

WINTER 2018 | What's Ahead in Science | Herrick Conservatory | Optimal Aging | Pioneer Mapmaker

KENT STATE

MAGAZINE

Coming to Fruition

Kent State Ashtabula has partnered with a vineyard in the Grand River Valley to provide hands-on experience for students in the viticulture and enology programs—and launch a new Kent State wine label. SEE PAGE 10



CONTENTS

WINTER 2018
On the cover: From grapes to glass, Kent State Ashtabula’s viticulture and wine programs have partnered with a winery and launched a wine label to help students gain real-world experience. See page 10.

COVER PHOTO: MELISSA OLSON

FEATURES

10 A Vintage Year

A new partnership with Grand River Valley’s Laurello Vineyards provides hands-on experience for students in Kent State Ashtabula’s viticulture and enology programs, including the production of a new Kent State Ashtabula wine label, made from Ohio grapes in the Grand River Valley. A riesling and a cabernet blend were released in December.

BY JAN SENN

14 The Next Big Thing

Inspired by the grand opening of Kent State’s Integrated Sciences Building, we asked the heads of the chemistry, biomedical sciences, physics and biological sciences departments about the advances they expect to see over the next 10 years.

BY LISA ABRAHAM

22 Optimal Aging

Planning for your golden years can be overwhelming, no matter your age. Kent State experts share advice on pertinent topics that may help you and your loved ones optimize the years yet to come.

BY LYNETTE LAMB

30 On The Map

As men were leaving civilian employment and entering the armed forces during World War II, Kent State was one of 22 universities to offer a 60-hour course in cartography for women willing to make maps for the war effort. Bea McPherson, BS ’43, took the course, went to Washington and has recently been honored for her pioneering work.

BY JAN SENN

DEPARTMENTS

02 Feedback

03 Presidential Perspectives

04 Flash Forward

20 KSU Collections

34 Alumni Life

40 Flashback

41 Giving Voice

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Kent State Magazine is published by Kent State University Communications and Marketing. It is mailed free of charge to faculty, staff, alumni, donors and friends of the university three times a year (fall, winter, spring).

Printed by Angstrom Graphics, Cleveland, Ohio



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Take Note

It’s a new year, and there are many new beginnings at Kent State University. Our new Integrated Sciences Building, which opened in the fall on the Kent Campus, provides a wonderful space for students to explore the sciences and collaborate together to meet the world’s challenges.

Our viticulture and enology program at Kent State Ashtabula announced a new partnership with a local winery that gives students hands-on experience, including the production and bottling of a new Kent State Ashtabula wine label.

Kent State experts from a variety of disciplines are researching new topics of interest to anyone who wants to make the most of their golden years—and they have some advice to share with you.

Speaking of optimal aging, 96-year-old Bea McPherson, BS ’43, could surely be a poster child for a life well-lived.

To celebrate our new partnership with Laurello Vineyards and the launch of the Kent State Ashtabula wine label, we’ve hidden a small image of a black squirrel in three places on the following pages. Those who find it qualify for a drawing to win a prize. It will appear like this:  (shown actual size).

If you find it, send us an email at magazine@kent.edu, listing the three page numbers and places it appears, plus your name and mailing address. The winner of the random drawing will receive a gift card for Laurello Vineyards. For rules and eligibility requirements see www.kent.edu/magazine/rules. Cheers!



FEEDBACK



A passing student adds bright color to a snowy scene behind Henderson Hall, home to the nursing program, on the Kent Campus.

via EMAIL

Ready or Not

I recently read “A Weighty Concern” in *Kent State Magazine* [fall 2017]. After graduating, I spent 27 years in the U.S. Air Force before entering the corporate world. Over 70 percent of high school seniors today are unfit for military service because of obesity issues, a lack of overall fitness, poor education and criminal records.

I belong to Mission: Readiness (one of five organizations that make up Council for a Strong America), which represents a bipartisan group of more than 700 retired generals and admirals who advocate for early childhood education, physical education, healthy school meals, etc. We are focused on ensuring that young Americans have the opportunity to develop into prepared and productive members of society.

GARY DYLEWSKI, BA ’74
MAJ. GEN. USAF (RET)
Colorado Springs, CO

First Occupancy

I was a resident in Korb Hall from 1964 until the end of the school year in 1965. Although the paragraph about Otto Korb and the KSU dorm named in his honor [“Live and Learn,” fall 2017], was interesting, it is incorrect regarding its first year of occupants. The new dorm housed all incoming women in 1964, and I think it was a mistake to put so many first-year, immature college women in one building. Maybe it was turned into a visitors guest house the following year.

The fall issue was well done. Even my husband, who has a textile engineering degree from another college, enjoyed the article about art professor Janice Lessman-Moss [“Continuing Threads”] and her Textile Arts program.

BONNIE CATLEY OLIVEIRA, BA ’69
Carmel, IN

More than a Mention

I eagerly read the article on women in flight [“Taking Flight,” fall 2017], only to see that Ruth Sitler’s name was just briefly mentioned. Ruth, who died recently [see page 39], received all her degrees, including her PhD, from KSU, earned her pilot’s license, became an FAA inspector and then a flight instructor at KSU. Eventually she became the director of the Flight School. Her awards for flying are numerous, especially the Amelia Earhart Award for notable contributions by women pilots, and her name is listed on a plaque at the Smithsonian National Air and Space Museum. If she has not been instrumental in women’s flight, then no one has!

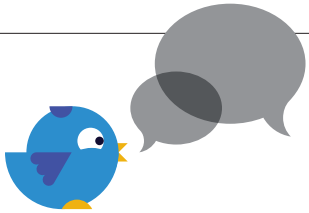
KATHY ROBINSON, BS ’71
Kent, OH

OOPS! In the article “Building on Firsts” for the Flashback section of the fall 2017 issue, we made a typo in the sentence about room-and-board-costs in 1913-14. It read \$400 per week—but that should have been \$4.00 per week! Kudos to all the Flashes who wrote and called us to question it.

We want to hear from you!

Respond to magazine content or comment on topics related to Kent State by writing:
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via TWITTER



I didn't think I could fall even more in love with @KentState, but here I am finding new places everyday! 🍷💙
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Our @CCIKentState students are super talented and hard working. Proud of them!
#KentState
Amy Reynolds | @amylreynolds

(Above: *The Kent Stater* was named the best student newspaper in the nation in its class, according to the College Media Association.)

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Year of Innovation

As we move into 2018, we press on with the collective purpose and passion I highlighted in October at the State of the University Address. This year Kent State will step up and make a case to the world, more distinctly and undeniably than ever before, that everyone at our university is an innovator, a designer and a boundary expander. This is not only an innovation year, it is the start of an innovation era.

Our goal is to propel a culture of innovation across every campus and throughout every community we serve. We will communicate our unique contributions to the world in a meaningful way that sets Kent State apart. As we take this journey together, we will unleash the power of interdisciplinary action and collaboration. Indeed, I believe the key to demonstrating collective purpose is cultivating an innovation mindset.

Across Kent State’s campuses, we share a strengthened commitment to innovation. We have an impressive start through the work we have done in our new Brain Health Research Institute (ranked first nationally in memory recall studies and third in stress and trauma psychology), our School of Fashion (its fashion merchandising program ranked third in the country), our renamed College of Aeronautics and Engineering (its aeronautics program is among the top five in the country) and our Kent State Ashtabula programs in enology and viticulture (the state’s only wine degree programs).

Our new School of Peace and Conflict Studies is addressing critical issues facing our communities in the 21st century. Our world-renowned Liquid Crystal Institute continues to innovate and develop new products through advanced materials science. And our regional campuses at Tuscarawas and Salem are using virtual reality and game design technologies for educational purposes, to create virtual worlds and other experiences that will help students succeed and build a culture for innovation and design.

As we look to the future, Kent State is making strides toward providing interdisciplinary, project-based design innovation courses, including design thinking, that will establish this university as a place where design and science converge to invent the future.

We can get there, but we must lock our arms, quicken our pace and step boldly toward an individual and collective purpose that reaches across boundaries and makes a meaningful difference in our communities and our world.

I am ready for the journey, and I am counting on you to join me.

Beverly J. Warren, President

Email: president@kent.edu, Twitter: @PresBWarren

presidential PERSPECTIVES

I believe the key to demonstrating collective PURPOSE is cultivating an INNOVATION MINDSET.



Beverly Warren @PresBWarren • Nov 2
Thanks for the personal delivery of the MAC Championship pendant. I am honored & will wear it with @KentState pride. Go Flashes!!

Kent State Softball @KentStSoftball
It was an honor to spend some time with @PresBWarren today! Thanks for your continued support!
#GoFlashes ⚡⚡⚡

Beverly Warren @PresBWarren • Oct 18
Thanks for your support of the SOTU message. May we all move forward with purpose.

Kristin Williams @KloseyWilliams
@PresBWarren I am always inspired when I hear you speak! So much to be excited about.
I am on with purpose with you!
#OnWithPurpose

Operation: Restoration

On a cold, rainy Saturday at the end of September, a group of volunteers and researchers trudge up a steep, muddy hill in the Cuyahoga Valley National Park (CVNP). They’ve come out to celebrate National Public Lands Day and, despite the conditions, they’re having fun planting over 480 native trees on a site near the Brandywine Ski Resort.

Christopher Blackwood, PhD, a professor of biological sciences at Kent State University, along with graduate students in the department, partnered with the national park to coordinate the volunteers who are assisting them in an effort to restore a native forest in land formerly used as a gravel and top soil mine. The tree planting is the beginning of a long-term research project launched by KSU and CVNP to restore similar sites throughout the park.

“Everyone left with a great feeling of accomplishment,” says Dr. Blackwood afterwards. “It was a wonderful day!”

Mining that began in the 1980s compacted the soil in this area significantly, creating dense, heavy clay conditions that impair tree and brush growth. Prior to the planting crew’s arrival, the park brought in machinery to dig trenches for planting, giving the soil an initial break-up, with the hopes that the trees’ roots will take hold and restore the soil naturally.

“That’s the goal—to see if the plants can handle the problem without doing any sort of further remediation,” says graduate student Tom Ruggles, BS ’17, who had worked with Dr. Blackwood as an undergrad and decided to complete his master’s degree in ecology at Kent State specifically to be involved in this project.

Noteworthy

First-Tier Ranking: Kent State moved up 12 spots in the Best National Universities category in the 2018 edition of Best Colleges by *U.S. News & World Report*. Ranked 176, Kent State is again the only public university in Northeast Ohio to make the top-tier list, which includes public and private universities nationwide.

Green Building: The Center for the Visual Arts received LEED Silver certification for design and construction from the United States Green Building Council—bringing



After a day of planting alongside volunteers, Dr. Blackwood and the team of graduate researchers are optimistic about the impact their efforts will have on this site in the Cuyahoga Valley National Park. Left to right: PhD candidates Andrew Eagar and Colleen Cosgrove, BS ’15; Christopher Blackwood, PhD; MS candidate Tom Ruggles, BS ’17; PhD candidate Matt Gacura.

The effects of the techniques used here will help determine the best tree species to use in other restoration efforts, says Dr. Blackwood. “A lot of tree species could be planted at these types of sites, so we’d like to know which ones will respond best under these conditions. We think the various trees might survive differently, depending on what family they’re from or their type of root system.

“Over the long-term, we will also look at how the different types of trees impact the site in many ways, including soil organic matter, nutrient runoff and habitat for other organisms.

to 12 the number of Kent State University buildings to be certified in five years. LEED (Leadership in Energy and Environmental Design) certification is a globally recognized symbol of sustainability achievement.

Creative Spaces: Kent State University’s Cleveland Urban Design Collaborative received the 2017 Great Places Award in the Place Planning category from the Environmental Design Research Association. It was recognized for its Making Our Own Space initiative, focused on empowering

In the weeks following this planting day, more than 2,000 trees were planted at several former mine sites throughout the Cuyahoga Valley National Park. It will be at least 10 years until the saplings are tall enough to produce shade to keep weeds at bay, so the areas will have to be under active management by the national park, and monitored by researchers from Kent State, for quite some time.

Researchers are hopeful that, with time, these sites can be restored to pre-mining conditions and help ecologists discover better practices for future restoration projects. —Melissa Olson

middle and high school students in Cleveland and Shaker Heights with design and construction skills to transform their neighborhood public spaces.

Best Business Schools: In addition to being named to the Best Business School 2018 list by The Princeton Review, Kent State’s College of Business Administration was also recognized as one of the 52 best business schools in the Midwest in The Princeton Review’s 2018 rankings.

Cool Course

Course number: JMC 40095/JMC 60195

Title: Music, Movements and Media: *Rolling Stone* @ 50

Instructor: Stephanie Danes Smith, BA ’79, assistant professor, School of Journalism and Mass Communication (JMC), College of Communication and Information (CCI)

Description: Special topics course offered the first five weeks of fall semester 2017, open to undergrad/grad students of any major. This one-credit course explores the history, authentic voices, visual storytelling, personalities, social impact and relevance of *Rolling Stone*.

Guest speakers: Jacqueline Marino, BA ’94, JMC associate professor, on *Rolling Stone*’s seminal writers and journalistic forms; Jan Leach, MA ’06, JMC associate professor and director of Kent State’s Media Law Center for Ethics and Access, on the

ethical implications of *Rolling Stone*’s provocative reporting. (Jann Wenner—cofounder, publisher and majority owner of *Rolling Stone*—had agreed to Skype into the course, but he cancelled the session after he announced in the media that he was selling his stake in the magazine.)

Readings: Articles from *Rolling Stone*, *Time*, *American Scholar*, NPR and the recently published book, *50 Years of Rolling Stone*; selected song lyrics

Field trip: Exploration of the magazine’s iconic images and artifacts during a special, after-hours tour at Rock and Roll Hall of Fame’s “*Rolling Stone*/50 Years” anniversary exhibit that ran through late November.

Projects: Three reflection papers on *Rolling Stone* writers, coverage of significant countercultures and the ethics of some of its controversial reporting; plus a final three-page paper for graduate students. In a *NYT*

article about selling the magazine, Jann Wenner is quoted as saying, “I think it’s time for young people to run it,” so in a group paper the students offered specific suggestions for the magazine’s future direction. Their manifesto, called “Being Jann Wenner,” was published on medium.com.

Purpose: Pilot course for CCI’s “Media and Movements” new experiential learning initiative to help students apply their communication skills to significant social issues. The program officially launches in spring 2018 with a 15-week course that will focus on alleviating Ohio’s opioid epidemic (also taught by Professor Smith).

Outcome: Apply lessons learned from a scholarly examination of *Rolling Stone* to emerging intersections of media, popular culture and social movements.

See www.kent.edu/magazine/RollingStone for links to the students’ manifesto and media coverage on the course.



Writing Across Borders

Teaching artists from the Wick Poetry Center are engaging refugee and immigrant populations in a cross-cultural, intergenerational conversation through poetry and graphic design.

With the support of a major grant from the Knight Foundation, the center has partnered with Urban Vision, the International Institute of Akron and Project Learn to host poetry writing workshops with refugee and immigrant populations locally and abroad, as well as at Kent and Akron Public Schools—encouraging people to share their voices across the divisions of language, age and culture. [See an example on the inside back cover.]

Participants then read their poems and tell their stories through video interviews on the Traveling Stanzas website. The project has expanded to include a traveling interactive exhibit, Traveling Stanzas: Writing Across Borders, which features

poems, illustrations and videos to showcase refugee resettlement in our communities, says David Hassler, director of the Wick Poetry Center. At the heart of the exhibit, an interactive touchscreen experience allows visitors to browse digital content and contribute to the community dialogue.

The Wick Poetry Center partnered with Kent State students and alumni from the School of Visual Communication Design and local design studio Each + Every to create a modular exhibit design that can adapt to unique environments.

After the exhibit launches in Akron, Ohio, at Summit Artspace (January 19 through February 17, 2018), it will begin a national tour that includes the Chautauqua Institution and other locations. With each new venue, the exhibit will unite communities around important topics and facilitate a civic dialogue through the intimate and inclusive voice of poetry.

If you're interested in bringing Traveling Stanzas: Writing Across Borders to your community, please contact the Wick Poetry Center at travelingstanzas.com.



Fifty Years On

State-of-the-art classrooms, computer labs, student lounges, centralized student advising and a gallery are just a few of the upgrades in the newly renovated Taylor Hall, which originally opened in 1967 and marked its “grand reopening” in September 2017.

The \$9 million, 60,000-square-foot renovation brings together two schools from the College of Communication and Information (CCI)—Communication Studies and Visual Communication Design—and creates expanded space for the May 4 Visitor’s Center. (The School of Digital Sciences is also housed in the building for one year while its permanent home in the University Library is under construction.) On the ground floor, a large, windowed gallery space (see photo above)

greet visitors in the lobby of Taylor Hall’s main entrance. Directly across from the gallery is a large auditorium that doubles as a classroom or space for special events.

Visual Communication Design moved from its longtime location in the Art Building to Taylor Hall’s fourth floor, once home to the School of Architecture, where floor-to-ceiling windows invite natural light into the open classroom spaces. Communication Studies maintains its location in historic Taylor Hall, which once housed the offices of *The Daily Kent Stater*.

Both schools rely heavily on online coursework, and shared rooms with technology dedicated to ongoing distance education allow them to combine resources and create distance learning

classrooms for the designing, taping and streaming of online content.

The Taylor Hall renovation also gave the May 4 Visitor’s Center—which opened in fall 2012 and was formally dedicated in May 2013—more offices, as well as the Reflections Gallery, a classroom and exhibit space that can accommodate tour groups.

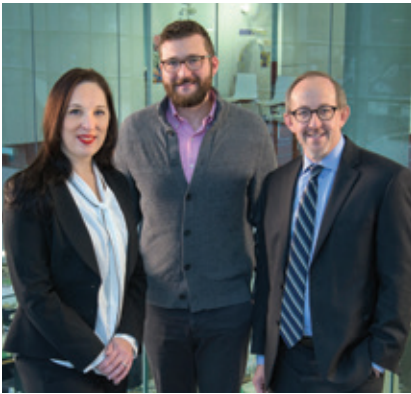
“This project is not just important to the college, but also to the campus,” says CCI Dean Amy Reynolds, PhD. “Taylor Hall sits at the heart of the university, and it represents the importance Kent State places on the values of civil discourse and freedom of expression—concepts that are central to our college as well.”

—Susan Menassa

campus **QUOTE**

“Our aim is to inculcate in Kent State graduates a kind of design intelligence that will lead to lifelong leadership. . . . When asked to build parking decks for Kent State in 2018, design intelligence asks, ‘Will we need them in 2030 and, if not, what else could they then become?’ ”

—MARK MISTUR, AIA, dean of Kent State’s College of Architecture and Environmental Design, speaking on “Design and Innovation at Kent State,” Fall 2017 Bowman Breakfast, October 4, 2017



Mark Mistur, dean of the College of Architecture and Environmental Design (CAED), at far right, was recently named among DesignIntelligence’s 25 most admired educators for 2017–2018, along with Jill Lahmer and Peter Marks, both assistant professors at Kent State’s CAED.



Namesake: When word got out in early 1967 that a newly constructed campus building—housing the School of Journalism and the Department of Architecture—would be named for long-serving School of Journalism chair and professor William Taylor, the building’s namesake never saw it coming. The honor typically went to university presidents or members of the Board of Trustees, not to a professor about to retire.

Responding to a congratulatory letter, Taylor wrote, “I was the most surprised guy in Ohio when I was told that building would bear my name. It’s more than anyone could merit.”

Taylor’s influence and contribution began when the former newspaper reporter and public relations practitioner first set foot on the Kent State campus in 1933 to teach in the fledgling journalism

department. By 1936, the department became the School of Journalism and Taylor took the helm as its chair, a position he held until 1963—with three years away to serve in the Army during World War II. He was named Professor Emeritus in 1968 and served on the Board of Trustees from 1970 until his death in 1975.

His legacy also lives on through the William D. Taylor Award, established by the university in 1957 and given to prestigious alumni of its Journalism and Mass Communication program every year since.

—Susan Menassa

For an expanded profile, see www.kent.edu/magazine/Taylor.

Fulfilling His Promise

When Doug Kirchner Jr., BA '17, crossed the stage in December to receive his degree in applied conflict management with a minor in criminal justice—the first in his family to graduate from college—his wife, Katie, and three sons were there to cheer him on.

But three other important people in his life were missing: his friend and mentor, Scott, a state policeman who had died in 2016; his mother, who had died in 2015; and his daughter, Skyler, who had died in 2011 at age 12.

Skyler had started him on this path—before she died of brain cancer, she had made him promise to get his GED. “One day she asked me what I was going to be when I grew up,” he recalls. “I laughed and said, ‘Well, I’m kind of grown up. I’m in my thirties, I have three kids and one on the way, and there’s not much I can do because I never graduated from high school.’”

Dropping out of school in ninth grade—after years of struggling with ADHD, dyslexia and a learning disability that hadn’t been diagnosed until after he’d failed several grades—he started managing bands and promoting concerts in and around Cleveland. He married his first wife in 1997, had his daughter in 1999 and was divorced in 2001.

He had remarried, had a son and was working at a cellphone company when his daughter was first diagnosed with brain cancer at age 6. After several years of remission, the cancer returned, and by age 12, she was terminal.

Work went by the wayside as he helped take care of her, and after she died in November 2011, he had to file for bankruptcy. He began attending GED education classes with Project Learn of Summit County and earned his General Equivalency Diploma in June 2012.

He’d kept his promise to his daughter, and that’s where he thought his education would end. But at his GED commencement, he’d met some recruiters from the GED Scholars

“I got my GED for my daughter, but to complete college, I had to start doing it for myself.”

DOUG KIRCHNER, BA '17



Doug Kirchner Jr., BA '17, receives his diploma and congratulations from President Warren at the December 2017 commencement. He hopes to return to campus next fall to start a master's degree in criminal justice.

Initiative, located on the Kent Campus, which helps GED graduates transition to college by offering academic, financial and social support. “They called me up and invited me to sit with them for a week—before I knew it, I had signed up to enroll for a semester, just to try it.”

It took him about four and a half years to complete his coursework, while working as a security specialist/investigator to help pay the bills. He credits his wife, caring professors and his “Lunch Bunch”—a small group of fellow students—for helping him make it through. “I got my GED for my daughter, but to complete college I had to start doing it for myself.”

“My heart is to change lives,” he says, “and to show juveniles who don’t have a voice that there is hope.”



Doug Kirchner, with his wife, Katie, and sons, Ian, Mason and Eli, following commencement.

BOB CHRISTY '95

BOB CHRISTY '95



High Performance Recovery Center

To compete at the collegiate level and emerge victorious, student-athletes need more than agility, speed, power and talent; they also need to keep their bodies healthy and stay safe, especially when rehabbing from injuries.

With more than 400 student-athletes participating in varsity sports, a modern training facility is a crucial element for the success of Kent State University’s many athletic programs. The new \$3.1 million Kent State Athletic Training and Education Center, located in the Memorial Athletic and Convocation Center Annex, boasts 10,000 square feet and two floors with state-of-the-art training and medical facilities.

Part of Kent State Athletics’ strategic vision to enhance winning and academic success, unveiled in March 2016, the new training facility focuses on the treatment and recovery of student-athletes. Three pools on the second floor of the facility include one with cold water, one with warm water and one with an underwater treadmill.

New equipment includes an antigravity treadmill that suspends an athlete above the machine, taking a variable percentage of their body weight off their lower extremities. This reduces impact on the running surface and enables athletes to work on gait or continue cardio exercises and rehabilitate injuries with less pain.



Clockwise from top left: A student-athlete receives care in a new, state-of-the-art exam area of Kent State’s Athletic Training and Education Center. Three pools on the second floor offer a variety of treatment options for recovery and rehab. Training can take place within the center, so student athletes can get technical supervision and guidance they need to perform at their best.

“Student athletes can now receive appropriate care for injuries as well as receive recovery methods to keep them at their peak performance,” says Trent Stratton, associate athletic director for sports medicine, sports performance and student-athlete well being. “With our new facility we have set the bar extremely high among our peers.”

The center’s benefits reach beyond student-athletes to other areas of the university, as well. Its cutting-edge technology provides opportunities to collaborate on research with Kent State faculty and students, a major component of the university’s priority to develop a

distinctive Kent State. The facility also houses a classroom environment for students in the athletic training program.

From additional taping stations and new rehab equipment to a private conference room and exam rooms, the new Athletic Training and Education Center is a huge upgrade from the original (1950) one-room space.

“This facility is an excellent recruiting tool, which will help attract the best and brightest,” says Joel Nielsen, Kent State’s director of athletics. “It will improve performances across the board.”

—Bethany Sava, BS '12

A VINTAGE YEAR



As the Ohio wine industry continues to expand, Kent State Ashtabula has partnered with a local winery and launched a wine label to help students gain real-world experience and meet the industry's demand for skilled workers.

By Jan Senn | Photography by Melissa Olson

Last year was a good one for vineyards in the Grand River Valley of Northeast Ohio. Hot weather at the end of the growing season ripened the grapes to perfection, and the harvest was bountiful.

Last year was also a good one for Kent State University at Ashtabula's burgeoning viticulture (grape growing) and enology (winemaking) programs—Ohio's only wine degree programs—which flourished under new program director Ed Trebets' first full year of leadership.

To expand its educational opportunities for students in the two-year, 60-hour wine programs, Kent State Ashtabula partnered with Laurello Vineyards, a small boutique winery in the Grand River Valley, to provide hands-on experience for students and launch a new Kent State Ashtabula wine label. The first two proprietary wines, a riesling and a cabernet blend, were released in December.

Kent State is the first Ohio university to have labeled wines produced by an Ohio winery, with the help of students, and made from Ohio grapes—when Mother Nature cooperates. After two years of polar vortexes, the grapes for the cabernet blend had to be sourced from out of state. However, Ed Trebets says that next year's red—a 50/50 mix of cabernet sauvignon and cabernet franc—will come from Grand River Valley grapes.

Students in the wine programs take classes online during the week, then meet together on campus two weekends out of the semester—usually at midterms and finals. For some of the classes, they're also required to contact an approved vineyard or winery in their area and arrange to complete a practicum.

As part of the new agreement with Laurello Vineyards (established in 2002 by Kim and Larry Laurello Jr., who maintain 10 acres of vineyards in Geneva), students who may not have access to other wineries can participate in the winemaking process from grapes to glass—and see the fruits of their labor for sale at Laurello's.

When we visit Laurello Vineyards in October, students in Ed Trebets' Intro to Enology class have recently helped bring in the harvest—picking, destemming, crushing and pressing the grapes. The

cellar is filled with vats of red grapes finishing fermentation and awaiting their new oak barrel homes.

Hannah Hollback, a freshman enology major, who is doing her practicum at Laurello's, hands a small glass jar to instructor Ed Trebets. It contains a sample of the five gallons of wine she is making at home as an assigned project for his Intro to Enology class. She suspects there's a problem; it has a bad smell. Mr. Trebets (a former high school chemistry teacher and an award-winning winemaker prior to becoming the program's director in 2016) takes a whiff and diagnoses the problem.

"It has a little bit of H₂S [hydrogen sulfide]; it is starting to go into a rotten egg smell," he says. "Add some copper—run it through copper tubing or add a small solution of copper sulfate—and it will clean right up. You can correct the flaw and by the end of the semester, you'll have a good wine. Fortunately, you caught it early; some people don't pick up on it, and when they go to bottle the wine, it's too late. But you learn by the mistakes."

"My goal is eventually to have a hands-on working winery for the students because that's the only way you learn wine," he adds. "That's why we've partnered with Laurello's, to start the process. It gives students a teaching winery without us having to invest in one right now."

It's a win-win for Laurello's, too. "Ed is a wonderful consultant to all who approach him, which I do all the time," says co-owner Kim Laurello, who runs the vineyard's daily operations. "He makes exceptional wines."

Senior enology major Brad Indoe arrives from doing his practicum at another vineyard. An entrepreneur with more than 10 years of marketing/sales experience working for large corporations and running his own small food business, he decided to become a winemaker about a year ago. "The enology program at Kent State was exactly what I was looking for to help me branch into a new career," he says.

Now, with mentoring from Mr. Trebets, he's gaining winemaking experience at Laurello Vineyards, as well as at Paper Moon Vineyards, an established winery in Vermilion, Ohio, where he assists with growing, harvesting and production.



Vineyard co-owner Kim Laurello and enology major Brad Indoe sample the Kent State Ashtabula cabernet blend in the barrel room at Laurello Vineyards. The wine was aged in old oak for three months and new oak for nine months.

That kind of real-world experience prepares the students to enter the winemaking industry and provides professional training for existing workers. Now the sixth largest wine-producing state in the country, Ohio produces more ▶

ABOUT THE REGION

The Grand River Valley, which follows the path of the Grand River in Lake, Ashtabula and Geauga counties, was formed thousands of years ago when glaciers carved out the Great Lakes and deposited a ridge of fertile, well-drained soil ideal for the cultivation of vineyards.

It also benefits from a climate moderated by the thermal effects of Lake Erie to the north. This "cool climate viticulture" is similar to many European, Australian and even California growing regions.

Despite the area's small size—just 22 miles long and 4 miles wide—it is the largest and fastest growing of Ohio's four active federally recognized growing regions (American Viticultural Areas or AVAs), with several dozen vineyards and more than 25 wineries.

SOURCE: Donniella Winchell, executive director of the Ohio Wine Producers Association

than a half-million cases of wine, brings in \$1.3 billion to the state's economy and provides more than 8,000 full-time jobs, according to a recently released 2016 Economic Impact report by the Ohio Grape Industries Committee. The state has become a tourism destination for wine drinkers, and the number of Ohio wineries grew from 175 in 2012 to 265 in 2016, an increase of 51 percent.

"Wineries are popping up everywhere," says Lori Lee, senior special assistant for academic affairs at Kent State Ashtabula, who was instrumental in starting the wine program in 2011. "In order to staff those wineries, they need an educated workforce. So that's what we're doing, thanks to the National Science Foundation (NSF)."

The NSF funds the Viticulture Enology Science and Technology Alliance (VESTA), a national grape and wine education program. Its goal is to establish programs of study in viticulture, enology and wine business entrepreneurship through collaborations with educational institutions, government and industry. VESTA approached Kent State Ashtabula, who joined in as a sub-awardee on the grant. It took about a year and a half to get the curriculum process approved, and the state approved the degrees in July 2011.

"We don't use any NSF funding for the actual production of the wine, because you don't use federal funds for alcohol," says Ms. Lee, who handles the contracts and grant paperwork for the program. The NSF

grant focuses on technical education and is designed to help people retool their skills to prepare for technical jobs.

"The VESTA grant supplements our program budget to keep curriculum up to date and provides opportunities for students to attend industry conferences across the country," she says.

"It used to be if you wanted a degree in winemaking, you had to go to one of the coasts. The NSF grant allows students across the country to access a high-quality education in a way that's convenient for them—through online classes and hybrid weekend programs like this one."

The new partnership and wine label are great marketing tools for the wine programs, says Danielle Weiser-Cline, academic advisor at Kent State Ashtabula. In addition to admitting and mentoring students throughout their time at Kent State Ashtabula, she travels to wine festivals, conferences and wineries to promote the programs and establish relationships with industry partners.

With so many opportunities to taste area wines, she considers herself a connoisseur of Ohio wines (see her top 10 Ohio wines to enjoy in winter and spring in the magazine's online version). "During Prohibition, wine growers in the area started growing Concord grapes for sale to Welch's, so when Prohibition ended [in 1933] they began producing wines using



Bottles of wine made by Kent State Ashtabula students for a class project in Ed Trebets' Intro to Enology class await evaluation.

Helping my students get employed in the wine industry is rewarding."

ED TREBETS, viticulture and enology program director, Kent State Ashtabula

Concord grapes," she says. "That's why Ohio has a reputation for sweet wines. Over the generations, it's started to shift again, and the industry has moved toward producing drier wines—planting more vinifera and hybrid types and less labrusca or native grapes."

Most of the viticulture students come to the program through A-Tech (Ashtabula County Technical and Career Center), the local technical high school. "For the enology program, you have to be 21 years or older to enroll, so we often get people who are on their second or third careers. It's a nice range of experience, personalities and people. Many of our students already have paid employment in the industry, and they haven't even graduated yet."

Students can earn an associate of applied science degree in viticulture or enology, and some earn degrees in both. Since the programs started in 2011, everyone who wanted a job in the industry after graduation has been able to obtain one.

"Helping my students get employed in the wine industry is rewarding," says Ed Trebets. "I enjoy seeing them get hired and then coming back for consultations."

Another way word is getting out about the wine programs is through the Ohio Winery Collection on the Digital Commons site of Kent State University Libraries. Amy Thomas, library director at Kent State

Ashtabula, and her staff have digitized photos and other materials borrowed from Ohio winemakers. Available to the public, recent additions include winemaker interviews on industry history and student videos of the winemaking process.

"This site shows how commercial winemaking began, where it is now and why there's a great future for Ohio's wine industry," says Ms. Thomas. "It's a way to connect with people who find these stories interesting and may want to pursue winemaking as a career."

When the return to Laurello Vineyards in early December to see the bottling of the new Kent State Ashtabula wines. Over the clanking of wine bottles making their way through the machinery, we check in with the Intro to Enology students who are there to help with the bottling and labeling—and to present their class projects, homemade wines, for sampling and review by class members and Ed Trebets.

Brad Indoe spent the early morning helping filter and test the Kent State Ashtabula riesling being bottled today. "We ran some final tests using lab equipment to see how much SO₂ [sulphur dioxide] was needed to help stabilize the wine prior to bottling," he says. "Adding SO₂ helps prevent any negative effects from exposure to oxygen and spoilage from microorganisms."

As the students help fill and label the wine bottles, they're joined by Susan Stocker, PhD, dean and chief administrative officer for Kent State Ashtabula, here to witness the event. "It's been a long road to get here, but we're excited about the partnership with Laurello's," says Dean

Stocker. "Having a partnership with a winery elevates the program, which we're trying to build into one of the premiere programs in the country. And we're lucky to have Ed, who knows where the industry is heading and what its needs are."

During a break in the action, we meet vineyard co-owner Larry Laurello Jr. "I love the idea that so many people are interested in the programs and that the school can offer them," he says. "It's great for the area. And whether the students end up here or in another part of the world that makes wine, they got their start here. So that's cool."

He says this year's growing season was helped by the hurricanes that traveled up the east coast and caused a front to stall over the area. "That gave us a high temperature of 95 degrees for a week and a half in September and it ripened everything to the best we've ever had."

"While the hurricanes were devastating for other places, the conditions were perfect here for producing wine. On my label for this year's vinifera wines I'm going to have 2017 as a vintage date."

It's lunch time, and in the front public area of the winery, visitors are sampling wines and ordering from Laurello's menu of foods that pair with the wine selections. In a rear tasting room, after the bottling is completed, the Kent State Ashtabula students assemble to enjoy salads and pizzas prior to presenting their projects.

"I made a pinot grigio," says Hannah Hollback when it's time to present her wine. She explains her hydrogen sulfide [H₂S] problem and says that after she tried to correct it by adding copper sulfate, she felt it took away the fruity flavor and was kind of bland. Uncorking the bottle, she pours her wine into glasses for the group to sample.

"I think the acid is high," says Ed Trebets. "If you put a little potassium bicarbonate in there, the fruit should just explode. Other than that, it's great."

One by one, the students present their wines for evaluation, and he shares tips on how to balance them. Members of the group chime in with comments, and at the end of each presentation, everyone applauds.

In 15 weeks, the students have discovered that winemaking is both an art and a science—an exciting challenge that's as ever changing as the weather.

Ten days later, it was Ed Trebets' turn to talk about wine—to the Kent State Board of Trustees, who were dining at the president's house prior to the meeting.

"The [Kent State Ashtabula] wines were met with universal acclaim," says Nate Ritchey, PhD, vice president for Kent State System Integration, who presented the wines and introduced Mr. Trebets to the trustees.

"After they tasted the wines, he described them in detail, as only an expert in enology could, and he answered any questions. It was impressive and made you want to drink wine from our area," says Vice President Ritchey, who later bought two cases to give as gifts and serve to family and friends over the holidays.

"Such good wine is a pleasure to give as a gift. It's a remarkable accomplishment for our regional campus system." 🌟

See www.kent.edu/ashtabula/wine for more information about the wine degrees and <http://digitalcommons.kent.edu/wine> for the history of Ohio wineries. Learn more about Laurello Vineyards at laurellovineyards.com.



Kim Laurello of Laurello Vineyards (center) and Susan Stocker, PhD, dean of Kent State University at Ashtabula, toast Ed Trebets, Kent State Ashtabula viticulture and enology program director, with one of the new Kent State Ashtabula wines. Students in the program assisted with production and bottling.



Kent State Ashtabula Sunset is a vinifera blend of cabernet sauvignon and cabernet franc. Kent State Ashtabula Sunburst is a dry riesling made from fruit grown in the Grand River Valley.

THE *NEXT* BIG THING

With the recent opening of Kent State's new Integrated Sciences Building, the university is well-positioned to be part of promising scientific breakthroughs in the 21st century.

By Lisa Abraham | Photography by Bob Christy '95 and Paul Silla

In 1965, laboratories at Kent State University were filled with scientists doing intensive study of liquid crystal. Since then, the innovations they helped develop have resulted in the material being used to create devices ranging from digital watches and pocket calculators to flat-screen televisions.

Now state-of-the-art classrooms and ample laboratory space in the light-filled Integrated Sciences Building, which opened in September 2017, are providing a foundation for a new generation of scientific discovery at Kent State.

The new building, attached to Williams Hall, brings together faculty researchers and students from various

science disciplines to work and learn side-by-side.

"Big ideas will certainly be born here," says James Blank, PhD, dean of the College of Arts and Sciences, who notes that more collaborative science research is part of a larger university goal of growing as a public research institution.

For such growth to happen, the university leadership recognized that the buildings along the Science Mall had to be not just improved, but reimagined, to reflect the kind of sharing that already has been taking place among Kent State scientists. Along with the construction of the Integrated Sciences Building, renovations and upgrades were made to



By creating one building that features shared laboratories for all scientific disciplines, any perceived barriers between the sciences have disappeared.

Williams, Smith and Cunningham Halls—with more improvements to come.

Over the past decade, enrollment in the sciences has been growing at a fast rate, Dean Blank says. For the fall 2017 semester, 1,295 students were enrolled in biological sciences, with more than 600 others studying chemistry, physics, biochemistry and biomedical sciences, the other disciplines that use the Integrated Sciences Building.

Increasing science enrollment, attracting top research faculty and raising money to fund that research are all pieces of an interdependent puzzle, he explains. Each component is needed to advance Kent State's reputation as a university where science innovation and breakthroughs are prevalent.

Gone are the days of a few powerhouse universities conducting the bulk of the country's science research, Dean Blank says. Laboratories big and small at every public institution will be part of the breakthroughs in such areas as cancer, heart disease and neurological disorders.

“Big ideas will certainly be born here.”

—DEAN JAMES BLANK

To have those kind of discoveries, though, science has to be viewed in a more collaborative fashion to better reflect the actual work that takes place in university research labs.

"Integrated" may be a new term on a building, but it is nothing new when it comes to the way faculty operate, says Soumitra Basu, PhD, chair of the Department of Chemistry and Biochemistry.

Chemists, physicists and biologists routinely work together on research, Dr. Basu says, and scientific discoveries are increasingly dependent on cross-disciplinary collaboration.

"In the old days [scientists] were very siloed," he says. By creating one building that features shared laboratories for all scientific disciplines, any perceived barriers between the sciences have disappeared.

"Students are seeing that there are no boundaries here," says Dr. Basu. "They will get trained with the mindset of working together to solve larger problems."

To reflect on the promise that scientific breakthroughs hold for finding solutions to those problems, we asked the heads of the four science departments housed in the new Integrated Sciences Building to tell us the scientific advances they expect to see within the next 10 years. ►

CHEMISTRY

Soumitra Basu, PhD, MBA,
professor and chair, Department
of Chemistry and Biochemistry



WHAT'S AHEAD

What areas are ripe for discovery within the next 10 years?

NANOTECHNOLOGY “The next big thing will be small,” Dr. Basu says. Chemistry is at work on a nanoscale. For example, instead of a drug to treat a cancerous liver, there will be a drug targeted to treat an individual cancer cell within the liver.

Dr. Basu’s laboratory is researching ways to identify and treat chemical deficiencies in the brain on the molecular level in an effort to treat patients with Parkinson’s disease or other neurological disorders.

MATERIALS SCIENCE “We always need new materials,” says Dr. Basu. “Think of how many different types of plastic there are, each with its own best use.”

He predicts that materials providing both a diagnostic agent and a solution will become more prevalent. For example, a drug-coated titanium rod that could be used to fix a broken leg and reduce the risk of infection. Or an agent used in environmental cleanups that could absorb toxins from a chemical spill and purify the site at the same time.

BRAIN HEALTH The brain is the next frontier, says Dr. Basu, because of the prevalence of so many diseases that affect the brain, such as Alzheimer’s—and because we still have much to learn about it.

“The brain is so complex. We can tell what it is composed of, but we don’t know why it functions the way it does,” he says. “Questions as basic as ‘Why do we dream?’ or ‘How does our memory work?’ are yet to be answered.”

DR. BASU’S RESEARCH FOCUS: *Understanding how DNA and RNA control our genes and regulate fundamental cellular processes; and using such molecules for therapeutic purposes to treat cancer and neurological disorders, including Parkinson’s disease.*

The field of chemistry often brings to mind the stereotypical image of a lab-coat-wearing scientist hovering over a Bunsen burner surrounded by beakers and test tubes filled with bubbling chemicals.

But chemistry is much less mysterious: It basically covers everything. “We touch chemistry all day from the time we get up to the time we go to bed,” says Dr. Basu. “It’s a very broad field.”

Chemistry is the science of identifying what matter substances are composed of and how the properties of matter interact, combine and change to result in new substances.

Two things will determine the next big invention, Dr. Basu says. A problem in need of a solution will present itself or someone will create something and a need for it will spring from the invention.

Think of the cell phone, he says. No one realized they needed one until they could have it. The product created its own need due to consumer desire. The same goes for electrostatically charged cleaning cloths, which made the Swiffer brand a more effective solution to dust than paper towels.

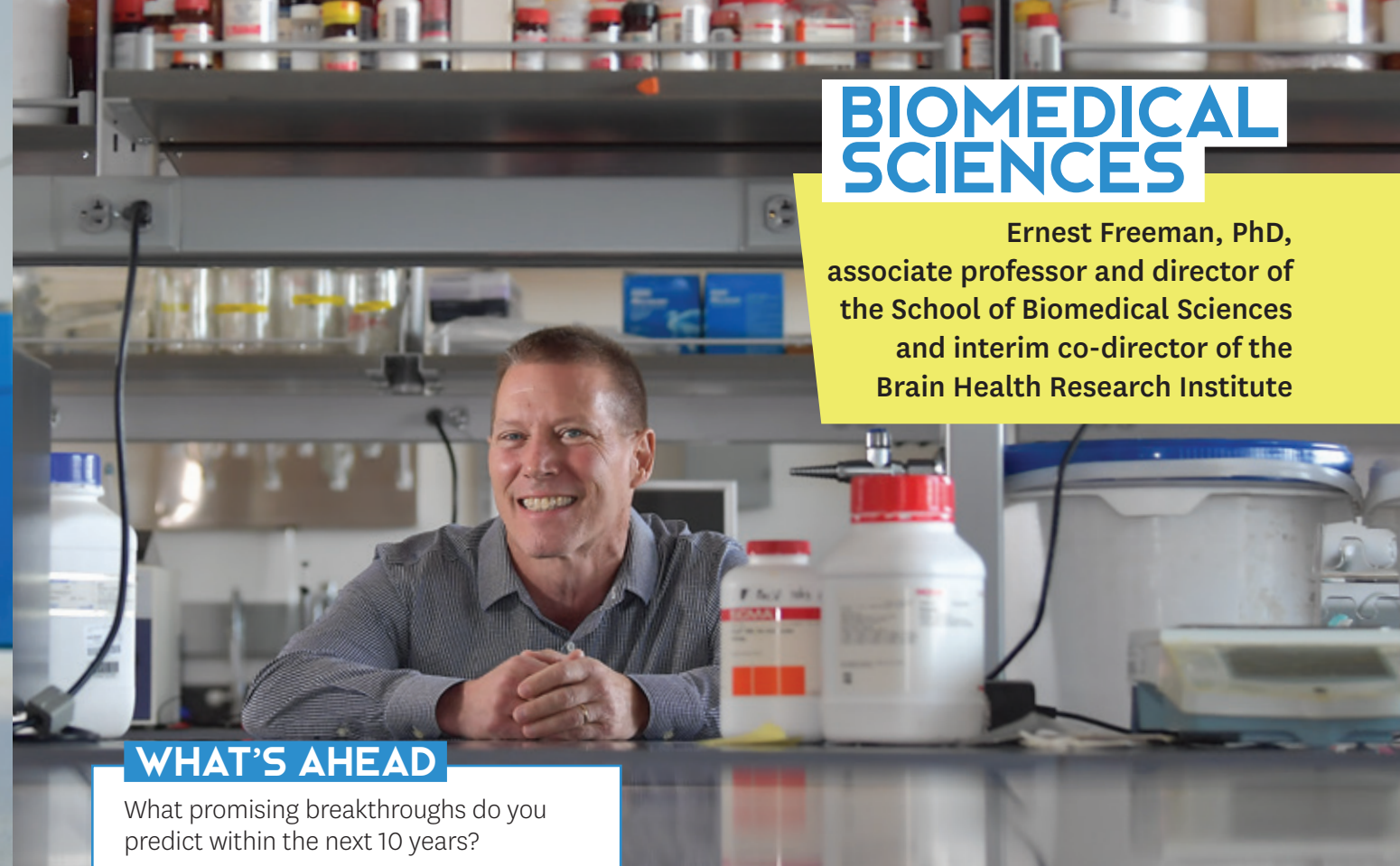
“The science of chemistry isn’t new,” says Dr. Basu. “Now it’s more what you can do with it.”

“The next big thing will be small.”

—DR. SOUMITRA BASU

BIOMEDICAL SCIENCES

Ernest Freeman, PhD,
associate professor and director of
the School of Biomedical Sciences
and interim co-director of the
Brain Health Research Institute



WHAT'S AHEAD

What promising breakthroughs do you predict within the next 10 years?

MAPPING THE BRAIN’S CELLS “There are hundreds of billions of cells in the brain, and they all have to function in concert with one another,” says Dr. Freeman. “We’re aiming to identify every type of cell that exists in the brain and its function.”

The task may seem monumental, but he believes there are enough researchers at work on the mapping that before long the compilation of all work will paint a comprehensive picture.

CURING CANCER “We can introduce genes now into cells,” Dr. Freeman says. “If cancer is caused by a gene [mutation], we are working now to insert the right copy of it to stop that cancer from occurring.” He also has great hope for pluripotent stem cells, which are capable of developing into any cell or tissue the body needs to repair itself (except those that form a placenta or embryo).

With genetic engineering, simple human skin cells can be genetically modified to create pluripotent cells, which can potentially be placed into the body to become any cell or tissue. “Scientists understand how to create these cells now,” he says.

IDENTIFYING THE ROLE OF ENVIRONMENTAL AND LIFESTYLE FACTORS Dr. Freeman’s research already suggests a possible environmental link to the brain mechanisms that cause neuron damage in multiple sclerosis. “With all this research, I think we’re going to realize that we perturbed many environmental and lifestyle factors to such an extent that we’re causing a lot of our own problems,” he says.

DR. FREEMAN’S RESEARCH FOCUS: *Basic mechanisms involved in lesion formation in multiple sclerosis, with an emphasis on cellular metabolism and signaling cascades leading to neurodegeneration. Also, the development and utilization of high-resolution imaging modalities.*

Unlike the wider discipline of biological sciences that looks at all life, biomedical sciences focus primarily on human medical issues, from the makeup of cells to the function of the brain and how outside factors influence human health. “We’re always trying to better understand how the human body functions and ways that we can treat it,” Dr. Freeman says.

He is enthusiastic about the volume of research going on globally in biomedical sciences. What’s more, the brain was recently identified by the National Institutes of Health as the next big research area with a suggested earmark of \$4.5 billion over the next 10 years to pay for the study of this incredibly complex organ.

Interaction is routine among researchers, Dr. Freeman says, and in biomedical sciences at Kent State, faculty are drawn from various departments at the Kent Campus, the Northeast Ohio Medical University and the Lerner Research Institute of the Cleveland Clinic. The School of Biomedical Sciences faculty provide graduate training in biological anthropology, cellular and molecular biology, neurosciences, pharmacology and physiology.

Researchers at Kent State laboratories are looking into topics that include the link between hormone levels and the onset of Alzheimer’s disease in post-menopausal women, the link between obesity and loss of cognitive function, and Dr. Freeman’s research into mechanisms in the brain that change the way DNA is read, leading to the loss of neurons in those with multiple sclerosis. ▶



PHYSICS

Jim Gleeson, PhD '91, professor and chair, Department of Physics

WHAT'S AHEAD

What areas are ripe for discovery within the next 10 years?

ENERGY "Getting more of our energy from the sun will require lots of physics and technological advances in order for it to be cheap, efficient and easily produced," Dr. Gleeson says. "And then we need to store it to provide energy for places where there isn't sunlight."

BIOPHYSICS Dr. Gleeson says this area of physics—applying the principles of physics to the problems of living systems—will likely see the most future growth because of its potential for understanding biological issues such as how proteins change their shape. That basic understanding can lead to cures for diseases, breakthroughs in genetics or even growing better plants.

DARK ENERGY/DARK MATTER Discoveries in the 1990s from data collected by the Hubble Space Telescope have led scientists to believe that about 68 percent of the universe is made up of dark energy and another 28 percent of dark matter—both of which remain a mystery. "Twenty or thirty years ago, we didn't worry about things like dark energy or dark matter," Dr. Gleeson says. "The more we have found out about the universe, the more we realize how much we don't know."

DR. GLEESON'S RESEARCH FOCUS: *Understanding the physical properties exhibited by a wide variety of complex fluids, such as liquid crystal, polymers and proteins in solution.*

Throughout history, humans have struggled to understand the big unanswered questions: Where do we come from? How was the world created? How do the galaxy and the solar system remain intact?

Researchers are still seeking to define the nature of the universe. Along the way, the efforts of physicists have resulted in more than one discovery, some on purpose, some by chance.

"The world wide web was invented in a particle physics lab in Switzerland," says Dr. Gleeson. "The browser system that we use was created for particle physicists to share information with each other. And now it's used for cat videos."

Technology begets technology, says Dr. Gleeson, who is confident that the quest to answer the questions of the universe will continue to result in new discoveries. Superconductors, magnets, batteries, solar panels—one way or another, he says, they all started in a physics lab.

Currently Kent State researchers are studying nuclear particle physics as part of the government's long-range plans to create "big atom-smashing machines." By studying the collision of heavy atoms, scientists can recreate "a sort of mini Big Bang," he says. "There are plans for new machines and facilities to study that."

"Studying the properties of matter and energy at those levels tells us a lot about our universe and also how it began 14 billion years ago," says Dr. Gleeson. "There are still a lot of unanswered questions."

Ongoing research also is taking place in soft matter such as liquid crystal and foam materials, and on solid state physics, super- and semiconductors.



BIOLOGICAL SCIENCES

Laura Leff, PhD, professor and chair, Department of Biological Sciences

WHAT'S AHEAD

What areas are ripe for discovery within the next 10 years?

MICROBIOMES Over the past ten years, increasing research on microbial communities—the collection of microorganisms (including bacteria, viruses and eukaryotes) in a specific niche, such as the human gut—has resulted in massive amounts of data being generated and shared, yet much remains to be explored and analyzed.

"A lot of organisms that we can't see are out there shaping our world," says Dr. Leff. She predicts that studying the ever-changing microbiome of an organism will further reveal the role of environmental factors versus genetic in diseases such as cancer.

GENOMICS Gene sequencing determines the order of the chemical pairings or building blocks that make up a DNA molecule. Work in gene sequencing has been conducted for decades, but the publicly funded Human Genome Project only began in 1990. That study, as well as technological advances in computational and sequencing methods, resulted in major strides in gene sequencing over the past 20 years.

Such volumes of data, Dr. Leff says, can lead to new methods or treatments at any level of biology, from creating cleaner water to curing cancer.

DATA MINING Scientists can now collect larger volumes of data with greater specificity than ever before on any subject. Also, Dr. Leff says, in terms of biomedical advances, meta-analysis of conventional data collected over many years and reported in many separate studies—thanks to more powerful computers and meta-analytics—will make information more accessible for research and can lead to new insights.

DR. LEFF'S RESEARCH FOCUS: *Microbial ecology of aquatic ecosystems with emphasis on bacterial ecology of streams.*

With a topic as vast as biology—the study of all living things—it's difficult to pinpoint just one area that could produce the next big breakthrough.

"There's environmental science, zoology, molecular biology, biomedical research," Dr. Leff says, rattling off just a few of the areas of study within her department. "Our research spans a wide range of topics."

With such a variety of subjects to explore, breakthroughs are bound to happen. "The last century was really the century of physics, with Einstein's Theory of Relativity, the race to put a man on the moon and atomic physics," says James Blank, PhD, dean of the College of Arts and Sciences. "This century is definitely the century of biology."

While the fundamental principles of biology won't change in the future, Dr. Leff predicts that discoveries will come from those who can find new ways to interpret existing data or who can discover ways to research generalities by combining and analyzing the results from different studies.

"The biggest advances will be in things we haven't thought of before," she says. "The next big thing will probably come from the students we are educating now. When you bring together different people from different backgrounds, who knows what they might do?" ⚡

"This century is definitely the century of biology."

—DEAN JAMES BLANK

ksu COLLECTIONS

Herrick Conservatory

In the dead of winter, Kent State’s greenhouse complex teems with life. Home to a diverse array of plants—and some fish—the facility is also filled with people. Students and faculty members from the biological sciences department conduct research there, students from other majors come to study and sketch, and student members of the Herrick Conservatory and Sustainability Club help with its upkeep.

“We do a lot of outreach, too,” says Melissa Davis, BS ’04, MS ’10, horticultural facilities director since 2014. High school students with disabilities explore careers and gain job training there through the conservatory’s partnership with programs like the Kent State Transition Collaborative and the Center for Career Services. And members of the community often visit for a guided tour or a refreshing retreat.

This past year, construction workers updated the 5,500-square-foot space, attached to the north side of Cunningham Hall, as part of the extensive renovations to the Science Mall that were completed in fall 2017. In the summer, they added on 1,500 square feet to the greenhouse complex to house new faculty research.

“We’ve reglazed the entire structure with double-walled, insulated polycarbonate panels that provide diffused light,” says Ms. Davis. “And we’ve implemented new environmental control systems throughout, so everything—heating, cooling, vent opening, misting systems, lighting—is controlled by automatic settings. These innovations have improved our ability to accurately control the building’s environment and have contributed to the campus’s energy conservation goals.”

The Herrick Conservatory, which was founded in 1978, is named for emeritus faculty members, Dr. J. Arthur and Margaret Herrick, who were longtime benefactors of Kent State. The couple, who both died in 2008, gave over 2.4 million dollars in their lifetimes to help support the facility and an endowed chair in plant conservation biology.

Ms. Davis gave us an enthusiastic tour of the building, which is divided into several areas that provide specialized growth conditions for the permanent plant collections, as well as spaces for projects that support sustainability:

CONSERVATORY
The large central space (see photo at right) is defined as a conservatory—a greenhouse with seating to welcome visitors. It consists of two large sunken areas housing tree-sized plants, including a giant rubber tree and a strawberry guava tree that have been there 30 years, as well as banana trees, a papaya tree, a chocolate tree, other tropical plants and a koi pond. Greenhouse bays branching off from the main space contain specialized collections that are open to visitors, as well as faculty research areas that are not open to the public.

GREENHOUSE COLLECTIONS
Diversity of flowering plants: With over 250,000 different types of flowering plants in the world, the collection in this bay gives students an opportunity to observe not only the bright-colored blooms on display that we typically recognize as flowers, but also those with no color.

Cactus and succulents: In this bay, the temperature and humidity are preset to be higher and drier than other areas for the comfort of the plants. The collection houses drought-resistant (xeric) plants, including barrel cactus, prickly pear cactus, century plant (*Agave americana*), ghost plant, many *Aloe* species and *Haworthia*, small succulents from Southern Africa.

Tropical plants: This collection displays tropical plants from around the world, including coconut palm, cinnamon, pomegranate, and citrus plants such as limes, lemons, oranges and grapefruits.

Ferns and humidity-loving plants: An ultrasonic fogging machine adds humidity to this bay, which includes flowering plants that enjoy moist growing conditions, like palms and orchids. It also houses a variety of spore-bearing vascular lower plants like ferns, whisk ferns and horsetails.

Carnivorous plants: This collection includes Venus fly traps, tropical pitcher plants, sundews, and related examples of the native sundews that grow six miles from campus in the 140-acre J. Arthur Herrick Fen, a state nature preserve.

BREEZEWAY
Shelves lining the recently reglazed corridor connecting Cunningham Hall with the Herrick Conservatory hold student projects for undergrad courses in biological sciences and are accessible even when the conservatory is closed.

WEATHER STATION
A weather station on a mast high above the greenhouse monitors conditions in order to protect the structure. For example, it signals the environmental control systems to close vents if it’s raining hard.

SUSTAINABILITY PROJECTS
Aquaponic growth system: To promote sustainability, this project illustrates aquaponics, the combination of aquaculture (raising fish) and hydroponics (the soil-less growing of plants) that grows fish and plants together in one integrated system.

Seed collecting: Greenhouse staff have collected over 100 different species of viable native plant seeds so far. And they gathered seeds from bedding flowers and plants in Kent State’s community garden this past fall to plant in the spring.

Rain barrels: The biological sciences department partnered with the art department to recycle, repurpose and decorate rain barrels, which are used by Ms. Davis to promote sustainability throughout Northeast Ohio. The greenhouse also collects water in rain barrels for carnivorous plants and fish that can’t tolerate the chlorine in tap water.

HERBARIUM
Herbaria are museum collections of pressed, dried plant specimens that function to identify plants, document changes in flora and provide the basis for botanical research.

Room 128 in Cunningham Hall holds the Tom S. and Miwako K. Cooperrider KSU Herbarium, named for faculty members who established this facility in the 1950s (and helped train Ms. Davis). Originally founded in 1921, it currently holds approximately 81,000 accessions—primarily flora of northeastern Ohio, but from other areas as well—and is the fourth largest in the state.

The herbarium is only open by appointment for botanical research, but the collections have been databased and are now being digitized into a virtual herbarium.

The Herrick Conservatory is open weekdays from 9-5. For tours and information, contact Melissa Davis, horticultural facilities director, mdavis7@kent.edu, 330-672-2469. Visit the Herbarium’s digital collections at www.kent.edu/biology/herbarium. See www.kent.edu/magazine/greenhouse for more photos of the collections.



OPTIMAL

AGING

*We're all getting older—that is, if we're lucky.
Kent State experts share their advice on how to prepare
for and make the most of our golden [Flash] years.*

by Lynette Lamb | Illustrations by Melissa Olson

As Baby Boomers become senior citizens—and attempt to redefine that stage life as they've redefined previous ones—articles and books are promising them a future of “healthy aging.” But how do we define that term? asks Gregory Smith, PhD, Kent State professor of human development and family studies. “The older we get, the more likely we are to be victims of senescence,” he says. “Biological aging is a normal process. It isn't necessarily ‘healthy,’ but it is inevitable.”

That's why Dr. Smith prefers the term *optimal aging*, which he says “implies that you are living the best quality of life that you can, given your current state of affairs.”

Yet the conundrum persists: How can we achieve that optimal life? There's no sure-fire set of instructions, but we've solicited the advice of some Kent State experts, on subjects ranging from communicating to exercising, that just might help you and your loved ones reach 80 or 90 optimally.



MAKING THE MONEY LAST

Who knows how long you'll live, but planning ahead can help you prepare for any event.

When it comes to aging well, money really can buy happiness. Of course, life is unpredictable. You could have saved millions for retirement only to die of cancer at 63. Or you might assume you won't make it past 70, only to see your 90th birthday roll around while eking out your Social Security.

Kent State's Nadia Greenhalgh-Stanley, PhD, an associate professor of economics who studies the economics of aging, has some advice to help you plan ahead, regardless of your lifespan.

GIVE AWAY MONEY TO YOUR FAMILY TAX-FREE WHILE YOU CAN.

Currently you can give each family member \$14,000 a year tax-free. Considering the uncertainty about when you will die and how sick you will be before that, she says, it makes sense to start giving away your money now, before you have to spend it down to qualify for Medicaid.

MAKE HOUSING CHOICES AHEAD OF TIME.

Waiting until a crisis hits nearly always results in a situation that is worse both emotionally and financially, says Dr. Greenhalgh-Stanley.

DON'T COLLECT SOCIAL SECURITY ANY EARLIER THAN YOU HAVE TO.

Taking your benefits before full retirement age means giving up larger monthly payments for the rest of your life.

REMEMBER THAT MEDICARE DOES NOT COVER NURSING HOME COSTS.

It's surprising how many people believe it does, says Dr. Greenhalgh-Stanley.

MODIFY YOUR HOUSE TO STAY SAFE.

Adding grab bars, removing throw rugs and improving lighting to prevent falls and hospitalizations will allow you to age in place longer. Some states (including Virginia, Minnesota and California) even have loan or grant programs to help elders improve their homes' safety.

DON'T LIVE IN A FOOD DESERT.

In an urban area, a food desert is defined as any home located more than a mile away from a grocery store selling fresh fruit and vegetables. Many elderly people cannot drive, nor can they walk far to buy groceries—and ordering food online hasn't caught on yet with most senior citizens. Yet obtaining adequate nutrients is critical for staying healthy at any age, says Dr. Greenhalgh-Stanley.

BUY LONG-TERM CARE INSURANCE EARLY—OR NOT AT ALL.

Because of its high cost, long-term care insurance rarely makes financial sense for any but the wealthiest people, says Dr. Greenhalgh-Stanley. The exception is if you can buy it early enough—in your 40s or 50s—or if you can get financial assistance from an employer to cover the premium costs. ▶

MEDICARE VS. MEDICAID

MEDICARE is a federally sponsored health insurance program for Americans aged 65 and up and for disabled people. The cost is reasonable (around \$200 to \$300 a month) and is usually supplemented by a small personal health insurance policy. Medicare pays for doctor's visits, hospital stays, prescriptions, etc., just as any other health insurance plan does. It does not pay for nursing home stays.

MEDICAID is a jointly funded, federal-state health insurance program for low-income people. It covers children, the aged, blind, disabled and other people who are eligible to receive federally assisted income maintenance payments. Medicaid will pay for nursing home care but only for those people whose incomes are quite low and whose assets have been reduced to \$2,000 to \$3,000 in total (not including a home).

HAVING THE TALK

How to have a conversation with your parents (or your children) about later-in-life choices—before it's too late.

One of the most important issues as we age is to communicate with our families about a host of vital matters, such as: Where do we want to live? When should we stop driving? When do we need help in our home? How much money do we have to live on? Under what medical conditions do we want to stop fighting a disease or sign a do-not-resuscitate order?

None of these are light, breezy conversations, but they are essential, says Kent State associate professor of communication studies Mei-Chen Lin, PhD. She and some Kent State colleagues have studied the kinds of issues that stop people from having these difficult but necessary talks.

They found that less than half of adults have conversations like these with their parents, yet one thing is certain: Members of the younger generation always wish they would have discussed these issues before a tragedy or crisis with a parent forced them into making quick choices without enough information.

Baby Boomers have struggled in part because they are the first generation to have so many parents who live into their late 80s and 90s. "Experience with their parents is giving them a better idea how to talk with their children," says Dr. Lin. Or at least she hopes so.

Following are a few of her suggestions for communicating with your parents about later-in-life choices. Then pass on your newfound wisdom to your kids. They'll thank you for it.

ASK YOUR PARENTS TO PUT THEIR WISHES ON PAPER. This is critical in case both parents become impaired at once, and neither can pass along their wishes to offspring.

LET YOUR PARENTS KNOW YOU HAVE PLENTY OF TIME TO TALK ABOUT THESE MATTERS. Elders told Dr. Lin and her fellow researchers that they didn't want to bother their busy children with this information.

BRING UP HOUSING, DRIVING AND OTHER MATTERS INFORMALLY. See how your parents respond and don't cover the entire conversation at once if they're not ready to talk.

SPEAK WITH YOUR SIBLINGS. Ask if they have already held these conversations with your parents, and get all siblings on the same page, if possible. The sibling who is emotionally closest to your parents should start the conversation. Others can help with resources, logistics, etc.

RESEARCH HOUSING AND TRANSPORTATION OPTIONS. Offer that information to your parents along with alternatives, such as hiring home care, moving to a senior complex, or remodeling the home for more safety and ease.

DON'T PATRONIZE YOUR PARENTS.

Reassure them that you are thinking about how they can best maintain their independence, not trying to take away their freedom.

COMMUNICATE YOUR LOVE AND CARE.

Don't make them feel like a burden; assure them that you're all in this together. Help your parents understand how much making these decisions will help you and your siblings now and later on.



HELP STOP THE CYCLE

The importance of this social intelligence intervention cannot be underestimated, Dr. Smith says. "Increasing evidence over the past decade shows that early life adversity has profound effects on our later lives. It is a huge risk factor for problems throughout life, including the ability to form and maintain close interpersonal ties. In risky families, the cycles continue across generations. Social intelligence training is a form of intervention that can stop the cycle."

RAISING THE GRANDCHILDREN

What happens when you're ready to retire, but have to take on another round of child-rearing?

Many Americans are finding that just as retirement comes into view, they are unexpectedly raising their grandchildren. This is more common than many people realize, says Gregory Smith, PhD, Kent State professor of human development and family studies. "I wish I had a nickel for every grandparent who told me they didn't see this coming."

Some are taking on a significant co-parenting role for a variety of reasons, which include parent work schedules, health concerns and military deployment.

But about a million grandparents in the United States are taking on a custodial or skipped generation role—meaning they are raising grandchildren on a fulltime basis in their own home without involvement from birth parents (although many don't have legal custody).

Parent substance abuse, incarceration and mental illness are some of the causes behind this upswing in custodial caregiving, says Dr. Smith, who has been researching various interventions to alleviate the psychological effects of disrupted parenting on custodial grandfamilies.

Custodial grandmothers (who do the major share of caregiving) are at high risk for psychological distress and custodial grandchildren (who experience early life adversity) are at high risk for behavioral and emotional difficulty.

The norm for traditional grandparenting, Dr. Smith points out, is to interact with grandchildren in an indulgent, fun-loving way and to help out occasionally with money or babysitting. That role gets tossed aside when a grandparent becomes the primary caregiver.

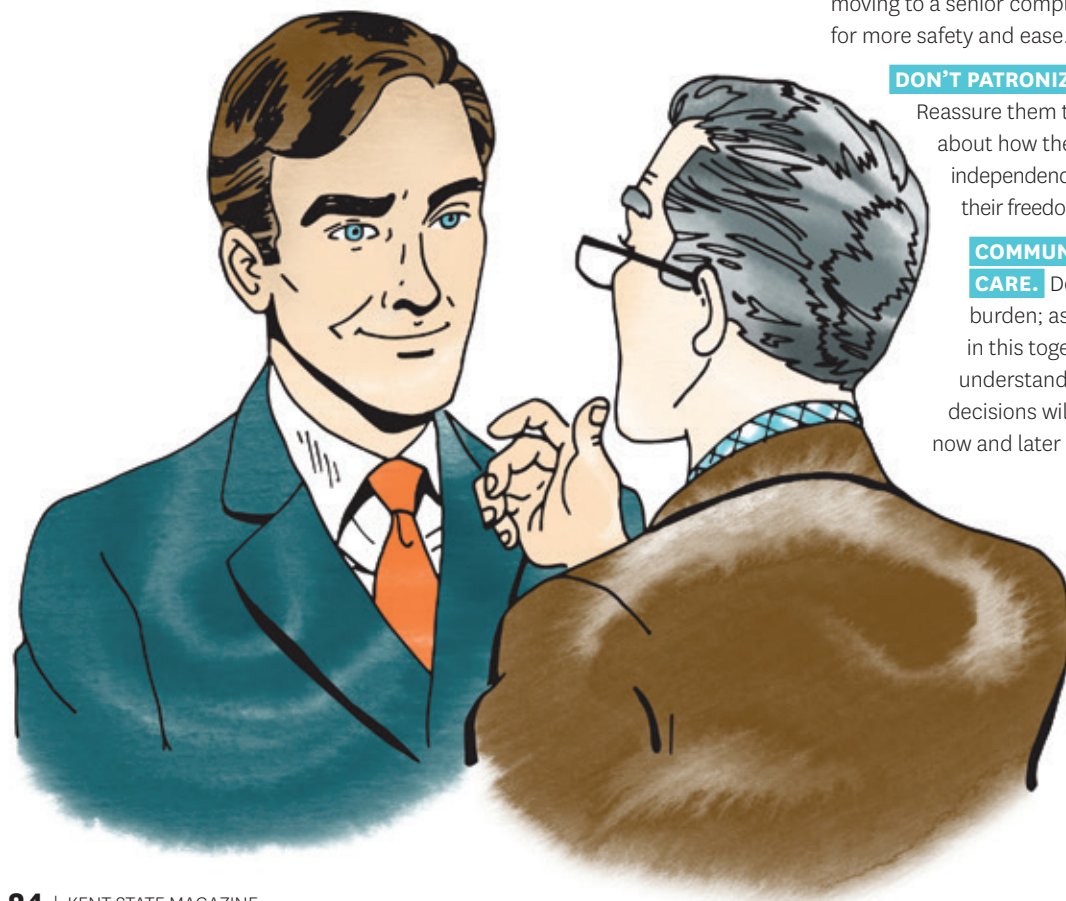
In a study funded by the National Institute of Nursing Research, involving custodial grandmothers of children ages 4 to 12, Dr. Smith compared three interventions—cognitive behavioral therapy, behavioral parent training and information only support—to improve the well-being of custodial grandfamilies. The first two interventions were equally effective in reducing distress and improving parenting behaviors among grandmothers and lessening psychological difficulties among grandchildren—and more successful than the information only approach.

Dr. Smith's most recent five-year research grant, funded by the National Institute on Aging, involves **social intelligence training** for custodial grandmothers and their adolescent grandchildren, ages 12 to 18. Adolescents have been largely ignored in studies, but are at a peak period for developing social skills. Social intelligence is the ability to effectively navigate and negotiate complex social relationships and environments. "Developing and maintaining close social ties is critical to optimizing mental and physical health, whatever your age," says Dr. Smith.

He and another principal investigator at Arizona State University are developing an online social intelligence training program for the grandmother/grandchild dyad.

Researchers and media reports on custodial grandparents have largely focused on the caregivers and their burdens. And while grandparents undoubtedly need support, Dr. Smith says he is equally concerned with the emotional needs of the grandchildren.

"It's the difference between caring *for* and caring *about* someone." ▶





KEEPING ACTIVE

Use it or lose it. We've heard this expression so often we don't really hear it anymore.

There's no denying that exercise is a vital component to achieving an optimal old age. A number of physiological changes occur naturally with aging, says Angela Ridgel, PhD, Kent State associate professor of exercise science and physiology—among them loss of muscle strength and balance, and a decline in sensory systems such as vision and kinesthetic sense.

The good news is that you can combat this decline, but **you're going to have to work at it.** "Aerobic exercise increases heart rate, blood flow to the tissues, oxygen delivery to the brain," Dr. Ridgel says. "We also know it increases neurotransmitters that help movement and cognitive processes and improve mood."

Okay, we're convinced. But how much exercise is enough? Dr. Ridgel, whose newest research focuses on neuro-rehabilitation with Parkinson's disease patients, has some advice.

WORK IT

Aerobic exercise means more than a weekly stroll around the block. If you prefer moderate exercise—which allows you to walk or bike, for instance, while still easily holding a conversation—you need to aim for 30 minutes, five days a week. If you can handle higher intensity, such as running or playing singles tennis, aim for 30 minutes three times a week.

RESISTANCE OR WEIGHT TRAINING IS NECESSARY TO OFFSET THE MUSCLE DECLINE THAT COMES WITH AGING.

You can slow down and even reverse that muscle loss with a two to three times a week weight regime. Choose exercises that work large muscle groups, such as the leg press, abdominal press and back machines, and those that help you work out your upper body. You'll be glad you did when you can rise from a chair, stand and walk for longer periods. And you don't need heavy weights to make a difference, Dr. Ridgel says. Even five to ten pounds will do the job.

CONSIDER HIGH-INTENSITY INTERVAL TRAINING.

Currently an important older adult research area in Dr. Ridgel's field, high-intensity interval training means performing five to six, 20 to 30-second bursts of very high heart rate exercise, which serves to increase blood flow and oxygen to the brain but won't completely wear a person out, she says. Researchers speculate that this increased blood flow may improve both physical function and cognitive function.

DON'T BE AFRAID OF GETTING HURT WHILE EXERCISING.

"It's important for older adults to feel confident about their abilities," says Dr. Ridgel. "Exercise allows you to go out into the world and face it head on. Believe me, you'll feel so much better."

And isn't that what we're all hoping for?

SURVIVING THE SANDWICH YEARS

What to do when you're caught in the middle of caring for children and older adults.

When his grandmother in Vermont got sick some years ago, Phillip Rumrill, PhD, Kent State professor and coordinator of the Rehabilitation Counseling Program and director of the Center for Disability Studies, became what he calls "an unwitting and unwilling member of the sandwich generation."

His grandmother was facing a long road ahead, with cancer and dementia, and Dr. Rumrill was faced with figuring out how to best support her through all of that, which drew on skills he'd learned from teaching rehabilitation counseling case management.

After his grandmother died he decided to write—with two colleagues—a helpful manual called *The Sandwich Generation's Guide to Eldercare*, which won the 2013 Gold Medal for the Family & Relationships category in Foreword Reviews' INDIES Book of the Year Awards.

Following is advice from Dr. Rumrill's book.

COMPILE ALL YOUR FINANCIAL RECORDS—

attorney's contact info, will, assets, medical records, bank accounts, etc.—and keep them in one easy-to-find place. Even though you may still be middle-aged, should you suddenly get sick your family would be able to easily find insurance policies and other vital financial information.

CONSULT WITH A FINANCIAL PLANNER WHO SPECIALIZES IN ELDERCARE ISSUES—

for yourself and your parents. Financially helping your parents can have implications for your children, though. "If you're paying for Grandma's assisted living, that's less college money for them," says Dr. Rumrill.

REALIZE YOU MAY NEED TO TAKE A MEDICAL LEAVE AT SOME POINT TO SUPPORT YOUR PARENTS.

This means making career adjustments, which tend to fall disproportionately on women, Dr. Rumrill says. Nationwide, about a third of women between ages 40 and 60 say they have had to interrupt their careers because of eldercare responsibilities.

ACKNOWLEDGE THAT THE ROLE REVERSAL IS HARD FOR BOTH PARTIES.

"Our parents are our superheroes," Dr. Rumrill says. "Watching them age requires some adjustment on our part, as well."

INCLUDE YOUR CHILDREN IN CARING FOR ELDERLY LOVED ONES AS MUCH AS YOU CAN.

"Aging is a natural part of the human experience," Dr. Rumrill says. "But there is a balance to this. You don't want to overwhelm children."

TAKE CARE OF YOURSELF IF YOU'RE THE CARETAKER.

"Don't be afraid to ask for help," says Dr. Rumrill. "You won't be good to anyone if you burn out." ▶





FEEDING YOUR BRAIN

Your gut's microbiome can help your brain function at its best.

Food and weight are fraught subjects, of course, but Kent State psychology professor John Gunstad, PhD, director of the Applied Psychology Research Center, urges older people to stay the course and take their caloric intake seriously.

Research has shown links between obesity and memory loss, he says, and as weight goes up, we're also at greater risk for diabetes and heart disease. Interestingly, underweight people are also at greater risk for Alzheimer's and other forms of dementia, so the best solution seems to be maintaining a healthy weight.

Dr. Gunstad's latest research explores the relationship between the gut microbiome and brain function in older adults. There are more bacterial cells in our body than human cells, he explains, and these bacteria can have an important impact on body systems such as blood sugar and heart disease.

"Research in animals shows that **a better ratio of good to bad bacteria improves brain health,**" he says. "And we think it might work the same in humans."

The researchers plan to check mood and memory at the beginning and end of a 90-day cycle in which some human test subjects take probiotics and others do not, to determine if probiotic capsules—standardized and safe—make a difference in brain function. By summer 2018 they hope to have some results.

BETTER BACTERIA

How to achieve that better bacteria ratio? Yep, back to the good old Mediterranean diet we've heard about for years: fruits, vegetables, fish, olive oil, yogurt. But what if we could help our guts and brains without mainlining kale and olive oil? Dr. Gunstad and his fellow researchers are interested in that question, too. They're in the midst of a study looking at whether taking a probiotic supplement might manipulate bacteria to improve brain function.

In the meantime, when it comes to aging gracefully, healthily and optimally, Dr. Gunstad has some advice, but it's nothing magical or new. "Do all the things your mother told you to do: sleep enough, eat right and exercise. Take care of the little things, and the big things will mostly take care of themselves."

EATING AS YOU AGE

How you ate and drank in your 20s and 30s probably won't meet your needs in your 50s and beyond.

When it comes to improving your diet, it's never too late to start, says Christine Rosenbloom, BS '73, PhD, a nutrition professor emerita at Georgia State University, who currently provides nutrition consulting services to many food and nutrition-related groups.

In her recently published book, *Food & Fitness After 50*, she and her coauthor translate scientific research into simple action steps for adults over 50 who want to lead active, healthy lives.

However, it's never too early to start either. Although many people wait until they retire to make major lifestyle changes, 30 is about the age when changes in most of our body systems begin to occur, says Dr. Rosenbloom, who specializes in sports nutrition and gerontology. "These changes happen gradually, and the good news is that aging adults can do many things to maintain good function, even at advanced ages."

"If you make it to age 65, statistically you have a life expectancy of 20 more years. And you want to

spend them in as good health as you can. You don't have to throw everything out of your pantry and start over. Just begin making little changes."

Here are some changes she recommends:

WATCH OUT FOR WEIGHT CREEP. If you gain just two pounds a year, multiply that by 30 years and you're saddled with 60 extra pounds. "Monitoring is important," Dr. Rosenbloom says. "I encourage people to weigh themselves every morning—not to freak out or let the number on the scale dictate your happiness, but when you start seeing that steady increase, to put the brake on it so you maintain a healthy weight."

EAT REGULAR MEALS AND DISTRIBUTE PROTEIN THROUGHOUT THE DAY. Many of us tend to eat light during the day and then backload all of our calories at night, says Dr. Rosenbloom. "It's much better for our muscle mass to be fed with good protein throughout the day."

CHOOSE NUTRIENT-RICH FOODS. As you get older, you need fewer calories, but the same (if not more) of some nutrients, including calcium, vitamin D and vitamin B12. "Be more selective about choosing foods that give you the right balance of nutrients, not just empty calories," Dr. Rosenbloom says. "There's less room in your diet for that pitcher of beer and basket of fried chicken wings you might have had when younger."

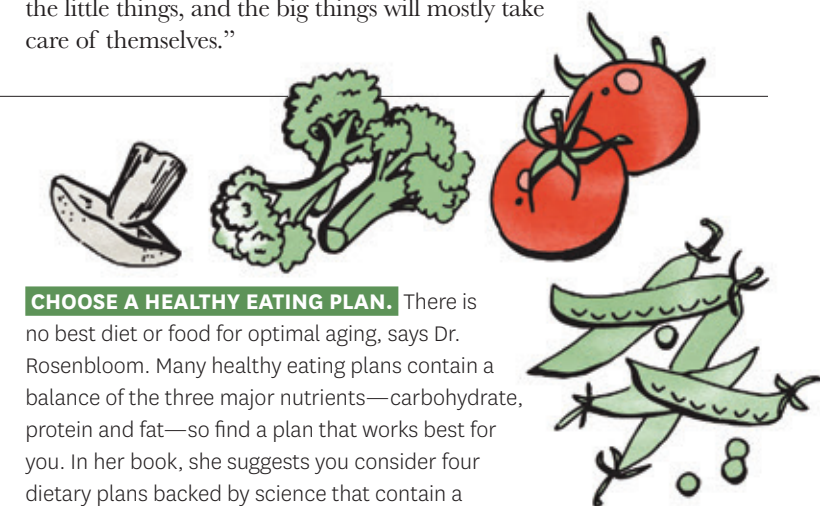
KNOW YOUR NUTRIENTS. Track your food/beverage intake for several days using sites like ChooseMyPlate.gov or Supertracker.usda.gov to see if you're getting a healthy balance of nutrients; you can also download apps to find the percentage of nutrients you've consumed.

"Once you know your baseline, you can make any needed adjustments," says Dr. Rosenbloom. "For example, when it comes to calcium, you might just need to add a handful of almonds or six ounces of yogurt in the afternoon to get your calcium up to a healthy range."

CONSIDER YOUR PORTION SIZES. Bigger isn't always better when it comes to health. You can overeat healthy foods, too. "For example, bottled smoothies can be a good snack or meal replacement, but often the bottle contains two servings."

COOK AT HOME MORE. Cooking is still the best way to make healthy meals. Highly processed packaged and frozen foods are often high in sodium, sugar and less healthy fats.

BE WARY OF THE LATEST FAD DIET. "We need the nutrients in carbohydrates, proteins and fats, so having a balance of those things is important," Dr. Rosenbloom says. "You don't need to go on a deprivation plan; most people can't stick with them anyway." Unless you have some major health condition, you don't need to be very restrictive; just make some minor adjustments and tweaks, like limiting added sugar and refined grains.



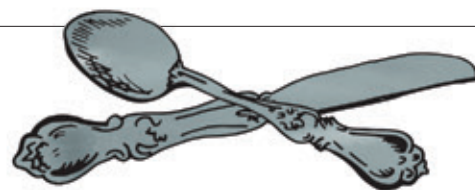
CHOOSE A HEALTHY EATING PLAN. There is no best diet or food for optimal aging, says Dr. Rosenbloom. Many healthy eating plans contain a balance of the three major nutrients—carbohydrate, protein and fat—so find a plan that works best for you. In her book, she suggests you consider four dietary plans backed by science that contain a variety of healthy foods from all food groups: Dietary Approaches to Stop Hypertension (DASH), Flexitarian, Mediterranean-style and the Mediterranean-DASH Intervention for Neurodegenerative Delay (MIND).

ENJOY EATING AND SOCIALIZING. Food is an essential and enjoyable part of life. Share meals with family and friends. Experiment with new flavors and recipes. Learn to make substitutions, not sacrifices. Eat for health most of the time, but recognize that everything in moderation is fine, says Dr. Rosenbloom. You don't have to miss out on enjoying a piece of your grandchild's birthday cake.

KNOW WHAT MODERATION MEANS. Sharing a decadent dessert with your dinner companions is moderation; ordering the death-by-chocolate cake just for yourself is not. Not drinking during the week and drinking it all on Saturday night is not moderation; that is binge drinking. If you drink alcohol, moderate your intake to one or two drinks a day for men and one drink a day for women. ⚡

See chrisrosenbloom.com for more information about food and fitness as we age.

Lynette Lamb is a freelance writer based in Minneapolis. Her parents are 85 and 91 years old.



BY THE NUMBERS

older American adults

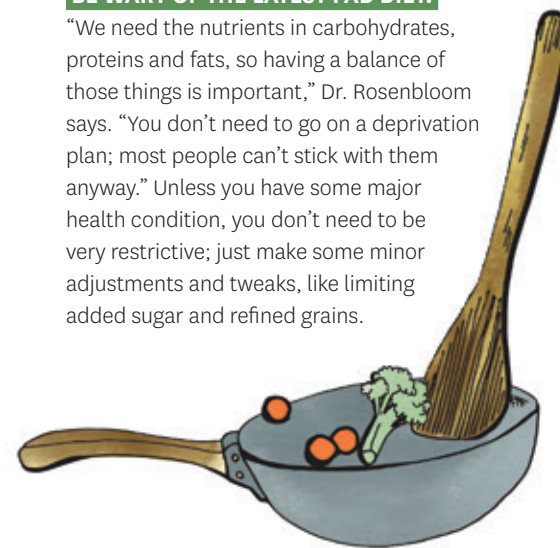
30%
are overweight or obese

1 IN 5
meet the recommendations
for daily physical activity

1/3
have high blood pressure

1 IN 4
over 60 have diabetes

SOURCE: Food & Fitness After 50





MELISSA OLSON

On the MAP

As the United States entered WWII, trailblazing women like Bea McPherson, BS '43, took on the task of providing essential handmade maps for the war effort—and charted the course for today's women mapmakers.

By Jan Senn

Bea (Shaheen) McPherson, BS '43, remembers many things about her long, eventful life. Like where she was at Kent State on December 7, 1941. Just seven days before her 20th birthday, she was listening to the radio while sitting on the porch swing of the off-campus house she lived at on Lincoln St., when she heard of the Japanese attack on Pearl Harbor.

The event that led to the United States entering WWII would change the course of her life, as it did for so many of her generation. But on that Sunday afternoon, sophomore Bea Shaheen had no idea of the path she was about to take—or what it would mean to her many years later.

From ages 8 to 18, she had worked to help support her family during the Great Depression—selling magazines, working in a market, operating an elevator at a store—with time for little else. Coming to Kent State (after completing freshman courses at her high school in Canton) had opened up a different world for her—one that included opportunities for fun.

She hadn't been allowed to date in high school, but at Kent State she met the man she would eventually marry, James W. "Bill" McPherson Jr., at a Wednesday night dance at Willis Gym. "He had on a kelly-green sweater with black patent-leather elbow patches, and he asked me to dance," she recalls. "He was a pretty good dancer. He walked me home."

Like many at the start of the war, she wanted to serve her country, but her mother, a widow with nine children, wouldn't allow her to join the military. She planned to be a schoolteacher, so she majored in elementary education with a minor in geography. When her geography

professor, Edna Eisen, told her about a military mapmaking course for women that she was supervising at Kent State starting in February 1943, she applied and was accepted, along with 19 other female seniors. "If I couldn't join the military, I decided I was going to help the war effort as a civilian."

If I couldn't join the military, I decided I was going to help the war effort as a civilian."

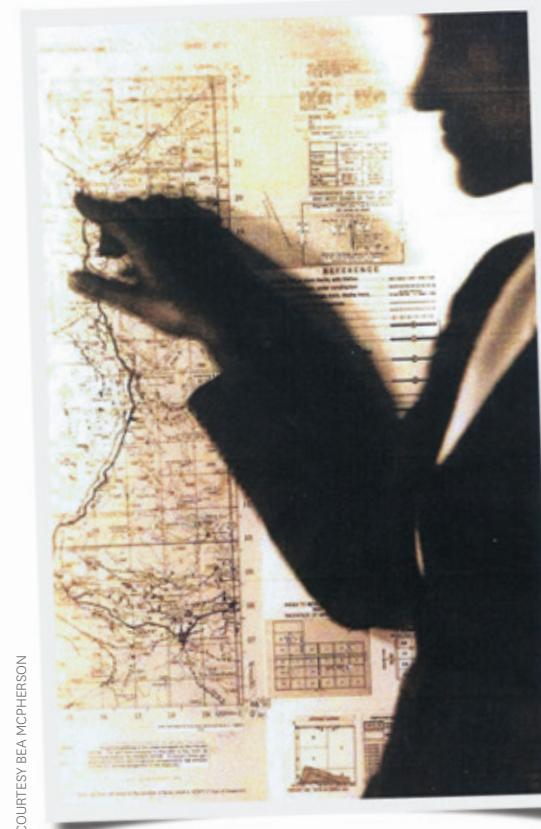
The 60-hour, non-credit course had been developed by Edith Parker, a geography professor from the University of Chicago, to train civilian women in military cartography. As the war accelerated, the Army Map Service (AMS), established under the U.S. Corps of Engineers, was losing much of its largely male workforce to the armed forces. They had an urgent need to recruit and train skilled workers who could meet the ever-increasing demand for current maps that could be distributed quickly to soldiers at the fronts.

Kent State was one of the colleges and universities selected to offer the inaugural course, approved by the U.S. Department of Education and the Civil Service Commission in 1942. Eventually, the military mapmaking instruction was expanded to 22 universities.

Bea Shaheen took the course her senior year, along with a full schedule of education classes, and graduated in March 1943. She worked as a teacher for three months to earn money before heading off to Washington, D.C., with 15 other women from Kent State. They

joined approximately 200 women from campuses across the East and Midwest who had completed the course, passed a background check and were employed by the Army Map Service. The pay was excellent and the work essential.

She initially lived at barracks in Arlington, Virginia, while the federal government completed construction of McLean Gardens—housing for defense workers being built on the grounds of the former McLean mansion (once home to heiress Evalyn Walsh McLean, the last private owner of the Hope Diamond) in northwest Washington, D.C. There she roomed with another Kent State graduate, the late Geraldine (Skora) Newman, BS '43—"the Kent State girls stuck together"—and they paid \$37.50 a month for their two-bed dorm room. ▶



COURTESY BEA MCPHERSON

Bea Shaheen briefs a map in 1943 during her time as a civilian military cartographer at the Army Map Service.

Bea McPherson proudly wears a medallion given to her by the former director of the National Geospatial-Intelligence Agency and made into a necklace by one of her daughters.

After taking a four-week “in service” training course to get practical experience and allow the AMS to evaluate their new employees’ skills, she was assigned to the project drafting department. Because of the top-secret work, the building she worked in was camouflaged to avoid detection from enemy aircraft and isolated from the other buildings.

For nearly three years, the group of women—informally dubbed the “Military Mapping Maidens” or “3Ms”—worked 70 hours a week in two shifts to meet deadlines that were built around upcoming battles. Each new map required approximately 600 hours of cartographic labor.

They studied foreign maps, aerial photographs and any other information that was available to create the maps—using protractors, contour pens and India ink to chart strategic locations, churches, schools, land contours, bodies of water and roads. Accuracy was a priority; for the safety of the troops, the women spent tedious hours cross-checking the maps.

Despite the demanding deadlines, the women cartographers also spent time together on their off hours—canoeing down the Potomac River, horseback riding along Rock Creek Park, trying out local restaurants and going to tea dances on Saturday afternoons. “We formed our own softball team called The Contours. I was the catcher,” she says. “We also helped with the USO at Fort Belvoir. We had the time of our lives!”

In the spring of 1944, things became busier than normal, and they knew a big operation was being planned. “Generals and colonels kept coming into the cartography room,” she recalls. “We were told to drop what we were doing, and work on this special project. We worked round the clock. After they landed [on D-Day], we heard about the invasion [of Normandy] on the radio, and they told us we’d been working on [maps of] the Utah and Omaha beaches.”

According to “The WWII History of the Army Map Service,” during 1944 the AMS prepared approximately 3,000 different maps and produced a



COURTESY BEA MCPHERSON

While a Kent State student, Bea Shaheen poses on a tree in front of Rockwell Hall.

total of 70 million sheets just for the Normandy invasion. (Throughout the war, the AMS employed more than 3,500 persons, and supplemented its workforce with other government agencies and commercial contractors, enabling it to prepare more than 30,000 different maps of all types, and to produce 500 million sheets.)

After receiving a promotion as assistant to the supervisor of project drafting, Bea Shaheen became responsible for recruiting college students majoring in geography for work at the AMS in Washington, D.C. On orders from the Secretary of War, she traveled by train to courier maps to New York City and to recruit women from Kent State University.

The university continued to offer the military mapmaking course for several years. In 1945, Kent State’s department of geography and geology was approved as a depository for more than 25,000 publications, maps, pamphlets and other property of the Army Map Service (still at the Map Library in McGilvrey Hall).

Bea Shaheen moved to Los Angeles in 1945, where her future husband, Bill McPherson, was stationed with the U.S. Marine Corps, and she found work as a U.S. Army classification analyst, reviewing 16 military installations.

When the war ended, a few of the 3M girls remained with the Army

Map Service, but most left to start careers and families in other locations. After the war, she moved back to Washington, D.C., and taught for several years while her husband-to-be completed his education at George Washington Law School.

They married in 1949, started a family and eventually moved back to Ohio, settling in Hartville. She taught third grade at the elementary school there, and after her third child was born in 1956, she worked as a legal assistant at her husband’s law firm for 35 years. They traveled extensively and were active in their community.

A lover of fashion—“I believe a person should look well-dressed when they go out; it makes you feel so much better”—Bea McPherson was a member of the board of the KSU Museum and School of Fashion Design and Merchandising for many years and served on other boards of civic organizations.

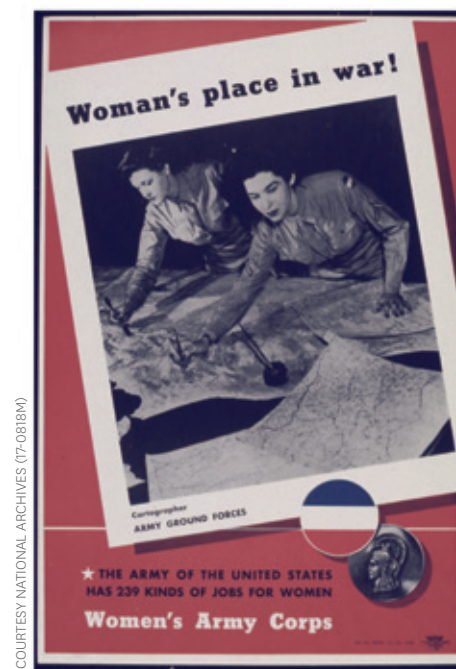
During all that time, she kept in touch with some of the women she’d worked with at the Army Map Service. And she initiated and organized reunions for the original Military Mapping Maidens in 1968, 1976 and 1993 in Washington, D.C., “to relive, briefly, one of the greatest experiences of our lives.” She put notices in *The Washington Post* and local papers and contacted the

various college alumni associations to try to track the women down. As the years went on, she participated in panels, attended events honoring WWII veterans and gave interviews on her experience as a military mapmaker to various publications.

Then she read a brief notice in the *AMS News*—the newsletter of the Association of Mapping Seniors, whose motto is “Keeping in Touch and Having Fun”—encouraging members to submit remembrances for a 40th anniversary commemorative brochure in 2014. “I called and said, ‘Well, I can’t do 40 years; I can do 70!’”

She was soon contacted by Al Anderson, a member of the National Geospatial-Intelligence Agency (NGA) Alumni Association (the Army Map Service has changed names several times over the years and is now part of the NGA). He interviewed her for a story about the Military Mapping Maidens, which appeared in the winter 2014 issue of *The NGA Pathfinder*, a publication for employees of the Department of Defense.

She was also invited to come to the NGA headquarters in Springfield, Virginia—now housed in a building many times the size of the original one she worked at—in January 2014 to celebrate Women’s History Month and meet then-NGA director Letitia



COURTESY NATIONAL ARCHIVES (77-08184)

World War II poster recruiting women to join the Army Ground Forces as cartographers.



NGA Director Robert Cardillo presents military mapmakers Dina (Morelli) Kennedy and Bea McPherson with a plaque commemorating the induction of the Military Mapping Maidens into the Geospatial-Intelligence Hall of Fame. This commemorative photo includes an inscription from the director, who wrote “Congratulations, Bea—you stole the show —deservedly so!”

Long. Her scheduled 15-minute meeting with Ms. Long stretched to 30 minutes as the director pored over the scrapbook she’d brought chronicling her time at the Army Map Service during WWII. Ms. Long presented her with a NGA medallion, typically given only to dignitaries, and in a follow-up note the director wrote, “You were truly a pioneer who paved the way for women to enter the field of cartography.”

“It was quite an honor to be called a pioneer mapmaker,” Bea McPherson says. “Until then, I hadn’t realized that’s what I was!”

Two years later, she received a letter from the current NGA director, Robert Cardillo, informing her that the Military Mapping Maidens had been selected for induction into the Geospatial-Intelligence Hall of Fame.

He invited her and her family (she was widowed in 2008) to visit the NGA on October 4, 2016, to accept the honor on behalf of all the civilian women cartographers from the Army Map Service whose accomplishments helped support the war effort during World War II.

During her acceptance speech on behalf of the 3Ms, she said, “Our country was at the forefront of our minds. We believed in our country, we protected our country, and we wanted to do our part, our very best—our patriotic duty.” She received a standing ovation.

The next day, Ohio Congressman Bob Gibb’s office presented her with a Declaration that he had read into the Congressional Record, which concluded: “These women have been an inspiration to countless future generations. The selfless dedication to the mission by the Army Map Service civilian women cartographers has earned them great honor and respect as well as a distinguished place in the Geospatial-Intelligence Hall of Fame.”

“Those two days were one of the highlights of my life,” says Bea McPherson, looking over the letters, photos, plaques, medallions and pins pertaining to her NGA visit that she’s saved—objects that join all the others she’s collected over her long life, many of which she has put into scrapbooks.

“I’ve always been a packrat,” she says. “I save everything. I’ve got my memories all on paper here.” (Well, not quite *all*—she also has thousands of digital photos on her iPad and keeps in touch with family and friends through Facebook.)

The mementos serve as markers for many significant moments on her life’s journey. But her time as a mapmaker holds a special place in her heart. “As women, we were doing our part to serve our country. I’m very honored to have been part of that.” ⚡

Bea McPherson donated her Army Map Service papers, as well as papers relating to the KSU Museum and Fashion School, to Kent State’s Special Collections and Archives (www.library.kent.edu/bea-mcpherson-papers). Watch a video of her at www.kent.edu/magazine/mcpherson.

alumni LIFE

Trip of a Lifetime

Florence study abroad opportunity now available to Kent State alumni.

Imagine visiting Florence, Italy, not as a tourist, but as a member of a community—sharing a daily routine with local residents, taking classes with a small cohort of students and beginning to understand life through the lens of another culture.

This summer Kent State University alumni have the rare opportunity to join Kent State faculty and students for an in-depth, study-abroad experience through the Florence Alumni College program, sponsored by the Kent State Alumni Association and the Office of Global Education. During this weeklong adventure (June 10–15, 2018), alumni will learn alongside students at the 15th century Palazzo Vettori (the new home of the Kent State Florence Campus) as they study Italian fashion, art, food, wine, cinema and the Mafia.

Alumni College members will also enjoy unique, off-campus excursions led by faculty,

DAVID LABELLE



Kent State students take in the sights and culture of Italy during a field trip to Prato.

including a walking tour of Florence, guided tours of the Uffizi Gallery and the Galleria dell'Accademia (home of Michelangelo's *David*), as well as a cooking class in authentic Italian food, a wine tasting and a field trip to Siena.

Experience firsthand the eye-opening education offered for more than 40 years by the Kent State Florence program, which the Association of American College and University Programs in Italy has touted as one of the best programs among 160 American universities in Italy.

To help prepare for the trip, Alumni College guests will meet fellow travelers and learn from Florence experts at a special pre-departure seminar on May 14 in Kent (and via live stream for those outside the area).

The deadline to register is mid-February 2018. Visit www.ksualumni.org/Florence for pricing, contact information, itinerary and registration details. For more information about the Kent State University Florence Campus, visit www.kent.edu/Florence. —Stephanie Langguth, BS '03

class NOTES

1950s

Former Golden Flash football player **Boghos (Bo) Mooradian, BA '50**, Guildford, Conn., attended a tailgating party at the football home opener on September 9, 2017 at Dix Stadium, hosted by the Lake County Alumni Chapter.

Pictured: kneeling (l to r) **Sandy Disbro, BS '75**; Susan Peterson (friend); **Bo Mooradian, BA '50**; **Steve Bierfeldt, BS '88**; standing (l to r) Mindy Aleman (staff); **Colin Maclean BS '90**; Mike Johann (friend); **Robert Milliken, BS '83**; **Glenn Peterson, BS '84**; and **Larry Disbro, BA '71, BS '73, MED '78**.



1960s

Joseph Concheck, BBA '60, Canal Fulton, Ohio, wrote: "My wife of 55 years, Fay Concheck, died May 26, 2016."

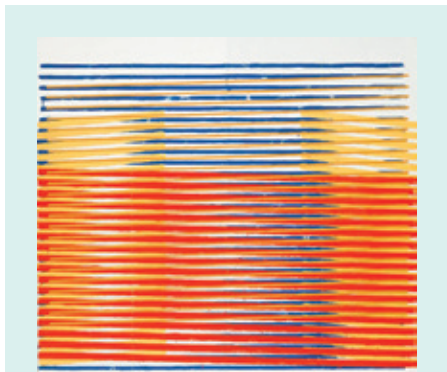
Larry McDougale, MA '65, Napoleon, Ohio, was awarded the 2017 Albert Nelson Marquis Lifetime Achievement Award by Marquis Who's Who for his many years of service to higher education. Dr. McDougale, who earned a doctorate in higher education administration from the University of Toledo, served as president of Northwest State Community College and Owens Community College. He served on the faculties of several universities, including the University of Toledo and Southern Illinois University, and he received honorary degrees from Owens Community College and the University of Findlay, where he was also the recipient of the 2009 Distinguished Alumni Award. He retired from higher education in 2011 and lives in Napoleon, Ohio, with his wife, Ruth.

Peter Foley, BS '67, Framingham, Mass., was selected for induction into the National Interscholastic Swimming Coaches Association (NISCA) Hall of Fame. He served as the swimming coach at Weston (MA) HS for 35 years and his team earned 18 state championships. The ceremony will take place at the 2018 NISCA Convention in Minneapolis on March 24, which is held in conjunction with the NCAA Men's Swimming Championships.

Richard Grimmett, BS '68, MA '70, PhD '73, Kensington, Md., is a contributing author for *White House History*, the quarterly journal of the White House Historical Association. He retired from the Congressional Research Service of the Library of Congress after a 38-year career, receiving the Library's

Distinguished Service Award, its highest honor, for "exceptional contributions to the United States Congress, the Congressional Research Service and the Library of Congress."

Terrence O'Donnell, BA '68, Rocky River, Ohio, Justice of the Ohio Supreme Court, was awarded the St. Thomas More Award for his high ethical standards by the Lawyers Guild on October 20, 2017.



Anthony Greco, MFA '66, Atlanta, Ga., explored minimalism during the decade of the 1970s, producing a series of large-scale minimalist paintings. Some paintings in the series were exhibited at the High Museum of Art in Atlanta and elsewhere, but hadn't been exhibited as a group since. In honor of Mr. Greco's 80th birthday, an exhibit of his works from the 1970s, "Looking Forward/Looking Back, Anthony Greco Paintings from the 1970s" was on display from October 13 to November 11 at Thomas Deans Fine Art in Atlanta, Ga. Pictured: *314/ Fourteen*, oil on canvas, 68" x 76," 1976



Bill Truby, BS '72, MEd '84, PhD '92, Valdosta, Ga., professor at Valdosta State University in the Graduate School of Education, wrote: "Fraternity brother and Hall of Fame Coach **Lou Holtz, BS '59**, Orlando, Fla., and I met in Valdosta recently, when Coach Holtz was in town to speak at the annual banquet sponsored by Georgia Christian School. (In the 10-year history of the banquet, other notable speakers have included George and Laura Bush, quarterback Terry Bradshaw, and Governor Mike Huckabee, among others.) Hopefully, golf is on the agenda for future visits!" Pictured (l to r) **Bill Truby** and **Lou Holtz**.

1970s

Don Rung, BBA '70, Amelia Island, Fla., wrote: "In my retirement, my wife and I have formed Camp Angels, a nonprofit that helps financially challenged children with diabetes attend specialized summer camps across the United States (www.campangels.com). Since 2003, we've helped more than 2,600 children attend diabetes camps where they learn how to manage their life-threatening disease and meet hundreds of other children facing the same daily challenges."

John Hayes, BA '71, MA '73, West Palm Beach, Fla., has been appointed the Titus Chair for Franchise Leadership and director of the Titus Center for Franchising at Palm Beach Atlantic University in West Palm Beach. He taught journalism at Kent State Trumbull (1971–1974) and Kent State Stark (1974–1976). After completing his doctorate in 1985 at Temple University, Dr. Hayes left academia to build a marketing and public relations business that specialized in franchising. Later he became the President & CEO of HomeVestors of America, Inc., the "We Buy Ugly Houses" franchise. He is the author of more than 25 books, most about franchising. During the past seven years Dr. Hayes served on the faculty of Gulf University for Science & Technology in Kuwait, where he held a dual appointment in mass communications and business administration. His appointment in Florida includes dual assignments in the Rinker School of Business and the School of Communication and Media.

William Gordon, BGS '73, Los Angeles, Calif., is releasing an updated e-book version of his book *The Ultimate Hollywood Tour Book* to celebrate the 25th anniversary of what has been called the bible of L.A.'s sightseeing

industry. Including new entries and color photographs, the book covers homes to the stars, filming locations of movies and TV shows, sites that inspired songs, as well as sites of scandals, murders and suicides.

Susan (Weisenbach) Johnson, BS '74, Avon Lake, Ohio, wrote "I've worked for NASA for four decades, currently as an engineer project manager at NASA's John H. Glenn Research Center at Lewis Field in Cleveland. In August, I received NASA's Exceptional Service Medal for sustained performance of NASA's Aeronautics missions and goals. The NASA Administrator approves a small number to be awarded each year. This is another highlight in my career!"

Peter Demyan, PhD '76, Sparks, Nev., retired in July 2016 after 48 years in education. Dr. Demyan served on graduate faculty in curriculum, instruction, administration and supervision at Johns Hopkins University, taught high school chemistry, forensics, philosophy and physics in Delaware and Ohio, served as district superintendent in California and Washington and in district administration in California, Delaware and Ohio. He created interest-driven magnet schools and early college high school programs, high school forensic science and philosophy courses, and curriculum masters at Hopkins and Ashland University in Ohio.

Mathew McIntosh, MA '77, Hagerstown, Md., headmaster of Grace Academy in Hagerstown, has written *Faith's Fortune—The Trilogy*, which was nominated by Xulon Press for the 2017 Historical Fiction Book of the Year. Dr. McIntosh recently served as dean of Academic Affairs at Kent State University–Geauga, and his daughter, Laura McIntosh, is a 2014 graduate of Kent State.



Ruth Ava Lyons, BFA '78, Charlotte, N.C., wrote: "This past summer, I showed 30 of my *Organism* series at The Yard, Brooklyn, N.Y.; a selection of my *Oceanic Alchemies* series at Expo 216, a gallerium in Wilmington, N.C.; and a selection of my *Changelings* at Hidell Brooks Gallery in Charlotte, N.C." Pictured: *Organism #55*, mixed media/ gold leaf on paper, 15" x 18"



Marcy Albert, BS '75, Tucson, Ariz., wrote: "I met my two college roommates our first year at Kent State in Fletcher Hall, and they continue to be my closest friends. Doesn't get better than that! This photo was taken at Old Faithful in Yellowstone National Park this summer." Pictured (l to r): **Loren Cuppy-Combs (Smith), BS '76**, Bozeman, Mont.; Marcy Albert, and **Joanne Schneider, BS '76**, Tucson, Ariz.

Bill Ayars, BArch '79, Bay Village, Ohio, principal of Perspectus Architecture in Cleveland, republished his 2015 memoir, *The Big Muddy*, with a new foreword and ending, after his daughter, Jennifer, died at age 28 from a drug overdose soon after its original publication. Ten dollars from each sale of his book (www.thebigmuddybook.com) will go to the Emerald Jenny Foundation, which Ayars launched to help find people struggling with drug addiction find treatment in Ohio.

Bruce Kirk, BGS '79, Lynchburg, Va., was named founding dean of the School of Communication & Digital Content at Liberty University in Lynchburg, Va. Dr. Kirk joined the Liberty faculty in 2009 after more than three decades in broadcast media. He is the winner of five Emmy Awards, including one for a 1980 documentary on the 10th anniversary of the Kent State shootings. He is the son of the late KSU administrator, Dr. Charles Kirk.

Alanna Welling-Arnold, BA '78, MA '80, Medina, Ohio, is serving as the president of the Medina County, Ohio Bar Association.

1980s

John Hollabaugh, BS '81, Mentor, Ohio, wrote: "I retired from electronic media advertising sales in Cleveland after a 35-year career at: WWWE/WDOK, WGCL, WJW TV, WOIO TV, WEWS TV, Time Warner Cable/ Sportstime Ohio, WKYC TV. Could have never done it without Kent State!"

alumni LIFE

School Spirit

Cuyahoga Falls High School (CFHS) colors are black and gold, but at the beginning of every school year the Golden Flashes who work there come decked in blue and gold to show off their Kent State spirit and pride.

Thirty-five percent of all administrators, counselors and teachers at the school are Kent State graduates, says associate principal **Hillary Freitag-Geiger, BS '08**, Akron, Ohio. “We’re the largest staff member alumni group!”

For the past four years, the KSU alumni at CFHS have posted a group photo on social media and on a bulletin board in the main hallway. “We’re trying to show our kids how many opportunities there are if they pursue a college education,” says language arts teacher **Melody Carlisle, BSE '91, MED '98**, Ravenna, Ohio.

We’re betting some of those Black Tigers will become Golden Flashes one day!
Adapted from an article that first appeared in eFlash by Abigail Winternitz, BS '19.



class NOTES

Steve Machovina, BBA '85, Elyria, Ohio, was promoted to assistant vice president of technology infrastructure and cloud services for Cleveland-based Safeguard Properties, a mortgage field services industry leader preserving vacant and foreclosed properties across the United States, Puerto Rico, Virgin Islands and Guam.

Earl Miller, BA '85, Somerville, Mass., a professor of neuroscience at MIT, was elected to The American Academy of Arts and Sciences, one of the nation’s most prestigious honorary societies. The academy is also a leading center for independent policy research. Members contribute to academy publications, as well as studies of science and technology

policy, energy and global security, social policy and American institutions, the humanities and culture, and education.

Bertice Berry, MA '86, PhD '88, Savannah, Ga., was invited by members of the National Association for Campus Activities (NACA) to join as a special guest advisor to its board of directors. A past NACA Campus Entertainer of the Year, as well as recipient of NACA’s Comedy and Lecture awards, she has published 11 best-selling books in fiction and nonfiction and has won numerous awards and accolades for her writing and presentations. After completing her doctorate, Dr. Berry taught sociology at Kent State University before leaving academia in the early 1990s to work as an entertainer, lecturer and comedian. She is the mother of five adopted children, her most fulfilling achievement and role in life.

Laurette Payette, MA '87, was inducted into both the National Lacrosse Hall of Fame and the Ohio Athletic Association Hall of Fame in October, in honor of her dedication to advancing opportunities for women in sports. She retired in 2007 from Hathaway Brown School in Shaker Heights, Ohio, after 32 years of serving as a teacher, coach, physical education department chair and athletic director.

Julie (Cirkelis) Locke, BA '88, Cleveland, Ohio, says: “I was on the nearly undefeated Kent State women’s lacrosse team of 1979, and I want to thank all the women on the team for doing a great job. We were an outstanding team, and we had a lot of fun!”

Bob Miller, BA '88, Beltsville, Md., has been appointed associate dean for graduate studies in the School of Theology & Religious Studies at the Catholic University of America, Washington, D.C.



Prashanth Shanmuganathan, PhD '16, Colombo, Sri Lanka, was selected as one of two winners of the prestigious Thesis Award at the Annual Users’ Meeting at the Brookhaven National Laboratory in Brookhaven, New York. The award recognizes the most outstanding thesis related to research conducted at the laboratory. Dr. Shanmuganathan, now a post-doctoral research associate at Lehigh University in Pennsylvania, presented his thesis to 200 scientists and received an award of \$3,000. His award-winning doctoral project findings unveiled the clearest and sharpest indication to date of a transition effect as the energy of nuclear collisions is scanned across the range that is available for study at the Relativistic Heavy Ion Collider at Brookhaven. Pictured: Brookhaven National Laboratory Director Doon Gibbs presented Prashanth Shanmuganathan with the Thesis Award on June 22, 2017.



Joe Yusko, BBA '13, and **Lindsay (Ludlow) Yusko, BA '13**, Broadview Heights, Ohio, were married on June 24, 2017. The couple met at a local Kent bar, the Zephyr, their junior year, and got engaged at the same bar in 2015. They took engagement photos around the campus and town. All photos by J and J Photography and Design (**Jeff Florentine, BA '11**, and Jen Florentine).

1990s

Hobson Hamilton, Jr., MED '93, Akron, Ohio, wrote: “I retired from Kent State University’s Career Exploration and Development as of July 1, 2017. Kent State has been very good to me, and I loved my time there.”

Linda Ozan, BA '94, Edmond, Okla., is now the deputy state historic preservation officer for the State of Oklahoma. Previously, she served as the architectural historian and National Register coordinator for Oklahoma, since 2008.

Stephanie Rubino, BS '95, Naples, Fla., has been a realtor licensed with the state of Florida for the past four years. She is with Amerivest Realty in Naples.



Dave Herrington, BS '13, BSN '15, St. Augustine, Fla., was engaged to Kristy Kurowski of St. Augustine in early 2017 on a cruise, and the couple celebrated their marriage on October 28, 2017, at Serenata Beach Club in Ponte Vedra Beach, Fla.

Jonathan Katz, PhD '97, Takoma Park, Md., had his first book of poems, *Love Undefined*, accepted for publication by C&R Press.

Jamy Bechler, MA '98, published *The Leadership Playbook: Become Your Team’s Most Valuable Leader* in July and it was a #1 New Release for basketball coaching books on Amazon.com. He is a John Maxwell certified leadership coach and former college basketball coach. He works with various teams and businesses to maximize their success by developing leadership skills and creating a championship culture (www.jamybechler.com).

Rebecca Lewis, BA '98, Mount Holly, N.J., studied desert and marine landscapes through ecological and social field methods in Baja in summer 2017. A lower school science teacher at Baldwin School in Bryn Mawr, Pa., she took the graduate course in pursuit of her master’s degree from Miami University’s Global Field Program.

Beth Graham, BArc '99, Akron, Ohio, is the newest addition to the team at Braun & Steidl Architects based in Akron, Ohio.

2000s

Lisa Shafto-Lehachi, BA '00, Palm City, Fla., received a doctorate degree in organizational leadership from Nova Southeastern University’s College of Education on June 16, 2017.

Sarah (Payne) Mueller, BA '01, Stow, Ohio, has been promoted to director of human resources at United Way of Greater Cleveland.

Matthew Busser, BGS '02, Upper Arlington, Ohio, was promoted to the human resources officer position for the Franklin County Board of Commissioners, Department of Human Resources.

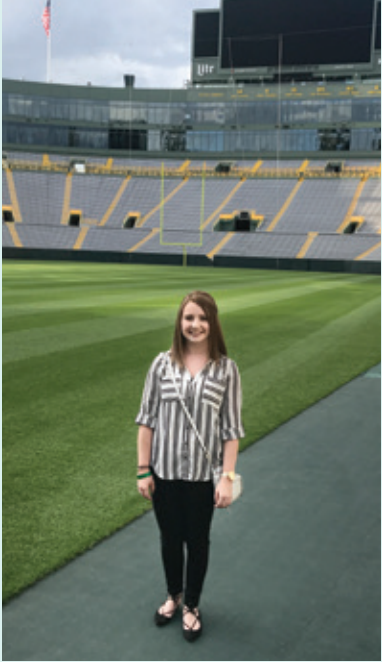
Bryan Bedford, BA '04, MED '06, Eds '13, Streetsboro, Ohio, member of the Kent State 2001-02 men’s basketball team that reached the NCAA Division 1 tournament’s Elite Eight, has been named athletic director of Hudson City School District.

Anne (Wiater) Johnson, BSN '09, Stow, Ohio, wrote, “Bill Johnson and I were united in marriage on July 15, 2017. The wedding was held at Holy Family Parish in Stow, and the reception took place at Emidio & Sons.”

2010s

Albert J. (A.J.) King, BS '11, Millbury, Ohio, has been promoted to virtual design and construction (VDC) team leader for GEM Inc., a Toledo-based company that offers design, renovation, upgrade, consolidation and relocation services for process manufacturing and industrial customers. He has worked with GEM Inc. since 2013 as VDC designer/laser scan technician. His added responsibilities include supervising and training designers in computer-aided design systems and laser scanning.

Michael Daugherty, BS '14, Owings Mills, Md., was recently promoted as site lead and subject matter expert for Amazon Robotics and Robotics Service Platform at the third largest AR Sortable Amazon site, BW12 in Baltimore, Md.



Lauren Rathmell, BS '17, Cuyahoga Falls, Ohio, wrote: “I was recently hired as assistant editor for *Lawn & Landscape Magazine*, a publication of GIE Media, located in Valley View, Ohio. My first few months have been full of opportunities, like a trip to Green Bay, Wisc., where I was able to tour Lambeau Field [see above] and cover new equipment and product launches.”

Chris Baum, BA '16, Atwater, Ohio, wrote: “I am happily married to Melannie, my wife of 16 years, whom I met at KSU. We have two young, active boys, Michael and Alex. I majored in English, and my poetry has been published in *Poetic Realm* and *Canto*. I’m happy to report that my first novel, *Surrender*—a religious fairy-tale satire—was recently published by Covenant Books.”

Amanda Maxwell, BS '16, New York City, N.Y., senior account executive at Hubb House Public Relations, shared her insight as an industry leader in an article on “What does business casual mean in 2017?” for fitsmallbusiness.com.

Send Us Your Class Note

We’d love to hear from you!

To share your news, complete the form at www.ksualumni.org/classnotes (you may include a high-resolution image in JPEG, GIF or PNG format) or write Kent State University Alumni Association, Center for Philanthropy & Alumni Engagement, P.O. Box 5190, Kent, OH 44242.

Limit your notes to 100 words or less and include your class year, city, state and degree(s). Notes may be edited for length or clarity and published as space allows.

Issue:	Deadline for submissions:
Fall	March 31
Winter	July 31
Spring	November 30

alumni LIFE
Flashes Give Back

Join your fellow Flashes to make an Impact around the globe during the 10th Annual Alumni Day of Service.

Since the first Alumni Day of Service in 2009, alumni and friends have helped build homes, clean rivers and beaches, prepare meals for families, clean hospice centers and shelters, assist at animal rescues and so much more.

During last year's Alumni Day of Service, alumni organized and held service activities in Cleveland, Akron, Columbus, San Francisco, Pittsburgh and many other locations. And for the first time, it was a global event, as Kent State alumni in Jordan participated.

As you help others during the day of service, it also helps you—giving you a chance to share your Kent State pride and experience the collective power of volunteers who make a difference in communities around the globe. And it provides an opportunity to reconnect with fellow Golden Flashes and share the value of giving back with your family and friends.

"We pulled weeds to clear a fresh water stream for the zoo animals," says **Stephanie Smith Oehler, BBA '99**, Gilbert, Ariz., who was the site coordinator at the Phoenix Zoo. "We loved working with other alumni and reminiscing about our Kent days. We had twice as many alumni this year, so the momentum is building. Flashes Forever, indeed!"

Planning for the 10th Annual Kent State Alumni Day of Service, to be held April 21, 2018, is underway. Details including available service site locations and information on how to register and lead a site of your choice is available on the Alumni Association website, www.ksualumni.org/FlashesGiveBack. You can also follow the Alumni Association on social media @KSUALumni and watch for the 2018 Alumni Day of Service hashtag, #FlashesGiveBack.

—Stephanie Langguth, BS '03

Overview of Alumni Day of Service since 2009

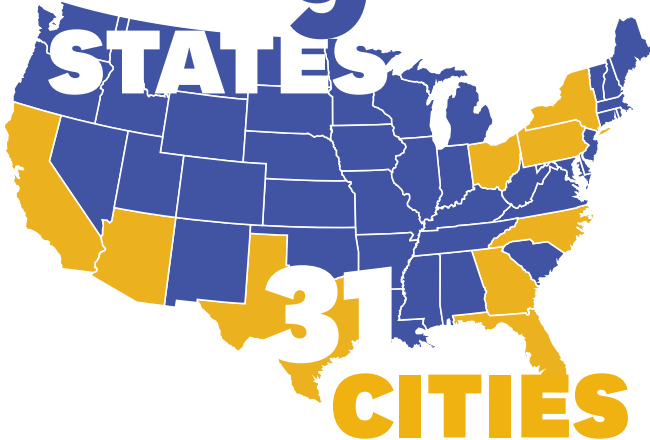


5,209 HOURS



1,490 VOLUNTEERS

Kent State alumni have volunteered in



Cleveland Food Bank
Cleveland



Children's Trail, Phoenix Zoo
Phoenix



SOS Children's Village
Irbid, Jordan



Amigos de los Rios
Los Angeles

Time Past

When John Saunders, a son of **Zane Saunders, BA and MA '59**, Sarasota, Fla., sent in his father's obituary, it included this sentence: "As president of the Kent Student Government, Zane crowned the Campus Day Queen, Joan Lindsay, who later became his wife on August 9, 1958."

Intrigued, we searched some of the digitized *Chestnut Burr* yearbooks from the time period and found a photo of that momentous event on Campus Day in 1957. (See photo at right.)

"Cloudy weather failed to extinguish the enthusiasm at Kent State as the 44th annual Campus Day arrived . . . As crowds of students, parents, alumni and townspeople gathered on the front campus, Queen Joan Lindsay was crowned by Zane Saunders, president of Student Council. She and her court watched as the traditional Maypole Dance was performed," according to the *Chestnut Burr* account.

We learned from the obituary that the couple "became proud parents of five sons born in rapid succession" and moved to Connecticut "where Zane was the Director of Speech Pathology and Audiology for 25 years at the Newington Children's Hospital (now known as the Connecticut Children's Medical Center). He was also an adjunct professor of Speech Pathology at Central Connecticut State University and served as consultant on the faculty of the University of Connecticut."



Zane Saunders crowns the 1957 Campus Day Queen, Joan Lindsay, in this photo from the *Chestnut Burr*.

"A strong advocate of higher education, he was perhaps most proud of the fact that he and Joan gave their five sons the opportunity to attend and graduate from some of the country's most prestigious private institutions of higher education. His legacy of promoting higher education continues in the intellectual development of his grandchildren."

Zane Saunders died on July 27, 2017 at his home in Sarasota, Fla. He is survived by his wife **Joan (Lindsay) Saunders, BA '58**, five sons, five grandchildren and several nieces and nephews.

The student-produced *Chestnut Burr* was published from 1914–1985. See digital versions at www.library.kent.edu/burr.

in MEMORY

1930s

Pauline Franks '39, May 30, 2017

1940s

Sue Snyder Hinton '41, January 18, 2017
Joseph Stevens '41, November 14, 2016
M. Wands '42, December 26, 2016
Rose Oberholtz '43, March 22, 2016
Louis Cosentino '46, May 21, 2016
George Sewall '48, November 18, 2015
Jordan Truthan '49, February 5, 2016

1950s

Rosalia Caperna '50, November 25, 2016
Gordon Goldsmith '50, January 16, 2017
William Browne '52, September 30, 2017
Clayton Hine '52, March 16, 2017
Mary Brown '53, May 8, 2017
John Hulan '55, November 21, 2015
Kenneth Cooley '57, March 19, 2017
Carol Pedid '59, February 13, 2014
Joan Pettibone '59, May 5, 2017
Zane Saunders '59, July 27, 2017

1960s

S. Arbit '60, October 1, 2015
Daniel Jessup '60, December 28, 2016
William Bolilantz '61, February 2, 2017
Donald Hale '61, August 8, 2016
Wayne Shumaker '61, January 28, 2017
Robert Ahrens '62, January 19, 2016
Vange Firestone '63, January 11, 2016
Jeffrey Kmetzko '64, March 1, 2015
Delores Pope '64, February 15, 2017
Frank Bokausek '65, May 4, 2016
Frederic Freede '65, October 20, 2016

Albert Nye '66, May 18, 2017

Janice Alexander '67, April 13, 2017

Ellen Deutsch '67, February 22, 2016

Patricia Smouse '67, May 3, 2017

Frank Brady '69, July 16, 2016

Barry Gilbert '69, September 16, 2016

Frederick Johnson '69, February 4, 2017

Judith Robinson '69, February 9, 2016

Ruth Wells '69, April 18, 2016

1970s

John Hauser '70, April 28, 2017

James Cody '71, MA '78, July 16, 2017

Christine Worona '72, October 28, 2016

David Pherson '72, July 3, 2017

John Awarski '73, July 13, 2016

John Carliin '73, June 20, 2016

Marjorie Steiner '73, August 19, 2016

Joanna Robbins '74, February 3, 2017

Alden Peterson '75, April 25, 2017

Toby Kupka '76, January 30, 2017

Donald White '77, November 30, 2016

Thomas Hadala '78, September 24, 2016

Ronald Skalsky '79, July 5, 2015

1980s

Catherine Cornell-White '80, December 13, 2015

Mary Alice (Washam) Corley '83, November 28, 2015

David Kraatz '83, January 25, 2017

Catherine Purdy '83, March 19, 2015

Terry Sickels '83, April 25, 2017

Raymond Swenton '83, September 21, 2016

Dennis Bindel '84, January 13, 2015

Craig Getty '84, February 14, 2017

Denise Kane '85, December 5, 2016

Tammy Arbogast '89, September 8, 2016

1990s

Robert Peden '90, January 19, 2016

Charles Derek Roberts '90, November 24, 2016

Alan Murin '91, January 12, 2017

Adella (Dell) Zatroch '91, February 27, 2017

Leonore Szymanski '92, September 29, 2016

Beverly Stamp '94, February 27, 2017

Ene Oro '95, September 28, 2016

Fred Starheim '97, March 26, 2017

2000s

Kaye Paterson '03, April 10, 2017

Elisabeth Waybright '04, July 19, 2017

Colin Huber '05, December 12, 2016

Erick Walker '05, December 2, 2016

Rachael Grover '11, April 29, 2017

FACULTY/STAFF

Alan Charles Coe, former dean of Kent State University–Trumbull, emeritus dean for Academic Affairs for Kent State's regional campuses, September 21, 2017
Halim El-Dabh, university professor emeritus of music, September 2, 2017
Marjory Tyler Rounds, adjunct music faculty, September 2, 2017
Ruth Sitler, BS '90, MEd '93, PhD '98, former director of Kent State's Flight School, September 11, 2017

Correction: The "In Memory" listing for Harry Filkor '88 in the fall 2017 issue was a mistake; Harry Filkor Sr. passed away on April 28, 2016, but Harry Filkor Jr. '88, is still among the living. We regret the error.



Slide On

Something special happens when the first snowfall blankets the Kent Campus. The familiar landscape turns into a winter wonderland, and college students tap into their inner child as they seek some snow-inspired fun.

A beloved pastime at Kent State University, tray sledding (or traying) is one way to overcome the winter blahs and take a quick break from studying. The concept is simple: “borrow” a dining hall tray, find a snow-laden hill, sit on the tray and—whoosh!

While no one knows the exact origin or date that tray sledding came to campus, *The Kent Stater* (formerly *The Daily Kent Stater*) has reported on it since the 1950s. And in many articles—including Kent State bucket lists from 2011 and 2016—tray sledding is portrayed as a rite of passage on campus.

“My goal as a student engaged in this popular winter activity was to join ‘the elite’ of the tray sliders—the ones who

Students take turns traying down a slope outside Taylor Hall in this archival photo dated circa 1980s. Let us know if you recognize yourself!

were able to get all the way down the hill *standing* on one tray!” recalls Tim Martin, BA ’84, Uniontown, Ohio.

Popular sledding spots remain the slopes of front campus and Blanket Hill. Trays are still available in the Kent State dining halls, but to-go containers and other dishware options have reduced their use. In lieu of trays, some students find other means of transportation, including plastic bags, trash can lids, snowboards and store-bought sleds.

While the method of sledding may change, the point remains the same: comradery, good old-fashioned fun and the chance for a thrilling downhill glide. ⚡
—Bethany Sava, BS ’12

Send us YOUR Flashback:

Share your memories from Kent State and they may appear in a future issue of *Kent State Magazine*. Email your stories and photos to magazine@kent.edu.

MY GRANDFATHER

whose stories were large
like a tree’s shadow
under which many people
could rest

who walked slowly like a turtle
reflecting kindness

who was over one hundred
and like a precious suitcase
contained wealthy things

whose heart was open
like a flower
on which bees could land
to collect pollen

whose voice was like honey
my grandfather

whose life is a mirror to me

by Luwela Esube
Democratic Republic of the Congo
Resettled in Akron, Ohio

BIO: During the First Congo War in 1996, Luwela Esube fled Zaire (now the Democratic Republic of the Congo) for Tanzania, where he lived for 20 years in refugee camps. He recently came to the United States and is working at the International Institute of Akron as an interpreter. During a poetry workshop led by staff members from Kent State’s Wick Poetry Center, he wrote the above poem “to show how my grandfather was important to me.”

“[In my village] my grandfather was the one to give the last decision in case of any problem, because everyone trusted him. He was kind to everybody; he used to welcome visitors. I carry the memory of my grandfather. Here in Akron, I don’t have relatives, I’m [by] myself. But if I can behave here as he taught me, I think I will get friends, because I will show my kindness to them. I’m just helping, as did my grandfather in former time.”

See a video of Mr. Esube reading his poem at travelingstanzas.com/traveling-exhibit.

share your **VOICE**

In partnership with the Wick Poetry Center, *Kent State Magazine* features a poem in each issue. To submit your poem, visit travelingstanzas.com, click “Submit,” and label it “Magazine Entry.”

ILLUSTRATION BY ZUZANA KUBISOVÁ '17



A New Home for Science Explorers

The grand opening of the Integrated Sciences Building in September 2017 ushered in a new era for collaborative scientific research and discovery at Kent State University.

Located just off East Summit Street, where the Science Mall meets Central Campus, the new structure provides 66,000 square feet of new classrooms, instructional and research labs, offices and meeting spaces.

Faculty researchers and students in various science disciplines—including chemistry, biochemistry, biomedical sciences, biological sciences and physics—now work and learn together. A light-filled, open common area enables them to meet informally, share ideas and collaborate to help meet the challenges of an ever-changing world.

SEE PAGE 14



PAUL SILLA