CURRICULUM VITAE (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

CV date	12/05/2023

First name	Gabriel		
Family name	Sangüesa Barreda		
Gender (*)	Male	Birth date (dd/mm/yyyy)	15/05/1985
Social Security, Passport, ID number	18442850-R		
e-mail	gabriel.sanguesa@uva.es	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0002-7722-2424	

(*) Mandatory

A.1. Current position

Position	Juan de la Cierva – Incorporación		
Initial date	01/01/2021		
Institution	University of Valladolid		
Department/Center	Ciencias Agroforestales/ EiFAB		
Country	Spain	Teleph. number	975129486
Key words	dendroecology, forest ecology, global change, mountain ecosystems		

A.2. Previous positions (research activity interuptions, art. 13.2.b))

Period	Position/Institution/Country/Interruption cause
02/12/2020 – 31/12/2020	Senior researcher/ University of Valladolid/ Spain
13/03/2020 – 04/06/2020	Parental leave
09/04/2018 – 01/12/2020	Juan de la Cierva-Formación/ University of Valladolid/ Spain
01/01/2017 – 15/03/2018	Contract in European project/ IPE-CSIC/ Spain
11/02/2017 – 10/03/2017	Parental leave
01/06/2016 – 31/12/2016	Professional contract/ Bioma Forestal/ Spain
15/01/2015 – 15/04/2015	Predoctoral internship contract / WSL/ Switzerland
2009-2015 (4 yrs and 5 months)	8 contracts in research projects/ IPE-CSIC/ Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD. Land-use planning and environment	University of Zaragoza/ Spain	2016
Master of geographic information technologies: GIS and Remote Sensing	University of Zaragoza/ Spain	2012
Forest Engineering	University of Lleida/ Spain	2009
Forest Technical Engineering	Politechnic University of Valencia/ Spain	2006

Part B. CV SUMMARY *(max. 5000 characters, including spaces)*

I am a forest ecologist and dendroecologist interested in all aspects of environmental change impacts on tree growth and functioning. I did my **PhD** at **IPE-CSIC** (2016) with a rating of **Apto-Cum Laude** and **extraordinary doctorate award.** I achieved the PhD degree without a specific funding, alternating my thesis with contracts in other research projects. I published the 5 chapters of my thesis in SCI journals before its defense. I was the first author of all the publications, and currently, they have more than 30 citations (Scopus). In 2017-2018 I had a **contract** (14 months) in the frame of the **European INTERREG project CANOPEE** to study the impacts of global warming on leaf phenology and vitality of Pyrenean forests. In 2018, I got a JdC-Formación at the University of Valladolid (**Cambium research group**), and in 2021, after a brief senior researcher contract, I started a **JdC-Incorporación** contract in the same group.

I am author or co-author of **89 SCI** (**13 first and corresponding author**) in collaboration with researchers from diverse centres and universities worldwide. I am also author or co-author of **8 national publications** and **10 chapters of books**. I have an m-index (Scopus) of 5 (academic age of 6 years; 2016-present), an h-index of 30, and a citation count in 2022 of 718 (Scopus; 3,286 in total). During my research career, I have spent **several pre and postdoctoral periods** (**1 year**) in top research centres and universities abroad and supervised by prominent scientific figures: **Ulf Büntgen**, at that time head of the dendroecology group at Swiss Federal Research Institute WSL – Switzerland – (6 months, 2014 and 2015), **Ricardo Villalba** head of the dendrochronology group at IANIGLA-CONICET – Argentina- (3 months, 2018) and **Gianluca Piovesan** head of the dendrology group at Tuscia University – Italy (3 months, 2019). The **scientific productivity derived from these periods has been very high**, 6 **publications:** Büntgen et al. 2015 - *Agr Ecos Envin* (19 citations; Scopus); Büntgen et al. 2017 - *J Climate* (56 citations); Sangüesa-Barreda et al. 2018 - *Can J Forest Res* (10 citations); Sangüesa-Barreda et al. 2019 - *Fron Plant Sc* (4 citations); Sangüesa-Barreda et al. 2020 - *Global Change Biol* (7 citations) y Sangüesa-Barreda et al. 2021 – *Sci Tot Environ* (23 citations).

In all my research I have carried out science outreach (e.g. in 2022, The Conversation or Foresta). This has led me to appearing frequently in the media at a regional and national level (e.g. dicyt, ElMundo-Diario de Soria or La Vanguardia), and occasionally at an international scale (e.g. Phys.org or LaRepubblica-Italy). Sometimes my diffusion to society has transcended the written media, including TV and radio interviews (link; link-0:55 or link-1:38). I am also manager and communicator on the Cambium Research Group website, which has frequent scientific outreach entries (e.g. link). Finally, I regularly collaborate with private companies such as Bioma Forestal (Art. 83) or the University of Valladolid spin-off, Föra forest Technologies.

I have participated in various research projects financed by regional (3), national (11) and international (3) programs. I have been IP in **3 projects in competitive calls**: 1 financed by the IET (2017; 1,710€), 1 by the AEET (2018; 2,500€; approx. 10% success rate), and, above all, 1 project funded by MCIN/AEI (PID2020-118444GA-I00; 2021-2024; 145,296€) including a 4-year predoctoral contract. **All the financing obtained sums a total of 241,196€ in 6 years of postdoc.**

Since May 2021, I am the **coordinator** of Cambium Research Group (awarded by UVa in 2022). I have also actively collaborated in the growth of the group, attracting, and helping young researchers. I have also continuously participated in the review of scientific articles SCI (29), and research projects (national and international – Switzerland and Poland-). Finally, I am Associate Editor in *Frontiers in Forest and Global Change.*

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications *(see instructions)*

1. **Sangüesa-Barreda G**(AC), García-Cervigón AI, García-Hidalgo M, Rozas V, Martín-Esquivel JL, Martín-Carbajal J, Martínez R, Olano JM (2022). Vertical cliffs harbor millennia-old junipers in the Canary Islands. *Ecology* e3633. Doi: 10.1002/ecy.3633. Citations: 2 (Scopus); Citations/year: 2.
2. **Sangüesa-Barreda G**(AC), Filippo A, Piovesan G, Rozas V, Di Fiore L, García-Hidalgo M, García-Cervigón AI, Muñoz-Garachana D, Baliva M, Olano JM (2021) Warmer springs have increased the frequency and extension of late-frost defoliations in southern European beech forests. *Science of the Total Environment* 775, 145860. Doi: 10.1016/j.scitotenv.2021.145860. Citations: 23 (Scopus); Citations/year: 11.5.

3. Batllori E(AC), Lloret F, Aakala T... Zeeman B (30/37, alphabetically) (2020). Forest and woodland replacement patterns following drought-related mortality. *PNAS* 117, 29720-29729. Doi: 10.1073/pnas.2002314117. Citations: 58; Citations/year: 19.3.
4. **Sangüesa-Barreda G**(AC)**,** Esper J, Büntgen U, Camarero JJ, Di Filippo A, Baliva M, Piovesan G (2020) Climate-human interactions contributed to historical forest recruitment dynamics in Mediterranean subalpine ecosystems. *Global Change Biology* 26, 4988–4997. Doi: 10.1111/gcb.15246. Citations: 7; Citations/year: 2.3.
5. De Soto L (AC), Cailleret M, Sterck F… Martínez-Vilalta (26/31, alphabetically) (2020). Low growth resilience to drought is related to future mortality risk in trees. *Nature Communications* 11, 545. Doi: 10.1038/s41467-020-14300-5. Citations: 173; Citations/year: 57.6.
6. **Sangüesa-Barreda G**(AC)**,** Camarero JJ, Sánchez-Salguero R, Gutiérrez E, Linares JC, Génova M, Ribas M, Tíscar PA, López-Sáez JA (2019). Droughts and climate warming desynchronize Black pine growth across the Mediterranean Basin. *Science of the Total Environment* 697, 133989. Doi: 10.1016/j.scitotenv.2019.133989. Citations: 24; Citations/year: 6.
7. **Sangüesa-Barreda G**(AC)**,** Camarero JJ, Pironon S, Gazol A, Peguero-Pina JJ, Gil-Pelegrín E (2018). Delineating limits: confronting predicted climatic suitability to field performance in mistletoe populations. *Journal of Ecology* 106, 2218-2229. Doi: 10.1111/1365-2745.12968. Citations: 12; Citations/year: 3.
8. **Sangüesa-Barreda G**(AC)**,** Camarero JJ, Oliva J, Montes F, Gazol A (2015). Past logging, drought and pathogens interact and contribute to forest dieback. *Agricultural and Forest Meteorology* 208, 85-94. Doi: 10.1016/j.agrformet.2015.04.011. Citations: 60; Citations/year: 7.5.
9. **Sangüesa-Barreda G**(AC)**,** Camarero JJ, García-Martín A, Hernández R, De la Riva J (2014). Remote-sensing and tree-ring based characterization of forest defoliation and growth loss due to the Mediterranean pine processionary moth. *Forest Ecology and Management* 320, 171-181. Doi: 10.1016/j.foreco.2014.03.008. Citations: 52; Citations/year: 5.8.
10. **Sangüesa-Barreda G**(AC)**,** Linares JC, Camarero JJ (2012). Mistletoe effects on Scots pine decline following drought events: Insights from within tree spatial patterns, growth and carbon use. *Tree Physiology* 32, 585-598. Doi: 10.1093/treephys/tps031. Citations: 59; Citations/year: 5.4.

C.2. Congress

Author or co-author in 38 conference contributions (oral or poster presentations; 22 contributions in international conferences; 9 first author).

1. **Sangüesa Barreda G,** Rozas V, García-Cervigón AI, García-Hidalgo M, García-Pedrero A, Di Filippo A, Piovesan G, Villalba R, Christie DA, Di Fiore L, García-López MA, Hernández-Alonso H, Olano JM (2021). Hacia una compresión global de la importancia de las heladas primaverales en el crecimiento y funcionamiento de las especies caducifolias. XV AEET National Meeting. 18-22/10/2021. Plasencia, Spain. Geographic area: national. Oral presentation.
2. **Sangüesa Barreda G,** Olano JM, García-Pedrero A, García-Cervigón AI, Rozas V (2019): Assessing wood traits to reconstruct late frost defoliations in Iberian beech forests. 1st Meeting of the Iberian Ecological Society & XIV AEET Meeting. Geographic area: EU. 4-7/2/2019. Barcelona, Spain. Oral presentation.
3. **Sangüesa Barreda G** (2019) **Co-organizer, coordinator, and moderator of the session** "*TS.09: Growth footprints: the challenge of time in plant and animal ecology*". 1st Meeting of the Iberian Ecological Society & XIV AEET Meeting. Geographic area: EU. 4-7/2/2019. Barcelona, Spain.
4. **Sangüesa-Barreda G** (2018). Los bosques y el cambio climático: presente y futuro de su capacidad como sumidero de carbono. Jornada técnica. Tecnologías de captura, transporte, almacenamiento y usos del CO_2: una oportunidad en la mitigación del cambio climático. Pteco$_2$ Geographic area: national. 15/6/2018. Soria, Spain. Invited conference.
5. **Sangüesa-Barreda G,** Camarero JJ, Büntgen U (2017). Long-term growth and establishment dynamics of high elevation Pyrenean forests. PAGES Zaragoza 2017 5th Open Science Meeting. 9-13/5/2017. Zaragoza, Spain. Geographic area: world. Oral presentation.
6. **Sangüesa-Barreda G,** Camarero JJ, Wacker L, Galván JD, Martínez-Peña F, Ortseifen J, Esper J, Olano JM, Büntgen U (2015) Development of the first composite juniper chronology for the Iberian Peninsula. TRACE–Tree-Rings in Archaeology, Climatology and Ecology. 20-23/5/2015. Sevilla, Spain. Geographic area: EU. Oral presentation.

C.3. Research projects

1. 2021-2024: *Winter is not coming: Understanding the pine processionary moth range of expansion in a context of global warming (PROWARM).* PID2020-118444GA-I00. Convocatoria 2020 Proyectos de I+D+i. MCIN/AEI/10.13039/501100011033. **PI: Gabriel Sangüesa Barreda** (University of Valladolid). **141,086€ + 1 predoctoral contract (4 years).** Type of participation: PI
2. 2022-2023: Internacionalización de las estructuras de investigación de excelencia (CL-EI-2021-05) relativo a la "Escalera de la Excelencia CLU -2019-01-Instituto iuFOR". JCyL and FEDER. PI: Felipe Bravo (University of Valladolid). 400,000€. Type of participation: garante researcher.
3. 2021-2024: *Programa Estratégico: IUI en gestión forestal (iuFOR).* CLU-2019-01. PI: Felipe Bravo (University of Valladolid). 850,000 € Fondos FEDER, Junta de Castilla y León-Consejería de Educación. Type of participation: garante researcher.
4. 2020-2024: *LIFE Soria ForestAdapt. LIFE19 CCA/ES/0011816RA-I00*. Comisión Europea. Participating entities: FGN, Cesefor, F Empresa y Clima, UVa, PEFC, FSC. 1,595,745€. PI: FGN, Action Coordinator JM Olano. Type of participation: research team.
5. 2019: *Buscando lo inesperado: Explorando proxies para determinar si el impacto de las heladas primaverales ha aumentado en los bosques caducifolios de los Andes Patagónicos.* Asociación Española de Ecología Terrestre (2018 call, modality "Ganando independencia") **PI: Gabriel Sangüesa Barreda** (University of Valladolid). 2,500€. Type of participation: PI and project coordinator.
6. 2019-2021: *Comprendiendo la dinámica de las laurisilvas para desarrollar estrategas de gestión ante el cambio climático. VA113G19*. Junta de Castilla y León-Consejería de Educación. PI: Vicente Rozas (University of Valladolid). 12,000€. Type of participation: research team.
7. 2018-2020: *spRING. Nuevos proxies para comprender la respuesta de los bosques a las condiciones primaverales en un contexto de cambio climático. CGL2017-87309-P*. Ministerio de Economía, Industria, y Competitividad. PI: Vicente Rozas (University of Valladolid). 128,000 €. Type of participation: work team.
8. 2017: *Recientes señales de decaimiento del bosque en una población de Pinus sylvestris turolense: efectos sobre el crecimiento, la eficiencia del uso del agua y la retención de acículas*. Instituto de Estudios Turolenses. **PI: Gabriel Sangüesa Barreda** (IPE-CSIC). 1,710 €. Type of participation: PI and project coordinator.
9. 2016-2019: *CANOPEE. Global change and Pyrenean forests adaptations. INTERREG-POCTEFA. EFA028/15*. European Union. Lead by Forespir (France). Project partner: IPE-CSIC. PI: JJ Camarero (IPE-CSIC). 82,389 €. Type of participation: work team.
10. 2011-2014: *Regeneración, crecimiento y modelos dinámicos de bosques tropicales secos: Herramientas para su conservación y para el uso sostenible de especies maderables.* AECI. PI: JJ Camarero (IPE-CSIC). 85,000 €. Participating entities: IPE-CSIC, Univ. Barcelona, Univ. Técnica de Loja (Ecuador) and Instituto Boliviano de Investigaciones Forestales (Bolivia). Type of participation: technician and pre-doc researcher.

C.4. Contracts, technological or transfer merits

1. 2022-2023: Art. 83 con Bioma Forestal para la reconstrucción de la historia de 4 bosques. 7,260€. PI: JM Olano (University of Valladolid). Type of participation: research team.
2. 2023: CaptuRING for BI. Advances for wood density measurement. PI: Miguel García-Hidalgo and JM Olano (University of Valladolid). 3,000€. Plan TCUE 2021-2023 para la realización de Pruebas de concepto (Funge-UVa). Type of participation: research team.
3. **Intellectual property registration.** García-Hidalgo M, García-Pedrero A, Colón D, **Sangüesa-Barreda G,** Rozas V, Olano JM, Alonso-Gómez V: *CaptuRING: An Open Source Software for Sequential Digitization*. Registration number: 765-645039. University of Valladolid.
4. 2018-2019: Estudio dendrocronológico sobre el cedro canario en el Parque Nacional del Teide. PI: JM Olano (University of Valladolid). Financing source: Gesplan Gobierno de Canarias. 13,500 €. Type of participation: research team.