

# Fishing, Seafood and Maritime Initiative (FSMI)

## Statewide Academic Council Update – September 2015

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Chairs, Paula Cullenberg, director Alaska Sea Grant and Fred Villa, Associate VP for Workforce Programs, UA. Overview created by Teri Cothren, UA Workforce Programs.

### Overview

The University of Alaska (UA) has been collaborating with maritime industry representatives, five state agencies, legislators and other training entities across the state since 2012 on the [Fishing, Seafood and Maritime Initiative \(FSMI\)](#). The cross-MAU initiative is guided by a fully collaborative dean and director level UA leadership team. The leadership team representatives are:

- Alan Fugleberg, Campus Director, UAA Kodiak College
- Fred Villa, Associate VP, UA Statewide Workforce Development
- Gunnar Knapp, Director, UAA Institute of Social Economic Research
- Joan Braddock, UAF School of Fisheries and Ocean Sciences
- Mike Castellini, Associate Dean, UAF Graduate School
- Paula Cullenberg, Director, UAF Alaska Sea Grant
- Pete Pinney, Executive Dean, UAF College of Rural & Community Development
- Priscilla Schulte, Interim Provost, UAS and Campus Director, UAS Ketchikan

The goal of FSMI is to sustain Alaska's economy, support Alaska's workforce needs and provide research to support marine resources upon which this economic sector depends.

Through this private-public partnership, the [Alaska Maritime Workforce Development Plan \(AMWDP\)](#) was created and published in May 2014. The plan has been supported and adopted by a number of groups around the state including the UA Board of Regents, the Alaska Workforce Investment Board, the Southwest Municipal Conference, the Southeast Conference and the Alaska State Legislature.

The Industry Advisory Committee to FSMI, originally appointed by President Gamble in November 2012, launched an independent group with the mission to help all parties (industry, university, state and federal government, communities) implement the AMWDP. With a challenge grant from UA, they have been raising matching funds since March 2015, hired a coordinator and renamed themselves, *Maritime Works*. Greg Pavellas, Crowley Maritime, chairs the 15-member group and guides an executive steering committee. UA's role has since moved from coordination of the creation of the AMWDP to working with its maritime partners to implement the plan.

Maritime Works identified four major priorities to focus implementation through 2016: Career Awareness, Vessel Maintenance and Repair, Marine Refrigeration, and Vessel Engineering and Licensing. [AMWDP work groups](#), including representation from UA, were established in late 2014 to address these priorities. The group also recognized important growing programs in fisheries, seafood processing and maritime training that are part of UA.

***The FSMI long-term vision is of a collaborative cross-MAU UA signature program as follows: the University of Alaska's Marine Research, Education and Training Collaborative provides Alaska's most comprehensive and far reaching source of education, training, research and technical support for sustainable fisheries resources and maritime industries and professions. The Collaborative comprises a network of scientists, educators and trainers, policy researchers, and specialists at 17 sites across the state.***

## FSMI Capacity in the UA System

### New Funding, FY15

#### Endowment

The Douglas Island Pink and Chum Salmon Hatchery (known as DIPAC) funded a \$1M endowment in September 2014 to fund a fellowship for fisheries graduate students at the UAF School of Fisheries and Ocean Sciences Juneau Center (<https://web.sfos.uaf.edu/wordpress/news/?p=1558>).

#### Technical Vocational Education Program (TVEP)

The University of Alaska FSMI leadership team worked together during early spring 2015 to develop an integrated FSMI set of proposals, guided by priorities in the Maritime Workforce Plan for TVEP that resulted in over \$600,000 in FY16 devoted to FSMI related programs. This was the largest contribution to FSMI projects since the initiative began.

The following were funded for FY16:

- Support for UA FSMI coordination - \$40,000
- UAA Kachemak Bay Campus maritime coordinator - \$83,300
- UAA Kodiak Campus Vessel Repair and Maintenance & Welding Technology - \$218,600
- UAF Alaska Seafood Processing Leadership Institute - \$44,000
- UAF Seafood Processing Quality Control Training Program - \$24,800
- Support for a new UAF/UAS fisheries faculty member based in Juneau - \$109,300
- Support for the multi-skilled maritime worker program in Ketchikan - \$85,000

#### Title III Grant

The Title III Program is a United States federal grant program to help eligible institutes of higher education to become self-sufficient and expand their capacity to serve low-income students to improve education. University of Alaska Southeast Ketchikan was awarded a 5-year, \$6.6M Title III grant in October 2014 to transform the current technical center into the UAS Regional Maritime Technical Training Center.

The completed center will enhance the Marine Transportation program, the Maritime and Multi-Skilled Worker program, and associated courses including welding, diesel engine maintenance and repair, hydraulics maintenance and repair, refrigeration maintenance and repair, and marine electrical maintenance and repair. The project will also incorporate upgrades and innovations to classroom technology across the campus to enhance e-learning courses for students living outside of Ketchikan.

By improving the training center and upgrading e-learning technology, there will be more opportunities for students to enroll in certificate and degree programs that lead to occupations with Vigor's Ketchikan Shipyard, the Alaska Marine Highway System, seafood processing, and many other maritime industries. More Alaskans will be able to enroll in these programs, stay in their communities and work towards an education that will lead to living wage jobs.

## Education and Workforce Training

UA is continuously improving and developing new programs in partnership with Alaska's maritime industry to build a skilled and qualified workforce.

### Highlights

During fiscal years 2014 and 2015, eight campuses offered 216 classes across 43 communities to 2,136 students who between them earned 2,312 credits and 548 continuing education units. Here are some additional highlights:

- UAA Kodiak College launched a series of [vessel maintenance and repair](#) classes with input from local boaters.
- UAA Kachemak Bay Campus is working closely with their local marine trades association and has launched a [series of local classes](#) as has the UAS Ketchikan Campus.
- UAF Alaska Sea Grant (ASG) Marine Advisory Program, with a donation from Icycle Seafoods, established a new 40-hour [Seafood Processing Quality Control Training Program](#), as well as continuing the [Alaska Seafood Processing Leadership Institute](#) and the [Alaska Young Fishermen's Summit](#).
- UAF Bristol Bay Campus and the ASG Marine Advisory Program offered fishermen training programs including net hanging, fishing business skills and [outboard maintenance and repair](#). This is the beginning of their development of an occupational endorsement in commercial fishing.
- UAS Ketchikan began offering a [Maritime and Multi-Skilled Worker](#) course.
- [Ammonia Refrigeration training](#), coordinated by the ASG Marine Advisory Program and taught by UAA Mat-Su Professor Dan Mielke, was offered both at Mat-Su College and at the Kodiak Seafood and Marine Science Center.
- UAS and ASG Marine Advisory Program developed a new [Boat Electrical](#) asynchronous course online to target commercial fishermen and all boaters.
- UAF Fisheries Division has enhanced their BA in Fisheries in partnership with the Rural Development Program.

### Core Programs

Core programs include vocational and technical training directly related to the maritime industry as well as bachelors and advanced education programs directly related to fisheries management and assessment, logistics, and oceanography and marine science.

- 33 percent of the FSMI related programs have e-learning components.
- The University engages in advisory councils to inform and guide education and training programs.
- 11 Occupational Endorsements, 7 Certificates, 8 Associate Degrees, 10 Bachelor's Degrees, 1 Graduate Certificate, 7 Master's Degrees and 4 Doctorates are related to maritime occupations.
- Additional information on maritime training can be located at: [http://www.alaska.edu/fsmi/reports-documents/Maritime\\_Inventory\\_FY14\\_Final.pdf](http://www.alaska.edu/fsmi/reports-documents/Maritime_Inventory_FY14_Final.pdf).
- 1,198 degrees were awarded to graduates in the core programs between 2010 and 2014.

### Support Programs

Support programs include the broader vocational and technical training and advanced degrees in such fields as accounting, business, engineering, and rural development.

- 6 Occupational Endorsements, 14 Certificates, 26 Associate Degrees, 21 Bachelor's Degrees, 1 Graduate Certificate, 14 Master's Degrees and 4 Doctorates support maritime occupations.
- Information on these programs can be located at: <http://www.alaska.edu/research/wp/ua/>.

## Research

The University of Alaska system has substantial and effective research programs that are closely tied to the FSMI objectives, including: Marine Sciences, Ocean Chemistry, Seafood Safety, Marine Policy, and economic analysis and support through the Alaska Sea Grant Program. FSMI input and support are used to leverage and add to the local, State, Federal and private funds that drive the major research components. Guidance from FSMI is utilized to expand the breadth of the research to impact the marine sectors that are so integral to the FSMI objectives. In other cases, using FSMI as the anchor, supporting organizations become partners to enhance the direction of FSMI. All cases are collaborative and support is leveraged to form a broad-based and stable funding platform for important FSMI related research.

### Research Capacity at UAA, UAF and UAS Includes:

- Fisheries Management and Assessment
- Oceanography and Marine Science
- Seafood Safety and Product Development
- Marine Policy

### Alaska Sea Grant

Alaska Sea Grant funds research related to the wise use and conservation of Alaska's coastal and marine resources. It supports graduate student fellowships to build capacity and has initiated a new Alaska Sea Grant State Fellowship Program that supports two recently completed graduate students working in state or federal agencies on marine policy.

### Maritime Research Center of Excellence

In August 2014 the U.S. Department of Homeland Security (DHS) Science and Technology Directorate announced that the University of Alaska Anchorage (UAA) was selected through an open call and rigorous competition to co-lead a new Maritime Research Center of Excellence (COE). The DHS COE network is a consortium of hundreds of universities that conduct research for new technologies and strategies that will advance DHS's mission. UAA received an initial \$1 million cooperative agreement for operations through June 2015 and is expected to bring additional funding in the coming years for research on maritime security in Arctic waters. Their mission is focused on developing innovative research and solutions to challenges in Arctic maritime domain awareness.

### Coming Up

The [UA FSMI Working Group](#) is scheduled to meet for the third time in four years on Wednesday, October 21. The objectives of the meeting include:

- Information exchange: What new opportunities are coming down the line?
- Engaging with Maritime Works - as UA moves from coordination to implementation - how can we be most effective in serving the needs of the industry?
- Working with new leadership at UA.
- Incorporating the research sector into the Fisheries Seafood and Maritime Initiative.