



OCC Goes to MARS

When Amazon founder and technology entrepreneur Jeff Bezos laid eyes on the structure that OCC architecture instructors Joseph Sarafian and Steve Fuchs helped design and construct using a new method of concrete casting, he called it “Insane. Which is the best compliment I can give.”

The structure — commissioned by Bezos for his annual MARS Conference in Palm Springs — was built using industrial robots and fabric Lycra sleeves, and the finished design hints at the intricate natural skeletal structures of microscopic organisms, such as Radiolarians, or zooplankton.

“Tapping into the way that natural organisms are designed allowed us to create structures with minimal waste, and brilliant structural redundancy, without the setbacks of traditional construction techniques,” explains Sarafian.

To build the 13-foot-tall dome-like structure, Sarafian and his business and design partner Ron Culver envisioned a system of interconnected concrete components that take a natural curve from gravity, much like a hanging cable, only inverted. Once the pieces are connected, they form a dome.

“Each concrete component is unique, but the steel connectors in between are all uniform, allowing for an easily bolted assembly system,” says Sarafian.

Once Sarafian and Culver had their concept, they reached out to OCC architecture technology professor Fuchs to collaborate on the construction. They also hired two interns — Coast technology student Andrew Lindauer, and Cal Poly San Luis Obispo student David Spiva — and teamed up with Walter P. Moore structural engineers to help solve the complex structural aspects of the design. After a month of fabrication, the pieces were assembled in three days, creating a visual feast

for attendees at the three-day, invite-only March 2017 technology conference.

Following the MARS conference, the structure was moved to the Architecture and Design Museum in Downtown Los Angeles, where it stayed until early October, after which it was disassembled and placed in storage. Yet, even as the structure’s time in the limelight comes to a close, Sarafian and Fuchs are eagerly looking ahead at the endless possibilities that their technique opens.

“[We want] to use OCC’s Makerspace and robots as a testing lab for future construction applications,” Sarafian says. “OCC students will have the opportunity to not only contribute, but to create their own robotic construction techniques to push the boundaries of fabrication.”

Some future development ideas we are exploring include rapid construction for disaster relief and as a housing prototype in developing countries.”

To find out more about Sarafian and Culver’s work, visit www.formfounddesign.com

Calendar

- **Oct. 19 — Dr. Chris Lowe Guest Lecture**
Science Hall, 4–5 p.m.
- **Oct. 20 — Science Night**
OCC Campus, 5:30–9:30 p.m.
- **Oct. 25 — Free Flu Shot Clinic**
Student Health Center, 10 a.m. until 2 p.m.
- **Oct. 31 — Free Flu Shot Clinic**
Student Health Center, 10 a.m. until 2 p.m.
- **Oct. 31 — Classified Senate Halloween Decorating Contest**
OCC Campus, 10 a.m. until Noon
- **Oct. 31 — Women’s Soccer vs Santa Ana**
Soccer Complex, 3 p.m.
- **Nov. 2 — Free Flu Shot Clinic**
Student Health Center, 10 a.m. until 2 p.m.
- **Nov. 3 — Women’s Volleyball vs Golden West**
Peterson Gymnasium, 6 p.m.
- **Nov. 8 — Free Flu Shot Clinic**
Student Health Center, 10 a.m. until 2 p.m.
- **Nov. 16 — Men’s Volleyball vs Palomar**
Peterson Gymnasium, 5 p.m.

Well-Known Shark Expert Will Give Guest Lecture at OCC Oct. 19

Orange Coast College’s marine science department has invited shark expert and California State University, Long Beach Marine Biology Professor Dr. Chris Lowe to give a guest lecture on campus on Thursday, Oct. 19.

The lecture, titled “Beach Babies: Southern California Beaches Form Important Nursery Habitat for White Sharks in the

Northeast Pacific," will take place in OCC's Science Hall from 4-5 p.m., and a VIP reception will immediately follow from 5:15-7:15 p.m. in the College's Lewis Building, next to the Dennis Kelly Public Aquarium.

Dr. Lowe has taught at Cal State Long Beach for nearly 20 years, and oversees the Shark Lab there. For the past decade, he and his students have studied baby and juvenile white sharks in Southern California waters, and his research has focused on developing underwater robots that are capable of tracking sharks and gamefishes. His expertise has often made him the go-to expert for media interviews about great white sharks, including specials on PBS and the BBC, the "Today" show, Newsweek, and many local outlets.

As the number of great white sharks sighted along Southern California beaches has skyrocketed in the past year, Dr. Lowe's research may be key in finding a cause.

"Dr. Lowe's long-term study on juvenile white sharks and his findings will give us insight into why we are seeing them more frequently in Southern California coastal waters," says OCC Marine Science Professor Karen Baker.

Admission to the lecture is free, and tickets are being sold for the VIP reception for \$50. To find out more, contact Baker at kbaker@occ.cccd.edu or at (714) 432-3067.



Over that span, Hilgendorf compiled a 233-100 record and helped guide the Pirates to 15 playoff appearances in 19 years, five conference titles and three state championships (1978, 1980, 1982).

Hilgendorf passed away on March 27, 2016 at the age of 74, but her memory will forever live on throughout Orange Coast College, thanks to an incredible \$1,012,500 donation following her passing. Per her requests, 75 percent will be donated to the OCC Kinesiology and Athletics Department, while the remaining 25 percent will go to the Friends of the OCC Library. Additionally, \$20,000 was received from the trust for a scholarship benefitting outstanding transferring OCC women's volleyball players.

Hilgendorf's generosity has already made an impact in the Pirate women's volleyball community. At last year's Women's Volleyball Honors Night, OCC sophomore setter Measha Lindstrand was the first-ever honoree of the Jane Hilgendorf Scholarship (\$1,000) and is now attending Hope International University.

Following her coaching career, Hilgendorf moved to the administrative side of the Athletics Department, where she was the Assistant Athletic Director for seven years (1991-1998), and the Dean of Physical Education and Athletics - as well as Athletic Director - for three years (1998-2001).

In addition to her work on the OCC campus, Hilgendorf also was a member of the state Commission on Athletics from 1981-1987 and was the president of the Orange Empire Conference in 1998.

Hilgendorf's tireless work with the Pirates earned her an induction into the Orange Coast College Athletics Hall of Fame in 2007.

"Jane absolutely loved Orange Coast College," former coach and athletic director Barbara Bond said of her longtime co-worker in a statement. "She worked tirelessly as athletic director and dean to improve the athletic programs and improve the competitive experience for the OCC students. She was also one of the pioneers for women's athletics at the state level, ushering in Title IX and its impact on women's sports throughout the California community colleges."

Pirates dedicate gym floor to Jane Hilgendorf

Prior to the women's volleyball match on Sept. 29, Orange Coast College took time to honor and dedicate the Peterson Gym floor to former longtime coach, administrator and lifelong friend of the Pirates, the late Jane Hilgendorf.

"It was great to see so many members of her family and friends as well as so many former co-workers of hers take the time to be here for this event," OCC Athletic Director Jason Kehler said. "She will forever be a Pirate, not just on the gymnasium floor, but throughout this department."

Hilgendorf began her OCC career in the fall of 1970 as a P.E. instructor, but not as a coach. Her first coaching stint began in 1971 when she helped develop OCC's co-ed volleyball team. Two years later, Hilgendorf took over the Pirate women's program and over the next 18 years, she helped build one of the more successful programs in all of California community college athletics.

OC Board Supervisor Presents Certificates of Achievement to Clay Lacy Scholarship Winners

Two Orange Coast College students who received Clay Lacy Aviation flight training scholarships received additional commendation from Orange County Board Supervisor Michelle Steel.

Steel, who represents Orange County's second district, presented certificates of achievement to Lex Lizotte and Soraya Eftekhari on Sept. 19 at Atlantic Aviation at John Wayne Airport.

"It is inspiring to see local students with a strong passion for flight," said Supervisor Steel. "I am delighted to join with Clay Lacy in honoring these remarkable future pilots."



Dr. Stanley Harriman—who teaches and runs OCC’s aviation pilot training program—and Dean of Technology Dan Shrader were on hand to watch the students receive their recognition. Supervisor Steel congratulated both for “building such an outstanding aviation school here in Orange County.”

Lizotte, of Huntington Beach, California, aspires to become a pilot for a major cargo company like FedEx.

“This scholarship will help me progress my private pilot learning and also progress my flight hours to hopefully get me up to my first solo, which means a lot,” Lizotte says. “I’ve been working hard ever since I arrived at Orange Coast College, and I’ve been trying to save up some money to schedule time to fly. When I was told I had received a scholarship, I couldn’t believe it. I was so full of happiness.”

Eftekhari grew up in Switzerland and now lives in Newport Beach. Her goal is to fly and train other pilots in seaplanes.

Upon graduation from OCC, each will have earned an Associate of Science degree and private pilot’s license, and both plan to complete their aviation education and pilot certifications at a four-year institution.

Student Health Center Offering Free Flu Shots to Employees, Students

OCC faculty, staff and students can get free flu shots at the College’s Student Health Center during several dates in late October and early November. Supplies are limited and shots will be dispersed first-come, first-serve.

The first flu clinic will take place on Wednesday, Oct. 25, from 10 a.m. until 2 p.m. at the Student Health Center, and no appointments are necessary.



Subsequent dates are as follows:

- Tuesday, Oct. 31 — 10 a.m. until 2 p.m.
- Thursday, Nov. 2 — 10 a.m. until 2 p.m.
- Wednesday, Nov. 8 — 10 a.m. until 2 p.m.

Influenza is a serious disease that can lead to hospitalization and sometimes even death. For more information about OCC’s free flu clinics, contact Janice Iglesias at jiglesias@occ.cccd.edu or at (714) 432-5808.



This Year’s Science Night Slated for Oct. 20

More than 5,000 elementary students and their families are expected to visit OCC during the College’s annual Science Night on Friday, Oct. 20.

Youngsters from 25 elementary schools in Newport Mesa, Fountain Valley, Huntington Beach and Westminster school districts are invited to attend the event, which will take place from 5:30-9:30 p.m. throughout campus.

This year’s theme for exhibits is “From the Sea to the Stars” and will include robots on parade, stargazing with high-powered telescopes, creepy-crawly creatures from the sea, bones and skeletons, airplanes, helicopters, volcanic rocks and dinosaur bones. For more information about exhibits visit www.orangecoastcollege.edu/sciencenight

Departments participating in activities include aviation, allied health, anthropology, architecture, biology, computing, consumer and health sciences, geology, marine sciences, mathematics, technology, to name just a few.

Admission and parking is free, and all attendees will receive a free sandwich, chips and bottle of water.

OCC Campus Safety Dept. Offers Safety Training for National Preparedness Month

Orange Coast College's Campus Safety department hosted a day of safety training on Sept. 26 in honor of National Preparedness Month.

Vendors and safety officials were on hand in OCC's Quad from 10 a.m. until 2 p.m. to provide information and answer questions about how to be prepared for disasters. The Costa Mesa Fire Department hosted a "sidewalk CPR" training to give students, faculty and staff a brief overview of the life-saving technique. The Orange County Sheriffs Department also was at the event to educate employees and students on the Alert OC notification system.

The College's Student Health Center had information about mental health services on campus, and Campus Safety screened a showing of the film "Shots Fired On Campus: When Lightning Strikes" which focuses on how to respond when an active shooter is in the vicinity.

Adopt-A-Family Opportunity Drawing Raffle Off Disneyland Tix, Duffy Boat Rides, and More

The annual Adopt-a-Family fundraising drive hosted by Extended Opportunity Programs and Services (EOPS) kicked off on Oct. 2, and employees have a chance to win big prizes.

EOPS will hold an opportunity drawing benefitting the Adopt-a-Family program on Nov. 16 at 1 p.m. in front of Watson Hall. All proceeds from the drawing will go directly toward helping low income and single parent families during the holiday season.

"These single parents are full time students at OCC who are choosing to better their lives and the lives of their children with the attainment of an education," says EOPS/CARE specialist Tracy Heffelman. "We raise money to purchase food, supplies and gifts for these students and their children. In addition, some of the families are personally adopted by individuals, organizations, and other groups on and off campus."

The top prize in the opportunity drawing this year is a \$500 Visa gift card. Second prize is two park-hopper tickets to Disneyland (\$330 value) and a \$50 restaurant gift card. Third prize is a 2-hour Duffy boat ride (\$200 value) and a \$100 restaurant gift card, and fourth prize is a round of golf for two at The Ranch in Laguna Beach and brunch at the Hilton Waterfront Hotel in Huntington Beach.

Additional prizes include gift cards to various restaurants and retail stores, event tickets to amusement parks, museums and movies, and more.

The cost of tickets is \$3 for one ticket, \$5 for two tickets, \$10 for five tickets, and \$20 for 15 tickets.

OCC's Adopt-a-Family program provides support to students during the holiday season who are part of Cooperative Agencies and Resources for Education (CARE). CARE is an extension of EOPS and offers additional counseling and support to students who are single parents receiving aid from the county.

EOPS/CARE also is accepting cash and check donations, which can be dropped off in the EOPS office, 4th floor, Watson Hall.

Faculty and staff are encouraged to adopt a family this year. Each family completes a wish form, including information about family members. Donors participate anonymously.

For more information call Heffelman at (714) 432-5173.



Pirates remain unbeaten in OEC with 7-6 win over Tigers

The Orange Coast College women's water polo team played a tough match against a tough opponent and pulled out an impressive 7-6 Orange Empire Conference win over host Riverside City College on Wednesday afternoon.

The Pirates (17-3 overall, 4-0 in conference) trailed 5-4 late in the third quarter before back-to-back goals by Shawna Kedzie and a tally by Bailey Lloyd put Coast up, 7-5 with five minutes remaining in the fourth quarter.

Riverside (14-2, 3-1) got to within a goal at 7-6 with 4:45 left in the contest, but from there, the Pirates swarmed the hosts with tremendous defense and strong goaltending by Avery Goodall to preserve the win against one of the top teams in Southern California.

Lloyd finished with four goals for the Pirates, while Madison Weber also tossed in a goal as well.

With the win, OCC is now the lone unbeaten team in the OEC, with Riverside and Golden West a game behind the Pirates.