

“It is not enough to do your best; you must know what to do and then do your best.”
W.E. Deming

PERSONAL INFORMATION

Family name, First name: BRAVO OVIEDO, ANDRÉS

Research ID: D-1512-2009

Date of birth: 10/03/1976

UNESCO Code: 310608

URL for web site: www.bravo-oviedo.info



• EDUCATION

- 16/07/2003 – 17/02/2010 PhD: Dominant height growth variability of *Pinus pinaster* Ait. in inland Spain, ETSIIAA/Sustainable Forest Management Research Institute, University of Valladolid/ES
- 01/09/1998 – 17/10/2001 Master: Forestry Engineer
ETSIIAA/Department of Forest Resources, University of Valladolid/ES
- 20xx Language Course: Certificado de Ciclo Elemental del idioma Francés [French Level, B1, DELF B1] / Regional Ministry of Education, Madrid, ES
- 2008 Language Course: Certificado de Aptitud del Ciclo Superior del idioma Inglés [English Level, B2, FCE, TOEFL 500-547] / Regional Ministry of Education, Madrid, ES
- 2006-2007 Postgraduate course: Métodos avanzados de estadística aplicada [Advanced Applied Statistical Methods] / UNED, ES
- 2002-2003 Postgraduate course: Técnicas de Estadística Multivariante [Multivariate Analysis]/ UNED, ES

• CURRENT POSITION(S)

- 09/12/2008 – Currently Research Assistant (Técnico I+D+i)
National Institute for Agricultural and Food Research and Technology (INIA) / Forest Research Centre (CIFOR) / ES
- 11/06/2009 – Currently Researcher
Sustainable Forest Management Research Institute/ University of Valladolid/ ES

• PREVIOUS POSITIONS

- 17/10/2005 – 08/12/2008 Research Collaborator (Colaborador I+D+i)
National Institute for Agricultural and Food Research and Technology (INIA) / Forest Research Centre (CIFOR) / ES

• SCI PEER REVIEW PUBLICATIONS (WoS H-index: 7, Google Scholar H-index: 9)

- **Bravo-Oviedo, A.**, Barreiro, S., Strelcova, K., Pretzsch, H. 2014. EuMIXFOR introduction: Integrating Scientific knowledge in sustainable management of mixed forests. *Forest Systems* 23 (3) (Pending of page assignment)
- **Bravo-Oviedo, A.**, Pretzsch, H., Ammer, C., Andematten, E., Barbati, A., Barreiro, S., Brang, P., Bravo, F., Coll, L., Corona, P. et al. 2014. European mixed forests. Definition and Perspectives. *Forest Systems* 23 (3) (Pending of page assignment)

- López-Senespleda, E., **Bravo-Oviedo, A.**, Alonso, R., Montero, G. 2014. Modeling dominant height growth including site attributes in the GADA approach for *Quercus faginea* Lamk. in Spain. *Forest Systems* 23(3): 494-499. DOI:10.5424/fs/2014233-04937
- Ruiz-Peinado, R., **Bravo-Oviedo, A.**, Montero, G., Río M. 2014. Carbon stocks in Scots pine afforestation under different thinning intensities management. *Mitigation and Adaptation Strategies for Global Change*. D.O.I. 10.1007/s11027-014-9585-0
- Río, M., Rodríguez, J., **Bravo-Oviedo, A.**, Ruiz-Peinado, R., Cañellas, I., Gutiérrez, E. 2014. Aleppo pine vulnerability to climate stress is independent of site productivity of forest stands in south-eastern Spain. *Trees - Structure and Function* D.O.I. 10.1007/s00468-014-1031-0
- **Bravo-Oviedo, A.**, Río, M., Calama, R., Valentine, H.T. 2014. New approaches to modelling cross-sectional area to height allometry in four Mediterranean pine species. *Forestry* 87: 399-406
- Tesfaye, M.A., **Bravo-Oviedo, A.**, Bravo, F., Kidane, B., Bekele, K., Sertse, D. 2014. Selection of tree species and soil management for simultaneous fuelwood production and soil rehabilitation in the Ethiopian Central Highlands. *Land Degradation & Development* <http://doi.wiley.com/10.1002/ldr.2268>
- Ruiz-Peinado, R., **Bravo-Oviedo, A.**, López-Senespleda, E., Montero, G., Río, M. 2013. Do thinnings influence biomass and carbon stocks in Mediterranean maritime pinewoods? *Eur. J. For. Res.* 132: 253-262
- Mora, J.V., Río, M., **Bravo-Oviedo, A.**, 2012. Dynamic growth and yield model for Black pine stands in Spain. *Forest Systems*
- Bravo, F., Álvarez-González, J.G., Río, M., Barrio, M., Bonet, J.A., **Bravo-Oviedo, A.** et al. 2011. Growth and yield models in Spain: historical overview, contemporary examples and perspectives. *Forest Systems* 20(2):315-328.
- **Bravo-Oviedo, A.**, Roig, S., Bravo, F., Montero, G., Río, M. 2011. Environmental variability and its relationship to site index in Mediterranean maritime pine. *Forest Systems* 20(1):50-64.
- **Bravo-Oviedo, A.**, Gallardo-Andrés, C., Río, M., Montero, G. 2010. Regional changes of *Pinus pinaster* site index in Spain using a climate-based dominant height model. *Canadian Journal of Forest Research* 40:2036-2048.
- **Bravo-Oviedo, A.**, Tomé, M., Bravo, F., Montero, G., Río, M. 2008. Dominant height growth equations including site attributes in the generalized algebraic difference approach. *Canadian Journal of Forest Research* 38:2348-2358.
- Bravo, F., **Bravo-Oviedo, A.**, Diaz-Balteiro, L. 2008. Carbon sequestration in Spanish Mediterranean forests under two management alternatives: a modeling approach. *European Journal of Forest Research* 127:225-234
- **Bravo-Oviedo, A.**, Río, M., Montero, G. Geographic variation and parameter assessment in generalized algebraic difference site index modelling. 2007. *Forest Ecology and Management* 247:107-119.
- **Bravo-Oviedo, A.**, Sterba, H., Río, M., Bravo, F. 2006. Competition-induced mortality for Mediterranean *Pinus pinaster* Ait. and *P. sylvestris* L. *Forest Ecology and Management* 222:88-98.
- **Bravo-Oviedo, A.**, Montero, G. 2005. Site index in relation to edaphic variables in stone pine (*Pinus pinea* L.) stands in south west Spain. *Annals of Forest Science* 62:61-72.
- **Bravo-Oviedo, A.**, Río, M., Montero, G. 2004. Site index curves and growth model for Mediterranean maritime pine (*Pinus pinaster* Ait.) in Spain. *Forest Ecology and Management* 201:187-197.

- **RESEARCH MONOGRAPHS, CHAPTERS,**

- Ruiz-Peinado, R., Sánchez-González, M., Bachiller, A., **Bravo-Oviedo, A.**, Montero, G. 2012. Resalveos en montes bajos jóvenes de quejigo (*Quercus faginea*) con objetivo de conversión a monte alto adehasado. *In: Vericat, P. Piqué, M., Serrada, R. (eds.) Gestión adaptativa al cambio global en masas de Quercus mediterráneas.* CTFC, Solsona (Lleida, España), pp. 148-149
- Bravo, F., Río, M., **Bravo-Oviedo, A.**, del Peso, C., Montero, G. 2008. Forest management strategies and carbon sequestration. *In Managing forest ecosystems: the challenge of climate change*, pp 169-185. Kluwer Academic Publishers.
- Río, M., Barbeito, I., **Bravo-Oviedo, A.**, Calama, R., Cañellas, I., Herrero, C., Bravo, F. 2008. Carbon sequestration in Mediterranean pine forests. *In Managing forest ecosystems: the challenge of climate change*, pp 215-241. Kluwer Academic Publishers.
- Bravo, F., **Bravo-Oviedo, A.**, Ruiz-Peinado, R., Montero, G. 2008. Selvicultura y cambio climático. *In Compendio de Selvicultura.* Ed. Fundación Conde del Valle de Salazar.
- **Bravo-Oviedo, A.**, Montero, G. 2008. Descripción de los caracteres culturales de las principales especies forestales de España. *In Compendio de Selvicultura.* Ed. Fundación Conde del Valle de Salazar.
- Bravo, F., Fernández, M.J., Bogino, S., Segur, M., Bravo-Oviedo, A., Ordóñez, C. 2007. Impacto de la gestión forestal sobre el efecto sumidero de los sistemas forestales. *In: Bravo, F. (Coord.) El papel de los bosques españoles en la mitigación del cambio climático.* Fundación Gas Natural. 315 p.
- Bravo, F., Delgado, J.A., Gallardo, J.F., **Bravo-Oviedo, A.**, Ruiz-Peinado, R., Merino, A., Montero, G., Cámara, A., Navarro, R., Ordóñez, C., Canga, E. 2007. Métodos para cuantificar la fijación de CO₂ en los sistemas forestales. *In: Bravo, F. (Coord.) El papel de los bosques españoles en la mitigación del cambio climático.* Fundación Gas Natural. 315 p.
- Bravo, F., Fernández, M.J., Bogino, S., Segur, M., **Bravo-Oviedo, A.**, Ordóñez, C. 2007. Bosques y gestión forestal ¿una solución al cambio climático?. *In: Bravo, F. (Coord.) El papel de los bosques españoles en la mitigación del cambio climático.* Fundación Gas Natural. 315 p.
- **Bravo-Oviedo, A.**, Delgado, J.A. 2002. La teledetección y el inventario forestal nacional. Fundamentos y aplicaciones en la gestión forestal sostenible. *In: Bravo, F., Río, M., del Peso, C. (eds). El Inventario Forestal Nacional. Elemento Clave para la Gestión Forestal Sostenible.* Fundación General de la Universidad de Valladolid. 191 p.

- **PEER REVIEW PROCEEDINGS AND PUBLICATIONS not included in SCI**

- **Bravo-Oviedo, A.**, Río, M., Montero, G., Onrubia, R., Rubio, A., Ruiz-Peinado, R. 2013. Desfronde y tasa de descomposición foliar en rebollar-pinar de repoblación con distinto grado de clara. *Actas del 6º Congreso Forestal Español.* 4 p. ISBN: 978-84-937964-9-5
- Vera-Vélez, R., **Bravo-Oviedo, A.**, Río, M., Bravo, F., Montero, G. 2013. Efecto de variables climáticas y litológicas sobre el crecimiento en altura dominante en masas de *Pinus nigra* Arn. *Actas del 6º Congreso Forestal Español.* 14 p. ISBN: 978-84-937964-9-5
- Ruiz-Peinado, R., **Bravo-Oviedo, A.**, López-Senespleda, E., Río, M., Montero, G. 2013. ¿Cómo afectan las claras a las cantidades de carbono en una repoblación de *Pinus sylvestris* L.? *Actas del 6º Congreso Forestal Español.* 13 p. ISBN: 978-84-937964-9-5
- Montero, G., Pasalodos-Tato, M., Montoto, R., López-Senespleda, E., Onrubia, R., **Bravo-Oviedo, A.**, Ruiz-Peinado, R. 2013. Contenido de carbono en la biomasa de las principales especies de matorral y arbustados de España. *Actas del 6º Congreso Forestal Español.* 11 p. ISBN: 978-84-937964-9-5

- Lopez-Senespleda, E.; **Bravo-Oviedo, A.**, Mutke, S., Alonso, R., Sánchez-Palomares, O., Pardos, M., Lexer, M. 2012. Parametrización autoecológica de especies forestales par la aplicación del modelo híbrido PICUS. Actas de la III Reunión sobre Ecología y Suelos Forestales *Cuad. Soc. Esp. Cienc. For.* 35: 37-42
- Ruiz-Peinado, R., **Bravo-Oviedo, A.**, López-Senespleda, E., Onrubia, R., Rubio, A., Sastre, S., Río, M., Montero, G. 2012. Efecto de la gestión forestal en la cantidad de carbono del suelo en una repoblación de *Pinus pinaster* Ait. Actas de la III Reunión sobre Ecología y Suelos Forestales. *Cuad. Soc. Esp. Cienc. For.* 35: 119-124
- Río, M., **Bravo-Oviedo, A.**, Martín-Benito, D. 2012. ¿Es el índice de sitio un estimador de la producción válido en el marco del cambio climático? Actas de la III Reunión sobre Modelización Forestal. *Cuad. Soc. Esp. Cienc. For.* 34: 85-94
- Mora, J.V., Río, M., **Bravo-Oviedo, A.** 2012. Variación regional de la producción en volumen y área basimétrica para *Pinus nigra* Arn. en masas españolas. Actas de la III Reunión sobre Modelización Forestal. *Cuad. Soc. Esp. Cienc. For.* 34: 177-183
- Rojo, A., Pasalodos, M., Ruiz-Peinado, R., **Bravo-Oviedo, A.**, López-Senespleda, E., Río, M., Montero, G. 2011. Historia de los aprovechamientos de los montes de *Pinus sylvestris* L. de Cercedilla y Navacerrada (1873-1990). *Foresta* 52:130-141
- **Bravo-Oviedo, A.**, Calama, R., Cañellas, I., Madrigal, G., Montero, G., Montes, F., Pardos, M., Río, M., Ruiz-Peinado, R., Sánchez-González, M., Sixto, H. 2011. Investigación del grupo de selvicultura del CIFOR-INIA en la comunidad de Madrid. *Foresta* 52: 454-468
- **Bravo-Oviedo, A.**, Río, M., Montero, G. 2009. Productividad de *Pinus pinaster* Ait. en la región mediterránea: variación geográfica y ecológica. *Actas del 5º Congreso Forestal Español. Montes y Sociedad: Saber qué hacer.* 16 p. ISBN: 978-84-936854-6-1
- Castaño-Santamaría, J., Herrero, C., **Bravo-Oviedo, A.**, Bravo, F. 2009. Relaciones altura-diámetro generalizadas para las masas naturales de *Quercus pyrenaica* Willd. En las vertientes castellano-leonesas de la Cordillera Cantábrica y del Sistema Central. *Actas del 5º Congreso Forestal Español. Montes y Sociedad: Saber qué hacer* 12 p. ISBN: 978-84-936854-6-1
- **Bravo-Oviedo, A.**, Río, M., Tomé, M., Montero, G. 2007. Variabilidad interregional en el crecimiento de la altura dominante de *Pinus pinaster* Ait. Actas de la II Reunión sobre aspectos prácticos de la Modelización Forestal. *Cuad. Soc. Esp. Cienc. For.* 23: 55-62
- Bravo, F., Lizarralde, I., Rodríguez, E., **Bravo-Oviedo, A.**, Ordóñez, C., Herrero, C., Pando, V., del Peso, C., Juez, L., Guerra, B. 2007. Modeling Forest dynamics with an empirical approach to support stand management: The case study of Mediterranean *Pinus pinaster* in Central Spain. EFI Proceedings No. 56. Scientific Tools and Research needs for multifunctional Mediterranean Forest Ecosystem Management: 45-55. ISBN: 978-952-5453-18-8
- del Peso, C., **Bravo-Oviedo, A.** 2006. Los enebrales de *Juniperus oxycedrus* L. en el paisaje forestal del valle del Alberche (Ávila). *Actas del III coloquio internacional sobre sabinares y enebrales:* 247-255. JCyL
- Bravo, F., **Bravo-Oviedo, A.**, Lizarralde, I. 2005. Estructura general de un modelo de simulación y proyección aplicable al inventario forestal nacional. *Actas del 4º Congreso Forestal Español* 5 p.
- Bravo, F., Ordóñez, C., Lizarralde, I., **Bravo-Oviedo, A.**, Guerra, B., del Peso, C., Domínguez, M., Osorio, L.F. 2004. Actas de la I Reunión de Modelización Forestal. *Cuad. Soc. Cien. For.* 18: 237-242
- **Bravo-Oviedo, A.**, Kindermann, G. 2004. Modelización de sistemas ecológicos mediante redes neuronales. . Actas de la I Reunión de Modelización Forestal. *Cuad. Soc. Cien. For.* 18: 311-316

- **PRESENTATIONS TO CONFERENCES OR SCIENTIFIC MEETINGS**

- **Bravo-Oviedo, A.**, Guerra, G.A., Bravo, F., Ruiz-Peinado, R., Montero, G., Río, M. 2014. Growth response and competition mode as modulated by climate and thinning intensity in Mediterranean pinewoods. Oral presentation to *5th International Conference on Mediterranean Pines (MEDPINE5)* / Solsona, ES
- Riofrío, J.G., **Bravo-Oviedo, A.**, Bravo, F. 2014. Age-related radial growth patterns of *Pinus pinaster* Ait. in response to climate variability in the south-central Spain. Oral presentation to *5th International Conference on Mediterranean Pines (MEDPINE5)* / Solsona, ES
- **Bravo-Oviedo, A.**, Ruiz-Peinado, R., Onrubia, R., Montero, G., Río, M. 2014. Does competitive intensity change after thinning in Mediterranean *Pinus pinaster* stands?. Oral presentation to *Biotic interactions: underlying mechanisms, ecological functions and ecosystem services*. Universidad Internacional de Baeza / Baeza, ES
- **Bravo-Oviedo, A.** 2012. Uncertainty in process-based forest growth models. The Bayesian melding approach. Oral presentation to *International Seminar Dealing with error in forest modeling and prediction: measurement error and uncertainty*. Sustainable Forest Management Research Institute and COST FP1001 / Palencia, ES.
- Río, M., Ruiz-Peinado, R., **Bravo-Oviedo, A.**, López-Senespleda, E., Mutke, S., Onrubia, R., Montero, G. 2012. Diversificación de repoblaciones de *Pinus pinaster* Ait.: Seguimiento de cortas de regeneración en Fuencaliente. Oral presentation at *V meeting of Working Group on Silviculture of the Spanish Society of Forest Science* / Madrid, ES
- Ruiz-Peinado, R., **Bravo-Oviedo, A.**, López-Senespleda, E., Onrubia, R., Rubio, A., Sastre, S., Río, M., Montero, G. 2012. Efecto de la gestión forestal en la cantidad de carbono del suelo en una repoblación de *Pinus pinaster* Ait. Oral presentation at *II meeting of the Working Group on Ecology, Ecophysiology and Forest Soils of the Spanish Society of Forest Science* / Huelva, ES
- Lopez-Senespleda, E.; **Bravo-Oviedo, A.**, Mutke, S., Alonso, R., Sánchez-Palomares, O., Pardos, M., Lexer, M. 2012. Parametrización autoecológica de especies forestales para la aplicación del modelo híbrido PICUS. Oral presentation at *II meeting of the Working Group on Ecology, Ecophysiology and Forest Soils of the Spanish Society of Forest Science* / Huelva, ES
- **Bravo-Oviedo, A.**, Valentine, H.T. 2011. Scaling cross-sectional growth and height growth in Mediterranean pines. Poster presentation at *MEDPINE4. International conference on Mediterranean pines* / Avignon, FR
- **Bravo-Oviedo, A.**, Tomé, M., Río, M., Montero, G. 2011. Calibración del modelo 3-PG para repoblaciones de pino negral sometidas a diferente tratamiento de claras. Oral presentation at *III meeting of the Working Group on Forest Modeling of the Spanish Society of Forest Science* / Lugo, ES
- Río, M., **Bravo-Oviedo, A.**, Onrubia, R., Rodríguez-Alonso, J., Roig, S., Rubio, R., Ruiz-Peinado, R. 2010. Growth response to thinning in a mixed stand of *Pinus pinaster* and *Quercus pyrenaica*. Poster presented at *IUFRO Conference 2010 "Mixed and pure forests in a changing World"* / Vila Real, PT
- Ruiz-Peinado, R., **Bravo-Oviedo, A.**, Río, M., Cañellas, I. 2010. Site index curves for Aleppo pine (*Pinus halepensis* Mill.). Poster presented at the *IUFRO Meeting Global Change and Mediterranean pines: alternatives for management* / Sustainable Forest Management Research Institute, INIA, SILVA Mediterranea, EFIMED / Palencia, ES
- Roig, S., Rodríguez, F., **Bravo-Oviedo, A.**, Sanz, A., Mutke, S., Río, M. 2010. Temporal variation and climatic influence on resin production in Maritime pine. Oral presentation at the *IUFRO Meeting Global Change and Mediterranean pines: alternatives for management* / Sustainable Forest Management Research Institute, INIA, SILVA Mediterranea, EFIMED / Palencia, ES

- Gallardo, C., Gaertner, M.A., Sánchez, E., Castro, M., **Bravo-Oviedo, A.** 2009. Relación entre cambio climático y los suelos y la vegetación de la Península Ibérica. Resumen de resultados obtenidos por el grupo MOMAC durante el período 1996-2008. Oral presentation at *Clima en España: Pasado, presente y futuro* / CCMA-CSIC, Madrid, ES.
- Bravo, F., Ordóñez, C., **Bravo-Oviedo, A.** 2009. Forest and carbon sequestration in Atlantic, Mediterranean and subtropical areas in Spain. Poster presentation at. *Climate Change: Global Risks, Challenges and Decisions* / IOP Conf. Series: Earth and Environmental Science 6/ Copenhagen, DK
- Río, M., **Bravo-Oviedo, A.**, Calama, R., Cañellas, I., Mutke, S., Pardos, M., Roig, S., Ruiz-Peinado, R., Sánchez-González, M., Sixto, H., Montero, G. 2008. Los sitios de ensayo sobre gestión forestal sostenible del CIFOR-INIA en el bosque modelo Urbión. Oral presentation at *Ibero-American Congress on Model Forests* / Castile and Leon Government, UVa, CATIE, University of Chile / Soria, ES
- **Bravo-Oviedo, A.**, Gallardo-Andrés, C., Río, M., Montero, G. 2008. Climate change effects on site index estimation in Mediterranean maritime pine forests. Oral presentation at *IUFRO International Conference on adaptation of forests and forest management to changing climate with emphasis on forest health: a review of science, policies and practices* / IUFRO, SLU/ Umea, SE
- **Bravo-Oviedo, A.**, Río, M. 2007. Modelos empíricos de variación interregional en el crecimiento de la altura dominante de especies forestales. Oral presentation at II Meeting of the Working Group on Forest Modelling of the Spanish Society of Forest Science / University of Extremadura, SECF / Jarandilla de la Vera, ES
- **Bravo-Oviedo, A.**, Río, M. 2006. Thinning regimes related to carbon fixation in Mediterranean *Pinus pinaster* Ait. Oral presentation at IUFRO International Meeting on Managing Forest Ecosystems: the Challenges of Climate Change / IUFRO, Castile and Leon Government, INIA, UVa/ Palencia, ES
- Bravo, F., **Bravo-Oviedo, A.**, Lizarralde, I. 2005. Estructura general de un modelo de simulación y proyección aplicable al inventario forestal nacional. Oral presentation at 4th Spanish Forestry Congress / SECF, Government of Aragon / Zaragoza, ES
- Lizarralde, I., **Bravo-Oviedo, A.**, Bravo, F. 2003. Use of tree mortality and taper equations to assess opportunity costs of leaving stand died trees. A case study for Scots pine in northern Spain. Oral presentation at *IUFRO International Conference on Silviculture and sustainable forest management in Mountain Forests in the Western Pyrenees (Navarra, Spain)* / INIA / Navarra, ES
- **Bravo-Oviedo, A.**, Delgado, J.A. 2001. Modelización de existencias forestales mediante parcelas del Inventario Forestal Nacional e imágenes T.M. de Landsat-5. Oral presentation at the *Seminar on National Forest Inventory: El Inventario Forestal Nacional. Elemento clave para la gestión forestal sostenible* / UVa, Ministry of the Environment / Palencia, ES

• **FELLOWSHIPS AND AWARDS**

13/04/2011	PhD Award received from University of Valladolid/ES
01/07/2002–31/12/2003	PhD Scholarship (FPI), Ministry of Science and Technology / ES
01/07/2001–31/12/2001	Post Graduate Scholarship, National Institute for Agricultural and Food Research and Technology (INIA)/ES

- **SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS**

Currently	Number of PhD Students: 1 ETSIIA/Sustainable Forest Management Research Institute, University of Valladolid/ ES
	Number of MSc Students: 1 ETSIIA/Sustainable Forest Management Research Institute, University of Valladolid/ ES
01/09/2011 – 30/06/2013	Number of Master Students: 2 ETSIIA/ Sustainable Forest Management Research Institute, University of Valladolid/ ES

- **TEACHING ACTIVITIES**

01/09/2010 – Currently	Master Course Instructor – Forest Biometrics, University of Valladolid/ Sustainable Forest Management Research Institute, University of Valladolid/ ES
01/09/2013 – Currently	ERASMUS Mundus MEDFOR Instructor – Adaptive Forest Management/ Sustainable Forest Management Research Institute, University of Valladolid/ ES
06/09/2012 – 09/09/2012	Course Instructor – Forest Growth Models, Ethiopian Institute for Agricultural Research / Ethiopia
01/01/2007 – 31/12/2010	Course Instructor – International Course on Sustainable Forest Management, National Institute for Agricultural and Food Research and Technology (INIA) / ES

- **ORGANISATION OF SCIENTIFIC MEETINGS**

22/09/2014-	Organizer, 5 th International Conference on Mediterranean
26/09/2014	Pines (MEDPINE5) / ES
27/09/2012 –	Organizer, Spanish Society of Forest Science meeting on
28/09/2012	Natural Regeneration and Global Change / ES

- **INSTITUTIONAL RESPONSIBILITIES**

19/02/2013 –Currently	FP1206 COST Action Management Committee/ Chair
11/06/2009 –Currently	Member of Sustainable Forest Management Research Institute, University of Valladolid/ ES
09/12/2008 –Currently	Member of the Department of Silviculture and Forest Systems Management, National Institute for Agricultural and Food Research and Technology (INIA) / ES

- **PARTICIPATION IN R&D PROJECTS**

2014-2016	RTA2013-00011-C02-01. Gestión adaptativa y multifuncional de las masas de <i>Pinus pinea</i> ante un escenario de cambio global [Adaptive and Multifunctional management of <i>Pinus pinea</i> stands] Funded by INIA
2013-2016	GESCLIMFOR Pasado, presente y futuro de los bosques de montaña: seguimiento y modelización de los efectos del cambio climático y la gestión sobre la dinámica forestal [Past, present and future of mountain forests: monitoring and modelling of climate change and management effects on Forest dynamics] Funded by Ministry of Agriculture and the Environment
2013-2017	FP1206 EuMIXFOR. European Mixed Forests. Integrating Scientific Knowledge in Sustainable Forest Management. Funded by COST. (Coordinator)
2013-2017	SIMWOOD. EU FP7-KBBE. Sustainable Innovative Mobilisation of Wood. Funded by EU
2013-2016	SAPHE FED 2013/320-291. Strengthening Agroforestry Programmes in Higher Education for Food Security in Sub-Saharan Africa. ACP-EU Co-operation Programme in Higher Education (EDULINK II)
2011-2014	EuropeAid/132023/D/ACT/ACPTPS. Funded by EU. AGL2011-29701-C02-01. PINES4CHANGE Estrategias selvícolas para la adaptación y mitigación del cambio climático en repoblaciones de pinares.[<i>Silvicultural strategies for adaptation and mitigation of climatic change in pine afforestations</i>]. Funded by Ministry of Science and Technology
2010-2013	AT2010-007 Mantenimiento de la red experimental de parcelas permanentes de silvicultura y mejora del CIFOR-INIA. [Maintenance and Inventory of Permanent Research Plots] Funded by INIA.
2011-2013	Acción Integrada (A1) Refuerzo de capacidades para optimizar la gestión y aprovechamiento de Recursos Forestales no Maderables y favorecer la Seguridad Alimenticia en Etiopía. [<i>Reinforcing research on non timber forest products for rural development and food security in Ethiopia</i>] Funded by Cooperation and Development Spanish Agency.
2012	BIRF 7520 AR. Desarrollo de funciones de índice de sitio basados en modelos mixtos incluyendo variables climáticas para plantaciones de <i>Pinus</i> sp. en Misiones y Corrientes [<i>Development of site index mixed models including climatic variables for Pinus sp in Misiones and Corrientes (Argentina)</i>]. Funded by Argentina Government.
2011-2013	RTA2010-0095-01. Tipificación ecológico selvícola de las principales especies forestales españolas. [<i>Ecological and silvicultural classification of the main forest tree species in Spain</i>]. Funded by INIA.
2009-2013	AGL2008-03740-E. Red temática sobre silvicultura y gestión sostenible de los sistemas forestales (SELVIRED). [Thematic network on silviculture and Forest Systems] Funded by Ministry of Economy and Competitiveness

2011	PID-2011/103. Un bosque de número [<i>Teaching Innovation Project. A forest of numbers</i>] Funded by University of Valladolid
2009-2011	SUM2008-0002-00-00. Adaptación de los pinares mediterráneos de la península ibérica al cambio climático: el manejo de la densidad. [<i>Adaptation to climate change of Mediterranean pinewoods in the Iberian peninsula: Stand density management</i>]. Funded by INIA
2008-2013	CC08-056. Valoración económica y ambiental de los montes andaluces: Modelos de silvicultura a turno completo [<i>Economic and Environmental valuation of Andalusian forests. Silvicultural Systems</i>] Funded by Andalucía Government
2005-2010	OT03-002. Mantenimiento e inventariación periódica de la red de parcelas experimentales permanentes del Departamento de Silvicultura del CIFOR-INIA [<i>Maintenance and Inventory of Permanent Research Plots</i>] Funded by INIA.
2004-2007	AGL2004-07094-C02-02. Regeneración natural y primer desarrollo de rodales forestales para masas de <i>Pinus pinaster</i> Ait. [<i>Regeneration and early growth of Pinus pinaster Ait. forest stands</i>]. Funded by Ministry of Education and Science
2002-2006	CC02-0017. Estudio autoecológico y modelos de gestión de los rebollares en Castilla y León. [<i>Autoecology and management models for Q. pyrenaica stands in Castile and León</i>]. Funded by INIA and Castile and León Government.
2001-2004	AGL2001-1780. Dinámica de rodales de pino negro (<i>Pinus pinaster</i> Ait.) en el Sistema Ibérico Meridional: Estructura genética, regeneración y dinámica forestal. [<i>Pinus pinaster Ait. stand Dynamics in the Southern Iberian Mountain Range: Genetic structure, regeneration and forest dynamics</i>] Funded by the Ministry of Science and Education

• **COMMISSIONS OF TRUST**

[CT.3]	2014-Currently	Editorial Board “ <i>Forest Systems</i> ”, National Institute for Agricultural and Food Research and Technology / ES
[CT.2]	2010-2014	Reviewer, <i>Global Change Biology, Forest Ecology and Management, Forest Systems, Forestry, Ecological Modelling, Revista de Investigación Agropecuaria</i>
[CT.1]	2003	Scientific Advisory Board, FSC Indicators for Sustainable Forest Management of <i>Pinus pinaster</i> Ait. stands/ WWF-Adena/ ES

• **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

[MS.2]	10/06/2014 – currently	Member, Spanish Association for Terrestrial Ecology
[MS.1]	2009 - currently	Member, Spanish Society of Forest Science

- **SCIENTIFIC MISSIONS AND RESEARCH VISITS**

Year	Country	Institution	Duration (weeks)	Role	Objectives
1996	Finland	Pieksämäki Forestry School	4	Undergraduate	Training in harvesting methods
1998	Venezuela	Escuela Básica Agropecuaria Fe y Alegría	8	Undergraduate	Plant nursery management; native tree plantations
2003	Austria	BOKU	12	PhD student	Tree mortality modelling
2004	France	Cemagref (EMAX)	8	PhD student	Multivariate analysis of ecological data
2006	Portugal	ISA	8	PhD student	Forest growth and yield modelling
2010	USA	US Forest Service	4	Researcher	Process based modelling (Pipe model theory)
2010	Portugal	ISA	2	Researcher	Process based modelling (3PG model)
2012	Ethiopia	EIAR	2	Researcher	Teaching forest growth modelling

- **PROGRAMMING AND SCIENTIFIC SOFTWARE SKILLS**

SAS, R, Arc-GIS, ImageJ, VBA, Java 7 (Beginner)