Georgia Chapter of APPA

Leadership in Educational Facilities

GAPPA News

July 2017

"Leadership in Georgia Educational Facilities"

Jekyll Island 2017! **The convention center successfully hosted GAPPA 2017Conference. The weather was so great. Each member enjoyed attending the conference .**

We had 100 booths, 47 sponsors, and 600 attendees. There were 120 golf participants, 24 golf sponsors. We had 30 guests visiting GAPPA from other regions. 24 stipends were awarded to assist with the cost of attending the conference. The Shane Bridges Band entertained the crowd at the Tuesday banquet.

For a sample of photos from the convention,

please check GAPPA web site. Select Annual meeting: www.gappa.org

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LIVING BUILDING AT GEORGIA TECH MOVES TO DESIGN DEVELOPMENT STAGE

The Living Building at Georgia Tech has reached a major milestone, with the approval of the schematic design. Approved by Georgia Tech's Planning and Design Commission in December, the schematic design essentially provides a working blueprint for what is anticipated to be the most environmentally advanced research and educational building ever constructed in the Southeast.

"The Living Building is moving into the design development stage where the building and its immediate surroundings really start to take shape based upon the program goals, Living Building Challenge certification requirements, and the project's budget," said Howard Wertheimer, assistant vice president for Capital Planning and Space Management. "It has been a collaborative and rather intense analytical process to get to this celebratory stage of the project."

What's in a Design Plan?

Since spring of 2016, a team of architects, engineers, landscape architects, cost estimators, and other professionals, have been hard at work analyzing mechanical systems and carefully weighing the tradeoffs to strike the ideal balance between form, function, and cost for this unique building.

"We look for solutions that can serve the needs of the building and its occupants with minimum resources required to operate it," said Joshua Gassman, lead project manager for Lord Aeck Sargent. "For instance, the schematic design proposes automated venetian blinds on the east façade of the building, which will reduce heat gain by shading when its needed and opening up to provide daylight when needed — all with minimal energy requirements from the building's photovoltaic panels."

Other win-win plans that received the green light include:

- Incorporating glu-lam (glue-laminated wood) for the majority of the building's structure. Wood is a preferred material due to its aesthetics, low carbon footprint, and regional availability — all of which are important variables to Living Building Challenge certification. While steel and concrete won't be eliminated entirely, these materials will only be used strategically where needed for structural support.
- Installing radiant flooring that utilizes the building's thermal mass to stay cool in the summer and to stay warm in the winter. In addition to maintaining thermal comfort, this strategy will also significantly reduce the need for traditional large fan systems — and the associated cost — to circulate air throughout the building.
- Installing composting toilets. While Tech is still exploring the cost benefits of a blackwater treatment facility as part of another project, composting toilets were deemed a far more practical solution for the Living Building based upon their low energy and low water requirement, simplicity to use and maintain, and inexpensive lifecycle cost.

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LIVING BUILDING AT GEORGIA TECH MOVES TO DESIGN DEVELOPMENT STAGE CONT'D

Programmatically, the schematic design promotes flexible space with purpose. Plans include an auditorium that seats 170 people for educational purposes and events. The building will also feature two 75-person classrooms and an open collaboration area — complete with makerspace — adjacent to the the soon-to-be developed Eco-Commons. While the upper rooftop will contain a 260 kW (approximately) photovoltaic array to harness the sun's energy, a lower occupiable roof will feature a rooftop garden complete with honeybee apiary and pollinator garden.

Lessons Learned

One of the main objectives in creating a Living Building Challenge certified building is to help transform the industry by challenging the status quo and applying lessons to other projects. Even at the beginning design stages, the Living Building at Georgia Tech is proving to be an educational platform for all involved.

One of the lessons learned so far is that early and frequent collaboration with system engineers is a key ingredient for success.

"You have to know how the building must perform, and design to that. So involving the [system] engineers is vital on a project with very specific and stringent performance requirements," stated Gassman. "This technical expertise must be integrated from the very beginning of the design process, not toward the end, which is often the case in traditional construction projects."

Another guiding principle is that simplicity rules even when employing the best available technologies. Choosing materials, mapping out the interior structure, and understanding how to best leverage sunlight are examples of incorporating basic design principles that are effective and can be easily repeated on other projects.

"Our aspiration is that the systems being employed on this project, and the mechanical solutions in

particular, will serve as an example to be replicated by others in high humidity climates," said Greg Spiro, senior mechanical engineer with Facilities Management's Design and Construction team. "This project has the potential to fundamentally change the way we think about heating and cooling buildings."

Lastly, form can co-exist with function. According to Wertheimer, it used to be an either-or decision. But the careful analysis performed leading up to the schematic design of the Living Building at Georgia Tech has shown that you can create a fully functional, high performance building that is aesthetically pleasing and meets all of the programmatic requirements.

For more on the Living Building at Georgia Tech, including updates on the design development, visit living-building.gatech.edu.

Newsletter Committee Chair and Editor:

Casey Charepoo

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DRAIN THE RAIN ON YOUR FOOTBALL FIELD

YOUR OPTIONS

The evacuation of excess moisture is paramount to the success of an athletic field. We know that a field with a small amount of organics or top soil in general tends to be better at binding more nutrients in the rootzone. Beyond the ability to retain more nutrients, the presence of native soil in rootzones tends to improve the surface stability. The downside to a field with excess amounts of clay or organic material though is they get compacted easily, they have poor exchange of air and water, and they get water logged in times of excess moisture.

The premier athletic field utilizes a gravel blanket and an underdrain system to create a very high quality field. It is hard to beat the outstanding drainage and rootzone that these types of fields provide. The design of these fields provides a uniform medium to establish your field and they remove excess moisture very quickly. These types of fields have few down sides beyond the upfront cost to construct and an increase in the level of maintenance. A couple of points of focus are increases to irrigation and fertilization due to the sand rootzone. Typically, fertilizations have to be increased or the field will require "spoon feeding" due to the rootzones inability to adequately bind the nutrients. It is important to consider the inputs, but this type of natural field is the highest performer in its class.

Another option to consider for your facility is a sand slit drain system. The sand slit drainage system does a good job of reducing intense maintenance while still improving a fields drainage capability. It is a happy marriage of the two things because the system can both evacuate the excess moisture from an athletic field, but still utilize native soils that can be easier to maintain when it comes to a natural grass field. This system requires fewer inputs with respect to fertilization and daily irrigation.

THE PROS

Sand slit drainage is a functional and an economical way to improve an athletic field that has good planarity, a good variety of turf, and has a native soil rootzone without complete reclamation of the facility. The system is able to whisk away excess water, without drying out the field. Cost wise it is cheaper for the owner to maintain, requires less staff time, and is cheaper to install in the front end. In the end it is the most cost-effective system to move water effectively.

This system also cuts down on maintenance because it requires less fertilizer, less irrigation, and less direct maintenance because it doesn't need to be watered as much and you don't have to feed it with as much due to leaching through the rootzone. The long-term maintenance of the drainage is easily maintained by having it re-slit after 5-7 years of use. This improves the overall downtime for the facility.

The installation time is also significantly quicker since it does not involve total renovation of the existing facility. If this system is installed in May or June, by late July the field is recovered, healed and ready for use. It is about a 2-3-week process to install. The sand slitting process itself only takes a couple of days.

The real benefit to the system is you never have to move water more than 10 inches over the surface area to find pore spacing for it to be evacuated. It moves into the sand slits and from the sand slits into the lateral collector lines. The lateral collector lines then drop into a collector line that will either remove it from the field or

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DRAIN THE RAIN ON YOUR FOOTBALL FIELD

into a site drain system.

By having this system, the field will be wet with significant rain fall, but not muddy because the excess water will be evacuated from the field. It will do a good job removing moisture in a way that keeps the field playable, even with a major rain event. In return you fields will be able to tolerate heavier wear.

THE INSTALLATION

In September of 2014, Sports Turf Company installed a sand slit drainage system in Bacon County High School's football, baseball and softball fields. The school system wanted athletic fields that drained efficiently, but were easily maintainable. The most economical way we saw to do this was through the installation of a sand slit drainage system.

Three years later the fields are still performing at an optimal level. Facilities and Maintenance Director of Bacon County Schools, Scott Taylor, says, "the fields are great, drain well, and are easy to maintain!"

Newsletter Committee Chair and Editor:
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GAPPA SCHOLARSHIPS

Scholarships are available to anyone pursuing development of their professional career in Facilities Management. Full time employees in the Facilities field for at least 12 months at a GAPPA member institution can apply for a scholarship for up to $2,000 per year for attendance at APPA's Institute for Facilities Management, APPA's Leadership Academy, or for a degree-track course at an accredited educational institution, for job related vocational or technical training, for certifications or licenses, or for professional development seminars.

Full details can be found on the GAPPA website at

http://www.gappa.org/scholarship/index.shtml

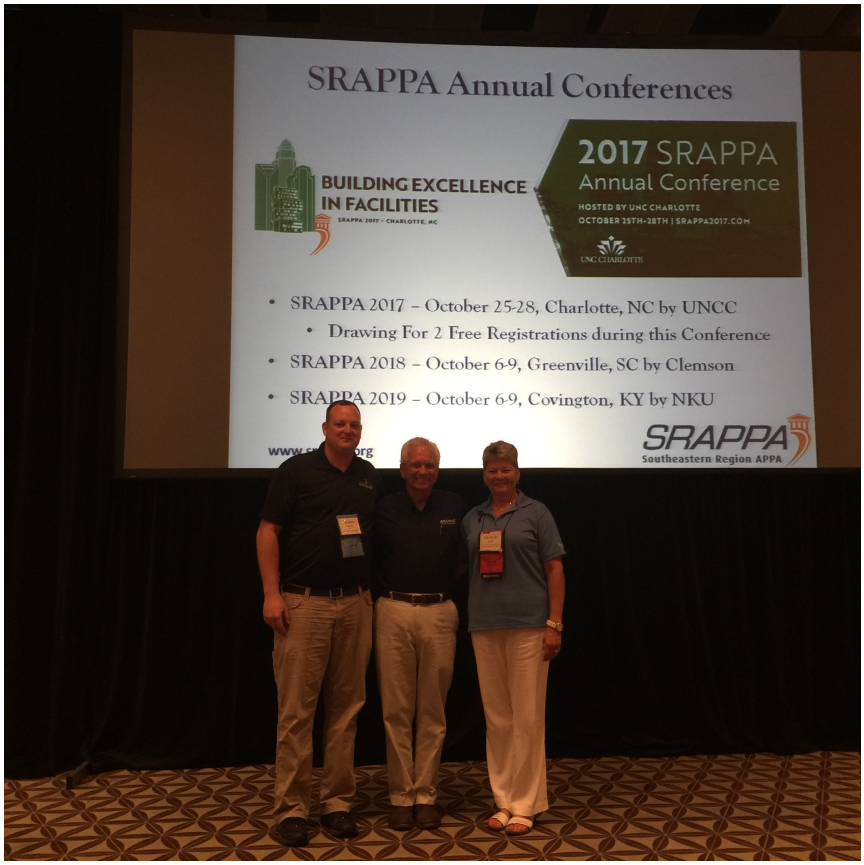
APPLY TODAY!

Drawing for two Free 2017 SRAPPA Conference registration packages!

SRAPPA has awarded two free registration packages for 2017 SRAPPA Conference in Charlotte NC, by drawing two names from the GAPPA attendees,

Michelle Goff and Stephen Bailey were awarded their package by Daniel Wooten

President of SRAPPA.



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UNSUNG HERO AWARD

This year APPA honored Casey Charepoo with the Unsung Hero award for his commitment and dedication to SRAPPA'S Professional Development Program in providing Hands on Training to SRAPPA's members.

In addition to his role and responsibilities in Georgia Tech's Operations Department, Casey plays a vital role in today's changing educational culture of human relations.

Casey works tirelessly with our Region's Higher Educational, HBCU's, Community Colleges, and K-12 Institutions to encourage and train our future leaders and talented professionals.

APPA's Supervisor Tool Kit has been an overwhelming success training more than 430 supervisors and emerging professionals so far this year in the facilities management profession.

Congratulations Casey, this is an honor well deserved!!

Dan Wooten, SRAPPA President, Director of Maintenance, Tennessee State University

"Let me thank you for the great course you put on two weeks ago. It was a very positive experience for all participants. Based on the feedback I have received, I think it exceeded my already high expectations!"

Dan King, PE, Associate Vice President, Facilities Management, Auburn University

"The training and collaboration is absolutely priceless. It is a wonderful opportunity for so many of our younger mechanics and lead mechanics as well as our managers."

Craig Cromer, Facilities Manager, University of Miami

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Casey Charepoo

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Georgia Tech's

New Office of Academic Effectiveness to Focus on Assessment and Accreditation Activities

Effective Feb. 1, a reorganization inside the Office of the Provost will officially establish the new Office of Academic Effectiveness (OAE), a move that shifts academic assessment, academic program review and planning, and accreditation duties into a stand-alone office reporting directly to the provost. The reorganization centralizes the coordination and oversight of these initiatives and is part of an overall academic-effectiveness strategy devised after the Institute's Commission on Colleges of the Southern Association of Colleges and Schools (SACSCOC) reaffirmation of accreditation last year.

The OAE will be led by the associate provost for academic effectiveness — a new position — who will work with and support the academic leadership and administrative units on items including SACSCOC requirements and reporting, program accreditation, Course Instructor Opinion Survey (CIOS), assessment of student learning outcomes, Academic Progress Rates, new program development, and long-term planning, among others. Through the use of vacant positions and currently allocated resources, OAE is being established with very limited additional resources.

"The partnership and dedication of many — including Dean Catherine Murray-Rust and the library staff and Sandi Bramblett and her Administration and Finance colleagues — helped to expertly carry us through the recent monitoring and reporting requirements," said Rafael L. Bras, provost and executive vice president for Academic Affairs and the K. Harrison Brown Family Chair. "The recent reaffirmation process revealed opportunities for improvement. Having dedicated staff to oversee these assessment activities will ensure a focused, centralized effectiveness strategy moving forward."

Two councils will also be established in support of the mission of the OAE. The Faculty Council for Accreditation will comprise the faculty leads charged with accreditation in each of the academic units and will be co-chaired by the associate provost for academic effectiveness and the assistant vice president for Institutional Research and Enterprise Data Management, Sandi Bramblett. Additionally, the Council for Assessment will consist of assessment professional staff from academic units, as well as assessment professionals in the nonacademic units and IRP. The councils will create opportunities for collaboration, sharing of best practices, and standard setting for quality and consistency across the Institute

A search committee is currently working to fill the new associate provost position. A search to fill the vacant director of assessment position will follow.

Susie Ivy
Institute Communications

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CAMPUS CCMS/CAFM REVIEW

During my 100+ years of serving in multiple campus facilities positions at Institutions of Higher Ed in the Southeast, I have learned that it is a prudent practice to initiate a comprehensive review of CMMS/CAFM programs at least every 5 years. Many campuses have purchased a Ferrari that they never get out of 2nd gear - thus wasting precious campus resources. Observation indicates that in many cases, 50+% of the modules originally purchased have never been used.

Many times the CMMS/CAFM systems were purchased without first completing a thorough review and updating of Facilities Business Processes. The Facilities staff continuously attempts to fit the CMMS/CAFM to existing Campus Business Processes rather than purchasing a product that fits an updated set of Campus Business Processes. Business Processes change over time, so those should also be reviewed/updated during the 5 year CMMS/CAFM review to further streamline operations.

- Lee H. Richey, PE

www.creativefacilitiessolutions.com

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7 Keys to Becoming a Remarkably Effective Leaders

Follow these leadership tips to turn your business into one that consistently outperforms the competition.

For many businesspeople, the last thing you want to worry about (or do) is managing people. You want to get out there and meet customers and create awesome products and bring exciting new opportunities through your front door. But unless you've hired people to take on the task of managing your employees, then you're still on the hook.

The good news is that you can make that task a little bit easier for yourself by remembering these 7 essential leadership keys, and your organization will benefit as a direct result.

1. Delegate wisely

The key to leadership success is to learn to effectively delegate both the responsibility for completing assignments and the authority required to get things done. Many bosses feel that they need to control every little thing that their employees do. This is a recipe for disaster. When you delegate work to employees, you multiply the amount of work you can accomplish while you develop your employees' confidence, leadership and work skills.

2. Set goals

Every employee needs goals to strive for. Not only do goals give employees direction and purpose, but they ensure that your employees are working towards the overall organizational goals. Set specific and measurable goals with your employees, then regularly monitor their progress toward achieving them.

3. Communicate

Far too many bosses communicate far too little. It's often difficult for busy business owners and executives to keep their employees up-to-date on the latest organizational news. Regardless, you must make every effort to get employees the information they need to do their jobs quickly and efficiently.

4. Make time for employees

Above all, leadership is a people job. When an employee needs to talk with you--whatever the reason--make sure that you set aside the time to do so. Put your work aside for a moment, put down your smartphone, and focus on the person standing in front of you.

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7 Keys to Becoming a Remarkably Effective Leaders

5. Recognize achievements

Every employee wants to do a good job. And when they do a good job, employees want recognition from their bosses. Unfortunately, few bosses do much in the way of recognizing and rewarding employees for a job well done. The good news is that there are many things bosses can do to recognize employees that cost little or no money, are easy to implement, and that take only a few minutes to accomplish.

6. Think about lasting solutions

No matter how difficult the problem, there is always a quick solution, and leaders are happiest when they are devising solutions to problems. The trouble is that, in our zeal to fix things quickly and move on to the next fire, we often overlook the lasting solution that may take longer to develop. Although it's more fun to be a fire-fighter, the next time you have a problem to solve in your organization, deal with the cause of the problem instead of simply treating the symptoms.

7. Don't take It all too seriously

Without a doubt, running a company is serious business. Products and services must be sold and delivered, and money must be made. Despite the gravity of these responsibilities, successful leaders make their organizations fun places to work. Instead of having employees who look for every possible reason to call in sick or to arrive to work late or go home early, organizations work hard and play hard end up with a more loyal, energized workforce.

By: Peter Economy
The Leadership Guy

Newsletter Committee Chair and Editor:
Casey Charepoo
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Spelman College Selects Studio Gang to Design New Center for the Arts & Innovation

ATLANTA (May 24, 2017) – Spelman College is pleased to announce the selection of Studio Gang to design the College's new Center for the Arts & Innovation. Founded by MacArthur Fellow Jeanne Gang, Studio Gang is an award-winning architecture and urban design practice based in Chicago and New York. Responsible for such lauded designs as the Arcus Center for Social Justice Leadership at Kalamazoo College, the recently completed Campus North Residential Commons at the University of Chicago, and the forthcoming Gilder Center for Science, Education, and Innovation at the American Museum of Natural History in New York City, Studio Gang uses design as a medium to connect people socially, experientially and intellectually.

"With the current pace of rapid change, in which the convergence of art, technology, entrepreneurship and science more and more frequently yields solutions to contemporary challenges, we are pleased to be working with the adventurous and innovative architectural team at Studio Gang," said Spelman President Mary Schmidt Campbell, Ph.D.

"The new facility will provide a home for the ARTS@Spelman and will also house the school's expanding Department of Computer and Information Sciences and an interdisciplinary Innovation Lab. Studio Gang brings to the project a uniquely collaborative approach to design that aligns with our vision to provide a new and dynamic state-of-the-art learning environment that encourages not only disciplinary mastery in the arts and computer science, but provides a creative intersection among art, technology, science and other liberal arts."

This mode of collaboration, popularly known as STEAM (science, technology, engineering, arts and math) is the underlying principle for the design of the new facility. The building will encourage experimentation, collaboration, active play, research and the imaginative use of digital technologies.

"We look forward to building on the rich history of Spelman College to design a facility that will expand opportunities for interdisciplinary collaboration and learning," said Studio Gang Founding Principal Jeanne Gang. "Working in close collaboration with the community, we hope to design a welcoming new front porch for the campus, oriented to the neighborhood."

Arts@Spelman

For the past 136 years, Spelman, one of the country's leading liberal arts colleges and top women's colleges, has been a beacon of intellectual excellence for Black women. In recent years, the College, according to the National Science Foundation, has led the nation in the education of Black women in the fields of science, technology, engineering, and math (STEM). As Spelman drafts a new strategic vision for the next five years, the intent is to couple the College's documented strength in STEM with a newly conceptualized set of possibilities in the arts.

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Spellman College Selects Studio Gang to Design New Center for the Arts & Innovation

Drawing on the expertise of Spelman's stellar faculty in the arts, this new direction is captured in the programmatic initiative ARTS@Spelman, a set of strategic opportunities for the departments of Art & Visual Culture, Dance Performance & Choreography, Theater & Performance, Music, the Digital Moving Image Salon and the Spelman College Museum of Fine Art. ARTS@Spelman's collaborative approach recognizes the opportunity of STEAM to enhance the academic excellence of Spelman and continue the College's ascent into the top ranks of liberal arts colleges.

To be a leader in dynamic campus engagement, relevance, collaboration and innovation, Spelman is heightening its emphasis on the arts and technology—envisioning an arts curriculum that is informed by innovative digital media, multiple arts languages, world artistic practices, multicultural influences, courses that build entrepreneurial skills, and technology integration into the arts. These changes to the arts curriculum will result in a broader range of employment opportunities for Spelman graduates, including careers outside of the arts.

The New Facility

Many of today's careers require an interdisciplinary approach. As a space for the convening of multiple disciplines, the new facility will bring together visual arts, art history, curatorial studies, photography, documentary filmmaking, dance, theater, music, an innovation lab and parts of the Museum. Along with the consolidation of arts disciplines on campus, the College will relocate the Department of Computer and Information Sciences to the building, where there will also be a laboratory for the SpelBots (the student robotics team), student collaboration areas, living spaces for visiting artists-in-residence and computer and information science professionals and a cyber café.

The Center provides an opportunity to formalize alliances and collaborations that already exist by creating a multi-disciplinary gathering space that allows faculty-to-faculty and faculty-to-student extracurricular conversations.

Another goal is to enhance the connections between the College and the Westside Atlanta community. The new facility will have an entrance that faces out to the Westside community that serves as a "front porch" to Spelman through programming and invitations to public activities and amenities.

The College expects to approve a conceptual design for the Center in the fall.

About Spelman College
Founded in 1881, Spelman College is a highly selective, liberal arts college widely recognized as the global leader in the education of women of African descent. Located in Atlanta, Georgia, the College's picturesque campus is home to 2,100 students. Outstanding alumnae include Children's Defense Fund Founder Marian Wright Edelman, former Sam's Club CEO Rosalind Brewer, Broadway producer Alia Jones, former Acting Surgeon General and Spelman's first alumna President Audrey Forbes Manley, Harvard University Professor Evelynn Hammonds, author Pearl Cleage and actress LaTanya Richardson Jackson. For more information, visit www.spelman.edu.

About Studio Gang
Studio Gang is an architecture and urban design practice based in Chicago and New York. Led by MacArthur Fellow Jeanne Gang and recognized internationally for a design process that foregrounds the relationships between individuals, communities, and environments, Studio Gang produces award-winning work that ranges in scale from the 82-story Aqua Tower to the 14-acre Nature Boardwalk at Lincoln Park Zoo. Recent projects include the new United States Embassy in Brasilia, Brazil; a unified campus for the California College of the Arts in San Francisco, California; and an expansion to the Arkansas Arts Center in Little Rock, Arkansas. Intertwined with its built work, Studio Gang develops research and related projects such as publications, exhibitions, and events that push design's ability to create public awareness and lead to change—a practice Jeanne calls "actionable idealism." These include Civic Commons, a multi-city project reimagining public buildings across the United States, and Reverse Effect, an advocacy publication produced to spark a greener future for the Chicago River. This will be Studio Gang's first project in Atlanta. www.studiogang.com

Joyce E. Davids
Director of Marketing
and Comminications

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Casey Charepoo

Rising Water Temperatures Endanger Health of Coastal Ecosystems, Study Finds

Athens, Ga.—Increasing water temperatures are responsible for the accumulation of a chemical called nitrite in marine environments throughout the world, a symptom of broader changes in normal ocean biochemical pathways that could ultimately disrupt ocean food webs, according to new research from the University of Georgia.

Nitrite is produced when microorganisms consume ammonium in waste products from fertilizers, treated sewage and animal waste. Too much nitrite can alter the kinds and amounts of single-celled plants living in marine environments, potentially affecting the animals that feed on them, said James Hollibaugh, coauthor of the study published recently in Environmental Science and Technology. It also could lead to toxic algal blooms and create dead zones where no fish or animals can live.

"Rising ocean temperatures are changing the way coastal ecosystems-and probably terrestrial ecosystems, too-process nitrogen," said Hollibaugh, Distinguished Research Professor of Marine Sciences in UGA's Franklin College of Arts and Sciences. "Much of the global nitrogen cycle takes place in the coastal zone."

Hollibaugh and researcher Sylvia Schaefer found midsummer peaks in concentrations of nitrite alongside massive increases in numbers of the microorganisms that produce it in the coastal waters off Sapelo Island, Georgia, in data collected over the course of eight years. Although most researchers believe nitrite accumulation is a consequence of oxygen deficiency in a marine environment, Hollibaugh and Schaefer thought something else had to be driving the accumulation.

Marine biologists James Hollibaugh and Sylvia Schaefer found that rising water temperatures could disrupt ocean food webs and lead to the release of more greenhouse gases. (Credit: Andrew Davis Tucker/University of Georgia)

"The paradigm taught when I was in school was that hypoxia, or lack of oxygen, results in nitrite accumulation," Hollibaugh said. "But the Georgia coast does not go hypoxic. It just didn't fit."

After performing lab experiments that exposed the single-celled organisms known as Thaumarchaea to varying water temperatures, the researchers discovered that higher temperatures prompted the microorganisms to produce more nitrite.

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Rising Water Temperatures Endanger Health of Coastal Ecosystems, Study Finds

"The microorganisms involved in this process are very tolerant to low oxygen levels," Schaefer said. "Typically, two groups of microorganisms work in really close concert with one another to convert ammonium to nitrate so that you don't see nitrite really accumulate at all, but we found that the activity of those two groups was decoupled as a result of the increased water temperatures."

To see if the pattern held beyond the island, Schaefer and Hollibaugh analyzed environmental monitoring data from 270 locations across the U.S., France and Bermuda, ultimately affirming the relationship between higher temperatures and nitrite accumulation.

This dependence on temperature wasn't appreciated by the research community until now, and it can have widespread consequences even beyond coastal water quality management, Hollibaugh said.

"The same process, though we didn't look at it specifically, takes place in regards to fertilizing soil for agricultural purposes," he said. "It affects farmers and their efficient use of fertilizer-when they should apply it and what form it should be in-and ultimately much of that fertilizer will end up in the waterways, which can lead to algal blooms that choke out other species."

Nitrite accumulation can also result in more production of nitrous oxide, a powerful greenhouse gas that has more of an effect on climate change per molecule than carbon dioxide, Hollibaugh said. That nitrous oxide production then increases global temperatures more, causing more nitrite accumulation and creating a positive feedback loop.

"If you live on a marsh and look out over the water, you're probably not going to notice it, but if you like shellfish, like to fish, like recreational water sports, then these findings do matter," Hollibaugh said. "The information gained from monitoring programs, like the ones we used to analyze temperature and nitrite data across the country and in other countries, can be used not only to forecast what is going to happen down the road and the longer-term consequences of management decisions, but also to come up with potential solutions for the problem. The data collected by these programs are important for wise management of our resources."

The study was published in Environmental Science and Technology and is available at http://pubs.acs.org/doi/abs/10.1021/acs.est.6b03483. The research was supported the National Science Foundation's Division of Ocean Sciences grants 13-35838 and 12-37130.

Written By:
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Gift from Krones Names Engineered Biosystems Building

"It is unprecedented that a leading research university can conceive, design, and construct a building that, inherent in its design, will accelerate innovation and breakthrough discoveries." That was the immediate impression of Helen B. and Roger A. Krone, AE 1978, after they toured the Engineered Biosystems Building (EBB) and learned about the work that's happening there.

They were so inspired, in fact, that they made a life-changing decision: to make a naming gift that will advance research in biomedicine and biosciences and leave an enduring legacy at Georgia Tech.

Opened in 2015, EBB embodies collaboration. It was designed specifically to bring together researchers from different disciplines so that, as a community, Georgia Tech faculty and students drawn from biology, chemistry, and engineering can elevate our understanding of living systems and bring about new cures for diseases. It houses the Children's Pediatric Technology Center, a research partnership with Children's Healthcare of Atlanta and Emory University. And it was made possible thanks to the investment of the State of Georgia, the Institute, and private philanthropy.

"We believe that the next big area for Georgia Tech is at the intersection of engineering and biosciences," the Krones explained. "There is so much we need to do: find cures for cancer, diabetes, and other chronic diseases. And that will require a new era in cooperation and collaboration. We hope that our gift will help propel Tech to a global leadership role in solving the most difficult human engineering problems that affect us all."

The Roger A. and Helen B. Krone Engineered Biosystems Building is organized around research neighborhoods: chemical biology, cell and developmental biology, and systems biology, and provides 219,000 square feet of shared laboratories, offices, and common spaces. Stairs alternate on various floors, encouraging people to move within the neighborhoods and interact with one another. Small and informal meeting areas are located near the stairwells, to further encourage interactions among the 140 faculty members and 1,000 graduate students who work there.

"I have often said that if cancer is cured at Georgia Tech, it will happen in the facility we have been calling EBB," said Gary S. May, EE 1985, dean and Southern Company Chair in the College of Engineering. "I could not be more pleased to say that that potential now exists for the Krone Building. Roger and Helen Krone have been great benefactors to Tech. It is fitting that this generosity is now permanently reflected in the building that will bear their name."

Paul M. Goldbart, dean and Betsy Middleton and John Clark Sutherland Chair in the College of Sciences, echoed May's sentiments. "I believe I speak for all of the researchers whose work will reach new heights as a result of the Krone Building, as well as all of the people whose lives and health will be enriched because of this work, when I say how immensely grateful we are to Roger and Helen Krone and all others who have made this 'temple of science and engineering' possible."

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Gift from Krones Names Engineered Biosystems Building

Roger Krone is the CEO of Leidos, a leader in science and technology solutions in defense, intelligence, homeland security, and civil and health markets. Before joining the company, he was president of Network and Space Systems for The Boeing Company, and was vice president and treasurer of McDonnell Douglas at the time of its 1997 merger with Boeing. Krone first began working at McDonnell Douglas in 1992 as director of financial planning after spending 14 years at General Dynamics.

Helen Krone is secretary, treasurer, and financial manager for the Krone Foundation. She is a member of the board of trustees for the Mountain Retreat Association, which manages the Montreat Conference Center, a national Presbyterian conference center in North Carolina.

For both of them, philanthropy is not just something they do, but an essential part of who they are. Over many years they have given generously, especially to the universities that shaped their lives — Helen's alma mater is the University of Texas at Austin, and Roger holds a master's degree in aerospace engineering from the University of Texas at Arlington and an MBA from Harvard Business School.

"Our success is the integral product of all of the investments that people and institutions have made in us over the past 40 years," they said. "The transformation we have watched at Georgia Tech over those same 40 years has been the direct result of the commitment that alumni have made in the Institute. The university that Tech will become will be a direct result of the lasting commitment we all make."

In 2015, the couple made an estate gift for faculty support in the Daniel Guggenheim School of Aerospace Engineering that pushed that school past its campaign goal in the final months of Campaign Georgia Tech. For 43 consecutive years, they have given to Roll Call. But it's not only about financial support. Roger Krone currently serves on the board of the Georgia Tech Foundation and he has been a member and chair of the Georgia Tech Advisory Board. He also served as an ex-officio member of the Campaign Steering Committee.

"My education didn't end with my graduation," he explained. "My lifelong association with Tech through continuing education, lectures, seminars, recruiting, advisory boards, and, of course, athletics, have continuously enriched my life."

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