



CONTACTS

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THE PARTICIPANTS

CAU (Christian Albrecht University)

Ralph Schneider: paleo oceanography, Future Ocean alternate speaker Sarah Gahlen: law of the sea, Walther Schücking Institute Barbara Neumann: physical geography, coastal and ocean geography, coastal

risks and sea level rise Esther Regnier: environmental, resource and ecological economics, fisheries Jörn Schmidt: environmental, resource and ecological economics, fisheries Philippe Soudant: marine biology, immunology, cell biology Hélène Hégaret: marine biology and ecology Caroline Fabioux: Molecular biology, marine invertebrate physiology Christine Paillard: marine biology, host-pathogen interactions Alain Hénaff: geography, coastal geomorphology Olivier Ragueneau: marine biodiversity, fisheries, ocean, climate impact Olivier Thébaud: marine resource economist Annie Cudennec: international and public law of the sea Elda Miramontes Garcia: PhD student, EDSM, marine geosciences Marta Payo Payo: PhD student, EDSM, marine geosciences Eve Tsang-Hin-Sun: PhD student, EDSM, hydroacoustics

Julia Hoffmann: environmental, resource and ecological economics - ISOS PhD

GEOMAR

Vincent Saderne: benthic ecology, biogeosciences, climate change Pieter Vandromme: biogeochemical modeling Jan-Lukas Menzel: ISOS PhD Siren Rühs: ISOS PhD

Future Ocean

Avan Antia: head of ISOS Nancy Smith: internationalization coordinator

IUEM (European Institute for marine studies)

Anne-Marie Tréguier: marine physics, IUEM and LabexMER director Vianney Pichereau: microbiology/ecology, marine biology, LabexMER scientific coordinator

Fred Jean: marine ecology, ecophysiology, marine biology, head of the doctoral school (EDSM)

UBO (University of western Brittany)

Jean Boncoeur: dean of the Faculty of law, marine living resource and protected area economics Cécile De Cet Bertin: maritime law Camille Mazé: anthropology Fabien Riera: PhD student, EDSHS, anthropology

LabexMER

Corinne Floc'h-Laizet: project manager Anouck Hubert: project officer, science and society

IUEM/UBO Valérie Barbosa Solomieu: international relations

Interdisciplinarity in marine sciences

cross-over experiences from two clusters: LabexMER and Future Ocean

LabexMER "A changing ocean" (Brest) and Future Ocean (Kiel) are clusters of Excellence funded by national French and German programs. Since their beginnings, they have brought together scientists from different fields to increase our understanding of ocean change. In order to address the complex issues concerning the future of oceans and coastal zones, experts from different areas need to combine their knowledge and expertise. However, the effective integration of multiple disciplines is not an easy task: through an exchange of experiences we aim at analyzing how the cluster environment can favor or provoke multidisciplinarity, interdisciplinarity and transdisciplinarity in marine sciences education, outreach and research projects.

Multidisciplinarity draws on knowledge from different disciplines but stays within their boundaries.

Transdisciplinarity integrates the natural, social and health sciences, and transcends their traditional boundaries. Interdisciplinarity synthesizes and harmonizes links between disciplines into a coordinated and coherent whole.

Such approaches provide different perspectives on problems...and contribute to solving them!

How do we do it in marine sciences? What are the benefits and drawbacks?

How can the cluster environment help?

PROGRAMME

Wednesday (12/11)

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	INTERDISCIPLINARITY IN MARINE SCIENCES I (Plenary session, Amphi A)
09:30	General Introduction and presentation of the IUEM (Anne-Marie Tréguier)
09:45	Presentation of the clusters Labex MER (Vianney Pichereau) and Future Ocean (Ralph Schneider)
10:45	 Integrative projects and research experiences: COCORISCO ANR project : understanding and managing coastal risks (Alain Hénaff) Marine Spatial Planning and Ocean Governance in Areas Beyond National Jurisdiction (Sarah Gahlen) Interdisciplinarity for the study of social ecological systems : case study of the French «Zone Ateliers» network (Olivier Ragueneau) ERC Starting Grant: Science, policy and interests. The case of Oceans Governance (Camille Mazé) Examples of interdisciplinary actions Young researcher support and interdisciplinarity within Future Ocean (Vincent Saderne) Integrating different user groups into fishery management (Esther Regnier) Assessing social–ecological trade-offs to advance Ecosystem-Based Fisheries Management (Jörn Schmidt)
12:45	Lunch (IUEM)
	INTERDISCIPLINARITY IN MARINE SCIENCES II (Plenary session, Amphi A)
14:00	Integrative projects and research experiences - ANR project ACCUTOX: Phycotoxin accumulation by oyster: from biological characterization to social representation (Philippe Soudant / Hélène Hégaret / Caroline Fabioux) - Zooplankton and particles flux implementation in biogeochemical models (Pieter Vandromme)
15:00	Examples of interdisciplinary actions - SEQUEDEM: series of questions on maritime law and economy - « ownership » (Jean Boncoeur / Cécile De Cet Bertin) - Building ecological-economic models and scenarios for marine resource systems (Olivier Thébaud)
15:30	Round table: strategies to build up interdisciplinarity in the cluster environment
16:00	Concluding remarks: from inter to transdisciplinarity
16:15	Coffee break
	EDUCATION AND OUTREACH ACTIONS
16:30	 Presentation of actions by both clusters - Mer Education: Interdisciplinary summer school for teachers (Anouck Hubert) - Art et sciences initiatives (Christine Paillard et Fabien Riera) - ANR CO-SCIENCES: Ethno-biology/Bio-ethnology, an interdisciplinary approaches of Abalone domestication (Christine Paillard et Fabien Riera) - Periscope: collaborative platform for interdisciplinary research at the interface between science and society (Olivier Ragueneau) - Public outreach in Future Ocean (Nancy Smith)
18:00	Poster sessions
18:30	Cocktail
20:30	Conference (Océanopolis) Global change and coastal zones: What future for the ocean, for men and for fish? One topic, three voices, and multiple perspectives: Barbara Neumann ¹ , Jörn Schmidt ² and Catherine Meur-Férec ³ ¹ Institute of Geography, Christian-Albrechts University – Kiel, ² Department of Economics, Christian-Albrechts University – Kiel and ³ LETG-Brest Géomer UMR 6554 CNRS, IUEM/UBO - Brest

Thursday (13/11)

MULTIDISCIPLINARITY AND DOCTORAL TRAI	INING (Plenary session, Amphi A)
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09:00	Introduction: - Avan Antia (ISOS) / Fred Jean (EDSM) : Integrated Doctoral Education: How and What - Sciences and society common course for master students (Anouck Hubert)	
10:00	Testimonies (PhD students) - Julia Hoffmann, Siren Rühs, Jan-Lukas Menzel - ISOS - Marta Payo Payo, Elda Miramontes Garcia, Eve Tsang-Hin-Sun - EDSM	
11:30	Coffee break / poster session	
11:50	Testimony : Fabien Riera, PhD student - EDSHS	
12:10	Cooperation and exchange opportunities and hurdles	
Future Ocean POST-DOCTORAL NETWORK (IMAP)		
12:25	- General Presentation (Jörn Schmidt, Barbara Neumann) - Conclusion and perspectives	
13:00	Lunch (IUEM)	
14:00	Opportunity of labs visits or individual research discussions	
16:00	End of the workshop and departure to the airport	