

Laboratory of Aquaculture & Artemia Reference Center

Faculty of Bioscience Engineering

Ghent University, Belgium

China AquaFishNet visit - Ghent, August 31, 2007

ARTEMIA

male brine shrimp

female brine shrimp

1 cm

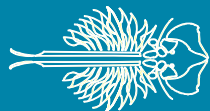


Coastal saltworks

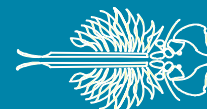
for solar salt production
(salinas)



Inland salt lakes



Artemia cyst accumulation on the beach of the Great Salt Lake (Utah-USA)

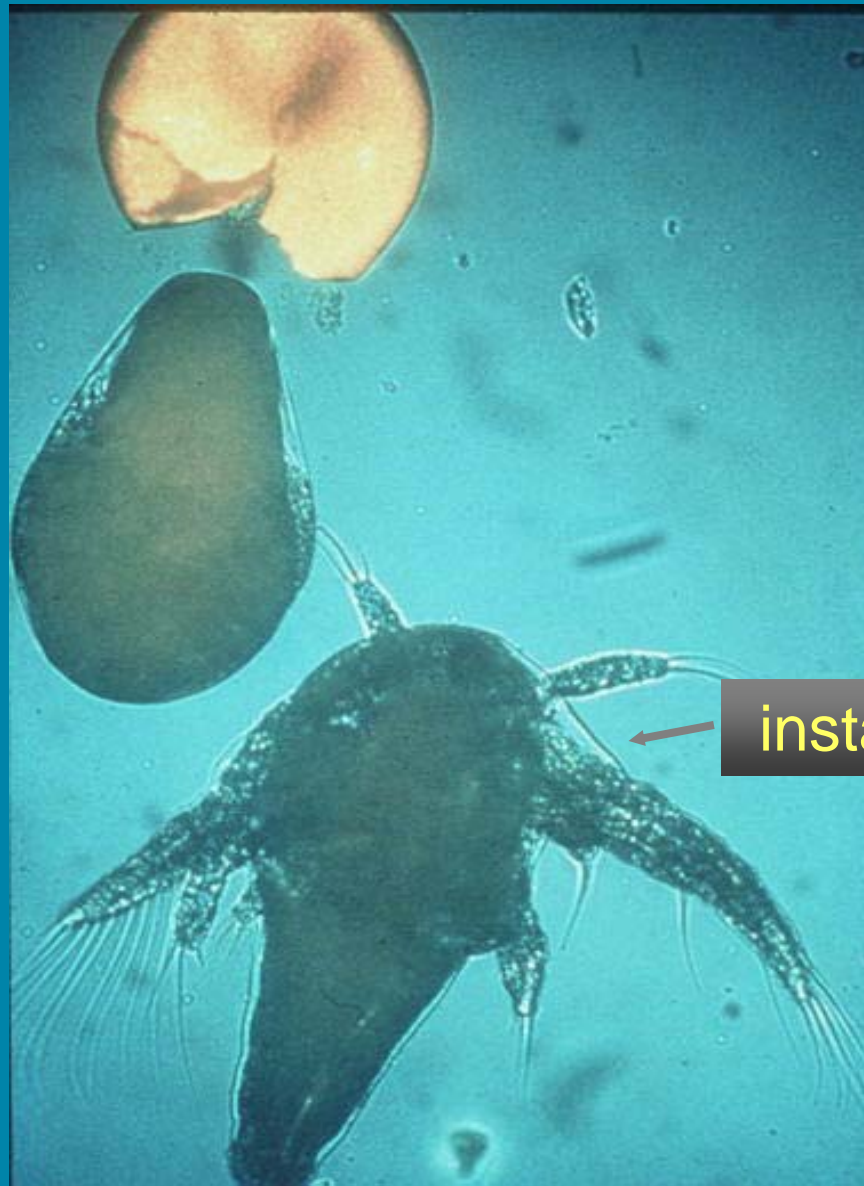




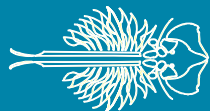
0.5 mm

dehydrated *Artemia* cysts in dormancy state

Artemia hatching



instar I nauplius

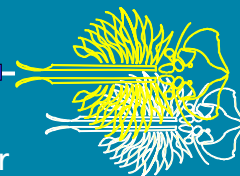




10-day old seabass larva feeding on Artemia



10-day old shrimp larva feeding on Artemia



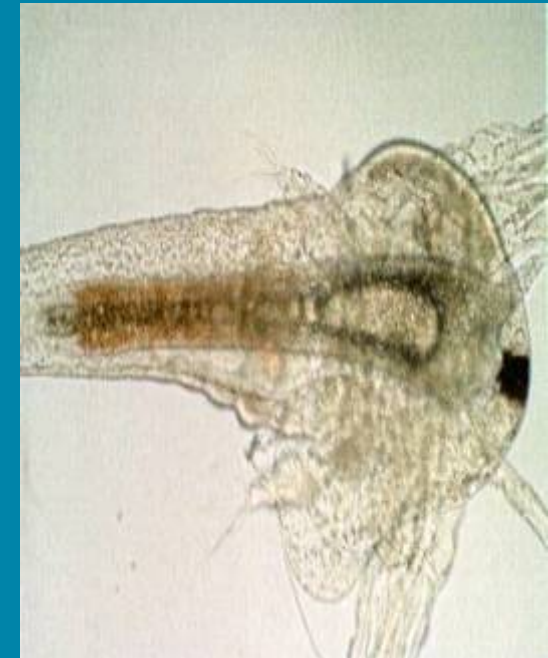
Artemia research



Biodiversity



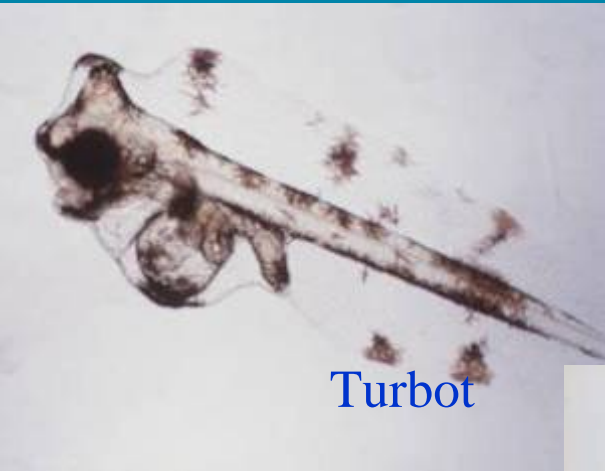
Hatching and life cycle studies



Bioencapsulation



Larviculture research



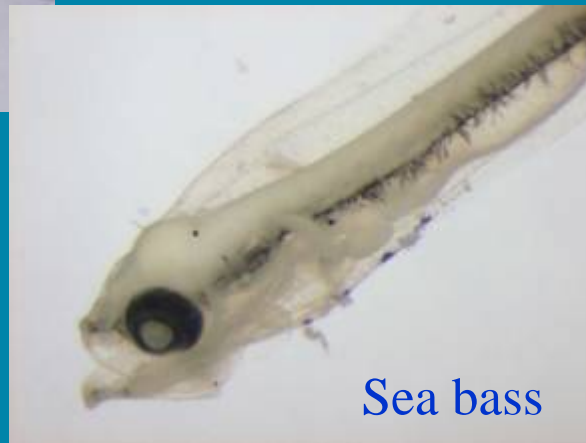
Turbot



Macrobrachium rosenbergii



Penaeid shrimp



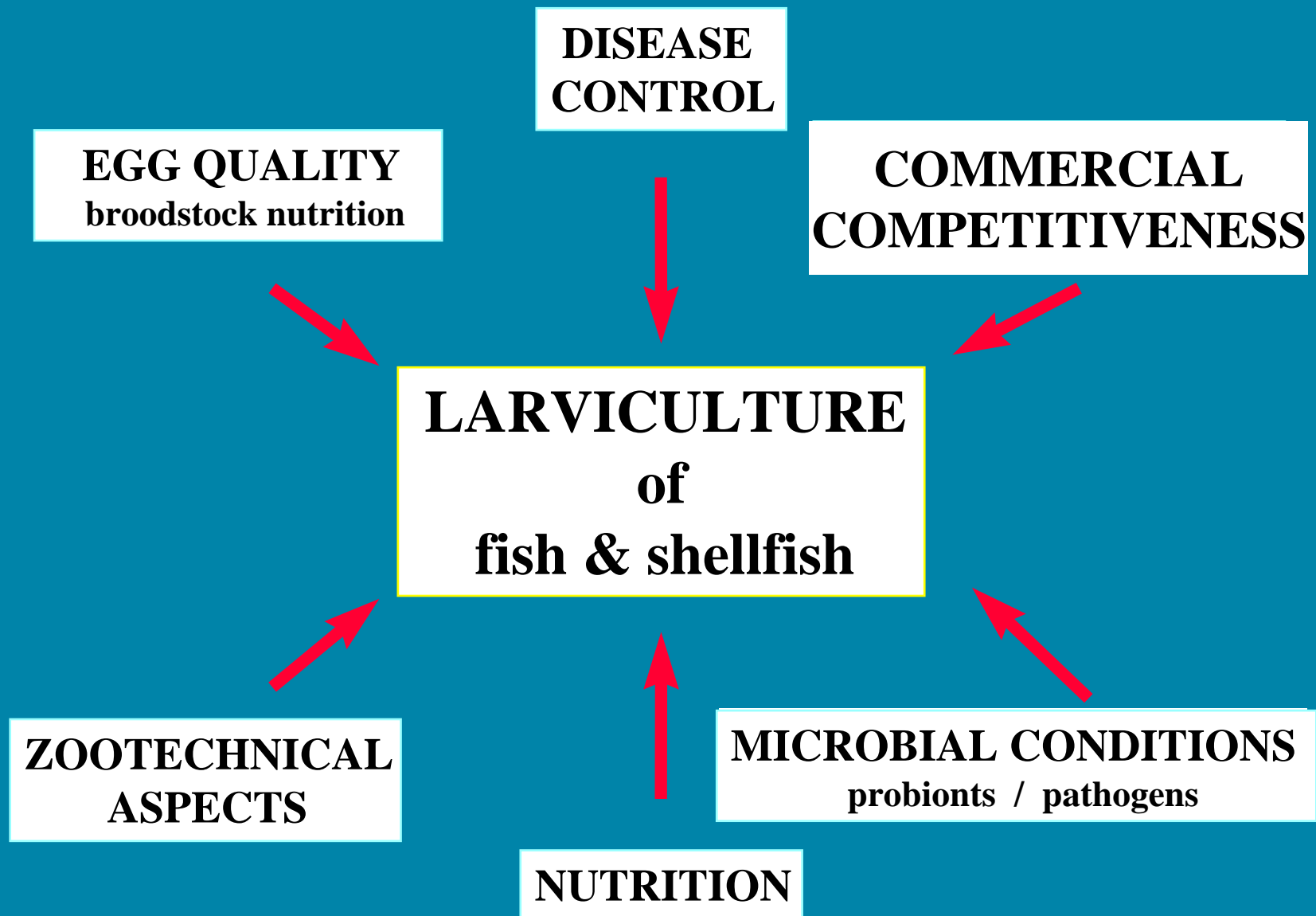
Sea bass



cobia



Mud crab : *Scylla* spp.



UGent interdisciplinary cooperation

in aquaculture R&D

Faculty of Bioscience Engineering

Biochemical and Microbial Technology – W. Verstraete and N. Boon

Crop Protection – P. De Clercq

Agriculture Economics – W. Verbeke

Applied Analytical and Physical Chemistry – P. Van Der Meeren

Applied Ecology and Environmental Biology – N. De Pauw

Faculty of Veterinary Medicine

Virology, Parasitology and Immunology – M. Pensaert and H. Nauwynck

Morphology – W. Van den Broeck

Pathology, Bacteriology and Poultry Diseases – A. Decostere

Faculty of Sciences

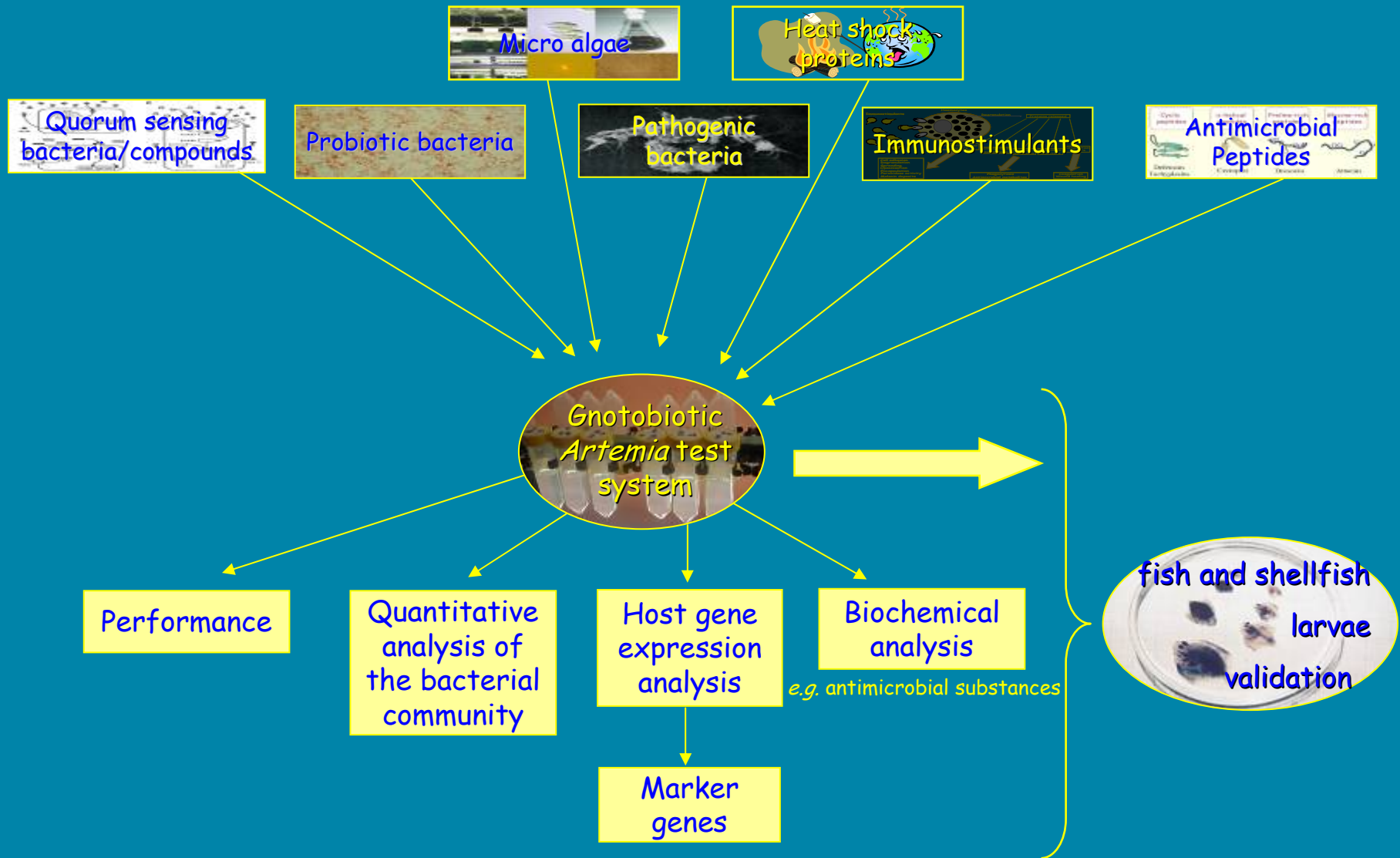
Biochemistry, Physiology and Microbiology – P. Vandamme and G. Huys

Biology – D. Adriaens and W. Vijverman

Molecular Genetics – D. Inzé and F. Van Breuseghem



→ INNOVATIVE MICROBIAL MANAGEMENT SYSTEMS



UGent Aquaculture R&D Center

Faculty of Bioscience Engineering

Animal Production - P. Sorgeloos en P. Bossier

Biochemical and Microbial Technology – W. Verstraete and N. Boon

Crop Protection – P. De Clercq

Agriculture Economics – J. Viaene, W. Verbeke and X. Gellynck

Organic Chemistry – J. Dewulf

Applied Analytical and Physical Chemistry – P. Van Der Meeren

Applied Ecology and Environmental Biology – N. De Pauw

Food Safety and Food Quality – J. Debevere, F. Devlieghere and J. Van Camp

Faculty of Veterinary Medicine

Morphology – W. Van den Broeck

Pathology, Bacteriology and Poultry Diseases – A. Decostere

Virology, Parasitology and Immunology – H. Nauwynck

Faculty of Sciences

Biochemistry, Physiology and Microbiology – P. Vandamme and P. De Vos

Biology – M. Vincx, A. Huysseune, D. Adriaens and W. Vijverman

Molecular Genetics – D. Inzé

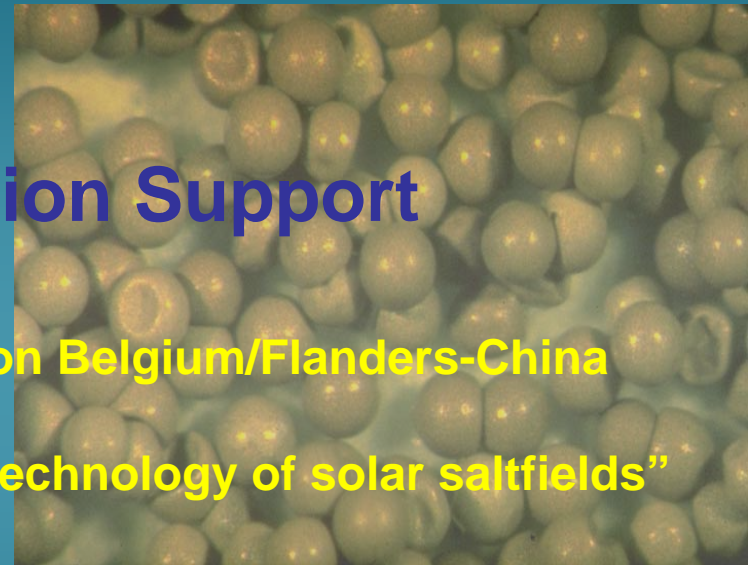


biggest solar salt production in the world is located in the Bohai sea, China



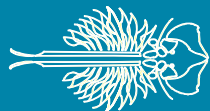
May 1985
Artemia training course
Shandong College of
Oceanography, Qingdao





Cooperation Support

- **Bilateral Cooperation Belgium/Flanders-China**
- **UNDP project “Biotechnology of solar saltfields”**
- **EU STD projects “Artemia”**
- **ABOS-VLIR Own Initiative Project
“Artemia & fish/shrimp/crab larviculture”**



Aquaculture Alumni UGent

Master of Science in Aquaculture (since 1991)

with scholarships of EU, VLIR and UGent

- Salt Research Institute (2)
- Ocean University of China, Qingdao (3)
- Institute of Oceanology, Qingdao
- Nankai University
- South China Sea Fisheries University
- University of HongKong
- Dalian University

PhD students in Aquaculture:

with scholarships of VLIR and Chinese government

- Ocean University of China (4)
- Salt Research Institute
- Shanghai Fisheries University



China & ARC-UGent Cooperation in aquaculture research, education & extension

- Salt Research Institute, Tanggu
- China National Salt Industry Cooperation, Beijing
- Ocean University of China, Qingdao
- Yellow Sea Fisheries Research Institute, Qingdao
- Institute of Oceanology, Qingdao
- Shanghai Fisheries University
- China Fisheries Society
- Nankai University, Tianjin
- Beijing Genomic Institute



China AquaFishNet partners

- Shanghai Fisheries University
- Ocean University of China, Qingdao
- Guangdong Ocean University
- Jimei University
- Dalian Fisheries University
- Fujian Academy of Agricultural Sciences
- Institute of Hydrobiology of the Chinese Academy of Sciences, Wuhan
- Institute of Oceanology of the Chinese Academy of Sciences, Qingdao
- Yellow Sea Fisheries Research Institute of the Chinese Academy of Fisheries Sciences, Qingdao
- Pearl River Research Institute of the Chinese Academy of Fisheries Sciences, Guangzhou

China AquaFishNet

- interest in closer interaction between China and Europe in the framework of the ASEM aquaculture platform (initiative launched in China in 1999, implemented by the EU in 2003)
- 1st Euro-China Conference on Higher Education & Research in Aquaculture, Shanghai, July 2006: first approach to set up network of aquaculture centers in China
- 2nd Euro-China Conference on Higher Education & Research in Aquaculture, Wageningen, August 27-28, 2007: official launch of China AquaFishNet; identification of priority areas for interaction

Aim of China AquaFishNet and its European counterparts (Universities of Wageningen, Trondheim and Gent):

*facilitate
dialogue / interaction / cooperation
in the following areas*

- Education
- Research
- Governance

with other ASEM aquaculture platform members

www.aquaculture.UGent.be

