

GROUP 3

Topic 3

Carbon **sequestration** efficiency in land
and aquatic ecosystems
Geo-engineering approaches

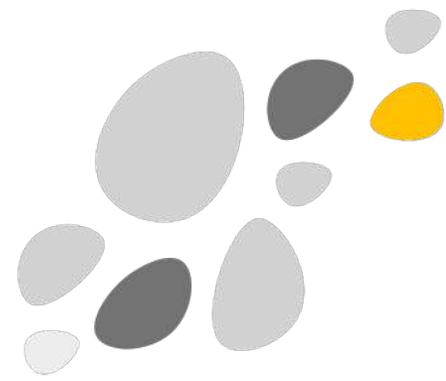


Ramon Margalef Colloquia 2021

Mona Abbasi



This is Mona



A 2nd year PhD student at limnology in Uppsala University

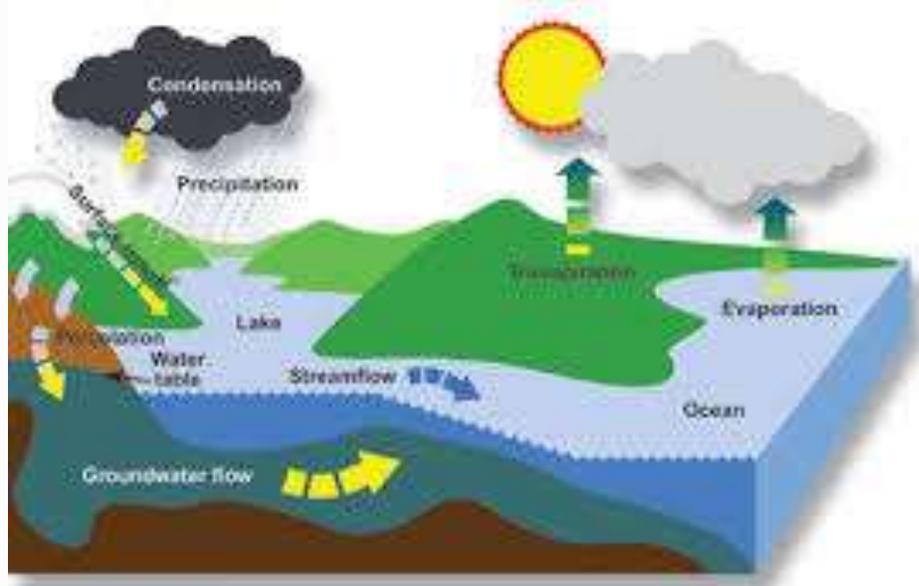
Life-loving, adventurous, a bit idealist
Cooking, yoga

My dream:

'Every Child Is Free To Be A Child...'



PS: To be able to eat and not gain weight



What's Next?

My research

Impact of adsorption and desorption processes on the biological reactivity of DOM across a range of different soils and DOM molecular compositions??

Follow my passion on using microscale techniques in my research

Expectations

Communicate with other researchers in different fields

Find similarities and common techniques in other fields and incorporate them into my research domain



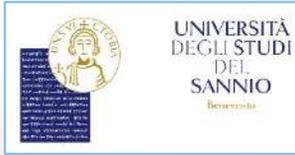
Carmen Argenio



- ✓ **Geologist**
- ✓ **Love travelling and nature**
- ✓ **Guitar player**
- ✓ **Books reader**



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COLLOQUIA



Research activities

- **RESEARCH TOPIC:** Study of calcareous nannoplankton paleo-assemblages to reconstruct the regional surface water circulation patterns and surface paleoproductivity fluctuations involving the Atlantic area during the past 25 ky.
- **CAREER STAGE:** Last PhD Year
- **NEXT STEPS:** PhD Trainig at Salamanca University



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Knowledge concerning
ecology and global biogeochemical cycles
from experts interaction
on terrestrial, limnetic and marine systems



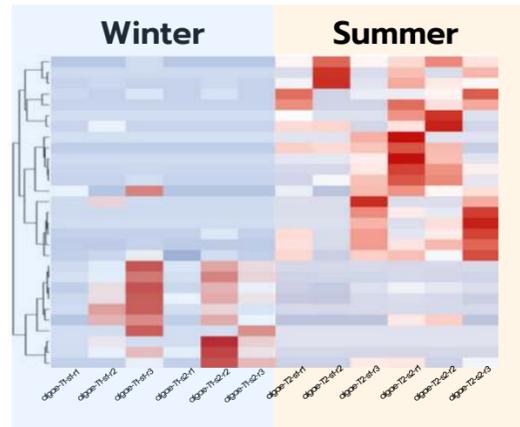
Andrea Bautista

PhD. Student

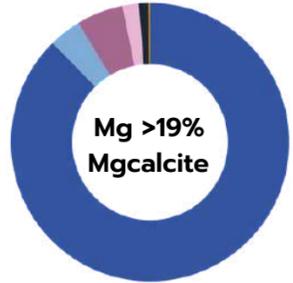
- Mexican
- Master in Marine and Coastal Sciences
- Interested in marine microbial ecology and science communication



Prokaryotic microbiota dynamics

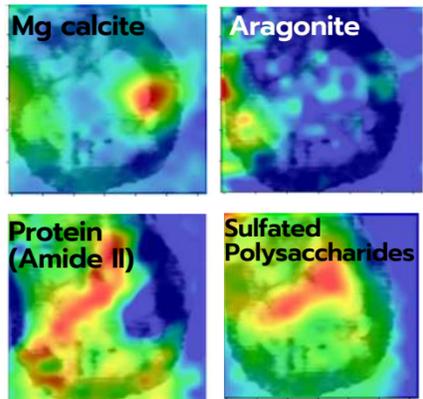
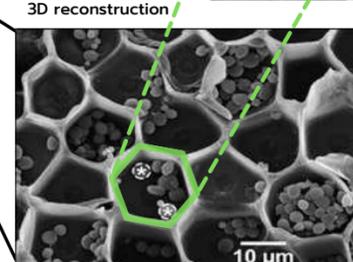
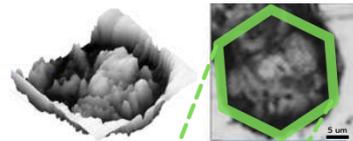


Biomaterial microstructure



- Carbonate minerals**
- MgCalcite
 - Aragonite
 - Ankerite
 - Siderite
- Evaporitic minerals**
only in summer
- Sylvite
 - Bischofite

Peritallus cell



- Interplay of microbial communities with mineral environments in coralline algae and environment.



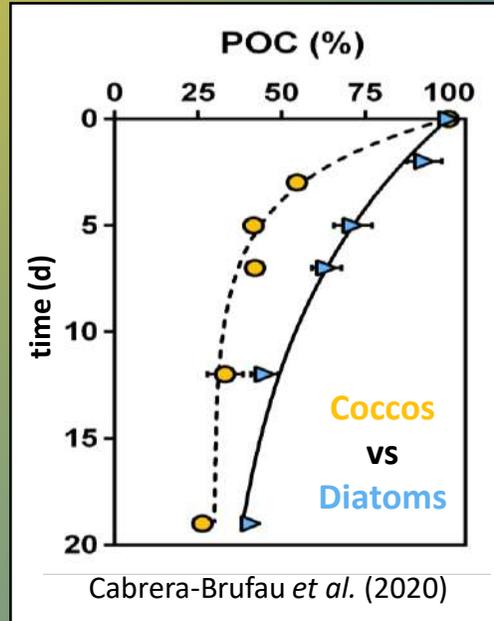
- The interaction with students and researchers as well as the dynamics of the colloquia will allow me a better understanding of the topics and their possible effects in marine environments.



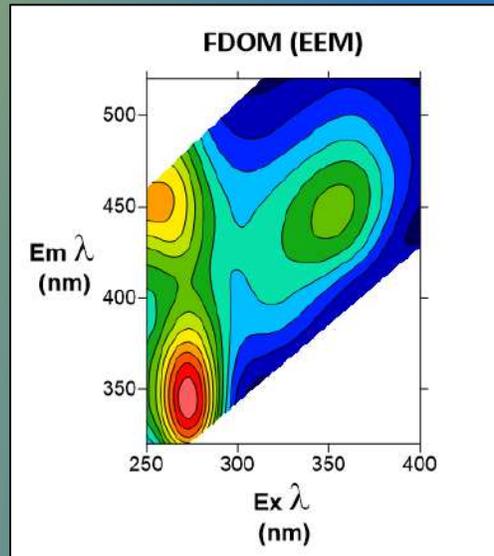
MIGUEL CABRERA-BRUFU

- Salamanca -> Barcelona
- Sailing, Beach-Voley, Surfing
- Guitar

1. POM reactivity



2. DOM composition



Phytoplanktonic OM: reactivity & quality

1. POM reactivity (degradation experiments)
2. DOM composition (spectrofluorimetry)

Last year of PhD in Marine Sciences

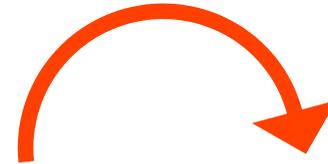
RMSC expectations:

- Learn about the terrestrial and limnic side of the field
- Networking

Clément Haëck



(Petit Som, Massif de la Chartreuse)



- Like outdoors
- Also, a big nerd



PhD student at LOCEAN
(Paris) who wants to
continue in academics

The subject

- Effect of sub-mesoscale (10-100km) fronts on phytoplankton growth, from satellite imagery

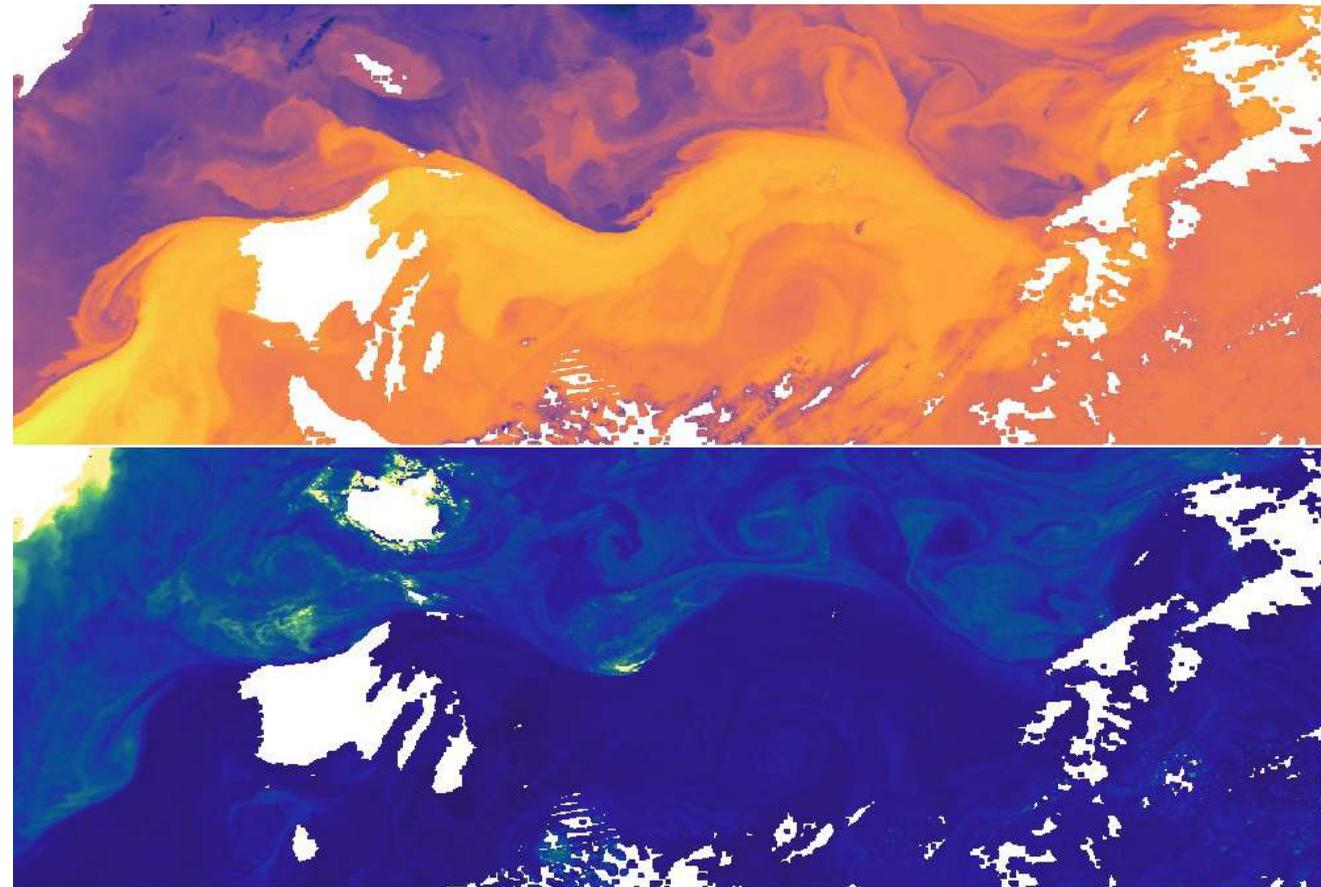
How it's going

- Clément from the past (August, starting 3rd year of PhD) hoped that by now the articles will be submitted...

- Increased biomass in fronts
- Change in composition in fronts
- Earlier bloom in fronts

- The implications of our **results** on the carbon cycle have not been explored yet...

Interaction on that topic with other researchers will surely be useful !



(SST and Chl-a in the Gulf-Stream from Modis)



Medhavi Srivastava

- Ardent and inquisitive.
- Environment and wildlife enthusiast.
- Travelling, reading and photography.
- Researcher.

1. I am about to start my PhD at Charles University, Prague, which aims at

- investigating the adaptability of the marine phytoplankton.
- Analysing reaction of the phytoplankton assemblage to environmental change in the past
- predicting future changes in the marine carbon cycle and carbonate binding capacity.

2. From this colloquia, I expect to

- deepen my knowledge in marine carbon cycling which would help me with my PhD
- be the part of an interdisciplinary program with an aim aligned to my interest.
- interact with other people from various streams and get the holistic idea.



Isabelle van der Zanden

- *Soil biodiversity in relation to soil processes (e.g. carbon dynamics)*
- *Ecological agriculture*
- *Dream: start an ecological research farm*

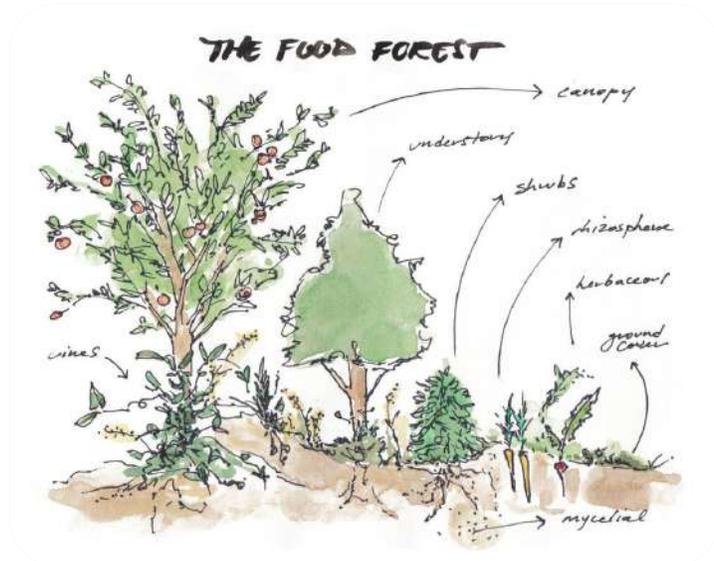


Illustration by Brook Artziniega

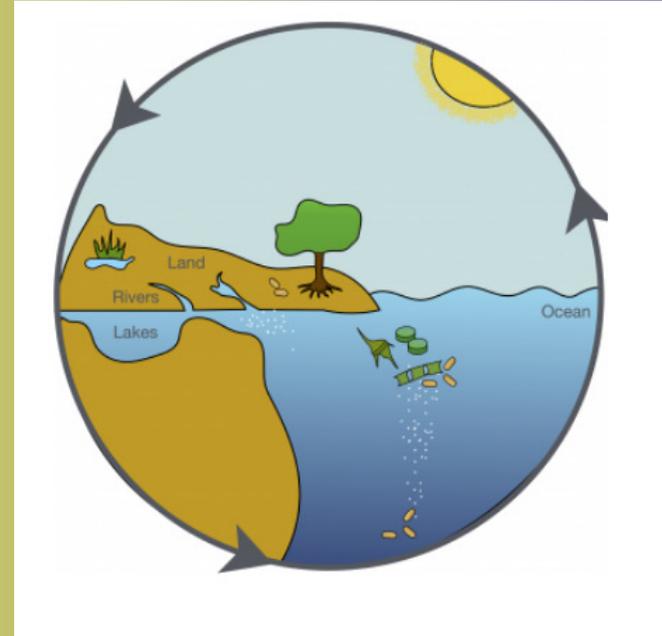
My research and future perspective

- *Second year PhD on biodiversity and carbon dynamics in food forests*
- *The design and study of agricultural systems mimicking natural ecosystems*

Expectations for the Colloquium

- *Place my own study in a broader network of research on carbon dynamics*
- *Finding inspiration for novel research ideas and methods*

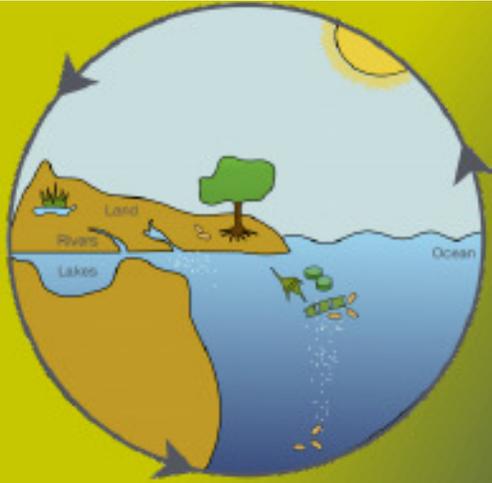
ARIANNA ROCCHI (ICM-CSIC Barcelona)



Marine biologist, fascinated by polar regions,
I love to discover.



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SUMMER COLLOQUIA

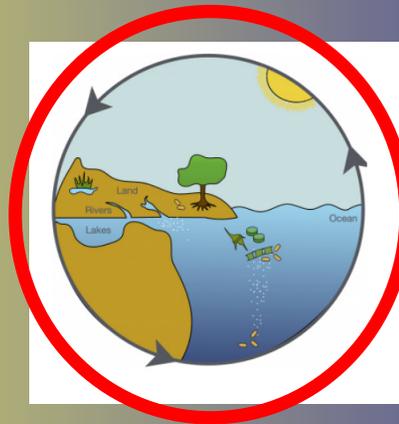


RESEARCH



- Polar ocean-atmosphere studies
- Starting my PhD at ICM-CSIC
- Make interdisciplinary research

My goal is to link all the three arrows!



THE RAMON MARGALEF
SUMMER COLLOQUIA