

PROFILE

International STEM Data Scientist

Curious, enthusiastic, attentive to detail, I am specialized in data analysis and interpretation for agricultural and food science applications. I have 15 years' research experience, including project management responsibilities, on both private and public institutions. As a result of my interest in promoting international collaborations, I maintain an international collaboration network and have enjoyed long professional stays in Spain, France, and Ireland.

EXPERIENCE

International Experience in Research and Science Communication

- 2017 – 2021 **Senior Post-doctoral Researcher at UCD-SIRG**¹. [HyperMicroMacro](#) project (ID 15/IA/2984). Responsible of project management, research activities, mentoring students and public engagement. **Awarded Funding Grants:** 93 565 euros of funding by the Spanish Program Torres Quevedo (2017); 186 000 euros funding from Internal UCD infrastructure call.
- 2014 – 2017 **Freelance Researcher.** Self-promoted research collaborations with the research institutes LPF-TAGRALIA²(Madrid, Spain), UMR ITAP-Irstea³ (Montpellier, France) and UPNA⁴(Navarra, Spain).
- 2012 – 2014 **Post-doctoral Researcher** at UMR ITAP-Irstea³. [AKER](#) French National Project. Responsible for project management, coordination with research partners, design and development of experimental protocols, experimental work, data analysis and interpretation, writing and presentation of scientific results.
- 2011 – 2012 **Post-doctoral Researcher** at the company Fruition Sciences⁵. Management of research collaboration with Montpellier-SupAgro⁶ at the PILOTYPÉ Project. Responsible of technology transfer regarding sampling methods applied to the spatial modelling of vine water status.
- 2005 – 2006 **Research Assistant** at LPF-TAGRALIA². Laboratory work, data collection and collation, data analysis.

TEACHING

Wide Range of Communication and Teaching Contexts

- 2017 – 2019 Invited lecturer and student tuition at UCD-SIRG¹. Organization of [Arts and Science](#) communication events in collaboration with Ranelagh Arts Centre and [Conway Institute](#). Participation in [Soapbox](#) Science Ireland for the promotion of Women in Research. Participation on the organization of Women in Science Quiz for UCD School of Biosystems and Food Engineering.
- 2015 – 2017 Active pedagogy teaching of sciences with the association [Les Petits Débrouillards](#). Responsible of the development of content and protocols for children 7-11 years old.
- 2006 – 2015 Invited lecturer at [Montpellier University](#) (2010-2015). International data analysis workshops. Student tuition at Montpellier University (2007-2016).

EDUCATION

Agronomy Engineer and Data Scientist

- 2006 – 2010 **Ph.D. Studies.** ETSIAAB –UPM⁷. Public lecture held on June 25th 2010. Thesis title: "Spectral Machine Vision for Peach Ripeness Assessment " (in English). Self-promoted stays at [UMR ITAP-Irstea](#)² and [NIAB-EMR](#)⁸.
- 1998 – 2005 **Agronomy Engineering Degree.** ETSIAAB –UPM⁷. Plant Science and Production. Socrates-Erasmus Exchange student at Ghent University, Belgium (2003-2004). Leonardo grant for training at [NIAB-EMR](#)⁸ on the Raspberry Breeding Program, UK (May- July 2005).

MERITS

Contribution to Scientific Communication and Scientific Committees

Publications	Scientific Publications.....	17 (See Research Gate Profile)
	Conferences	35 (30 International, 5 National Conferences)
	Books.....	2 book chapters
Conference Committees	HelioSPIR (2019- 2021), IEEE-whispers (2019).	
Scientific associations	ChemHouse (France), Sociedad Española de Quimiometría (Spain).	
Peer Review	Occasional Peer review for Scientific Journals including Journal of Spectral Imaging, Biosystems Engineering, Foods (mdpi), Talanta, Tecnológicas.	

COMPETENCIES

Scientific Competencies

Domains of Expertise

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| <ul style="list-style-type: none">○ Team Working Skills○ Attention to detail & quality○ Creative○ Self-Learner and Self-Motivated○ Good Communication Skills○ International Scientific Network | <ul style="list-style-type: none">○ Multidisciplinary Experience (flexibility)○ Multivariate Data Analysis○ Experimental Design and Sampling○ Spectral Analysis (Visible, NIR, FTIR)○ Image Analysis○ Precision Agriculture |
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LANGUAGES

Fluent in English, French, and Spanish

English	FULL PROFESSIONAL PROFICIENCY (C2)	Working language since 2005.
French	ADVANCED (C1)	Fluent. Working language from 2010 to 2016.
Spanish	NATIVE	Storytelling, poetry, and short story writing.

INFORMATICS

Competent in Programming, Data Base and Office tools

Competent use of Office tools (Excel, PowerPoint), Mendeley, MATLAB (Toolbox design).
Basic use of QGIS (Open GIS), ImageJ, GIMP2.

INTERESTS

Social and Creative Activities

Graphic arts (amateur); short stories and poetry writing (amateur); reading (fantasy and travel books); film and documentary production (KINO, 2015). Participation in local art associations including Pay Attention Collective (2019 - 2021), Ranelagh Arts (2017-2019), Ateliers St Roch - Montpellier (2012-2015), [KINO](#) (2015-2017).

REFERENCES

Other references available. Please notify before contacting.

Aoife Gowen	Current Employer. (2017-2021). Aoife.gowen@ucd.ie (UCD-SIRG ¹)
Jean Michel Roger	Previous Employer (2009-2016). Jean-michel.roger@irstea.fr (Irstea ³)
Belén Diezma	Research Supervisor (2006-2010). belen.diezma@upm.es (LPF-TAGRALIA ²)

ACRONYMS

Employers and Collaborators as Cited on the Text

¹ **UCD-SIRG**: University College of Dublin. Spectral Imaging Research Group. School of Biosystems and Food Engineering. Ireland.

² **LPF-TAGRALIA**: Laboratorio de Propiedades Físicas y Tecnologías Avanzadas en Agroalimentación. Madrid, España.

³ **UMR ITAP-Irstea**: Unité mixte de Recherche Information, Technologies, Analyse environnementale, Procédés Agricoles. Montpellier, France.

⁴ **UPNA-IMAB**: Institute for Multidisciplinary Research in Applied Biology. Universidad Pública de Navarra. Pamplona, España.

⁵ **Fruition Sciences**: Technology transfer company for Precision Viticulture. Montpellier, France.

⁶ **Montpellier-SupAgro**: Agronomy Engineering School. Viticulture Engineering (Bât. 21). Montpellier, France.

⁷ **ETSIAAB- UPM**: Escuela técnica Superior de Ingenieros Agrónomos. Universidad Politécnica de Madrid. Madrid, España.

⁸ **NIAB-EMR**: East Malling Research, Research on Horticultural Crops and Plants. East Malling, Kent, U.K.