

Fishery Industrial Technology Center (FITC) Update

School of Fisheries and Ocean Sciences, University of Alaska Fairbanks

www.sfos.uaf.edu/fitc

Ongoing Activities, July 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.

Upcoming

The Alaska Seafood Processing Leadership Institute (ASPLI) is taking registration until September 15th. Supporting the next generation of leaders in our seafood industry is critical to the strength of our economy and the health of coastal Alaska. ASPLI is a 20-day, 2-session intensive professional development program designed to support up and coming leaders in Alaska's seafood processing industry. It is designed for mid-level managers in a seafood plant - production managers, QC supervisors, seafood engineers, human resources or administrative personnel who are identified by their employer as having leadership potential. Others who might want to participate include direct marketers or small seafood processors or others closely involved in the seafood industry.

ASPLI begins with 10 days of training at the University of Alaska Fairbanks' Kodiak Seafood Center (FITC) from October 31-November 9th focusing on seafood technology, safety, plant production, seafood marketing and networking with various plant personnel in Kodiak. The second session is 5 days in Anchorage, March 5-9, focusing on human resource development, project management and leadership, followed by a 5-day trip to the International Boston Seafood Show on March 10-14. Cost for participation in ASPLI is \$3,000, which includes all travel and housing costs from the individual's place of employment to Kodiak, Anchorage and Boston. The University of Alaska Fairbanks is supplementing this course (valued at about \$9,000) with vocational training funds. Details and an application can be found at <http://seagrant.uaf.edu/map/aspli/index.html>. Please contact Chuck Crapo (chuck.crapo@alaska.edu) with questions. **Registration is limited to 20 participants and applications will be taken until September 15th.**

A **community taste test on smoked salmon** will be carried out on **Saturday August 27 at the Kodiak Harbor Convention Center**. A commercially refined liquid smoke applied to cold-smoked sockeye salmon is being tested. So far, the results of our study show remarkable improvement in the consumer safety of the product. To evaluate its applicability, we are seeking your feedback. Please come any time between 10am and 4pm, and let us know what you think about it. The test will take a few minutes.

News

FoodProductDaily.com published the following article <http://www.foodproductiondaily.com/Processing/Freeze-dried-salmon-targets-applications-from-soups-to-space-food> and the Anchorage Daily News article <http://www.adn.com/2011/08/14/v-printer/2015183/kodiak-facility-refining-technique.html> both discussed research by Chuck Crapo and Alex Oliveira on the potential to freeze-dry salmon.

The Alaska Space Grant Epscor Program at UAF has funded a proposal submitted by Alexandra Oliveira titled **“Freeze-dried salmon: Omega-3 rich space food from Alaskan waters.”** The Kodiak Regional Aquaculture Association is donating sockeye salmon from the cost recovery fisheries in Kitoi Bay for this project.

Teaching (teaching and student support by FITC faculty)

Julie Matweyou, Kodiak’s MAP agent, was the invited teacher/expert for KANA’s Explore the Rock field trip. She gave an overview of the PSP problem, readings from State Epidemiology bulletins, pictures of the causative organism, and some discussion of biological oceanography. Audience included 12 students (6th through 12th grade) and 8 adults for a total of 20 participants. Julie also presented at the Fort Abercrombie State Historical Park Summer Naturalist Program on PSP and the risks associated with personal harvest.

Julie was also a presenter and volunteer at Dig Afognak, a culture camp conducted by the Native Village of Afognak and held on Afognak Island. Julie gave a presentation geared toward children age 10-14 with some slides included for adult audience (16 children and > 10 adults). Julie also co-taught three phytoplankton sessions (the students were broken into 3 groups) with Michael Opheim, from the Seldovia Village Tribe.

Research

Seafood byproduct use research

FITC Affiliate Faculty member Leo Pederson brought a **portable fish dryer to Kodiak for a 6-month trial** period by local seafood processors. The dryer was funded by a federal Saltonstall-Kennedy grant and is designed to be used for fish normally discarded as either a nonmarketable species or undersized. After a 6-month period, the dryer will be transported to Unalaska/Dutch Harbor for trials there. Processor personnel from six plants came to FITC for a talk and tour of the equipment located outside of the pilot plant (Alaska Pacific Seafoods, Global Seafoods, Island Seafoods, Jason Bang, Kodiak Seafood Labs, Sun-Aq Tribe). Any seafood processor interested in using the dryer can contact either Leo at dantec@att.net or Scott Smiley at smiley@sfos.uaf.edu or by calling 486-1500.



Peter Bechtel, affiliate faculty and USDA seafood scientist based at FITC, **travelled to Unalaska/Dutch Harbor to visit with Alyeska Seafoods, Westward Seafoods and UniSea** personnel and discuss fish byproduct research projects and research.

Chuck Crapo continued with research on **using dry salmon skins for pet treats.**

Alex Oliveira and Peter Bechtel began work on **processing cod liver oil samples** for characteristics to be analyzed for potential markets.

Brian Himelbloom developed two proposals – BOD:COD correlation for seafood processing wastewater **and pulsed UV light to treat high value fish organs**, for USDA-ARS funded seafood byproduct research. This is part of an annual cooperative agreement developed by Scott Smiley and USDA's Peter Bechtel for continuation of funding for seafood byproduct use research.

Scott Smiley hosted a visit to FITC by Dr. Ray Carruthers from USDA-ARS, who funds the seafood byproduct research at FITC. He toured fish plants, the fish meal plant and met with Rep. Alan Austerman, Matt Moir from APS and Mayor Jerome Selby while in Kodiak.

Seafood product research

Chuck Crapo and Alex Oliveira continued their research looking at using **natural nitrates to color pale-meat pink salmon**.

Energy Efficiency in seafood processors

Chuck Crapo and Torie Baker (MAP), Rich Weis, Dalton Ellingson and Joel Bailey (Institute of Northern Engineering) visited Peter Pan Seafoods in King Cove and Alyeska Seafoods in Unalaska **testing energy loads on a variety of motors to assess efficiency**. Do-it-yourself energy audit kits for smaller processors are now ready to be tested. See <http://seagrant.uaf.edu/map/seafood/energyefficiency/index.php>.

Public Service



Chuck Crapo travelled to Mali, Africa in support of a USAID project to look at **packaging of smoked fish along the Niger River**.

Quentin Fong made a presentation to the Kodiak Noon Rotary club on the “Role of MAP/FITC in the Alaska Seafood Marketing System” to 34 attendees.

Quentin also provided **marketing support to two groups interested in developing fisheries** – one is looking at helping divers direct market geoducks and sea cucumbers. Another group is interested in growing kelp for markets in Asia.

Brian Himelbloom was asked to serve on a review panel in Washington DC. to evaluate proposals by a consortia being created to **study the aftermath of the Deepwater Horizon oil spill in the Gulf of Mexico**. Funds are from British Petroleum and will be disbursed before fall by the Consortium on Ocean Leadership <http://www.gulfresearchinitiative.org/2011/gri-research-board-announces-request-for-proposals-for-bps-500-million-gulf-of-mexico-research-initiative/>

FITC faculty answered Kenai Cooperative Extension Service questions regarding dark flesh on fish as a source of fats and antioxidants. They answered a local processor's phone call regarding questions about microbiological testing of Alaska salmon caviar, responded to questions about composition of salmon oils and pollock oils produced in Alaska and assisted in testing for the presence of arsenic in seven natural history specimens from the Baranov Museum in Kodiak.

Kate Wynne worked with a Whale Week summer camp in Oregon via Skype. Note her billing as “renowned whale specialist”. Kids asked her questions in real time with her 6 foot image on the screen in Oregon.

