



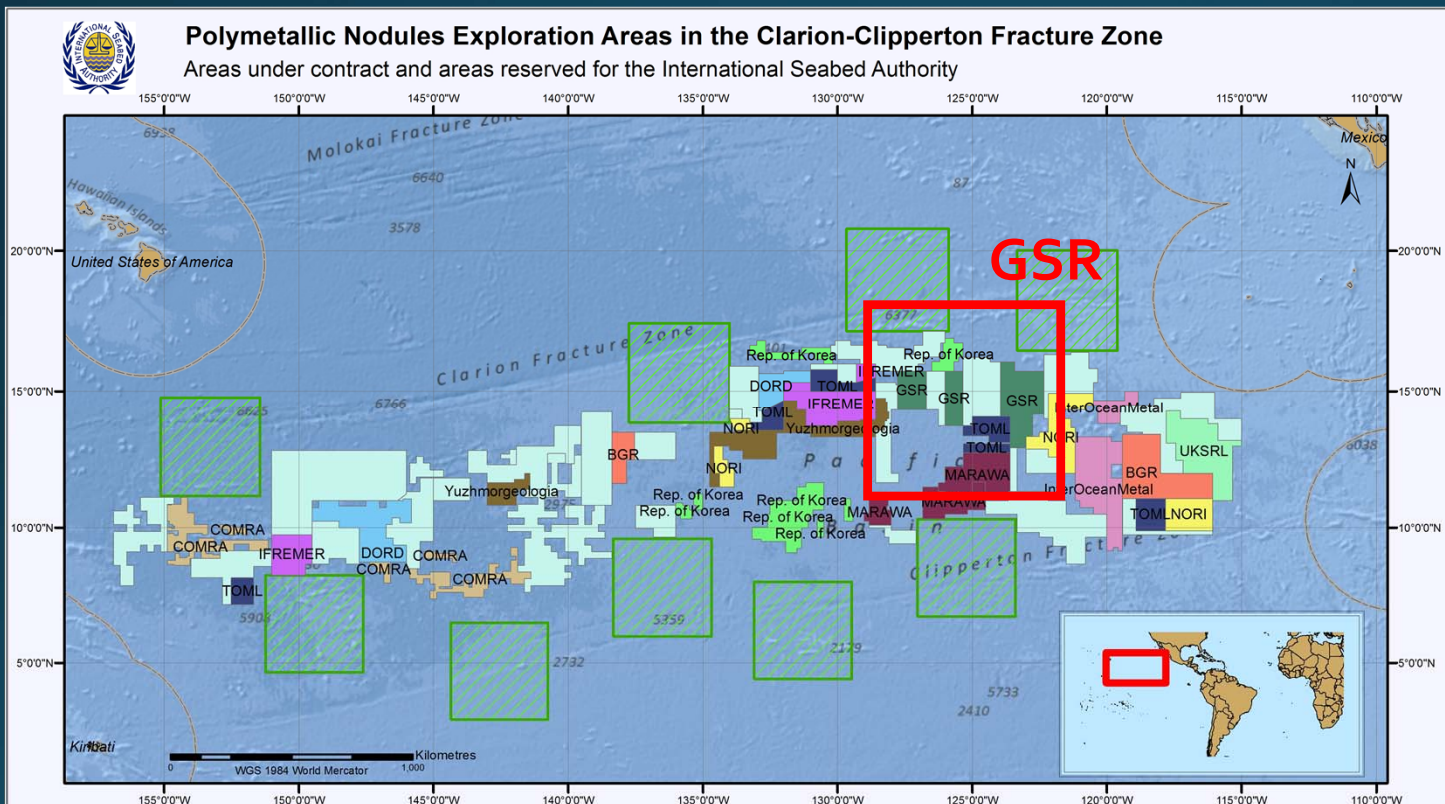
Global Sea mineral Resources N.V.

Status of activities on biological baseline surveying in the CCFZ

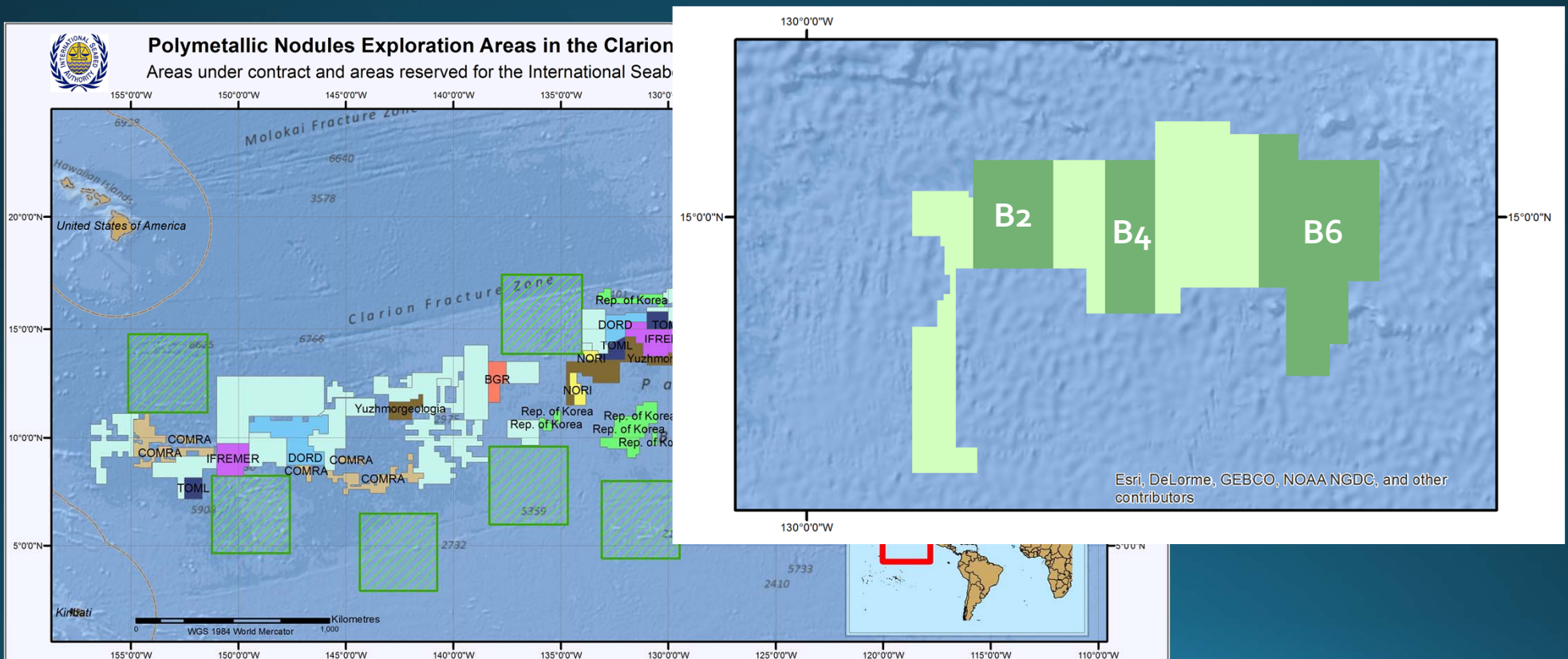
Ellen Pape & Ann Vanreusel
Ghent University, Marine Biology Research Group, Belgium

Workshop on standardization of the macrofauna in the CCFZ
23-30 November 2014, Uljin, Korea

Polymetallic nodule exploration area



Polymetallic nodule exploration area



Expertise of our research group

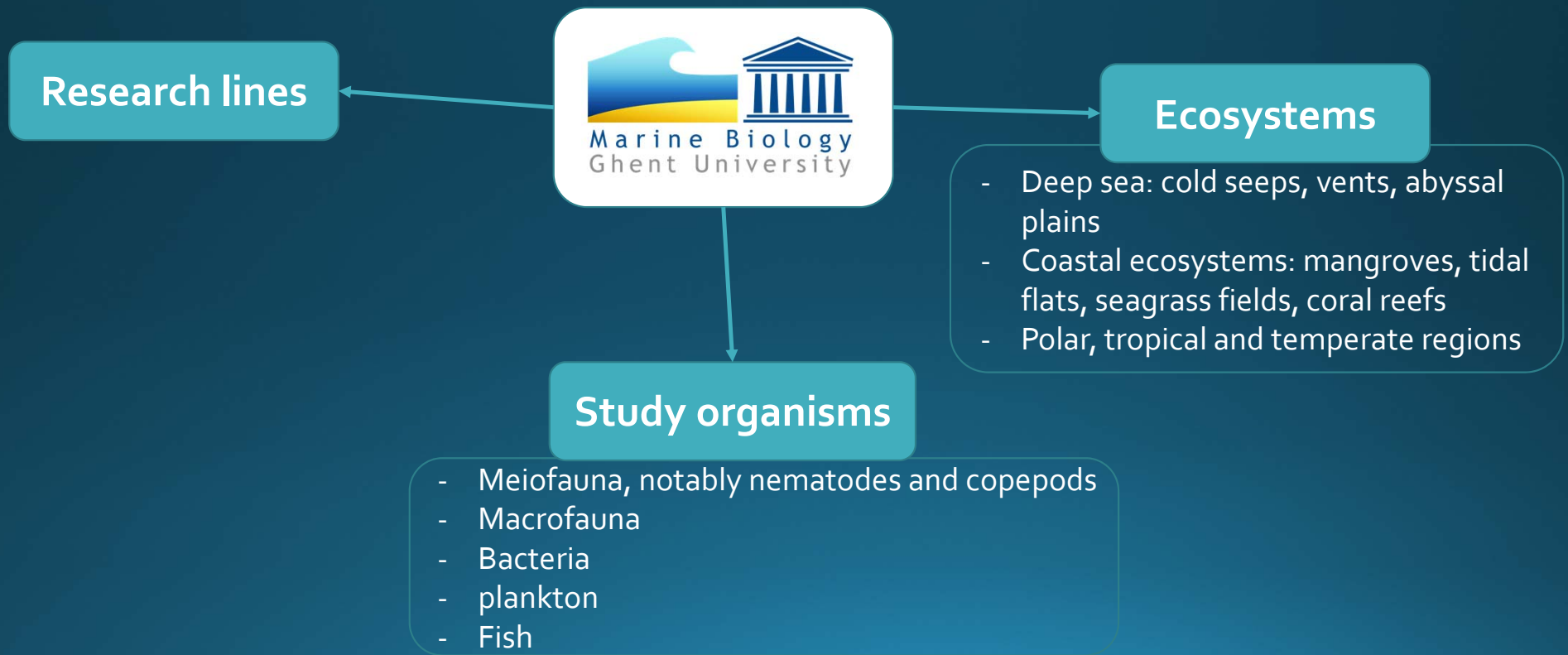


Lead by Prof. Ann Vanreusel

Expertise of our research group



Expertise UGent



Expertise of our research group



Research lines

- Biodiversity incl. functional diversity
- Biogeography
- Ecosystem functioning e.g. bioturbation, respiration
- Impact studies: e.g. wind mills, acidification, hypoxia

Ecosystems

- Deep sea: cold seeps, vents, abyssal plains
- Coastal ecosystems: mangroves, tidal flats, seagrass fields, coral reefs
- Polar, tropical and temperate regions

Study organisms

- Meiofauna, notably nematodes and copepods
- Macrofauna
- Bacteria
- Fish

Expertise of our research group



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GSR exploration cruise 2014 - biology

1.



- Macrofauna
- Meiofauna
- Bacterial cell counts (AODC)
- DNA (eDNA) – dredge: megafauna DNA
- Granulometry, TOM, TOC & TN

3.

Observation of seabirds, marine mammals, turtles,...



2.



- Mounted on dredge + box corer
- Imagery of megafauna & bioturbation marks

Plans for the future for UGent

- Construct a DNA sequence reference database for the benthos in the GSR claim area
- Participation in future GSR exploration cruises
 - Collection of replicate samples
 - Multiple corer, CTD,...
 - Small-scale in situ experimental trials

Questions for you!

- What about macrofauna-sized nematodes and copepods? What about foraminifers?
- Workshop on biodiversity assessments using molecular techniques to be organized by Ann Vanreusel, Andrew Gooday and Jan Pawlowski – support from ISA?

Thanks to

ISA KIOST GSR

Questions for me?

