**Information about the supervisors and the team**

The supervisors, Dr. Víctor Matamoros and Dr. Jessica Subirats, are experts in the assessment of the impact of pollutants in agriculture (more than 20 papers on this topic over the last 5 years). They have led and participated in numerous national and international programs, attracting substantial funding (> 2 million €). They have supervised 8 PhD thesis (four of them currently going-on) (see the list below), more than 20 Master’s and Degree’s projects and 3 postdocs. The supervisors will continuously advise the candidate through regular meetings, monitor the progress towards the objectives and milestones of the project, and assist him in funding applications and job search beyond the fellowship period. Their work as supervisors has decisively contributed to facilitate the incorporation of his former PhD students to research institutions (see below). The supervisors have also actively participated in transfer-of-knowledge to the industrial sector and to management public agencies (e.g. ARC; DACC; ACA: Catalan Water Agency). The close relationship of the supervisors with management agencies and industries will allow the fellow to explore economic and societal implications of his research and will open the possibility to work with nonacademic partners. The supervisors have a long history of effective and productive international collaboration as demonstrated by the publication record and collaboration with international projects and initiatives. International networking opportunities will thus be provided to the candidate by interacting with existing international collaborators.

The current team is composed of four doctoral students, two postdoctoral researchers and two laboratory technicians. The working environment is friendly and collaborative.

***Training program planned in the context of the project.***

The student of the BIORISK project will be enrolled in the PhD programme in Agri-food Technology and Biotechnology at the UPC, with a high participation of international students (60%) and professors (20%). This PhD program generated 60 thesis and 65 articles (44% in the 1st quartile) between October 2013 and June 2021.  Within his/her planned training, the PhD student of the BIORISK project would have programmed at least one stay with some collaborators of the Research team working in EFSA (Dr. Liebana). Finally, within his/her planned training PhD will conduct several training courses such as: Core communication skills, and time/project management (+ collaborative learning); Research Design; Introduction to R - statistical computing; Advanced statistical computing using R; Oral and poster presentations; Scientific Writing and Communication; and other courses that the CSIC offers.

**The objective of the PhD student project** will be to perform a holistic assessment of chemical and biological pollutants on the whole crop system following fertilization with biosolids in extensive agriculture. Special emphasis will be given to their interaction, effect on crop and human health risk, as well as on providing solutions. The work plan to reach these objectives is as follows:

**Year 1**: (1) Conduct several training courses within the PhD program; (2) get familiar with analytical instruments and methodologies described in the methodological section; (3) start the sampling in WP1 and WP2, manage and analysis of the samples collected during the sampling campaigns; (4) participate and co-organize the different coordination meetings between the research team and working team to share the obtained results.

**Year 2**: (1) Continue with the forecasted field and greenhouse work in WP1 and WP2, and start working in WP3; (2) collaborate with the research team and working team in preliminary interpretations of the results and conduct statistical analysis of the results (WP4); (3) write a paper on the effect of the co-occurrence of several chemical and biological micropollutants in biosolids on crops: “Rhizosphere and metabolomic  crop response of the co-occurrence of chemical and microbiological pollutants following biosolid application”. (WP2); (4) participate and co-organize the different coordination meetings between groups to share the obtained results; (5) Presentation of PhD results in congresses related to Agriculture and Environment.

**Year 3:** (1) Continue with the interpretation of the data (WP4) and write a paper on the use of different green solutions on the reduction of the crop uptake of micropollutants from the greenhouse study (WP3); (2) plan and perform a stay at a risk assessment center to conduct human health risk studies (WP5); (3) write two papers, “Occurrence of chemical and microbiological pollutants in extensive agriculture following organic soil amending. Agricultural and Environmental implications” and “Human health risk associated with the presence of chemical and microbiological pollutants following biosolid soil amending in extensive agriculture”, (4) Presentation of PhD results in the IDAEA Young Researchers’s Week; (5) participate in the coordination meetings between groups to share the obtained results; (6) write the PhD thesis.