

Kodiak Seafood and Marine Science Center College of Fisheries and Ocean Sciences University of Alaska Fairbanks

Annual Report FY2017 (July 1, 2016-June 30, 2017)



Prepared by Paula Cullenberg (Director, Alaska Sea Grant) and the faculty and staff based at the Kodiak Seafood and Marine Science Center, College of Fisheries and Ocean Sciences, University of Alaska Fairbanks

December 2017

Kodiak Seafood and Marine Science Center College of Fisheries and Ocean Sciences University of Alaska Fairbanks Annual Report FY2017 (July 1, 2016–June 30, 2017)

Executive Summary

Introduction

The Kodiak Seafood and Marine Science Center (KSMSC) is a unique facility including classrooms, laboratories, a test kitchen and a pilot seafood processing plant that enables the University of Alaska Fairbanks (UAF) to provide a statewide program of research, technical assistance, workforce training and education. KSMSC is Alaska's only workforce development and applied research center focused on the seafood processing/fishing industry, as designated by the Alaska State Legislature in 1983. KSMSC also serves the Kodiak Island communities as a regional marine research and education center.

UAF personnel working at KSMSC currently consist of four UAF faculty members (three Marine Advisory and one Fisheries) and three staff members all within the UAF College of Fisheries and Ocean Sciences (CFOS). In addition, the UAF Cooperative Extension Service's 4-H coordinator works at KSMSC. Graduate students and visiting UAF faculty use the Center and a number of community groups make use of the space for meetings during the year.

Kodiak is the fourth largest seafood port in the nation and has a large resident seafood processing and fishing workforce, with plants operating 11 months a year. Statewide, the waters off Alaska produce over 60% of the nation's seafood valued at \$5.6B and the seafood industry is the state's largest private employer with over 50,000 jobs. Kodiak Island also has a number of smaller outlying villages that have a strong subsistence economy based on marine resources, whose residents work with the faculty at KSMSC.

The Kodiak Seafood and Marine Science Center is a hub of applied research, training and technical assistance serving a statewide seafood industry audience. It supports food safety in Alaska and is recognized as a food process authority by the Alaska Department of Environmental Conservation.

KSMSC's Activities in FY2017

FY2017 was a busy and active year for the Kodiak Seafood and Marine Science Center. KSMSC hosted a meeting, training, class or event almost daily during the year with over 900 people using the building (including the classrooms, pilot processing plant and labs) for classes, meetings, training, seminars or events during the year.

One hundred and eight nine (189) people participants received workforce development training in 15

seafood processing/fishing industry classes offered by Alaska Sea Grant at KSMSC and in three additional coastal communities and via online. Workforce development classes generated over \$28,000 in training fees in FY2017.

Seven UAF undergraduate/graduate fisheries classes were taught or hosted at KSMSC this year, serving 31 graduate and undergraduate students. Two classes were taught by KSMSC-based faculty teaching to students across the state via vidoeconference, one class was taught in Kodiak and two classes were taken by Kodiak-based graduate students via videoconference in the building.

Seven research projects were conducted by faculty members in the areas of seafood science and product development, harmful algal blooms and safe subsistence harvest of shellfish and human dimensions of fisheries. Marine Advisory and Fisheries faculty based at KSMSC produced three peer-reviewed publications and one Alaska Sea Grant publication.

Technical assistance and information was provided on an ongoing basis throughout the year by all faculty members, who engaged with over 70 different seafood businesses and individual food producers as well as with state and federal agencies, tribal representatives and nonprofit groups. Numerous outreach and marine education projects took place in the building, including the 3rd Kodiak Area Marine Science Symposium, ComFish Alaska public forums, paralytic shellfish poisoning community sampling and testing studies, and K-12 marine education events. Marine Advisory faculty at KSMSC engaged with over 400 local youth during the year in marine science classes and field trips.

External funding in FY2017 based at KSMSC came from seven funders. Funders included Alaska Sea Grant, the Pollock Conservation Cooperative Research Center (PCCRC), UA Technical Vocational Education Program (TVEP), North Pacific Research Board, Alaska Seafood Marketing Institute, Alaska Native Tribal Health Consortium and the Southwest Alaska Municipal Conference (SWAMC). Significant this year is continuing industry investment in product development research and development based at KSMSC from PCCRC, as well as a new internship program at KSMSC with the support of the Alaska Seafood Marketing Institute.

KSMSC Operational Concerns Continue

In August 2015, UAF leadership made public their intention to develop a cost containment strategy due to declining state revenues. Community and seafood industry leaders expressed strong objections to closing the Center or changing the Center's mission. A diverse group of community members formed a new nonprofit called the Alaska Research Consortium (ARC) in spring 2016 with the intention of acting as an operating body for the Center. In early winter 2017, UAF signed a statement of intent to develop a public-private partnership with the ARC and the Kodiak Island Borough (KIB). The ARC is in the process of working with UAF and KIB to develop a business plan for presentation to UAF in spring 2018.

Kodiak Seafood and Marine Science Center

College of Fisheries and Ocean Sciences University of Alaska Fairbanks

FY17 Annual Report

Background

The University of Alaska Fairbanks Kodiak Seafood and Marine Science Center (KSMSC) is a 20,000 square foot, seafood processing and marine research and training/education facility serving a statewide role of research, technical assistance, education and workforce development training. KSMSC also serves the Kodiak Island communities as a regional marine research and education center.

The Kodiak Seafood and Marine Science Center's (formerly FITC) purpose is directed in AS.52.020. "The center shall create employment opportunities in the state's fishing industry and other benefits to the state by:

- (1) providing training opportunities to citizens of the state on the most efficient and appropriate technologies for the harvesting, processing, and conservation of the fishery resources of the state;
- (2) providing information and technical assistance on the adaptation of existing and new technologies to the users of the fishery resources of the state;
- (3) providing research and development activities to adapt existing technologies to enhance the economic viability of the industry;
- (4) providing research and development activities to create new technologies that will enhance the effectiveness of the industry, and provide economic benefits to state citizens; and
- (5) encouraging joint projects between industry and government in order to use industrial experience and government programs to enhance the productivity of the industry."

KSMSC is an important asset in the implementation of the Alaska Maritime Workforce Development Plan, endorsed by the Alaska State Legislature, the UA Board of Regents, the Alaska Department of Labor and Workforce Development, the Alaska Workforce Investment Board and the industry group Maritime Works.

Teaching and Training, FY17

Seafood Processing and Fisheries Workforce Development Training Classes

189 people were trained in 15 seafood processing/fishing industry workforce development trainings offered by Alaska Sea Grant Marine Advisory faculty at KSMSC and in three additional coastal communities, generating \$28,000 in program income from training fees. Classes are offered as noncredit intensives, meeting the training needs of a year-round industry. Descriptions of each class can be found on the Alaska Sea Grant website https://seagrant.uaf.edu/map/workshops/seafood-processing/

October

- **Smoked Seafood School,** smoking seafood practices, safety, and operational practices for commercial producers. 3 days, 24 hour class, 18 participants, Sannito, course fee \$270.
- Smoked Seafood Workshop, 2 days, 15 participants, Sannito (held in Cordova), course fee \$50

November

- HACCP (Hazard Analysis Critical Control Point), 2 day, 16-hour class. Certified by the Association of Food and Drug Officials (AFDO). 10 participants, Sannito, course fee \$200.
- Seafood Processing Quality Control Training (SPQC), 5 days, 40 hour class designed for quality control professionals. 11 participants, Sannito, course fee \$480.

December

• **Commercial Fishing Drill Conductor,** Coast Guard required training for commercial fishermen, 2 days, 16 hours. 12 participants, Matweyou.

February

- Introduction to Seafood Direct Marketing, online, statewide 15-hour class for those interested in marketing their own seafood. 20 participants, Fong, course fee \$175.
- Better Process Control School, required class for thermal processing of fish/food and meets FDA and USDA regulations and training requirements, 3 days, 5 participants, Kodiak, Sannito, course fee \$450.
- HACCP, Kodiak, 5 participants, Sannito, course fee \$200.
- Commercial Fishing Drill Conductor, 2 days, 8 participants, Matweyou.



March

• **HACCP,** Anchorage, 18 participants, Sannito, course fee \$200.

April

- **Preventative Controls for Human Foods,** 4 participants, 3 days (24 hours), Sannito and Himelboom, course fee \$600.
- Direct Marketing Your Seafood workshop in Juneau, Fong and Sannito, 1 day, 20 participants.
- Facilitated Alaska National Insurance company with Kodiak seafood processor seminar at KSMSC. 25 people attended the two day safety training event

May

- **HACCP,** Kodiak, 15 participants, Sannito, course fee \$200.
- **HACCP**, Petersburg, 13 participants, Sannito, course fee \$200.
- Commercial Fishing Drill Instructor, 2 classes, 2 days each, 15 participants, Matweyou.

UAF CFOS Undergraduate and Graduate Credit Classes

Seven UAF CFOS undergraduate/graduate fisheries classes were taught or hosted at KSMSC this year serving 31 graduate and undergraduate students. KSMSC-based UAF faculty members taught two classes to students across the state and five classes were taken by two Kodiak-based students via videoconference in the building.

- Fish 261, Introduction to Fisheries Utilization, 3 credits, fall, 17 students, Himelbloom
- Fish 340, Seafood Business, 3 credits, fall, two students, Fong
- Fish 681, **North Pacific Fishery Management Council,** 1 credit, spring, 10 students, Criddle and Kruse
- Four UAF Fisheries classes were taken via videoconference by two Kodiak-resident graduate students, Fish 425/650, Fish 492, MSL 652, Fisheries seminar

KSMSC Summer Internship Program



Five summer interns were hosted by faculty at the Kodiak Seafood and Marine Science Center this summer. Marine Advisory agent Julie Matweyou hosted early career and youth interns, Mandi Cox (left) and Natalia Partida (right) who assisted Matweyou with invasive tunicate monitoring in St. Paul Harbor. The two interns worked with Matweyou on various marine science related projects through partnerships with the Sun'aq Tribe of Kodiak (Cox) and the Latin American Women's Association (Partida).

Three graduate/undergraduate students interned at KSMSC this summer in partnership with the Alaska Seafood Marketing Institute (ASMI) and the Pollock Conservation Cooperative Research Center.

ASMI's Michael Kohan supervised the interns from her office in Juneau, while Kodiak-based Alaska Sea Grant Marine Advisory faculty were on-the-ground overseers, providing input, equipment and logistics.

Camron Christoffersen graduated from Brigham Young University with a bachelor's degree in biology in April. He's spent the summer in Kodiak investigating the Food and Drug Administration's requirements for making sure seafood is free of viable parasites before being sold to the public. "There are scientists and commercial fishermen who feel that these requirements may be excessive for certain species of fish," Christoffersen said. He developed a study in which used pepsin, an

enzyme that breaks down food, to help him locate parasites and verify if they are dead after being frozen.

Phil Ganz worked on how best to communicate complicated science topics to the public. "I'm creating material for the fishing and seafood industries and the general public on seafood science-related

issues. Right now I'm working on an infographic about ocean acidification," said Ganz, who graduated with a master's in fisheries from UAF in August. Besides creating the infographic, he is making videos and posters for seafood processors about safety issues, including how to avoid cross contamination.

Alina Fairbanks used the internet to find more than 60 companies—large and small, domestic and international—that may be suitable for marketing nucleotide supplements made from Alaska pollock. Nucleotides are used as human nutritional supplements, feed for aquaculture and other animals and in infant formulas to enhance the immune system. "This

MEET THE 2017 KSMSC SEAFOOD INTERNS

Nucleotides. Parasites and Communicating Seafood Safety



PHIL GANTZ Communicating the Science and Safety of Seafood



ALINA FAIRBANKS Market Research



CAMRON CHRISTOFFERSEN Nucleotide Supplement Secondary Parasite Control for Pacific Salmon

experience allowed me to play detective on the current nucleotide market, which is very different than doing research as an undergraduate student in a classroom," said Fairbanks. "It has been a great experience learning the research process and understanding the marketing field." She is earning her bachelor's degree in the College of Fisheries and Ocean Sciences, University of Alaska Fairbanks.

Applied Research and Technical Assistance to Industry

In FY2017, 10 research projects were conducted out of KSMSC, funded by the Alaska Seafood Marketing Institute, Alaska Sea Grant, North Pacific Research Board, Pollock Conservation

Collaborative Research Center, Alaska Native Tribal Health Consortium, Southwest Alaska Municipal Conference and USDA.

Highlights:

Manufacturing Extension Partnership works with Alaska Sea Grant.

The Alaska Sea Grant Marine Advisory Program is now a key partner in the Hollings Manufacture Extension Partnership (MEP) 5-year federal grant recently awarded to the Southwest Alaska Municipal Conference (SWAMC). MEPs are found in all 50 states and provide manufacturing companies with services and resources to enhance growth, improve productivity, reduce costs, and expand capacity. Seafood harvesting and processing are a primary focus of the Alaska MEP, and Marine Advisory faculty based at KSMSC will be providing seafood processing training and technical assistance. Other partners include Southeast Conference and the Anchorage Economic Development Corporation. Pls are Fong and Sannito.

Seaweed Farming Comes to Kodiak!

Blue Evolution, a California that turns seaweed into pasta products, has partnered up with several Kodiak residents to harvest and process seaweed "super food." The company has rented space in the KSMSC pilot plant to process the sugar and ribbon kelp grown by local farmers. The company hopes to expand in 2018.

Last spring, KSMSC hosted a webinar on "The Rising Tide of Seaweed Farming," a presentation by Marine Advisory agent Gary Freitag. The presentation can be



viewed on the Alaska Sea Grant You Tube site https://www.youtube.com/user/AlaskaSeaGrant and a recent publication Seaweed Farming in Alaska. Both Quentin Fong and Chris Sannito are actively providing information on markets and processing of seaweed.

PSP studies in the Kodiak region. Julie Matweyou is working with the Alutiiq Tribe of Old Harbor with funds from the Alaska Native Tribal Health Consortium (ANTHC) to study PSP levels in locally harvested shellfish. Old Harbor residents rely heavily on a subsistence diet including shellfish, a dietary and culturally important food source. Traditional knowledge and shellfish

harvest practices are at risk with climate change that increases the variability of weather and extreme events, thus influencing harmful algal bloom (HAB) frequency and distribution and breaking down clear seasonal boundaries. The objective of the study is to compare PSP toxin concentrations in butter clams between two popular subsistence shellfish harvest sites in Old Harbor over a 6-month study period, and correlate toxicity with seawater temperature and salinity measurements at each site.

Another research project funded by the North Pacific Research Board focuses on continued PSP monitoring and further development of a time-sensitive toxin field test kit. The project involves collaboration between Matweyou, NOAA's Beaufort, North Carolina lab and involves the Sun'aq Tribe, the Alutiiq Tribe of Old Harbor, the Native Village of Ouzinkie, and the communities of King Cove and Sand Point in local monitoring and testing of the field kit.

This year a new statewide network, the Alaska Harmful Algal Bloom (AHAB) network was formed with KSMSC as the hub for Kodiak region testing and information. http://www.aoos.org/alaska-hab-network/

Seal Oil and Botulism Research Collaboration - Seafood specialists Brian Himelbloom and Chris Sannito hosted Dr. Eric Johnson, a botulism expert and professor of bacteriology at the University of Wisconsin-Madison, and Lorinda Lhotka of Alaska Department of Environmental Conservation, for a seminar at the Kodiak Seafood and Marine Science Center in winter 2017. Both Chris and Brian are members of the state-sponsored Seal Oil Task Force working to ensure traditional methods of processing seal oil continue to result in a safe product. Chris is working with Maniilag Association to develop a HACCP plan for the oil.

Synopsis of the Hong Kong Seafood Market is a Sea Grant publication released in FY17 authored by Dr. Quentin Fong. Using the information in the study about the Hong Kong seafood market, US seafood exporters, policy makers, and NGOs can make informed decisions on potential trade and marketing of Alaska and US seafood products in Hong Kong. Fong was also involved in a study published this year looking at consumer preference for Alaska salmon in China.

The State of Alaska's Salmon and People (SASAP) - Well-Being and Alaska Salmon Systems, funded by the Moore Foundation, is the focus of research professional, Danielle Ringer, who graduated last winter with her master's in political ecology of fisheries. This state of the knowledge synthesis project is led by Rachel Donkersloot, Jessica Black and Courtney Carothers, and is driven by the overarching goal of identifying and applying well-being concepts to improve the social sustainability management of Alaska salmon systems. Visit the project website for more information.

Research at KSMSC FY2017

- **Development of Value-added Market Opportunities for Pollock Co-products,** Fong, Pollock Conservation Cooperative Research Center (co-PI with C. Dewitt, M. Kohan), 2017 to 2019
- **Developing Alternative Product Forms for Pollock Roe**, Fong, Pollock Conservation Cooperative Research Center (co-PI with C. Sannito, B. Smith), 2016 to 2017.
- Utilization of nano-scale fish bone for gel enhancement of Alaska pollock surimi and as CalPro injection marinade made from surimi fish protein for improved nutritional and eating quality of Alaska pollock fillets, Fong, Pollock Conservation Cooperative Research Center (co-PI with J. Park), 2016 to 2018.
- Alaskan Mariculture Diversification, Innovation and Technology Transfer, Fong, NOAA Sea Grant (co-PI with P. Cullenberg, G. Freitag), 2015 to 2017.
- Implementation of Community Based PSP Testing for Subsistence and Recreational Shellfish Harvesting in Southwestern Alaska, JMatweyou, co-PI, NPRB, ongoing
- Safe Subsistence Shellfish Harvest in the Face of Climate Change. Matweyou, ANTHC, ongoing
- The State of Alaska's Salmon and People (SASAP) Well-Being and Alaska Salmon Systems, Ringer, research professional, Moore Foundation, ongoing

Publications and Reports

- Lee, J., Q. Fong, and J.W. Park. 2016. Effect of pre-freezing treatments on the quality of Alaska Pollock fillets subjected to freezing/thawing. Food Bioscience 16 (2016): 50-55.
- Zheng Q., H.H. Wang, Q. Fong, & Y. Lu. Consumer Preference and Market Potential for Alaska Salmon in China.
- Chen, J.Q., M.C. Haws, Q.S.W. Fong, & P.S. Leung. 2017. Economic feasibility of producing oysters using a small-scale Hawaiian fishpond model. Aquaculture Reports 5 (2017): 41-51

Technical assistance was provided in areas listed below:

- Food security audit
- Acid level of salmon oil
- Onboard shrimp quality processing
- Export certification of salmon milt
- Salmon jerky production
- coliform bacteria in smoked fish
- Kitoi Bay salmon hatchery wastewater permit
- CAS (cells alive system) freezing explanation
- Low acid canned foods
- Seafood industry overview
- HACCP plan

- Laboratory RTE (ready-to-eat) product testing
- Salmon parasite information
- Salmon chowder production
- Salmon pouch retort processing
- RTE mustard testing, process schedule evaluation
- Characterizing salmon waste stream
- Waste stream solids test for new plant
- Introduced seafood buyer to Kodiak processors
- Small scale production equipment

- Cold smoked HACCP plan
- Salmon processing venture assistance
- Shortraker rockfish processing
- Heat distribution information for retort
- Retort selection
- Assisted in used seafood processing equipment
- Consulted salmon jerky project
- Date coding, recall program, vodka processing
- Food composition analysis
- Jerky sample production, Hong Kong test
- 2016 processing permit

- Roe processing
- Fresh shipping
- Smoked seafood
- Process evaluation
- Salmon handling
- Food plant video surveillance
- Salmon pressure bleeding
- Boiler sizing
- Cold process approval
- Bait oil percentage test
- Reissued processing authority letter
- Fish smoking
- Process schedule revision
- Backpacker foods
- Business plan development
- Marketing opportunities

Some of the companies and groups seeking assistance from KSMSC included:

- Blue Evolution
- Luxe Seafood
- Pickled Alaska
- Juneau Kelp
- Kodiak Island Smoke House
- Maniilaq Seal Oil group
- Community of Pilot Point
- Alaska Pacific Seafoods,
- Alaska Seafood Company,
- Moosetards, Inc.,
- Silver Bay Seafoods
- Trident Seafoods
- Community of Port Heiden

- Pacific Sun Products
- Cooperative Extension Service
- Kahtnuht'ana
- Meshik Corporation
- Pacific Seafoods
- Ekuk Fisheries
- Ocean Beauty Seafoods
- Wildfish Cannery
- Naknek Family Fisheries
- Bambino's Baby Food
- Hydaburg Project
- Island Processing
- Northern Smokeries

Public Service and Marine Education

Highlights

Kodiak Area Marine Science Symposium (KAMSS) held for the 3rd time

The 4-day Kodiak Area Marine Science Symposium (KAMSS) hosted over 40 oral presentations, 10 poster presentations, and a number of social events during the symposium. AKTEACH recorded and archiving videos of each presentation and many of the slide presentations are found on the KAMSS website



KAMSS keynote speaker Julia Parrish with the Coastal Observation and Seabird Survey Team addresses the audience at the Tuesday evening kickoff event.



Dock Talks is a newly created program sponsored by the Alaska Sea Grant Marine Advisory Program. This monthly evening event provides a venue and an opportunity for all Kodiak fishermen to engage, network and learn more about community-based fisheries issues. Topics this year included - KRAA Summer Update, Kodiak Maritime Infrastructure Discussion, Upcoming Board of Fish Meeting, Understanding Global Seafood Markets and Direct Marketing Development, Riding the Rising Tide of Seaweed Farming.

ComFish Alaska

This year, KSMSC and Alaska Sea Grant continued to have a strong presence at ComFish, Alaska's annual industry trade show held in March 2017 in Kodiak. Julie Matweyou coordinated speakers and topics for the ComFish Forum including a presentation on the FishBiz program, and coordinated and led the popular Fishermen's Showcase competition.





Guest speaker Tim Troll displayed his exhibit of historical photos in the halls of KSMSC, Sailing for Salmon, and gave an evening presentation on the sailboat days in Bristol Bay to a packed room of about 70 people. The late Judge Madsen, in his 90's and a former Bristol Bay sailboat fisherman, attended the presentation.

Kodiak Island Youth discover marine science locally



AK Teach reaches rural Kodiak

Marine Advisory agent Julie Matweyou delivered a lesson on PSP in shellfish through AK Teach to approximately 50 middle and high school students at seven rural schools over three days in May. Students had collected local shellfish samples prior to the lesson. Species were confirmed, sample tissue shucked, toxin extracted, tested and results were interpreted. Samples were collected during the last week of April and include: Akhiok littleneck clams – positive for PSP; Ouzinie blue mussels – positive for PSP; Old Harbor butter clam – positive for PSP; Port Lions butter clam – positive for PSP and Larsen Bay blue mussel – negative for PSP.

6th Grade Near Island Field Trip -KSMSC

Julie Matweyou set up two stations including a PSP lesson and hands on activity for the 6th graders of Kodiak. The lesson included lecture and four activities - microscope station, shellfish ID, phytoplankton sampling and shellfish shucking. Sixty students participated.

Girl Scouts Women of Science

Matweyou led an educational activity for 54 girls in March for event called *Clams and other Science Measurements*. Brief description of workshop: Transects and quadrats will be used to estimate simulated clam populations. Age appropriate clam identification lessons and/or games will be incorporated. A similar percent cover measurement will be discussed while looking at live organisms on a settling plate designed for monitoring invasive tunicates. Microscopes will be available to view live organisms.

Boards and Councils served by faculty at KSMSC

- ADEC Alaska Food Safety Advisory Committee
- ASMI Seafood Technical Committee
- Latina Association of Women Board
- Kodiak Comprehensive Economic Development Committee
- Kodiak College Vessel Repair & Maintenance Local Advisory Committee
- Kodiak Workforce Regional Advisory Council
- OceansAlaska Board of Directors
- Western Regional Aquaculture Consortium Extension Technical Committee

Press Coverage

- KMXT and Fish Radio coverage below:
- Talk of the Rock (Apr 18) with J. Matweyou, P. Cullenberg, J, Parrish and R. Cassidy: http://kmxt.org/2017/04/talk-rock-kodiak-area-marine-science-symposium/
- http://kmxt.org/2017/04/science-symposium-highlights-citizen-science/
- http://kmxt.org/2014/04/marine-science-symposium-kicks-off-tomorrow/
- http://www.alaskafishradio.com/alaska-sea-grant-host-marine-science-symposium-kodiak/
- Interview for Fish Radio piece on ComFish http://www.alaskafishradio.com/commercial-fisheries-vendors-industry-professionals-join-together-comfish-alaska-2017/
- Cordova Times http://www.thecordovatimes.com/2017/04/05/comfish-2017-from-fish-politics-to-em/
- https://www.adn.com/rural-alaska/article/alaska-native-group-seeks-serve-seal-oilnursing-home-clients/2016/03/30/

KSMSC Operations

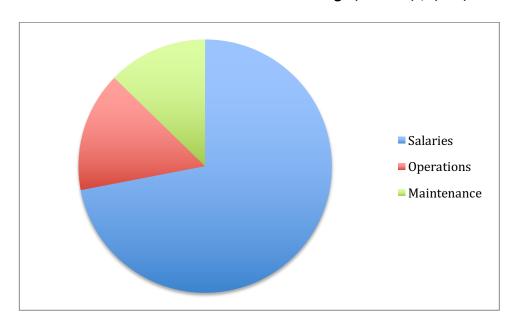
Ongoing Operations Concerns Continue

In FY17 the Alaska Research Consortium (ARC) formed a 501(c)(3) non-profit organization with a committed group of local and industry supporters of KSMSC. Jay Stinson, as chair of the ARC signed a letter of intent with UAF to develop a public private partnership to develop a proposal to operate the Kodiak Seafood and Marine Science Center. UAF agreed to operate KSMSC in FY18 while the ARC developed their partnership proposal.

Budget

In FY17, faculty and staff salaries and program expenses at the Center were covered by University of Alaska Fairbanks funds, charges to seven grants, and program income. The University of Alaska Fairbanks covered operations and maintenance of the Kodiak Seafood and Marine Science Center.

Kodiak Seafood and Marine Science Center Budget, FY2017, \$1,013,721



UAF funds: \$778,731

Staff salaries/benefits: \$74,880

Operations: \$178,490Maintenance: \$124,192

Faculty salaries/benefits: \$401,169
 Faculty salaries charged to grants: \$234,990

Grants charged in FY17

Alaska Sea Grant omnibus

Alaska Sea Grant Mariculture Diversification, Innovation and Technology

Alaska Seafood Marketing Institute, Internships at KSMSC

- Southwest Alaska Municipal Conference, Manufacturing Extension Partnership
- o TVEP, Seafood Processing Training Program
- Pollock Conservation Cooperative Research Center (PCCRC)
 - Shelf stable pet treats from pollock skins
 - Freshness and nutritional value of Alaska pollock products and byproducts
- Program income: \$28,000

Personnel

Highlights



At the end of FY17, Associate Professor Brian Himelbloom retired from UAF after 30 years of service. In recent years Brian has held a split appointment with the CFOS fisheries division and the Marine Advisory faculty. Brian mentored many graduate students in seafood science who went on to strong careers, and worked hard to support the Kodiak Seafood and Marine Science Center. In the course of Brian's tenure, he provided valuable research, teaching and outreach expertise in seafood science and technology in the College of Fisheries and Ocean Science. We will miss Brian's presence in our building and wish him well in his retirement.

Quentin Fong was promoted to Professor. Fong is the Seafood Marketing Specialist for the Alaska Sea Grant Marine Advisory program.

After ten years of sailing the world and living down under, Mike Litzow has returned to Kodiak, Alaska, to work on several research projects. He has an assistant research professor appointment with the University of Alaska Fairbanks College of Fisheries and Ocean Sciences. He is happy to return and enjoys working at KSMSC. "I lived in Kodiak for seven years in the early 2000s, and I love being in such a vibrant commercial fishing port," he said. "This place really underscores the importance of better understanding the dynamics that govern the ecosystems we exploit, and the Kodiak community is very supportive of marine research.

Fishermen and processors really get the need for science."

Longevity is a clear indication of commitment. Kay Bodi has worked for the Kodiak Seafood and Marine Science Center/UAF for 25 years. Congratulations Kay for reaching this distinguished level of service



Administration

 Paula Cullenberg, Alaska Sea Grant (based in Anchorage) serves as director of Alaska Sea Grant and KSMSC. • Quentin Fong, Marine Advisory professor, seafood marketing, is KSMSC onsite coordinator.

UAF CFOS Faculty Based at KSMSC

- Quentin Fong, Seafood Marketing Specialist, Professor, Marine Advisory Program, KSMSC coordinator
- Julie Matweyou, Marine Advisory agent, Assistant Professor
- Chris Sannito, Seafood processing specialist, Research Assistant Professor, Marine Advisory Program
- Mike Litzow, Research Assistant Professor, Fisheries

Staff

- Astrid Rose, Marine Advisory Program Assistant
- Laurinda ("Kay") Bodi, KSMSC Facilities Manager
- Kate Schaberg, 4-H coordinator, Cooperative Extension Service
- Danielle Ringer, Research Professional

Students

- Natura Richardson, MS fisheries, ADF&G employee
- Michelle Stratton, MS fisheries, ADF&G employee

Interns

- Alina Fairbanks, MS Fisheries
- Phil Ganz MS Fisheries
- Camron Christensen, BS Biology, Brigham Young University
- Mandi Cox Sunaq Tribe intern
- Natalia Pardita, ALMA intern

KSMSC Policy Council Members

- Jay Stinson, chairman
- Jeff Stephan, vice chairman
- Greg Peters, Alyeska Seafoods
- Mark Palmer, Ocean Beauty Seafoods
- Alan Austerman, retired legislator
- Paul Lumsden, Trident Seafoods
- Dean Adams, retired fisherman
- Heather McCarty, fisheries consultant