



The Center to Advance Manufacturing Monthly News

November 2024

HAPPY Thanksgiving

Dear Associates,

It has been one year since the Center to Advance Manufacturing began distributing our monthly newsletter. Over the past 12 months I am proud to say we have nearly 1,000 recipients each month of our newsletter. In addition, our LinkedIn following is over 775 people. This growth of our communication and marketing efforts highlights that Northwest Ohio is interested in hearing what we have to say.

The Center to Advance Manufacturing is the “network interface” of Bowling Green State University, University of Findlay and Owens Community College with the region's manufacturing and logistics economy. With Thanksgiving just around the corner, I would like to give thanks to all our partners that make our work meaningful and impactful.

Our work could not be completed without the support of the [Governing Board](#), [Coordinating Committee](#) and our [Industry Advisory Board](#). These leaders provide our staff with the industry insight, leadership, and resources to respond to industry needs. This could be related to training of technical skills, faculty led research, regional data analysis, industry trends and so much more. For all your support and hard work, we say, **thank you!**

Beyond the day-to-day support there are many other organizations that we partner with including local economic development professionals, Regional Growth Partnership, Ohio Department of Development, Ohio Department of Higher Education, JobsOhio, Raise the Bar Hancock County, Northwest Ohio Manufacturing Alliance, Center for Automotive Research, Northwest Ohio Innovation Consortium, CIFT, and our State Legislators. Your collaboration with the Center leverages resources that allows our simple math to be $1+1=3$. For all of your support and hard work, we say, **thank you!**

Finally, to the over 106,000 people employed in manufacturing in Northwest Ohio, thank you for the work you do every day. Your commitment to safety, quality, and innovation is what makes Northwest Ohio a leader in manufacturing. The Gross Regional Product has seen significant increases over the past 15 years in manufacturing; this couldn't be accomplished without a talented workforce.

Happy Thanksgiving,



Tim Mayle
Executive Director
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Source: Lightcast, Gross Regional Product for manufacturing in Northwest Ohio



Consulate-General Shindo Gathering and Farewell Reception

Over the past three years, Ohio has been fortunate to have the Consulate-General of Japan Shindo Yusuke serving the nearly 10,000 Japanese residents and hundreds of Japanese-owned companies across the state. As his assignment comes to an end, the Center participated in two memorable events to bid him farewell.

Center Executive Director Tim Mayle attended a farewell reception hosted at the Consul General's residence, honoring his contributions and leadership. Additionally, the City of Findlay, the University of Findlay (UF), Findlay Hancock County Economic Development, the Ohio Department of Development (ODOD), and the Center gathered for a final farewell meal to celebrate his efforts in strengthening manufacturing partnerships between Japan and Northwest Ohio.

The Consulate-General of Japan (in Detroit), established in 1993, serves and protects the interests of Japanese residents and companies in Michigan and Ohio. Located in Detroit's GM Renaissance Center, its mission includes fostering and strengthening Japan's economic, governmental, educational, cultural, and people-to-people relations with both states. Consul General Shindo's leadership has exemplified this mission, contributing to stronger ties and vibrant partnerships, particularly in the manufacturing sector.

We thank Consul General Shindo for his friendship and guidance over the past few years and wish him the very best in his next assignment.

ODOD Director Lydia Mihalik, UF Associate Professor Hiroaki Kawamura, Consul General Shindo, UF President Katherine Fell, and Mayle at the farewell gathering.



Ohio Manufacturers' Association Workforce Summit

Center staff Ford Weber and Jeri Steinbrook attended The Ohio Manufacturers' Association Workforce Summit, where industry leaders, policymakers, and experts gathered to address Ohio's manufacturing workforce needs. The event focused on innovative strategies for attracting and developing talent, while also addressing the role of AI in manufacturing.

Rose Brickner of Pinnacle Plastics, a Northwest Ohio manufacturer, spoke at the event, sharing insights on their successful approach to retaining staff. She also highlighted their collaboration with the Center and the Northwest Ohio Manufacturing Alliance (NOMA) to fund language training for associates. This initiative included a BGSU graduate student conducting the training, demonstrating how partnerships can address workforce development challenges while empowering employees and enhancing workplace communication.



Weber, pictured with Ohio Department of Higher Education Associate Vice Chancellor of Economic Advancement John Magill and Senior Program Manager of Workforce Alignment, Sri Vidya.

Steinbrook and Weber, pictured with Toledo Regional Chamber of Commerce (TRCC) VP of Talent and Workforce, Sara Swisher; Pinnacle Plastics Products HR Manager, Rose Britner, and TRCC Workforce Initiatives Manager, Megan Stretavski



Millstream Career Center Groundbreaking

Center staff attended the Millstream Career Center groundbreaking ceremony, where Lt. Gov. Jon Husted delivered a keynote speech celebrating the \$3.5 million expansion. Scheduled to open for the 2025-26 school year, the new facility will feature expanded Engineering and Robotics programs as well as a new Manufacturing and Industrial Robotics program, equipping students with skills for high-demand careers.





Center for Automotive Research

Center staff Tim Mayle and Ford Weber had the privilege of hosting the Center for Automotive Research (CAR) in early November. CAR, which recently appointed Northwest Ohio native David Leckey as interim CEO, continues to be a vital partner in advancing the automotive industry. Our collaboration includes their Automotive Communities Partnership program and our regional automotive study. A special thank you to Christine Keller from Findlay Hancock County Economic Development and David Blatnik from Marathon Petroleum Corporation for joining a dynamic discussion on energy, supply chains, economic development, and the future of the industry.

BGSU Schmidthorst College of Business & Ohio Logistics

The Center recently collaborated with professors from the BGSU Schmidthorst College of Business and Ohio Logistics CEO, Chuck Bills to explore innovative ways to connect students with industry through hands-on projects.

Starting in January, students will work on a project importing and analyzing data to determine the potential benefits of activating within a foreign trade zone. The initiative will culminate in a student competition, where participants will present their findings. We're excited to see the innovative solutions the students develop.



Center Updates

Workforce Certification

We're excited to share that Center Workforce Training Coordinator, Jeri Steinbrook, earned the Certified Workforce Development Professional (CWDP) certification. To earn this certification, Jeri completed courses and a final test that covered the five core competencies of workforce, as identified by the National Association for Workforce Development Professionals.



With her new credential, Jeri will lead initiatives to secure funding opportunities for regional manufacturers and connect them to customized training programs through our educational partners. This certification highlights her dedication to workforce development and her expertise in creating impactful strategies to empower our workforce and support economic growth in the region.

CAR Regional Automotive Study

The Center is working with the Center for Automotive Research (CAR) to conduct a study of the automotive manufacturing sector in the 17 counties comprising the RGP service territory in Northwest Ohio. Working with all 17 County economic development organizations, 230 manufacturing facilities have been identified and a map developed. CAR has conducted focus groups with the county economic development directors and has also surveyed businesses and economic developers.

The results of these focus groups and surveys are being analyzed, and their findings will be available soon. We will roll out the results of the entire study in the first quarter of 2025.

New Computational Science Group formed at the University of Findlay

The University of Findlay has recently been expanding and enhancing its computational footprint in the College of Sciences thanks, in large part, to a Super RAPIDS grant tied to the State of Ohio 5G broadband initiative. In an effort to expand their capability in computational work, the University of Findlay has invested in faculty with computational expertise and established a Computational Science Group under the direction of Professor Helen Schneider, department chair of the Department of Computer Science and Principal Investigator for the 5G grant jointly awarded to Terra State Community College. There are currently at least seven faculty with various expertise in computation with applications in AI, cryptography and number theory, data science, drug discovery, clean energy materials, microwaves and nanotechnology.



University of Findlay

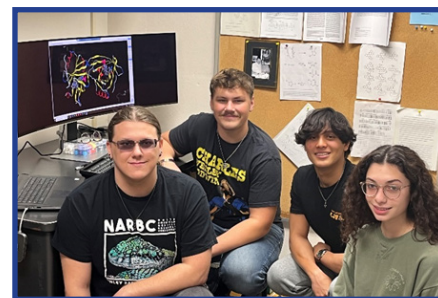


The grant has enabled the purchase of hardware and software to support education, workforce training and the research of the faculty, and will enable collaborations and projects with industry and other regional partners. The most powerful workstation dedicated to high-performance computing is a PC with an AMD Ryzen Threadripper 7960X 24-core, 48-thread CPU and 256GB RAM running the Linux operating system; a second workstation with 512GB RAM is being acquired. Some of the specialized software already installed for engineering and physical sciences problems include COMSOL, Gaussian, and MATLAB.

An example of a research problem enabled by the new resources is in the area of drug discovery by the computational group of Dr. Daniel Osborne. Dr. Osborne's group is researching the S1P_S1PR axis in cancer metastasis; sphingosine-1-phosphate (S1P) has tumor promoting effects on 80% of the S1P receptors. The plan is to develop classes of drugs that will prevent activation of these receptors. Dr. Osborne's group currently consists of five undergraduate students in a variety of STEM majors and collaborations with the College of Pharmacy are being developed.

Related to materials, Dr. Steven Wild uses GAUSSIAN to calculate the electronic and material properties of a system of molecules. The theoretical predictions can be used in applications like electronics (e.g., video screens, solar cells), medicinal, or pharmaceutical applications. Clean energy research includes uncovering the physical mechanism of a whole class of triboelectric phenomena in order to improve the efficiency of future green energy sources.

Applications in data science and related fields include Dr. Dominic Wilson's research on leveraging advanced computational methods in data science and knowledge engineering to address challenges in computer security. Research in the Department of Mathematics on number theory has applications in cryptography and Dr. Daniel Baczowski and his students are using computers in the search for the "smallest Sierpinski number and smallest Riesel number".



The development of the computer in the 20th century had created a third leg in the scientific research enterprise (after experimentation and theory) and is today changing society through the internet and AI, among other applications. Thanks to the grant funding through the State of Ohio, the University of Findlay today boasts of outstanding computational resources for its students, faculty and community partners.

To learn more about the University of Findlay College of Sciences visit findlay.edu/sciences.



Owens Community College CDL Training Program Receives Financial Aid Funds



Owens Community College has received \$149,100 in funding from the Ohio Department of Higher Education's Commercial Truck Driver Student Aid Program for CDL training. This support will help train more students to become safety-focused, skilled CDL drivers—a critical workforce for Ohio's manufacturing and logistics industries. Congratulations to Owens for securing this funding and for their commitment to advancing Ohio's workforce. For full announcement details, visit: owens.edu/news-releases.

The Owens CDL Training Program features small class sizes and individualized instruction. Certified by the State of Ohio, the program includes 160 total course hours—40 hours of classroom learning and 120 hours of hands-on training behind the wheel of fully equipped big rigs. Classes are taught by licensed CDL instructors committed to preparing students for successful careers in trucking, offered at both the Toledo and Findlay campuses. Visit owens.edu/cdl for program details.

Robotics and Advanced Manufacturing Educator Program at Bowling Green State University



The Bowling Green State University College of Technology, Architecture and Applied Engineering has once again received a grant from the National Science Foundation, Research Experience for Teachers program, aimed to increase interest in STEM-related fields with a focus on robotics and advanced manufacturing.

The program is designed for high school and community college educators teaching STEM subjects. Participants engage in advanced manufacturing and robotics research, collaborate with faculty and graduate mentors, and attend workshops and industry tours. The program also includes the creation of instructional modules that educators implement in their classrooms to bridge classroom learning with real-world applications.



Participants receive stipends, resources, and professional development credits, equipping them to inspire students toward careers in STEM fields and address regional workforce needs in advanced manufacturing. The deadline to apply is February 10, 2025.

Learn more about this impactful program at buff.ly/495Spr8.

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