

Inazio Garin doktoreak ikerketako hiru seiurteko ditu aitortuta, Azkena 2015. Gainera, lau doktore-tesi zuzendu ditu, 2009tik UPV/EHUz zuzenduak eta unibertsitate horrek nazioarteko kalitatekotzat aitortuak. Gaur egun bi doktorego-tesi zuzentzen ditu.

Web of Sciences webguneko argitalpenei 900 gora aipamen egin zaizkie guztira, eta H indizea 19koa da. 2014-2018 bosturtekoan, urteko aipamenen batez bestekoa bestekoa 67 izan da. Web of Sciences aldizkarian guztira indexatutako 62 argitalpenetatik 16 Q1 kuartilekoak dira, eta zerrenda hori 34tik 12ra igo da azken 10 urteetan.

Pirinioetako dentsitate handiko oreinen ezaugarri ekologikoei buruzko doktore-tesia egin zuen Pirinioetako Ekologia Institutuan (IPE-CSIC, Jaca, Huesca). Horiek guztiek 1997 eta 2000 artean argitalpenak ekarri zituzten. Lortutako esperientziak populazioen ugaritasuna, espazioaren erabilera, baliabideen eskuragarritasuna eta ugaztunen dieta (marmotak eta sarrioak ere bai) aztertzerako bideratutako ikerketen diseinuan eta analisi estatistikoan prestakuntza ematen zuten.

UPV/EHUko Zoologia atalarekin lankidetzan hasi zen 1999-2000 aldian karniboro ertainen eta saguzarren espazioaren eta dietaren erabilerari buruzko azterlan baten esparruan, eta nazioarteko sei artikulu baino gehiago sortu zituen zenbait ugaztunen portaerari buruz (bisoi europarra, azkonarra eta katajineta, eta ferrasaguzar mediterraneo). Horiei esker ere zuzendutako lehenengo doktorego-tesi proiektuaren oinarriak ezarri ziren (2006), eta ikertzaile nagusi gisa lehen finantzaketa lortu zuen horretarako (2002-2004). Jakintza dagokionez, esperientzia hori oso produktiboa izan zen argitalpenei dagokienez. Gainera, mehatxatutako espezie bat aztertzeak ikerketaren balio soziala are gehiago nabarmendu zuen. Ondoren, 5 doktorego-tesi gehiago zuzendu ditu saguzar espezie iberiarrei buruz, eratorritako nazioarteko dozenaka argitalpenekin, eta 100 ekarpen baino gehiago nazioarteko kongresuetan. Proiektu horiek garatzeko finantziazioa erakunde publikoekin egin kontratuetatik eta lehian erdietsitako-proiektuetarako dirulaguntzetatik etorri dira.

2006 urteaz geroztik etenik gabe parte hartu du I+G+b proiektuetarako ministerio-deialdietatik lagundutako lau ikerketa-proiektutan (milioi erdi eurotik gorako dirulaguntza guztira). Era berean, buru izan den ikerketa-taldeak 400.000 €baino gehiago jaso ditu 2007tik, euskal unibertsitate-sistemako ikerketa-jarduerak babesteko laguntzen deialdian. Azkenik, Errepide Zuzendarien Europako Konferentziaren (CEDR) deialdiaren nazioarteko azpiproiektu baten buru izan da. Azken 10 urteetan zuzendu dituen eta zati bat hartzen duen ikerketa-kontratuak sektore publikoak finantzatu ditu batez ere, eta 225.000 eurotik gorako diru-sarrerak sortu ditu.

2010etik ugaztunen ekologia trofikoaren azterketan sakondu du, DNAREN barkodetze anizkoitza (metabarcoding) eta sekuentziazio masibokoa (HighThroughput Sequencing) bezalako teknika molekularrak ekologiaren azterketaren mesedetan. 2012an MINECOren (CGL2012-38610, IP I. Garin) proiektu bat lortu zuen, NGS bidez saguzar

intsektujaleen harrapari-harrapakin harremanetan sakontzeko. Lan horrek, 2016tik aurrera, MINECOren bi proiektorekin jarraitu zuen (CGL2015-69069-P, Ikerlari Nagusia U. Goiti; PID2019-1081123GB-I00, IN J. Aihartza), Iberiar Penintsulako laborea ezberdinetan izurriteak eragiten dituzten sitsekin saguzarren arteko elkarrekintzak aztertzeko. Zeregin horiei esker, nazioarteko artikulu ugari argitaratu ahal izan dira, doktore-tesiak egin ahal izan dira, batzuk oraindik egiten ari dira eta nazioarteko esparruan aztertutako gaiei buruzko erreferentziazko ikerketa-taldeetako bat da instalatu dena.

Bere jardun zientifiko osagarri gisa, fauna kiropterologiko tropikalaren ikerketan eta haren moldapen absolutibo partikularretan parte hartzen du, baita goraldian dauden gaixotasunekin lotutako saguzarren komunitate birikoaren karakterizazioan, prebalentzian eta ostalariarekin batera eboluzionatzean ere. Bi ikerketa-lerro horiek nazioarteko hainbat argitalpen ekarri dituzte.

Azken 10 urteetan, 50 ekarpen baino gehiagorekin parte hartu du nazioarteko eta estatuko kongresuetan, eta, gainera, ikerketa-taldeak 2017ko abuztuan Donostian egindako XIVth European Bat Research Symposiuma zuzendu du.

Honako hau 10 argitalpen garrantzitsuren lagin bat da, azken 10 urteetako adierazleekin:

ARRIZABALAGA-ESCUDERO A., MERCKX T., GARCIA-BAQUERO G., WALBERG N., AIZPURUA O., **GARIN I.**, GOITI U. & J. AIHARTZA (2019). Trait-based functional dietary analysis provides a better insight into the foraging ecology of bats. JOURNAL OF ANIMAL ECOLOGY, 88: doi: 10.1111/1363-2656.13055. JCR: 4.36; **Q1** Zoologia (3/170) y Ekologia (24/164).

ARRIZABALAGA-ESCUDERO, A., CLARE, E., SALSAMENDI, E., ALBERDI, A., **GARIN, I.**, AIHARTZA, J. & U. GOITI (2018). Assessing niche partitioning of co-occurring sibling bat species by DNA metabarcoding. MOLECULAR ECOLOGY, 3 (27): 1273-1283; doi: 10.1111/mec.14508. JCR: 5,85; **Q1** Ekologia (13/164); 12 aipu WoS.

GARIN, I., CHAVERRI, G., JIMENEZ, L., CASTILLO-SALAZAR, C., AIHARTZA, J. (2018). Contrasting thermal strategies of montane Neotropical bats at high elevations. JOURNAL OF THERMAL BIOLOGY, 78: 352-355; doi: 10.1016/j.jtherbio.2018.10.017. JCR: 1,9; ; **Q1** Zoologia (35. 170tik)

IGLESIAS-CABALLERO, M., JUSTE, J., VAZQUEZ-MORÓN, S., FALCON, A., AZNAR-LÓPEZ, C., IBAÑEZ, C., POZO, F., RUIZ, G., BERCiano, JM., **GARIN, I.**, AIHARTZA, J., ECHEVARRIA, JE., CASAS, I. (2018). New Adenovirus Groups in Western Palearctic Bats. VIRUSES-BASEL, 10: 443; doi: 10.3390/V10080443. JCR: 3,8; **Q2** Biologia (11. 36tik); aipu 1 WoS.

ALBERDI, A., GILBERT, M. T. P., RAZGOUR, O., AIZPURUA, O., AIHARTZA, J. & **GARIN, I.** (2015). Contrasting population-level responses to Pleistocene climatic oscillations in an alpine bat revealed by complete mitochondrial genomes and evolutionary history inference. JOURNAL OF BIOGEOGRAPHY, MAY 2015: 1-12; doi:10.1111/jbi.12535. JCR: 3,88; **Q1** Ekologia (34/164); 13 aipu WoS.

AIZPURUA, O., AIHARTZA, J., ALBERDI, A., BAAGØE, H. & **GARIN, I.** (2014). Fine-tuned echolocation and capture-flight of *Myotis capaccinii* when facing different-sized insect and fish prey.

JOURNAL OF EXPERIMENTAL BIOLOGY, 217: 3318-3325; doi: 10.1242/jeb.104992. JCR: 3,02; **Q1** Biologia (19/87); 7 aipu WoS.

GARCÍA-PÉREZ, R., IBÁÑEZ, C., GODINEZ, JM., ARECHIGA, N., **GARIN, I.**, PÉREZ-SUÁREZ, G., DE PAZ, O., JUSTE, J., ECHEVARRÍA, JE., BRAVO, IG. (2014). Novel Papillomaviruses in Free-Ranging Iberian Bats: No Virus-Host Co-evolution, No Strict Host Specificity, and Hints for Recombination. GENOME BIOLOGY AND EVOLUTION, 6: 94-104. doi: 10.1093/gbe/evt211. JCR: 3,7; **Q2** Genetika eta Heredentzia (46. 174tik); 27 aipu WoS.

ALMENAR, D., AIHARTZA, J., GOITI, U., SALSAMENDI, E. & **GARIN, I.** (2013). Hierarchical patch choice by an insectivorous bat through prey availability components. BEHAVIORAL ECOLOGY AND SOCIOBIOLOGY, 67(2): 311-320; JCR: 2,10; **Q1** Zoologia (24/170); 7 aipu WoS.

NAPAL, M., **GARIN, I.**, GOITI, U., SALSAMENDI, E. & AIHARTZA, J. (2013). Past deforestation of Mediterranean Europe explains the present distribution of the strict forest dweller *Myotis bechsteinii*. FOREST ECOLOGY AND MANAGEMENT, 293(1): 161-170. JCR: 3,1; **Q1** Baso Zientzia (6. 67tik); 5 aipu WoS.

SALSAMENDI, E., **GARIN, I.**, AROSTEGUI, I., GOITI, U. & AIHARTZA, J. (2012). What mechanism of niche segregation allows the coexistence of sympatric sibling rhinolophid bats? FRONTIERS IN ZOOLOGY, 9(30): 1-12; JCR: 2,98; **Q1** Zoologia (9/153); 14 aipu WoS.

Dr. Inazio Garin has three six-year research periods, the last one granted in 2015. He has also supervised four Doctoral Theses since 2009 at the UPV / EHU and recognized as of international quality. He currently supervises another two Doctoral Theses.

The total citations made to its publications and collected in the Web of Sciences amount to more than 900 and the H-Index computed is 19. The average of annual citations in the 2014-2018 five-year period is 67. Of the total of 62 publications indexed in Web of Sciences during its career, 16 correspond to the Q1 quartile, a ratio that rises to 12 out of 34 in the last 10 years.

He carried out his doctoral thesis on the ecological characteristics of a very dense Pyrenean deer population at the Pyrenean Institute of Ecology (CSIC) based in Jaca (Huesca). All of them gave rise to publications that were fruitful between 1997 and 2000. The experience gained provided training in statistical analysis and research design aimed at studying the abundance of populations, use of space, availability of resources and diet of mammals (also of marmots and chamois).

He began to collaborate with the Zoology section of the UPV / EHU in the framework of a study on the use of space and diet of medium-sized carnivores and bats between 1999 and 2000, giving rise to more than six international articles on behavioral topics of various mammals (European mink, badger and genet, and the Mediterranean horseshoe bat). These studies established also the bases of the project of his first supervised Doctoral Thesis (2006) and for some of them he obtained funding as principal investigator (2002-2004). That collaboration turned out to be highly productive in terms of publications. In addition, the study of threatened species increased the social value of the research. Subsequently, he has directed five more Doctoral Theses on many species of Iberian bats with dozens of derived international publications, as well as more than 100 contributions in international research conferences. The financing to develop these projects has been both in contracts with public entities and fundings gained by proposals in competitive calls.

Since 2006 it has participated without interruption in four research projects funded by the spanish ministerial calls for R + D + i Projects (totalling more than half a million € of subsidies). Likewise, the Research Group which he has led has received more than € 400,000 since 2007 in calls for grants to support the activities of research groups of the Basque University System. Finally, he has led an international subproject for the European Conference of Road Directorates (CEDR). The research contracts that he has led and

participated in over the last 10 years have been mainly financed by the public sector and have generated income of more than € 225,000.

Since 2010 he has deepened the study of the trophic ecology of mammals implementing new molecular ecology techniques of DNA metabarcoding and High Throughput Sequencing. In 2012 he led a research project financed by MINECO (CGL2012-38610, IP I. Garin) to delve into the predator-prey relationships of insectivorous bats using NGS. This work continued as of 2016 with two MINECO projects (CGL2015-69069-P, IP U. Goiti; PID2019-1081123GB-I00, IP J. Aihartza) focused on the study of the interactions of bats with moths that cause pests in different crops of the Iberian Peninsula. These ongoing tasks have allowed the publication of an important series of international articles, the completion of doctoral theses, some still in progress, and placed his team as an internationally referenced research group on the topics studied.

Complementarily, it participates in the investigation of the tropical chiropterological fauna and its particular adaptations, and also in the characterization, prevalence and coevolution with bat host of the viral community associated with emerging diseases. Both research topics have produced several international publications.

During the last 10 years he has participated with more than 50 contributions in international and local congresses, and has also organized the XIVth European Bat Research Symposium, held in August 2017 in Donostia-San Sebastian.

The following is a sample of 10 relevant publications and associated quality indicators from the last 10 years:

ARRIZABALAGA-ESCUDERO A., MERCKX T., GARCIA-BAQUERO G., WALBERG N., AIZPURUA O., **GARIN I.**, GOITI U. & J. AIHARTZA (2019). Trait-based functional dietary analysis provides a better insight into the foraging ecology of bats. JOURNAL OF ANIMAL ECOLOGY, 88: doi: 10.1111/1363-2656.13055. JCR Index: 4,36; **Q1** in Zoology (3/170) and Ecology (24/164).

ARRIZABALAGA-ESCUDERO, A., CLARE, E., SALSAMENDI, E., ALBERDI, A., **GARIN, I.**, AIHARTZA, J. & U. GOITI (2018). Assessing niche partitioning of co-occurring sibling bat species by DNA metabarcoding. MOLECULAR ECOLOGY, 3 (27): 1273-1283; doi: 10.1111/mec.14508. JCR Index: 5,85; **Q1** in Ecology (13/164); 12 cites WoS.

GARIN, I., CHAVERRI, G., JIMENEZ, L., CASTILLO-SALAZAR, C., AIHARTZA, J. (2018). Contrasting thermal strategies of montane Neotropical bats at high elevations. JOURNAL OF THERMAL BIOLOGY, 78: 352-355; doi: 10.1016/j.jtherbio.2018.10.017. JCR Index: 1,9; **Q1** in Zoology (35th out of 170)

IGLESIAS-CABALLERO, M., JUSTE, J., VAZQUEZ-MORÓN, S., FALCON, A., AZNAR-LÓPEZ, C., IBÁÑEZ, C., POZO, F., RUIZ, G., BERCIANO, JM., **GARIN, I.**, AIHARTZA, J., ECHEVARRÍA, JE., CASAS, I. (2018). New Adenovirus Groups in Western Palearctic Bats. *VIRUSES-BASEL*, 10: 443; doi: 10.3390/V10080443. JCR Index: 3,8; **Q2** in Virology (11th out of 36); 1 cite WoS.

ALBERDI, A., GILBERT, M. T. P., RAZGOUR, O., AIZPURUA, O., AIHARTZA, J. & **GARIN, I.** (2015). Contrasting population-level responses to Pleistocene climatic oscillations in an alpine bat revealed by complete mitochondrial genomes and evolutionary history inference. *JOURNAL OF BIOGEOGRAPHY*, MAY 2015: 1-12; doi:10.1111/jbi.12535. JCR Index: 3,88; **Q1** in Ecology (34/164); 13 cites WoS.

AIZPURUA, O., AIHARTZA, J., ALBERDI, A., BAAGØE, H. & **GARIN, I.** (2014). Fine-tuned echolocation and capture-flight of *Myotis capaccinii* when facing different-sized insect and fish prey. *JOURNAL OF EXPERIMENTAL BIOLOGY*, 217: 3318-3325; doi: 10.1242/jeb.104992. JCR Index: 3,02; **Q1** in Biology (19/87); 7 cites WoS.

GARCÍA-PÉREZ, R., IBÁÑEZ, C., GODINEZ, JM., ARECHIGA, N., **GARIN, I.**, PÉREZ-SUÁREZ, G., DE PAZ, O., JUSTE, J., ECHEVARRÍA, JE., BRAVO, IG. (2014). Novel Papillomaviruses in Free-Ranging Iberian Bats: No Virus-Host Co-evolution, No Strict Host Specificity, and Hints for Recombination. *GENOME BIOLOGY AND EVOLUTION*, 6: 94-104. doi: 10.1093/gbe/evt211. JCR Index: 3,7; **Q2** in Genetics and Heredity (46th out of 174); 27 cites WoS.

ALMENAR, D., AIHARTZA, J., GOITI, U., SALSAMENDI, E. & **GARIN, I.** (2013). Hierarchical patch choice by an insectivorous bat through prey availability components. *BEHAVIORAL ECOLOGY AND SOCIOBIOLOGY*, 67(2): 311-320; JCR Index: 2,10; **Q1** en Zoology (24/170); 7 cites WoS.

NAPAL, M., **GARIN, I.**, GOITI, U., SALSAMENDI, E. & AIHARTZA, J. (2013). Past deforestation of Mediterranean Europe explains the present distribution of the strict forest dweller *Myotis bechsteinii*. *FOREST ECOLOGY AND MANAGEMENT*, 293(1): 161-170. JCR Index: 3,1; **Q1** Forestry (6th out of 67); 5 cites WoS.

SALSAMENDI, E., **GARIN, I.**, AROSTEGUI, I., GOITI, U. & AIHARTZA, J. (2012). What mechanism of niche segregation allows the coexistence of sympatric sibling rhinolophid bats? *FRONTIERS IN ZOOLOGY*, 9(30): 1-12; JCR Index: 2,98; **Q1** in Zoology (9/153); 14 cites WoS.