

UNESCO CHAIR

Integrated analysis of marine systems

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ISMER-UQAR

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Organisation
des Nations Unies
pour l'éducation,
la science et la culture



- Chaire UNESCO en analyse intégrée
- des systèmes marins
- Institut des sciences de la mer de Rimouski
- Université du Québec à Rimouski (Canada)

www.uqar.ca/systemes-marins

UNESCO Chairs, major UNESCO partners in natural sciences

- Promoting science, environment and sustainable development for a better human security, thanks to a better management of the environment.
- Enhance institutional capacities through knowledge sharing and collaborative work for scientific and technological development, and for the adaptation of science policies to the needs of society

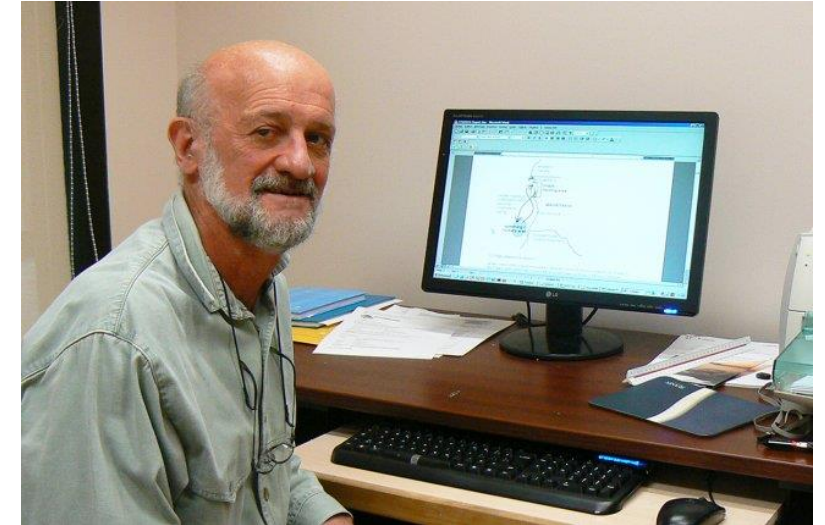
First UNESCO chair in marine sciences in Canada,
the UNESCO chair in integrated analysis of marine systems is rooted in North-South
collaboration and a multidisciplinary research on marine ecosystems.



Phase I (2010-2020)

Chair leader : Jean-Claude Brêthes

Objective: Integrated analysis of harvested ecosystems (fisheries)



Phase 2 (2020 -)

Chair leader : Fanny Noisette

Objective: Integrated analysis of marine systems using a multidisciplinary and multi-scale approaches (from the organism to the ecosystem)



Objectives of the Chair

Training and commitments

- Supervise and train the new generation of scientists able to handle efficiently scientific questions related to multidisciplinary in marine systems (including social and economic actors)
- Train students from Canada and partner countries in the integrated analysis of marine systems, adopting an holistic approach at the ecosystem scale



Marine science courses at UQAR

- DESS in applied oceanography
- DESS in management of maritime resources
- MSc in oceanography
- MSc in management of maritime resources
- PhD in oceanography
- PhD in management of maritime resources

Objectives of the Chair

Training and commitments

- Enhance the competences of research and teaching staff to ecosystemic approaches under climate change
- Inform and educate the representatives of the civil society (e.g. fisherman association) to sustainable management of ecosystems



Objectives of the Chair

▶ Multidisciplinary research integrating different biological scales

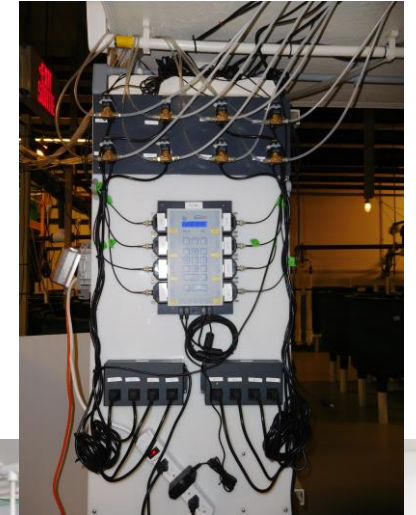
- Multiscale studies on coastal ecosystems, from individual responses to ecosystem functioning
- Multidisciplinary research for developing coastal ecosystem management accounting for the concept of socio-ecosystemes



Objectives of the Chair

North-South partnerships

- Support and develop coastal environment surveys and observatories in partner countries to monitor the impacts of human activities
- Build similar experimental setups in Canada and partner countries to study the responses of coastal ecosystems to climate changes (warming, ocean acidification)



► Sensibility of the Northern shrimp to climate changes in Quebec



Piero Calosi, UQAR



Photo : Jean-Claude Brêthes



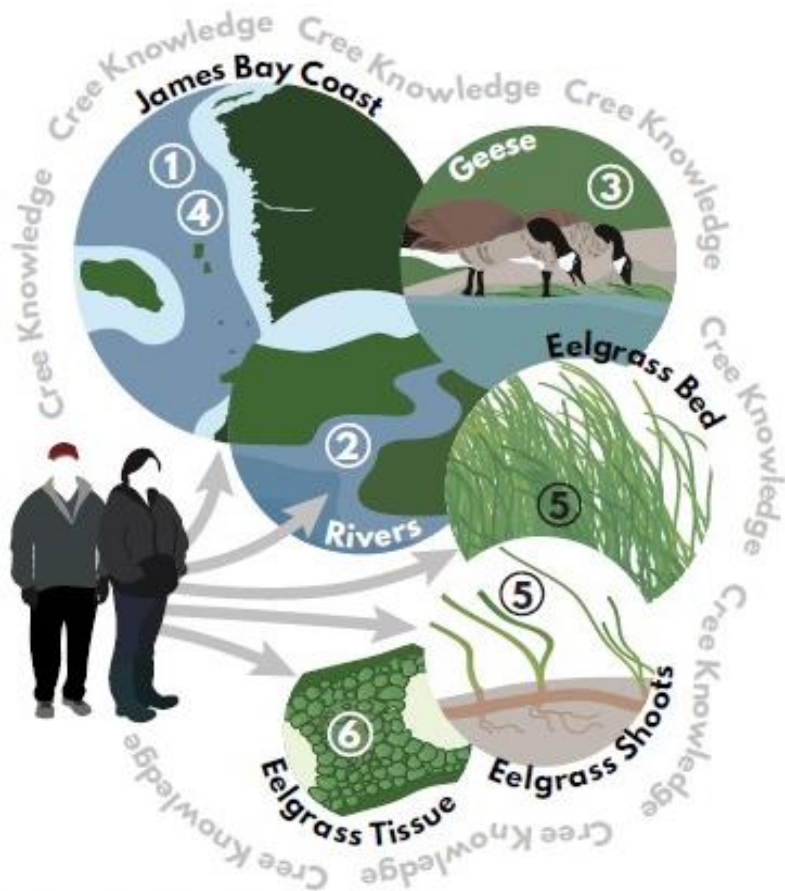
Marco Alberio, UQAR

Biological sensibility of different Northern shrimp populations along eastern Canada

Community management and diversification strategies in First Nation fisheries

Projects

Understand the functioning of James Bay coastal ecosystems and the decline of eelgrass meadows



Impacts of ocean acidification on organisms and ecosystems from la Ciénaga Grande de Santa Marta (Colombia)



Natalia Villamizar, U. Magdalena



Luz Adriana Velasco, U. Magdalena



International collaborations

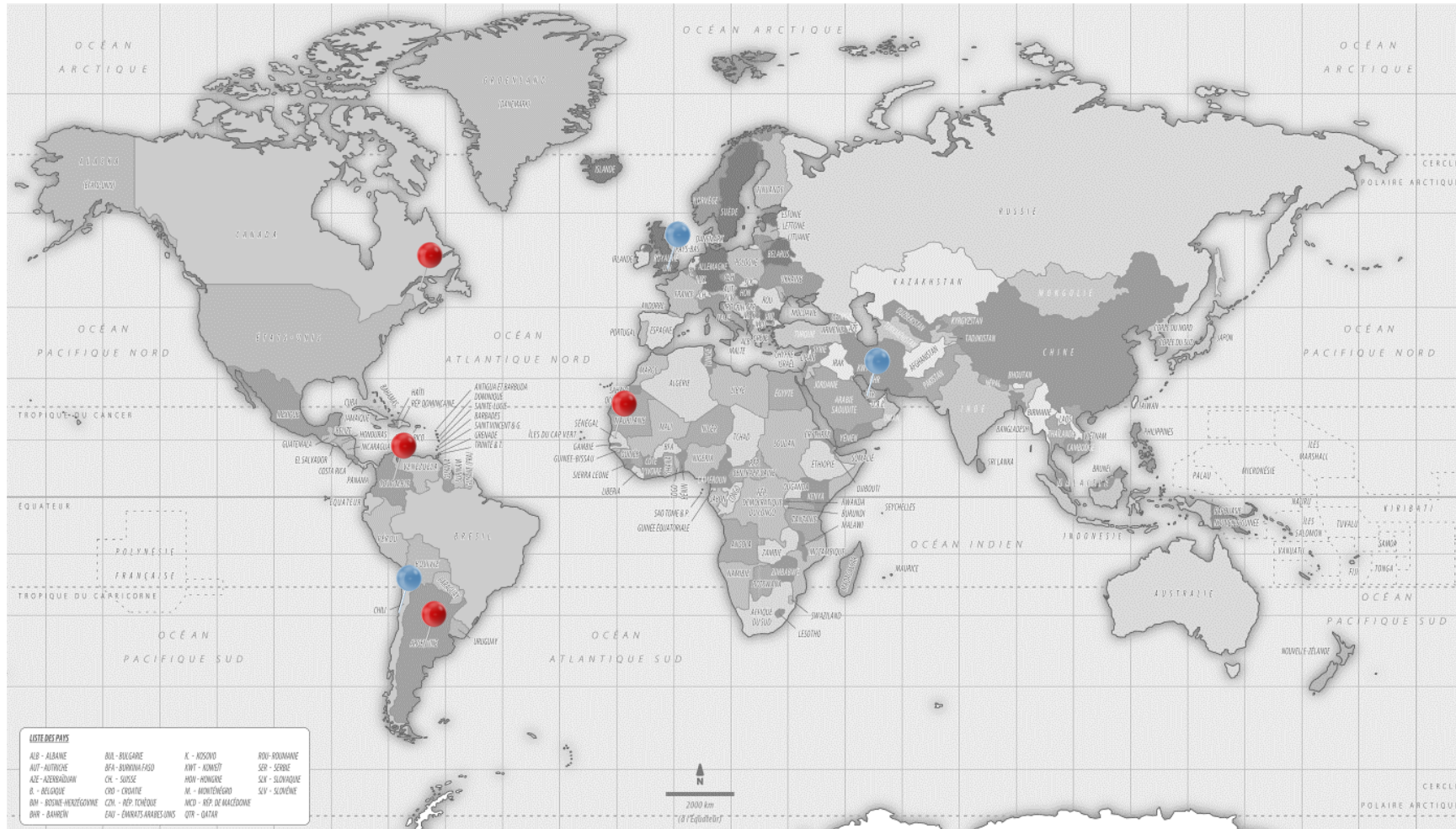


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Developping North-South and South-South collaborations and partnerships



Thank you for your interest!



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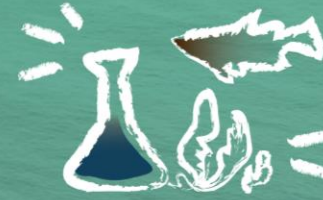


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In this team We truly believe



In Science



Gender
isn't binary



In Indigenous
people's right to
auto-determination



People
with disabilities
are welcome



Love is love



Feminism is
for everyone



Black Lives
Matter



Communication
is key



Immigrants are
welcome

emZCR2020