

PhD position available **(Marie Skłodowska-Curie Early Stage Researchers)**

DNA-addressable arrays for multiplex ligand binding assays with optical smartphone readout

RESEARCH GROUP: Nanobiotechnology for Diagnostics (Nb4D) group

<https://www.iqac.csic.es/research/departments/surfactants-and-nanobiotechnology/nanobiotecnology-for-diagnostics/>

IQAC-CSIC/CIBER-BBN

*Jordi Girona, 18-26
08034-Barcelona*

PROJECT: FoodSmartPhone - Smartphone analyzers for on-site testing of food quality and safety

<http://www.foodsmartphone.eu/>

GRANT NUMBER: 720325

OFFER:

→ We offer the possibility to integrate oneself and doing a PhD in a dynamic research group and to obtain a multidisciplinary formation in the chemistry and biomedicine fields.

→ The incorporation will be through the Marie Skłodowska-Curie Innovative Training Network (MSCA-ITN) whose aim is “to train a new generation of creative, entrepreneurial and innovative early stage researchers who will be able to face current and future challenges and to convert knowledge and ideas into products and services for economic and social benefit”.

→ The possibility to learn the fundamentals and operation of multiplex binding assays. This includes developing universal and reusable chip platforms based on DNA-directed immobilization strategies for the analysis of antibiotics in milk, assessing the performance of the universal chip using optical transducing principles, microfluidic design and implementation in a portable device, developing the interface for smartphone readout and data acquisition and performing an analytical evaluation and critical comparison with well-established confirmatory methods.

MAIN TASKS:

- Immunoreagents conjugation and labeling with oligonucleotides
- Development of immunochemical techniques (ELISA, microarray, biosensor...)
- Short stays (3 months) in other European research organizations
- Attendance to congresses and conferences and presentation of own research work.
- Preparation of reports, scientific papers and IP-related documents, when necessary.
- Responsible of the SOP and TPM of lab equipment.
- Collaboration in the maintenance of the lab and contributing to the common tasks and good atmosphere of the whole research group.

CANDIDATE PROFILE:

Contact us if you:

- Hold a degree in biotechnology, biochemistry or chemistry.
- Have not lived or performed your main activity (work, studies, etc.) in Spain for more than 12 months in the 3 year period immediately prior to the start date of the PhD research. *
- Are in the first 4 years (full-time equivalent) of your research career and not yet have been awarded a doctorate. This 4 year period is measured from the date of obtaining the degree which would formally entitle to embark on a doctorate. *
- Have experience in organic chemistry with interest in bioanalytical assays.
- Are knowledgeable of the English language (certificates will be required). *
- Are a dynamic person, willing to work in a multidisciplinary research group.
- Communication skills will be highly valued.

** Please consider that there are strict eligibility requirements for the ESR PhD positions in MSCA-ITN. Requirements have been indicated with a * symbol. Please ensure that you qualify before applying, as ineligible candidates cannot be considered.*

Applicants should send motivation letter and curriculum vitae no later than the 15th December to:

Dr. J.-Pablo Salvador, jpablo.salvador@iqac.csic.es

Please indicate "Marie Curie Fellowships: FoodSmartphone" in the subject of your e-mail.