Penn Goile MAGAZINE

A NURSE'S CALLING

Determined graduate reaches goal of flight

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Spring 2021

Penn College Magazine, a publication of Pennsylvania College of Technology, is dedicated to sharing the educational development, goals and achievements of Penn College students, employees and alumni with one another and with the greater community.

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Extraordinary curiosity led Fletcher Ewing, '98, from childhood Soap Box Derbies to an innovation-filled career. His latest role is senior mechanical engineer for X, developing robots with the humanlike capacity to learn.



A flight nurse's calling Having weathered many challenges herself, Geisinger Life Flight's Stephanie Suzadail, '14, loves to provide calm in the center of the storm.



Student-athlete covers all 'bases'

is speedy for his size, but he is quicker



Adding hope to math An experiment launched in 2016 to model a math course on the lecture-lab template of other Penn College courses is multiplying student success.



Grad's gift transforms machining lab

A gift from a grateful Larry A. Ward, '66, has transformed one of the oldest labs on campus, leading the college's manufacturing majors into the next generation.

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About 80 students from a wide range of majors crafted ceramic masks for "Regarding the Mask ...," a display surrounding The Victorian House in October. Ceramics students taught by David A. and Deborah L. Stabley were offered the project as a mode of creative expression related to the face coverings being worn due to the pandemic. "My idea stems from the physical masks we're all wearing and our inability to communicate the way we used to," David Stabley said.

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" UUU"



On the field, first baseman Tyler S. Rudolph behind the wheel of his rear-engine dragster.







degrees that work.

ON THE COVER

Stephanie Suzadail, '14, cares for patients in the confines of a helicopter, but she hopes to make an impact that can't be contained. See Page 20.

ATTENTION, ALUMNI

Share your story and catch up with classmates online at magazine.pct.edu/cn

GO PAPERLESS

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Emily Wagner, a counselor at South Williamsport Area Junior/ Senior High School, works on building a robotic arm during a Manufacturing Externship Camp at Penn College. Funded by the National Science Foundation, the weeklong camp - devised and led by Penn College faculty - exposed high school educators to various aspects of manufacturing, so they can communicate the promising career possibilities in that sector to their students.

"I've been aware of the demands in manufacturing but haven't been sure how to talk about it with kids," Wagner said. "This has provided a good opportunity to experience manufacturing and machining and speak with those who teach in those areas, so I can better promote the industry as a career choice."

The educators' hands-on exercise required them to build a robotic arm, featuring several 3D-printed parts. They used a CNC milling machine to manufacture the robot's aluminum base before relying on CAD documents to assemble the arm. The teachers employed Windows software to program the robot – a scaled version of an industrial robot – to pick up a metal ball. The exercise can serve as a manufacturing module for the educators at their home schools.

College works to ensure inclusion

The college made the strategic decision to recommit to ensuring that all members of the college community can live, work and learn in a safe environment, free from harassment, discrimination and prejudice.

As part of this effort, President Davie Jane Gilmour created an Inclusion Task Force to focus on ways Penn College can better educate and support all members of its community, especially those from historically marginalized backgrounds. The task force includes representative faculty, staff and students from across campus.

The task force will assist college leadership in identifying and responding to problems that hamper efforts to create a more socially just campus. The group will work with a consulting firm to conduct a systemic campus climate study, with the goal of developing strategic plans for direct action to improve the Penn College experience for all.

College offers certificate



The college is accepting applications for its CNC machinist certificate, offered for the first time in Fall 2020.

technologies.

Coursework includes mill and lathe operations, precision measurement, blueprint reading, and CNC programming. The certificate feeds into the college's associate degrees in machine tool technology and automated manufacturing technology and its bachelor's degree in manufacturing engineering technology.

A portion of a three-year \$685,297 National Science Foundation grant paid for the development of the certificate.

Hands-on and strong

The college returned to handson, in-person classes for the fall semester with safety measures in place. The semester opening included an "If you want handson, you will need masks on" campaign – and the campus complied, enabling on-campus coursework to continue as scheduled.



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To find more comprehensive versions of the articles in Campus News - and to read other news stories about Penn College visit PCToday, the college's news-and-information website, at pctoday.pct.edu



Faculty member shares innovation expertise internationally

In two virtual sessions for a United Arab Emirates entity, Anita R. Wood, associate professor of computer information technology, advocated for organizations to embrace an "innovative mindset" in the wake of the COVID-19 pandemic.

"History has always shown us that nothing is the same after a crisis, so we must prepare," said Wood, who participated from Florida. "An innovative mindset is critical in defining what the new normal is and to allowing organizations to move into this new era."

The presentations were produced and offered by Beacon Red, a subsidiary of Edge, a UAEowned conglomerate. Edge seeks to revolutionize the UAE's defense industry by bringing innovative technologies and services to market with greater speed and efficiency.



"Industry needs skilled machinists and CNC operators. This program can be completed in nine months, so students can guickly obtain the skills required by industry and get right to work," said Bradley M. Webb, dean of engineering

WHEELIES TO RADIOGRAPHS

A fter being out of high school for more than 10 years, **Michael Cargile** decided it was time for a change. Ready for new opportunities and a fresh start, he enrolled at Penn College. He graduated with an associate degree in radiography in August 2020 and is working toward a bachelor's in applied health studies.

WHY RADIOGRAPHY?

"I have always loved to ride motorcycles," Cargile says. "While learning to do different tricks, I have broken a lot of bones. I would always have to get X-rays done and was fascinated by how the X-ray can see inside of my body."

HIS ADVICE FOR OTHERS CONSIDERING A RETURN TO SCHOOL

"I would say definitely to do it. You can never be too old to learn new things and improve your life. It was one of the best decisions I have made."

THE BEST PART OF PENN COLLEGE RADIOGRAPHY

"The clinical experience for me was the best. Being able to work with patients and also being able to put classroom teaching to practical use went hand in hand for me."

See more "Penn College Family" profiles at family.pct.edu

 STUDENT-ATHERTER

 STUDENT-ATHERTER

 Dy Tom Speicher, writer/video producer

 BASEBALL COACH CHRIS HOWARD'S

 Years playing professional baseball and

BASEBALL COACH CHRIS HOWARD'S years playing professional baseball and coaching the Wildcats convinced him that 6-foot-5, 220-pound first basemen aren't typically fleet of foot.

EDR.

Then he saw Tyler S. Rudolph run.

"His power at the plate jumped out at me, but I was surprised and impressed how fast he was for a kid that size," a delighted Howard said. "Foot speed isn't essential for what we expect of him, but it's certainly a plus. He might even get a few stolen bases before he's done at Penn College."

From Rudolph's perspective, the "speed" he exhibited for Howard was turtle-esque. The experienced drag racer is used to being a blur.

"My two favorite things to do really are baseball and drag racing," Rudolph said. "It's the competition. You have that one-on-one aspect I like a lot. In baseball, it's you against the pitcher, and in racing, you have to be better than the person next to you in each round."

Penn Colleg

Radiograph

Rudolph has excelled at both sports but doesn't let either overshadow his ultimate goal of becoming a design engineer, preferably in the automotive industry. "I really like the hands-on aspect," he said. "In my program (engineering design technology), you are able to get right into it and start designing on the computer."

On the diamond, Rudolph earned considerable playing time at first base and was hitting .286 when the COVID-19 pandemic canceled his freshman season after just 10 games.

But Rudolph had plenty to fill the baseball void, like launching Hill Top Clothing with his friend Max Yale.

Rudolph designed the Hill Top logo, which pays homage to the hilly landscape surrounding their hometown: Hemlock, New York. The logo is screen printed or embroidered on clothing they secure from various suppliers.

One of the marketing vehicles for Hill Top is Rudolph's rear-engine dragster. Most weekends from April through October, Rudolph races the 2,000-pound car at Empire Dragway in Leicester, New York, and at other tracks throughout the mid-Atlantic.

Thanks to that pursuit, his academic and athletic endeavors at Penn College, and co-founding a clothing line, Rudolph is covering all bases for future success.



SPORTS REPLAY

Tyler S. Rudolph celebrates after winning the Professional Drag Racers Association world finals in the Bracket Bash class. In addition to drag racing, Rudolph, who is majoring in engineering design technology, plays on the Penn College baseball team and recently co-founded a clothing line.

67 SELECTED AS NEAC SCHOLAR-ATHLETES

Penn College set a school record with 67 student-athletes selected as North Eastern Athletic Conference Scholar-Athletes. The Wildcats topped their previous mark of 60 selections in 2018-19.

"This is the third straight year that we topped our previous number of scholarathletes, and it's a trend we strive to continue. The achievements of our student-athletes in the classroom are always the most rewarding," Director of Athletics John Vandevere said.

To be selected, a student-athlete competing in a conference-sponsored sport must achieve a combined GPA of 3.4 or higher for the fall and spring semesters and must be in good standing on his or her team.

TWENTY INDUCTED INTO CHI ALPHA SIGMA

The Athletics Department inducted its second class of Chi Alpha Sigma athletics honor society members following the Spring 2020 semester. The honorees included 20 student-athletes, representing 10 teams and a grade point average of 3.59.

Student-athletes must be in their junior or senior year with a minimum cumulative GPA of 3.4 to be eligible.

"While each individual is accomplished and talented in unique ways, they share one common characteristic – striving to do their best in everything they undertake in their studies and in their sports," Faculty Athletic Representative Tom Zimmerman said.

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WHO REALLY WORKS IN SCIENCE, TECHNOLOGY, **ENGINEERING AND MATH** by Davie Jane Gilmour, president

the acronym coined by the National Science Foundation two decades ago to mean "science, technology, engineering and mathematics" - is practically a household term.

Schools have been working hard to ensure K-12 students are receiving solid STEM programming. STEM Days help to connect kids with fun science, technology, engineering and math activities.

Educators, legislators and business leaders are all on board. There are countless complex problems waiting to be solved. To confront them, we need citizens who are well-versed in STEM.

But for all the recognition STEM has received, evidence shows that many high school students still cannot imagine careers that relate to those subjects.

In one example, a survey by Randstad North America found that 56% of students age 11 to 17 do not know what kind of math jobs exist, yet 64% rate creating video games as "very fun."

That disconnect appears to indicate that there is confusion - or at least a lack of clarity - about what a STEM career is.

Among many, there is a misconception that STEM careers are only those that include a long list of credentials after a person's name or entail solitary work in a research laboratory.

But STEM encompasses far more. It does include licensed professional engineers and registered architects, but it also includes the surveyors, estimators, project managers, carpenters, HVAC technicians, electricians and others who are part of their teams.

Indeed, cardiothoracic surgeons are part of the STEM workforce, but so are radiographers, nurses, surgical technologists, paramedics, physical therapists and countless others responsible for successful patient outcomes. The kind of professionals who are educated at Penn College.

The STEM workforce includes a wellrounded mix of employees with associate, bachelor's and advanced degrees.

WHY MISPERCEPTIONS PERSIST

A recent PEW Research Center survey found that more than half of adults believed students don't pursue STEM careers because they think the subject matter will be too difficult. At Penn College, parents have similarly expressed that they initially did not investigate STEM careers for their children because they believed they were for the elite few who are willing to spend years pursuing advanced degrees.

Given the way that STEM is frequently discussed, those misperceptions may be forgiven. As the PEW survey explains: "There is no single standard for which jobs count as STEM, and this may contribute to a number of misperceptions about who works in

STEM and the difference that having a STEM-related degree can make in workers' pocketbooks."

The reality is that STEM is a way of thinking and problem-solving that applies to a wide range of fields.

Penn College offers 100 majors that lead to careers in many of those fields.

In fact, Penn College's roots are in STEM education (although the popular acronym didn't exist until 2001). Since 1914, when the Williamsport School District began offering hands-on classes in woodworking and machining in its new high school building, the institution that evolved into today's national leader in applied technology education has been teaching students to use science, technology, engineering and mathematics as tools to impact industries and communities – and sustain their own livelihoods.

The difference it has made in

Pennsylvania and beyond includes World War I veterans who retrained for new careers after returning from Europe; businessmen who lost their jobs during the Great Depression and were retrained for the skilled positions that remained unfilled in Williamsport-area industry; and countless students who have come to the college's campus in the ensuing decades seeking "degrees that work." In the era of COVID-19, their impact has been proven as graduates fill essential roles and help entities around the globe find new ways of doing business.

IF A PREDICTION

that 47% of today's jobs may simply vanish in the next decade proves true, workers' willingness to adapt to new technology will be vital to success in the workforce.

Those partnerships remain crucial as Penn College students acquire professional career skills in hands-on courses taught by faculty with relevant real-world experience. That instruction takes place in facilities and labs that feature industry-standard equipment provided by industry-leading companies.

Business and industry representatives serve on the college's academic advisory committees, providing expert counsel on curriculum-related matters. And when workforce cues indicate the college needs to change course with its expansive menu of academic offerings, it nimbly makes those changes.

The result is an overall graduateplacement rate of 98%, which reaches 100% in many majors.

More and more colleges are choosing to follow the model Penn College and its predecessors have had in place for a century.

Those degrees have worked for graduates, industry and society, thanks to partnerships the college established with industry in its earliest days.

WHY IT'S IMPORTANT

According to the PEW research, growth of employment in STEM has markedly outpaced the growth of overall employment.

/ / / / /

STEM workers with some college education make 26% more than those in non-STEM fields. Interestingly, STEM training in college leads to higher compensation whether the individual winds up in STEM fields or not.

But the importance lies beyond the paycheck.

STEM jobs are essential.

"In an ever-changing and complex world, it's more important than ever that our nation's youth are prepared to bring knowledge and skills to solve problems, make sense of information and know how to gather and evaluate evidence to make decisions," posits the U.S. Department of Education. "These are the kinds of skills that students develop in science, technology, engineering and math."

About half of STEM workers are employed as health care practitioners and technicians, including nurses, physicians and surgeons, as well as medical and health services managers. Those positions must be filled for the health of our communities.

Outside of health care, there are more than half a million open jobs in manufacturing today, according to a study by Deloitte and The Manufacturing Institute. The state Department of Education reports more than 17,000 unfilled computer science and software development jobs in Pennsylvania.

And if a prediction by Deloitte and The Manufacturing Institute that 47% of today's jobs may simply vanish in the next decade proves true, workers' willingness to adapt to new technology will be vital to success in the workforce.

To meet the increasing need for tomorrow makers with problem-solving skills, STEM Days that teach younger students about the real world of STEM careers are vital. And at Penn College, every day is STEM Day.



by Cindy Davis Meixel, writer/photo editor





Mathematics faculty members Ed Owens, associate professor, and Lisa D. Jacobs, instructor, piloted an experiment to help students who were struggling in mathematics courses by adding a lab component to a math class that is required in many majors. In the five years since, the percentage of students passing the course has soared.

There's something akin to a quiet revolution happening inside the Klump Academic Center –

the oldest building on the Pennsylvania College of Technology campus and home to innovation since 1914.

This transformation has been going on for about five years and has touched over 1,100 students enrolled in an enhanced version of MTH 180 – College Algebra and Trigonometry 1.

Consistent with similar college classes across the nation, success rates in this course have been historically low, but with the recent concerted effort, scores have risen in striking proportions.

Hearing about Penn College's achievement, other universities are calling, asking for advice. They, too, want this equational elixir.

According to the Mathematical Association of America, only about 50 percent of students enrolled in college algebra earn a grade of A, B or C. As gateways to many STEM majors, algebra courses are crucial for preparing students to benefit society in a range of occupations.

Penn College's experimental MTH 180 course has increased the percentage of students earning an A, B or C to 65% and those receiving a D or better to 84%. (Grades of D and higher permit students to pass.) One semester, the percentage of students earning a passing grade climbed to 90%. The mathematical wizards behind this conversion are Ed Owens and Lisa D. Jacobs. Three other Penn College professors joined the endeavor as it evolved: Lauren Rhodes, Tiffany Schwanger and Nathan Trick.

From Fall 2016 through Fall 2020, 45 sections of the revised course have been taught by the five participating faculty members.

The educators are excited to see students' math comprehension and confidence rising and their math scores increasing, along with opportunities for success in their chosen majors and careers.

"Our big question was: How do we reach the struggling student with a weak background and high math anxiety?" Owens explained.

"We know that the A and B students will most likely always be successful, but how can we target the C, D and F group?" Jacobs added. "Our focus was: How do we get that group to be more successful?"

More Time = Collaboration + Confidence

The first strategic change was to add more time to the class each week in the form of a lab component.

"All of their major courses follow the lecture-plus-lab model, with the lab tied to the lecture. We were simply modeling that structure, but in a mathematics context," Jacobs said.

Following lab time, students are encouraged to continue collaborating at study spaces outside their professors' >>> "Our primary goal in all our effort was to provide hope and empower students for success."



- "The lab created a more practical sense to the course, where we could apply the lesson before it was lost in our brain. The relationships that were built during the time were beneficial, too."
- "Math has been turned from seemingly impossible to something that I look forward to doing. After this 180 course, I'm helping students in other MTH 180 courses. I have NEVER been able to help others with math."
- "High school mathematics felt like being given the keys to a door, but with college mathematics, you finally use the key to open the door. This course is very structured and helpful."
- "The extra class time and reviews make me feel like the instructor truly cares. ... I also like knowing why something works, not just the formula. I almost failed math in high school: now I look forward to this class. The different types of questions helped me truly understand the problems. Having extra time each class to interact with other students was amazing."
- "Homework is really how you get to understand the information. Lab time prepares you more for the homework. ... I felt like homework wasn't needed because it isn't graded – until I realized how much it helped me to prepare for quizzes and exams."
 - from anonymous student evaluations

offices. More than 50% of students have taken advantage of this extra offering.

With lab and study time allowing for enhanced interaction among students and between students and professors, a strong sense of community and camaraderie has emerged.

"The lab time, as well as the time spent with the professor and the other students outside of the class, was the biggest and most beneficial surprise," said Scott R. Seneca, a civil engineering technology student from Lewisburg. "The structure of that class taught me to seek out help from the professors, as well as the student sitting next to me. The lab time broke the ice for students to realize that just because the person sitting next to you may have a better score on an assignment, doesn't mean they didn't struggle and seek help or that they wouldn't help you in return."

This culture of support has circled back into lecture time, where students feel more comfortable asking questions or responding to questions without fear of embarrassment. Students' math anxieties have decreased and their confidence has flourished.

Practical Problems = Elevated Understanding

The second component of the retooled MTH 180 course model has focused on content. Owens and Jacobs had a strong desire to stress conceptual learning through the use of practical algebraic problems relating to students' daily lives and fields of study. (Students in a transportation-related major might be determining measurements of a piston, while students in health sciences could be calculating dimensions of vertebrae.) Through the use of relevant problems, the faculty hoped students would see the value as it applies to their future careers.

"In architecture, there are many calculations that have to be done to ensure structural safety, and learning some of these concepts in MTH 180 better helped me in my core classes, especially when my math professor would make the equations a reallife scenario," said Christine A. Limbert, a building science and sustainable design student from Curwensville.

Engineering design technology student Evan L. McElhenny, of Bainbridge, had

similar experiences. The conceptual coursework helped him relate better and retain the information longer.

"The biggest thing this course helped me complete within my major was how to work out problems given to me when it came to figuring out unknown dimensions within a certain sketch or design," McElhenny shared.

Another concerted effort has focused attention on the depth of the content in lieu of the breadth of material within the course.

Additionally, the faculty implemented lecture guides aimed at helping students stay organized. Jacobs says the guides provide students time to think and process without frantically trying to write everything down during a lecture.

This supplement to instruction helped Kaylei L. Hildebrandt, an electrical technology graduate who is enrolled in building automation engineering technology. Hailing from St. Leonard, Maryland, Hildebrandt is a Navy veteran.

"With how the note sheets were laid out and with how well my professor was able to explain the concepts, I was able to focus more on the lesson being taught," she said, explaining that the lecture guides offer questions that work in tandem with the material the professor is covering; additional space for note-taking is also contained in the guides.

Adding Hope to the Equation

A third area of emphasis for the enhanced course model has been to inject a sense of hope into the classroom.

Aware that many students arrive on the first day of math class already feeling defeated or set up for failure, the educators believed it was necessary to infuse a nurturing atmosphere into the classroom from day one, creating a place where students feel safe to make mistakes.

"I tell the students: 'You only learn when you're making mistakes. If you're not wrong, I have nothing to teach you," Owens said.

Jacobs added: "Our primary goal in all our effort was to provide hope and empower students for success."

The elevation of students' hope has Many students, especially if they

positively merged with the one thing that benefits students the most within their mathematics courses: homework. struggle with math, have difficulty taking the material learned in class and completing their homework. They often run into challenges finishing homework alone, get frustrated and give up on their assignments. This can "snowball" on them throughout the semester, leading to high withdrawal or high failure rates.

"Out of the confidence and content mastery from lab time, students are then more engaged and determined to complete their homework," Jacobs said. "Completion of homework is one of the best catalysts for success within a mathematics course."

Faculty Are Learning, Too

"I was very interested in the

Trick says he joined the effort as a new faculty member because the level of student success was evident, and he was interested in the opportunity to interface with the other four professors teaching the enhanced MTH 180 model. opportunity to collaborate with the other committee members on a weekly basis to discuss what was working and any changes that the group felt would better serve the course," he said. "Discussing the different components of the course with my colleagues and sharing ideas with each other really helped me grow as an instructor."

The group's weekly meetings have supported the educators in creating consistency among their classrooms and providing an opportunity to share experiences, heading off challenges during the semester as opposed to waiting until the end.

"Teaching MTH 180 in the lecture/ lab format has convinced me of how important it is for the students to have the opportunity to collaborate with each other and me during the lab time," Trick added. "I have found that the more the students have the opportunity to discuss and work the mathematics with each other and their instructor, the more they understand the

concepts being taught, which ultimately helps them become better problem solvers in general."

This academic effort that began as a singular quest has moved in myriad directions and resulted in numerous unexpected benefits – similar to an equation yielding infinite solutions.

"The MTH 180 project demonstrates not only that the faculty at Penn College are experts in their field, but also that they are dedicated to their students," said Sue A. Kelley, dean of the School of Business, Arts & Sciences. "I am continually impressed with the innovative methods that they develop to foster student understanding and success. The faculty involved in this project found a way to make math relevant and meaningful for students. The growth that they cultivated is remarkable. Perhaps the most extraordinary piece of this story is the fact that the math faculty are applying what they learned through the MTH 180 project to improve other courses within the department."

The evolution of individual students continues to inspire Jacobs.

"The most significant impact that I have noticed has been a complete transformation of students' attitudes as the semester unfolds. Every semester begins the same way: a class full of individual students. However, as the semester progresses, they slowly transform into a cohesive community working together to complete the course," she said. "It is also my hope that, through the many classroom interactions between the students, they are not only garnering the mathematical conceptual knowledge, but also taking away many of the soft skills that will make them productive participants in whatever field they find themselves in in the future."

With the incredible success of the MTH 180 pilot course, Jacobs is spearheading a new initiative to revise MTH 006 -Elementary Algebra II.

"It was our desire that this would be a catalyst to experience the same level of success and transformation in our STEM developmental course," she said. The fully revised course will be renamed MTH 008 and implemented in Fall 2021.

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Building robots that learn is grad's latest engineering venture

by Tom Speicher, writer/video producer



CURIOSITY FUELS FLETCHER EWING.

As a kid, it drove him to meticulously build and competitively race Soap Box Derby and remote control cars. As a college student, it pointed him to plastics. As a professional, it led him to devise and develop innovative products. Today, it inspires him to "shoot for the moon."

The 1998 Pennsylvania College of Technology graduate is thriving as a senior mechanical engineer in Silicon Valley at X, The Moonshot Factory. The company formerly known as Google X comprises engineers, inventors and entrepreneurs whose expectations defy gravity. Their lofty objective is to build and launch "technologies that aim to improve the lives of millions, even billions of people."

Current initiatives at X – a subsidiary of Alphabet, Google's parent company include driverless cars, delivery drones and internet access via light beams and balloons. Ewing's assignment is the Everyday Robot Project, which aims to create robots that can operate in

unpredictable settings, such as homes and offices. Unlike today's robots, which are built to perform specific functions in structured environments, X wants its machines to possess the humanlike capacity to learn and adapt.

"We're focused on developing an endto-end robot system that requires us to integrate many different components like the hand, arm, body, head and computer to work together to do something reliably over time in real-world, unstructured environments," Ewing said. "We see robots as tools that we can put to work to extend humanity's capabilities."

X describes the development of such general-purpose robots as "tackling and integrating some of the hardest hardware and software challenges in the field of robotics." The herculean job description doesn't spook Ewing. Instead, he savors it.

"With problems come solutions, and X's mission is to solve difficult problems," he said. "You have to accept you may not get it right after multiple attempts. In my opinion, failure is part of being an engineer and has been part of my experience since the beginning."

It's difficult to determine "the beginning" from Ewing's resume. Is it his graduation from Penn College's renowned plastics program? His development of a device that identified the remains of the world's most-wanted terrorist? His work on components for a high-end vehicle? His creation benefiting swimming pool owners? The answer is "none of the above."

Childhood activities inspired by deep curiosity conceived his engineering acumen. Growing up, Ewing's prized possession wasn't a toy. It was a used set of the Encyclopaedia Britannica.

"For as long as I can remember, I've had intellectual curiosity in things, people and history. Before you could 'Google it,' I would have my face buried in books to find out things," said Ewing, who earned a bachelor's degree in plastics and polymer engineering technology. "I've always been very interested in how things work and the science behind it. I grew up during a time when kids were outside playing and figuring things out on their own, which left an incredibly broad and blank canvas to fill."

Fill it he did. With his older brother,

"Robots can learn tasks in the real world through practice versus having to code every new task, exception or improvement."

Nathan (a 2002 automotive technology graduate of Penn College), and father, Dalas, Ewing spent countless hours in his native Selinsgrove manufacturing Soap Box Derby and remote control cars. Both endeavors taught him to embrace, not shrink from, challenges.

The Soap Box Derby cars required handling wood and fiberglass to finalize the body and troubleshooting pulleys, bell cranks and cables to install the control and brake systems. Painting the car so its finish produced the least aerodynamic drag also consumed considerable time. Testing and fine-tuning preceded the races, which took Ewing's family throughout Pennsylvania and to the national championships in Akron, Ohio.

When he was 11, Ewing "graduated" to remote control cars. But they weren't ordinary RC cars to run on the kitchen floor. He built one-eighth scale, nitro gas-powered cars for road races that could exceed an hour. Choosing and incorporating optimal tire compounds, fuel type, motors, gearing and exhaust systems were critical for racing success. Ewing and his brother excelled, winning several events and earning sponsorship from Delta Manufacturing.

They learned the enduring virtue of patience while testing their mechanical aptitude and ingenuity.

"My father was extremely fussy and had a lot of pride in quality and workmanship, along with a positive attitude," Ewing recalled. "So in the process of working on the cars and racing, he instilled that same mindset into my brother and me.

"You have to be patient and make sound decisions. Rushed judgments on product design or engineering can cost companies thousands of dollars and their reputation." Shortly after graduating from high school, Ewing put his engineering aspirations on hold. The passing of his father prompted him and his brother to become full-time employees of the family's building products company. The family sold the business's assets a few years later,

opening Ewing's opportunity to attend Penn College.

The "uncommon and specified focus" of the plastics and polymer engineering technology program attracted him to the school. Penn College is one of only

's experiments at its headquarters in Mountain View, California, include robots g waste into bins dedicated to landfil and compost. The goal of the Everyday Robot Project is to produce machines that possess the humanlike capacity to learn and adapt. Fletcher Ewing, '98 (opposite page), is senior mechanical engineer for the project.

> six institutions nationwide offering plastics degrees that are accredited by the **Engineering Technology Accreditation** Commission of ABET. The college is also home to the Plastics Innovation & Resource Center, an internationally recognized provider of plastics training, research and development, and industry partner programs.

"I wanted to get into new product development involving plastics materials or composites in some shape or form," Ewing said. "The labs and hands-on work allowed us to physically test theories or the material science and gave us the freedom to choose related paths and interests.

"I'm very thankful for my experience at Penn College. It has given me the right tools and direction to become what I am today."

Combining theory with extensive hands-on training in labs dedicated to various plastics processes is what distinguishes Penn College's program, according to Kirk M. Cantor, professor of plastics and polymer technology.

"I tell my students all the time that there are folks who understand the science \gg really well but can't run the machines. Then there are people who can run the machines but aren't as strong with the science," he said. "Our students straddle both worlds. They understand the science, can run the machines and troubleshoot effectively."

Cantor remembered "Fletcher Ewing the student" as diligent and possessing a good attitude. He described "Fletcher Ewing the alumnus" as the embodiment of the varied, rewarding opportunities available to graduates of the plastics program.

"Pretty much everything dealing with electronics and technology has plastic components involved," he said. "Because our students are working with stateof-the-art plastics technology, they are exposed to ancillary types of technologies. Many graduates do migrate from working directly with plastics to focus on other technologies, and they do well. The opportunities are always there for anyone like Fletcher, who is good at what they do and works hard."

Ewing's degree steered him to the automotive industry and its increasing reliance on plastics to reduce vehicle weight for better gas mileage. He was a product development engineer for top suppliers of under-hood and interior components. The role included trips to Germany for the Mercedes-Benz W164 program, which produced the second generation M-Class luxury SUV.

"It was fun going to Germany and working directly with Mercedes-Benz in Sindelfingen, getting behind-the-scenes tours and seeing vehicles that were not yet released to the public," he said. "I loved Germany, but eventually the hours and travel were not a great fit for me.

"Working in the industry was a good start and taught me much about manufacturing and design for manufacturing and assembly, which aided my career path."

The aquatics industry was the next stop on that path. For two companies, Ewing served as lead mechanical engineer of new product development. At Aquatron Robotic Technology in Delray Beach, Florida, he produced robotic swimming pool cleaners and water treatment devices. Nine years later, at Fluidra in San Diego,

he designed and developed the Polaris Quattro, an autonomous submersible pool cleaner, launched commercially in January 2020.

"It involved a big team of people to make it happen," Ewing said. "It was a great experience and has had great reviews after one season on the market."

With its four big wheels and plastic body, the machine resembles a toy monster truck in size and shape. Powered by a booster pump, the Polaris Quattro scours a pool's bottom and climbs its sides to devour any debris. The pool owner doesn't break a sweat. For them, it's like hiring Aquaman to vacuum.

Between his two stints in aquatics, Ewing helped to create a tool used by real heroes. Working for Cross Match Technologies in Palm Beach Gardens, Florida, he played a key role in designing, developing and selecting materials for the SEEK Mobile Biometric Device. U.S. Navy Seals employed the instrument during the 2011 mission that killed Osama bin Laden the mastermind of the 9/11 attacks, which claimed nearly 3,000 lives on U.S. soil.

The Seals relied on the device - a small



Since it was built to withstand drops, water and sand intrusion, and extreme temperatures, Ewing's team realized its invention would appeal to the military. They didn't know about the device's role in identifying the Al-Qaeda leader until a company-wide meeting a few weeks after the raid.

"It gives me great pride to have been involved in the development of something that aided the nation's fight against terrorism," Ewing said.

Aiding humanity is Ewing's ultimate goal in his current role with the Everyday Robot Project at X. His innate curiosity and unquenchable thirst for innovation convinced him to apply for the senior mechanical engineer position in the fall of 2019.

"X has a long history of bringing together hardware and software to create breakthrough solutions," he explained. "I was thrilled to join a renowned company working on such a rewarding and

"I grew up during a time when kids were outside playing and figuring things out on their own, which left an incredibly broad and blank canvas to fill."



challenging project. Machine learning and robotics could one day help us find new solutions to some of the biggest challenges facing the world – from finding new ways to live sustainably, to caring for loved ones, to tasks we've not even imagined."

Whether he is prototyping inside X's 20,000-square-foot workshop in Mountain View, California, or designing from home due to the COVID-19 pandemic, Ewing's days consist of hands-on work with components, interactions and meetings with team members, and hours devoted to research and development. That effort has produced tangible results.

The company's offices are populated by several robot prototypes, all of which bear a slight resemblance to the "Number 5" robot featured in the 1986 classic film "Short Circuit." Unlike that fictional machine, these mobile robots don't talk, but they are sleeker and smarter. Current testing requires the prototypes – relying on artificial intelligence software and equipped with cameras, sensors and one "arm" - to grasp and accurately sort waste into bins earmarked for landfill, recycling and compost.







'02. show off their remote control cars before a race at a Selinsgrove parking lot, circa 1980. At right: They adjust the fuel/ air mixture of Fletcher's car. The cars were powered by nitro gas.

Above: Ewing, left, and his brother, Nathan,



"We have tens of thousands of virtual robots running in the cloud to learn this task nightly," Ewing revealed. "What's gained in experience and learning is then transferred and shared to the physical robots. We have reduced contaminated waste from 20% to less than 5%. This proves that robots can learn tasks in the real world through practice versus having to code every new task, exception or improvement."

It could be several years before the robots envisioned by X become part of the fabric of society. That reality doesn't faze Ewing, thanks to lessons learned in childhood, augmented at Penn College and cemented in his various professional experiences.

"The challenge is what drives me and inspires me to be both creative and inventive in solving problems," he said. "I aim to be a lifelong learner and feed my curiosity as much as possible." Consider it fed.

> Ewing proudly displays some of his Soap Box Derby trophies outside his Selinsgrove home in 1977. He credits building Soap Box Derby and remote-control cars for developing his mechanical aptitude and learning the value of patience.



Ewing patiently waits for the start of a Soap Box Derby race at Bucknell University in the mid-1970s. At right is Ewing's father, Dalas, who with his two brothers owned Ewing Brothers Inc., a custom home builders business. Ewing's dad eventually branched off to form his own company: Ewing Building Products.

GRAD'S GIFT *CONSTITUTION* MACHINING LAB

A grateful Larry Ward, '66, helps revamp lab in which he learned

by Tom Speicher, writer/video producer

ost people stepping inside a machine shop tolerate a cacophony of sounds. When Larry Ward enters, he embraces sweet music. For him, the noise generated by mills, lathes, computer numerical control machines and related equipment coalesces into a soothing beat. Ward's senses are so keen to the echoes of manufacturing that he can diagnose a machining problem just with his ears, like a proud conductor identifying the source of a symphony's rare sour note.

Machinery has produced the soundtrack for Ward's rich, 50-plus-year career, and thanks to his generosity, Ward has ensured that his "music" will be everlasting at his alma mater. Future generations of Pennsylvania College of Technology students will play Ward's favorite "songs" on "instruments" furnished by his gift. The entrepreneur's donation of more than \$1 million – the largest alumni gift in the history of the college – financed the recent revamping of one of the oldest instructional spaces on campus – the machining lab. The 14,299-squarefoot facility features fresh lighting, flooring, fixtures and, most importantly, new equipment in the recently christened Larry A. Ward Machining Technologies Center.

"This gift is truly transformational, and that is the very best word I can use to The Larry A. Ward Machining Technologies Center – one of the oldest labs on campus – received fresh lighting, flooring, fixtures and, most importantly, new equipment. "Throughout my career, I've always looked for a return on my investment, and when I see these kids here at Penn College, I just feel like I'm getting my money's worth."

new lab sets us apart from other programs and is really leading us into the next generation." "Mr. Ward, with this donation, has set up the Penn College machining program for the next 50 years," emphasized Bradley M. Webb, dean of engineering technologies. "I think Mr. Ward's donation is critical to our ability to continue to put out skilled machinists for all of society."

The machining lab contains nearly 50 new mills and lathes, as well as cabinets

Larry A. Ward, a 1966 engineering drafting technology graduate, used the hands-on skills he honed at the college to eventually invent new packaging machinery and found Packaging Progressions Inc.

describe it," said Loni N. Kline, vice president for college relations. "The lab sets us apart from other and is really leading us generation." stocked with drill bits, end mills, micrometers, wrenches and other tools required for each piece of equipment. About 90 students from five manufacturingrelated majors receive vital hands-on experience in the space each semester.

"I'm extremely grateful," said a smiling Christopher M. Schweikert, majoring in manufacturing engineering technology and one of about 50 students who greeted Ward with thunderous applause at the lab's unveiling. "These new machines really do make a difference to our program."

"It looks amazing. It's better than what I was ready to walk into," added Dakota C. Harrison, a fellow manufacturing engineering technology student. "It has just completely transformed the entire lab, and we really couldn't have done it without Mr. Ward."

Without Penn College's predecessor Williamsport Technical Institute, Ward

believes he wouldn't have been in a position to bestow such a gift. The Corning, New York, native who liked to work with his hands enrolled at WTI in the mid-1960s because of its strong reputation for producing graduates with real-world skills.

He chose engineering drafting technology, which required work in the same machine shop transformed by his recent donation. He successfully juggled night classes with various jobs to be among the first graduates of Williamsport Area Community College in 1966. (WTI became the community college the previous year.)

"I got a skill I could actually use, and they offered a full-rounded education," Ward said. "All through my working career, I have thought back when I'm doing something, 'Oh yeah, I remember covering this at Tech.' I can still draw on things I learned here, today. I just can't say enough about the education I got here."

That education led to an eclectic career. Ward designed typewriters for Smith Corona, served as a Navy deep-sea diver and worked as a hyperbaric engineer at the University of Pennsylvania and a project engineer at Exide Battery. He assisted in the design, layout and startup of two manufacturing plants before transitioning to sales and service of packaging machinery and supplies in the late 1970s.

The realization that automation and efficiency were key for manufacturing success inspired Ward to create his own business, Packaging Films and Equipment Co., out of his home in 1981.

He designed automated packaging lines, installed and serviced equipment, and sold the materials that ran on the packaging machines.

In the mid-1980s, Ward invented the Arc-Tronic Hole Perforator, which employs an electric arc to produce clean vent holes in plastic film for all types of packages, including food products. He founded Packaging Progressions Inc. in Collegeville in 1989 to market the device.

A few years later, the company began designing and manufacturing interleaving and stacking machinery for the food

packaging industry. The automated equipment accurately inserts paper between food items, such as sliced Philly steaks, hamburgers, pizza and bacon.

With Ward as maestro, Packaging Progressions became a hit, growing from \$250,000 in first-year sales to a \$30 million-a-year operation. In 2017, the company moved to Souderton and a 35,000-square-foot facility, mostly consumed by stainless steel machinery produced in-house. Today, it's the world's leading manufacturer and supplier of highspeed interleaving and stacking machines.

Ward sold Packaging Progressions to the Middleby Corp. in July 2019, and his son, Drew, assumed leadership of the company.

While increasing his workforce from five to about 70 employees, Ward actively recruited Penn College graduates, desiring their hands-on technical experience. In recent years, he donated materials and equipment for the machining and welding programs and began sponsoring a commencement award for mechatronics students.

"When we sat down and thought about this project, the immediate name that came to mind for us that we wanted to display on this building was Larry Ward," Kline said. "He's been supportive of Penn College in many ways over the years, and so what better way to engage someone so wonderful."

"Throughout my career, I've always looked for a return on my investment," Ward said moments after walking through the refurnished lab for the first time. "And when I see these kids here at Penn College, I just feel like I'm getting my money's worth."

Howard W. Troup, instructor of automated manufacturing and machining, likened Ward's gift to winning the lottery with the mortgage due.

"It was just fantastic! That feeling was shared by all my coworkers," he said. "The machines that we had were being overwhelmed by students. There weren't enough workstations. The machinery was getting old. It just needed to be replaced."

The responsibility for choosing replacements fell to Troup with input from Ward.

"Howard was instrumental for the vision of this space, thinking through all the equipment and necessary renovations," Kline said. "And Larry had some great ideas. His recommendation to us was to get as much automation as possible, because that's where we are in industry."

Troup assembled a team consisting of Ron H. Beck, machine shop toolroom attendant; Bryan C. Schaefer, maintenance mechanic/millwright specialist; Allan M. Meck, electronics service specialist; and automation engineering technology students Brian J. Daniels, Conner J. Nickerson and Levi E. Pomeroy to lead the renovation throughout the summer.

The crew disconnected and removed about 100 pieces of instructional equipment - for the painting, flooring and LED lighting to be completed – before returning about 40 machines and installing nearly 50 new ones.

"We had to attach power to the machines. Most of the time that meant new wire and connectors," Troup said. "We also had to connect compressed air lines to the new machines."

In addition to that work, the students used a CNC router in The Dr. Welch Workshop: A Makerspace at Penn College to fabricate 200 tool holders - made of wood and foam - for the drawers of the lab's new cabinets.

"If it wasn't for those three students and our own staff, the lab would not have been ready for the start of the fall semester," Webb said. "It was a feat. We were behind by at least a month because of the pandemic. There were long days and weeks."

3

The college auctioned 44 old machines before purchasing the new equipment. The replacements include more than two dozen dual-purpose CNC mills and lathes that facilitate both manual and – adhering to Ward's wishes - automated operations.

"While CNC is great, we have a fundamental belief that understanding the manual process makes you a better

Penn College's automated manufacturing & machining majors

In the newly updated Larry A. Ward **Machining Technologies Center** and the Automated Manufacturing Lab (in the College Avenue Labs building), Penn College offers:

Spellek

- ♦ Manufacturing engineering technology (bachelor's degree)
- ♦ Automated manufacturing technology (associate degree)
- ♦ Machine tool technology (associate degree)
- ♦ Metal fabrication technology (associate degree)
- CNC machinist (certificate)





machinist. We start students there and move up into the CNC applications," Webb explained. "The dual-purpose machines allow our students to get a much broader experience, beginning in their first semester."

"There's going to be a wide array of machines that I can say that I know how to use," Harrison said. "When I show up for my first week of work and they are expecting to train a kid who doesn't know how to do anything, I can show them that I actually know a thing or two."

Ward appreciates the college's approach, which has resulted in a near 100% placement rate for graduates of manufacturing-related programs.

"The students that come out of here are well-trained," he said. "With manufacturing coming back, Penn College is giving America what we need. We don't have enough people with technical skills. Penn College teaches them those skills."

Deloitte and the Manufacturing Institute estimate that more than half of the projected 4.6 million manufacturing job openings during the next decade won't be filled because of the skills gap. The new lab full of drill presses, surface grinders, dual-purpose CNC lathes and mills, and electrical discharge machines will enhance Penn College's pivotal role in shrinking that gap.

"The students now have access to the new technology on their own machine, learning and operating that machine during their class period," Webb said. "They also still have access to the manual skills and to faculty who have worked in industry. Our students are ready when they leave here to really hit the ground running."

Just like Ward was more than 50 years ago.

"They taught me here to do a good job, stand behind what you do and you'll do well," he said.

"I have done very well, so I want to give it back for the next generation."

Bravo.

🔀 Watch a video about the lab's unveiling at magazine.pct.edu/gg





NURSE'S CALLING

by Jennifer A. Cline, writer/magazine editor

STEPHANIE SUZADAIL

loves providing calm in the center of a storm.

"I'm a bit of a tornado myself, so the idea of chaos excites me," says Suzadail, a flight registered nurse for Geisinger Life Flight who, with a flight medic, cares for patients in critical situations in the confines of a helicopter. "I love chaos. I work best under pressure, and there's a lot in emergency and trauma."

The crew's work requires proficient and level-headed response.

"Emergency nursing is a lot of calm in crisis and prioritization in the face of chaos," Suzadail says.

A 2014 Pennsylvania College of Technology graduate with a bachelor's degree in nursing, Suzadail began her career in health care as a volunteer emergency medical technician while still in high school. But the inspiration began well before that.

Her dad, she says, was like a human Humpty Dumpty. "If it could be fallen through, under, on, beside, around," she jokes, "that was him."

"I got used to being there and helping take care of him," she says. "My mom then also got really sick with an immunity disorder that wiped out her ability to create antibodies. As a result, she saw many intensive care visits over simple illnesses you and I could easily fight off. Medicine was something I was exposed to a lot as a kid."

Unfortunately, she's been exposed to trauma, as well.

In high school, she survived abuse from a boyfriend. But as a result, she was motivated to empower others, earning a master's degree in forensic nursing.

"I wanted to make their voices heard and give them justice I didn't feel like I had," she explains. "I have no regrets

in my own life but recognize I wouldn't want others to feel what I felt. I wanted and advance the current state of the legal system."

As she graduated from high school, she applied to nursing schools and was accepted by a private university in a large city. But her heart wasn't in it – yet. She changed her major to pre-medicine, but was overwhelmed by the big city, big class sizes, and the big ambitions of an overloaded course schedule. She became depressed and failed most of her classes. Then she transferred to Penn College. Instead of a residence hall, she moved into living quarters at the Loyalsock Volunteer Fire Co. as part of a "live-in" agreement that several local volunteer fire companies have initiated to provide free room and board for EMT-certified college students who agree to answer ambulance

calls overnight.



to advocate for men, women and children

Suzadail initially enrolled in the college's paramedic program before she decided to switch to nursing, the major she had initially explored.

This time, she was all in.

"After the defeat of my first year of college, I buckled down," she said.

She also began to find a support system, including her now-husband, Chris, a fellow firefighter, 2005 Penn College graduate and faculty member currently on special assignment to help the college implement a new enterprise resource planning system. He supported her education when her mother no longer could.

Each semester, her confidence and her grades improved as she found her niche.

And then came more trauma when, driving home the night before an anatomy exam, her car left the roadway and rolled six or seven times before coming to rest on its roof.

The accident caused a brain injury and \gg

Stephanie Suzadail, '14, in action as a student in a Technical Austere Medical Evacuation class last summer: The students trained in full tactical gear and practiced with the bare minimum essentials they would have in austere" environments. (In this case, she and er teammates, a SWAT officer and tactical paramedic, planned how to coordinate a scenario that simulated a hiker who had fallen several hundred feet off a cliff.)

"I'm sort of proof that anything possible

Suzadail is grateful for a support system that includes her husband, Chris, '05, left, her parents, colleagues and Penn College faculty.

a minor skull fracture. Suzadail cannot remember the moments that led up to the crash - nor several days before it.

She continued her nursing education, but "for all intents and purposes, I never should have passed," she says.

As she recovered from the head injury, she managed neurological issues. She spent long nights studying while doctors changed medications, some of which caused her to doze off or made it difficult to focus.

But as she communicated her concerns, the college's faculty provided support.

"They worked with me. I wasn't given anything I didn't earn, but they worked with me so I didn't have to drop out of school," Suzadail says. "That means something. My faculty saw potential. They weren't easy on me, but they were supportive. Semesters got better as my doctors figured things out.

"I never would've gotten to graduation, my first job, my master's degree with an almost 4.0 GPA, and then my dream job without the faculty who pushed me past my limits, who stayed there in my life as a support system when I wanted to give up. PCT nursing faculty are not just paid to teach; they get invested in your success when sometimes you can't see it in yourself."

She might not have seen it, but they did.

"She was extremely driven to attain the goal of becoming a nurse and worked very hard to attain this," recalls Karen L. Martin, associate professor of medicalsurgical nursing.

But the effects of her brain injury were not behind her. While a student, Suzadail worked as a patient care assistant at Williamsport Hospital. In May 2013, as she got ready for work, she noticed her left hand and arm were numb.

She wrote about the scary experience in her blog, Scrubs N' Sirens.

"I figured I slept weird on it and ignored it – I was running late," she wrote.

But when she arrived at work 15 minutes later, the numbress and tingling had spread throughout her left side.

She turned to a colleague to ask whether she'd ever experienced anything like it, but the colleague looked confused. Suzadail's words were garbled. As she tried to speak, she felt the left side of her face begin to slide and go numb. She tried to lift her left hand to touch her cheek but couldn't move it

"It all went black as I hit the floor." she wrote.

When she opened her eyes, she was in the hospital's emergency room. A chaplain was speaking to her, and a "stroke cart" was being wheeled into the room.

She answered questions, agreeing to receive a clot-dissolving drug and to be flown by helicopter to another hospital: Penn State Health Milton S. Hershey Medical Center, near her hometown. During a three-day stay in the medical center's neuro ICU, doctors determined that although she had shown the symptoms of a stroke, the cause was a rare type of headache called a hemiplegic migraine.

She recovered and spent the summer between her junior and senior years completing a 10-week nursing externship in the Emergency Trauma/General Surgery unit at the Mayo Clinic in Minnesota.

"It took me six years to graduate," she says. "I'm sort of proof that anything is possible. I went from a cruddy GPA to a 4.0 in my last semester despite my brain injury because I worked hard and had the right guidance. I think anywhere else, I would

have fallen by the wayside. So I love PCT."

"She sets the bar high and is a wonderful role model for our nursing students," says one of those guides, Dottie M. Mathers, professor of medical-surgical nursing and Suzadail's academic adviser. "As a student herself, she was always very polite and professional. She was enthusiastic about her learning and actively sought clarification as needed. She was a high achiever and earned top grades in my class. She was a role model to other students during her time at Penn College – being eager to help others learn but refusing to participate in any immature or unprofessional behavior."

After graduating, Suzadail worked in an intensive care unit and then an emergency room.

In the UPMC Williamsport ER, she received a DAISY Award for Extraordinary Nurses and found fulfillment in knowing that she was helping people on their worst days.

"It was not just the clinical and technical proficiency, but the art of nursing: the small squeeze of the hand and a smile to let them know you were there and they weren't alone," she says. "It was your mental health patients who felt their worlds crumbling around them and giving them empowerment back with something as small as a shower and a warm meal small acts of kindness."

In the course of her work as an emergency department RN, and her continued volunteer work as an EMT, she frequently encountered flight nurses and flight medics and admired their work. She read every book on the subject and dreamed of working in a helicopter.

She continued to advance her education, obtaining her master's degree, the trauma certified registered nurse credential, sexual assault nurse examiner training and other credentials. (In Fall 2020, she began pursuing a second master's degree in emerging media with a concentration in health communication.)

"Every certification I completed was with the end goal to fly," she says.

Nearly two and a half years ago, she met that goal as she joined the Geisinger Life Flight staff, flying out of a base at

the Williamsport Regional Airport in Montoursville along with several Penn College paramedic program alumni.

The weight of the work before her was heavy: "People associate the flight suit with competence, confidence and skills. Then I became the person in the flight suit."

One of the challenges is continual change: Patients change from moment to moment, illnesses evolve, and the field of medicine continues to advance, requiring her to learn about new diagnoses and treatments.

"I have to constantly know more, and I continually get served humble pie, but it's a cool job, because you get to operate at the top of your nursing license. I couldn't imagine anything else. The combination of adrenaline and brains is music."

The crew lands in tragic scenes. Often, she looks at patients who, intubated and unresponsive, do not look like the photo she sees on their driver's license. She strives to return them to that state.

Although they don't look like themselves, "you're looking at someone's someone," she says.

"The hard, defeating part of this job is that you're going to save a lot of lives, but some you are not," she adds. "Me, as an over-empathetic person, having been flown in a helicopter, having lost people, for me it was learning how to deal with these losses."

Emergency responders must learn to take care of themselves and know when to take a break, she says.

After difficult losses, the wins keep her going.

"The most rewarding experience has been when one of my most injured patients of my career, who was in a vehicle crash with a terribly lacerated liver requiring over 140 different blood products, multiple surgeries, months of intensive care, ventilator use, heart and lung bypass, and renal replacement therapy, was able to be discharged, and his brother sent me pictures of him and his children at his sister's wedding.

"I remember having to intubate him, start multiple blood products and complex medication drips to stabilize his hemodynamics in the middle of a dark helicopter. I visited him three times in the hospital, and every time, seeing him get a little better each time, made me realize this was where I wanted to be. Not every patient survives, but patients like him strengthen your resolve." Suzadail is a picture of resilience and

resolve.

"Not everyone has been as misfortunate to go through as many things as I have, but not everyone has been as fortunate as me," she says, grateful for a support system that includes her parents, husband, colleagues and Penn College faculty.

She recently accepted a part-time second job as a flight nurse with Penn State Health's Life Lion, where she flies on the same helicopter that transported her from Williamsport to Hershey when she was displaying the signs of a stroke. "I feel like every experience up to now has put me in the right place," she says. "I would have changed a few things, but nothing has let me down."

She hopes to use the lessons from the storms she's weathered to help not only her patients, but future nurses - and others who find themselves facing obstacles in the pursuit of their dreams.

"Bad things can happen to the best people," she says. "However, it's important to realize that those bad things never have to define who you are or destroy your dreams.

"It's OK to put your goals on a brief pause, but pick them back up and keep working on them. Anything we want in life, we can make happen if we dig our heels in, refuse to take 'no' for an answer and instead reframe our thinking as 'not right now.' So there's no shame in stepping back, taking a breath, getting your finances, mental health, physical health and family situations in better places in order to dedicate yourself completely to your goal. Timelines are self-imposed – I took six years to get my BSN, and I like to think I'm a decent nurse anyway." Her faculty agree: "She was, and is, genuinely a delightful person and an excellent nurse," Mathers says.



EDUCATION FFERS Z 0 S Ю Z ш TER ЮШ S S 2 D N N A M 0 C



Applications opened in January for Penn College's new Master of Science in Nursing, nursing education, with classes set to begin in Fall 2021. Created for the working nurse, the degree is designed to be completed on a part-time basis within two years. All classes are conducted online.

To learn more, call 570-327-4519 or visit www.pct.edu/nursing

niche

The pond is 15 feet deep at its deepest spot. The inlet side is 4 feet deep to accommodate warm-water fish (perch, sunfish, bluegill and bass), and turtles and waterfowl have resumed habitat there. The ultimate goal of college horticulturists Andrea L. Dildine and Chad L. Karstetter is to expand the area to include a second pavilion and to increase a focus on outdoor recreation that is so beneficial to the health and well-being of the college community. "Now we are able to reach the water – where before we could not! – and people can potentially enjoy fishing, kayaking, outdoor events at the pavilion and hiking the trails," Dildine said. Building construction students built a new deck, as well as a footbridge allowing better access to the site from the rest of the Earth Science Center campus, and concrete students artfully added to that part of the work. General Services performs all on-site prep, pays for the necessary materials and makes sure that supplies are on-site when needed.

Allenwood Camp Lane, Montgomery

Penn College's Herman T. Schneebeli Earth Science Center, just off Route 15 about 10 miles south of the college's main campus, is home to a nearly hidden instructional gem: a 2.5-acre pond that, over several semesters, has been the object of a crosscurricular effort to reverse the ravages of time, including an overgrowth of brush and other vegetation. The project has involved students and faculty from the heavy construction equipment, concrete science, building construction and horticulture majors, all working in conjunction with the college's General Services department.

In horticulture instructor Justin Shelinski's Turf Management class, students assisted with soil preparation and seed work. Lending their expertise to the hydroseeding portion were Jeremy L. Thorne, '13, and Scott Burk, of Scott's Landscaping in State College, a member of the program advisory committee. The first step was to drain the pond with water pumps; then, as warm weather approached in May 2019, the site was dry enough for equipment to move in.

"Erosion control proved to be the most challenging aspect of the project – removing dirt out as the water followed behind us," explained Seth J. Welshans, laboratory assistant for diesel equipment technology. "I relate this to a chess game. Every move you make gets you closer to a win or loss, and before you make a move, you must think about your next three to four moves and what the results will be. Many of our students experienced this through the project, and you cannot learn it in a textbook."

> Over 12 weeks, heavy construction equipment students worked to dig, load, haul, clean and grade the pond, moving an estimated 13,850 tons of clay and 2,000 tons of topsoil, 25 tons at a time. Students employed a Caterpillar 320B excavator, an XL2200 Gradall, a Volvo A-20 haul truck, a CAT D3G bulldozer and a CAT 953C track loader.

1960s

Gary G. Koppenhaver, '65,

mechanical drafting, retired in 2007 as an engineering technician designer after 42 years with Gannett Fleming. He resides in Enola.

Keith Rote, '66, drafting

technology, retired from Newport News Shipbuilding after 46 years. He was an engineering designer for nuclear naval fluid systems and refueling equipment and facilities. He resides in Hampton, Va. He is married and has two sons and five grandchildren.

1970s

Bertrand Crouthamel, '70,

mechanical drafting, is a senior consultant electrical engineer for ESP USA, designing power and control systems for movable bridges. He resides in Tampa, Fla.

Art Cianca, '71, machinist general, retired after 37 years as a machinist in the powder metal industry in Ridgway, where he resides.

Barry W. Cooper, '72, electrical construction, retired from PPL as an electrical leader after 39 years of service. He is married and has two children and two grandsons. He resides in Winfield.

Jonathan H. Shaffer, '72,

business administration, retired from the U.S. Army as a major/ GS-13 senior military analyst. He resides in Seal Beach, Calif.

Warren A. Peter, '74, carpentry and building construction technology, retired from the company he founded and resides in Indiana, Pa.

John J. Urick, '74, forest technology, retired in December 2019. He resides in Fleetwood.

William L. Lehman, '75, civil

engineering technology, retired in 2020 after 34 years as a county planner. He has been a licensed professional land surveyor since 1979 and served as president of the Pennsylvania Society of Land Surveyors in 2010. He resides in Somerset.

Mike McNamara, '76,

ornamental horticulture technology: floriculture, is a horticulturalist for Spring Lake Golf Club. He resides in Toms River, N.J.

Thomas F. Schatz, '76,

automotive technology, is an area manager for Fiat Chrysler Automobiles. He earned a bachelor's degree from Pittsburg (Kan.) State University and an MBA from Lake Erie College. He resides in Boonville, Ind.

Robbin S. (Schreiner) Smith,

'76, forest technology, is retired and resides in Williamsport.

Mary Ann Henderson, '77,

radiologic technology, is a senior sonographer for Inova. She provides sonography for high risk obstetrical patients in an antenatal hospital department. She holds several specialized credentials from the American Registry of Diagnostic Medical Sonographers. She resides in Warrenton, Va.

Kevin F. Mentzer, '77,

engineering drafting technology, retired from Case New Holland in 2020. He was a current product manager for hay-prep products. He resides in Ephrata.

R. Mark Upright, '78, machinist general, retired from Textron Lycoming after 42 years of service in the manufacturing of airplane engines. He began working at Textron while attending WACC. He resides in Montoursville with his wife, **Sharon (Wright), '78,** computer science technology, and two of their eight children. They visit five grandchildren in Alabama and Florida, and a daughter in Alaska.

David D. DeWalt, '79,

toolmaking technology, is the president and owner of Maitz Home Services. "After working in my field of study from WACC, the desire to own a business led me to the HVAC and plumbing field," he said. He resides in Zionsville.

Michael Holland, '79, welding,

is a chief inspector for Kinder Morgan, overseeing all pipeline, welding and related activities. He resides in Williamsport.

1980s

Reese F. Dibble, '80,

accounting, retired as the City of Hailey water superintendent. He resides in Hailey, Idaho.

David E. Hoover, '81, machine

tool technology, spent more than 30 years in the electronics connector field and is an R&D tooling manager for SIG Sauer in ammunition manufacturing research and development. He is the co-author of an Association for Talent Development award-winning toolmaker apprenticeship program with an employer in New Albany, Ind. He resides with his wife in Ward, Ark.

Stephen P. Gilbody, '84,

electronics technology, is a network administrator for University of Scranton. He resides in Clarks Summit, where he enjoys the solitude of northeastern Pennsylvania with his wife of 28 years and daughter.

Wayne A. Burke, '85, forest

technology, is a senior procurement specialist for the Pennsylvania Turnpike Commission. He created and took the lead on a business resource group to research generational gaps in the turnpike's workforce and blend the workforce to reduce those gaps. He resides in Mechanicsburg.

Tracy DeCoursey, '85,

engineering drafting technology, retired in 2007 as a designer draftsman for PennDOT. After retirement, he took courses in Penn College's professional cooking major. He resides in Williamsport.

Jack Neidig, '86, diesel

g, technology, is a diesel technology instructor for SUN ne, Area Technical Institute. He . He resides in Milton.

James Mothersbaugh Jr., '87,

broadcasting, is president, founder and show director of Road Radio USA, which shares the message of underage drinking prevention and youth safety through Mothersbaugh's personal tragedy. The program has received awards from the Governor's Alcohol Highway Safety program and the Pennsylvania Brain Injury Association. He resides in Williamsport.

Diane Shaheen, '88, individual

studies, is completing a bachelor's degree in interdisciplinary studies at Massachusetts College of Liberal Arts. She resides in Lee, Mass.

Greg Black, '89, landscape/ nursery technology, is president/ owner of Black Landscape Contracting Inc. He resides in Mechanicsburg.

1990s

Todd M. Mason, '91, landscape/ nursery technology, is director of sales and development, turf and ornamental, for Sipcam Agro USA. He is responsible for the sales organization across the U.S. and works with university researchers to develop new products. He is a member of the Penn College Landscape/ Horticulture Technology Advisory Committee, the Leukemia & Lymphoma Society Maryland Chapter Board of Trustees, and RISE committee. He resides in Easton, Md.

Andrew Klein, '92, toolmaking

technology and automated manufacturing technology, is a teacher at Western Montgomery Career and Technology Center. He holds a master's degree in education and bachelor's degree in business administration, and authored NIMS Level 1 Study Guide, published by Cengage in 2017. He resides in Reading.

Randall Snare, '92, HVAC technology, owns Snare's Property and Handyman Services.

He resides in Pittsburgh. **Shawn M. Young, '93,** aviation technology, is general manager of East Coast Propeller Service Inc., an FAA-certified repair station specializing in aircraft propeller

overhaul and repair. He resides in

Elizabethtown. Jeremy Nunn, '94, diesel technician, is a shop leader for Glenn O. Hawbaker Inc. He resides in Williamsport.

Steven Roupp Jr., '94,

construction carpentry, is a multi crew foreman for Penn Line Services, clearing power lines for a local utility company. "Twentysix years after graduation, I now have a son attending Pennsylvania College of Technology!" he said. A certified arborist, he resides in Middleburg.

James Bomberger, '95,

landscape/nursery technology, is a truck driver for Good Transport Services. He resides in Jonestown.

Catherine (Dershem) Farr, '95,

computer information systems, is a criminal justice instructor for Lycoming Career & Technology Center. She resides in Trout Run.

Dora L. (Scholl) Walter, '95,

business management, is retired and resides in Lewisburg.

Karen Gair, '97, occupational therapy assistant, is retired and resides in South Williamsport.

Jeffrey Johnson, '97, automated manufacturing technology, is a sales application engineer for Contour Fine Tooling. He resides in Orlando, Fla.

Nathaniel C. Wright, '97,

graphic communication, is a job trainer for the Lancaster/Lebanon Intermediate Unit. He resides in Elizabethtown.

Todd J. Fox, '98, business

management, is an organizational development consultant for Habitat for Humanity International Inc. He works and consults with more than 1,200 affiliates throughout the U.S. to expand and promote the organization's mission of providing simple, decent and affordable housing to families that have earned the privilege of home ownership. "This occurs while traveling the entire U.S. as a Habitat subjectmatter expert in financing, and seeing firsthand the impact safe housing has on families' lives is priceless!" He resides in Williamsport.

2000s

Adam C. Maglich, '00,

construction management, is the dedicated quality manager for Whiting-Turner Contracting Co.'s northern Virginia region. He resides in Haymarket, Va.

Sean Harp, '01, automotive service technician, is an emergency management specialist for the Pennsylvania Emergency Management Agency. He resides in Linglestown.

Sandra Hollingsworth, '01, early childhood education, is retired and resides in Muncy.

David Hoover, '01, plastics and polymer engineering technology, is an engineering manager for Pactiv. He resides in Williamsport.

Ronald Lesher, '01, construction management, is assistant vice president of workplace delivery for Geisinger Health System, responsible for capital project construction. He resides in Bloomsburg.

Jason Siegfried, '01,

manufacturing engineering technology, is director of manufacturing for surgical for Bioventus, where he manages the outsourced manufacturing of all synthetic and allograft surgical products, oversees the manufacturing engineering team and leads new product development for human cellular tissue products used in spinal fusion procedures. He has received a CEO Award for development of OSTEOAMP Select Fibers for posterolateral spinal fusion and Key Innovator Award for MOTYS placental tissue product used to treat osteoarthritis in the knee. He and his wife relocated from Scranton to Raleigh, N.C., in 2018 for his work with Bioventus.

Sabrina J. (Lowman) Slimmer,

'01, physical fitness specialist, is a children's pastor for Keymar Evangelical Wesleyan Church. She and husband, **Shaun, '02,** computer-aided product and systems design, reside in Keymar, Md. They were married in Williamsport during Spring Break 2002.

Matthew Ott, '02, construction management, owns Modus Construction LLC. He resides in Mohrsville.

Shaun Slimmer, '02, computeraided product and systems design, is a technical sales manager for Carlisle Interconnect Technologies, where he began working just out of college. He returned to the company after working for firms in Kansas and Florida. He resides in Keymar, Md., with wife, Sabrina J. (Lowman), '01, physical fitness

specialist.

Benjamin Delp, '04,

manufacturing engineering technology, is a lead manufacturing engineer for Dura-Bond Pipe LLC. He resides in Schuylkill Haven.

CLASS NOTES

Jason Praster, '05, welding and fabrication engineering technology, is a welding engineer for Zachry Group, a provider of construction, engineering, maintenance, turnaround and fabrication services. He resides in San Antonio with his wife, Sarah (Jinar), '06, physical fitness specialist, and their son.

Adam Waigand, '05, building construction technology, owns Craft Masters Construction LLC. He resides in Conway, S.C.

Kevin H. Chase, '06, heating, ventilation & air conditioning technology, owns ARC Heating and Service Co. in Cogan Station. He resides in Montoursville.

Melani B. (Grady) Decker,

'06, dental hygiene, earned a master's degree in dental hygiene education in 2015. She resides in Colorado Springs, Colo.

Kyle F. Dolinsky, '06, diesel technology, is a heavy equipment mechanic for Metropolitan Washington Airports Authority. He repairs and maintains all vehicles and equipment, including fire and police equipment. He resides in La Plata, Md.

Joshua T. Fox, '06, civil engineering technology, is a water and wastewater practice area leader for Herbert, Rowland & Gubric Inc. He was named one of Engineering News-Record MidAtlantic's 2020 Top 20 Under 40 Young Professionals. Fox resides in Harrisburg.

Mark Orleski, '06, landscape/ nursery technology, is a firefighter/EMT for Loudoun County Fire and Rescue. He has received the Lifesaving Award and Unit Citation for going to extreme measures to save a 17-month-old girl who was choking and went into cardiac arrest. He holds a bachelor's degree in fire science from Columbia Southern University and resides in Gettysburg.

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CLASS NOTES

Matthew D. Stephens, '06, mass

media communication, won a 2019 Mid-Atlantic Emmy Award in the Sports Photography category for his work on "Unrivaled: The Penn State Football Story." He is a videographer/editor for WPSU Penn State, where he films and edits video content for Penn State football and basketball and contributes to other WPSUproduced projects. He resides in Bellefonte.

Ryan Cooper, '07, applied health studies: cardiovascular technology, is a senior territory manager for Ostial Corp. He was Ostial's sales rep of the year for 2019 and was named to Cardinal Health's Presidents Club for achieving Top 3 in sales in 2015. He resides in Conshohocken.

Erik Tallada, '07, hospitality management, is a regional hotel manager for Onvo Hospitality. He resides in Clarks Summit.

Matthew Doherty, '08,

technology management, has been a special agent with the Naval Criminal Investigative Service since 2015. He recently changed offices and is working at NCIS Resident Agency New London, Conn. He resides in Gales Ferry, Conn.

Alexander Leach, '08,

information technology: web & applications development, is vice president of technology for L. Catterton. He resides in Stanford, Conn.

Melanie Stump, '08, paramedic technician, is an educator for the Williamsport Area School District. She is developing a new career and technical education program in homeland security for Williamsport Area High School students. She has two children and resides in Milton.

Joshua Rosetta, '09, information technology: network specialist, is a senior cyber defense infrastructure engineer for Penn State Health. He and **Bridget** Palmer, '07, graphic design, met at Penn College and have been married for 10 years. They reside in Shippensburg.

Elizabeth (Collins) Shorb, '09, dental hygiene, is a dental hygienist for Cole Family Dentistry. She resides in Gettysburg.

2010s

Juliette (Yeager) Finley, '10,

physical fitness specialist, is an outpatient therapeutic nutrition specialist for Abbott. She provides therapeutic nutrition resources and oral nutrition supplements for internal medicine, bariatrics and oncology clinics. She resides in Jacksonville Beach, Fla.

Jenna (Eichner) Hunt, '10,

emergency medical services, is a paramedic for Hanover Area Fire & Rescue. She resides in McSherrystown.

Joseph Simon, '10, business administration: management information systems, is a purchasing administrator for PMF Industries. He resides in Williamsport.

Estel F. Taylor, '10, HVAC design

technology, is an estimator for Alberio Energy, formerly Advanced Power Control. He is president of ASPE (American Society of Professional Estimators) Delaware Chapter 75, and served as vice president in 2017 and 2018. He resides in Newark, Del., with his wife, Renee (Paulhamus), '11, business administration: small business and entrepreneurship concentration.

Megan R. (Pennington) Asbeck,

'11, graphic design, is a lead web designer for State University of New York at Brockport. She is pursuing a Master of Fine Arts in visual studies and resides in Akron, N.Y.

Adriana (Glotz) McSweeney, '11,

health information technology, is a certified medical assistant for WellSpan Health. She resides in Fallston, Md.

Renee (Paulhamus) Taylor, '11, business administration: small business and entrepreneurship concentration, is employed by CSC. She resides in Newark, Del, with her husband, Estel F., '10, HVAC design technology.

Lance B. Richardson, '11,

plastics and polymer engineering technology, is a process engineer for W.L. Gore & Associates. He resides in North East, Md.

Stephanie N. Tempesco, '12,

legal assistant-paralegal studies, is a senior paralegal/office manager for Malee Law Firm. Her daughter Cortney N. graduated from Penn College with a bachelor's degree in nursing in May 2020. They reside in Williamsport.

Polikseni Hysi, '13, dental

hygiene: health policy and administration, recently attained a Doctor of Health Sciences degree with a concentration in education in health care professions. She is an adjunct faculty member for Bergen Community College. She resides in Clifton, N.J.

Jonathan Probst, '13, residential construction technology and management, is director of purchasing for Dan Ryan Builders. He resides in Cranberry Township.

Ashley (Adams) Spickler, '13,

early childhood education, is a home visitor for Huntingdon County Early Head Start. She resides in Huntingdon.

Lester Wrobel, '13, electronics and computer engineering

technology, is a principal technology engineer for PSEG, the largest gas and electric service provider in New Jersey. He received a master's degree in engineering management in 2017. He resides in Florham Park, N.L

Tyler Bodder, '14, heating ventilation & air conditioning technology, is a utility technician, air conditioning and refrigeration, for Merck & Co. Inc. He resides in

Coopersburg.

Travis Gibbon, '14, information

technology: network specialist, owns Island Rentals of Hilton Head. He manages 75 vacation rental properties for private owners and resides in Hilton Head Island, S.C.

Nathan J. Katzmaier, '14,

paramedic technician, is a firefighter II/paramedic for the City of Goose Creek Fire Department. He resides in Walterboro, S.C.

Victoria L. Kostecki, '14, baking and pastry arts, is a culinary area supervisor for Hershey

Entertainment & Resorts, where she manages cold side food production at the Giant Center, as well as all food production for The Overlook Food Court and The Outpost in Hersheypark. She was named Hershey Entertainment & Resorts Outstanding Employee in 2019. She received a bachelor's in applied management from Penn College in 2016. She resides in Palmyra.

Brett A. Trimble II, '15, welding

technology, is a certified pipe welder for J.F. Kiely Construction of PA, fabricating and installing natural gas regulator systems, building new natural gas pipelines and welding on live gas mains. He resides in Montoursville.

Loralee E. Lindemuth, '16,

dental hygiene, is a dental hygienist for Healthy Smiles of Corry. She resides in Tidioute.

Lillian Pakradooni, '16,

accounting, is a refund coordinator for Trustmark Health Benefits. She resides in Lancaster. Houssain Mohammed Shannier,

'16, heating, ventilation & air conditioning design technology, is a national HVAC sales manager for Samsung Electronics. He resides in Saudi Arabia.

Charles M. Stankye IV, '16,

residential construction technology and management, is a builder third class petty officer for the U.S. Navy. He recently came home from a 15-month tour in Souda Bay, Crete, Greece, and resides in Derby, Conn.

LaQuinn N. Thompson, '16,

applied human services, received the York County District Attorney's 2019 Outstanding Service as a Citizen Award for his work to create a safer and more viable York. He is the director of community outreach for St. Matthew Evangelical Lutheran Church. He resides in York.

Stephanie M. (Puckly) Biltz,

'17, welding and fabrication engineering technology, is a weld engineer II for BAE Systems, responsible for the amphibious combat vehicle for the U.S. Marines. In 2018, she earned a master's degree in management and organizational leadership from Penn State. She resides in Felton

Sarah (Deem) Derolf, '17,

business administration: management, is employed by Penske Truck Leasing. She resides in Selma, N.C.

Stacey French, '17, applied human services, is a family preservation and reunification counselor for Family Intervention Crisis Services. She resides in

Montoursville.

Zachary Meredick, '17, plastics and polymer engineering technology, is a process engineer for Sealed Air. He resides in Greenville, S.C.

Kristieann (Wild) Molitor, '17,

nursing, is an RN clinical manager for Maxim Healthcare. She manages five clinical supervisors, who oversee RNs, LPNs and aides working in patients' homes in Durham and Raleigh, N.C. She resides in Raleigh.





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Efrem K. Foster, '18, applied management, is a pediatric emergency department registered nurse for Golisano Children's Hospital. He earned a Bachelor of Science in nursing from University of Rochester in May 2020. He resides in Rochester, N.Y.

Joseph M. Radice, '17, heating,

technology, is an HVAC technician

for the New York City Department

Eliza R. Whyman, '17, graphic

Stockport, England, where she

Laura Cholko, '18, landscape/

horticulture technology: plant

cultivator for DocHouse LLC,

where she cultivates medical

cannabis, cares for mother plants

and produces clone plants. She

ventilation & air conditioning

of Education. He resides in

design, is a designer for

MediaCom. She resides in

performs in a brass band.

production, is a cannabis

resides in Port Carbon.

Bayside, N.Y.

Rachel L. Hill, '18, landscape/ horticulture technology: plant production emphasis, owns Brush Valley Floral. She resides in Rebersburg.

Amanda N. Suda, '18, landscape/ horticulture technology: plant production, is a program assistant in the orchard at Milton Hershey School, where she helps to plant and provide other farm maintenance, harvests produce for a student-run market and

assists with student interns and after-school clubs. She resides in Harrisburg.

Nikki Gipe-Werts, '19, nursing, is a registered nurse for Bucktail Medical Center. She resides in Cross Fork.

CLASS NOTES

Genevieve Guzman, '19, nursing, is a registered nurse for Milton S. Hershey Medical Center, where she is an oncology nurse in the Inpatient Penn State Cancer Institute. She is biotherapy and chemotherapy certified. She resides in Hummelstown.

Casandra Henderson, '19,

business administration: banking and finance, is a multichannel correspondence writer for Vanguard, an investment management company. She resides in King of Prussia and is a member of Vanquard's Out Professional Engagement Network.

Michelle D. Kachik, '19, physician assistant, is a PA for WellSpan Health, working in an orthopedic walk-in/urgent care facility in York. She recently completed a Master of Medical Science from St. Francis University. She resides in Dover.

Danette Resciniti, '19, surgical technology, is a surgical technologist for Geisinger Medica Center. She resides in South Williamsport.

Devon Sanders, '19, business administration: sport and event management, is an assistant baseball coach for Juniata College. He resides in Bloomsburg.

Stephen I. Ulmer, '19,

manufacturing engineering technology, is a machinist for Pneu-Dart. He resides in Cogan Station.

2020

Mohanad Alguraish, '20, nursing, is a staff nurse for UPMC in the Susquehanna Region. He resides in Williamsport.

Alexis I. Ashby, '20, applied health studies: surgical technology, is a certified surgical technologist for UPMC Susquehanna. She is an alumni member of the college's Surgical Technology Advisory Committee and is pursuing a master's degree in physician assistant studies from University of Pittsburgh. She resides in Williamsport.

Evan N. Bond, '20, surveying technology, is a surveyor for Arthur A. Swallow Associates LLC. He resides in Saylorsburg.

Amelia A. Buffington, '20, nursing, is an emergency department registered nurse for Geisinger Medical Center. She resides in Montoursville.

Rachal D. Clark, '20, nursing, is a registered nurse for UPMC Susquehanna. She resides in Williamsport.

Skyler Cline, '20, welding and fabrication engineering technology, is a welding engineer for Axis Integration. He resides in Frin N.Y.

Arthur S. Cohan, '20, diesel technology, is a technician for Kenworth Trucks. He resides in Dingmans Ferry.

Elizabeth Dailey, '20, nursing LPN-to-RN, is an operating room registered nurse for Geisinger Medical Center. She resides in Milton.

Jordan D. Derrick, '20,

accounting, is an accountantadvisory assistant for Sullivan County Financial Services. He resides in Mildred.

Vanessa M. Dick, '20, dental hygiene, is a dental hygienist for Reardon Dental. She resides in Phoenixville. ≫



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CLASS NOTES

Jason Eichensehr, '20, business management, is a dining services manager for Penn College. He resides in Williamsport.

Jack Farrar, '20, welding and fabrication engineering technology, is a welding engineer for Kiewit Corp., a Fortune 500 contractor. He resides in Union Dale.

Camren Ferrara, '20, automotive technology: Ford ASSET, is a service technician for Murray Motors Ford of Lock Haven, where he is the lead electrical diagnostic technician. He resides in Lock Haven and is a member of Central Pennsylvania Street Machines car club.

Chase C. Forry, '20, building construction technology, is a field manager for Pulte Homes. He resides in Lakeway, Texas.

Timothy Frey, '20, diesel technology, is a diesel technician for Garden Spot Frame and Alignment. He resides in Blandon.

Dan Gerard, '20, automated manufacturing technology and metal fabrication technology, is a machinist for Jones Racing Products. He resides in New

Alex J. Hackenberg, '20,

Britain.

information technology: network specialist, recently moved to the Northern Virginia/Washington, D.C., area to begin full-time work as a systems administrator for M.C. Dean. He is also commissioned as a second lieutenant in the U.S. Army Cyber Reserves.

Cutter M. Hall, '20, construction management, is a foreman for Glenn O. Hawbaker Inc. He resides in Aaronsburg.

Jonathan R. Hendrickson, '20,

software development and information management, is an information technology specialist for the Federal Bureau of Investigation. He resides in Cowansville.

Seth R. Henry, '20, building science and sustainable design, is an architectural designer/ construction for Samuel Dodson Contracting. He resides in Wernersville.

Daryn Hess, '20, electrical technology, is an electrical technician for Bloomsburg Carpet Industries, revamping and installing new control panels for high-speed carpet looms and other electrical duties throughout the facility. He resides in Benton.

Nathan J. Lavallee, '20, building automation technology, is a control systems tech for Johnson Controls. He resides in Loganton.

Michael P. Lindsay, '20,

information technology: network specialist and software development & information management, is an IT associate for Benton Foundry. He resides in Northumberland.

Christopher J. Milliken, '20,

heating, ventilation & air conditioning technology, is a technician for Nittany Oil. He resides in Bellefonte.

Glen Molitoris, '20, civil

engineering technology, is an entry-level civil engineer for KCI Technologies. He resides in West Grove.

Mike D. Moran, '20, software development and information management, is a software development and IT coordinator for AIDS Resource, a nonprofit serving several counties in central and northcentral Pennsylvania. He resides in Williamsport.

Nichole Ohnmeiss, '20, nursing, is a registered nurse for Geisinger. She resides in Muncy.

Christopher Ottolenghi, '20, manufacturing engineering

technology, is a CNC machinist for Globus Medical. He resides in Media.

Nolan Poust, '20, welding and fabrication engineering technology, is a welding engineer for Johnson Controls. He resides in New Oxford.

Joesph F. Shelcusky, '20, welding and fabrication engineering technology, is a welding engineer for United Technical, a metallurgical laboratory and testing center. He resides in Saline, Mich.

John R. Smigley, '20, building

automation technology, is a building automation technician for Honeywell. He resides in Saylorsburg.

Michael A. Snyder, '20, engineering design technology, is a field engineer for Allan Myers. He resides in Parkesburg.

Theron Sorgen, '20, mechatronics engineering technology, works in electromechanical maintenance for Evergreen Packaging. He resides in Portage, Mich.

Victoria Sosar, '20, business administration: sport and event management, is a social media manager for ConversionWorx Media. She resides in Berwick.

Stephen Vaughn, '20, heating, ventilation & air conditioning technology, is a chilled water operator for Penn State, maintaining the chilled water loop to ensure proper operation of the campus. He resides in Spring Mills.

Joshua Warren, '20, on-site power generation and diesel technology, is an electric power generation shop technician for Cleveland Brothers Equipment Co. He resides in Hummelstown.

Austin S. Weinrich, '20,

residential construction technology and management, is an engineer officer in the U.S. Army. He resides in Rydal.

Ryan C. Wilson, '20, heavy

construction equipment technology: operator emphasis, is a laborer for Schlouch Inc., a sitepreparation specialist. He resides in Reading.

Marriages & Births

Adam Waigand, '05, building construction technology, and his wife, Jennifer, were married on Nov. 24, 2018, and welcomed son Seiler Haze Waigand on Aug. 22, 2019. They reside in Conway, S.C.

Melani B. (Grady) Decker, '06, dental hygiene, welcomed baby No. 4 in August 2019. The family resides in Colorado Springs, Colo.

Juliette Yeager, '10, physical fitness specialist, married Michael Finley in November 2018. They reside in Jacksonville Beach, Fla.

Adriana L. Glotz, '11, health information technology, married Matthew McSweenev in September 2020. They reside in Fallston, Md.

Chelsi Welch, '11, mass media communication, married Leif Solveson, '05, civil engineering technology, in May 2018. They welcomed a son, Finley, in October 2019. They reside in Muncy.

Ashley Adams, '13, early childhood education, married Ben Spickler on Oct. 19, 2019. They reside in Huntingdon.

Foundation Board of Directors,

of mathematics, age 54, on Jan. 26

emerita, fitness and lifetime sports, and cheerleading adviser, age 84, on Sept. 17

Robert M. Werkmeister Sr., retired assistant professor of aviation, age 83, on Dec. 3



"Knowing that people I've never even met want to support me and other students so that we can change the world is amazing to think about. I'm especially inspired by our very own President Gilmour's support of students. Knowing that we have someone leading us who cares about us so much makes me want to do the best I can here. I hope someday I'll be able to support Penn College, as well, as a way to thank those who have given before and while I attended."

Mary C. Watts '21 information assistance & cyber security



"Contributions from Wildcat Club members make it possible for student-athletes like me to participate in the sports we love. We appreciate the continued support, especially during this pause from competition, and look forward to everyone cheering us on from the sidelines again soon."

Colin G. Browne Jr. '22 human services & restorative iustice wrestling

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Holly Neely, '15, surgical technology, married Darien Ebersole, '15, renewable energy technologies, on Sept. 21, 2019. They reside in Lancaster.

In Memory

Philip R. Boob Sr., former vice chairperson, Penn College age 80, on Oct. 19

Laurie K. Kiss, assistant professor

Donna Rae (Myers) Miller, faculty

"Allan Myers is pleased to continue our support of Penn College through scholarship gifts. Our industry is looking for the best and brightest employees. those who exhibit a passion for building the future. Penn College provides the programs that graduate the students our industry needs."

Bob Herbein

executive vice president, Allan Myers



"My goal is to strategically provide 'seed money' that will provide opportunities for students to achieve career goals that will enhance their quality of life. Along with students' hard work, my contribution is leveraged to provide much more benefit going forward than the original gift."

John J. Urick Jr. '74 forest technology retired chief highway engineer, STV Inc.

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EXPERT TIPS



SIGNATURE CHOCOLATE SOUP

Want a new way to satisfy that chocolate craving? Le Jeune Chef Restaurant's pastry chef, Lynn Sisino, and part-time baker, Patrick Hufnagle (a baking and pastry arts/applied management student) share the recipe for this much-craved Le Jeune Chef specialty: chocolate ganache lightened with cream, surrounding a coffee flan. In the restaurant – a live-learning lab for culinary and baking and pastry arts students - it is garnished with fresh berries, white and dark chocolate shavings, and Chantilly cream.

Tips from Patrick and Lynn:

- \diamond To be sure the sugar is dissolved, check the back of your utensil to see whether any sugar crystals are stuck to it.
- ♦ Instead of a hazelnut product, change the flavor of the soup by using vanilla or a liqueur that pairs well with chocolate, such as Grand Marnier.
- ♦ Instead of ramekins, flan can be baked in a single pie plate and spooned into the soup bowls.





Servings: 15-18

- FLAN
- 2¹/₄ cups milk
- 1 ¹/₂ teaspoons instant coffee
- 5 eggs
- 1 ¹/₂ teaspoons vanilla
- 1 cup sugar
- ¹/₈ teaspoon salt

Add milk and coffee to a pan and heat just enough to dissolve the coffee.

Whisk together eggs, sugar, salt and vanilla. Continue whisking as you gradually add the warm coffee mixture, so as not to scramble the eggs.

Strain through a fine sieve and pour into greased 2-ounce ramekins.

Bake in a water bath for 40 minutes.

Refrigerate overnight (or at least 4 hours).

SOUP

15 ounces semisweet chocolate (chips or chopped)

1 quart heavy cream

1 cup sugar ¹/₂ cup hazelnut butter or 4 ounces Frangelico or 4 ounces hazelnut syrup

Place chocolate in a large bowl.

On stove, bring cream and sugar to a boil and stir until sugar is dissolved.

Pour cream and sugar mixture over chocolate and let steep for 2 minutes. Add hazelnut butter or Frangelico, and whisk together until smooth. Cool. Strain and pour into a pitcher.

TO SERVE

Place flan in the center of a soup bowl. Pour soup around flan. Place fruit in soup, top flan with whipped cream, and sprinkle the dessert with chocolate shavings.

Pennsylvania College of Technology

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disabilities through a variety of aptitude and psychological tests to help them consider what types of careers they might pursue. He later served as Williamsport Area Community College's first coordinator of student activities and housing. He left Williamsport to take positions at University of Delaware and Delaware County Community College before returning to WACC in 1976 to serve as assistant dean and then dean of student and career development.

He led the college through March 1981, while the college conducted a national search for a permanent president, but declined to be considered for the position. He stayed on to help with the transition in administration, then left to become director of education and employee relations at Williamsport Hospital. He retired as director of administrative services for Lycoming College.

Pennsylvania College of Technology became an affiliate of Penn State in 1989 after establishing a national reputation for education supporting workforce development, first as a technical institute and later as a community college. Today, Penn College is a special mission affiliate of Penn State and a national leader in applied technology education. Penn College offers more than 100 master's, bachelor's, associate and certificate majors to nearly 5,000 students in careers ranging from manufacturing, design, transportation and construction to hospitality, health, business and natural resources. Business/industry connections, small classes, industry-standard equipment and faculty with work experience contribute to strong graduate placement rates. The full college experience awaits those desiring on-campus housing, Greek Life, student organizations and NCAA Division III athletics.

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Penn College operates on a nondiscriminatory basi



REMEMBERING DAVID M. HEINEY

DAVID M. HEINEY, former interim college president, died Dec. 20, 2020, at the age of 80.

Heiney was tapped as the interim president of Williamsport Area Community College in 1980, on the recommendation of exiting President William H. Feddersen.

Heiney began his career at the college as a diagnostic assistant for Williamsport Technical Institute, assessing students with physical



One College Avenue | Williamsport, PA 17701-5799

Change Service Requested



This spring, the Center for Career Design opened in the Roger & Peggy Madigan Library to serve students, alumni and industry partners on "all things career."

Opened in 2006, the library marks its 15th birthday this summer.

Fifty-five years ago, in 1966, students (in inset photo) lined up to move 1,000 books from the Williamsport High School (today's Klump Academic Center) to the college's first library, a former laundromat at 1223 W. Fourth St. Since the college grew from Williamsport High School offerings, it had shared its library.

