

**CITY COUNCIL - BOROUGH ASSEMBLY
JOINT WORK SESSION AGENDA**

Thursday, January 7, 2016

Borough Conference Room

6:30 p.m.

(Borough Chairing)

Joint work sessions are informal meetings of the Borough Assembly and City Council where elected officials discuss issues that affect both Borough and City governments and residents. Although additional items not listed on the joint work session agenda are sometimes discussed when introduced by elected officials, staff, or members of the public, no formal action is taken at joint work sessions and items that require formal action are placed on a regular Borough Assembly and/or City Council meeting agenda. Public comments at work sessions are NOT considered part of the official record. Public comments intended for the "official record" should be made at a regular Borough Assembly or City Council meeting.

Page

1. Public Comments

2. Items for Discussion

2 - 23

- A. UAF Seafood and Marine Science Center
[Joint Letter UAF Kodiak Seafood and Marine Science
Resolution No. FY2016-21 Fish Tech AML
AML Approved Resolution
2015-11-03 FITC Additional Information](#)



Kodiak Island Borough
710 Mill Bay Road, Rm. 101
Kodiak, AK 99615
907.486.9310



City of Kodiak
710 Mill Bay Road, Rm. 216
Kodiak, AK 99615
907.486.8636

November 5, 2015

President James R. Johnsen
University of Alaska
Office of the President
P.O. Box 755000
Fairbanks, AK 99775-5000

Dear President Johnsen:

On behalf of the citizens of the City of Kodiak, the Kodiak Island Borough, and other Alaska communities engaged in commercial, sports and subsistence related fishing pursuits, we respectfully urge the University of Alaska to reconsider the decision to close UAF's Kodiak Seafood and Marine Science Center, formerly, and in Alaska Statute (Title 16 Chapter 52), referred to as the Fishery Industrial Technology Center or FITC.

The applied research conducted by faculty, staff, students, and visiting scientists at FITC has improved fishery processing technology, seafood safety, and increased catch utilization across the state. In addition, the work of FITC based scientists has brought better understanding to marine ecosystem energetics and the interactions of marine mammals in the North Pacific Kodiak-based and visiting scientists use FITC facilities and its specialized equipment to further a deeper understanding of the complex ocean ecosystems; an understanding necessary to both develop and maintain sustainable Alaska fisheries policies. The sudden and unexpected decision by the University to close FITC at the end of the fiscal year, absent any community or industry dialogue, suggests that the University of Alaska is preparing to abandon both a commitment to applied fisheries research as well as the close community and industry partnerships that provide the foundation for a healthy university system.

It is not our collective intent to join the cacophony of voices demanding that local programs be spared the budget knife. Tough times require tough decisions. Our communities are also weathering the complex logistical and personnel challenges created when declining revenues test our commitment to mission and vision. However, we believe the key to an

President Johnsen
November 5, 2015
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effective response to a fiscal crisis is transparent and collaborative dialogue with our citizenry. It is in this spirit, that we invite the University to work collaboratively with our community to develop alternative sources for revenue to support the critical research conducted by FITC. Maintenance of FITC research, equipment, and staff through fiscal year 2017 will provide time to explore new sources of revenue while preserving the universities role in these applied fisheries related activities.

The FITC facility and equipment are critical to achieving the mission. Transference of the Alfred Owen Building to another campus without underlining a requirement that it be used to support future applied fisheries research (as outlined in Alaska Statute Title 16 Chapter 52) will make it difficult to revitalize the program in the future. Plans to ship millions of dollars worth of specialized seafood processing equipment from the pilot plant and the dedicated laboratory equipment in the Organismal, Biochemistry, Chemistry, and Microbiology labs at the Alfred Owen Building to another site will be expensive and will also severely limit the potential for future productivity at the facility. Recent discussions to develop a maritime trades program by the local college are exciting and timely, but should not be used to justify eliminating FITC. If anything, FITC can be a critical hub for learning these trades.

The University of Alaska is undergoing significant leadership changes with a new statewide president, UAF chancellor, and a new UAF School of Fisheries and Ocean Sciences dean. Delaying this potentially devastating decision for one fiscal year will provide sufficient time for leadership to review and evaluate the critical role FITC plays statewide. Because FITC was created by Alaska Statute with a continuing appropriation, it will be important to consult with Legislative leaders before eliminating the program.

Maintenance of even partial funding for a year will provide time for the scientific community, civic leaders, fishers, processors and those who see the value in applied fisheries research to explore other funding streams. Partnerships with other Sea Grant institutions, public and private grants or new fisheries research opportunities with interested state or federal agencies are feasible, plentiful, and worthy of exploring.

The decision and timing to close FITC was made in the absence of community dialogue. Once a decision is announced, the community is placed in a reactive or defensive posture rather than engaged in the positive and proactive process necessary for effective problem solving. The current fiscal crisis can represent an opportunity for the University to collaborate with stakeholders to identify innovative strategies to renew and revitalize FITC. Or it can be used to cloak and justify top down program cuts made in the absence of community dialog and without input from the largest employment sector in the state.

The University of Alaska was charged with supporting and maintaining the Fishery Industrial Technology Center, a vision of 24 citizens from coastal Alaska more than 30 years ago. It was brought to fruition by the Alaska Legislature with its mission and functions encoded in

President Johnsen
November 5, 2015
Page 3

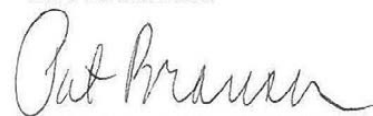
State Statute. Transferring the Alfred Owen Building's administrative home, moving faculty to different campuses and cannibalizing the equipment housed at FITC surely represents an abrogation of the responsibility the University accepted when the Alaska State Legislature created FITC.

Alaska's fishing industry cannot afford to stand idly by while critical fisheries research programs wither away until their purpose, vitality and vision is no longer recognizable. We eagerly anticipate a professional discourse with University leadership to address and hopefully resolve this issue.

Sincerely,



Jerrol Friend, Mayor
Kodiak Island Borough



Pat Branson, Mayor
City of Kodiak

Cc: Governor Bill Walker
Senator Gary Stevens
Representative Louise Stutes

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Introduced by: KIB Assembly
Requested by: KIB Assembly
Drafted by: Assembly members
LeDoux and Crow
Introduced on: 11/05/2015
Adopted on: 11/05/2015

**KODIAK ISLAND BOROUGH
RESOLUTION NO. FY 2016-21**

**A RESOLUTION OF THE ASSEMBLY OF THE KODIAK ISLAND BOROUGH
URGING THE UNIVERSITY OF ALASKA TO RECONSIDER THE DECISION
TO CLOSE THE UNIVERSITY OF ALASKA FAIRBANKS' KODIAK SEAFOOD
AND MARINE SCIENCE CENTER, FORMERLY, AND IN ALASKA STATUTE
(TITLE 16 CHAPTER 52), REFERRED TO AS THE FISHERY INDUSTRIAL
TECHNOLOGY CENTER (FITC)**

WHEREAS, the State of Alaska is currently facing fiscal difficulties as a result of an overdependence on oil prices and needs a more diversified base of income and,

WHEREAS, the State of Alaska has an abundance of other natural resources, including a rich and robust abundance of fish that drives Alaska's largest economic employment sector, it is imperative that this resource is well managed to ensure it is sustainably and safely harvested, processed, marketed, and distributed to provide the maximum benefit and value to the State of Alaska

WHEREAS, the Kodiak Seafood and Marine Science Center, known in Alaska Statute as the Fisheries Industrial Technology Center (FITC) in Kodiak, was created by the University in response to a charge by the Alaska Legislature (Title 16 Chapter 52) to represent an applied science partnership between the fishing industry, coastal communities and the University where members of the Alaska Seafood Industry (harvesters, processors and community members) present the questions they need answered and scientists at FITC endeavor to answer them.

WHEREAS, academic research represents a core mission of UAF, applied research supports the jobs, industry and economic vitality of the communities the University of Alaska is charged to serve.

WHEREAS, Applied Seafood Research conducted by FITC scientists staff, students and visiting scientists has improved fishery processing technology, stock sustainability, seafood safety, processing efficiency, food preservation and increased catch utilization across the state; and

WHEREAS, the University of Alaska Fairbanks (UAF) has announced the closure of the Kodiak Seafood and Marine Science Center in Kodiak, the transfer of the Alfred Owen Building's administrative home, the transfer of remaining faculty and the dismantling of the seafood processing Pilot Plant; and

Kodiak Island Borough

Resolution No. FY2016-21
Page 1 of 2

47
48 **WHEREAS,** the decision to close the facility was conducted without consultation with FITC
49 staff, fishing communities, industry or others dependent of the fishing industry; and
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51 **WHEREAS,** the FITC facility and equipment are critical to achieving the mission; and
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53 **WHEREAS,** the sudden and unexpected decision by the UAF to close the FITC at the end
54 of the fiscal year suggests that UAF is preparing to abandon both a commitment to applied
55 fisheries research as well as the close community and industry partnerships that provide the
56 foundation for a healthy University system; and
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58 **WHEREAS,** the key to an effect response to a fiscal crisis is transparent and collaborative
59 dialogue with the citizenry it serves; and
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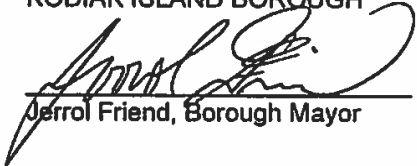
61 **NOW, THEREFORE BE IT RESOLVED BY THE ASSEMBLY OF THE KODIAK ISLAND**
62 **BOROUGH,** that the University of Alaska maintain FITC research, facilities, equipment and
63 staff through fiscal year 2017 to allow sufficient time for the University and Alaska's communities
64 to discuss challenges and opportunities related to the mission, operation and funding of the
65 FITC.
66

67 **BE IT FURTHER RESOLVED** that new university leaders in the offices of statewide system
68 president, UAF chancellor and UAF School of Fisheries and Ocean Sciences dean engage in
69 open dialogue with Alaska's fishing communities relative to the preservation of the FITC as a
70 focus of the universities commitment to the critical need for applied fisheries research.
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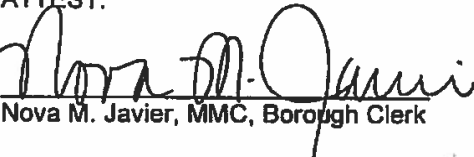
72 **BE IT FURTHER RESOLVED** that upon adoption, this Resolution shall be submitted to the
73 membership of the Alaska Municipal League for consideration and adoption.
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75 **ADOPTED BY THE ASSEMBLY OF THE KODIAK ISLAND BOROUGH**
76 **THIS FIFTH DAY OF NOVEMBER 2005**
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78 KODIAK ISLAND BOROUGH

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82 Jerrol Friend, Borough Mayor

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84 **ATTEST:**

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87 Nova M. Javier, MMC, Borough Clerk
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**ALASKA MUNICIPAL LEAGUE
RESOLUTION # 2016-10**

A RESOLUTION URGING THE UNIVERSITY OF ALASKA TO RECONSIDER THE DECISION TO CLOSE THE UNIVERSITY OF ALASKA FAIRBANKS' KODIAK SEAFOOD AND MARINE SCIENCE CENTER, FORMERLY, AND IN ALASKA STATUTE (TITLE 16 CHAPTER 52), REFERRED TO AS THE FISHERY INDUSTRIAL TECHNOLOGY CENTER (FITC)

WHEREAS, the State of Alaska is currently facing fiscal difficulties as a result of an overdependence on oil prices and needs a more diversified base of income and,

WHEREAS, the State of Alaska has an abundance of other natural resources, including a rich and robust abundance of fish that drives Alaska's largest economic employment sector, it is imperative that this resource is well managed to ensure it is sustainably and safely harvested, processed, marketed, and distributed to provide the maximum benefit and value to the State of Alaska

WHEREAS, the Kodiak Seafood and Marine Science Center, known in Alaska Statute as the Fisheries Industrial Technology Center (FITC) in Kodiak, was created by the University in response to a charge by the Alaska Legislature (Title 16 Chapter 52) to represent an applied science partnership between the fishing industry, coastal communities and the University where members of the Alaska Seafood Industry (harvesters, processors and community members) present the questions they need answered and scientists at FITC endeavor to answer them.

WHEREAS, academic research represents a core mission of UAF, applied research supports the jobs, industry and economic vitality of the communities the University of Alaska is charged to serve.

WHEREAS, Applied Seafood Research conducted by FITC scientists staff, students and visiting scientists has improved fishery processing technology, stock sustainability, seafood safety, processing efficiency, food preservation and increased catch utilization across the state; and

WHEREAS, the University of Alaska Fairbanks (UAF) has announced the closure of the Kodiak Seafood and Marine Science Center in Kodiak, the transfer of the Alfred Owen Building's administrative home, the transfer of remaining faculty and the dismantling of the seafood processing Pilot Plant; and

WHEREAS, the decision to close the facility was conducted without consultation with FITC staff, fishing communities, industry or others dependent of the fishing industry; and

WHEREAS, the FITC facility and equipment are critical to achieving the mission; and

WHEREAS, the sudden and unexpected decision by the UAF to close the FITC at the end of the fiscal year suggests that UAF is preparing to abandon both a commitment to applied fisheries research as well as the close community and industry partnerships that provide the foundation for a healthy University system; and

WHEREAS, the key to an effect response to a fiscal crisis is transparent and collaborative dialogue with the citizenry it serves; and

NOW, THEREFORE BE IT RESOLVED BY THE ALASKA MUNICIPAL LEAGUE that the University of Alaska maintain FITC research, facilities, equipment and staff through fiscal year 2017 to allow sufficient time for the University and Alaska's communities to discuss challenges and opportunities related to the mission, operation and funding of the FITC.

BE IT FURTHER RESOLVED that new university leaders in the offices of statewide system president, UAF chancellor and UAF School of Fisheries and Ocean Sciences dean engage in open dialogue with Alaska's fishing communities relative to the preservation of the FITC as a focus of the universities commitment to the critical need for applied fisheries research.

PASSED AND APPROVED BY THE ALASKA MUNICIPAL LEAGUE ON THE TWENTIETH DAY OF NOVEMBER, 2015

Signed:

Bob Harcharek, President, Alaska Municipal League

Attest:

Kathie Wasserman, Executive Director, Alaska Municipal League

Submitted by: Kodiak Island Borough
Contact Name: Larry LeDoux

Date Submitted: November 5, 2015
Contact Phone #: (907) 942-7011

Implementation Recommendation:

Agencies to Contact:

Funding Required:

Staff/Board/Membership Action:

ALASKA STATUTES
Title 16: Fish and Game
Chapter 52: Fishery Industrial Technology Center

AS 16.52.010. Fishery Industrial Technology Center.

There is established a Fishery Industrial Technology Center as part of the University of Alaska.

AS 16.52.020. Duties.

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.

AS 16.52.030. Fishery Industrial Technology Policy Council.

- (a) A Fishery Industrial Technology Policy Council is established to provide program and planning guidance to the center. The policy council shall be composed of members of the state's fishing and processing industry.
- (b) The policy council consists of seven members appointed by the president of the University of Alaska, including
 - (1) two members appointed from the seafood processing industry; the members appointed under this paragraph shall be owners or employees of firms that are in operation in the state and, insofar as possible, shall represent diverse processing operations;
 - (2) two members who are commercial fishermen; the members appointed under this paragraph shall be actively engaged in commercial fishing in the state and, insofar as possible, shall represent fishing for diverse fisheries resources;
 - (3) three public members.
- (c) A member of the policy council serves a term of two years.
- (d) At least five members of the policy council shall be residents of the state.

AS 16.52.040. Location.

The principal activities of the center shall be located in Kodiak, Alaska.

AS 16.52.050. Annual Report.

The Board of Regents of the University of Alaska shall prepare an annual report of the center's activities and notify the legislature by the 20th day of each regular session that the report is available. The report must include a description of the work conducted by the center, the

training sessions held and number of students trained, and any other information that the Board of Regents determines should be included to describe the work of the center.

AS 16.52.060. Cooperation with Other Agencies.

In the development of its programs the center shall consult with

- (1) Alaska Department of Fish and Game;
- (2) Division of economic development, Department of Community and Economic Development;
- (3) Department of Natural Resources;
- (4) Alaska Fisheries Development Foundation;
- (5) Alaska Seafood Marketing Institute;
- (6) North Pacific Fishery Management Council;
- (7) National Marine Fisheries Service;
- (8) Department of Education and Early Development; and
- (9) Department of Labor and Workforce Development.

AS 16.52.070. Definitions.

In this chapter

- (1) "center" means the Fishery Industrial Technology Center;
- (2) "policy council" means the Fishery Industrial Technology Policy Council.

**FISHERY INDUSTRIAL TECHNOLOGY CENTER
POLICY COUNCIL BYLAWS
(Amended March 14, 1996)**

I. COUNCIL ORGANIZATION

A. The Fishery Industrial Technology Center was established (Sec. 16.12.020) to:

1. Provide training on the most efficient and appropriate technologies for harvesting, processing and conservation of fishery resources.
2. Provide information and technical assistance on existing and new technologies to users of the state's fishery resources.
3. Develop new technology and conduct research on existing and new technologies in order to enhance the industry's economic viability and effectiveness in harvesting and utilizing the state's fishery resources.

B. The Fishery Industrial Technology Center Policy Council:

1. Charge:

The Fishery Industrial Technology Center Policy Council is appointed by the President of the University of Alaska and charged with providing the Center with program and planning guidance (Sec. 16.12.030). It will be the responsibility of the Policy Council Chair to report back to the President of the Center's progress on an annual basis.

2. Members:

- (i). Sec. 16.12.030 of the Alaska Statutes states that the Council will consist of seven members, appointed by the President of the University of Alaska. Two members will be appointed from the processing sector, two from the harvesting sector, and three from the public sector. At least five members will be Alaska residents. Each member will be appointed for a two-year term.
- (ii). It is the responsibility of the Director of FITC to inform the President of the University, through the Dean of SFOS and the Chancellor of UAF, of any vacancies

in the Policy Council. Unexpired terms will be filled at the earliest opportunity. Nominations for these unexpired terms will proceed according to the rules as for regular memberships on the Policy Council.

- (iii). The FITC Policy Council invites the Alaska Governor to appoint an ex-officio (non-voting) member to the Policy Council. The term of this member is the same as the Governor's elected term. The Policy Council also invites the Alaska Senate and the Alaska House of Representatives to each appoint one of their members or their representatives to sit as ex-officio members of the FITC Policy Council. The terms of these members, or their representatives, will be the same as the members elected terms.

3. Geographic Representation:

Those Council members who are Alaskan residents, to the greatest extent possible, shall be representative of the various geographic areas of state.

4. Center's Director:

The Center's Director is an ex-officio and non-voting member of the Policy Council.

5. Compensation:

Each Council member will be compensated for actual transportation and University per diem for attending Policy Council meetings or for other purposes approved by the Council's Chair.

6. Officers:

The officers of the Council will consist of a Chair and Vice-Chair. The Center's Director will act as executive secretary of the Council. Officers will be elected by a simple majority and serve for two years. They may be removed by simple majority. If an office is vacated it will be filled immediately at the same or next meeting and the new individual serve the remainder of the office's term.

7. Committees:

Four permanent committees of three members each are established by the Policy Council. At least one Council member will be on each committee. They will act as focal points and recommend to the Council appropriate actions. These committees are: *problems in industrial processing, problems in harvesting, education, and research*. Special ad hoc committees may be formed as warranted. The Center Director, or their designee, will act as an ex-officio member of each committee. Members appointed to committees will serve for two years, their terms expiring concurrently with terms of other members. Committee meetings will be held prior to and conducted in a similar manner to Council meetings (Section 8 on Meetings).

8. Meetings:

Regular Policy Council meetings will be held two times per year or as the need arises. A quorum is 4, passing any items under consideration for adoption by less than the full Policy Council requires 4 votes in favor.

9. Duties:

Chair - The Chair shall preside at all Council meetings and appoint committee members and their Chairs. The Chair shall perform other duties as may be necessary for the function of the Council.

Vice-Chair - In case of the Chair's absence for any reason or resignation, the Vice-Chair will perform all duties of the Chair until his return or replacement.

Executive Secretary: The Center Director, as executive secretary of the Council, will assist the Chair in establishing Council and committee meetings, prepare minutes of meetings, prepare notification of meetings, prepare a balance sheet showing expenditures to date at each Council meeting, brief new appointees as to the Center's past activities and purposes and generally orient the new appointee. Other duties will be as prescribed by the Council.

10. Voting:

All full Council members will have one vote.

II. DUTIES OF THE COUNCIL:

- A.** The Policy Council will provide the Center's staff with assistance and advice on the priorities and critical issues facing the industry as industry experts. This information will be in aid of the development and continuation of the Center's education, training, and research activities. The assistance and advice will be done through formal and informal mechanisms and every effort should be made by Council members to represent all interested industry people. Any new critical issues and new research directions at FITC, pertinent to the fishing industry, will be reviewed by the Policy Council as to feasibility, practicality, and industry needs. Council members will pursue further cooperation between FITC, the industry, and the State of Alaska.
- B.** At least one meeting per year will be held with the Center's staff in group discussion sessions to examine past activities and potential new directions.
- C.** One member of the Policy Council will serve on the SFOS search committee for new directors of FITC.
- D.** At each meeting of the Policy Council, the FITC director will provide a regular program report. This is a required part of the Policy Council meeting agenda. The program report will include a review of efforts in the research, instruction, and service missions of the FITC. Additional reviews will cover advances in communication, partnerships, and funding opportunities.

Talking Points

The Fishery Industrial Technology Center (FITC), developed from a vision that a group of 24 coastal Alaskan citizens had in the 1970s. To insure the long term viability of commercial, sports and subsistence fishing in their communities, they petitioned the Alaska Legislature and in 1981, FITC was established with its mission and functions encoded in State Statute (Title 16, Chapter 52). Kodiak was the chosen location of FITC because local fish landed there included about 80% of the species harvested in the eastern Gulf of Alaska and 80% of those caught in the Bering Sea.

FITC was originally created to be administratively lodged within CCREE or the Community College Rural Education and Extension Division of the University of Alaska. CCREE and its constituents were considered STATEWIDE functions. As configured within CCREE, the FITC director was also the head of the Marine Advisory Program (MAP) also a part of CCREE. The Alaska Legislature provided a continuing annual appropriation of \$660,000 to fund the institution.

In 1987, FITC and MAP were moved to UAF's newly formed, but seriously underfunded, School of Fisheries and Ocean Sciences (SFOS) during the reorganization of the University of Alaska due to significant cuts in state oil revenues. Glaring cultural conflicts between the *Academic Research Focus* of SFOS faculty and the heavily *Applied Industrial Focus* of FITC faculty, coupled with the serious underfunding of SFOS at its creation, led to the relentless financial dismemberment of FITC by SFOS.

By Applied Research we mean that research where members of the Alaska Seafood Industry (Harvesters, Processors and Community Members) develop the questions they need answered, and scientists at FITC would endeavor to answer them. In Academic or Basic research, pertinent questions arise from the scientists' imagination not from outside sources. Cultural conflicts between Applied and Academic are well known at the University level. An obvious mark of this conflict lies in the presence, in many states, of both an Academic Research University and a separate Applied Research University, such as in Ohio with Ohio University and Ohio State University or in Colorado with the University of Colorado and Colorado State University. The state level costs required to field two separate University systems speaks to the degree of conflict between the cultures of Applied and Academic researchers.

To some in the University, supporting a research, teaching and outreach institution that was not the product of PhD faculty was an anathema. And even though they would be abrogating their responsibility to maintain and support the creation of the Alaska Legislature, UAF and SFOS slowly began their quest to transfer state appropriations out of FITC. There have been 4 directors of FITC over the past 30 years and all have been fired. During this interval, UAF and SFOS have removed funding for more than 11 Full Time Equivalent (FTE) faculty and staff positions. At the same time, UAF's reason for dropping FITC is that productivity is low.

Alaska's Seafood Industry is arguably the largest employment sector in the state. Importantly, it includes many entry level jobs in Harvesting, Processing and in Retail where new workers can increase their earning power by taking a wide variety of directed courses. For many, if not most, coastal Alaskan communities the Seafood Industry is the only economic horse in town. The role

of FITC, as originally configured, was to provide this employment sector with education, service and research, helping it to face the new challenges of the future. That mission is why FITC was originally placed within CCREE. To allow it to return to its Applied roots will benefit coastal Alaskan communities now and into the future.

From 1981 until 1991 FITC was located in rented office space in Kodiak and in shared laboratory space on the Coast Guard Base in Kodiak. In 1991, the Alfred Owen Building on Near Island in Kodiak was completed with \$10.1M in funds drawn from the Criminal Settlement for the Exxon Valdez Spill. The building houses faculty and staff offices, 4 dedicated research laboratories, a test kitchen and a 5,000 ft² pilot plant where virtually any food could be produced. Senator Fred Zharoff of Kodiak worked diligently to find the construction funds. In 1991 Senator Zharoff included legislative intent language to accompany the University budget that year. This allowed for \$300,000 to be directed to FITC for operations and maintenance of the Alfred Owen Building. (Scuttlebutt suggests that SFOS received only \$110K of this funding and the UAF the remaining \$190K). With this funding, FITC had continuing annual appropriations (and directed legislative budgetary intent) from the Alaska legislature amounting to ~\$960,000 annually.

With the assistance of the Department of Community and Economic Development, the Alaska Congressional Delegation, the US Department of Agriculture and the Alaskan Seafood Industry, FITC, through its faculty, were awarded more than \$25M in grant funding from 1995 through 2012, much of it coming from the two USDA divisions: the Agricultural Research Service (ARS) and the Cooperative State Research Education and Education Service (CSREES). Over the years, a portion of those funds were used to purchase laboratory (estimated at \$2-3M) and Pilot Plant equipment (estimated at \$4-5M) amounting to a total of ~\$6-8M for existing equipment. However the replacement cost for the laboratory and Pilot Plant equipment is likely to be significantly more expensive now, perhaps as much as 1.5 to 2.0 times the original cost.

Some would like to see industry supporting all research at FITC. The problem with this notion is that given the highly competitive nature of the Alaska Seafood Industry, any outcome from a research investment must be considered proprietary by the investing company. Results from research done under the aegis of federal or state funding can be made available to all, assisting many more coastal Alaskan communities.

There had been 13 FTE Faculty and Staff positions at FITC. In 2015 only 1.35 FTEs (0.85 Faculty and 0.5 Staff) remain. This amounts to a loss of 11.65 positions, representing almost a 90% loss in personnel. Of those FTEs 8.60 were absorbed by SFOS, 1.30 FTEs by MAP and 1.75 FTEs by UAF. It is absurd to condemn FITC for low productivity when 90% of the faculty and staff FTES have been removed.

One solution is to refund FITC, thereby allowing it to recoup the personnel losses it has suffered. In addition it is manifestly necessary to move its administrative home. The new home could be in Statewide UA, along with MAP and Sea Grant. These could be joined by other truly Statewide functions including the Cooperative Extension Service (CES) as well as the Palmer Agricultural Experiment Station. If not moved to Statewide UA, FITC could associate itself with another university or consortium of universities, as a stand alone non profit or as a State of Alaska function .

FITC Resources

THE ALFRED OWEN BUILDING

The Alfred Owen Building, where FITC is housed, is a 20,000 ft² two-story structure built in 1991. The facility consists of a central office complex, 14 faculty offices and a large and a small conference room. Other facilities include a sensory testing facility, a research kitchen, a 1,000 ft² storage building, and a 5,000 ft² Pilot Plant. Specialized research is usually done in one of FITC's four dedicated function - research laboratories, each around 500 ft², and each equipped with one or more fume hoods. These include engineering, chemistry, biochemistry, and microbiology. The Owen Building has a high capacity LAN and all computers in the building are connected to the Internet via a WAN operated by the Kodiak Island Borough.

PILOT PLANT

The FITC Pilot plant is equipped to handle virtually any form of Seafood Processing. Fish and Seafood Processing By-products are stored in three freezers with a total area of 1,200 ft² located off a large 300 ft² cold room. FITC also has sufficient ice to stabilize large volumes of fish or processing by-product before it is handled from FITC's flake ice device that has a 1 ton per day capacity. Available utilities in the Pilot Plant include 100 lb. air pressure, low (15 psi) and medium pressure (85 psi) live steam, hot and cold water. Available electrical service includes 110v and 220v single phase, 208v triple phase, as well as 240v and 480v triple phase. The Pilot Plant has an array of state of the art processing equipment including:

AHS Custom designed pelletizer,
AHS pilot scale batch hydrolyzing system,
Armfield FT 40 Multipurpose Processing Vessel,
ASTA Hydrolyzer (on lease),
Brown Model 3900 finisher (deboner),
Clextral Model 270 twin-screw extruder,
Dole Freeze-Cel plate freezer,
Groen / Dover Model DLT-40 steam pot,
Hobart Model A-200-D1 mixer,
Koch RVF 55 Vacuum Stuffer,
Koch SR1 dicer,
Littleford Model FM 130-0 vacuum dryer,
Nissan Model 30 forklift,
Urschel Model 1700 Comitrol
Virtis Genesis Lyophilizer.

Additionally, various other pertinent equipment is available, including a screw press, grinders, mixers, packaging machinery, pumps for high viscosity material, dry pumps, a canning seamer, a laboratory retort, and an EnviroPak smoker.

CENTRAL OFFICE COMPLEX

The central office complex has fax, Xerox, and postal services as well as up to date common use computers for visitors connected to the Internet via LAN. FITC has a small Seafood Processing library consisting of about 500 volumes of books and monographs and about 15 years of back issues of the 25 journals that are subscribed to. Other research information can be accessed from the Fairbanks campus through Internet connections.

ANALYTICAL LABORATORY EQUIPMENT

The have the following major laboratory equipment are available:

Agilant 6890 CG with a M-5973 mass spectroscopy detector (MSD),
Agilant HP-7694 Headspace Autosampler,
Agilant Model 6850 CG- with an integral flame ionization detector (FID),
Agilant 5182-3482 Hydrogen Gas Generator,
Beckman L8M Ultracentrifuge,
Biorad Versidoc 1000 Digital Image Analyzer,
Buchi Automated Kjeldahl Nitrogen Analyzer,
Consolidated Steromaster Mark II Autoclave,
Hewlitt Packard 5890 GC-FID,
Iatroscan TH-10 TLC -FID Free Fatty Acid Analyzer,
Iatroscan Mk-6s Lipid Class Analyzer,
Labconco Freeze Dry - Shell Freeze System,
LECO FP-2000 Protein Analyzer,
LECO FA-100 Fats Analyzer, a
Minolta Hunter Color Analyzer,
Nikon Research Microscope with DIC and Epifluorescence,
Perkins Elmer DSC-7 Differential Scanning Calorimeter,
Quantichrome Mutli-pycnometer,
Revco -80°C Freezer,
Sorvall High Speed Centrifuge,
Sterigard III Laminar Flow Biohazard Hood,
Sun Kagaku Food Checker,
Texture Technologies TA - HDi Texture Analyzer,
Waters 2690 HPLC with
Waters model 474 Fluorescence Detector
Waters 2487 Dual I Absorbance Detector.

In addition, FITC is equipped with routine scientific laboratory equipment including: analytical and standard balances, ashing oven, food testers, fraction collectors, heated water baths, ion sensitive electrodes, pH meters, refrigerators, refrigerated water bath, soxhelet extraction apparatus, spectrophotometers, ultramicrotome, vacuum drying oven, microbiological equipment such as microscopes, plate readers and prokaryotic and eukaryotic cell culture apparatus, biochemistry equipment such as devices for electrophoresis and liquid chromatography, a variety of seafood engineering equipment, plus a rotary evaporator and sundry assorted glassware, heaters, stirrers, etc.

PROCESSING PLANTS AND FISH MEAL PLANTS IN KODIAK

Because of its long history of service to the Alaska Seafood Industry, FITC is able to work quite closely with the seafood processors in Kodiak, plants that process a huge volume of seafood annually. FITC receives fish and Seafood Processing By-products directly from these companies.

They include:

Alaska Fresh Seafoods,
Alaska Pacific Seafoods,
International Seafoods of Alaska,

Ocean Beauty - King Crab,
Trident Seafoods (Tyson Seafoods) and
Western Alaska Seafoods.

In addition, meal plants at:

Kodiak Fishmeal Inc

International Seafoods of Alaska

FITC receives samples from various stages in the process of making fish meal from both these plants.

Nearly 200 FITC Applied Research Projects in 25 years (1986-2011)

Ecosystem Projects

Gulf Apex Predator Prey Project (Gap I)
Gulf Apex Predator Prey Project (Gap II)
Gulf Apex Predator Prey Project (Gap III)
Lidar/Sonar Assessment of Stellar Sea Lion (SSL) Prey Availability & Ecology
Nutritional Composition of Fish in SSL Habitat
Prey Competition between SSL and Pollock
Identification of Juvenile Flatfish Habitat
Nearshore Habitat Use by Commercial Fish (Nearshore I)
Nearshore Habitat Use by Commercial Fish (Nearshore II)
Developing Faunal Lists for Western Alaskan Waters
Sonar System for Analyses of Commercial Fish Species
Trophic Status of Spiny Dogfish (*Squalus acanthias*)

On Board Quality Projects

Digital Observer Fish Recognition and Weight Estimation Software
Evaluating Chilled Sea Water (CSW) Systems
RSW: Elevated Storage Temperatures Compared with CSW and Ice
Groundfish Quality Improvement Using Chlorine Dioxide in RSW
Mechanisms of Induction: Chalky Halibut (Chalky Halibut I)
Understanding Chalky Halibut (Chalky Halibut II)

Gear Projects

Use of Pots for the Commercial Harvest of Flatfish
Flatfish Size Separation in Trawl Gear
New Gillnet Roller to Improve Quality
Net Pens – Salmon Live Delivery

Bycatch Projects

Effectiveness of Square Mesh Cod End Reducing Pollock Bycatch
Separator Panels in Trawl Gear Reducing Halibut Bycatch
Visual Cognition in Pacific Cod and Halibut: Fish Response to Gear
Expert System to Reduce Bycatch
Size Selectivity and Survivorship of Juvenile Pollock in Trawl Gear
Revival of Halibut Bycatch in Alaskan Trawl Harvests

Aquaculture & Enhancement Projects

Environmental Variation & Physiology of Pacific Cod
Models for Marine Finfish Enhancement Aquaculture
Enhancing Locally Depleted Stocks of Marine Finfish

Processing Projects

Deactivating Proteolytic Enzymes in Fish Flesh
Detecting Parasites and Bones in Fish Flesh

Processing Projects (continued)

Development of a Pinbone Removal Machine (Pinbone I)
Building a High Capacity Pinbone Removal Machine (Pinbone II)
High Capacity Pinbone Removal Machine (Pinbone III)
Developing Appropriate Processing Parameters for Pollock Surimi
Using Filleting Machines to Prepare Pollock Flesh for Surimi
Developing Decanter Centrifuges to Process Fish for Surimi
Screw Configuration in Extruder Processing of Fish
Texture and Flavor Enhancement of Pollock Surimi
Mince Product from Filleted Pollock Frames
Developing Processing Parameters for Mince from Undersized Sole
Developing Processes for Texturized, Cooked Minces for Food Service
Feasibility Studies for a Fish Smoking Plant.
Quick Method to Assess Crab Viability for Live Delivery of Seafood
Fish Muscle Texturization in Extruder Processing
Thermal Processing Development for Salmon Products in Glass Jars
Enhanced Surimi Production
Fillet Operations: Improving Recovery & Portion Control
Advanced Microwave Technology for Salmon Products
Hydrolyzed Salmon Protein In Infant Formulae (Salmon Baby Food I)
Prototypes for New Salmon Baby Food Products (Salmon Baby Food II)
Salmon Baby Food III: Baby Food from Roe & Oil.
Canning with Oil, Improving Processed Salmon
Freeze Dried Salmon: Product Forms for the Y Generation
Developing Value for Second Grade Salmon Caviar and Roe
Applications of Carbon Monoxide to Salmon.
Value Adding to Pink and Chum Salmon Fillets.

Under Used Species

Arrowtooth Degradation Caused by Endogenous Enzymes not Parasites
Developing Criteria for Deactivation of Endogenous Proteolytic Enzymes
Enzyme Biotechnology for Utilization of Arrowtooth Flounder
Developing Processing Parameters for Arrowtooth Mince & Surimi
Texture Enhancement of Arrowtooth Fillets
Analysis of the Utility of Giant Grenadier as a Food Source
Development of Flaked Products from Pink Salmon
Developing High Quality Alaskan Salmon Product: Alaska Bits
Developing Pink Salmon Nuggets with McDonald's Inc.
Developing Laminated Blocks from Pink Salmon
Using Late Harvest Salmon in Blocks
Utilization Options for Bitter Crab
Analysis of Texture Modification to Improve Marketability
Texture Modification in Giant Grenadier
Developing Value Added Products from Late Harvest Salmon
Standardization of Color in Late Harvest Chums
Undersized Sole & Pollock: Developing Processes & Markets

New Product Projects

Shatter Pack Evaluations: Alaskan, Icelandic and Norwegian Processors
Developing Texture Enhancement of Cod Fillets
Determination of Optimal Storage Conditions for Frozen Round Halibut
Seafood Taste Panels: New Value-added Products
Evaluation of Marketability of Rock Sole Fillets
Assisting Small Fish Smoking Plants in Developing New and Safe Products
Regional Differences in Alaskan Salmon Fatty Acids (Salmon FA I)
Regional Differences in Alaskan Salmon Fatty Acids (Salmon FA II)
Composition and Fatty Acid profiles of Pacific Salmon
Microbial Analysis of Alaska Native Smoked Salmon.
Feasibility Study for Alaska Herring Food Product Diversification
Determining Freezing Efficiency in Alaskan Seafood Plants
Producing Ready-to-Eat Food from Fish Muscle
Sous-vide Method for Product Development
Control Flaked Salmon for New Products
Test Development of New Puffed Salmon Products
Production of Dried Salmon Heads
Evaluation Herbal Teas from Reindeer Antlers
Pasteurization of Salmon Caviar
Microencapsulated Fish Oil Powder from Alaskan Salmon Oil
Effects of Fish Gelatin on Salmon Patties and Fillets
Intermediate Moisture Products from Pale Meated Salmon
Salmon Heads: New Product or Ingredient Source

Seafood Quality Projects

Measuring the Effects of Delayed Chilling on Fish Quality
Baseline Studies of Raw Material Composition and Quality
Surimi-Based Products for School Foodservice Programs
Seafood Taste Panels: New Products from Under Utilized Species
Sensor Automation for Parasite Detection in Fillets
Shelf Life and Quality Evaluation of Commercial Seafood Products
Improving Microbial Quality of Seafood Processing Plants
Controlled Atmosphere Shipping of Fresh Alaskan Fish
Using an Electronic Nose to Improve Seafood Quality
Evaluating Imaging Technologies for Detecting Bruising in Salmon (Deep Bruise I)
Detecting Deep Bruising by SW-NIR Spectroscopy (Deep Bruise II)
Causes and Prevention of Bruising in Salmon
Quality Criteria for Ikura (Salmon Caviar)
Statewide Salmon Quality Inspection & Certification Project (3rd Party I)
Statewide Salmon Quality Inspection & Certification Project (3rd Party II)
Analysis of Microbiological Contaminants in Pollock Mince
Analysis of the Causes of Gaping in Pink Salmon
Measuring Salmon Shatter Pack & Block Quality and Stability
Antioxidants for Shelf Life Extension in Salmon Blocks
Pink Salmon: Shelf Life Extension using Natural Antimicrobials

Seafood Quality Projects (continued)

Salmon Caviar Products: Safety and Quality Determinations
Extending Shelf life of Fresh Pink Salmon Fillets Using Chitosan
Machine Vision System for Seafood Quality Control
Machine Vision II: Identifying Quality Indices in Salmon Fillets
Evaluation of Ozone for Ready to Eat Seafoods
Nutritional Comparison of Regional Red Salmon
HACCP Validation using ATP Luminescence
Managing Salmon Fisheries for Quality
Assessment of Shelf Life in Dried Salmon Products
Development of Color Standards for Alaska Salmon
Vitality in Live Shipped Tanner Crab
Developing Food Ingredients from Diced Pink Salmon
Digital Observer Smart Tag - Development and Testing (Smart Tag I)
Digital Observer Smart Tag (Smart Tag II)
Digital Observer Smart Tag III
Stress Physiology and Seafood Quality
Alaskan Shellfish Safety, Quality and Markets (Shellfish I)
Asian Shellfish Quality and Markets for Alaskan Shellfish (Shellfish II)
Economic Feasibility of Oyster Farms in Alaska (Shellfish III)
MIDI: Rapid Identification of Fish Spoilage Bacteria
Anti Listerial *Carnobacterium* Species from Processed Fish
Use of Colorless Smoke in Salmon Fillets
Analysis of Late Odor in Canned Pink Salmon
Ethanol-Producing Bacteria as Spoilage Indicators in Salmon
Evaluating Slurry Ice Systems for Alaska Salmon Fisheries
Digestibility & Nutritional Quality for Alaskan Salmon & Pollock.

Seafood Safety Projects

Bioprocessing of Marine Bacteriocins for Enhancing Seafood Safety
Evaluation of *Clostridium sporogenes* for Botulism Testing
Eradication of *Listeria monocytogenes* by Directed Sanitation (*Listeria* I)
Supplements to Inhibit *Listeria* in Cold-Smoked Salmon (*Listeria* II)
Effectiveness of pH in Controlling *Listeria* (*Listeria* III)
Histamine Levels in Pink Salmon
Bacterial Survivability during Smoked Salmon Pellicle Formation
Monitoring & Identification of *Vibrio parahaemolyticus*
Pulsed UV Light for Inactivating *Listeria* on Cold-Smoked Salmon

Contaminants Projects

Phytoplankton Monitoring: Paralytic Shellfish Poison causing Dinoflagellates
Developing New Methods to Identify Toxic PSP Molecules
Fish Flesh Petroleum Contamination from Exxon Valdez Oil Spill
Evaluation of MIST Alert for Detecting PSP
PSP Testing with FDA Sodium Blocking Assay
The Effects of *Ichthyophonous* Infestation on Fish Fillet Properties

Marketing Projects

Alaska Salmon Marketing Mini-Grant Competition (Mini-Grant II)
Alaska Salmon Marketing Mini-Grant Competition (Mini-Grant III)
Salmon Marketing Workshops, Alaska's Fishing Communities (Tour I)
2nd Seafood Marketing Workshop for Alaska Communities (Tour II)
Alaska Regional Salmon Marketing Mini-Grant Program (Regional I)
Alaska Regional Salmon Marketing Mini-Grant Program (Regional II)
Alaska Regional Salmon Marketing Mini-Grant Program (Regional III)
Assessment of Hong Kong Smoked Salmon Trade
Linking Quality and Marketing in Alaskan Seafoods
Alaska Regional Marketing Manual
Alaska Direct Marketing Manual & Starter Kits
Alaska Marketing Workshop CD
End-user Preference Analysis for Whitefish Fillet & Blocks
Economic Feasibility of Clam Farms in Alaska
Synopsis of the Live Seafood Market in North America

Processing Waste Projects

Membrane Technology for Stickwater Recovery in Fishmeal Processing
Artificial Bait for Cod with Fish Hydrolysates
Fish Meal as a Protein Source for Human Consumption and Livestock
Fish Feed Development for Alaska Hatchery Salmon
Medium Scale Waste Handling for Human Food Grade Protein Powder
Making Marketable Oil from Salmon Byproducts
Seafood Processing Byproduct Project: Greater Value from Fish Waste.
Using Ultrafiltration to Recover Byproduct Proteins
Marketable Fish Oil from Salmon Byproducts
Developing Edible Protein Powders from Underutilized Fish
Analysis of Black Cod (*Anoplopoma fimbria*) Lipids
Recovery of Soluble Proteins from Surimi Washwater

Other Projects

Instrumentation for Scientific Research (Instrumentation I)
Scientific Instrumentation (Instrumentation II)
Instrumentation for Scientific Seafood Research (Instrumentation III)
Feasibility Study for Freight Consolidation Facility
Review of Funding Sources for Fisheries Development Projects
K-12 Seafood Curriculum - Food Dude Unit
Instructional Videos - Plant Sanitation and Employee Hygiene
Review of Inputs for Alaska Seafood Industry
Fatty Acids and Wax Esters in Walleye Pollock