

Eñaut Izaguirre Estibaritz

Glaciologist, Geographer, Mountaineer.
National Geographic Explorer

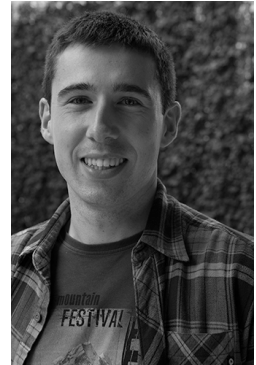
**30 November 1990, Elgoibar (Basque Country, Spain)*

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Academic Training

- PhD Course: **AG-825 Glaciology**. The University Centre in Svalbard (UNIS). February-March 2019
- **Doctorate student in Quaternary: Environmental Changes and Human Footprint**. University of the Basque Country (EHU/UPV). 2018-present
- PhD Course: **Ice Core Analysis Techniques (ICAT) PhD school**. Centre for Ice and Climate, University of Copenhagen. September 2018
- Short Course: **Patrimonio Geológico, Geoparques y Geoturismo**. Universidad Internacional Menéndez Pelayo. Aínsa, Spain. July 2017
- MSc Dissertation: **Fluctuations and Glacial Geomorphology of Marinelli and Pigafetta glaciers during the Holocene, Cordillera Darwin, Tierra del Fuego**. University of Magallanes. Punta Arenas, Chile. 2017
- **Master's Degree in Antarctic Sciences with mention in Glaciology**. University of Magallanes. Punta Arenas, Chile. 2013-2017
- **Online Course (Coursera 12 weeks)**: "Global Warming I: The Science and Modelling of Climate Change". University of Chicago (professor D. Archer). 2016
- Summer School: **Polar Geodesy**. Scientific Committee for Antarctic Research (SCAR), Torres del Paine National Park, Chile. March 2014
- **Online Course (Coursera 4 weeks)**: "The Dynamic Earth: A course for educators". American Museum of Natural History (AMNH). 2013
- **Bachelor's Degree in Geography**. University of the Basque Country (EHU/UPV). 2012

Academic Activities & Collaborations

- Research Collaboration: **"Natural Hazards in Hushe Valley, Baltistan (Pakistan)"**, University of the Basque Country in partnership with Baltistan Foundation. 2018-present
- Research Collaboration: **"BALELUR project: Climate Change effects and sensitivity in the Baltoro Glacier and Karakoram"**, BC3 - Basque Centre for Climate Change. 2018-2019
- Course Lecture: **"Glaciares, Campos de hielo y Hielos continentales"** at *Glaciares, Nieve y Permafrost de Montaña: La Criósfera como indicadora de cambios en el clima* course, UIMP Pirineos (Aínsa, Spain). September 2017
- Research Collaboration: **"Glacial Hazards in Chile: Processes, Assessment, Mitigation, and Risk Management Strategies"**, University of Aberystwyth (Wales, UK). 2016-2018
- Research Collaboration: **"Are the long-term spatiotemporal dynamics of the gut microbiota associated with the climate change? Answers from the metagenomic analysis of ancient DNA from guano deposits"**, University of Copenhagen (Denmark). Field Assistant in Portugal, Spain, Croatia, Serbia and Bulgaria fieldworks. 2016-2017

- Exploration and Research Expedition: ***“Incognita Patagonia 2016: Exploring the Last Patagonian Icefield”***, granted by National Geographic Society, Royal Geographical Society and Azpeitia Council. Conducting an expedition to the southernmost icefield in South America, Hoste Island, Chilean Tierra Del Fuego. March-April 2016
- Research Collaboration: ***“The Monte Perdido Glacier: Monitoring and analysis of its actual dynamic and associated cryospheric processes as indicators of global change”***, IPE-CSIC & EHU/UPV. Glaciology fieldworks in Monte Perdido glacier, Spanish Pyrenees. 2015-present
- Field work: ***“Fluctuations and Glacial Geomorphology of Marinelli and Pigafetta glaciers during the Holocene, Cordillera Darwin”***, UMAG. Expedition to Ainsworth Bay, Pigafetta Inlet and Marinelli Fjord. April 2015
- Research Collaboration: ***“Late Quaternary changes in the Westerly Winds over the Southern Ocean”***, British Antarctic Survey (BAS). Expedition to Hermite Island, southern edge of South America. February-March 2015
- Research Collaboration: ***“Glacier dynamics in Antarctica and Southern Patagonia Icefield”***. INACH-FURG. 2 expeditions to **Schiaparelli glacier**, Monte Sarmiento, Cordillera Darwin. 2014-present
- Research Collaboration: ***“Dynamic and active layer characterization in frozen grounds and permafrost: John Gardner Pass – Torres del Paine & Cordillera Darwin”***. University of Magallanes. 2014-present
- Winter School on **Field Methods and Glacier Safety** (INACH-FURG-UMAG). Sub-Grey Scientific Station, Torres del Paine National Park, Chile. June 2014
- Research Collaboration: ***“The glaciers of the Pyrenees: Glaciology and glacial dynamic in the context of global change”***. **PANGEA Researching Group**. 2010-2013

Work Experience

- Research Contract. **Evolution of glaciers and glacial lakes in response to climate change in the Cordillera Darwin Icefield, Tierra del Fuego, Chile**. Supervision: Professor Iñaki Antiguada (UPV/EHU) & IkerBasque Research Professor Sérgio H. Faria (BC3).
- **“Logistics of Exploration Expeditions”** Teacher together with PhD (c) Ibai Rico. Main course of the “Mendizaleasuna: Mendi Jardueren Ikasketak”, University of the Basque Country (UPV/EHU). June 2016
- Research Contract. **Fluctuations and Glacial Geomorphology of Marinelli and Pigafetta glaciers during the Holocene, Cordillera Darwin, Tierra del Fuego**. Supervision: PhD Juan Carlos Aravena & PhD Gino Casassa. University of Magallanes. Fieldwork using peat coring, bathymetric survey and timelapse cameras for calving. 2014-2016
- **Glaciology Teaching Assistant**. Main course in MSc Antarctic Sciences, University of Magallanes. Teachers: PhD Gino Casassa & PhD Cedomir Marangunic. 2014-2015
- **Remote Sensing Teaching Assistant**. Giving classes of optical images and Geographic Information Systems, University of Magallanes. Teacher: PhD Carlos Cárdenas. 2014-2015

Mountain Guide Training

- International UIAGM recognized TD1 **Mountain Guide** level. KIROLENE, Durango. 2012-2013
- **First Aid Wilderness International Qualification course**: First Aid, Rescue management and Rescue logistics skills applied to remote and mountainous areas. September 2012

Publications, Talks & Outreach

- Izagirre, E., E. Miles & I. Rico: “1945-2018 glacier change of Cloue Icefield and associated GLOF events in southernmost South America, Tierra del Fuego, Chile”. **VII Iberian Conference of the IPA**, June 25-27, Jaca (Spain). 2019
- Arigony-Neto, J., R. Jaña, I. Gonzalez, J. Costi, R. Gomez, E. Izagirre, G. Netto, S. Weidemann, C. Schneider & G. Casassa: “Estimating the mass balance of Schiaparelli glacier 2013-2017 by degree-day modelling, satellite remote sensing and field surveys. **2nd SOCHICRI Congress**, May 9-10, La Serena (Chile). 2019
- Izagirre, E., C. Darvill, C. Rada & J.C. Aravena: “Glacial geomorphology of the Marinelli and Pigafetta glaciers, Cordillera Darwin Icefield, southernmost Chile”. **Journal of Maps** 14, 269-281. 2018

- Aizpurua, O., A. Arrizabalaga, P. Georgiakakis, C. Ibáñez, L. Jimenez, H. Rebelo, E. Izagirre, T. Gilbert & A. Alberdi: "Beyond moths and mosquitos: the exceptional dietary diversity and disparity of the long-fingered bat *Myotis capaccinii*". **14th European Bat Research Symposium**, August 1-5, Donostia (Basque Country). 2017
- Izagirre, E., E. Miles & I. Rico: "Glacier change and concurrent GLOF events in southernmost South America, Tierra del Fuego, Chile". **Climate Impacts on Glaciers and Biosphere in Fuego-Patagonia Meeting**, July 14-18, Berlin (Germany). 2017
- Rico, I., E. Izagirre, E. Serrano & J.I. López-Moreno: "Current Glacier Area in the Pyrenees: An Updated Assessment 2016". **Pirineos** 172, 1-7. 2017
- Izagirre, E.: "Recent variations of ice shelves and their effect in tributary glaciers in the north part of the Antarctic Peninsula (63° S – 70° S)". **Anales del Instituto de la Patagonia** 43(2): 75-88. 2015
- Ruiz, S., E. Izagirre, E. Beriain, P. Cid-Agüero & J. Bockheim: "Frozen grounds as climate proxy in Patagonia". **Congress of Scientific Initiation**, December 15-19, Punta Arenas (Chile). 2014

Talks & Outreach

- Lindblad Expeditions Lecturer. **Naturalist** position onboard NG Explorer cruise through Patagonian fjords and channels. Oct 2018
- Few Television **collaborations with Basque TV** (ETB) in different scientific communication and outreach programs, such as: *Gailurra*, *Teknopolis*, *Ur Handitan*, etc.
- Festival Talk: "Incognita Patagonia" at the **Sofia Science Festival**, Bulgaria. May 2017
- Festival Talk: "Ski-alpinism in Southern Patagonia" at the **Fort William Mountain Festival**, inside the Backcountry skiing night session. February 2017
- Film director: "Incognita Patagonia film" first released at the International **Bilbao Mendi Film Festival**. December 2016
- Works in Progress Talk: "Incognita Patagonia: Exploring the Last Patagonian Icefield", in the **National Geographic Society's Headquarters**, Washington DC (USA). July 2016
- Festival Talk: "National Geographic" together with Rebecca Martin, NatGeo Expedition Council Director, in the **Bilbao Mendi Film Festival** (Basque Country). December 2015

Associated Scientific Projects

- BC3-Sherpa Project: **BALELUR – Climate Change effects and sensitivity in the Baltoro Glacier and Karakoram**. PI: Dr. Sérgio Faria (BC3). 2018-2019
- Basque Government PRE-EH Grant: **Natural hazard assessment in the Hushe Valley, Baltistan – Pakistan**. PI: Dr. Iñaki Antigüedad (EHU/UPV). 2018-2019
- BMBF Project: **GABY-VASA Responses of Glaciers, Biosphere and Hydrology to Climate Variability and Climate Change across the Southern Andes**. PIs: Dr. Christoph Schneider (HU), Dr. Matthias Braun (FAU) and Dr. Gino Casassa (UMAG). 2014-2017
- RCUK-CONICYT Grant: **Glacial Hazards in Chile: Processes, Assessment, Mitigation, and Risk Management Strategies**. PI: Dr. Neil Glasser (ABER). 2016-2018
- DFF-MOBILEX Grant: **Are the long-term spatiotemporal dynamics of the gut microbiota associated with the climate change? Answers from the metagenomic analysis of ancient DNA from guano deposits**. PI: Dr. Antton Alberdi (KU). 2016-2017
- Fondecyt 1130381: **Recent, centennial and multi-millennial glacier fluctuations in Cordillera Darwin, Tierra del Fuego island, southern Chile**. PI: Dr. Juan Carlos Aravena (UMAG). 2013-2017
- UK NERC Standard Grant: **Late Quaternary changes in the Westerly Winds over the Southern Ocean**. PI: Dr. Dominic Hodgson (BAS). 2013-2016

Languages

- **English**; Writing: High. Reading: High. Speaking: Intermediate. (C1 / Advanced)
- **Basque**; Mother tongue. (C1 / EGA)
- **Spanish**; Native.
- **French**; Writing: Elemental. Reading: Elemental. Speaking: Elemental.

Memberships & Awards

- National Geographic Society's **Young Explorer**. Developing the **EC0757-15** "INCOGNITA PATAGONIA: Exploring the southernmost icefield in South America" project. The team returned from Tierra del Fuego with a better understanding of the glacial history, having traversed the Cloue Icefield and ascended two previously unclimbed peaks.
- Spanish Geographical Society's **Trip of the Year Award 2017** for the INCOGNITA PATAGONIA project and expedition.

Personals Skills & Other Training

- Several expeditions in Patagonia and around the world, with constant team working experience.
- Exploration expedition support, geographical mapping skills and glacier related scientific guidance.
- Advanced Photography courses and landscape photography and filming skills.
- Sailing and kayaking skills gained while several sailing trips in Patagonia. Kayaking elemental course certificated by Travesiaaustral, October 2014
- Navigation licence for boats up to 6 metres of length. 2017