



Western Michigan University  
ScholarWorks at WMU

---

The Western Insider

Western Michigan University

---

2-28-2020

## The Western Insider

Western Michigan University

Follow this and additional works at: <https://scholarworks.wmich.edu/western-insider>



Part of the Higher Education Commons

---

### WMU ScholarWorks Citation

Western Michigan University, "The Western Insider" (2020). *The Western Insider*. 3.  
<https://scholarworks.wmich.edu/western-insider/3>

This Newsletter is brought to you for free and open access by the Western Michigan University at ScholarWorks at WMU. It has been accepted for inclusion in The Western Insider by an authorized administrator of ScholarWorks at WMU. For more information, please contact [wmu-scholarworks@wmich.edu](mailto:wmu-scholarworks@wmich.edu).



February 28, 2020



## THE WESTERN INSIDER

### WMU's aviation program tapped by United Airlines for top piloting talent

WMU has partnered with United Airlines through the company's new pilot career development initiative. The alliance is designed to put aviation students on a fast track to a career at the airline.



[See the program take off](#)

**For other campus news, read WMU Today online:**  
Created by employees for employees.  
[WMU Today](#)



**WMU TODAY**



**WMU garners \$9.6M federal grant to advance renewable energy research**



**Dining Services partners with Invisible Need to expand food options for students**



**Researcher: Despite gender-based challenges, women entrepreneurs resilient in achieving profitable growth**

---

## WMU in the news



### **WMU-United partnership could help ease pilot shortage**

The launch of United's Aviate program offers aviation students a new altitude of opportunity.

[WWMT](#) [WOOD-TV](#) [WKZO](#)



## Researchers receive grant to work on improving battery efficiency for electronics

Breakthroughs supported by this funding are expected to enhance efforts in energy efficiency.

[WWMT](#) [WKZO](#)



## West Michigan provided a safe haven for those fleeing from slavery

WWMT interviewed Professor Michael Nassaney about his experience tracing the Underground Railroad with his students in Cass County.

[WWMT](#)



## WMU grad who earned \$200K in scholarships starts business to help others

Alumna earned more than \$200,000 in scholarships as a student. As MLive and others report, with her business, The Scholarship Expert, she's now teaching others how to find funding.

[MLIVE](#) [WWMT](#)

(269) 387-8400  
[marcom@wmich.edu](mailto:marcom@wmich.edu)



Western Michigan University  
1903 W Michigan Ave  
Kalamazoo MI 49008 USA

# Student aviation careers ready for takeoff with launch of Aviate partnership

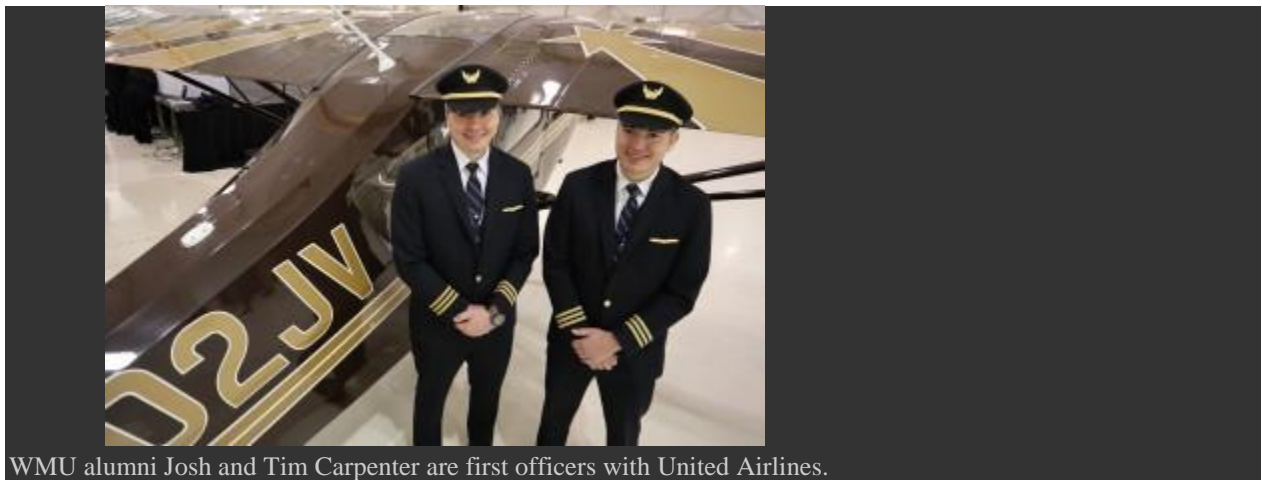
Contact: [Erin Flynn](#)

February 19, 2020

Video of FNLMfVqb60E

KALAMAZOO, Mich.—Since he was five years old, **Josh Carpenter's** head has been in the clouds. His first ride on an airplane had him hooked.

"We were always interested in things with motors and things that went fast," says his twin brother, Tim, who also caught the bug. The siblings followed their aviation aspirations from their hometown of Commerce, Michigan to Western Michigan University.



WMU alumni Josh and Tim Carpenter are first officers with United Airlines.

"It was awesome," says Josh. "I always had a study partner and a friend, along with some sibling rivalry."

Graduating in 2013, the brothers followed similar career paths—both eventually landing at United Airlines, where they are first officers.

A new partnership between WMU's [College of Aviation](#) and United will put students on a faster track to follow in their footsteps. [The Aviate program](#) offers applicants a new altitude of opportunity with the fastest path to a career with a major airline in the country.

"It's an honor that Western was recognized by United Airlines to create this program to help flow students through to an airline," says **Suzie Targosz**, a 2018 WMU alumna who now works as a flight instructor in the College of Aviation.

---

## CREATING OPPORTUNITIES



Capt. Curtis Brunjes speaks about the Aviate program to a crowd at the College of Aviation.



Carpenter talks about Aviate with WMU students.

Students accepted into the Aviate program are required to get experience teaching as a certified flight instructor at WMU. Once they accumulate the minimum flight hours to earn their restricted airline transport pilot's license, they'll fly for a United Express Aviate partner. After successfully completing at least 2,000 flight hours and 24 months with that partner carrier, pilots will be able to transition to United as a first officer.

The streamlined trajectory is something that the Carpenter brothers say would have made their career decisions much easier when they were students.

"This gives you a defined pathway. You follow the rules, you meet the parameters and you have a guaranteed job at United Airlines," says **Tim Carpenter**. "It's priceless."

The new partnership means a lot to students like **Tristan McClendon**, an incoming freshman from Orland Park, Illinois, who chose WMU over several other aviation programs across the country.

"Western was, of the many choices, the one where it felt like they really wanted me to succeed. It's where I felt more at home and welcome."

**Shaun Windhorst**, a freshman who came to WMU from Eau Claire, Wisconsin agrees.

"I came to Western specifically for the aviation program because of the high standard it carries and the opportunities that come with it," he says. "Having Aviate come here reassures me that Western Michigan University has a high status in the airline industry."

## ELITE STATUS



Suzie Targosz, second from left, talks with Brunjes about the program.



Aviation student Nathaniel Charter-Harris talks with U.S. Rep. Fred Upton.

WMU is one of just four collegiate programs chosen by United to participate in Aviate.

"We think it's a top-notch school," says **Capt. Curtis Brunjes**, managing director of pilot strategy at United. "We think that the curriculum, the standard and the program at Western Michigan University generates the top talent."

Student aviators at Western are able to train on some of the most advanced aircraft in collegiate aviation, something Josh Carpenter says led to a "very seamless" transition to his career as an

airline pilot. His brother, Tim, adds that the crew environment training in WMU's curriculum "replicates exactly what we do at the airlines."

"So, when you get to the airlines, you know how to study the material, you know how the basic flow of a flight deck and how to set it up, and those things combined will put you well ahead of others who don't attend a program such as this," he says.

The preparation is one of the many reasons WMU lands among the top three aviation schools in the nation.

"Students know that if they really want a job, if they really want to be feet first into this industry, this is the place to come," says **U.S. Rep. Fred Upton**. "The proof's in the pudding. United recognized it—we all have."

For more WMU news, arts and events, visit [WMU News](#) online.

## Western Michigan University receives a \$9.6M federal grant to advance renewable energy research

Contact: [Joy Brown](#)

February 12, 2020



Dr. Qingliu Wu, Western Michigan University assistant professor and the project lead for Enabling Advanced Electrode Architecture through Printing Technique project.

KALAMAZOO, Mich.— **Western Michigan University** has received a nearly \$9.6 million grant from the **U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy** to supercharge ongoing lithium-ion battery research led by the [College of Engineering and Applied Sciences](#). The scientific breakthroughs supported by this funding are expected to enhance crucial environmental sustainability efforts pertaining to energy efficiency and resources consumption.

"This is spectacular news for Western Michigan University and the Kalamazoo community, and I am so proud to continue supporting the work of this incredible institution," says **U.S. Rep. Fred Upton, R-St. Joseph**.



Titled Enabling Advanced Electrode Architecture through Printing Technique, the three-year project is being spearheaded by **Dr. Qingliu Wu**, an assistant professor in WMU's Department of Chemical and Paper Engineering. As principal investigator, Wu will lead the project team of scientists and engineers in seeking ways to create more cost-effective, fast-charging and high-energy lithium-ion batteries for use in electric vehicles and other consumer products such as drones and portable devices.

The low-cost printing method used for electrode fabrication will potentially increase energy density without sacrificing battery life. Lithium-ion batteries, such as those in cell phones, that now take up to three hours to charge would take only 10 minutes or less with such next-generation technology.

According to **Dr. Terri Goss Kinzy**, vice president for research and innovation at WMU, Wu has assembled a multidisciplinary team within WMU to work with Argonne National Laboratory; WMU's partners Northeastern University, Brown University and University of North Carolina Charlotte; SafeSense Technologies LLC, a technology start-up launched by WMU and spun off as an independent company; and Boston, Massachusetts-based Nanoramic Laboratories to provide solutions to global energy concerns and address national priorities of the Department of Energy.

"This research is designed to also engage Western Michigan University students and allow them to contribute now and become the next generation of leaders in this field," Kinzy says.

Contributing to the research at WMU will be Ph.D. students Guanyi Wang and Jie Ziong and Jian Yang; undergraduate students Lindsay Gubow, Bharat Goel and JustOne M. Crosby; and professors Dr. Kecheng Li, Dr. Paul D. Fleming, Dr. Alexandra Pekarovicova, Dr. Clement Burns and Dr. Massood Atashbar.

Wu says he is grateful to have received the grant, and for the support of various partners and colleagues who also helped earn the award.



Western Michigan University student Lindsay Gubow conducting lithium-ion battery research.

"I am very excited that I need not worry about the money to conduct this important research," says Wu. "Also, I am excited that we can have more students at WMU involved in our research

on lithium-ion batteries. As you know, lithium-ion batteries could store significant amount of energy from solar and wind power, making possible a fossil fuel-free society.”

“If successful, the printing technology that we proposed for this project will further reduce the energy consumption during cell fabrication, and thus pollution to the environment. In addition, the technology could also significantly reduce the cost of electrodes, and make possible cheaper batteries for customers,” Wu says.

In December 2019, Wu impressed Congress members in Washington, D.C. with his presentation at the Energy and Environment Innovation Showcase.

WMU’s longstanding reputation for discovery and forward-thinking scientific development is exemplified within its College of Engineering and Applied Sciences, where its numerous programs produce practical improvements and problem-solving leaders who are committed to improving lives.

## ABOUT WESTERN MICHIGAN UNIVERSITY'S COLLEGE OF ENGINEERING AND APPLIED SCIENCES

Western Michigan University's College of Engineering and Applied Sciences offers a nurturing environment that allows each student to achieve and grow. The college gives students a solid foundation with exceptional hands-on experiences. Students work closely with our highly accomplished faculty, who want to get to know them, support them and see them succeed. The \$100 million facility on WMU's Parkview Campus has 323,000 square feet of teaching and research space, with 75 undergraduate and graduate labs. The college shares space in the Business Technology and Research Park with 44 high-tech companies.

For more WMU news, arts and events, visit [WMU News](#) online.

## Dining Services partners with Invisible Need to expand food options

Contact: [Erin Flynn](#)

February 24, 2020

KALAMAZOO, Mich.—Feeding students isn't just a job for **Rob Powers**; it's a passion. A sous chef in the Bernhard Center, he's been whipping up culinary creations at Western Michigan University for 12 years now.



Rob Powers labels food that he's packaged for the Invisible Need Project.

"I love when I hear how appreciative the students are for the food that we make for them," he says. "Some students are away from home for the first time, and to be able to give them three hearty meals a day is comforting to me."

A new partnership allows him to extend that passion beyond the current service areas. [WMU Dining Services](#) is teaming up with the [Invisible Need Project](#) to give students struggling with food insecurity new freshly prepared meal options.

"Dining Services supports student success, and food insecurity interferes with our students' best opportunity to succeed," says **Judy Gipper**, director of Dining Services.

"There are so many students who are choosing books over meals," continues **Kimberly Johnson**, assistant Dining Services manager. "We are excited to be part of a program that assists students in their wellness and well-being by providing nutritious meals for Invisible Need."

At the end of service each day, Powers takes excess food—when it's available—that's been prepared and packages it in individual servings to be stored in the freezer. In early February, Dining Services began weekly deliveries of those meals to the Invisible Need food pantry.



Powers, Johnson and Hazel discuss the INP partnership in the Bernhard Center kitchen.

Quality is top of mind for the chef, who's been testing out which meals are the best candidates for this program. So far, he's found about 10 menu items that work best for freezing and reheating, ranging from lasagna and beef stew to chicken tikka masala.

In addition to feeding students in need, the new initiative also helps cut down on waste—something nutrition specialist **Emily Hazel** says is important not just to Dining Services, but to students as well.

"I had a lot of people contact me saying that we should do this. We did a customer satisfaction survey and there were quite a few comments asking what we were doing to reduce waste," she says. "This partnership is a wonderful solution where students are better fed and landfills contain less food waste."

## SUPPORTING STUDENTS



Joshua Conley goes through items on the food pantry's shelves.

Launched in 2014, the Invisible Need Project operates a food pantry on campus where WMU students can shop for food items for free as often as every two weeks—no questions asked.

"We know college is hard. It should be academically challenging. That should probably be, in an ideal world, the hardest part of college," says **Kelly Reed**, Invisible Need co-chair. "Yet, we are seeing so many students who struggle with food insecurity, housing insecurity, unexpected costs."

The project relies heavily on volunteers, both in terms of food and monetary donations as well as staffing at the pantry. Created by some University employees who recognized a need, the pantry has grown in size and moved to the lower level of the Faunce Student Services building in fall 2018 to keep up with increasing demand.

"Our goal, when we talk about this, is that it is a holistic outreach—that we're trying to serve the whole student," says **Karen Lamons**, one of the founders of Invisible Need who currently serves as co-chair. "How do we serve the student as a human? What are their needs to keep them here and be successful?"

Students who have used the pantry say it's made a huge difference in their WMU experience.

"For me, the relief that the food pantry has provided ... greatly benefited my emotional/mental health, as well as my performance in class," says **Jeffrey Wetherford III**, a fifth-year instrumental music education major.

"I've had students tell me that this saved their life," says **Joshua Conley**, graduate assistant for the program. "I've had students tell me that they hadn't eaten in days, they didn't know what they were going to do, and a friend told them about this."



Karen Lamons, Joshua Conley and Kelly Reed work on the Invisible Need Project.

The difference the program makes, says Lamons, is evident at the end of each semester.

"One of the best things is I can see who's graduating, and I can see who used the pantry, and I know that what we did made a difference for them," she says. "There's a connection between them going out into the world and being successful, and we were able to help them get to that point. And I love that."

The Invisible Need Project also helps foster a culture of giving within the campus community.

"We had a volunteer say that he knew wherever he went in the world, that being part of the community and volunteering in some way would always be part of it because of his experiences with Invisible Need," says Lamons.

"We would hope that's the case for all graduates—that part of leaving Western is that there's this desire to serve," says Reed.

## FEEDING SUCCESS

Since it began, thousands of students have used the pantry's services—and demand continues to increase. But, Reed says, a recent survey by a Lee Honors College student found that many students still aren't utilizing the resources because they feel someone else needs it more than them.

Lamons says she encountered that firsthand when talking with a student who'd volunteered to help at the pantry and realizing he was struggling to pay his own bills and help his mother out.

"This is a kid I've known since he was about 8 or 9. My husband coached him. And he's here to volunteer for the food pantry and says he hasn't eaten in three days, but he doesn't think he needs help as much as other people," says Lamons.



The Invisible Need Project pantry is located on the lower level of the Faunce Student Services building. "Everybody thinks that we're helping someone else—another person, another part of the population. That 'it doesn't happen to people like me.' But that was my circle. That could have been my son in the elevator saying that. And I still think about that moment all the time, because I was helping 'other people' until that day."

In addition to the food pantry, Invisible Need also operates the [Student Emergency Relief Fund](#), which provides financial assistance to students with immediate, unexpected needs, and helps with the [Staufer Emergency Health Fund](#), which covers unforeseen medical expenses.

"We view ourselves as mission critical. Students cannot retain if they are not fed and housed and clothed," Reed says. "If you are a Western student, (our goal is that) you don't have unmet basic needs, period."

The program depends on the support of WMU faculty, staff, students and the community. For more information about Invisible Need and to find ways to donate, [visit the project online](#).

**For more WMU news, arts and events, visit [WMU News](#) online.**

# WMU researcher says despite gender-based challenges, women entrepreneurs use grit, resilience to achieve profitable growth

Contact: [Molly Goaley](#)

February 18, 2020



Dr. Laurel Ofstein, associate professor of management in the WMU Haworth College of Business.

KALAMAZOO, Mich.—More women are starting businesses than ever before. Between 2007 and 2018, the number of women-owned businesses grew by 58%—nearly five times the national average—yet, just 2.2% of all venture capital in the U.S. goes to companies founded solely by women.

Beyond access to funding, there is no shortage of challenges faced by women entrepreneurs. But a Western Michigan University researcher has found that, regardless of obstacles, female founders are able to use grit, resilience and leadership excellence to achieve profitable growth.

**Dr. Laurel Ofstein**, associate professor of management in the WMU Haworth College of Business, contributed to a study released by Bank of America and Babson College that identifies strategies all entrepreneurs can learn from an exclusive group of industry-leading women business owners.

## THE RESEARCH

In “Beyond the Bucks: Growth Strategies of Successful Women Entrepreneurs,” Ofstein and her colleague **Dr. Lakshmi Balachandra**, associate professor of entrepreneurship at Babson College and principal researcher on the project, interviewed 30 women entrepreneurs who have achieved an average of \$43 million in revenue about their challenges and growth strategies.

The study revealed three key themes around the hurdles women face in growing their businesses:

- **Market misperceptions:** Women’s motives for starting a business are frequently misunderstood. Women entrepreneurs have often had their leadership position questioned due to their gender. They also find that their businesses are subject to additional scrutiny due to gendered assumptions about the markets they are serving.
- **Network exclusion:** Women are often excluded from traditional male-dominated networks. As business success is often based on “who you know” and not “what you know,” women entrepreneurs can experience limited, gender-based access to networks and strategic relationships.
- **Managing expansion with underfunding:** Women must plan for and incorporate organic capital growth. A lack of capital can also impact recruitment and retention of talented employees, a critical step for growing any business.

“While much research exists about the challenges women entrepreneurs face during the startup phase of business, very few studies have focused on the obstacles women confront in the growth phase,” Ofstein says.

“Women who have reached \$5 million in annual revenue have clearly established a successful enterprise; however, \$5 million tends to be a revenue plateau for any business. We found that there are gender-based impediments for women entrepreneurs in growing their businesses, even after significant success has been achieved.”

Ofstein adds that the knowledge, skills and abilities needed to push past this point are critical, as is access to substantial financial and organizational resources.

## ACTIONABLE STRATEGIES

---

The researchers found that women entrepreneurs who participated in the study have developed novel approaches for growing their businesses and finding success, despite the challenges they faced. These strategies, Ofstein says, can help other business owners manage setbacks, grow their businesses and inspire the next generation of entrepreneurs. They include:

- **Exploring capital alternatives:** Venture capital funding and the startup successes it produces garner significant media attention, yet venture capital funding remains a rare event for women entrepreneurs. Other forms of capital may enable female founders to fuel growth while maintaining equity ownership of their business.
- **Building for the long term:** The women profiled had an attitude that building a business was “a marathon, not a sprint.” By avoiding formal investors, they also averted their expectations for rapid, possibly unrealistic, growth. This allowed their businesses to grow more organically and, therefore, more sustainably.
- **Developing a strong and talented workforce:** Many of the interviewees believe in investing in people and the company’s culture. While it may create a strain on profitability in the short-term, building a strong workforce may generate multiple returns in the long term.
- **Buying from and funding women-owned businesses:** All people can help women entrepreneurs scale more quickly by intentionally buying from and supporting women-owned businesses.
- **Being and seeking a mentor:** From informal coffee meetings to industry events, there are multiple forms of mentorship that can develop and showcase successful women entrepreneurs.
- **Joining or creating new networks:** Network-minded women, in addition to pursuing broader networks with both men and women, can bring together other women from their own industries as a way to leverage new opportunities.



- **Capitalizing on personal insights and experience:** Women have significant purchasing power and understand emerging needs and trends for female consumers. Forming strong partnerships with other women entrepreneurs in similar ventures offers cross-market opportunities.

“While all of these actions are important for spurring sustainable growth, I believe one of the most impactful strategies is to buy from and fund women-owned businesses,” Ofstein says. “More angel investment and venture capital funds are going to women-led businesses than in the recent past, yet there remains a large imbalance.”

Ofstein adds that businesses targeting the female demographic are often underestimated in terms of their potential for market success. However, women have significant purchasing power and are often the primary decision maker for household purchases. “The personal experiences of women entrepreneurs should be counted as a key advantage in understanding the preferences of this important consumer group, and valued when assessing future growth potential of women-owned businesses,” she says.

## BEYOND BARRIERS

---

Ofstein notes that the research is “not just a story about barriers” that women entrepreneurs face in the marketplace. “The women in this study persevered and adapted in spite of the challenges they encountered, achieving impressive levels of business growth and success,” she says.

To access the white paper based on the study, visit [Bank of America](#) online.

**For more WMU news, arts and events,** visit [WMU News](#) online.