

UMaine graduate students present at international marine conference

September 21, 2016

Five members of Dr. Yong Chen's Lab in the School of Marine Sciences at the University of Maine have received external funding supports to present their fisheries research at an international conference this month. They are presenting at the Annual Science Conference (ASC) of the International Council for the Exploration of the Sea (ICES) in Riga, Latvia at the end of September. ICES supports the sustainable use of the oceans through development of science and advice.

Dr. Jie Cao, a postdoctoral researcher; Mattie Rodrigue, a dual master's student in marine biology and policy; Jocelyn Runnebaum, a Ph.D. candidate in marine biology; Kisei Tanaka, a Ph.D. candidate in ecology and environmental sciences; and Mike Torre, a Ph.D. student in marine biology will all be presenting at the conference in Latvia.

They will be presenting research on a spatio-temporal model applied to survey abundances of Northern shrimp, a groundfish survey ran by both fishermen and scientists, a habitat suitability model for cusk using fishermen's knowledge, American lobster shell disease, and a model of habitat suitability for sea scallops.

Some of their work highlights the importance of including fishermen's knowledge and participation in sciences.

"Fishermen's knowledge regarding important environmental variables for cusk is used to fine-tune habitat model development. Fishermen's knowledge for areas where cusk are likely to be caught can also validate habitat suitability maps produced in modeling," Jocelyn Runnebaum says.

All of their research is important to Maine, as these marine species are a part of many important fisheries in the Gulf of Maine.

"The shrimp population that supports important fisheries in Maine experienced a sudden decline of all life history stages in 2012. Our study could potentially improve the stock assessment and management of the fisheries," says Dr. Jie Cao.

"The expansion of lobster shell disease has become an emerging threat to the inshore lobster fisheries in the northeastern United States. The development of models to improve the efficiency and precision of existing monitoring programs has been advocated as an important step in mitigating its harmful effects," Kisei Tanaka said.

These graduate students are excited to share their work with scientists from all over the world.

"ICES ASC will be the first major conference that I attend during my PhD program and will provide me with excellent exposure to marine science research," said Mike Torre.

“It will be helpful to get feedback from researchers around the world who are looking to integrate sociology and economics into research and management of fisheries,” says Runnebaum.

“I hope to be able to meet with a multitude of disciplines who are all working toward sustainable fisheries management and be able to bring back some of their own knowledge to UMaine,” says Mattie Rodrigue.

Presenting their research will also help contribute to ICES’s mission of sustainable ocean use.

“My research addresses the principles of ICES that promote scientific research for optimum use of aquatic resources. I believe I can contribute to ICES’s efforts to aid effective implementation of ecosystem-based management policies,” said Tanaka.