Creating and caring for the physical environment in which those who seek enlightenment, knowledge, health and productive lives can flourish.

Facilities Management supports the University of Virginia’s wide range of research, academic and patient care programs. From proving parking lots and clearing sidewalks to monitoring cutting-edge research labs, our 1,200 employees show a tireless love for the day and night to ensure the University is up and running for students, patients, staff, faculty and visitors.

Facilities Management employees dedicate themselves to the highest standard of stewardship while demonstrating initiative, professionalism and innovation. As a service organization, we are responsible for the planning, construction, renovation, maintenance and repair of the University’s buildings and facilities; and the provision of utilities, grounds care, custodial, trash collection, recycling and other services. We have two primary goals: to be the University’s choice for all of its facilities management needs, and to be the very best and most effective provider of these services.

This past year we associated with a variety of collaborative and innovative projects including the completion of the University’s newest residence hall, Rotunda; breaking ground on what will be one of the most comprehensive outpatient orthopaedic centers in the nation, the Top Mountain Outpatient Center; and multiple new sustainability efforts that will help us reach our carbon footprint reduction goal ahead of schedule.

Facilities Management has a long tradition of giving back to the community. In addition to supporting annual fundraisers, employees launched new community outreach initiatives this year including five Lookbox workshops, an event hosting high school students on site and building a play structure within a Charlottesville neighborhood.

We are proud to serve the University of Virginia, an iconic public institution of higher education, hosting nationally-ranked schools and programs, distinguished faculty, a major academic medical center and proud history as a renowned research university.

SURPASSING SUSTAINABILITY GOALS

The University of Virginia is on track to meet its carbon footprint reduction goal six years ahead of schedule. In 2011, the University set out to reduce greenhouse gas emissions 20% below 2005 levels by 2020 – a goal 6 years to reach this year, thanks to a combination of reducing energy consumption and generating solar energy. UVa has been recognized as a leader in sustainability efforts among peers, coming in at No. 1 in the Atlantic Coast Conference for its use of green energy, according to the U.S. Environmental Protection Agency. In addition, the UVa Facilities Management team recently earned the Sustainable Food Accreditation, becoming the only active university fleet in Virginia and the first active automobile fleet in the U.S. to receive this designation.

CARING FOR OUR TREES

The University of Virginia earned the 2014 Tree Campus USA designation, an Arbor Day Foundation program honoring universities and their leaders for promoting healthy trees and engaging students and the community in the spirit of environmental stewardship. The recognition highlights Facilities Management’s role as stewards of University trees and the extensive benefits they provide to everyone on grounds.

THE BEAUTY OF GROUNDS

UVa’s red brick buildings and distinctive landscape are regularly included on lists ranking the “most beautiful” campus around the country – recognizing Facilities Management’s skilled staff charged with caring for the UNC 100 World Heritage Sites. Most recently, Best College Reviews ranked UVa as the No. 1 Most Beautiful College Campus in the U.S.
University Hall was first built in 1965 and served for nearly five decades as the University’s sports arena and venue for many cultural events, including concerts, professional wrestling matches and a presidential visit.

“U-Hall”, as it is commonly known, was the first truly modern building on Grounds, with its distinctive round, scalloped roof, made from 9,000 tons of concrete and sprayed on the inside with asbesto-soundproofing. This became a problem many years later when the roof started leaking and asbestos began falling down on the by-then-abandoned seats.

University Hall hosted its last basketball games in 2007, before the excitement moved across the street to the brand-new John Paul Jones Arena. It hosted a few small events before increasing safety concerns forced its closure to the public in 2015.

On May 28, 2015, at 10 a.m., UVA basketball legends Ralph Sampson and Dawn Staley, athletic director Carla Williams and UVA Board of Visitors member Robert H. McIlvaine pushed the demolition lever, imploding U-Hall.

The demolition is part of the first phase of the Athletics Master Plan, which will transform the North Grounds athletics precinct. Plans include a new football operations center, a new Olympic sports building, additional practice fields, a renovated McCorkle Center and a promenade for pedestrians.

While the implosion brought down the shell of U-Hall in one day, enabling projects to prepare for the demolition started almost a year in advance.

In the summer of 2018, multiple modular units were installed near the site along with the construction of two buildings to house sports medicine, locker rooms, training and storage. The project was completed by Project Services Inc. and managed by Project Services Project Manager for Design Amy Stoups, Construction Project Manager Hans Moorch and Construction Superintendent Todd Russell.

In the fall of 2018, crews then started the careful dismantling and disassembly of U-Hall and its dependencies. The project — managed by Facilities Planning & Construction Project Manager CaitlinMurtaugh and Senior Construction Administrator Ralph Parno — was completed by crews from Renascent Inc., of Indianapolis, and Controlled Demolition Inc. of Phoenix, Ariz.

Approximately 95% of the building material was recycled. The metals were segregated and recycled, while the concrete was used as 15%, some on site, to help level off the ground.

In virtual reality app, 3D Glasswater Library, with the aid of a headset and two hand controls, spectators can walk through the stands at University Hall, despite its demolition in May.

In preparation for the demolition, several UVA students, faculty and staff members documented the building with 3D data-collection methods and still cameras. Wild Plenty, a 2.0 data and content specialist with the UVA Library’s Student Lab, and her team used lasers to scan the interior of U-Hall, recording center data and measuring the spaces, using two scanners on tripods simultaneously reading different parts of the interior of the arena.

The project to capture U-Hall is just one of many performed by the Scholar’s Lab staff throughout the year to capture a digital record of U-Hall’s buildings, structures, sites and objects.

Final update created with the Facilities Planning & Construction Mentorship Preservation team to identify opportunities for connecting UVA’s architectural spaces and names. In the past, the Scholar’s Lab team created Carter’s Hill, architecture and historic building directory accessible on the East Lawn and the tree on the Library’s historic site, which was extruded to early 2020 and relabeled later in the year.
The art of graining

Pavilion Doors Restored Using Graining Technique

Thomas Jefferson’s pavilions in the Academical Village are works of art—right down to the front doors. In the spring of 2013, the doors of Pavilions I, II and III were “restored” in a traditional double-stipple technique for making ordinary wood appear to be more rare and expensive. In the case of the pavilions, this door wood was grained to make them look as if they were mahogany, sycamore, black locust to create the impression of a wood grain.

Facilities Planning & Construction Architectural Conservator Mark Kytey has been working with John Caton & Associates staff who have performed the graining techniques on the original panel, Jefferson doors.

Graining is a multi-step process that involves the stippling of the door’s wooden panel, priming the wood and then applying a base color. The wood grain patterns are drawn with a variety of brushes with different lengths, texture, and techniques, working to recreate the randomness of a natural wood pattern.

The procedure and graining process was kick-started in the Facilities Management cabinet and paint shop with the help of Cabinet Finisher Kaia Rippon, Painters Kenny Thompson and Carpenter C.C. Stillm. The group worked together to prep the doors for the decorative graining, providing an opportunity for them to learn more about graining techniques, tools and tips.

In 2015, the doors of Pavilions IV, V and XI were refinished and additional doors will be completed next spring. Eventually, all of the doors will be restored with this technique as the current graining wears out.
NEW MUSCULOSKELETAL CENTER BREAKS GROUND

The University of Virginia’s new by Mountain Musculoskeletal Center will provide comprehensive outpatient care, including sports medicine and joint replacement surgery as well as all orthopedic specialty offices. In the fall of 2018, Facilities Management and UVA Health staff celebrated the groundbreaking of the Ivy Mountain project, which includes the musculoskeletal center and the Ivy Mountain Central Utility Plant. The new outpatient musculoskeletal care facility will be one of the largest and most comprehensive outpatient orthopedic centers in the nation and is expected to open to patients in 2023.

The 200,000-square-foot facility will include operating rooms, surgery support services, extensive imaging services, a robust clinical trials program, approximately 90 exam rooms for all the major UVA Orthopaedic specialties, and consolidation of all administrative functions.

The projects— which are being managed by Facilities Planning & Construction Senior Project Manager Marka Hartman—will be located on Ivy Road. Planning for the Ivy Mountain Musculoskeletal Center project started in 2016 and has involved hundreds of hours of discussion and planning by a core group of leaders, led by Dr. Chicago, a UVA Orthopaedic surgeon, with input from more than 200 members of user groups.

The facility expects to achieve a LEED Silver rating through various sustainable strategies and practices including retaining facilities for responsible water usage, improving energy performance, reducing greenhouse gas emissions, and enhancing the beauty of the existing site which will include pedestrian paths through landscaped areas.

To support the Ivy Mountain Musculoskeletal Center, and future developments on the site, the Ivy Mountain Central Utility Plant is being built in a parallel track to the project. The combined project budget for both projects is $2.99 million. For both projects, the UVA/FAC project team is Senior Project Manager Marka Hartman and Senior Construction Administration Manager John Marshall and Carolyn Chicho, the architect is JLP, and the construction manager is Whiting Turner.

Space for the smallest patients

A well-coordinated effort to renovate the University Hospital’s seventh and eighth floors was completed in December 2018, following a six and half year multi-phase project of those critical patient areas.

The project—managed by Facilities Planning & Construction Senior Project Manager Jim Leman and Senior Construction Administration Manager Carolyn Chicho—transformed approximately 60,000 square feet of space including the Pediatric Intensive Care Unit (PICU) and Labor & Delivery. The project was completed while maintaining full operations of all surrounding areas of the hospital, resulting in a high level of coordination, communication and problem solving.

Upgrades to the PICU on the seventh floor included new family-friendly and COVID-compliant amenities as well as a new bee’s narrow transport unit. The Women’s Health area on the eighth floor was renovated to include both private and semi-private rooms as well as an updated ceiling-care room and refurbished labor and delivery rooms and new nurse team stations. Mechanical, electrical, and plumbing systems were upgraded throughout both floors.

The $17 million project’s architect was IRS and the construction manager was DBI Construction, both of Richmond.

A YEAR OF GROWTH

UVA Health is continuously expanding to serve its growing patient base and research growth. This year, Health System Physical Plant staff added the following new spaces to its roster of buildings: UVA Endocrine Monitors, head and neck cancer Radiation Therapy, expand-exposed rooms within the Education Research Center and the Ivy County Critical Access Hospital, as well as the expanded emergency department (part of the University Hospital Corporation project), which opened with a ribbon-cutting ceremony in October 2018.

HPHP recently signed for Zone 1 maintenance staff which had previously consisted of 2,000 square meters with 70 employees. Zone 1 North took over the medical center building north of the Clinic and Zone 1 South covers the buildings to the north which included University Hospital.

Health System Physical Plant’s Renovations team has completed refurbishing 293 patient rooms, totaling close to $1.9 million worth of work. The ongoing effort will continue until all of the hospital’s approximately 479 rooms are renovated.
Ramps on the lawn

Students, faculty, staff and visitors with mobility issues now have significantly greater access to the four terraced levels of the Lawn following the construction of two new permanent ramps, which were completed in the spring of 2019.

Facilities Planning and Construction and Project Services worked together to construct the two ramps on the west side of the Lawn, adjacent to Pavilions V and E. The project was a collaborative effort between the University’s Battelle-F松 Access Committee, Alin Rauhuter, the architect for the University, and her team; Susan Wise President for Operations Esseta Shively and her team; and the Facilities Management team that worked through several weather delays to complete the project.

Project Services administrators and staff worked on the ramps which include LED lighting and the same custom brick bond used for wall repairs in the Acaednial Village buildings, preserving the look and feel of the UNESCO World Heritage Site.

PROJECT TEAM

- James Zehrer, Facilities Planning & Construction, historic preservation project manager
- Zach Bracker, Facilities Planning & Construction, construction administration manager
- Luan McMillin, Project Services, construction project manager
- Matt Mann, Project Services, construction project manager
- Rhodes & Flashed, landscape architects

CORY PARADIS
PROJECT COORDINATOR

If you had one extra hour of free time a day, how would you use it?
I would spend more time with friends and family.

Who do you admire the most?
My family, because without their support I would not be where I am today.

Do you have a favorite quote?
"Success is not achieved alone."

LOCKER ROOM REFRESH

The UVA Women’s Basketball team locker room was recently updated to provide a fresh and functional feel, supporting the team’s efforts to attain a high-rather than winning league.

The John Paul Jones Center locker rooms were completely gutted out and transformed into a fluid layout with shared interior spaces, lighting and furniture, including the use of recycled floating wood floors in the new locker rooms for sustainability.

The renovated space now includes a large open team lounge, a nutrition station and kitchen, a social film room and new locker rooms for the team and coaching staff. An extensive graphics package was designed to create a cohesive, branded home for the team.

The $2.6 million project was managed by Facilities Planning & Construction and completed by Project Services. The architect was Mwani with 2RW providing engineering services.

PROJECT TEAM:

- Taryn Spann, Facilities Planning & Construction, senior project manager
- Keith Payne, Facilities Planning & Construction, construction manager
- Alex Malcolm, Project Services, construction project manager
- Matt Fennell, Project Services, construction project manager
- Matt Boll, Project Services, construction project coordinator
- Populous, architect
- 2RW, engineering services
A NEW KIND OF BOILER

To meet the growing number of UVA facilities being served by the Main Heat Plant, a new boiler (but water heater) is being constructed at the plant that will be primarily fueled by natural gas. The.hot Plants team has been involved in this project, providing design review, construction support and auxiliary system upgrades such as new plenums. The project team includes Facilities Planning & Construction Senior Project Manager Will Moms and E&G Process Control Manager Jon Antindegger.

A new life for labs

A phased renovation of Darden Hall and the Chemistry Building will bring many of the University’s research and teaching laboratories up to 21st-century standards and practices. The buildings – which include more than 600,000 square feet of space – house research and teaching laboratories for the biology, geology and chemistry departments as well as general-use classrooms for the Colleges of Arts & Sciences. The project will enhance student-faculty interaction and research collaboration as well as accommodate projected growth within those departments. A new north facade and main entrance will be created for Darden Hall, in addition to a second-floor student commons area within the Chemistry Building. Mechatanical, electrical and plumbing system upgrades will boost efficiency and result in significant utilities savings. Phases of the project are scheduled for completion starting in 2020 (Chemistry) and continuing through 2022 (Darden). The architect is Perkins + Will and construction management services are being provided by Whiting-Turner. The project budget is $158.8 million.

PROJECT TEAM:
- Craig Hinton, Facilities Planning & Construction, senior project manager
- Jim Kappel, Facilities Planning & Construction, senior construction administrator manager
- Charlotte Robinson, Facilities Planning & Construction, construction administrator manager
- Perkins+Will, architect
- Whiting-Turner, construction manager

Wireless monitors will increase efficiency and support research

The University’s utilities infrastructure is acting as a living testbed for emerging technologies. A total of 180 wireless sensors were installed on UVA’s steam traps as part of a collaborative effort between the Facilities Management-Energy & Utilities department and the School of Engineering and Applied Science. The effort is to test out the use of “smart infrastructure” by a $2 million grant from the University’s Strategic Investment Fund (SIF), which supports proposals to transform critical areas of technology or operation at UVA.

Monitoring steam traps — which allow for the release of water condensate from pipes without losing steam — will lead to efficiency savings while also providing research opportunities for students and faculty studying next generation technologies that use data analysis to reduce energy consumption. The Evacuum and SteamQ sensors measure wet temperature of steam flow to determine if steam traps are working properly and use wireless networking to transfer the collected data in the cloud. Evacuum’s battery-powered sensors are powered only from the heat of the steam pipes.

The installation of the sensors — which occurred in late 2018/early 2019 — was managed by Senior Associate Director of Energy & Utilities Paul Zwick, Utility Systems Maintenance Manager Ed Brooks and Senior Planner/Platelifter Daniel Pongny. Access to real-time data about the health of the steam traps is a significant improvement for the team, which has typically relied on regularly-scheduled preventative maintenance to monitor the traps.
Teaming up for safety

Occupational Health and Safety works collaboratively with groups across Facilities Management, providing management of workplace hazards and controls, as well as maintaining a departmental focus on employee and other on-site occupants' safety.

This year, OHS has been working on the facility-wide efforts to improve safety through improved safety observation programs and increased training. The new safety observation program has been designed to identify potential safety hazards and provide feedback to the team on areas for improvement.

Training classes have been enhanced to better support the field and involve trainees in multiple project sites, including the University Hospital Campus, the Ivy Mountain Multipurpose Center, and the Softball Stadium projects.

OHS has also partnered with West Virginia University to work towards achieving Occupational Safety and Health Administration (OSHA) standards. This includes training employees on workplace hazards, providing information on health and safety regulations, and ensuring that all employees are aware of their responsibilities.

NARGES SINAKI

OCCUPATIONAL HEALTH & SAFETY COMPLIANCE SPECIALIST

Can you describe what it’s like to be on the Facilities Management team?

Narges Sinaki: I believe it’s being surrounded by a diverse group of individuals and that I am grateful to have an opportunity to put positive contributions to our community. There is always an opportunity to learn new skills and use our experiences and skills. I am so proud that I am part of UAA FM.
FM PILOTS FREE HYGIENE PRODUCTS

This year, Educational & General (E&G) Custodial Services launched a pilot program to install and stock sanitary napkin and tampon dispensers in public restrooms across Grounds.

The program was initiated by a request from the UVA Student Council in discussions with Associate Vice President and University Dean of Students, Mary Groves, to serve as both a convenience for students in addition to easing the financial burden of purchasing these products.

Dispensers were installed within high-traffic buildings with a substantial student presence, including Newcomb Hall, How Quad Lawn, and the South Lawn buildings. Discussions are in progress to bring the program to other areas on Grounds.

Mentoring program

This year, Occupational Training launches the Facilities Management Mentoring Program to provide guidance, training, and motivation to individuals interested in developing their careers. Mentoring educates and motivates people within the organization while preserving and expanding critical corporative knowledge.

The initial pilot program included 15 first-year apprentices matched with mentors from 13 different departments in positions that ranged fromohnes supervisors to assistant directors. The pilot included more than 580 coaching sessions among the participants, as well as several Roundtable sessions aimed at equipping mentors with the needed tools.

In the summer of 2019, the program was expanded to include the 2019 apprenticeship class and now includes a total of 63 mentors and mentees. Beginning in the fall of 2019, the program will expand to include employees outside of the Apprenticeship Program.

A group of Facilities Management employees spent six months preparing the department for the January 2019 launch of Workday, the new human resources and payroll technology that consolidates more than 75 legacy applications.

The project team, which included staff from Programs & Information, Finances, Technology & Innovation, Occupational Training, and the Department’s Business Partners, met weekly to review the impact of all changes in Facilities Management’s existing time entry processes and related software systems. The team provided training for more than 800 employees.

Leading up to the transition, the project team performed testing within the Workday environment, providing valuable feedback to the UVA Human Resources Workday team in their efforts to deliver a software product that meets FM’s business needs.

W O R K D A Y L A U N C H

More than 800 Employees Trained
Employee from across all of Facilities Management's operational divisions and the office of the University Building Director collaborated to complete the University's newest residence hall, Bond House.

The project to construct the 210,000-square-foot building started in December 2017 and was managed by Facilities Planning & Construction Project Manager, Reginald Westover, and Alan Williams, Senior Construction Administrator. Project Manager Charles Bynoe and Project Coordinator, Ron Walker,_instance failed on the project's deadline and 80% served on the general contractor. Ready plans during the winter of 2017 caused initial project delays, and a 90,000 labor market time the challenges of completing the project in an accelerated manner. The contractor, therefore, made the decision to temporarily suspend about 60 team members from other projects to ensure the building would open on time for the fall semester.

Electronics from Project Management, Operations, Maintenance, Survey, Design & Controls, Automation, Fabrication and Systems Project Manager, during the building's completion. Due to the tight timeframe, staff from Housing, Facility and Landscaping Services worked with racking teams over the weekend before students moved in.

As the building neared its final inspection, Facilities Management teams worked closely with offices of the University Building Director, the staff, and the staff to ensure the building adhered to all guarantees outlined in the Virginia state code. Leadership from both departments was updated daily, closely tracking any outstanding issues.

The project’s “pilot phase” concluded with the issuance of an occupancy permit on Saturday, Aug. 24, 2019 with an advisory meeting in the next day. The building within is named for the professor and civil rights leader, the late John R. Bond, Jr., the first phase of theBrandon Avenue master plan. This plan also includes the construction of a new student health and wellness center, a second residence hall and the development of a “green space,” a space with the a landscaped bluffs and gathering space in the central plaza.

**PAUL NORFORD**

**ELECTRICIAN WITH PROJECT SERVICES**

What do you feel was your greatest accomplishment at work this past year?

One big accomplishment that I’ve been going strong on is the Bond House job, where I was in charge of all the LEED. I’ve also worked with the electrical contractor.

I’ve always wanted to go to Europe, specifically Ireland, Scotland and England.
Green fleet

The University of Virginia Facilities Management Fleet recently earned the Sustainable Fleet Accreditation, becoming the only active university fleet in Virginia to achieve the designation. Operations and Fleet Manager Michael Duffy initiated Facility Management’s pursuit of the accreditation which recognizes the department’s efforts to build a fleet of cleaner and more sustainable vehicles.

UVA is the sixth active university fleet in the U.S. to receive the accreditation, a joint program between the National Association of Fleet Administrators and NAFA. “The University of Virginia Facilities Management has successfully demonstrated that real, meaningful progress is being made toward reducing the fleet’s total emissions and the negative environmental impact made by emissions carbon fuel usage,” according to the accreditation organizations.

The route to achieve this accreditation over the past two years involved multiple departments within Facility Management, including the department’s leadership as well as staff members within Maintenance, the Office for Sustainability, Environmental Resources and Project Services.

Sustainability Program Manager for Buildings & Operations James Weber and Environmental Projects Manager Jess Wagner assisted with the development of a Sustainable Fleet Plan, which includes data examining the impact of reducing fuel consumption and emissions and was required for the accreditation process. Fleet Services Coordinator John Jordan and Newcomb Zero Manager James Joyner worked with Duffy to research the use of electric vehicles at other universities and Project Southampton staff outside the infrastructure necessary to charge electric vehicles.

ZERO EMISSIONS

During the 2018-2019 fiscal year, the Facilities Management Fleet reduced its gasoline consumption by 2,209 gallons and its carbon emissions by 26 metric tons by replacing 25 of the older, less efficient, vehicles with electric and hybrid vehicles.

The team also reduced the department’s number of zero divo vehicles by 83% down to just 13, resulting in a reduction of 2,103 gallons of diesel and 26 metric tons of emissions.

Facility Management’s electric vehicles produce zero emissions while driving, have a range of 150-170 miles and charge in just seven hours. The department uses hybrid vans and box trucks, which use up to 25 percent less fuel, and is currently piloting the use of an electric cargo bicycle.
Caring for our trees

The University of Virginia recently earned the Tree Campus USA designation, an Arbor Day Foundation program that honors universities and their leaders for promoting healthy trees and engaging students and staff in the spirit of conservation.

The Tree Campus USA designation highlights UVa’s role as a steward of its trees and the environmental benefits they provide to everyone in Grounds, according to Landscape Services Supervisor Ben Hain Long. In addition to providing oxygen for us to breathe, these trees help prevent air pollution and stormwater runoff, cool and stabilize the microclimate, and provide habitat for local wildlife.

The designation is awarded based on five core standards for sustainable campus forest management, including a tree advisory committee, a university-wide tree care plan and dedicated funds, Arbor Day observance and the sponsorship of student service-learning projects. Currently, there are 346 campuses across the United States with this recognition.

Landscape Services provides for the full range of care for more than 10,000 trees across the University’s Grounds. There are more than 10,000 acres of trees across all local land owned by the University and the UVA Foundation, with approximately 50 percent of trees care coverage on all Grounds and 30 percent coverage within the developed areas.

This year, Landscape Services partnered with Geospatial Engineering Services to enhance the department’s mapping and documentation of the University’s trees. GIS created a map of the University’s trees with the help of a student engineer who spent a summer documenting each one. The map is accessible to all University students, as well as staff and faculty. The map is updated regularly on the Geospatial Engineering Services website.

Landscape Services has partnered with Programs & Information Technology to streamline the data with the department’s finances using Sage. This has allowed the department to analyze costs and better predict the labor, material, and budget needs to maintain Grounds.

YOUR RIVER STARTS HERE

When it rains, trash and debris in roadways and sidewalks are washed into storm drains that eventually lead to nearby streams. To bring attention to the importance of stormwater pollution prevention, the Clean Water Working Group (chaired by Environmental Resources staff) held a statewide contest. The winners — which included messages such as, “Your river starts now, keep it clean!” — were created by the High School and applied using an invisible, biodegradable ink solution that only shows up when it rains.

CLEANING SUSTAINABLY AND EFFECTIVELY

This year, Educational & General (E&G) Custodial Services created and launched the first program in the custodial industry to verify individuals based on Green Seal Standards, specifically known as GS-42 Certification for Commercial and Institutional Cleaning. The standard sets forth requirements that ensure cleaning practices protect human health and the environment, without compromising quality or effective cleaning results.

Twenty-four CUSTODIAL SERVICES employees earned their individual certification during an October 2015 celebration and award ceremony attended by Brian Snell, Director of Administrative Services.

Six staff members were certified as custodians and management team members who each demonstrated academic achievement in sustainable practices, products and procedures.

Galit recognized the program as the first to certify individuals based on GS-42 standards and attributes the GS-42 Custodial Services program to an example of leadership and innovation to other organizations and institutions.
Securing our infrastructure

The lights within a classroom, the temperature within a research lab and the air pressure within an operating room can all be monitored and adjusted remotely through building automation system controls. These controls – which are installed and maintained by Automation Services – are invaluable to Facilities Management’s support of the University, allowing for energy conservation, remote monitoring, as well as troubleshooting malfunctioning equipment. However, with the increasing dependence of systems, cybersecurity continues to be a focus for Automation Services with the support of Technology & Innovation, which handles the security of all of Facilities Management’s network-connected devices.

This fiscal year, the Technology & Innovation Systems team improved a further effort to perform comprehensive reviews of all applications and software being used by Facilities Management departments. The team’s security review focuses on three areas: confidentiality (only authorized users can access the systems), integrity (the system only contains accurate data and information) and availability (the system is readily available).

Facilities Management uses more than 60 different software applications that will be reviewed through this process.

Graduates’ balloons donated to UVA’s youngest patients

Every year during Final Convocation, the Office for Sustainability encourages UVA students to pledge to properly dispose of their graduation balloons rather than releasing them into the air, which leads to pollution and potential harm to marine species and wildlife.

This year, the Office of the President and UVA Health added another element to the no-balloon-release pledge – they coordinated a collection of balloons from graduates at the Lawn Lawn and then donated them to UVA Children’s Hospital.

President’s Office staff members collected more than 1,500 balloons, which were transported to UVA’s youngest patients with the help of Project Services and Central Grounds Maintenance. Staff members dropped balloons off at the hospital, where the UVA Health Auxiliary has a process for collecting donated flowers, cards and other gifts.

Creative composting

Composting of food waste – an important initiative that supports UVA’s landfills diversion goal – is available within various locations around Grounds as well as during zero waste events.

This year, the Office for Sustainability, Custodial Services and Recycling worked together to pilot a paper towel composting program in restrooms within the Facilities Management buildings. Collection bins were placed in restrooms within the Albemarle Road complex starting in the fall of 2018 with additional buildings added in the summer of 2019.

Paper towels – which are carbon-rich, a necessary component for a properly working compost pile – are collected daily by Custodial Services. They then sent to Black Bear Composting along with food waste collected from kitchen compost bins and dining halls around UVA. Over 700 tons of organic material is diverted each year and a portion of the processed compost is returned to Grounds to supplement gardens, including the Herndon College Farm Garden and the UVA Community Garden on the corner of Albemarle and McCormick roads.

Leila Garner
Sustainability Coordinator for Outreach & Engagement

Do you have a favorite quote?
“‘There are big ships and there are little ships, but the best ship is friendship.’”

If you had one extra hour of free time a day, how would you use it?
I would likely be baking chocolate chip banana muffins, listening to my favorite podcasts, and watching the Eagles win the Super Bowl.
Ground-breaking discoveries and inventions are occurring on Grounds every day—from the discovery of a link between the brain and the immune system to the creation of instruments allowing astronomers to view stars in the farthest reaches of the galaxy. In 2018 alone, the University of Virginia generated $346 million in sponsored research awards.

As an R1 Doctoral University, UVA has the highest possible research activity ranking with a principal investigator population of more than 100 scientists in 82 different research departments. And these researchers depend on Facilities Management for the department’s unwavering dedication to the University’s mission.

Staff members provide crucial support that includes monitoring the temperature and humidity of lab spaces and equipment as well as responding to maintenance emergencies at all hours of the day.

Automation Services recently completed an installation of more than 80 sensors for the “sensors within the Clinical Core Laboratory,” which provides testing and body fluid analysis for both research and patient care purposes. The use of these monitors has already shown its value as Core Lab employees were alerted to a system freezer failure by a monitor, allowing them to quickly transfer all of the freezer’s contents, which included about $210,000 worth of stabilizers and other chemicals.

The McCormick Zone maintenance team serves 13 different buildings that contain researchers in a variety of fields including biology, chemistry, physics and engineering. This research community has been utilizing the McCormick Zone staff’s skills for everyday needs in addition to special projects that extend beyond typical maintenance requests. In April 2019, a UVA-built mini-spacecraft launched off toward the International Space Station after three years of development by aerospace, mechanical and electrical engineering students under the guidance of mechanical and aerospace engineering professor Chris Gino. Prior to the launch, the professor engaged the McCormick Zone team to install an antenna on the roof of the Mechanical & Aerospace Engineering Building and construct a mission control room to allow the team to track the launch and communique with the International Space Station.

Facilities management teams support the university’s world-renowned research.

Physics professor Peter Schauss is currently researching atomic and molecular physics and needed a way to cool a high-powered laser that reaches extreme temperatures. He contacted the McCormick Zone with a preliminary drawing of the cooling system he envisioned. The Zone’s HVAC team used the professor’s sketch to build the system completely in-house, saving the need to hire an outside fabrication shop.

“We’re focused on making [our zones] a part of [our research teams],” said McCormick Zone Manager Randy Campbell. “This has resulted in my staff to see the output of what they do every day and the difference they make.”

FM supports more than 500 scientists in 34 research departments.

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4 INNOVATIVE OUTCOMES

A PART OF THE TEAM
Cleaning up the data

Facilities Management’s Finance, Programs & Information and Technology & Innovation teams worked together this year to improve the department’s management of overhead expenses. Overhead includes all goods and services that are not tied to a specific project or customer work order, including items and tools for everyday use such as computers and handtools.

These types of expenses were previously tracked within the department’s work management system, AM2. This system is designed to work best with expenses that are tied to a specific work order or project and result in the system performing inefficiently when used differently.

In an effort to improve the quality of the data within these systems, the teams worked to change the department’s purchasing processes by reviewing overhead, inventory and fixed price expenses from the work management system and posting them directly to the finance management system, Oracle. In addition to work on the back-end of these systems, this effort involved training more than 300 facilities management staff members to regularly update purchasing transactions.

This process is one of many planned efforts to improve the quality of Facilities Management’s financial data which will improve analysis of expenses.

OTIS HACKETT
HEALTH SYSTEM PHYSICAL PLANT RENOVATIONS SUPERVISION SERIES

What do you feel was your greatest accomplishment at work this past year?

Finishing a large percentage of the patient rooms that we reconfigured, for which we received many positive comments from our patients, visitors, and staff on what an improvement it made to our facility.

Who do you admire the most?

My dad, who has given me the most support and guidance through my entire life. If you could visit any place in the world, where would you go?

Italy, my ancestors from my mother’s side are from there.

HIGH-TECH MAINTENANCE

FACILITY MANAGEMENT TEAM EXPLORE USE OF 3D MODELS

As one of the largest and most complex projects in the University’s history, the University Hospital Expansion project team utilized state-of-the-art technologies throughout the design and construction process.

The project’s contractor, Skanska USA, and design team, Perkins+Will, used Building Information Modeling (BIM) tools to create three- and four-dimensional models of the design to be used during construction. These models were accessible on tablets in the field by construction managers, the Facilities Planning & Construction project team and office of the Building Official staff during inspections.

Through a partnership with the contractor, these same models were turned over to Health System Physical Plant Zone 1 and Operations staff members who will serve as providing maintenance support within the expanded emergency department, Technology & Innovation IT Business Systems Analyst John Dolan worked with HIMSS to obtain the needed hardware, software and training to access the models in the field.

The use of the BIM tool allows maintenance staff to simply point a tablet in the direction of a piece of equipment (such as an air handler or light fixture) in a variety of locations to display details such as the dimensions, the model number and installation date. The HIMSS and T&B teams are currently evaluating the long-term use of these types of tools by maintenance staff as well as providing additional opportunities in upcoming construction projects.
EMPOWERING THE COMMUNITY

This year, Facilities Management Tradewinds, with the support of PSECU, assembled, offered two trades workshops to teach local women repair skills and build confidence in their ability to complete home maintenance. More than 50 women registered for the two workshops hosted by PSECU’s Tradewinds, which included tool demonstration, equipping a apartment and painting workshop. The workshops were seen as the greater community with more skills by pre-selling tickets for the "Stronger at the Broken Places" event at the Mansion Music Live Women’s Center. Project Learning Tools and PSECU’s community engagement created a pop-up store for the Friendship Court community through a partnership with PSECU’s Tradewinds and UAB alum Angie Williams.

Reaching a younger generation

Facilities Management has expanded its outreach to area schools in an effort to expose young kids to careers in the facilities and utility trades industry. The UA Apprenticeship Program visited 36 area high schools and middle schools to share information about apprenticeships, skilled trades and the program application process. Multiple Facilities Management departments worked closely with Western Albemarle High School this year. Vocational Health and Safety taught an SHRM 3.5-hour construction course in the school's high School trades class and Technical & Innovation hosted students from the school’s computer science club to provide exposure to IT careers. During the club’s spring IT day, PSECU students were introduced to the department’s IT operations, Automation Services, the Dynamics Control Center and the University Data Center.

SUSTAINABILITY SUMMIT

The Office of Sustainability focused on building community connections during the 2018-2019 fiscal year, resulting in unprecedented levels of engagement from the University community. The Biennial Sustainability Leadership Summit featured a series of events in October 2018 showcasing the breadth of UA’s multidisciplinary work in sustainability and to collaboratively develop UA’s longer-term missions as a global sustainability leader. Attended by nearly 600 guests, the summit featured over 60 guest speakers including UA’s President Jim Bean, multiple UA deans, faculty, staff, alumni and leaders in the field of sustainability.
115 PINTS OF BLOOD DONATED
ENOUGH TO SAVE 345 LIVES

125 EMPLOYEES PARTICIPATED IN THE UNITED WAY DAY OF CARING
+ COMPLETED 55 TOTAL PROJECTS

$825 DONATED TO CHARLOTTESVILLE’S ANNUAL TOY LIFT

$18,000 DONATED BY 94 EMPLOYEES TO THE COMMONWEALTH OF VIRGINIA CAMPAIGN CHARITY DONATION DRIVE

126 EVENTS SUPPORTED
WITH 5,000+ ATTENDEES

THE HoOS REUSE MOVE OUT DONATION DRIVE DIVERTED 45,000 POUNDS OF USABLE GOODS FROM LANDFILLS

THE OFFICE FOR SUSTAINABILITY
INCLUDING 800 POUNDS OF FOOD

90 GIRLS BETWEEN AGES 10-16 ATTENDED THE 4TH ANNUAL GIRLS DAY WITH HANDS-ON ACTIVITIES + 25 VENDORS

JUNE BATES PROGRAM MANAGER

What do you feel was your greatest accomplishment at work this year?

Being a part of the work associated with the Continuous Improvement Taskforce. We’ve worked hard to bring our members together throughout the organization to form actual working teams. Our goal is to implement positive and tangible change throughout NUA based on comments received during feedback sessions.

Do you have a favorite quote?

I have a few, but one is “attitude determines attitude.” Everything starts with a thought. If you think positive in the end, you will get positive results.
Facilities Management
How we support UVA

Employees
Facilities Management’s filled full-time positions totaled 1,186.
At the 2013 Annual Service Award Ceremony, 126 employees celebrated 2,230 years of service.
422 different employees were awarded 585 merit & recognition awards totaling $224,150.
32 employees were recognized for educational and professional accomplishments.

OCCUPATIONAL TRAINING

- Filled 2,017 seats for 2,091 total hours of training in:
  - Professional Development
  - Technology
  - Leadership

OCCUPATIONAL HEALTH & SAFETY

- Completed 139 safety surveys, including 4,704 observations, with 338 hazards identified and corrected.

APPRENTICESHIP

- 10 apprentices graduated and 18 apprentices were indentured in 2013.
- 112 on-the-job trainers.
- 55 total apprentices in the program.
- 14 plumbers
- 17 electricians
- 15 carpenters
- 18 plumbers
Facilities Planning & Construction

- 230 Active Construction Projects
- $1.9 Billion in ongoing design & construction
- 250 Vehicles & 80 pieces of equipment in the FM Fleet
- 317 Active Construction Projects
- 3,270 Acres owned by the University of Virginia
- 560 Buildings in the UVA Portfolio
- 6.27 Miles of Utility Tunnels
- 17.7 Million square feet for all UVA Facilities
- 49,319 Total Assets
- An asset is a piece of equipment that is part of a building system.
- 14,590 Health System Physical Plant
- 11,122 Housing Facilities
- 3,929 McCormick Road Zone
- 5,886 West Grounds Zone
- 2,145 Newmanb Zone
- 5,304 Central Grounds Zone
- 2,127 North Grounds Zone
- 4,216 Other

Sustainability

- The UVA Rose Stone donated 1,800.00 LBS of surplus property from landfills since April 2018
- 2,479 Solar panels on grounds & 123,800 off grounds at UVA solar facilities
- 55 Leadership in Energy & Environmental Design (LEED) Certified Buildings
- 17% Decrease in greenhouse gas emissions in calendar year 2018 compared to 2009
A GREAT AND GOOD UNIVERSITY

President Jim Ryan’s roadmap for the University of Virginia’s future, “A Great and Good University: The 2020 Plan,” is built upon four unifying goals and includes 20 major new initiatives to help achieve them. The plan, which was endorsed by the Board of Visitors in June 2019, aims to strengthen UVA’s foundation, cultivate community, enable discoveries that improve lives and make UVA synonymous with service.

TRANSFORMING ALDERMAN

In May 2020, Alderman Library will close to undergo a comprehensive renovation project to bring the library up to contemporary standards of safety, accessibility, usability, and service. The project—expected to be complete by 2023—will build a new 139,000-square-foot addition on the north side of the historic building and renovate 100,000 square feet of the historic building. The renovated library will include space for collections, study areas, reading rooms, staff work areas and spaces for scholarly research and support, in addition to a major new entrance facing University Avenue.

A CENTER FOR HEALTH

In addition to two new residence halls, the Brandon Avenue Green Street district will also include the new Student Health & Wellness Center, which will provide expanded space and programming aimed at boosting students’ overall health and well-being. The design team hosted an interactive student feedback session to gather input on the project, which is currently under construction and estimated to be completed in spring 2021. The 169,000-square-foot building will feature updated spaces for health and wellness appointments as well as multipurpose instructional spaces and flexible lobby and lounge areas.

NEW SUSTAINABILITY GOALS

The University of Virginia’s leadership role in environmental stewardship and broader social and economic sustainability issues has evolved and expanded over the past 20 years with significant accreditation over the past decade. Building upon successes to date and with a focus on leadership, innovation, and alignment with the UVA Strategic Plan, a new 2020-2030 Sustainability Plan is being developed by the UVA Committee on Sustainability to include new and accelerated goals.
The University of Virginia continues to experience growth with rising enrollment, an increasing number of patients and expanding research grants all contributing to the need for new and improved spaces.

While Facilities Management has responded to this need with a growing employee population, we have also expanded the scope of services we provide to the University. But even as our work has changed, we have always understood that our most important asset is, and has always been, our people. Our work here is successful because of the dedication of our employees who pride themselves on providing the highest quality of service to the University—24 hours a day, seven days a week, 365 days a year.

Facilities Management has adopted four core initiatives to support our values and the success of our employees: diversity, inclusion and respect; safety, sustainability; and training and development. These initiatives are supported through a combination of established programs and employee-led councils, encouraging active engagement in the shaping of the department’s future.

Over the past year, a Facilities Management-wide effort toward continuous improvement involved feedback sessions with employees across all departments. The sessions centered on gathering input on previously identified focus areas including communication, accountability, teamwork and mentoring. From that effort, a group of 40 Change Champions have been selected to explore projects to address improvement opportunities.

We know our employees are committed to providing outstanding support of the University, and we are committed to supporting them achieve that goal.

Donald E. Sundgren
Associate Vice President and Chief Facilities Officer