galindo A; Surbek D; Chantraine F; Stepan H; Hyett J; Tan KH; Verlohren S. **Ultrasound Obstet Gynecol 2020; 55: 5-12.**

13. Correlation of Kryptor and Elecsys® immunoassay sFlt-1/PIGF ratio on early diagnosis of preeclampsia and fetal growth restriction: A case-control study. Simón E; Herraiz I; Villalaín C; Gómez-Arriaga PI; Quezada MS; López-Jiménez EA; Galindo A. **Pregnancy Hypertension 2020; 20: 44-49.**

14 Maternal and perinatal outcomes associated to extremely high values of the sFlt-1/PIGF ratio. Villalaín C; Herraiz I; Valle L; Mendoza M; Delgado JL; Vázquez-Fernández M; Martínez-Uriarte J; Melchor I; Caamiña S; Fernández Oliva A; Villar O; Galindo A. **J Am Heart Assoc 2020; 9: e015548.**

15. sFlt-1/PIGF ratio for the prediction of delivery within 48 hours and adverse outcomes in expectantly managed early-onset preeclampsia. Simón E; Permuy C; Sacristán L; Zamoro-Lorenci MJ; Villalaín C; Galindo A; Herraiz I. **Pregnancy Hypertension 2020; 22: 17-23.**

16. sFlt-1/PIGF ratio and timing of delivery in early-onset fetal growth restriction with antegrade umbilical artery flow. Quezada MS; Rodríguez-Calvo J; Villalaín C; Gómez-Arriaga PI; Galindo A; Herraiz I. **Ultrasound Obstet Gynecol 2020; 56: 549-556.**

17. External validation of prognostic models predicting pre-eclampsia: Individual participant data meta-analysis. Snell KIE; Allotey J; Smuk M; Hooper R; Chan C; Ahmed A; Chappell L; Von Dadelszen P; Green M; Kenny L; Khalil A; Khan K; Mol B; Myers J; Poston L; Thilaganathan B; Staff A; Smith G; Ganzevoort W; Laivuori H; Odibo A; Arenas Ramirez J; Kingdom J; Daskalakis G; Farrar D; Baschat A; Seed P; Prefumo F; da Silva Costa F; Groen H; Audibert F; Masse J; Skråstad R; Salvesen K; Haavaldsen C; Nagata C; Rumbold A; Heinonen S; Askie L; Smits L; Vinter C; Magnus P; Eero K; Villa P; Jenum A; Andersen LB; Norman J; Ohkuchi A; Eskild A; Bhattacharya S; McAuliffe F; Galindo A; Herraiz I; Carbillon L; Klipstein-Grobusch K; Yeo S; Browne Y; Moons K; Riley R; Thangaratinam S. **BMC Med 2020; 18: 302.**

18. Cerebroplacental ratio in predicting adverse perinatal outcome: a meta-analysis of individual participant data. Vollgraff Heidweiller-Schreurs CA; van Osch IR; Heymans MW; Ganzevoort W; Schoonmade LJ; Bax CJ; Mol BWJ; de Groot CJM; Bossuyt PMM; de Boer MA; the CPR IPD Study Group (Khalil A; Thilaganathan B; Turan OM; Crimmins S; Harman C; Shannon AM; Kumar S; Dicker P; Malone F; Tully EC; Unterscheider J; Crippa I; Ghidini A; Roncaglia N; Vergani P; Bhide A; D'Antonio F; Pilu G; Galindo A; Herraiz I; Vázquez-Sarandeses A; Ebbing C; Johnsen SL; Karlsen HO). **BJOG 2021; 128: 226-235.**

19. Obstetric and pediatric growth charts for the detection of fetal growth restriction and neonatal adverse outcomes in preterm newborns before 34 weeks of gestation. Fernandez-Rodriguez B; de Alba C; Villalaín C; Pallás C; Galindo A; Herraiz I. **J Matern Fetal Neonatal Med 2021; 34: 1112-1119.**

20. Placental growth factor testing in the management of late preterm pre-eclampsia without severe features: A multi-center, randomized, controlled trial. Peguero A; Herraiz I; Perales A; Melchor JC; Melchor I; Marcos B; Villalaín C; Martínez-Portilla R; Mazarico E; Meler E; Hernández S; Matas I; del Río M; Galindo A; Figueras F. **Am J Obstet Gynecol 2021; in press.** DOI: 10.1016/j.ajog.2021.03.044

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INTERNATIONAL AND NATIONAL RESEARCH PROJECTS

(Funded in the last five years)

"Elección del momento del parto en la preeclampsia y el crecimiento fetal restringido de aparición tardía: aproximación al dilema mediante tecnología analítica de alta resolución". Entidad financiadora: Proyectos de Investigación en Salud en la convocatoria 2016 de la Acción Estratégica en Salud. Instituto de Salud Carlos III. Ministerio de Economía y Competitividad. (Expediente PI16/01955).

"Papel del Factor de Crecimiento Placentario en el manejo de la preeclampsia no severa: estudio aleatorizado". ClinicalTrials.gov Identifier: NCT02373839. Sponsor: Fetal Medicine Research Center, Spain. Proyecto subvencionado dentro del programa de Ayudas y Subvenciones a Proyectos de Investigación del Fondo de Investigación Sanitaria, en el marco del Plan Nacional I + D + I, durante el año 2015. (Expediente PI15/00903).

"Ensayo clínico aleatorizado para la inducción del parto a término en la restricción del crecimiento intrauterino: dinoprostona vaginal versus sonda de Foley". Entidad financiadora: Programa de Ayudas y Subvenciones a Proyectos de Investigación del Fondo de Investigación Sanitaria, en el marco del Plan Nacional I + D + I. (Expediente PI19/01005).

"Estudio de salud cardiovascular en mujeres con antecedentes de preeclampsia precoz". Entidad financiadora: Proyectos de Investigación en Salud en la convocatoria 2019 de la Acción Estratégica en Salud. Instituto de Salud Carlos III. Ministerio de Ciencia, Innovación y Universidades. (Expediente PI19/01579).

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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.