

Curriculum vitae

Maria João de Medeiros Brazão Lopes Feio

Born in 1.8.1973, Coimbra, Portugal. Married, two children (2007, 2013)



Present position: Researcher of University of Coimbra & Marine and Environmental Sciences Centre (MARE).

Summary of career path:

PhD (2005) in Biology, specialization in Ecology by the University of Coimbra (with Environment Canada). Postdocs at the University of Coimbra and University of Canberra, Australia (2005-2009), and University of Lyon, France (2009).

My main research topics are the freshwater ecology, structural and functional large-scale patterns of temperate and tropical rivers, ecological assessment and metagenomics, urban aquatic ecosystems and participatory science. In addition to research, I have been teaching in advanced courses at the Universities of Coimbra (Portugal), Granada (Spain), Brasília, Federal de Minas Gerais and Estadual da Paraíba (Brazil), and supervising PhD students, master and graduation students and postdocs.

I have also been involved knowledge transference activities, namely in the implementation of the Water Framework Directive at the national and European level through the development of protocols and assessment methods, coordination of the 2nd phase of the Intercalibration Exercise in the Mediterranean countries for the element macroinvertebrates, or elaboration of River basin Management Plans.

I have a long collaboration with the Iberian Association of Limnology (AIL) as Portuguese representative of Jovens AIL (2008-2014), member of the board (vocal, 2010 and 2014), associate editor of *Limnetica*, and member of the organizing committee of the XIX AIL meeting in 2018. I am also president of the Portuguese association PROAQUA, dedicated to the promotion of knowledge in aquatic sciences.

Selected publications (from 55 in indexed journals):

Feio MJ, Leite GFM, Rezende RS, Medeiros AO, Cruz LC, Dahora JAS, Calor A, Neres-Lima V, Silva-Araújo M, Callisto M, França J, Martins I, Moretti MS, Rangel JV, Petrucio MM, Lemes-Silva AL, Martins RT, Dias-Silva K, Dantas GPS, Moretto Y, Gonçalves Jr JF. (2018). Macro-scale (biomes) differences in neotropical stream processes and community structure. <https://doi.org/10.1016/j.gecco.2018.e00498>

Filipe AF, **Feio MJ**, Garcia-Raventós A, Ramião JP, Pace G, Martins FMS, Magalhães MF (2018). The European Water Framework Directive facing current challenges: recommendations for a more efficient biological assessment of inland surface waters. *Inland Waters*. doi: 10.1080/20442041.2018.1494973

Calapez AR, Serra SRQ, Santos JM, Branco P, Ferreira T, Hein T, Brito AG, **Feio MJ** (2018) The effect of hypoxia and flow decrease in macroinvertebrate functional responses: a trait-based approach to multiple-stressors in mesocosms. *Science of the Total Environment* 637-638: 647-656

Pawlowski J, Kahlert M, Kelly-Quinn M, Altermatt F, Apothéoz-Perret-Gentil L, Beja P, Boggero A, Borja A, Bouchez A, Cordier T, Domaizon I, **Feio MJ**, Filipe AF, Fornaroli R, Graf W, Herder J, van der Hoorn B, Jones IJ, Sagova-Mareckova M, Moritz C, Barquin J, Piggott JJ, Pinna M, Rimet F, Rinkevich B, Sousa-Santos C, Specchia V, Trobajo R, Vasselon V, Vitecek S, Zimmermann J, Leese F (2018) The future of biotic indices in the ecogenomic era: integrating (e)DNA metabarcoding in biological assessment of aquatic ecosystems. *Science of the Total Environment* 637-638:1295-1310

Serra SRQ, Graça MAS, Dolédec S, **Feio MJ** (2017) Chironomidae traits and life history strategies as indicators of anthropogenic disturbance. *Environmental Monitoring and Assessment* 189: 326. DOI 10.1007/s10661-017-6027-y

Feio MJ, Almeida SFP & Aguiar FA (2017) Functional associations between microalgae, macrophytes and invertebrates distinguish river types. *Aquatic Sciences* 79: 909-923. DOI:10.1007/s00027-017-0541-4

Bambi P, Rezende RS, **Feio MJ**, Leite G, Alvin E, Quintão JMB, Araújo F, JF Gonçalves Jr (2016)

Temporal and spatial patterns of inputs and Stock of organic matter In Savannah streams of Central Brazil. *Ecosystems* 20: 757-768. DOI: 10.1007/s10021-016-0058-z

Elias CL, Calapez AR, Almeida SFP, Chessman B, Simões N, **Feio MJ** (2016). Predicting reference conditions for river bioassessment by incorporating boosted trees in the environmental filters method. *Ecological Indicators* 69: 239-251.

Sánchez-Montoya MM, Pastor A, Aristi I, Arco AI, Antón-Pardo M, Bartrons M, Ruíz C, **Feio MJ**, Gallardo B, Chappuis E, Catalán N (2016) Women in limnology in the Iberian Peninsula: biases, barriers and recommendations. *Limnetica* 35: 61-72

Feio MJ, Dolédec S, Graça MAS. 2015. Human disturbance affects the long-term spatial synchrony of freshwater invertebrate communities. *Environmental Pollution* 196: 300-308.

Feio MJ, Ferreira WR, Macedo DR, Eller AP, Alves CBM, França JS, Callisto M (2015) Defining and testing targets for the recovery of tropical streams based on macroinvertebrate communities and abiotic conditions. *River Research and Applications* 31: 70–84.

Feio MJ, Viana-Ferreira C, Costa C. (2014) Testing a multiple machine-learning tool (HYDRA) for the bioassessment of freshwaters from different geographic regions. *Freshwater Science* 33: 1286-1296

Neto JM, **Feio MJ**, Teixeira H, Serra S, Patrício J, Calapez A, Franco J and Constantino E (2014) Transitional and freshwater bioassessments: is the river continuum discontinued? *Marine Pollution Bulletin* 78: 153–164.

Feio MJ, Ferreira J, Buffagni A, Erba S, Dörflinger G, Ferréol M, Munné A, Prat N, Tziortzis I, Urbanic G. (2014). Comparability of ecological quality boundaries in the Mediterranean basin using freshwater benthic invertebrates. Statistical options and implications. *Science of the Total Environment* 476–477: 777–784.

Feio MJ, Aguiar FC, Almeida SFP, Ferreira J, Ferreira MT, Elias C, Serra SRS, Buffagni A, Cambra J, Chauvin C, Delmas F, Dörflinger G, Erba S, Flor N, Ferréol M, Germ M, Mancini L, Manolaki P, Marcheggiani S, Minciardi MR, Munné A, Papastergiadou E, Prat N, Puccinelli C, Rosebery J, Sabater S, Ciadamidaro S, Tornés E, Tziortzis I, Urbanic G, Vieira C. (2014). Least disturbed conditions for European Mediterranean rivers. *Science of the Total Environment* 476–477: 745–756.

Selected projects:

2018-2021. Coordination of the partner Universidade de Coimbra in the project: RIVEAL - Riparian forest Values and Ecosystem services in uncertain freshwater futures and Altered Landscapes. Funding: Foundation for the Science and Technology (FCT), Portugal

2018-2022. Participation in the project PROECOS-Processos ecológicos: desenvolvimento de novas tecnologias de diagnóstico e processos ambientais. Coordenação Universidade Federal de Minas Gerais. Financiamento CEMIG, Brasil

2018-2022. Coordination of the participatory science project Crescer a Cuidar dos Rios da Cidade, for the promotion of urban streams restoration. MARE – University of Coimbra/PROAQUA/University of Aveiro/Grupo de escolas Eugénio de Castro - Coimbra.

2017-2018. Participation in the Cost action DNAqua-Net: “Developing new genetic tools for bioassessment of aquatic ecosystems in Europe”. European Cooperation in Science and Technology

2017. Coordination of the partner IMAR and monitoring in Central Portugal in the project-contract: “Monitorização do estado das massas de água rios e albufeiras”. Consortium MFA/UTAD/UA/IMAR/UÉVORA. Funding: Agência Portuguesa do Ambiente (APA), Portugal

2016-2017. Participation in the project “Variações espacial e temporal na vegetação ripária como reguladores da dinâmica trófica em riachos de cabeceira no Cerrado”. University of Brasilia, Institute of Biological Sciences. Funding: FAP-DF, Brasil.

2010-2014. Coordination of the project AQUAWEB - Assessment of rivers biological QUALity through a WEB platform. Funding: FCT, Portugal.