



The PARENT project has
Union's Horizon 2020
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received funding from the European
research and innovation Training
Agreement N° 956394

Early-Stage Researcher PhD fellow position (3-years) available within the EU Horizon 2020 MSCA-ITN-ETN “PremAtuRe nEwborn motor and cogNitive impairmenTs: Early diagnosis (PARENT)”.

EU Research Framework Programme	Marie Skłodowska-Curie Actions ITN 2020
Project Name	PremAtuRe nEwborn motor and cogNitive impairmenTs: Early diagnosis (PARENT)
Project Grant Agreement	N° 956394
Organization/Company recruiting the ESR	Fundación para La Gestión de la Investigación Biomédica de Cádiz (FGIBICA/FCádiz) - Hospital Universitario Puerto del Mar, Novena Planta Investigación Avda. Ana de Viya, 21 – 11009, Cádiz, Spain
Project N° in PARENT PhD projects' list	ESR-4
ESR Research Topic	Preterm infant, biomarkers, neuroimaging, neurodevelopment, outcome prediction, brain injury,
ESR Research Field	molecular biology, biomedicine and health sciences
Researcher Profile	First Stage Researcher (R1)
Application Deadline	15/06/2021 17:00 - Europe/Brussels
ESR Host Location	Hospital Puerta del Mar, Cádiz
Type of Contract	Temporary (36 months)
Job-Status	FULL TIME
Hours per week	40
Vacancy Starting Date	1/09/2021
Enrolment in a PhD Program	YES
Institution Awarding PhD	University of Cádiz. Edificio Hospital Real Plaza Falla, nº 8. 11003 Cádiz, Spain

OFFER DESCRIPTION



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We would like to encourage applications from candidates worldwide wishing to pursue a PhD degree in the field of Health-related sciences, with interest in the research areas related to: biomarkers, neuroscience, preterm infant, neuroimaging, neurodevelopment, outcome prediction, brain injury. FGIBICA/FCadiz in Cádiz, Spain, is offering a PhD Fellowship for 1 early-stage researcher (ESR), starting between 01.09.2021 and 01.11.2021.

The selected candidates will be enrolled in the Doctoral School of University of Cádiz with the option of being awarded a PhD Degree in Health-related sciences.

The ESR will be hosted at the University Hospital Puerta del Mar in Cádiz, Spain

The position is posted as part of the exciting PARENT project, PremAtuRe nEwborn motor and cogNitive impairmenTs: Early diagnosis (PARENT), funded by the European Union through the Horizon 2020 Marie Skłodowska-Curie Actions programme under Grant number 956394.

Information on the PARENT project can be found at

<https://parenth2020.com>

<https://cordis.europa.eu/project/id/956394/it>

The PARENT consortium comprises universities with researchers who are leading experts on motor and cognitive impairment diagnosis and treatment, medical diagnostics, clinical data digitalization, machine learning, mechanistic modelling, molecular and multiscale modelling, information and communication technologies.

The successful candidate will join an international network of 15 PhD Fellows (ESRs) to become part of the next generation of specialists able to challenge the traditional way of neurodevelopmental disease follow-ups, by adding to classical approaches methods and technologies such as multiscale and multiphysics modelling, artificial intelligence, hybrid neuroimaging technologies, automatized eye tracking for newborn. All of those technologies can be integrated in a last frontier of a modular intelligent decision support system built on cardinal principles such as Patient-Centred Design and Evidence-based and Personalized Medicine. Therefore, besides training ESRs on premature child related to neuro-diagnostic technologies, clinics, modelling, computer science and data management, PARENT emphasizes aspects related to ethics, privacy, and security which will be an integral part of the network's training program.

The position will offer you an excellent background, working within a strong, cross-disciplinary network among leading Universities and research institutions across Europe and with contacts to industry, governmental- and non-governmental institutions.



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PARENT ESR 4

Topic: Preterm Children Neurodevelopmental Trajectory: clinical study focused on biomarkers selection

Description: The PhD will focus on the study of miRNA changes in the developing brain of the preterm infant and explore the impact of these in the outcome. Research will include exploring associations of miRNA changes with neuroimaging findings of brain injury or dysmaturation such as white matter injury (taking as neuroimaging markers) and the association with miRNA implemented with myelination. Furthermore, the PhD will explore the potential role of miRNAs expression analysis combined with clinical and neuroimaging and ETM markers of brain growth and brain injury related to neurodevelopmental outcome in preterm infants and correlate miRNA changes with biochemical markers routinely used in the clinical setting. We will encourage a contextual approach to determine the association of miRNA changes with pre- peri and postnatal clinical factors that could contribute to morbidities during NICU admission and study the association of miRNA changes with socioeconomic status and the social environment.

Supervisors: Prof. MD PhD Simón Lubián-López, PhD Raul Montañez Martínez. FGIBICA, Cádiz.

Secondment Periods: The ESR 4 project includes secondment periods to other beneficiaries and external partners of the PARENT Project (more information, will be given during the oral interview).

Job description:

The positions are available for a 3-year period and your key tasks as a PhD student at FGIBICA:

- To work independently, develop and carry through your research project
- Comply with the PhD training program at University of Cádiz
- Write scientific articles and your PhD thesis with support from your supervisors.
- Disseminate your research, participate in network related and international conferences and workshops
- To stay at partner research institutions for at least six months total to develop new skills
- Contribute to the everyday activities at the department.

Benefits

The selected candidates will receive a 36-months, full-time employment contract as per Marie Skłodowska-Curie Actions (MSCA) regulations for early stage researchers, with a highly



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competitive salary, including a generous monthly living and mobility allowance and (if eligible) a monthly family allowance.

The **gross salary** consists of:

- **Living allowance:** 3.270 EUR/month (39.240 EUR/year), multiplied by the country correction coefficient of the country where the researcher is recruited (for Spain: 95,4%).
- **Mobility allowance:** 600 EUR/month (7.200 EUR/year)
- **Family allowance**, if applicable - depending on the family situation at the time when the contract is being concluded: 500 EUR/month. This amount will be paid should the researcher have family, regardless of whether the family will move with the researcher or not. In this context, family is defined as persons linked to the researcher by (i) marriage, or (ii) a relationship with equivalent status to a marriage recognised by the national or relevant regional legislation of the country where this relationship was formalised; or (iii) dependent children who are actually being maintained by the researcher.

The gross salary is subject to local tax, social benefit and other deductions following applicable national regulations of the country in which the researcher is recruited. If you need further detail please contact: giacomo.dibenedetto@inibica.es

Eligibility criteria

Details of the admission requirements are as follows:

ESR Profile

- ✓ Degree in Health Sciences or Biological Sciences.
 - (i.e. 2° level title, as defined by the Bologna Process), issued by an officially recognized academic institution, which grants admission in PhD programs in the country of issuance.
 - In order to evaluate the University career, the candidate should provide: Master's Degree and transcript of records of the Master's Degree, Bachelor's Degree and transcript of records of the Bachelor's Degree. The documents shall be issued by the relevant university and must be officially translated to Spanish
- ✓ One of the following certificates of English language knowledge, regardless of when they were issued:
 - IELTS with a minimum score of 5.0;
 - one of the language certificates recognized equivalent to IELTS 5.0 by the Modern Languages Superior Centre and detained in the table published at [Acreditación oficial](#)



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[de nivel – Centro Superior de Lenguas Modernas \(CSLM\) \(uca.es\)](http://uca.es) or a declaration of having a Ba. and/or M.Sc. degree issued by a University in which courses are taught in English, i.e. “The medium of instruction was English”.

SELECTION PROCESS

Application Procedure:

The application, in English, must be submitted electronically to FGIBICA STRICTLY following the rules below:

1. by email before application deadline
2. Email address: rrhh@inibica.es
3. Email subject: PARENT ITN2020 Application – ESR(4).
4. Attach as a single PDF document (the PDF file name should start with the last name of candidate – e.g., Deriu-PARENT-SupportingInfo.pdf).
 - a) A copy of a valid ID document (passport or other)
 - b) Cover Letter (max 2 pages, in English) containing research interests, main skills, career plans and the reasons for applying to the selected ESR position. The cover letter should also contain information on reference Researchers/Professors (name, surname, affiliation, institutional emails) to be contacted.
 - c) CV (in English) with relevant work and study experience (if any) and adding other relevant information, e.g. a list of publications (if any)
 - d) Diploma and transcripts of records.
 - e) English language certificate (please see the table in the Eligibility criteria)
 - f) Any other document useful to demonstrate your eligibility (please see eligibility criteria above)

Selection procedure

The **selection procedure** will be based on the following steps:

1. preliminary compliance check with the MSCA eligibility criteria and the specific requirements of the ESR project (degree, specific mandatory skills, specific requirements). Incorrect or lacking documentation may invalidate the recruitment procedure.
2. screening of all the applications received and candidate shortlisting based on CV, academic transcripts, reference letters, cover letter and relevance for the research project.
3. interview (Skype or other) of shortlisted candidates. In any case you receive a feedback of your application.



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4. final selection and ranking of suitable candidates and identification of the successful candidate.

FGIBICA wishes our staff to reflect the diversity of society and we welcome applications from all qualified candidates regardless of personal background. The selection will be exclusively based on qualification without regard to gender identity, sexual orientation, religion, national origin, or age.

Offer requirements

- **Required education level**

Medicine, Psychology, Biology, or other strictly related to the above-mentioned disciplines: Master Degree or equivalent

- **Required languages**

ENGLISH: Good

Skills/Qualifications

- ✓ Master's degree in Biology or Health-related sciences, Medicine, Psychology, or related field (if you have not obtained your diploma yet, but expect to do so in the near future, please apply already).
- ✓ Background in neurosciences and/or molecular biology is appreciated.
- ✓ In view of the international context, mastering of the English language is mandatory.
- ✓ International mobility of researchers is a key concept within the MSCA ETN framework. As such you participate in international meetings, workshops, and a secondment program.
- ✓ Willingness to produce original findings to be disseminated/communicated by attractive posters, sparkling presentations, and high-quality papers.

SPECIFIC REQUIREMENTS

Since the aim of EU ITN MSCA H2020 projects is to attract candidates from worldwide locations, applicants must not have resided and not have carried out their main activity (work, studies, etc.) in Spain for more than 12 months in the 3 years immediately before the recruitment date — unless as part of a procedure for obtaining refugee status under the Geneva Convention (1). If you are applying from a location that requires a visa or permit, then we will be able to provide support and advice throughout the process of relocation for you and your family. Feel free to ask us questions in advance if you need more information and reassurance.



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The applicant must be an Early Stage Researcher (ESR) i.e. at the time of recruitment she/he must be in the first 4 years (full-time equivalent research experience) (2) of her/his research career and must not have been awarded a doctoral degree.

Notes:

(1) 1951 Refugee Convention and the 1967 Protocol

(2) This is measured from the date when a researcher obtained the degree which would formally entitle him or her to embark on a doctorate, either in the country in which the degree was obtained or in the country in which the researcher is recruited, irrespective of whether a doctorate is or was ever envisaged.

Basic duties and responsibilities of the ESR

The ESR will be required to work exclusively on the MSCA ITN program (PARENT-ETN). In all cases, all duties and responsibilities will be clearly outlined in the researchers Personal Career Development Plan, as determined in the early stages of the project between the ESR and supervisors.

Statement regarding data protection

You share your information with us for the sole purpose of assessing the requirements for the selection process regarding the present ESR position. We respect that information, and we are careful to comply with our obligations under data protection laws while processing your application, in particular the EU General Data Protection Regulation (GDPR) 2016/679. Your data will not be disclosed to any third party, other than the ESR selection committee defined by the organization/company you are applying to. You have the right to obtain without undue delay: the rectification of inaccurate personal data concerning you (art. 16 of the GDPR); the erasure of personal data concerning you (art. 16 of the GDPR); right to obtain restriction of processing (art. 18 of the GDPR). By submitting your application, you agree to these terms.

Additional comments

Questions: For specific information about the PhD scholarship, the principal investigator will be happy to answer your questions and provide advice (isabel.benavente@uca.es).

For further information **about PARENT** please consult the project website <https://parenth2020.com>



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General information about **PhD programmes at University of Cádiz** is available at [Escuela de Doctorado de la Universidad de Cádiz – Escuela de Doctorado de la Universidad de Cádiz \(uca.es\)](https://uca.es/escuela-de-doctorado)

For additional information on other ESR available positions in the PARENT MSCA-ITN framework, please contact the **PARENT Coordinator**

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