

Fishery Industrial Technology Center (FITC) Update
University of Alaska Fairbanks
www.sfos.uaf.edu/fitc

Ongoing Activities, February 2011

The FITC faculty and staff provide this monthly update for those interested in the teaching, research and public service at FITC. Please contact us with questions.

News

Two graduate students at FITC, Katie Brenner and Lale Grurer earned awards at the 62nd annual Pacific Fisheries Technologists Conference in Vancouver, B.C. Katie Brenner won third place in the student competition for her oral presentation “Quality Assessment of Commercially Harvested Weathervane Scallops from Alaska.” Brenner’s advisor is FITC faculty member, Alexandra Oliviera. Lale Gurer earned third place in the student competition for her poster “Development of Flavored Freeze-Dried Cubes from Wild-Caught Pacific Pink Salmon.” Her advisor is FITC faculty member, Quentin Fong. In addition, Chuck Crapo, FITC faculty member, was elected chair of PFT and coordinator of next year’s conference to be held in Anchorage in February 2012.



Two winners of the 2011 Alaska Symphony of Seafood competition received technical support from FITC faculty members while creating their award-winning products. Alex Oliviera calculated estimates of nutritional value of smoked Copper River salmon for Wayne Carpenter’s Candysmoke product. Chuck Crapo and Quentin Fong provided product and marketing assistance to Crabby Sisters who produced the winning gluten-free king crab cake.

Upcoming

The next Brown Bag Lunch Seminar will be **Tuesday, March 22nd** given by Kate Wynne titled “*Whale Deterrence for Fishermen and Mariners: Research Findings.*” Past presentations are archived and available on the FITC website.



The *Kodiak Area Marine Science Symposium*, KAMSS, is Kodiak’s first integrated science conference linking regional research with community members. It will be held in Kodiak from **April 9-12**. Additional workshops offered include training in the Alaska Seas and Rivers K-8

curriculum, community monitoring for invasive species and Paralytic Shellfish Poisoning. KAMSS is being organized by MAP faculty member, Kate Wynne, and is sponsored by Alaska Sea Grant, FITC and many other organizations and agencies. <http://alaskaseagrant.org/kamss>

During KAMSS, on **Monday, April 11th**, FITC will sponsor *Seafood Snacks and Science*, an open house from 6:30 to 8:30 pm. The open house will feature hands-on demonstrations, a tour of FITC and delicious seafood snacks.

Teaching (teaching and student support by FITC faculty)

Brian Himelbloom presented “Zero Tolerance for *Listeria monocytogenes* in Ready-to-Eat Smoked Seafood” at the FITC Brown Bag Lunch Series. The talk will be archived on the FITC website. Chuck presented an FITC Brown Bag lunch seminar titled “Eating Safe Seafood: Avoiding the Botulism Toxin.”

Chuck Crapo taught a Hazard Critical Control Analysis Process (HACCP) and a Sanitation class in Anchorage to 15 participants from 11 seafood companies, CDQ groups and fishing operations. Chuck teaches HACCP twice a year in Anchorage and in other sites as demand warrants. This fall he taught HACCP in Kodiak for a class of about 40.

Chuck, Alex and Brian held committee meetings for their FITC graduate students and assisted them in their research projects. Katie Brenner is working with Alaska scallops, Naim Montazeri is working with smoked salmon and Stuart Thomas is working with Alaska oysters.

Kate Wynne presented a 3-hr training on marine mammal identification and recording for 16 NMFS groundfish observer trainees at UAA’s Observer Training Center in Anchorage.

This semester, there are 3 graduate-level classes and 1 undergraduate class being offered at the FITC. Chuck Crapo and Brian Himelbloom are teaching FSN661 *Seafood Processing and Preservation* (3 credits). Chuck and Alex Oliviera are team teaching FSN663 *Quality Control Systems and Sensory Evaluation* (3 credits). Brian Himelbloom and Alex are teaching FSH 692 *Food Science Seminar* (1 credit) and Scott Smiley is teaching FSH 261 *Introduction to Seafood Utilization* (3 credits). Scott Smiley began developing an undergraduate Fisheries class in aquaculture.

Research

Chuck Crapo conducted seafood processing plant energy audits in Kodiak for Ocean Beauty Seafoods and Alaska Pacific Seafoods with Torie Baker, MAP and Joel Bailey, from the UAF Institute of Northern Engineering. They also tested energy audit do-it-yourself kits designed for smaller processors to use themselves. Reducing energy costs to the state's seafood operations is the focus of a two-year project funded by the Alaska Energy Authority.



Alex Oliviera delivered a presentation at the Pacific Fisheries Technologist's meeting on the composition of Pacific cod livers during their spawning cycle.

Alex hosted two researchers, Dr. Graham Fletcher and Dr. Terry Chadderton from the New Zealand Plant and Food Research Center, who were visiting FITC. They met with FITC faculty to discuss potential collaborations in joint research projects. KMXT interviewed for the radio.

Kate conducted a monthly aerial survey of marine mammals in northern Kodiak waters. An additional leg flown to Tugidak Island is specifically designed to monitor winter distribution. Kate also conducted land-based observations and brand-resighting on the Long Island Steller sea lion haulout. She attended the Alaska Marine Mammal Stranding Network meeting in Seward and presented an annual summary of Kodiak Area stranding responses and trained a group of statewide Marine Advisory Program agents in stranding response protocol.

Brian Himelbloom co-wrote with Alexandra Oliveira a proposal to the Alaska Space Grant College Program looking at the potential for freeze-dried salmon.

Public Service

Brian and Alex met with two Kodiak High School teachers, Kevin Lauscher and Jane Eisemann about their joint project to develop a high school seafood science class. The class will be available to high school students during the next school year.

Quentin Fong and Chuck Crapo presented a seafood processing perspective at *Strong Communities, Vibrant Economies: A Workshop for Alaska's Rural Coastal Communities*, at the Southwest Alaska Municipal Conference Annual Meeting, Anchorage for 40 regional residents.

Chuck Crapo provided technical information to: a Seattle seafood processor on

utilization of sockeye salmon bellies; a Juneau smoker on retort pouch production; a Fairbanks hot sauce producer providing process validation; a Talkeetna small processor interested in developing baby food from local produce; a Vietnamese seafood processor interested in the coloration of flaked pink salmon products; a Seward processor on thermal processing in retort pouches and glass jars; a Wrangell processor on king crab processing times and procedures; a Quinhagak processor for HACCP methods; an Elfin Cove processor for HACCP and sanitation plans; California Sea Grant on distance delivery for HACCP training; a Seattle processor on energy audit opportunities; and a Kodiak processor on smoked salmon quality problems and establishing sanitation procedures.

Scott Smiley worked with Aquaculture Technologies Agribands, Purina Mexico on developing a consistent source of feed requirements for farmed *Litopenaeus vannamei*.

Brian Himelbloom participated in a meeting of the Kodiak Fisheries Research Center (KFRC) as the FITC member of the Kodiak Workforce Regional Advisory Council (KWRAC).

Quentin Fong produced a brief for Bruce Schactler titled: Potential Species for Commercial Harvesting and Cultivation Alaska – Jellyfish.

Professional Service

Kate Wynne attended the NOAA Alaska Scientific Review Group (AKSRG) meeting in Seattle: reviewed the status of 12 marine mammal stocks, received research updates from NMFS personnel, and helped draft a white paper promoting mitigation of marine mammal fishery interactions through work with fishing organizations.

Various FITC faculty served as scientific reviewers of manuscripts submitted by other researchers including the Journal of Food Sciences, Journal of Aquatic Food Product Technology, and Food Control.

University Service

Brian Himelbloom represented the School of Fisheries and Ocean Sciences as a member of the UAF Faculty Senate at a meeting in Fairbanks.

Scott Smiley, Stephen Bodnar and Kay Bodi met every other week with Ron Moore from UAF Facilities regarding maintenance of the FITC building.

The faculty, staff and students met this month with Mark Herrmann, Dean of the UAF School of Management and chair of the UA FITC Review Committee. Dean Herrmann was in Kodiak on a fact-finding mission for the Committee.