# Ana Samperiz Vizcaino

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#### Education

#### Cardiff University, Cardiff (United Kingdom)

PhD in Earth Sciences

October 2018 – Present

Thesis title: Connecting watersheds and reefs: Investigating environmental histories of climate and land-use change from long-lived corals.

Experience highlights:

- Sample selection and data processing of CT scan and SEM images to determine coral growth.
- Sample selection and preparation for skeletal LA-ICP-MS trace metals analyses, and  $\delta^{13}$ C and  $\delta^{18}$ O analyses to explore environmental signals.
- Work closely with international collaborators (WCS, USP Fiji, Government of Fiji).
- Outreach and science communication: Volunteering at "Pint of Science 2019". Implementation
  of a workshop on the topic "tropical reefs and corals as archives" aimed at both Primary and
  Secondary schools.

Funded by: NERC GW+4 DTP + CASE Partner Wildlife Conservation Society Fiji.

#### University of Bristol, Bristol (United Kingdom)

MSci by Research in Earth Sciences

September 2016 - August 2018 (Part time)

Thesis title: Stylasterid corals: A new paleoceanographic archive?

Experience highlights:

- Identification of stylasterid corals up to species level based on the skeletal morphology of the specimens.
- Sample selection and preparation for skeletal  $\delta^{13}C$  and  $\delta^{18}O$  analyses.
- Sample preparation for mineralogy analyses (XRD) and SEM analyses to determine biomineralisation patterns.
- Five-week marine research expedition on RSS *Discovery* to the Labrador Sea.
- Outreach and science communication: execution of geology workshops aimed towards Primary Schools.

# University of Zaragoza, Huesca (Spain)

BSc Environmental Sciences, 1st class.

September 2009 - December 2014

Fourth year project title: Design, implementation and evaluation of an Environmental Education Program in a summer camp.

Experience highlights:

 Design of environmental education activities and obtention of data to investigate their impact on participant's knowledge and behaviour towards the environment.

## Relevant employment

## **University of Bristol, Bristol (United Kingdom)**

Research analyst in marine geochemistry October 2016 – August 2018 (Part-time) Responsibilities:

- Physical and chemical cleaning of marine samples and preparation for AMS and MC-ICP-MS analyses.
- Curation of marine samples and maintenance of the coral database.
- Interaction with international collaborators and training visitors to the lab.

## Sustainability Office. University of Zaragoza, Zaragoza (Spain)

Environmental Education officer January 2013 – January 2015 Responsibilities:

> Design of environmental awareness campaigns directed to the university community, design and implementation of training courses about good environmental practices, events and conferences organization, web page and social media management.

## Work skills

- SEM and CT scan image processing.
- Stylasterid and scleractinian corals morphological identification up to species level.
- Experience in chemistry clean laboratory.
- Wide experience in environmental education and science communication, including organisation, design and implementation of activities.

## Personal skills

- Excellent computer skills with all basic office software (Microsoft Office).
- Excellent knowledge of graphical (Corel, Inkscape) and data manipulation and statistical software
   (R), as well as GIS (ArcGIS, QGIS) and Ocean Data View (ODV).
- Fully fluent in both Spanish and English at a written and spoken level. Additionally, basic competence in French.

## **Publications**

- Li, T., Robinson, L., Chen, T., Wang, X., Burke, A., Rae, J., Pegrum-Haram, A., Knowles, T., Li, G., Chen, J., Ng, HC., Prokopenko, M., Rowland, G., Samperiz, A., Stewart, J., Southon, J., Spooner, P. 2020. Rapid shifts in circulation and biogeochemistry of the Southern Ocean during deglacial carbon cycle events. *Science Advances*, 6:42. doi:10.1126/sciadv.abb3807
- Samperiz, A., Robinson, L., Stewart, J., Strawson, I., Leng, M., Rosenheim, B., Ciscato, E.,
   Hendry, K., Santodomingo, N. 2020. Stylasterid corals: a new paleotemperature archive.
   Earth and Planetary Science Letters, 545:116407. doi:10.1016/j.epsl.2020.116407
- Stewart, J., Robinson, L., Day, R., Strawson, I., Burke, A., Rae, J., Spooner, P., Samperiz, A., Etnoyer, P., Williams., B., Paytan, A., Leng, M., Häussermann, V., Wickes, L., Bratt, R., Pryer, H. 2020. Refining trace metal temperature proxies in cold-water scleractinian and stylasterid corals. *Earth and Planetary Science Letters*, 545:116412. doi:10.1016/j.epsl.2020.116412

- Hendry, K., Huvenne, V., Robinson, L., Annett, A., Badger, M., Jacobel, A. Ng, HC., Opher, J., Pickering, R., Taylor, M., Bates, S., Cooper, A., Cushman, G., Goodwin, C., Hoy, S., Rowland, G., Samperiz, A., Williams, J., Achterberg, E., Arrowsmith, C., Brearley, A., Henley, S., Krause, J., Leng, M., Li, T., McManus, J, Meredith, M., Perkins, R., Woodward, M. 2018. The biogeochemical impact of glacial meltwater from Southwest Greenland. *Progress in Oceanography*, 176:102126. doi:10.1016/j.pocean.2019.102126
- Samperiz, A. & Herrero, J. 2018. Evaluation of a summer camp environmental education program in Spain. Applied Environmental Education & Communication, 17(1), 79-90. doi:10.1080/1533015X.2017.1366881

## **Awards and Grants**

- Hazel Prichard Impact Prize, School of Earth and Ocean Sciences, Cardiff University (2019). £500 to support the implementation of the outreach activity "REEFsistence".
- Alumni Foundation Award, University of Bristol (2017). £1,000 to support the outreach program
   "Rock Wow Days".
- 4<sup>th</sup> Year Project Award, Polytechnic School, University of Zaragoza (2015). Award given to the 5 best last year projects in Environmental Sciences.