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Perspective

Graduate Degrees

Your Path to a Rewarding Career

DR. A. GORDON EMSLIE, DEAN OF OSU'S GRADUATE COLLEGE

As dean of the Graduate College at OSU, it is my privilege to oversee the progress of some 4,500 graduate students toward advanced degrees in their chosen fields.

In today's world, a master's degree is truly the "career credential;" it opens up a wealth of career opportunities not otherwise available. In addition, earning a graduate degree is one of the wisest investments one can make because it can equate into substantial financial rewards.

In 2003, the median salary for an individual with a bachelor's degree was $49,899; for individuals with a master's degree, it was $59,508. Over a 40-year career span, this translates into nearly $400,000 of additional earnings, an immense return when you consider that a master's degree in most fields can be completed in just over a year. At OSU, we even allow students to start their graduate coursework in their senior year, which can further reduce the time it takes to earn your career credential.

Of course, the rewards for pursuing a doctoral or professional degree are even higher. The median salary for holders of professional degrees is nearly double that of bachelor degree holders.

But graduate education is not only a "private good" that benefits the degree recipient; it is very much a "public good" with substantial benefits for society at large. Recipients of advanced degrees form the intellectual base and much of the entrepreneurial spirit that drives industry and sustains the economy. They earn higher salaries and pay more taxes. They improve the quality of life for our citizens in innumerable ways. In short, they are essential to our society.

Earning a graduate degree is an intensely rewarding and worthwhile experience. I encourage all of our graduating seniors to consider this challenging and compelling sequel to their first degree. Ask your advisor about the more than 100 graduate degree offerings at OSU or visit the Graduate College at grad.okstate.edu.

OSU students help with "Extreme Makeover"

Several Oklahoma State University students invested their time and talents to help on a recent "Extreme Makeover: Home Edition" for a widowed mother and her 10 children in Dewey, Okla. The episode airs Sunday at 7 p.m.

"It was an amazing experience to see how many hundreds of people volunteered to help someone they don't even know, will probably never meet, and will never see again," said interior design graduate student Michele Seymour, who was among about 15 students from the College of Human Environmental Resources who pitched in.

Seymour, an Enid native and fan of the TV show, was surprised how much goes on behind the scenes. "There were contractors, landscapers, cooks, firefighters, police officers, people taking snacks around and preparing food for the volunteers—most of which had been donated by area businesses. Everyone was incredibly helpful and agreeable."

The family honored on this show includes Danna White and five of her 10 kids who are still at home. They had been living in a mobile home with no shower and no hot water after losing their husband and father, a church pastor, who suffered a fatal heart attack last April.

The HES interior design team from OSU used their artistic talents for an exterior job—painting a mural on an old well house on the property. "Evidently, this well house was going to be demolished, but time didn't allow this, so we worked with local artist Shelly Walters to paint the mural," said Seymour.

Some OSU-Okmulgee students pitched into help feed the show's production and construction crews. The students, members of the Future Chefs Association, got together to bake and box 500 peanut butter and chocolate chip cookies and deliver them to the worksite.

In the meantime, 25 construction management students from the College of Engineering, Architecture and Technology each devoted a full day helping out at the construction site. "Building a fence, doing some trim work, painting, laying sod, hauling buckets, helping anyway we could. It was chaos with all those people there, but everyone had a great attitude and made it work because they knew it was a worthy cause," said Matt Sharp, a junior from Jenks and vice president of the OSU Construction Management Society.

Six days after the makeover crew and volunteers first arrived, the show's star, Ty Pennington, welcomed the family back to a brand new 5,500-sq.-ft. home from Simmons Homes of Owasso. The house was fully stocked with food, and a $50,000 fund was established for the family to help with future expenses like utilities. College scholarships also awaited Danna and the five children.

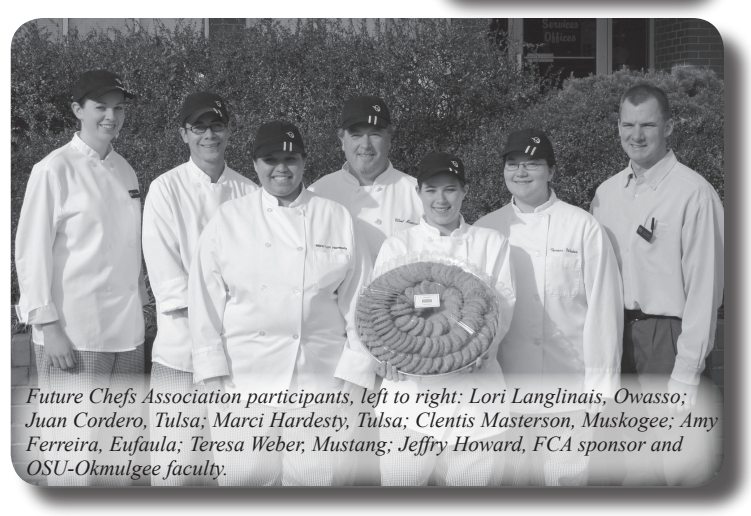
Seymour said she's grateful for the experience that was made possible when Alison Vaughn, a Tulsa senior in interior design, invited the senior studio class to get involved. "Because the show is televised nationally, I felt like we were representing the state of Oklahoma as well as OSU and that was a real honor," said Seymour, who expects to graduate with a master's degree in interior design this May.

And, in case you wondered if Ty was the same in real life as he is on the show, Tahlequah senior interior design student Lindsay Sinclair answered, "Yes! he really is hyperactive in real life!" Sinclair met Ty and his fellow design team member Daniel Kucan at the construction site, and both signed her pink hardhat.

For more, go to extremesimmons.com.

(Top - left to right) OSU students Michele Seymour, Katie Sapp and Sara Lair pose for a shot outside the new home in Dewey, which measures 5,500 sq. ft.

(Right - left to right) Alison Vaughn and Alexis Skib paint a mural to spruce up an old well house at the home site.



Future Chefs Association participants, left to right: Lori Langlinais, Owasso; Juan Cordero, Tulsa; Marci Hardesty, Tulsa; Clentis Masterson, Muskogee; Amy Ferreira, Eufaula; Teresa Weber, Mustang; Jeffry Howard, FCA sponsor and OSU-Okmulgee faculty.

Wildfires illuminate ecological problems

Terry Bidwell

The spate of wildfires in Oklahoma over the past few months has exacted a heavy toll on the state, resulting in deaths and injuries and still unaccounted property losses and expense of resources trying to contain blazes. As the devastation has spread, however, so too has awareness of a creeping threat to the natural landscape that some OSU researchers believe could be as disastrous as the dust bowl.

The invasion of eastern red cedars and other junipers has long been recognized by the U.S. Department of Agriculture's Natural Resource Conservation Service as Oklahoma's most critical natural resource concern. Dubbed the "green glacier" because it is moving slow enough to avoid perception, it is producing a complete alteration of the ecosystem. The invasion is a natural disaster that endangers state wildlife and holds crippling implications – estimated in the hundreds of millions of dollars – for Oklahoma natural resources, outdoor recreation and agricultural enterprise.

And researchers have cited repeatedly the serious risks the invasion poses for human populations by providing fuel for wildfires.

"We've been talking to people about this for 25 years," said Dr. Terry Bidwell, OSU professor of rangeland and ecology management and a specialist with the Oklahoma Cooperative Extension Service. "A great analogy is building in the flood plain out west of town. Someone says, 'Let's locate new buildings and businesses out here' because it's convenient and the land hasn't flooded in years."

"You won't hear anything about the problem of building in a recognized flood plain until it floods again," he said. "It's well documented that the only time the public or leaders will really listen is in the immediate aftermath of a catastrophe."

According to NRCS estimates, 8 million acres in Oklahoma are infested with at least 50 junipers per acre, and approximately 5 million acres boast at least 250 trees per acre. Add the current climate conditions – including increased winds, higher temperatures and extremely low humidity – and suburban sprawl to the mix, and the recipe for disaster is the same that annually afflicts California and other western states.

"They keep saying we need a big rain to stop the wildfires, but that has little to do with it," Bidwell said. "As long as we have relative humidity under 40 percent, then we have wildfire conditions."

"Compounding those climate conditions, we have people moving out and building into oak forests that haven't been burned in 100 years so they're now full of red cedars," he said. "Think of a cedar tree as a 55 gallon barrel of gasoline. Once it gets going, the volatile mix of chemicals gets so hot it will melt the mortar out from between bricks. No fire department in the world can put out those kinds of fires."

According to Bidwell, the overabundance of natural fuel is largely attributable to fire suppression policies that go directly against historical management of the landscape.

"What we're really talking about is a clash of cultures for more than 200 years," Bidwell said. "If we look at archeological evidence and the history of the United States, the landscape of the Great Plains was managed with fire by Native Americans for at least ten to 12-thousand years, and when Europeans moved in, they didn't understand or appreciate the history of taking care of the land with fire."

"Interestingly, this is an issue across the United States. In the forests on the East Coast and the West Coast and the prairies of the Great Plains, fire suppression results in increased fuel loads," he said.

Ironically, the best prevention for massive, uncontrollable wildfires is fire itself. A combination of prescribed burns and allowing natural fires to burn is becoming increasingly necessary to restore habitats.

"Right now there are more trees in this country than there have ever been historically, primarily due to fire suppression, so when we have fires, they are difficult to control. Under extreme conditions, they are uncontrollable, and only changes in the weather bring them under control," Bidwell said. "When there is less fuel, fires typically proceed through a forest and don't burn everything down, but too often, that doesn't happen."

And the potential for policy changes is greater in the wake of catastrophe.

"The Yellowstone fire of 1988 was a great example of Smokey the Bear and Bambi running the national park system's philosophy of practicing fire suppression and not doing anything else," Bidwell said. "The out of control wildfires were catastrophic, but the park has responded great so the results were very beneficial to a lot of wildlife species.

"They've done a great job of interpreting that and have seen a change in public attitudes about suppression."

Have you met...

Gorman Gilbert

As chairman of New York City's Taxi and Limousine Commission under Mayor Ed Koch from 1986-1988, Dr. Gorman Gilbert headed an agency that licenses and regulates more than 50,000 vehicles and approximately 100,000 drivers. His constant presence in area garages made Gilbert a favorite of cabbies and the media, including writers at *The New York Times* who still call on occasion to get his take on issues involving the city's chauffer services.

Gilbert brought the same leadership style to OSU in 2000 when, as the new head of the School of Civil and Environmental Engineering, he spearheaded the establishment of the Oklahoma Transportation Center. He downplays his role, but Henry Bellmon, Neal McCaleb, Ike Glass and OU College of Engineering Dean Thomas Landers, who co-directs the center with Gilbert, are just a few of the people who can attest to his indispensability in its formation.

Under the center's auspices, OSU, OU and Langston University expertise is applied directly to Oklahoma transportation problems as identified by ODOT, the Oklahoma Turnpike Authority and state industry. The collaboration and renewed focus it supports also has enabled researchers to compete successfully for major grants, including $3 million for the first national motorcycle crash study in 30 years. In fact, the OTC has secured almost $28 million in federal funding for transportation and transit research at the three participating universities over the past four years.

ADAM HUFFER: ADAM.HUFFER@OKSTATE.EDU
ALANNA BRADLEY: ALANNA.BRADLEY@OKSTATE.EDU