

 @francesc_baro

QR Code for ORCID (0000-0002-0145-6320)

Extended Curriculum Vitae

Francesc Baró

Personal data: Born 18th June 1981 in Barcelona (Spain). Nationality: Spanish.

Current affiliations: Institute of Environmental Science and Technology (ICTA), Autonomous University of Barcelona (UAB); ‘Hospital del Mar’ Medical Research Institute (IMIM).

Current professional address: Edifici Z (ICTA-ICP), Carrer de les Columnes s/n, Campus UAB, 08193 Bellaterra (Cerdanyola del Vallès), Barcelona, Spain.

Contact: E-mail: francesc.baro@uab.cat; Phone: +34 686968827.

Websites: www.researchgate.net/profile/Francesc_Baró; www.bcnuej.org/francesc-baro-bio/

Language skills: Catalan (native); Spanish (native); English (proficient); French (advanced).

Computer skills: ArcGIS (expert); QGIS (advanced); Microsoft Office (expert); R Statistical Computing (intermediate).

Keywords: Urban ecosystem services; green infrastructure; nature-based solutions; spatial analysis; landscape and urban planning; social-ecological systems; urban resilience; strategic environmental assessment.

1. SHORT BIO AND RESEARCH INTERESTS

Francesc Baró is an environmental scientist (BSc, Autonomous University of Barcelona - UAB, 2004) trained in landscape and urban planning. He holds a Master’s degree in Ecological Economics and Environmental Management (ICTA-UAB, 2005) and another in Geographic Information Systems - GIS (Polytechnic University of Catalonia – UPC, 2007). He obtained his PhD in Environmental Science and Technology (ICTA-UAB, 2016), focusing his research on the operationalization of the ecosystem services and green infrastructure concepts in the urban context. He has participated (or is currently participating) in several international and national research projects, including URBES (Urban Biodiversity and Ecosystem Services; BiodivERsA ERA-NET, 2011-2015), OpenNESS (Operationalization of Natural Capital and Ecosystem Services; FP7, 2012-2017), ENABLE (Enabling Green and Blue Infrastructure Potential in Complex Social-Ecological Regions, BiodivERsA ERA-NET, 2017-2020), NATURVATION (NATURE-based URban innoVATION, Horizon 2020, 2016-2020) and GREENLULUs (Green Locally Unwanted Land Uses, ERC Grant, 2016-2021). Before starting his PhD, he worked some years as environmental consultant and GIS analyst, especially in Strategic Environmental Assessment (SEA).

In an increasingly urban planet, many cities and their inhabitants are facing multiple pressing threats within their borders, including heat stress, pollution and growing disconnection with the biosphere. Improving sustainability, resilience and liveability in urban areas should be thus a major goal on the policy agenda, from local to global authorities. The operationalization of concepts such as ‘ecosystem services’, ‘green infrastructure’ and ‘nature-based solutions’, is claimed by a mounting number of policy-makers, practitioners and scientists as the way forward to address many of these urban challenges. Francesc’s interests focus on the role of greening strategies to cope with diverse urban challenges from a critical and multi-scale spatial perspective, considering also negative impacts such

as disservices and trade-offs (e.g., green gentrification). Francesc has conducted most part of fieldwork and research in Barcelona, the city where he was born and he currently lives.

1. ACADEMIC AND PROFESSIONAL POSITIONS

1.1. Current positions

Postdoctoral research fellow at the Institute of Environmental Science and Technology (ICTA – <http://ictaweb.uab.cat>), Autonomous University of Barcelona (UAB – www.uab.cat) and at ‘Hospital del Mar’ Medical Research Institute (IMIM), Barcelona, Spain (since November 2016). Member of the research groups: (1) Barcelona Lab for Environmental Justice and Sustainability (BCNEJ – www.bcnej.org); (2) Laboratory for the Analysis of Social-Ecological Systems in a Global World (LASEG – http://ictaweb.uab.cat/linia_recerca.php?linia=30&area=2).

Coordinator of the Air Quality working group at the Catalan Professional Association of Environmental Scientists (COAMB – www.coamb.cat), Barcelona, Spain (since May 2016).

1.2. Past positions

Junior research associate and PhD candidate at the Institute of Environmental Science and Technology (ICTA – <http://ictaweb.uab.cat>), Autonomous University of Barcelona (UAB), Barcelona, Spain (March 2012 – October 2016). Member of the research group: Laboratory for the Analysis of Social-Ecological Systems in a Global World (LASEG – http://ictaweb.uab.cat/linia_recerca.php?linia=30&area=2).

Visiting PhD research fellow at the Department of Landscape Ecology, Institute of Geography, Humboldt-Universität zu Berlin, Berlin, Germany (September - October 2014).

Coordinator of the Landscape and Territory Commission at the Catalan Professional Association of Environmental Scientists (COAMB – www.coamb-cat), Barcelona, Spain (January 2014 - May 2016).

Environmental consultant and GIS analyst (self-employed), Barcelona, Spain (September 2011 - March 2012).

Environmental consultant and GIS analyst at Lavola (environmental consultancy – www.lavola.com), Barcelona, Spain (September 2007-August 2011).

Research support technician at the Institute of Environmental Science and Technology (ICTA), Autonomous University of Barcelona (UAB), Barcelona, Spain (November 2006-May 2009).

2. QUALIFICATIONS

2016. *PhD's degree* in Environmental Science and Technology, Institute of Environmental Science and Technology (ICTA), Autonomous University of Barcelona (UAB), Spain. Supervised by Prof. Erik Gómez-Baggethun and Prof. Dagmar Haase. Academic tutor: Prof. Victoria Reyes-García. Awarded with “Excellent cum laude”.

2012. *Postgraduate's degree* in Project Management (48 ECTS credits), Institute for Lifelong Learning (IL3), University of Barcelona (UB), Spain.

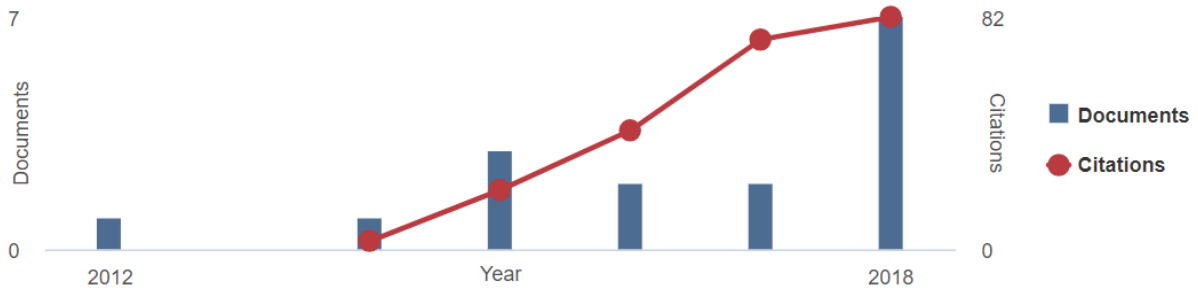
2007. *Master's degree* in Geographical Information Systems (GIS) (54 ECTS credits), Polytechnic University of Catalonia (UPC), Spain.

2007. *Diploma of Advance Studies (DEA)* in Regional Geographic Analysis (equal to a Certificate of Research Aptitude), Autonomous University of Barcelona (UAB), Spain.

2005. *Master's degree* in Initiation to Research in Ecological Economics and Environmental Management (35 ECTS credits), Institute of Environmental Science and Technology (ICTA), Autonomous University of Barcelona (UAB), Spain.

2004. *Bachelor's degree* in Environmental Science (320 ECTS credits), Autonomous University of Barcelona (UAB), Spain, including an Erasmus exchange stay in the Van Hall Instituut, the Netherlands.

3. SCIENTIFIC PUBLICATIONS



h-index: 7 (May 2018)

Source: SCOPUS (<https://www.scopus.com/authid/detail.uri?authorId=55652382900>)

3.1. Articles in international peer reviewed journals (published / in press / accepted for publication)

First author

Baró, F., Gómez-Baggethun, E., Haase, D. 2017. Ecosystem service bundles along the urban-rural gradient: Insights for landscape planning and management. *Ecosystem Services*. 24, 147–159. doi:10.1016/j.ecoser.2017.02.021

Baró, F., Palomo, I., Zulian, G., Vizcaino, P., Haase, D., Gómez-Baggethun, E. 2016. Mapping ecosystem service capacity, flow and demand for urban planning and policy: a case study in the Barcelona metropolitan region. *Land Use Policy* 57:405-417. doi: 10.1016/j.landusepol.2016.06.006

Baró, F., Haase, D., Gómez-Baggethun, E., Frantzeskaki, N. 2015. Mismatches between ecosystem services supply and demand in urban areas: A quantitative assessment in five European cities. *Ecological Indicators* 55:146–158. doi: 10.1016/j.ecolind.2015.03.013

Baró, F., Chaparro, L., Gómez-Baggethun, E., Langemeyer, E., Nowak, D. J., Terradas, J. 2014. Contribution of Ecosystem Services to Air Quality and Climate Change Mitigation Policies: The Case of Urban Forests in Barcelona, Spain. *Ambio* 43:466–479. doi: 10.1007/s13280-014-0507-x

Co-author

García-nieto, A.P., Geijzendorffer, I., Baró, F., Roche, P., Bondeau, A., Cramer, W., 2018. Impacts of urbanization around Mediterranean cities: Changes in ecosystem service supply. *Ecological Indicators* 91:589–606. doi:10.1016/j.ecolind.2018.03.082

Barton, D.N., Kelemen, E., Dick, J., Martin-Lopez, B., Gómez-Baggethun, E., Jacobs, S., Hendriks, C.M.A., Termansen, M., Llorente, M.G.-, Primmer, E., Dunford, R., Harrison, P.A., Turkelboom, F., Saarikoski, H., van Dijk, J., Rusch, G.M., Palomo, I., Yli-Pelkonen, V.J., Carvalho, L., Baró, F., et al.

2018. (Dis) integrated valuation – Assessing the information gaps in ecosystem service appraisals for governance support. *Ecosystem Services* 29:529-541. doi: <https://doi.org/10.1016/j.ecoser.2017.10.021>

Turkelboom, F., Leone, M., Jacobs, S., Kelemen, E., García-Llorente, M., Baró, F., et al. 2018. When we cannot have it all: Ecosystem services trade-offs in the context of spatial planning. *Ecosystem Services* 29:566-578. doi: 10.1016/j.ecoser.2017.10.011

Dunford, R., Harrison, P., Smith, A., Dick, J., Barton, D.N., Martin-Lopez, B., Kelemen, E., Jacobs, S., Saarikoski, H., Turkelboom, F., Verheyden, W., Hauck, J., Antunes, P., Aszalós, R., Badea, O., Baró, F., et al. 2018. Integrating methods for ecosystem service assessment: Experiences from real world situations. *Ecosystem Services* 29:499-514. doi: 10.1016/j.ecoser.2017.10.014

Zulian, G., Stange, E., Woods, H., Carvalho, L., Dick, J., Andrews, C., Baró, F., et al. 2018. Practical application of spatial ecosystem service models to aid decision support. *Ecosystem Services* 29:465-480. doi: 10.1016/j.ecoser.2017.11.005

Dick, J., Turkelboom, F., Woods, H., Iniesta-Arandia, I., Primmer, E., Saarela, S.-R., Bezák, P., Mederly, P., Leone, M., Verheyden, W., Kelemen, E., Hauck, J., Andrews, C., Antunes, P., Aszalós, R., Baró, F., et al. 2018. Stakeholders' perspectives on the operationalisation of the ecosystem service concept: Results from 27 case studies. *Ecosystem Services* 29:552-565. doi: doi.org/10.1016/j.ecoser.2017.09.015

Saarikoski, H., Primmer, E., Saarela, S.-R., Antunes, P., Aszalós, R., Baró, F., et al. 2018. Institutional challenges in putting ecosystem service knowledge in practice. *Ecosystem Services* 29:579-598. doi: 10.1016/j.ecoser.2017.07.019

Haase, D., Kabisch, S., Haase, A., Andersson, E., Banzhaf, E., Baró, F., et al. 2017. Greening cities – To be socially inclusive? About the alleged paradox of society and ecology in cities. *Habitat International*. 64:41–48. doi:10.1016/j.habitatint.2017.04.005

Kremer, P., Hamstead, Z., Haase, D., McPhearson, T., Frantzeskaki, N., Andersson, E., Kabisch, N., Larondelle, N., Rall, E.L., Voigt, A., Baró, F., et al., 2016. Key insights for the future of urban ecosystem services research. *Ecology and Society*. 21(2):29. doi:10.5751/ES-08445-210229

Depietri, Y., Kallis, G., Baró, F., Cattaneo, C. 2016. The urban political ecology of ecosystem services: The case of Barcelona. *Ecological Economics* 125:83–100. doi: 10.1016/j.ecolecon.2016.03.003

Langemeyer, J., Baró, F., Roebeling, P., Gómez-Baggethun, E. 2015. Contrasting values of cultural ecosystem services in urban areas: The case of park Montjuïc in Barcelona. *Ecosystem Services* 12:178–186. doi: 10.1016/j.ecoser.2014.11.016

Rodríguez-Rodríguez, D., Kain, J.H., Haase, D., Baró, F., Kaczorowska, A. 2015. Urban self-sufficiency through optimised ecosystem service demand. A utopian perspective from European cities. *Futures* 70:13–23. doi: 10.1016/j.futures.2015.03.007

Lobo, A., Ara, F., Baró, F., Camino, C. 2012. Geospatial analysis for conservation: applications with open-source software in the Natural Parks of Barcelona. *Applied Geomatics* 4:113–122. doi: 10.1007/s12518-012-0079-z

3.2. Articles in international peer reviewed journals (submitted / under review / in preparation)

Calcagni, F., Langemeyer, J., Baró, F. Mapping the intangible: Using geolocated social media data to examine landscape aesthetics. Under review in *Land Use Policy*.

Langemeyer, J., Baró, F., Gómez-Baggethun, E. Ecosystem services in cross-scale urban landscape planning. Will Barcelona become a successful example? In preparation.

3.3. Book chapters, thesis and conference proceedings (published, accepted for publication)

First author

Baró, F., Gómez-Baggethun, E. 2017. Assessing the potential of regulating ecosystem services as nature-based solutions in urban areas. Book chapter in: Kabisch, N., Bonn, A., Korn, H., Stadler, J. (eds.). *Nature-based Solutions to Climate Change in Urban Areas - Linkages between Science, Policy and Practice* (pp. 139-158). ISBN: 978-3-319-53750-4. Springer. Available via: https://doi.org/10.1007/978-3-319-56091-5_9

Baró, F., et al. 2017. Birds as providers of ecosystem services. Book chapter in: Anton, M., Herrando, S., Garcia, D., Ferrer, X. and Cebrian, R. (eds.): *Barcelona Breeding Bird Atlas* [in Catalan, Spanish and English]. Barcelona City Council/ICO/UB/Zoo Barcelona. ISBN: 978-84-9156-009-8. Available via: www.barcelona.cat/barcelonallibres

Baró, F. 2016. Urban Green Infrastructure: Modelling and mapping ecosystem services for sustainable planning and management in and around cities. PhD thesis supervised by Prof. Erik Gómez-Baggethun and Dagmar Haase. Autonomous University of Barcelona (UAB). doi: 10.13140/RG.2.2.35758.92485/1. Available via: <http://hdl.handle.net/10803/399173>

Baró, F., Bugter, R., Gómez-Baggethun, E., Hauck, J., Kopperoinen, L., Liqueste, C., Potschin, P. 2016. Green Infrastructure. Book chapter in: Potschin, M. and K. Jax (eds.): *OpenNESS Ecosystem Service Reference Book*. EC FP7 Grant Agreement no. 308428. Available via: www.openness-project.eu/library/reference-book

Baró, F. 2015. A multi-scale assessment of regulating ecosystem services in Barcelona. Book chapter in: Sergi Nuss-Girona, Mita Castañer (eds.): *Ecosystem Services: Concepts, methodologies and instruments for research and applied use*. Girona: Documenta Universitaria, 2015. (Quaderns de medi ambient; 6). ISBN 978-84-9984-308-7. Available via: <https://www.documentauniversitaria.cat/botiga.php?a=llibre&id=825>

Baró, F., Chaparro, L., Gómez-Baggethun, E., Langemeyer, E., Nowak, D. J., Terradas, J. 2014. Contribution of Barcelona's green space to air quality and climate change. In: XVI Spanish Congress on Arboriculture, *The contribution of trees in the sustainable city*. Conference proceedings [only in Spanish]. Valencia, Spain, 23-25 October 2014. Available via: http://ocs.editorial.upv.es/index.php/CNArboricultura/XVI_CNA/paper/view/86/65

Baró, F. 2007. Planning proposal for the agroforestry mosaic of Sant Llorenç del Munt i l'Obac Natural Park: a prioritization of agricultural open spaces using a GIS-based MCE (Geographic Information Systems – Multi-criteria Evaluation). Master thesis [only in Catalan] supervised by Dr. Agustín Lobo. Available via: <http://hdl.handle.net/2072/97186>

Baró, F., Bertolaso, M., González, E., Niemann, M., Atiapah, S.E.I., Dao, N.M.HA. 2003. Sustainable policies for the Wadden Sea as a wetland area. Bachelor thesis supervised by David Goldsborough. Available upon request.

Co-author

Anguelovski, I., Argüelles, L., Baró, F., Cole, H.V.S., Connolly, J.J.T., García-Lamarca, M., Loveless, S., Pérez del Pulgar, C., Shokry, G., Trebic, T., Wood, E. 2018. Green Trajectories: Municipal policy trends and strategies for greening in Europe, Canada and United States (1990-2016). BCNUEJ book. Available via: <http://www.bcnuej.org/wp-content/uploads/2018/04/GreenTrajectories.pdf>

Bródy, L. S., Chelleri, L., Baró, F., Ruiz-Mallen, I. 2018. Enhancing Community Resilience in Barcelona: Addressing Climate Change and Social Justice Through Spaces of Co-Management. Book chapter in: Galderisi, A., Colucci, A. (eds.): *Smart, Resilient and Transition Cities: Emerging Approaches and Tools for A Climate-Sensitive Urban Development*. ISBN: 9780128114773. Springer. Available via: <https://www.elsevier.com/books/smart-resilient-and-transition-cities/galderisi/978-0-12-811477-3>

Kopperoinen, L., Baró, F., et al. 2017. Integrating nature-based solutions in urban planning: examples from five case studies. In: European Conference on Biodiversity and Climate Change (ECBCC) *Nature-based solutions to climate change in urban areas and their rural surroundings*. Conference Proceedings. Bonn, Germany, 17-19 November 2015. Available via: <https://www.bfn.de/fileadmin/BfN/service/Dokumente/skripten/Skript456.pdf>

Langemeyer, J., Calvo, L., Abellán, A., Baró, F., Batalla, M., Boleda, M., Guerrero, V., Sanyé-Mengual, E., Bosch, M. 2016. Enhancing ecosystem services in cities through multifunctional rooftop gardens. Insights from a co-designed pilot project in Barcelona, Spain. In: *Growing in cities: Interdisciplinary Perspectives on Urban Gardening International Conference*. Conference proceedings. Basel, Switzerland, 9-10 September 2016. Available via: <http://hdl.handle.net/2117/102123>

Potschin, M., Kretsch, C., Haines-Young, R., Furman, Berry, P., Baró, F. 2016. Nature-based solutions. Book chapter in: Potschin, M. and K. Jax (eds): *OpenNESS Ecosystem Service Reference Book*. EC FP7 Grant Agreement no. 308428. Available via: www.openness-project.eu/library/reference-book

Lobo, A., Ara, F., Baró, F., Camino, C. 2010. Geoinformation analysis for Conservation: experiences with Open Source Software in the Natural Parks of Barcelona. Conference proceedings. Free and Open Source Software for Geospatial (FOSS4G) meeting, Barcelona, Spain, 6-9 September 2010. Available via: <http://2010.foss4g.org/papers/4181.pdf>

3.4. Selected scientific reports and outreach material

First author

Baró, F., Kotsila, P., Sekulova, F. 2018. Nature-based solutions: a new concept to achieve greener, more resilient and liveable cities? [only in Catalan]. Outreach article in *Sostenible.cat*. Available via: <http://sostenible.cat/reportatge/solucions-basades-en-natura-un-nou-concepte-per-assolir-ciutats-mes-verdes-resilients-i>

Baró, F. 2017. How can we create greener cities to be socially inclusive too? Outreach article in UAB Divulga (Barcelona research and innovation). Available via: <http://www.uab.cat/web/news-detail/how-can-we-create-greener-cities-to-be-socially-inclusive-too-1345680342044.html?noticiaid=1345730710636>

Baró, F. 2016. The green infrastructure in Barcelona is still very insufficient to have positive effects on the environment quality and wellbeing. Outreach article in UAB Divulga (Barcelona research and innovation). Available via: <http://www.uab.cat/web/news-detail/the-green-infrastructure-in-barcelona-is-still-very-insufficient-to-have-positive-effects-on-the-environment-quality-and-wellness-1345680342044.html?noticiaid=1345715658419>

Baró, F. 2015. Urban green space, an opportunity to improve air quality and mitigate the impacts of climate change in Barcelona? [only in Catalan]. Opinion paper in *Punt Ambiental* n° 21 on Ecosystem Services, the online journal of the Catalan Professional Association of Environmental Scientists (COAMB). Available via: <http://www.coamb.cat/puntambiental/index.php>

Baró, F., Castells, C. 2015. Integrating the ecosystem services framework in landscape planning through mapping. [only in Catalan]. Opinion paper in *Punt Ambiental* nº 21 on Ecosystem Services, the online journal of the Catalan Professional Association of Environmental Scientists (COAMB). Available via: <http://www.coamb.cat/puntambiental/index.php>

Baró, F., Basnou, C., Pino, J., Gómez-Baggethun, E., et al. 2015. Development and mapping of a system of ecosystem services indicators in the province of Barcelona within the framework of the Territorial Information System for the open spaces network (SITxell) [only in Catalan]. Final report for Diputació de Barcelona (Barcelona Regional Council). Available upon request.

Baró, F., van Ham, C. 2014. Green Infrastructure, a wealth for cities. BiodivERsA URBES Project Factsheet 6. doi: 10.13140/2.1.4960.4167

Baró, F., Gómez-Baggethun, E., Palomo, I., 2014. Development and mapping of a system of ecosystem services indicators in the province of Barcelona within the framework of the Territorial Information System for the open spaces network (SITxell) [only in Catalan]. Final report for Diputació de Barcelona (Barcelona Regional Council). Available upon request.

Baró, F. 2013. Urban green space, an opportunity to improve air quality in Barcelona? [only in Catalan]. Opinion paper in *Punt Ambiental* nº 13 on Air Quality, the online journal of the Catalan Professional Association of Environmental Scientists (COAMB). Available via: <http://www.coamb.cat/puntambiental/opinions.php?notid=78>

Co-author

Bosch, J., Baró, F. [contributing author], et al. 2018. Environmental criteria for green space design – NTJ 01C Part C [only in Catalan and Spanish]. Technical report of the series Technological Norms of Gardening and Landscape Architecture (NTJ). Edited by *Fundació de la Jardineria i el Paisatge*. ISBN: 978-84-96564-78-7. Available via: <http://fjip-ntj.org/>

Turkelboom, F., Leone, M., Baró, F., et al. 2017. Local planning with ecosystem services and stakeholder participation. OpenNESS project policy brief nº 7. Available via: http://www.openness-project.eu/sites/default/files/Policy%20Brief_ES_local%20planning_final%20300817.pdf

Barton, D., Dunford, R., [...], Baró, F. [contributing author] et al. 2017. Integrated valuation of ecosystem services. Guidelines and experiences. EU FP7 OpenNESS Project Deliverable 33-44, Barton, D.N. and P.A. Harrison (Eds.). European Commission FP7.

Basnou, C., Baró, F., Gómez-Baggethun, E., et al. 2016. Analysis of ecosystems services in the province of Barcelona and proposal of green infrastructure within the framework of the Territorial Information System for the open spaces network (SITxell) [only in Catalan]. Final report for Diputació de Barcelona (Barcelona Regional Council). Available upon request.

Maes, J., Zulian, G., Thijssen, M., Castell, C., Baró, F., et al. 2016. Mapping and Assessment of Ecosystems and their Services. Urban ecosystems. 4th Report – Final. Publications Office of the European Union, Luxembourg. ISBN 978-92-79-58515-9. doi: 10.2779/625242

Kopperoinen, L., Stange, E., Rusch, G., Baró, F., Garcia-Blanco, G., Mederly, P. 2015. Integrating Nature-based Solutions in urban planning. OpenNESS project policy brief nº3. Available via: http://www.openness-project.eu/sites/default/files/OpenNESS_brief_03.pdf

Langemeyer, J., Baró, F. 2015. City focus on Barcelona. URBES project dissemination material. IUCN (ed.) Available via: http://www.iucn.org/about/union/secretariat/offices/europe/resources/urbes_city_focus/barcelona__spa in/

Moreso, A., Baró, F. 2013. Are we all advancing at the same speed and in the same direction towards a smart urban future? [only in Catalan]. Opinion paper in *Punt Ambiental* n° 10 on Smart Cities, the online journal of the Catalan Professional Association of Environmental Scientists (COAMB). Available via: <http://www.coamb.cat/puntambiental/opinions.php?notid=59>

Gómez-Baggethun, E., Langemeyer, J., Baró, F. 2012. Scientific review of methods, tools and techniques for the integrated accounting and valuation of ES in monetary and non-monetary terms. Working paper. BiodivERsA URBES Project Deliverable 10. Available upon request.

Lobo, A., Vega, C., Baró, F. 2007. Selection of open areas to recover and land use proposals: an approach by spatial and multi-criteria analysis [only in Catalan]. Reports on Environmental Sciences 6 (ICTA-UAB). Available via: <http://hdl.handle.net/2072/40712>

4. CONFERENCES, SEMINARS, WORKSHOPS

4.1. Oral communications in conferences

Turkelboom, F., Leone, M., Jacobs, S., Kelemen, E., García-Llorente, M., Baró, F. [co-author], Termansen, M., Barton, D.N., Berry, P., Stange. When we cannot have it all: Ecosystem services trade-offs in real-life planning contexts. II Open Science Conference of the Programme of Ecosystem Change and Society (PECSII), *Place-based transdisciplinary research for Global Sustainability*, Oaxaca City, Mexico, 7-10 November, 2017.

Basnou, C., Baró, F. [co-author], Langemeyer, J., Castell, C., Dalmases, C., Pino, J. Biodiversity and ecosystem services in the province of Barcelona. Implications for green infrastructure planning at landscape scale. European Forum on Urban Forestry (EFUF), *Urban Forest Boundaries. Within, between and beyond the city*, Barcelona, Spain, 31 May – 2 June 2017.

Baró, F. [author and speaker], Gómez-Baggethun, E., Haase, D. Ecosystem service bundles along the urban-rural gradient: Implications for landscape planning and management. European Ecosystem Services Conference, *Helping nature to help us*, University of Antwerp, Belgium, 19-23 September 2016.

Turkelboom, F., [...], Baró, F. [co-author], et al. When you cannot have it all: Ecosystem services trade-offs in local planning contexts. European Ecosystem Services Conference, *Helping nature to help us*, University of Antwerp, Belgium, 19-23 September 2016.

Langemeyer, J., Calcagni, F., Baró, F. [co-author] Mapping aesthetic value for land use planning using crowdsourced indicators– the case study of the Barcelona Province. European Ecosystem Services Conference, *Helping nature to help us*, University of Antwerp, Belgium, 19-23 September 2016.

Langemeyer, J., [...], Baró, F. [co-author], et al. Enhancing ecosystem services in cities through multifunctional rooftop gardens. Insights from a co-designed pilot project in Barcelona, Spain. Growing in cities: Interdisciplinary Perspectives on Urban Gardening International Conference. Basel, Switzerland, 9-10 September 2016.

Castell, C., Baró, F. [co-author], Pino, J. Planning of open spaces at local and regional scales. An approach from ecosystem services and green infrastructure [in Spanish]. VIII International Congress of Spatial Planning (*VIII Congreso Internacional de Ordenación del Territorio*), *New Times, New Objectives*, Fuerteventura, Spain, 25-27 May 2016.

Turkelboom, F., [...], Baró, F. [co-author], et al. Ecosystem services real-world applications: The proof of the pudding is in the eating! 8th Ecosystem Services Partnership (ESP) World Conference,

Ecosystem Services for Nature, People and Prosperity. Stellenbosch, South Africa, 9-13 November 2015.

Baró, F. [first author and invited speaker] Chaparro, L., Gómez-Baggethun, E., Langemeyer, J., Nowak, D. J., Terradas, J. Contribution of Barcelona's green space to air quality and climate change [in Spanish]. XVI Spanish Congress on Arboriculture, *The contribution of trees in the sustainable city*. Valencia, Spain, 23-25 October 2014.

Langemeyer, J., Gómez-Baggethun, E., Baró, F. [co-author] Integrating multiple ecosystem service values by social multi-criteria evaluation – an application to inform urban policy making. The 11th Biennial Conference of the International Society of Ecological Economics (ISEE), *Well-being and equity within planetary boundaries*. University of Iceland, Iceland, 13-15 August 2014.

Baró, F. [first author and speaker], Gómez-Baggethun, E., Haase, D., Palomo, I. Mapping ecosystem services in the urban region of Barcelona to support local and regional decision-making. Resilience 2014. 3rd International Science and Policy Conference on the resilience of social & ecological systems: *Resilience and Development: Mobilizing for transformation*. Montpellier, France, 4-8 May 2014.

Langemeyer, J., Haase, D., McPhearson, T., Kremer, P., Baró, F. [co-author], Rall, E., Gómez-Baggethun, E., Frantzeskaki, N. Multi-criteria framework for enhancing relevance of urban ecosystem service assessments for policy-making. Society for Urban Ecology (SURE) World Conference, Berlin, Germany, 25-27 July 2013.

Baró, F. [first author], Langemeyer, J., Gómez-Baggethun, E., Chaparro, L., Terradas, J. 2013. Quantifying regulating ecosystem services provided by urban forests in Barcelona, Spain. The 10th biennial conference of the ESEE 2013 Ecological Economics and Institutional Dynamics. Lille, France, 18-21 June 2013.

Langemeyer, J., Baró, F. [co-author], Gómez-Baggethun, E. 2013. Valuing urban ecosystem services: Three examples from Barcelona—Urban Gardens, Parks & Forests. Resilience Cities Conference, Bonn, Germany, 31 May – 2 June 2013.

Frantzeskaki, N., Haase, D., Baró, F. [co-author], Gomez-Baggethun, E., Artmann, M., Schewenius, M., Elmqvist, T., Kaczorowska, A., Kain, J-H., van Ham, C. 2013. Socio-ecological transitions of cities. Exploring spatial, ecological and governance dynamics in European cities. The 4th International Conference on Sustainability Transitions. Zurich, Switzerland, 19-21 June 2013.

4.2. Oral talks in seminars, workshops and meetings

Baró, F. [author and invited speaker] Nature-based solutions in Mediterranean cities. Expert's meeting "Towards the implementation of Nature-based solutions in Mediterranean cities". Organized by IUCN-Med, Málaga, Spain, 20-21 February 2018.

Baró, F. [author and invited speaker] Ecosystem services in the province of Barcelona [in Catalan]. Seminar for environmental educators and technicians of the Natural Parks Network of Diputació de Barcelona (Barcelona Regional Council), Barcelona, Spain, 19 December 2017.

Baró, F. [author and key-note speaker] Urban green infrastructure in the European context [in Spanish]. Seminar on "Urban Green Infrastructure" ("*Donem pas al verd*"). Organized by Barcelona City Council and Spanish Association of Public Parks and Gardens, Barcelona, Spain, 27 June 2017.

Baró, F. [participant] SDG Labs. Collaborative thinking for greener cities. Organized by Altekio and Autonomous University of Madrid and supported by Future Earth and Stockholm Resilience Centre, Madrid, Spain, 20 June 2017.

Baró, F. [author and key-note speaker] The benefits of urban green space for quality of life [in Catalan]. II Forum of “Viles Florides” (Flower Towns). Organized by “Viles Florides” (<https://vilesflorides.cat/>), Blanes, Spain, 28 April 2017.

Baró, F. [author and invited speaker] What are nature-based solutions? [in Catalan]. Seminar “Urban resilience for climate change local adaptation. Organized by Barcelona Regional Council and Catalan Professional Association of Environmental Scientists (COAMB), Barcelona, Spain, 31 March 2017.

Baró, F. [author and speaker] Nature-based solutions [in Catalan]. Workshop of the Barcelona Urban-Regional Innovation Partnership (URIP), Naturvation project, IMIM (PRBB building), 28 March 2017.

Baró, F. [author and invited speaker] The ecosystem services of urban green space [in Catalan]. Seminar series “Green City” on City, Environment, Health and Drawing. Barcelona City Council, Barcelona, Spain, 10 June 2016.

Gómez-Baggethun, E., Baró, F. [co-author] Ecosystem services provided across urban-rural gradients. Workshop ‘Ecogradientes’, Autonomous University of Madrid (UAM), Madrid, Spain, 7 July 2015.

Baró, F. [first author and speaker], Langemeyer, J., Gómez-Baggethun, E. Integrating ecosystem services and green infrastructure in urban planning: Case study in the Barcelona Metropolitan Region. OpenNESS Annual meeting, 20-24 April 2015, Barcelona, Spain.

Baró, F. [author and speaker] Monetary & non-monetary valuation of urban ecosystem services. URBES 3rd Training Session - *An in-depth insight in the results of the URBES Project*. Brussels, Belgium, 14 January 2015.

Baró, F. [author and speaker], Martín-López, B., Palomo, I. Ecosystem service supply and demand spatial (mis)matches. OpenNESS WP 3/4/5 Integrated Assessment & Valuation Workshop. Edinburgh, UK, 17-21 November 2014.

Martín-López, B., Baró, F. [co-author], Palomo, I. Integrated mapping of ecosystem services supply and demand. AGFORWARD (Agroforestry for Europe) WP 7 Meeting, Copenhagen, Denmark, 12 November 2014.

Baró, F. [author and invited speaker] The URBES project: urbanization and ecosystems [in Catalan]. “Ecotendències” seminar series: *Ecosystems and biodiversity: an economic resource?* Barcelona, Spain, 3 June 2014.

Baró, F. [author and speaker] Operationalization of the Ecosystem Services Framework in Urban Areas. ICTA-UAB seminars in Ecological Economics, Ethno-Ecology and Integrated Assessment. Cerdanyola del Vallès, Spain, 29 January 2014.

Baró, F. [author and speaker], Gómez-Baggethun, E. Sustainable urban planning in the metropolitan region of Barcelona. 1st OpenNESS Workshop. Loch Leven, UK, 21-24 October 2013.

4.3. Poster presentations in conferences, seminars and workshops

Kopperoinen, L., Baró, F. [co-author and co-presenter], et al. Integrating nature-based solutions in urban planning: examples from five case studies. *Nature-based solutions to climate change in urban areas and their rural surroundings - linkages between science, policy and practice*. European Conference on Biodiversity and Climate Change (ECBCC), Bonn, Germany, 17-19 November 2015.

Langemeyer, J., Baró, F. [co-author], Gómez-Baggethun, E. Multi-Criteria Evaluation of Ecosystem Services – Informing Urban Green Infrastructure Policies. 11th International Conference of the European Society for Ecological Economics (ESEE 2015): *Transformations*. Leeds, UK, 30 June – 3 July 2015.

Baró, F. [first author and presenter], Langemeyer, J., Gómez-Baggethun, E. Integrating ecosystem services and green infrastructure in urban planning: Case study in the Barcelona Metropolitan Region. 2nd OpenNESS Annual meeting, Barcelona, Spain, 20-24 April 2015.

Baró, F. [first author and presenter], Langemeyer, J., Gómez-Baggethun, E. Sustainable planning of urban green infrastructure in the metropolitan region of Barcelona. 1st OpenNESS Annual meeting, Budapest, Hungary, 24-28 March 2014.

Baró, F. [first author], Haase, D., Gómez-Baggethun, E., Frantzeskaki, N. Assessing the mismatch between supply and demand of urban ecosystem services at city scale. A comparative analysis of European cities. Society for Urban Ecology (SURE) World Conference, Berlin, Germany, 25-27 July 2013.

Baró, F. [first author], Gómez-Baggethun, E., Barton, D. The ecology and economics of urban ecosystem services. A spatially explicit approach in the city of Barcelona. The 10th Biennial Conference of the ISEE 2012, Ecological Economics and Rio+20: Challenges and Contributions for a Green Economy. Rio de Janeiro, Brazil, 16-19 June 2012.

5. AFFILIATIONS AND APPOINTMENTS

5.1. Research and professional organizations

Member of the Ecosystem Service Partnership (ESP - <http://es-partnership.org/>) since 2016, including the participation in different working groups (e.g., Mediterranean Biome).

Member of the European Network of Environmental Professionals (ENEP - www.efaep.org/) since 2012.

Member of the Catalan Professional Association of Environmental Scientists (COAMB – www.coamb.cat) since 2004, including coordination of different working groups.

6. RESEARCH PROJECTS AND PROGRAMS

6.1. Ongoing international research projects

2016-2021. Green Locally Unwanted Land Uses (GREENLULUS). Funding: ERC Starting Grant Call 2015 (PI: Isabelle Anguelovski). Total EU Contribution: 1,453,868€. Role: Postdoctoral research team member (ICTA-UAB; IMIM).

2016-2020. NATure-based Urban innoVATION (NATURVATION). Funding: European Commission under the Horizon 2020 scheme (Call: H2020-SCC-NBS-1stage-2016). Total EU contribution: 7,803,348€ (managed: 619,848€). Role: Postdoctoral research team member and case study leader (ICTA-UAB; IMIM).

2016-2019. Enabling green-blue infrastructure in complex social-ecological regions: system solutions to wicked problems (ENABLE). Funding: BiodivERsA Joint Call 2015-2016 under the Horizon 2020 ERA-NET COFUND scheme and the Spanish Ministry for Economy and Competitiveness (MINECO) Total funding request: 2,629,977€ (managed: 134.439€). Role: Co-coordinator of work package and case study co-leader (ICTA-UAB; IMIM).

6.2. Finished international research projects

2013-2017. Operationalisation of Natural Capital and Ecosystem Services: From Concepts to Real-world Applications (OpenNESS). Funding: European Commission under the FP7 scheme (Grant agreement n°: 308428). Total EU contribution: 9,956,353€ (managed: 257,330€). Role: Research team member and case study co-leader (ICTA-UAB).

2012-2015. Urban Biodiversity and Ecosystem Services (URBES). Funding: BiodivERsA Joint Call 2010-2011 under the FP7 ERA-NET COFUND scheme and the Spanish Ministry for Economy and Competitiveness (MINECO) (code: PRI-PIMBDV-2011-1179). Total funding request: 2,445,000€ (managed: 121,000€). Role: Member of the research team and case study co-leader (ICTA-UAB).

2008-2010. Constitution of a European inter-territorial network Living Labs for the application of satellite technologies (RITA). Funding: European Commission under the FP7- CAPACITIES – Regions of Knowledge scheme. Total grant: 250,000€ (managed: 30,000€). Role: Member of the research team (ICTA-UAB).

6.3. Ongoing national research projects

2017-2018. Integration of cultural ecosystem services in landscape planning and strategic environmental assessment in Catalonia. Funding: Agreement of collaboration with Generalitat de Catalunya (Catalan Government). Total grant: 20,500€. Role: Project co-coordinator.

6.4. Finished national research projects

2016-2017. Definition, characterization and dissemination of the green infrastructure in the province of Barcelona within the framework of the Territorial Information System for the open spaces network (SITxell). Funding: Agreement of collaboration with Diputació de Barcelona (Barcelona Regional Council). Total grant: 28,000€. Role: Project coordinator.

2015-2016. Assessment of ecosystem services in the province of Barcelona and proposal of green infrastructure within the framework of the Territorial Information System for the open spaces network (SITxell). Funding: Agreement of collaboration with Diputació de Barcelona (Barcelona Regional Council). Total grant: 30,000€. Role: Project co-coordinator.

2014-2015. Development and mapping of a system of ecosystem services indicators in the province of Barcelona within the framework of the Territorial Information System for the open spaces network (SITxell). Funding: Agreement of collaboration with Diputació de Barcelona (Barcelona Regional Council). Total grant: 15,000€. Role: Project co-coordinator.

2013-2014. Mapping and assessment of ecosystem services within the framework of the Territorial Information System for the open spaces network (SITxell). Funding: Agreement of collaboration with Diputació de Barcelona (Barcelona Regional Council). Total grant: 9,000€. Role: Project co-coordinator.

2007-2008. Delimitation and characterization of open areas in the Natural Parks of the South-West Territorial Directorate of Barcelona Provincial Council. Funding: Diputació de Barcelona (Barcelona Regional Council). Role: Junior research team member.

7. SCIENTIFIC EVALUATION

7.1. Reviewer for scientific journals and editorials

I have served as reviewer for the scientific journals: *Frontiers in Ecology and the Environment*; *Landscape and Urban Planning*; *Plos One*; *Sustainability*; *Sustainability Cities and Society*; *Ecological Indicators*; *Environmental Impact Assessment Review*; *Moravian Geographical Reports*

My complete scientific reviewer profile is available from:
<https://publons.com/author/418738/francesc-baro#profile>

8. INDIVIDUAL AWARDS AND GRANTS

January 2018 – Award for the best article in the Science category of the Social Observatory of "la Caixa" Awards (<https://observatoriosociallacaixa.org/en/premios>). Article: Urban greening: towards healthier and more resilient cities? (Based on my PhD Thesis). Total prize: 10,000€.

November 2016 – First prize in the research activity category (for my PhD thesis) of the 5th Environmental Science Awards, organized by the Catalan Professional Association of Environmental Scientists (COAMB – www.coamb.cat) and the Catalan Association of Environmental Science (ACCA – www.cienciasambientals.cat). Total prize: 150€.

September 2015 – August 2016. VI Call of Scholarships for Research in Energy and Environment. Funder: Iberdrola Foundation. Project proposal: Integration of the ecosystem services and green infrastructure in landscape planning and management. Case study of the metropolitan region of Barcelona (part of my PhD project). Total grant: 19,680€.

October 2005 – September 2007. “La Caixa” Scholarship for Postgraduate studies in Spain. Funder: “La Caixa” Foundation. It funded my enrolment in the Master in Geographical Information Systems (UPC) and living expenses. Total grant: 22,000€ (approx.).

August 2003 – July 2004. Erasmus Scholarship for an undergraduate university exchange stay in EU countries. Funder: European Commission. It funded my Erasmus exchange stay in the Van Hall Instituut, the Netherlands where I carried out my undergraduate thesis. Total grant: 4,000€ (approx.).

9. TEACHING AND SUPERVISION

9.1. Master, undergraduate and training courses

2018. Guest lecturer in the undergraduate module “Sustainable Urban Development – Barcelona Field Course”, Newcastle University. Lecture: Urban greening: towards more liveable and inclusive cities? (2h, in English). Held in PRBB building, Barcelona, Spain, 20 March 2018.

2017. Guest lecturer in the undergraduate module “Sustainable Urban Development – Barcelona Field Course”, Newcastle University. Lecture: Integrating ecosystem services in urban sustainability policy (2h, in English). Held in PRBB building, Barcelona, Spain, 27 March 2017.

2017. Guest lecturer in the International Master in Landscape Architecture (Workshop B2: the systems of green infrastructure: from urban green space to natural areas). Lecture: Green infrastructure: conceptual framework and practical applications (2h, in Spanish). Polytechnic University of Catalonia (UPC), Barcelona, Spain, 25 January 2017.

2017. Panelist in the Joint European Master in Environmental Studies: Cities and Sustainability (Course on Research Design and Qualitative Methods for Social Science Research). Talk: The peer review process: how to deal with reviews (1h, in English). Autonomous University of Barcelona (UAB), Cerdanyola del Vallès, Spain, 25 January 2017.

2016. Lecturer in the training course on *Ecosystem services: integration in planning, management and environmental assessment*. Lecture: Development of spatial indicators for ecosystem service capacity, flow and demand (1h, in Catalan). Generalitat de Catalunya (Catalan Government), Department of Territory and Sustainability, Barcelona, Spain, 5 July 2016.

2016. Lecturer in the Advance International Course on *Mapping ecosystem services for landscape planning*. Lecture: Indicator based mapping (2h, in Spanish). International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM), Zaragoza, Spain, 15-19 February 2016.

2015. Lecturer in the XV International Summer School on the Environment (ISSE 2015), *Ecosystem Services: Concepts, methodologies and instruments for research and applied use*. Lecture: A multi-scale assessment of regulating ecosystem services in Barcelona (1h, in Catalan). University of Girona, Spain, 2-3 October 2015.

9.2. Master thesis supervision

Calcagni, F. 'Mapping and comparing landscape aesthetic capacity and flow in the Barcelona Province using a photo-series crowd-based approach'. JEMES (Join European Master in Environmental Studies) CiSu (Cities and Sustainability) Master thesis, Institute of Environmental Science and Technology (ICTA-UAB). Supervised by Langemeyer, J., co-supervised by Roebeling, P. and Baró, F. January – September 2016.

Zhao, M. 'Mapping recreational opportunities in the province of Barcelona'. Internship report. MSc in Urban Environmental Management, Wageningen University. Supervised by Baró, F. and de Groot, R. April – July 2014.