

Seafood: Center’s labs focus on safety, production, quality

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or environmental research. The lab is associated with the Coastal Oregon Marine Experiment Station at the Hatfield Marine Science Center in Newport. But it falls under the university’s Food Science and Technology department and was established more than 75 years ago to help the fishing and seafood processing industries.

“Most people don’t understand that we aren’t marine biologists,” Mireles-DeWitt said. “We’re food scientists.”

All things seafood

The center includes three labs focusing on production, quality and safety of seafood. It averages 10 to 15 graduate and doctoral students who come from around the world, each taking on their own projects.

In one lab, students work under Jae Park, a world-renowned researcher of surimi, the gelatinous fish protein processed from inexpensive seafood into a wide variety of products, most famously imitation crab meat. An annual surimi school draws hundreds from the global seafood industry.

“Dr. Park is at the top of his field,” said graduate student Kaitlin Junes, an Astoria native back in her hometown to study how to market “sea vegetables,” such as seaweed as she pursues a master’s in food science.

Yuka Kobayashi, from Japan, is a doctoral food science student at OSU researching how to isolate protein from seafood. Hyeonwoo “Howard” Park is a visiting graduate student from Korea testing the texture of surimi made with different fillers, such as salt, egg whites and potato starches.

In the next lab over, students study seafood quality control, from trying to increase the shelf life of products to creating a device to test when the fishy smell means a product has expired.

Doctoral student Jinhwan Lee, also from Korea, said he focuses on a bad enzyme introduced to seafood products during frozen storage that causes the growth of formaldehyde and toughens fish fillets over long periods.

“My goal is to figure out how to block the enzyme” and increase the shelf life of fish fillets, Lee said.

In a third lab, overseen by seafood microbiology and safety professor Yi-Cheng Su, students research how to keep seafood products safe for consumption, with a focus on products eaten raw. Graduate student Xiaoye Shen from China studies how to better remove toxins from raw oysters, using a closed recirculation tank with clean seawater.



Edward Stratton/The Daily Astorian
Oregon State University graduate student Xiaoye Shen shows off her research into depuration, namely the removal of toxins from oysters.



Edward Stratton/The Daily Astorian
The Oregon State University Seafood Research and Education Center studies products sent in by seafood companies and also creates its own surimi, a gelatinous fish protein, which the center specializes in studying.

‘We get a lot of requests from people to come here and study from all over the world.’

Christina Mireles-DeWitt

director of Oregon State University’s Seafood Research and Education Center

Shen said the lab purposely introduces pathogens into oyster samples, before letting them stay in the lab’s recirculation

system and adding natural compounds in hopes of making the process more efficient in removing toxins.

Industry-focused

The seafood center started in 1940 as an effort to improve the science of seafood.

“We get a lot of requests from people to come here and study from all over the world,” Mireles-DeWitt said.

All the students at the center are supported through assistantships funded by the university, she said. Getting in is a matter of when one of the seafood center’s three professors are available and have grant funding.

“Just having a cadre of students is really important because they need that kind of support to be successful here at the lab,” Mireles-DeWitt said. “If you’re the only student in a town that’s away from a bunch of other students, it’s kind of lonely.”

The seafood center is advertising for a fourth faculty member, she said, as it tries to help the seafood industry develop markets, particularly in the health industry, for the byproducts of seafood processing.

“What’s happening right now, is the seafood industry is looking at ways to take the product that they’re not utilizing ... and figure out ways to maybe isolate the protein to add value to it.

“Think about what the dairy industry does for whey. They used to just throw down the drain. In cheesemaking, there’s valuable protein, and the industry figured out how to capture that protein, and now whey’s an important ingredient in tons of products. It’s actually more valuable than the cheese now. We want to do the same thing for the seafood industry.”

Turf: ‘I don’t think it’s a good direction for us to go as a community’

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Siebert-Wahrmund said she was concerned approval of an artificial turf plan could set a precedent.

“I don’t think it’s a good direction for us to go as a community, a community that cares about nature,” Siebert-Wahrmund said. “We care very much about how we do things here and I don’t think this fits. It’s a bad step.”

Design Review Board member Mike Morgan agreed. “I don’t think (artificial turf) should be in any way acceptable landscaping for public view,” Morgan said.

But since the property is out

of public view, the plan would be acceptable, Morgan said.

Board members asked how Haystack Gardens’ outdoor renovation proposal would overlap with a previously approved plan to build a multifamily dwelling on the property. The plan for that apartment building — not yet built — overlaps slightly with the proposed outdoor renovations.

With the help of City Planner Mark Barnes, the new proposal was amended to accommodate both the outdoor renovation and apartment building designs. When and if construction on the apartment building begins, overlapping artificial

turf could be rolled back.

Construction on the multifamily unit is intended to offer dormitory-style housing to Martin Hospitality’s seasonal employees. A start date for the project has not been determined, Norstedt said.

“The apartment building is on hold,” Norstedt said. “The cost of construction is a little bit higher than we anticipated right now, and we’re just weighing our options.”

The landscape renovations, however, have a target date.

“We want to be ready for the wedding season,” Norstedt said. “So we should have it completed by May.”

Warrenton: It took at least 100 people to make library happen

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our duties and investigating our cases.”

The Astoria, Seaside and Cannon Beach police departments use WatchGuard Video equipment, he added.

Body and mobile cameras also allow officers to view themselves in action and learn how they can do their jobs more safely, Commissioner Tom Dyer, who works for Oregon State Police, said.

“You learn by watching yourself,” he said.

For the front-loader refuse truck, the commission

awarded a contract to JMR Group Inc. doing business as McCoy Freightliner, for a not-to-exceed price of \$323,843. The budgeted amount was for \$300,000; the remaining costs will come from the sanitation fund, Public Works Foreman Craig Walter said.

The aerial ladder truck will cost the city up to \$625,000, financed through U.S. Bancorp over several years, plus a \$200,000 down payment from the equipment reserve fund.

In other business

The city handed out

three certificates of appreciation to Diane Collier, Janet Gannaway and Kathleen Merritt — the outgoing members of the Warrenton Community Library board — for their instrumental roles in establishing the library in the 1990s.

“Many people like myself ... remember it when it was the Hammond Town Hall,” Mayor Mark Kujala said. “And now it is a gathering place for young and old alike, and you guys are responsible for it.”

Gannaway said it took at least 100 people to make the library happen. “It’s been lots of fun,” she said.

Evidence: Oregon’s backlog now stands about 3,700 cases

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OSP laboratories take an average of 65 days to test evidence, according to the audit. The National Institute of Justice standards call for evidence to be tested within 30 days,

But auditors also noted that backlogs also are a problem in other parts of the nation.

Oregon’s backlog now stands about 3,700 cases. In 2014, OSP received 29,500 requests for testing. The demand for testing has surged by 31

percent since 2005 with only “marginal” staff increases, the audit stated.

The audit was “substantially complete before allegations were publicly reported” that a forensic analyst in the division had tampered with ev-

idence, auditors wrote. They said employees had disclosed no criminal behavior during the audit.

A criminal investigation into the allegations is underway. Nika Larsen, a forensic analyst in OSP’s Bend office,

has been identified as a suspect in the case.

Gov. Kate Brown also has appointed a work group to review the division’s practices and procedures for evidence control.

The division has 127 employees, five laboratories in

Bend, Central Point, Clackamas, Pendleton and Springfield and a biennial budget of \$35.8 million.

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