



**CURRICULUM VITAE (CVA)**  
**IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.**

<b>Part A. PERSONAL INFORMATION</b>		<b>CV date</b>	24-01-2024
First name	Jurgi		
Family name	Cristóbal Azkarate		
Gender (*)	Male	Birth date (dd/mm/yyyy)	05-03-1974
Social Security, Passport, ID number	15395607M		
e-mail	jurgi.cristobal@ehu.eus	<a href="https://www.researchgate.net/profile/Jurgi-Cristobal">https://www.researchgate.net/profile/Jurgi-Cristobal</a>	
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-2799-8638		

(\*) Mandatory

**A.1. Current position**

Position	Tenured professor		
Initial date	10-11-2022		
Institution	The University of the Basque Country		
Department/Center	Basic Psychological Processes and their Development		
Country	Spain	Teleph. number	943 01 57 28
Key words	Ecophysiology; behavioural ecology;		

**A.2. Previous positions (research activity interruptions, see call)**

Period	Position/Institution/Country/Interruption cause
2019- 2022	Associate Professor
Sept. 2016- April 2019	Interruption/Private sector: Pedagogical Consultant
2012- 2016	Temporary Lecturer (University of Cambridge; Dept Archaeology and Anthropology/UK/)
206-2012	Full Time Researcher/Centre for Tropical Research; University of Veracruz/ MX)

**A.3. Education**

PhD, Licensed, Graduate	University/Country	Year
PhD (Primate behaviour)	University of Barcelona/Spain	2004
Master (DEA)	University of Barcelona/Spain	2000
Degree (Veterinary Science)	University of Zaragoza/Spain	1997

**Part B. CV SUMMARY** (max. 5000 characters, including spaces) to complete this section, please read carefully: "Instructions to fill CVA"

I have published more than 56 scientific papers, which have been cited **2,041 times (H-index = 25)**, including 35 papers in SCI journals –around 50 % are in Q1– (*Proceeding of the National Academy of Science, Current Biology, Biology Letters, Hormones and Behavior, General and Comparative Endocrinolgy*, etc), 9 book chapters, 1 co-edited book and over 35 communications in congresses. I have recognised 3 six-years research periods, the last being awarded in 2021.



The central theme of my research is the study of environmental changes on the health and viability of wildlife. My work has focused primarily on primates, but also includes other species such as felines (Solórzano-García et al., 2016; Cristóbal-Azkarate et al., 2014) and more recently equids. A key aspect of my research is the use and development of non-invasive methods for the study of energetic physiology. In this regard, I participated in the development and validation of a protocol to analyse thyroid hormone metabolites in faeces for a wide variety of species (Wasser et al., 2010), which I have then used to analyse metabolic trade-offs between competing energetic demands (Cristóbal-Azkarate et al., 2016). These physiological biomarkers are analysed in relation to environmental parameters such as climate (Chen et al., 2021; Cristóbal-Azkarate et al., 2016), landscape characteristics (Ordóñez-Gómez et al., 2016), foraging (Dunn et al., 2013; Aguilar-Melo et al., 2013) and social behaviour (Cristóbal-Azkarate et al., 2006; Cristóbal-Azkarate et al., 2007), and are complemented by studies on demography (Arroyo-Rodríguez et al., 2008; Cristóbal-Azkarate et al., 2005, 2017; Ordóñez-Gómez et al., 2016; Alcocer-Rodríguez et al., 2021), parasitology (Cristóbal-Azkarate et al., 2012; Cristóbal-Azkarate et al., 2010; Solórzano-García et al., 2017). This approach has allowed us to understand the processes that mediate the relationship between habitat characteristics and demographic development, particularly for howler monkeys in fragmented landscapes (Cristóbal-Azkarate et al., 2017).

My other line of research is related to evolutionary aspects of behaviour, including evolutionary trade-offs associated male sexual competition (Dunn et al., 2018), nest building in chimpanzees (Steward et al., 2018) and learning in hunter-gatherer children (Lew-Levy et al. 2018,2018). This led me to leave academia in September 2016 to work as a pedagogic consultant of the biological bases on children´s behaviour. In April 2019 I returned to the teach at the University of the Basque Country where I teach in two courses: one on the evolution of human behaviour, and the second on psychophysiology.

I have participated in 12 research projects (3 as PI or co-PI) amounting to 750.000 €. I have been carried out long-term stays at research institutions including the Instituto de Neuroetología of the University of Veracruz, Department of Anthropology of the University of Southern California, The Center for Conservation Biology of the University of Washington, The Primate Immunogenetics and Molecular Ecology Lab at the University of Cambridge. I have taught at the Bachelor and Postgraduate level at the Universities of Veracruz, Cambridge and currently of the Basque Country topics related to animal conservation, evolution, behavioral ecology, behavioural physiology and ecophysiology, and I have co-supervised of 3 PhD theses (Sira Vegas & Jacob Dunn, University of Barcelona; José Ordóñez, UNAM). Jacob Dunn is currently Reader at the University of Anglia Ruskin and Research Associated of the University of Cambridge and Domingo Ordoñez is conducting a postdoc at the German Primate Center. On the other hand, I am a reviewer for several SCI journals including, *Frontiers in Ecology and Evolution*, *Hormones and Behavior*, *American Journal of Primatology*.

Finally, my outreach work is not limited to the publication of scientific manuscripts. I have also participated in workshops about Mexican primate conservation organized by the Conservation Breeding Specialist Group of the IUCN, in addition to working with local communities. I am also a regular contributor to the science programme La Mecánica del Caracol on Radio Euskadi.

## **Part C. RELEVANT MERITS**

### **C.1. Publications**

Granweiler, J., **Cristóbal-Azkarate, J.**, Morton, N., Palme, R., & Shultz, S. (2024). The paradox of spring: Thyroid and glucocorticoid responses to cold temperatures and food availability in free living Carneddau ponies. *Hormones and Behavior*, 161, 105526.

<https://doi.org/10.1016/j.yhbeh.2024.105526>

Chen, H., Yao, H., Yang, W., Xiang\*, Z., Ostner\*, J., & **Cristóbal-Azkarate\*, J.** (2021). Validation of a fecal T3 metabolite assay for measuring energetics in wild golden snub-nosed monkeys (*Rhinopithecus roxellana*). *International Journal of Primatology*, 42(5), 759–763.

<https://doi.org/10.1007/s10764-021-00236-0>

**Cristóbal-Azkarate\*, J.**, Dunn, J. C., Domingo-Balcells, C., & Veà-Baró, J. (2017). A demographic history of a population of howler monkeys (*Alouatta palliata*) living in a fragmented landscape in Mexico. *PeerJ*, 5, e3547. <https://doi.org/10.7717/peerj.3547>



- Cristóbal-Azkarate\***, J., Maréchal, L., Semple, S., Majolo, B., & MacLarnon, A. (2016). Metabolic strategies in wild male Barbary macaques: evidence from faecal measurement of thyroid hormone. *Biology Letters*, 12(20160168), 1–4. <https://doi.org/10.1098/rsbl.2016.0168>
- Ordóñez-Gómez, J. D., **Cristóbal-Azkarate, J.**, Arroyo-Rodríguez, V., Santillán-Doherty, A. M., Valdez, R. A., & Romano, M. C. (2016). Proximal and distal predictors of the spider monkey's stress levels in fragmented landscapes. *PLoS ONE*, 11(2), e0149671. <https://doi.org/10.1371/journal.pone.0149671>
- Dunn\*, J. C., Halenar, L. B., Davies, T. G., **Cristobal-Azkarate, J.**, Reby, D., Sykes, D., Dengg, S., Fitch, W. T., & Knapp, L. A. (2015). Evolutionary trade-off between vocal tract and testes dimensions in howler monkeys. *Current Biology*, 25, 1–6. <https://doi.org/10.1016/j.cub.2015.09.029>
- Cristóbal-Azkarate\***, J., Dunn, J. C., Day, J. M. W., & Amáñile-Cuevas, C. F. (2014). Resistance to antibiotics of clinical relevance in the fecal microbiota of Mexican wildlife. *PLoS ONE*, 9, e107719. <https://doi.org/10.1371/journal.pone.0107719>
- Dunn, J. C., **Cristóbal-Azkarate, J.**, Schulte-Herbrüggen, B., Chavira, R., & Veà, J. J. (2013). Travel time predicts fecal glucocorticoid levels in free-ranging howlers (*Alouatta palliata*). *International Journal of Primatology*, 34(2), 246–259. <https://doi.org/10.1007/s10764-013-9657-0>
- Wasser\*, S. K., **Cristóbal-Azkarate, J.**, Booth, R. K., Hayward, L., Hunt, K., Ayres, K., Vynne, C., Gobush, K., Canales-Espinosa, D., & Rodríguez-Luna, E. (2010). Non-invasive measurement of thyroid hormone in feces of a diverse array of avian and mammalian species. *General and Comparative Endocrinology*, 168(1), 1–7. <https://doi.org/10.1016/j.ygcen.2010.04.004>
- Cristóbal-Azkarate\***, J., & Arroyo-Rodríguez, V. (2007). Diet and activity pattern of howler monkeys (*Alouatta palliata*) in Los Tuxtlas, Mexico: effects of habitat fragmentation and implications for conservation. *American Journal of Primatology*, 69(9), 1013–1029. <https://doi.org/10.1002/ajp.20420>
- Cristóbal-Azkarate\***, J., Chavira, R., Boeck, L., Rodríguez-Luna, E., & Veà, J. J. (2007). Glucocorticoid levels in free ranging resident mantled howlers: a study of coping strategies. *American Journal of Primatology*, 69(8), 866–876. <https://doi.org/10.1002/ajp.20383>

## C.2. Congress

### Poster:

2021. Burton A, Britnell J, Harvey N, Cristóbal-Azkarate J, Kamau M, Shultz S.: Conservation Macrophysiology: Non-invasive monitoring of nutrition and reproduction across ecological gradients. 30th International Congress for Conservation Biology. Virtual conference

### Oral communication

2017. Dunn J, Alcocer-Rodríguez M, Carmen Galan-Acedo C, Cristóbal Azkarate J, Asensio N, Rito K, Arroyo-Rodríguez V, Veà J. Evaluating extinction debt in the critically endangered Mexican howler monkey 54th Annual Meeting of the Association for Tropical Biology and Conservation. Mérida, México.

2015. Cristóbal-Azkarate J, Maréchal L, Majolo B, Semple S, MacLarnon A. Metabolic strategies in free ranging male Barbary macaques: evidence from T3 in faeces Congreso: 2015 Spring Meeting of the Primate Society of Great Britain. London, UK

2015. Cristóbal-Azkarate J, Dunn JC, Domingo-Balcells C, Veà-Baró JJ. A ten-year demographic history of a population of howler monkeys (*Alouatta palliata*) living in a fragmented landscape in México. Reunión de la Asociación Mexicana de Primatología Veracruz, México

2015. Dunn JC, Halenar LB, Davies TG, Cristóbal-Azkarate J, Reby D, Sykes D, Dengg S, Fitch TW, Knapp LA.: Evolutionary trade-off between vocal tract and testes dimensions in howler monkeys. 2015 Spring Meeting of the Primate Society of Great Britain. London, UK

2012. Escorcía-Quintana M, Mac Swiney CG, Quiroz-Romero H, Cristóbal-Azkarate J. The effect of distance from forest edge on the development of a nematode, *Trypanoxyuris*



*minutus*, from mantled howler monkeys (*Alouatta palliata*) in high tropical forest. 24<sup>th</sup> International Primatological Society Congress. Cancún, México

2011. Cristóbal-Azkarate J, Domingo-Balcells C, Dunn JC, Vèa-Baró JJ. Demografía, historia de vida y migraciones de monos aulladores en Los Tuxtlas. III Congreso Mexicano de Ecología. Boca del Río, México

2011. Dunn JC, Asensio N, Arroyo-Rodríguez V, Schnitzer S, Cristóbal-Azkarate J. Liana Consumption supplements diet but increases foraging effort in howler monkeys *Congreso: III Reunión de la Asociación Mexicana de Primatología Veracruz*, México.

2010. Cristóbal-Azkarate J, Dunn JC, García J, Osorio-Sarabia D, Veà JJ. Levels of parasitism in howler monkeys: inter and intra-annual variations between two groups living in forest fragments in Mexico. 23<sup>rd</sup> Meeting of the International Primatological Society. Kyoto, Japón

2005. Dunn JC, Cristóbal-Azkarate J, Veà JJ. Changes in the foraging behaviour of mantled howler monkeys (*Alouatta palliata*) in response to food availability and their effect of physiological health. 22<sup>nd</sup> Meeting of International Primatological Society. Edimburgh, UK

### C.3. Research projects

2023-2026. Consolidated Research Group Natural Diversity of the Mesozoic and Cenozoic of the Western Pyrenees. Geology, Fossil Record and Evolutionary Biology. Heritage and Dissemination. Basque Government (IT1485-22 144500 €) **CoIP**. Actualism and behavioural ecology.

2013–2014. Untraceable adaptations to the cold: exploring the link between sociality and physiology in the thermoregulation of Barbary macaques in the Middle Atlas Mountains. *Isaac Newton Trust & University of Cambridge* (£19,605). **Co-IP**. Ecophysiology and energetics

2011 – 2015. Migrations and kinship: behavioural strategies of howler monkeys in a fragmented landscape. Ministerio de Ciencia e Innovación, Gobierno de España (PSI2011-24523) (€55,000). **Researcher**. Demography and life history

2010 – 201. Evaluation of the distribution, population size and vulnerability of threatened species (jaguar, tapir, primates, bats and birds) to determine priority conservation areas and strategies in the Uxpanapa region, Veracruz., Mexico. CONACYT-Gobierno de Veracruz (FE10/220/09) (3,328,353 MXN). **Co-PI**- Biogeography

2009 – 2009. Vocal plasticity and fragmentation in *A. palliata*: A tool for assessing population status. Ministerio de Ciencia e Innovación, Gobierno de España (PSI2008-05092/PSIC) (€50,000). **Researcher**. Primate behaviour.

2009 – 201. Taxonomic determination of the Mexican howler monkey bot fly parasite in the Los Tuxtlas Biosphere Reserve. Universidad Veracruzana (79,938 MXN). Universidad Veracruzana (102,925 MXN). **PI**. Parasitology/health.

2005 – 2008. Detection of stress levels in *Alouatta palliata mexicana* in fragmented habitats. *Fundación BBVA* (€100,075). **Researcher**. Eco-physiology/health

2005 – 2008. Detection of behavioural changes and stress levels in *Alouatta palliata mexicana* in fragmented habitat: a tool for the evaluation of natural protected areas in the state of Veracruz. Ministerio de Educación y Ciencia, Gobierno de España (SEJ2005-01562-Psic) (€57,100). **Researcher**. Eco-physiology/health

2002 – 2004. Behavioural plasticity and ecological change in *Alouatta palliata mexicana*: designing conservation strategies for a fragmented habitat. Ministerio de Educación y Ciencia, Gobierno de España (BSO2002-03340) (€48,680). **Researcher**. Behavioural ecology

2000 – 2002. Identification of ecological parameters relevant to the viability of *Alouatta palliata* populations in fragmented habitat: Applications to Mexican primate conservation.



*Financiación Ministerio de Educación y Ciencia, Gobierno de España (PB98-1270)*  
(€17,789). **Researcher.** Demography and biogeography