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INSIDE:

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Issue 1
WELCOME, CHANCELLOR GARDNER!

The new year brings a new Chancellor to the Ohio Department of Higher Education (ODHE). Randy Gardner was appointed ODHE’s 10th Chancellor in January 2019.

Chancellor Gardner comes to ODHE from the Ohio Senate, where he had served for a total of 13 years. He had recently been chosen as Senate Majority Leader for this latest term. Gardner also served as a member of the Ohio House of Representatives from 1985 to 2000, and again from 2008 through 2012.

He has been recognized as the General Assembly’s foremost policy leader in higher education. For the past eight years, he served as chairman of the Finance Higher Education Subcommittee, and held that post in both the House and the Senate.

A well-respected leader in state government, Gardner has also previously served as Senate President Pro Tempore, House Majority Leader, and House Speaker Pro Tempore. He has also been a member of the Senate Finance Committee and the panels dealing with Ohio’s workforce development and budget management. Gardner’s work ethic was exemplified by his 100% voting record over 33 years—more than 10,430 consecutive votes.

Chancellor Gardner received a bachelor’s degree in education and a master’s degree in political science, both from Bowling Green State University.

C-TEC’s Ohio Technical Center Partners with Ariel Corporation to Train Workforce
C-TEC Adult Education trains more than 3,000 students annually in 15 traditional, short-term career-technical training and customized training opportunities.

YSU Gets $717K Manufacturing Grant
Youngstown State University will get new advanced manufacturing technology thanks to funding approved by the state Controlling Board.

Active Learning in IT Classroom Extends into Workplace
Dr. Judy Paternite teaches Information Technology for-credit college courses, but also specializes in workforce development training.

Ohio State Startup Raises $59 Million in Initial Funding to Treat “Undruggable” Illness
A biotechnology company with roots at The Ohio State University is making news after raising $59 million from investors.

Edison State, Hobart Institute Partner to Offer Welding Technology Degree
Edison State Community College and Hobart Institute of Welding Technology have entered a consortium agreement.
Ohio Technical Centers (OTC) not only provide technical training for adults seeking employment or to enhance their skills to advance on their career path, but many also provide customized training for businesses in their region. Due to several factors influencing the ability to offer training for incumbent workers, there can be different ways to partner with companies to provide the training they need. The customized training model described in this article can be replicated in other businesses and industries in Ohio and across the nation. As the unemployment rate remains low in Ohio, the demand for a skilled workforce continues to grow. Countless employers find themselves advertising job openings for months at a time with few prospects. While many applicants apply, few have the necessary skills. In an effort to fill job openings, many employers are turning to their local Ohio Technical Centers. Employers are finding it easier to create a skilled workforce by training their prospective and incumbent employees to meet their needs.

For more than a decade, Career and Technology Education Centers of Licking County (C-TEC), one of Ohio’s premier technical centers and a leader in customized training, has partnered with Ariel Corporation, the
Ariel Corporation employs roughly 2,000 people between operations in Mt. Vernon and Heath, Ohio locations. Their compressors are utilized by the global energy industry to extract, process, transport, store, and distribute natural gas from the wellhead to the end-user. As a world-class manufacturer, Ariel sets the industry standard through expert design and manufacturing, and industry-leading research and development.

Ariel and C-TEC have worked together for years to develop a model through pre-employment training and training existing personnel in the skills needed to keep the company advancing. While the early model consisted of pre-employment training adapted to Ariel’s needs, it quickly evolved into pre-screening Ariel’s temporary employees to fill entry-level positions in its machining department.

Today, C-TEC’s industry expert instructors and Ariel’s training personnel continually develop and deliver curriculum specific to Ariel’s needs in hands-on
labs constructed at C-TEC and Ariel's Training Center. These labs are outfitted with equipment used in Ariel's daily operations in the areas of machining, assembly, and maintenance. Those that successfully pass the pre-screening and pre-employment training are directly hired into entry-level, high-skill shop positions. This process assures that Ariel's workforce has the knowledge and skills needed to be productive from day one.

C-TEC is proud to be entering into the 16th class of pre-employment training for aspiring Ariel employees and has trained hundreds of its workforce to date.

Ariel's commitment to developing its workforce does not stop with pre-employment training. Ariel encourages and support its incumbent workforce in pursuing an associate degree. Ariel and C-TEC partner with Zane State College and Stark State College through articulation agreements so that training at C-TEC can be applied to associate degree programs.

This is just one example of a mutual and beneficial partnership between a local business and an Ohio Technical Center. Many others exist throughout this country and can serve as examples of collaborative success.

This piece is re-published from the ACTE Administration Division's email newsletter.
Youngstown State University (YSU), Eastern Gateway Community College (EGCC), and the Columbiana Career Center have partnered with businesses in Northeast Ohio in an effort to increase the training of the workers in the field of advanced manufacturing. YSU will purchase new equipment thanks to funding approved by the state Controlling Board.

YSU received $716,699 to support area workforce development through collaboration with the Columbiana Career Center. The new equipment to be purchased includes a Vari-Drive milling machine, manual lathes with digital readout and taper turning, CNC Wardjet Waterjet cutting system, and a GE Phoenix VtomexS CT System.

The purchase of the new machines allows the schools to educate students on the most updated, state-of-the-art equipment, making for a streamlined transition into the workforce. The training will help prepare students for occupations such as CNC machine tool programmers and operators, electrical engineering technicians, machinists, industrial engineers, maintenance workers, aerospace and robotics engineers, just to name a few.

Joel Hodge, an engineer coordinator from one of the business partners, Dearing, said, “Students who have trained with this (new) technology will be valuable in preparing us to meet the increasingly complex nondestructive evaluation requirements of our industry.”

The purchases are funded by the Ohio Department of Higher Education’s Regionally Aligned Priorities in Delivering Skills (RAPIDS) program.

The RAPIDS investment supports federal and other state funds toward the construction of the Mahoning Valley Innovation and Commercialization Center (MVICC), with a planned opening scheduled for 2020. MVICC will provide training using RAPIDS equipment for traditional and non-traditional students from the participating institutions, and offer learning opportunities for incumbent workers.
Active Learning in IT Classroom Extends into Workplace

Faculty Spotlight on Judy Paternite, Ph.D. - Information Technology

Learning should never be a passive exercise, and it should never be confined to the traditional classroom. Effective learning should continue on in the workplace, especially where information technology (IT) is involved. According to Judy Paternite, Ph.D., associate professor of information technology at Kent State University, “Active learning is key to retaining and using information, so learning by doing is very important. It’s my approach for all computer courses I teach, regardless of the audience.”

This approach applies to teaching adults in various business environments as well. Dr. Paternite conducts corporate training classes on all levels of Microsoft Office Suite. In workforce development and IT course development, she has built a program of courses in which adults participate. On the college credit side, she engages students in service learning projects for organizations in the area. Students work on websites and databases for these companies.
While Dr. Paternite has been a professor at Kent State University Geauga for over 20 years, she sees every class as a fresh experience. This is because the developments and demands of IT are constantly changing, and educational goals must accommodate emerging workplace requirements. As such, each year the IT faculty from all of the Kent State regional campuses work together to update courses or create new courses to ensure students are being taught what is needed to enter the working world. “It’s nice to know we don’t let our courses get stale and old,” she said.

“Active learning is key to retaining and using information, so learning by doing is very important. It’s my approach for all computer courses I teach, regardless of the audience,” Dr. Paternite says.

This change of pace keeps Dr. Paternite on her toes. “There is so much to learn in IT, and it is constantly changing. I enjoy teaching new classes on updated software to make sure I’m learning and working with newer technology. By teaching these classes (and keeping up with the changes), I get to see how IT and its improvements make our lives easier and better by increasing our ability to gather information quickly, contact others instantaneously, and automate tasks.”

Dr. Paternite received a Bachelor of Arts degree in psychology from Arcadia University, a Master of Arts degree in special education, and Master of Technology from Kent State University. She also holds a Doctorate in instructional technology from Kent State University. Crediting her diverse set of interests, experiences, and skills for her multi-faceted approach to education and practical lifelong learning, Dr. Paternite said, “At the beginning of my career, I taught learning disabled students from 7-12 grade. Through that I realized that each person learns differently. I try to ensure that students can get information through multiple channels: reading, listening, and doing.”

While studying IT may be focused on computers, the atmosphere at Kent State Geauga is focused on the individual. Dr. Paternite calls it “my home away from home” where the small faculty-to-student ratio encourages faculty members to know their students, showing them that they are available and willing to help them succeed. “Working together with staff and other faculty has created a wonderful environment for students here,” Dr. Paternite said. “When we work together for the greater good, we are all happier.”
Ohio State Startup Raises $59 Million in Initial Funding to Treat “Undruggable” Illness

Chris Booker
Ohio State News

A biotechnology company with roots at The Ohio State University is making news after raising $59 million from investors.

Entrada Therapeutics is a biotechnology company developing new ways of treating devastating diseases by delivering drugs into target cells. The company was co-founded by Dehua Pei, Charles H. Kimberly Professor in Chemistry and Biochemistry at Ohio State.

The funding sets a new record for Ohio State startups as the largest Series A round of funding.

Pei and his research team at Ohio State have developed an approach to treating so-called “undruggable” diseases. Approximately 80 percent of all drug targets are out of the reach of current drug development approaches and are termed “undruggable” by the drug discovery community.

“Our commitment to bold, high-impact research can be seen in innovators like Dehua, who show how discoveries made
“It has been a challenge for the pharma and biotech industry to find a way to deliver drugs of larger sizes, such as biologics, into the cell. We have developed a technology that seems to be very effective in taking molecules, large or small, into the cell.”

Dehua Pei

in the lab can have an impact far beyond our campus,” said Janet Box-Steffensmeier, interim executive dean and vice provost the College of Arts and Sciences.

“Through his platform for intracellular drug delivery, Dehua is an exemplar of research excellence in the College of Arts and Sciences at Ohio State.”

Pei’s research uncovered a family of small cyclic peptides, or amino acids strung together into a ring, that are capable of delivering all major drug modalities – from small molecules to large proteins – into a cell.

“In real estate, they say the three most important things are ‘location, location, location.’ In drug discovery, particularly in biologics, what is most important is ‘delivery, delivery, delivery,’” said Pei.

“It has been a challenge for the pharma and biotech industry to find a way to deliver drugs of larger sizes, such as biologics, into the cell. We have developed a technology that seems to be very effective in taking molecules, large or small, into the cell.”

The first application of Entrada’s platform is focused on treating a rare and fatal mitochondrial disease with no approved treatment that is caused by mutations in a gene that contains instructions for production of an intracellular enzyme. The financing will allow Entrada to advance its lead program into human clinical trials. The company also plans to broaden its work on rare diseases involving single genes by identifying and advancing additional intracellular enzyme replacement therapies.

“The ability to move potential drugs through cell walls has been a goal for the biomedical industry for decades. Many compounds are effective in treating specific diseases, but the challenge for many has always been to penetrate cell walls to move the drug compound to where it needs to do its work,” said Susan Olesik, professor and chair of the Department of Chemistry and Biochemistry.

“This platform technology has the potential to save many lives. We are thrilled to see that the commercialization is moving forward swiftly.”

Pei has been recognized by the university for his research in this area. He was named the 2017 Innovator of the Year.

“We don’t do research for the awards but it’s nice to know people do appreciate what we are doing,” Pei said. “It’s impossible to pull off what we have done without the full support of the university.”
Edison State Community College and Hobart Institute of Welding Technology have entered a consortium agreement, making it easier than ever before for students enrolled in Hobart Institute accredited welding programs to continue on the path to an associate degree at Edison State.

Charlie Carpenter (L), director of skill education at Hobart Institute of Welding Technology, and Dr. Tony Human (R), dean of professional and technical programs at Edison State, meet on behalf of the two institutions entering a consortium agreement.

Photo: Edison State Community College
Building upon a 20-year partnership, the institutions’ latest agreement facilitates the transfer of credit from the Hobart Institute to Edison State for students who wish to pursue an Associate of Technical Studies in welding technology.

“We are pleased to bolster our partnership with Hobart Institute in which we provide educational opportunities to students from both institutions and strengthen their future work-based learning and employment opportunities,” said Tony Human, dean of professional and technical programs at Edison State.

Dependent upon the students’ career goals, the institutions support three pathways of completion. Students have the option to work toward an Associate of Technical Studies in welding technology with a focus on management, manufacturing, or quality.

Students enrolled in the program may apply up to 30 credit hours from Hobart Institute toward one of the Associate of Technical Studies degrees now offered at Edison State. The remaining balance of coursework required at Edison State may be completed online or in person in as little as one year.

“We feel it is important to provide our students with a multitude of opportunities once they graduate,” said Charlie Carpenter, director of skill education at the Hobart Institute. “Our team does a great job with career assistance, and we believe partnering with Edison State can help expand the opportunities for our graduates interested in further education. We are excited about the partnership and believe Edison State is a great option for our graduates seeking further education.”

According to U.S. Bureau of Labor Statistics, Occupational Employment Statistics, employment of professionals in the welding career field is projected to experience a 6 percent growth from 2016 to 2026. Welders will be sought to aid in the nation’s aging infrastructure, which will require the expertise of welders to help rebuild bridges, highways and buildings. In 2017, professionals in this career field earned an average of $19.35 per hour or $40,240 per year.

The Associate of Technical Studies in welding technology degree is approved by the Higher Learning Commission and the Ohio Department of Higher Education.

Edison State Community College is accredited by the Higher Learning Commission and is recognized with the highest order attainable by the Ohio Department of Higher Education.

The Hobart Institute of Welding Technology is accredited by the Accrediting Commission of Career Schools and Colleges and is approved by The Ohio State Board of Career Colleges.

For more information about the degree pathways offered, call 937-778-8600 and ask to speak with a resource specialist.
HigherEd Highlights is a “behind-the-scenes” look at the work being done at our public colleges and universities – as well as collaborations with the business community and other state agencies – to prepare students for a successful future and raise Ohio’s postsecondary education attainment level.
Thank you for reading ConnectED. We appreciate any suggestions or ideas to improve this newsletter.

We welcome story ideas, links to articles of interest, and news releases.

Please send story ideas to Jeff Robinson at jrobinson@highered.ohio.gov.

A special thank you to all of those who contributed to the stories and articles:

C-TEC’s Ohio Technical Center Partners with Ariel Corporation to Train Workforce
William Bussey
Ohio Technical Centers
Lauren Massie
C-TEC of Licking County

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Joel Hodge
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Photo: University of Toledo