GSC18 - Crete ISD 2016

The 18th Genomic Standards Consortium Workshop and the Crete Island Sampling Day 2016

http://wiki.gensc.org/index.php?title=GSC_18

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18th Genomic Standards Consortium workshop



Crete Island Sampling Day 2016

Aim: to identify the functional composition of the microbes within metagenomic community associated with each vegetation type within and between each vegetation zone.

The Genomic Standards Consortium (GSC) is an openmembership, international community aiming to enable genomic data integration, discovery and comparison [1].

The GSC18 workshop [2] held on 12 – 15 June 2016 at HCMR/IMBBC for the first time included an Island Sampling Day (ISD) event [3].

The main focus of the GSC18 meeting was to 'put standards into action'.

Presentations to this end included both large-scale projects and resources, EBI/ENA [4], Ocean Sampling Day [5], Genomic Observatories [6], NEON [7], MetaSUB [8]), and smaller-scale focused projects (such as Moorea IDEA and microbiology activities in Greece).

Development of new standards and their application across research initiatives is an ongoing activity of the GSC.

One Day, One Island - 15th June 2016, Crete

- coordinated island wide Citizen Science activity
- 26 participants, 10 teams/routes
- 435 soil samples, 140 plant specimens
- 72 predefined locations across the island of Crete
- different types of environments, elevations, vegetation and soil
- a range of environmental and temporal variables recorded on site

<u>On-going:</u>

- Marker gene and metagenomics analysis on soil samples
- Plant specimens barcoding
- Crete soil-associated-plant community assessment



As a response to the Nagoya protocol developments, part of the GSC18 meeting focused on new legislation pertinent to biological sampling and it's impact on international scientific research studies.

GSC18 ISD Movie

An introduction to GSC and the Crete Island Sampling Scan to Wate Day as it evolved.

Directed by: Stavros Psyllakis

Filming Crew: Stella Christou, Michalis Geranios

Video: https://youtu.be/Vpqly7HDTd0 (~4 minutes)

High resolution versions available at [3]

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A. Ten sampling areas were selected to examine the diverse and unique habitats and plants across the elevations on the island of Crete. Scientists attending the GSC18 meeting, HCMR staff and a group of local volunteers teamed up and headed out for a day of sampling



B. Each team followed a standard sampling procedure, collecting three 50 mL Falcon tubes of soil at each site, recording GPS coordinates and sample site metadata including soil type, soil temperature, elevation, plant species, time and date of collection. From left to right: soil sampling device; Katsounaki beach, Xirokampos; Sivas lowlands - Kommos Beach transect

Resources

Acknowledgements





- [1] Genomic Standards Consortium: http://gensc.org/
- [2] 18th Genomic Standards Consortium workshop: http://wiki.gensc.org/index.php?title=GSC_18
- [3] Crete Island Sampling Day: http://wiki.gensc.org/index.php?title=GSC_island_sampling_day
- [4] EBI/ENA: http://www.ebi.ac.uk/ena
- [5] Ocean Sampling Day: https://www.microb3.eu/osd
- [6] Genomic Observatories: http://genomicobservatories.org/
- [7] NEON: http://www.neonscience.org/
- [8] MetaSUB: http://metasub.org/





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