





1.

# We Belong

At the University of Miami, we are a community—strong, connected, and united in our celebration of diversity, pursuit of academic excellence, and conviction that each of us has a unique genius to develop and contribute to the world.



#### **MESSAGE FROM THE PRESIDENT**



At the University of Miami, we are answering the higher calling for higher education—building bridges across boundaries and fostering skilled changemakers whose passion to serve will shape a better future for us all. As I begin my fourth year as president and look back at the past year, I am proud to see that so many of the innovative ideas and initiatives outlined in the Roadmap to Our New Century are taking deeper root and flourishing.

During the 2017-18 academic year, we bolstered our leadership team, deepened our commitment to a culture of belonging where everyone feels valued and adds value. and launched specific efforts to crosspollinate interdisciplinary discovery and understanding. We expanded educational opportunity for students, ensured that our campuses remain

places for open and respectful debate, and supported scholarship that propels knowledge and action about the most consequential challenges of our times.

Let us not forget that the last school year began with a massive hurricane bearing down on Miami. The storm disrupted operations and forced the

persons who live, learn, and work throughout the U. Our response? together to restore our campuses to safe and normal operations, and reached out to help neighboring communities recover along with us.

The storm reminded us that natural disasters pose increasing risk with their frequency and ferocity. Yet this past year further revealed that we are living in an era of instability where forces of divisiveness threaten us as well. Our antidote to these challenges has been to fortify the traditional role of a good university: to unite people from diverse backgrounds, experiences, and perspectives. Strong leadership and a dedication to collaborative strategies are key.

To our already stellar leadership for Development and Alumni

evacuation of nearly all of the 31,000 Relations Josh Friedman, Dean of the Leonard M. Miller School of Medicine Henri R. Ford, and School of envisioned in 1925—to become As one strong community, we pulled Education and Human Development Dean Laura Kohn-Wood. Their collective expertise and deep desire to drive important change will surely enhance our team's efforts.

> In this report, we take a look at how and where 'Canes belong—at the forefront of education; to each other community by fostering a more vibrant city and state; and to the hemisphere, where our cutting-edge research and commitment to our neighbors build connections, break down stereotypes, and spur positive change across the Americas.

A technological revolution in learning is sweeping the globe, and we have positioned the University team, we added Senior Vice President to be at the forefront of this transformative development.

This past year we vaulted toward the goal that University founders a Pan-American institution with close ties to Latin America and the Caribbean. Leaders representing 11 top-rated universities across the Americas convened at UM to sign the first academic agreement spanning the hemisphere. We strengthened our capacity to operationalize this effort, which will address global problems through our willingness to engage in by engaging cultural and intellectual dialogue about our differences; to the resources across our region and the rest of the world.

> With the groundbreaking for the Frost Institutes of Science and Engineering, a facility that will house the intertwined network of institutes aimed at boosting STEM across our campuses, we began a bold new era to galvanize scientists and students to address big challenges, be they in neuro-engineering, smart cities, the environment, data science, or other fields that are shaping the future.



#### **MESSAGE FROM THE PRESIDENT**



Our Rosenstiel School of Marine and Atmospheric Science celebrated its 75th anniversary, a milestone that marked the school's incredible evolution from small boathouse laboratory to a research powerhouse whose groundbreaking discoveries are of Health as the lead partner for the leading us to deeper understanding of SouthEast Enrollment Center's All hope for a sustainable future.

Students, graduates, and faculty from groups and communities. the Frost School of Music garnered a range of awards—from Grammys and DownBeats to recognition as a top music business school—and celebrated the dedication of the new Messinger Music Executive Building. was honored with the prestigious

The University's Jay I. Kislak Collection of the Early Americas, Exploration and Navigation, a historic community space transformed into a multipurpose, state-of-the-art facility located within & World Report in its Best Hospitals the Otto G. Richter Library, will serve as a hub for academic and cultural

exchange, and has become the new home for our Libraries' Special Collections and University Archives.

The Miller School of Medicine was selected by the National Institutes the marine environment and inspiring of Us research initiative-tasked with DNA profiling for 100,000 of 1 million on independent surveys of employees, participants from underrepresented

> Among the many UHealth highlights this past year, Ramin Shiekhattar, a genetics researcher at Sylvester Comprehensive Cancer Center, "Pioneer Award" and a \$5 million National Institutes of Health grant.

Our Bascom Palmer Eye Institute once again ranked as the nation's best in ophthalmology by U.S. News edition. This marks the 15th year in a row, and the 17th time overall,

that Bascom Palmer has achieved this prestigious distinction.

We were again recognized as one of America's Best Employers. The 2018 *Forbes*' ranking positioned us among the top universities in the country and also among the best employers of any industry in Florida. The ranking, based reflects the pride of our faculty and staff, and how they feel valued.

Our progress and accomplishments over the past year have been buoyed by an excellent record of fundraising. That excellence was, in fact, recognized with the 2018 Council for Advancement and Support of Education (CASE) Educational Fundraising Award in overall performance in the category of private research/doctoral institutions with endowments less than \$1.2 billion. For the second consecutive year, CASE also awarded the University a 2018 Sustained Excellence Educational Fundraising Award.

Our stellar research programs earned an impressive array of grants and funding, and the generous support of our wonderful community of donors opened new worlds of opportunity at the U. This philanthropic support is highlighted in several of this report's feature stories and in the timeline.

In 2017-18 our 'Canes football team soared to a 10-win season, captured the ACC Coastal Division title, and earned an invitation to the Capital One Orange Bowl. Fourteen of our 18 varsity programs competed in postseason play. Volleyball won 22 matches and advanced to the second round of the NCAA tourna ment. Both basketball teams played in March Madness. Women's tennis made its 12th Sweet Sixteen appearance in the past 13 years. Men's tennis advanced to the NCAA Championships for the first time in seven years. And in late May, our women's track and field team was crowned ACC Outdoor champions in to service.

thrilling fashion in front of our home crowd at Cobb Stadium.

Overall, our student-athletes earned 64 All-ACC honors, nine individual ACC titles, and 18 All-America accolades. Estela Perez Somarriba (women's tennis) and Olga Strantzal (volleyball) won ACC Player of the Year in their respective sports. Football head coach Mark Richt was named ACC Coach of the Year and Walter Camp National Coach of the Year, while Randy Ableman was named ACC Female Diving Coach of the Year and Amy Deem was named ACC Outdoor Track and Field Women's Coach of the Year.

Read more in the report about how our student-athletes are embodying the very best in athleticism, academic achievement, and a commitment

In summary, our endeavors this past year have pursued a bold new course for institutional collaboration. As we look ahead to our centennial in 2025, we can find inspiration in the many ways that we are promoting the open pursuit of knowledge and in our progress toward creating a community where everyone feels that they belong and believes that they can make a difference.

We are one U, and we are answering the higher calling for higher education.

Julio Frenk President



# **BELathe**Forefront of Education

Interactive learning, innovation, and shared experience are vital to our educational approach. Our thinking adds value. We believe that everyone at the U is valued and

that each individual can add value to the mission and purpose of such a top-tier university. That belief encourages the strong sense of belongingthat each of us belongs here, and that our voices are heard and celebrated.

# The Simulation 'Supercomputer'

In its first full year of operation, the More than a thousand students and School of Nursing and Health Studies hundreds of health care professionals Simulation Hospital is already setting benefited this past year from the a new bar for health care education through the provision of advanced simulation-based techniques within an innovative, collaborative, and technology-rich environment.

Simulation Hospital's ability to bridge that can happen—he can turn blue, the critical and growing gap between classroom learning and increasingly complex clinical environments.

semester of her clinical studies learning before going into the hospitals." on the newborn simulator dolls.

"The simulators can do pretty much anything that a normal newborn can, and there are lots of complications have different lung sounds, different breathing sounds," Pearce explains. "Anything can go wrong with him, and that's why they do it: so that we Nursing student Casey Pearce spent a can learn to do different scenarios

The Simulation Hospital replicates a real hospital and a fully functioning health care system.

Students experience an accelerated learning curve through simulation education.





#### Interactive, Innovative, and Collaborative **Health Care Education**

The Simulation Hospital serves as a hub for students, health care professionals, first responders, and corporate partners to design, test, and master skills and technologies to transform health care education, research, and practice.

Students are exposed to a range of real-life health care settings across the five floors of the state-of-the-art facility that includes an emergency department, outpatient clinics, labor and delivery suites, a neonatal intensive care unit, operating rooms, a critical care unit, and a fully equipped home health care apartment.

#### WE BELONG AT THE FOREFRONT OF EDUCATION







The new facility simulates the look, feel, and flow of a real hospital—without putting any patients at risk. The use of microphones, cameras, control rooms, and an intricate network of advanced tools and technology allows nursing faculty and other specialized simulation instructors to manipulate and observe each scenario as it unfolds. the third leading cause of death

"Here we create a simulated environment where, all at once, the phone is ringing, physicians are giving you orders, and the patient is telling you they don't feel good. It's a sort of organized chaos—and yet you can think about what you're going to do, how to respond, and then have the time immediately after to debrief

"Additive manufacturing lets you envision what's possible." Joseph Sendra, B.S. '93, M.B.A. '96, worldwide vice president of manufacturing engineering and technology at Johnson & Johnson

The "collaboratory" is helping to educate tomorrow's technology leaders.

Through the process of 3D printing, students add materials such as plastics or metals in successive layers.

and reflect on what you did," says Susana Barroso-Fernandez, assistant professor of clinical and director of simulation operations at the school.

This high level of experiential training is advancing efforts to reduce medical error, currently in the United States.

The facility is also helping first responders prepare personnel and communities for adverse events such other gadgets. as natural disasters, terrorist attacks, and infectious disease pandemics and enabling corporate partners and researchers to beta-test technologies and conduct studies aimed at transforming health care education and clinical practice worldwide.

"While simulation has been around for years, the hospital represents an exponentially bigger piece of the educational experience—similar to me learning to use a slide rule in high school and now having a supercomputer," says Dean Cindy L. Munro.

# New 3D Lab Helps Educate Tomorrow's Engineering Leaders

A biomedical engineering student uses a 3D printer to optimize the manufacturing process for a new type of catheter. An aerospace engineering student prints a 3D component for a hybrid motorpropelled rocket. And a group of mechanical engineering majors use a series of 3D printers to turn their classroom projects into reality, creating prototypes for novel vegetable cutters, juice extractors, and mobility devices, among many

Not long ago, such additive manufac- "An engineering education has turing techniques were out of reach for engineering students. But with the hands-on creativity and allow new College of Engineering-Johnson their imaginations to soar," he & Johnson 3D Printing Center of Excellence Collaborative Laboratory. students now have the means to create objects limited only by their imaginations.

Housed within a 5,850-square-foot "maker space" inside the McArthur Engineering Building and featuring an impressive lineup of 3D printers, the center supports joint research, materials development, and testing of additive manufacturing technologies and processes. And students work alongside Johnson & Johnson engineers and scientists, gaining invaluable experience.

"A collaboratory" is how Jean-Pierre Bardet, dean of the College of Engineering, describes the facility. to give students the chance for says. "This new lab is yet another resource to educate tomorrow's technology leaders."



University.

"Additive manufacturing lets you envision what's possible," says Joseph Sendra, worldwide vice president of manufacturing engineering and technology at Johnson & Johnson and one of three UM alumni who helped bring the new lab to the

Faculty are just as excited about the new center, as researchers within the college are making use of it to propel projects in fields that range from the aviation and aerospace industries to biomedical engineering. "The new Johnson & Johnson Lab," says Ashutosh Agarwal, assistant professor of biomedical engineering "is a game changer for the college."

# Music School's Laptop Ensemble Blends Technology and Talent

You watch them click away on laptops, shifting sliders on a MIDI controller to mix effects, textures, and instruments and then sending the remix soaring through speakers to fill the room with sound. Yet these are not club DJs who simply manage and massage the sounds of others; these multitalented students are musicians themselves-members of the Frost School of Music's Laptop Ensemble.

Students in the Laptop Ensemble embody the Frost School's mission to nurture well-rounded musicians and are composing a new score in music education: They are among the first in the country to use laptops as their primary performance instruments to create contemporary masterpieces

"Imagine someone with excellent music-many are doing this and are very were deeply rooted in musical tradition. successful. Now what if you took people with music talent and made sure they know how to use these same technologies and platforms-that was our goal,"

says Joe Abbati, studio director of the Contemporary Media Performance Studio Program (CMP), which helped create the Laptop Ensemble, and lecturer in the Music Engineering Program at the Frost School.

When they launched CMP a few years are required to perform. ago, Abbati and Rey Sanchez, associate dean for strategic initiatives and innovation at Frost, sought to fuse the power of modern music-making tools with the most talented of musicians.

"Frost and other schools are inundated with students who want to learn production skills. Our goal was to take musically talented people and get them but not abandoned by any means his trained on these techniques as a tool for musicianship. He now dedicates himself real-time expression," Abbati explains.

The professor duo was challenged to production skills remixing other people's show that their approach and curriculum technology scene.

> Students in the Laptop Ensemble practice their own musicianship in private classes and study new ways

to perform and produce electronic music in innovative ways—which means real-time improvisation and solos, and emotive expression with sound via contemporary musical interfaces. Most have mastered a performance instrument and, as part of their music degree,

Conner Golden, a junior in Frost's Music Engineering Program, played classical piano and sang in the choir for many years prior to joining UM. As a sophomore, he switched from Classical Voice to the CMP and Laptop Ensemble. Golden has delved into the world of music engineering and technology, to the LinnStrument, which resembles a key-tar (keyboard/guitar hybrid) and is a relatively new addition to the music

"The possibilities of the LinnStrument are endless, and I know I have only scratched the surface of what is possible," Golden says.

Laptop Ensemble students are among the first in the country to use laptops as their primary performance instruments to create contemporary masterpieces.

Contemporary Media Performance Studio fuses the power of modern music-making tools with the most talented nusicians.

#### If We Can Talk About It. We Can Learn From It

We build trust and strengthen connections through the willingness to address-not ignorethorny issues that are often the basis for discord and alienation yet are rarely discussed in society. A range of programs and projects are underway that complement the culture of belonging initiative, which is guided by the Office of Institutional Culture (OIC).

The Intergroup Dialogue follows a well-structured curriculum that generates empathy and understanding of inequality and privileges, and optimizes learning opportunities for students.

"When I was able to tell my story to my group, it allowed me to break through so much of the uncomfortableness I'd been feeling. An experience like this could help a lot of students bridge differences and build solidarity," says Wilson Mejia, a graduate student and intern in the OIC.



# **BELONG**Each Other

Our diverse experiences and thoughts bring us closer. We listen and seek to understand. We are committed to mutually enriching our experiences by celebrating our differences.

> Reason, evidence, and observation fue engaging conversation in courses like Science and Humanism that deepen inquiry and enhance understanding.

## New Endowed Chair Demonstrates University's Commitment to Knowledge Through Deep Inquiry

Over the course of human history, few subjects have proven to be as "rose like" as religion—to believe or not to believe-given its potential to prick and to assume the first such chair in the polarize while offering the possibility for comfort and solace. Might there be this fall, Science and Humanism, a way to frame or approach this powerful domain to yield less prickliness and more fragrance?

Anjan Chakravartty, the University's new endowed chair for the study of

atheism, humanism, and secular ethics, was impressed by the "bold and wholeheartedly believes there is. He joined the U officially in summer 2018 country, and his first course offering explores that very framework.

Christopher Doell, the director of programs of Academic Excellence and evidence, and observation through a senior advisor for residential colleges, heard about the new endowed chair,

forward-thinking" decision, and registered for the course.

"Some might think that this person is coming to teach a course that condemns the belief in God, but that's not the case," Doell says. "Like a lot of philosophy, we're looking at reason, process of inquiry and argument to arrive at varying levels of truth.





"Professor Chakravartty is a maestro of conversation and cultivating dialogue. He's very, very encouraging to talk about them and to have of people offering their views, and then he presents some of the historical or deeper philosophical context to help us continue to think through," Doell says, adding "courses like these are invaluable"

The new endowered chair, made possible by a generous \$2.2 million gift from the Louis J. Appignani Foundation, comes as secularization is rising, and demonstrates the University's commitment to rigorous academic leadership and to explore topics critical to modern culture.

"These complex issues need to be addressed, and it's important resources to analyze them carefully," says Otavio Bueno, chair of the philosophy department, who was closely involved in the selection of the new endowed chair.

"It's outstanding and a feather in the cap of the University that it took this leadership role," says Chakravartty. "The University of Miami seems like the interdisciplinary research projects that perfect place where this kind of mandate hold great promise for addressing some might flourish, given the wonderful diversity of students who come from so many different parts of the world exactly what you want to have a rich discussion about these kinds of issues."

# The Promise of Team Science

In its second year of University funding, the UM Laboratory for Integrative Knowledge, or U-LINK, is advancing a new model for collaborative research by encouraging and enabling researchers "Collaborative interdisciplinary research to work across disciplines to tackle some of the world's thorniest problems.

#### And that's by design.

The ultimate goal of the new University-wide platform is to develop of society's toughest challenges—and the That's why all grant recipients—Phase I potential to attract the external funding needed to advance solutions for them.

"We aren't just funding awesome ideas," says John Bixby, vice provost for research mandatory seminar on the "hows" and and U-LINK's lead coordinator. "It has to "whys" of team science. be something important to society."

But a secondary and, for now, even more important goal is developing a cadre of interdisciplinary collaborators who can share best practices for creating effective interdisciplinary teams.

Bixby and Susan Morgan, associate provost for research development and strategy, acknowledge that goal is a challenging task. After all, highly specialized researchers who are

accomplished in their respective disciplines often don't speak the same language as experts from other fields.

is hard work, and we don't take it for granted that everyone knows how to do it," Morgan says. "A lot of a team's success depends on how team members communicate. They need to create a new, unique intellectual space where their disciplines maybe don't overlap but at least speak to each other."

teams and those designated as Phase II for renewed funding—in U-LINK's second year will begin the next funding cycle in January by attending a

And that's because the world's most compelling and difficult problems are complex and multidimensional, requiring multiple experts with varied perspectives, skills, and knowledge to come together.

"Each discipline has a little piece of the puzzle," Morgan says. "We need to put all the pieces together to assemble the comprehensive picture and create more innovative solutions."

#### U-LINK provides a model for researchers to collaborate across different disciplines and tackle some of the world's most challenging problems.

"A lot of a team's success depends on how team members communicate." Susan Morgan, associate provost for research development and strategy







# Dialogue Across Differences: Creating Brave Spaces to Build Stronger Bonds

It's been said that courage is contagious "Many at the University felt that we and that every time we choose courage, we make everyone around us a little better and the world a little braver.

A new course at the University of Miami is intent on just that: creating brave spaces, which allow for controversy with civility and where students can engage in a genuine way by talking about challenging topics and thereby learn to respect differences, heighten awareness, and increase understanding.

The course, Dialogue Across Differences, stems from the Intergroup Dialogue (IGD) program, transplanted here in part by Laura Kohn-Wood, dean of the School of Education and Human Development, and which took root at UM under the leadership of President Frenk.

wanted to create a culture of belonging by having these conversations so people could get to know each other better and can work toward a more socially just community both on campus and off campus," says Miriam Lipsky, a professor The experience of finding themselves Born in Ethiopia, Mesfin moved to and senior learning and facilitation specialist in the Office of Institutional Culture and a lecturer in the School of Education and Human Development.

IGD began at the U as a work group, was piloted as a class this past spring and summer, launched as a course elective in fall 2018, and is taught by Lipsky together with Renee Dickens Callan, UM director of a space of 'oh, I get it, I know that," multicultural affairs.

The conversations—on ethnicity, race, sexual orientation, gender-are intended to provoke deep personal sharing, yet everyone knows that they are in a safe space and that whatever happens in class stays there, Lipsky explains.

During a recent class, students participated in an outdoor exercise where they positioned themselves on an imaginary continuum line as they answered an array of questions.

standing alone or bunched together or seeing a classmate all by themselves invited students to physically experience the impact of their beliefs and biases.

"This class is geared to getting you out of your comfort zone because there you're not really learning—that's Lipsky explains. "But we don't want you in the danger zone either, where someone may have said or done something that triggered you and you shut down.

"Intergroup Dialogue is about locating you on the learning edge," she says.

Bersabeh Mesfin, a sophomore, registered for the class out of her interest in social justice and sociology. St. Louis when she was 4. She grew up verv aware of "differences."

The outdoor exercise motivated her to know her classmates better. "I wanted to know their reasons why," she says. "Generally whenever we're challenged we fall back on 'oh. I don't want to talk about it.' I know that I'll learn a lot in this class, especially from those who are very different."

"Dialogue Across Differences is geared to getting you out of your comfort zone because there you're not really learning." Professor Miriam Lipsky

The conversations—on ethnicity, race, sexual orientation, and gender-are intended to provoke deep, personal sharing, yet everyone knows they are in a safe space.

# BELONG the Community

At the University of Miami, we impact and influence Greater Miami. Florida. and the nation. We play a critical role in helping to foster more vibrant and harmonious communities

## 'Canes Surge to Success— On and Off the Field

Our football 'Canes won 10 games last year for the first time in 14 years, including wins against rival Florida State and powerhouse Notre Dame. The buzz spread far, fast, and wide and for paying it forward. With support prompted ESPN's College GameDay to broadcast live on the Coral Gables campus for the first time.

The success for these 'Canes spread beyond the gridiron: Touchdowns and "Everyone has to try and work to takeaways were matched by classroom achievement and solid support for community kids and families.

Defensive lineman Demetrius Jackson, a senior political science major, embodies this class of student-athletes with a passion from the U, Jackson launched the Young Men of Tomorrow foundation to help the Overtown community where he grew up.

give a helping hand and make their community better. You can't just talk about it. You have to be about it. You have to try and do something," says Jackson, who was twice voted Hurricanes Community Service Man of the Year.

"Service is a pillar of our program. From the first day of recruiting, we emphasize that the players have tremendous humility for the blessings they've been given, and therefore they must share." Women's Basketball Head Coach Katie Meier

> Women's basketball players support community children in one of many service events.





#### **Making a Difference**

We are the University of Miami, founded as part of the vision and development of this city. It's an integral part of our culture and ethos to positively impact the city and the region.

Our focus on performative research demonstrates our commitment to help resolve local and regional challenges. Rising sea level, for example, poses a problem for Miami and for the world, and we offer unparalleled expertise in climate science and urban planning through our **Rosenstiel School of Marine and** Atmospheric Science and our School of Architecture. We strive to be active participants in finding solutions especially suited to Miami.

Our mission is to educate and nurture student changemakers who will go out in the world and make a difference, and that experience begins while here at the U.

#### WE BELONG TO THE COMMUNITY





And the football team is far from alone in its focus to foster wellrounded student-athletes.

In the classroom, 12 of our programs were recognized for perfect scores of 1,000 in the 2016-17 NCAA Academic Progress Rate (APR) report. Three programs were honored for perfect multiyear APR scores.

Hurricane student-athletes ranked first among all Division I schools in 2018 in the NCAA Team Works Helper Community Service Competition, as our students participated in more than 200 events, that the players have tremendous supporting the Boys and Girls Club, Best Buddies, Holtz Children's Hospital, Lotus House, the YES Institute, and more. In one ongoing project, 77 student-athletes acted as pen pals with students at local elementary schools. Overall, student-athletes logged close to 3,400 hours of community service.

"Service is a pillar of our program," says Miami Hurricanes are competitive Katie Meier, who last year completed her 13th season as head coach of the UM women's basketball team. "From the first day of recruiting, we emphasize hardworking students, and role humility for the blessings they've been given, and therefore they must share."

The commitment is ingrained in the 'Canes sports culture. "We don't sit there and sign them up; when they hear of an opportunity, they seek it out and do that on their own—it's purely from their hearts," says Meier, whose 'Canes made a ninth consecutive postseason appearance in 2017-18.

in all things, including uplifting others. They are athletes, proud members of the community, models.

Enrolling 1 million diverse people in the largest health study ever undertaken by the National Institutes UM partnered with the University of Health is a daunting task. Yet UM researchers who positioned the Miller School of Medicine to lead the ambitious All of Us Research Program for the Southeast are compelled by an ethical imperative: ensuring that medical breakthroughs benefit all of us.

conditions.

Hurricane student-athletes ranked first among all Division I schools in 2018 in the NCAA Team Works Helper Community Service Competition.

> The commitment to pay it forward is ingrained in the 'Canes sports culture.





# **Closing the Medical Research Gap**

Black, Hispanic, and other minority populations suffer disproportionately from diabetes, cancer, and other diseases, yet they have not been included in the large-scale clinical trials that historically lead to more effective treatments for such

With a new \$60 million grant from the \$1.5 billion All of Us program, of Florida, Emory University, and the Morehouse School of Medicine to establish the SouthEast Enrollment Center (SEEC), a consortium that will director of the Hussman Institute, endeavor to address this discrepancy. This spring, the center began recruiting about 100,000 of the 1 million people who, by confidentially position the University to play a sharing their biomedical and health data, are helping to generate one of the largest, richest biomedical databases in history—one that researchers will one day use to tailor treatments based on a patient's biology, environment, and lifestyle.

"This is an important opportunity to expand the promise of personalized medicine to all communities," says Stephan Züchner, the SEEC's lead principal investigator who chairs UM's Dr. John T. Macdonald Foundation Department of Human Genetics and co-directs the John P. Hussman Institute for Human Genomics. "This study will begin to collect the data that will enable us to begin fine-tuning therapies for specific health issues and specific populations."

Given UM's expertise in genetics and genomics and its location in one of the nation's most ethnically diverse counties, Züchner and two other SEEC principal investigators from UM—Margaret A. Pericak-Vance, and Olveen Carrasquillo, chief of the Department of Medicine's Division of General Internal Medicine—helped leadership role in All of Us. Over the next five years, they and the rest of UM's All of Us team-three co-investigators and 15 research managers, coordinators, and assistants—are intent on recruiting many of the 40,000 participants the SEEC expects to enroll across South Florida.

The Sylvester Comprehensive Cancer Center, the University's Center for Computational Science and School of Nursing and Health Studies, and experts in medical informatics are also poised to contribute to this monumental effort.





"This is an important opportunity to expand the promise of personalized medicine to all communities." Professor and Lead Principal Investigator Stephan Züchner

UM exercises the leading role for this \$60 million grant to help ensure that medical breakthrough benefit "All of Ŭs.'







#### WE BELONG TO THE COMMUNITY

"Our clinics give students the opportunity to gain real, practical legal skills representing real clients." Law School Associate Dean Kele Stewart

For many students, participating in a clinic provides a competitive edge in the job market and is one of their most rewarding law school experiences.



## Through Law Clinics, Students Gain Experience and Spur Community Change

UM School of Law students work to address the needs of some of the most vulnerable and marginalized a lawyer—in South Florida and across what it means to actually represent a the globe through the school's clinics. child who's going through the system," These training forums, a critical part Stewart adds. of the curriculum, provide unparalleled experience for students learning Students select from a range of the essentials of lawyering under the close supervision of professors and clinical instructors.

"Our clinics give students the opportunity to gain real, practical legal skills representing real clients," savs Kele Stewart, associate dean for experiential learning and co-director other practices. Ethics and social justice of foster children to filing class action of the Children and Youth Law Clinic. issues are often debated. In her clinic, students learn to advocate for children in the foster care system.

"We can talk about this in class in a theoretical manner, but there's nothing impact for communities involved. populations—most who cannot afford student the complexities and nuances of mother who has a broken back and

> clinics—health rights, human rights, immigration, bankruptcy, environmental justice, children and youth, federal appellate, innocence, investor rights, and tenant rights. They spend about 15 hours per week on their case work and meet weekly in class to learn skills on interviewing, legal writing, and isolation. From defending the rights

Alexa Poo, a second-year law student, worked with children and teens with behavioral and emotional disabilities and other special needs as part of her clinic work. She stressed the importance of promoting youth rights and advocacy.

Students' cases often have a lasting like this experience that so conveys to a Shiana Barbosa, a Marine veteran and two brain injuries, was one of tens of thousands of Floridians unable to endure long lines to register for benefits in the aftermath of Hurricane Irma. A lawsuit filed by the Health Rights Clinic and other organizations allowed for the registration to be made via phone.

> For many students, participation in the clinics reveals the hardships and challenges that many clients face due to lack of advocacy or systemic immigration suits, their experience is vast and the work is extensive.

challenges.

The institutes aim to make Miami a hub for technological and scientific innovation, and to support basic and applied sciences and engineering at the University.

## Frost Institutes Herald a Bold New Era for STEM Research and Education

Climate change, disease, famine, and pollution need not be the bane of the world. Scientific, technological, engineering, and mathematical advances that only a few years ago were regarded as the stuff of science on display." fiction are now making such seemingly intractable problems solvable.

In May, with the launch of the Frost an intertwined network of institutes aimed at boosting STEM across its campuses—the University took a solutions to community and global

Speaking at the launch ceremony, President Julio Frenk said that the institutes, which link UM's College of Arts and Sciences and College of Engineering, "will put science

"The University of Miami is already known for excellence in biomedicine, marine sciences, and other fields," Institutes of Science and Engineering— he said. "But continued excellence cannot be sustained without critical investments in basic and applied science, mathematics, and engigiant step forward in helping to foster neering. These disciplines, which form the building blocks for innova tion, must be strengthened to maintain our leading edge as a research university."

> The institutes and the facility where they will be headquartered are made possible by a landmark \$100 million gift from the namesake UM benefactors, Phillip and Patricia Frost, whose

legacy at the University is already well known in the form of a gift that named the Frost School of Music. Jeffrey Duerk, executive vice president for academic affairs and provost, said that the University needs smart cities, the environment, data to act boldly if it is to be a leader in interdisciplinary STEM research and education. "The Frosts' gift makes that possible, and the impact will be felt not only at the U, but also throughout the greater South Florida community and beyond," he said.

The Frost Institute of Chemistry and Molecular Science is the first of the individual institutes to be created. which is fitting, said Duerk, because "chemistry is a central science everything in the physical, life, and applied sciences intersects with chemistry."

For future institutes, said the provost, "we will continue to galvanize our scientists, researchers, and students to delve into the big problems that matter, be they in neuro-engineering, science, or any of the other disciplines that will shape the future of our planet and our society."

> "We will become a leading institution in the STEM fieldsscience, technology, engineering and mathematics. This year we broke around on what will be the first of at least five institutes in a science quad that will be a hub for research in the Americas." President Julio Frenk

This rendering depicts the facility that will house the network of institutes aimed at boosting STEM at UM.







#### The Hemispheric University

When our founders wrote the charter, they knew that the University of Miami would build its home at the crossroads of the Americas, the economic and cultural center of our continent.

Today we are leveraging our location to become the Hemispheric University—la Universidad Hemisférica—the university that reaches across national borders to convene and lead institutions with a particular emphasis on bridging North, Central, and South America.

We are creating relationships throughout the region to promote student and faculty exchange. We took a major leap forward this past spring with the launch of the Hemispheric University Consortium, a partnership of 11 universities across the Americas, to further the exchange of knowledge and understanding.



# BELONGhe Hemisphere

We share our values, expertise, and knowledge across the Americas and throughout the world. Both as an institution and also graduate by graduate, we impact the world—through our groundbreaking research and commitment to cultivating global citizens.

# An Imperative for the Americas: Closing the Gap in Palliative Care

The global pain crisis is arguably the most glaring inequity in global health today. Felicia Marie Knaul, professor of public health sciences at the University of Miami's Leonard M. Miller School of Medicine and director of the Institute for Advanced could have an easier death if an Studies of the Americas (U-MIA), is a leading voice of a global project representing 25 countries seeking to change that.

Knaul chaired a comprehensive Lancet Commission report that revealed that tens of millions of people who live in low- and middle-income countries and die in severe physical and psychological pain each year essential package of palliative care, which includes immediate-release, oral, and injectable morphine, were made available by health systems around the world.



"This global pain crisis can be remedied quickly and effectively. We have the right tools and knowledge, and the cost of the solution is minimal. Denying this intervention is a moral failing, especially for children and patients at the end of life." Professor and Lancet Commission Report Chair Felicia Marie Knaul





#### WE BELONG TO THE HEMISPHERE

"The commission describes a new measure of serious health-related suffering, which captures for the first time the crisis that must be addressed. and makes a clear call to take more seriously the alleviation of the burden of pain, suffering, and severe distress associated with life-threatening or life-limiting conditions," says Richard Horton, the journal's editor-in-chief.

UM's participation is anchored by U-MIA. The center is guiding the implementation of the commission's recommendations in Latin America and the Caribbean, starting with El Salvador, Haiti, and Mexico.

"This global pain crisis can be remedied quickly and effectively," says Knaul. "We have the right tools and knowledge, and the cost of the solution is minimal. Denying this intervention is a moral failing, especially for children and patients at the end of life."

Early last April, the U, serving as the commission's host institution, convened global and regional palliative throughout the region to better estimate care civil society organizations together their country's need for palliative care and with researchers and advocates from around the world for the two-day Global Launch Symposium. Attendees the Caribbean that will change priority developed and adopted the Miami DeclarAction strategy to implement the findings of the report.

Natalia Rodriguez, director of research support for U-MIA, explains that the University will work with its research partners to develop accountability frameworks and appropriate metrics as part of the project. A new metricsuffering-intensity-adjusted life-years—has been proposed.

Knaul adds that the strategy also includes training policymakers pain medications to close pain divides, and collecting data in Latin America and setting in health, measuring the burden of serious health-related suffering and incorporating the value to patients and caregivers of alleviating pain and suffering.

The commission's goal is to make a palliative care package of painrelieving and palliative care medicines, equipment, and caregiving available to all by the year 2030. UM will continue to lead these efforts with a particular focus on the Americas.



ORPHIN Injection, USP

Sixty-one million people worldwide experience serious health-related suffering each year for a total of at least 6 billion suffering days.

Each year, nearly 2.5 million children die needing palliative care and pain relief. In low-income countries, they account for more than 30 percent of serious healthrelated suffering deaths.

Over 80 percent of those people live in low- and middle-income countries where access to palliative care is severely lacking.



University leaders meet at the Kislak Center to sign the unprecedented accord and develop an implementation framework

# Hemispheric University Consortium Forging New Ties Across the Americas

In late April, leaders representing 11 universities across the hemisphere met in the University's Kislak Center to share resources and expertise in a collaborative effort to address crime and corruption, public health, climate change, urban resilience, innovative entrepreneurship, and other pressing regional challenges.

The Hemispheric University Consortium, a component of the Roadmap to Our New Century, capitalizes on the respect for universities as among the most prestigious institutions in society and will provide a platform for students, faculty, and researchers to collaborate. In its initial phase, UM is serving as the host or backbone agency, leveraging our geographic advantage at the crossroads of the Americas, while fulfilling a key part of our mission.

Vice President for Hemispheric and "Our next step is to identify champions In an article published in *The* Global Affairs Lourdes Dieck-Assad is spearheading University involvement different institutions who is going to and penned an unprecedented accord: and coordinating the consortium working group.

> "There is so much enthusiasm, and all the universities want to put their own seed into the initiatives so that they will work. We're working to see how we can adapt the ideas to make them consortium-wide," she explains.

Since April, the working group has met for its potential for collaboration. twice online, and its efforts have focused Another possibility—one of timely on designing initiatives—from the five broad topical areas—that would enhance on migration that Monterrey [Mexico] student experience or would spur collaborative research.

Several specific research issues have generated special interest and enthusiasm-water and water management for sustainability from the area of climate change, and data science and big data from the area of entrepreneurial innovation.

for these issue areas, someone at the commit themselves to the work and then connect to others throughout the consortium," Dieck-Assad says.

In terms of student mobility and experience, the group is looking to identify courses that could be offered to leaders," he wrote. students across the consortium. UM's study-abroad expedition to the Galapagos Islands has sparked interest public policy interest—is coursework Tech offers, studying ways to improve conditions in Mexico and Central America to curb emigration. The chance for students from different countries to share their unique perspectives and research embodies the true potential of the consortium.

Washington Post, President Frenk touted the value and impact of the consortium. "By working across borders, universities can advance resilient, boundary-spanning solutions to our world's shared problems. Institutional alliances can also serve as models for civil society that may elude national

The article generated interest from a range of universities across the hemisphere seeking to join the partnership.



## A Hub for Hemispheric and Global Knowledge

The opening in March of the gleaming new Kislak Center, a historic community space transformed into a multipurpose, state-of-the-art facility, celebrated a landmark moment in the University's evolution as a hemispheric university.

The center, located within the Otto G. Richter Library on the site of the former Brockway Lecture Hall, offers a ground-floor reading room and exhibit gallery for scholarly and cultural exchange. The Jay I. Kislak Collection of the Early Americas, Exploration and Navigation—among the most prestigious collections in the world of rare books, manuscripts, and artifacts relating to the Americas—will be housed collection and other artifacts in a mezzanine level gallery.

"This is certainly the most important The center has been chosen collection the University has acquired as one of the principal venues for in its history, and the most highly assessed in terms of value," says UM Libraries Dean Charles Eckman. "It puts us in a different level of libraries exploring a range of options to in terms of unique and distinctive holdings."

In March, leaders from universities across the Americas penned the Hemispheric University Consortium agreement in the center.

"Kislak was the natural setting for the inaugural meeting of the consortium. It felt like it was a perfect moment in a room surrounded by aspects of the of the Americas," Eckman says.

the International Association of University Libraries' 2021 Annual Conference, and UM Libraries are partner with consortium members to spur library engagement, be it hosting seminars or other initiatives to share knowledge and resources.

Ashli White, associate professor of history, accessed the new Kislak Center collection as part of the research for "Antillean Visions: Maps the Caribbean. and the Making of the Caribbean," an exhibition of cartographic art.

"We viewed some fantastic, oneof-a-kind, amazing pieces relating to the Caribbean—and the 27 pieces we used represent just a small percentage of the enormous wealth and breadth of the collection." White says.

"I'm already looking at the thousands of pieces that are coming that I can use for class and can bring my students to the center to view. That is pedagogically fantastic," says White, a specialist on revolutions in

"This is certainly the most important collection the University has acquired in its history, and the most highly assessed in terms of value. It puts us in a different level of libraries in terms of unique and distinctive holdinas." UM Libraries Dean Charles Eckman

The landmark gift by the Jay I. Kislak Foundation of the Collection of the Early Americas, Exploration and Navigationamong the most prestigious collections in the world–opens new worlds for learning, and creates a hub for academic and cultural exchange.











It might sound absurd to some people, but to Neil Hammerschlag, diving into shark-infested waters without a spear gun or repellant is actually a chance to learn something new about an often-misunderstood super predator.

That is precisely what the University of Miami research associate professo recently did, taking the plunge off the coast of Key Largo to observe five massive tiger sharks feeding on a whale carcass. But it wasn't the first time Hammerschlag has gotten up-close and personal with sharks.

# Deep Dive on Sharks, Revelatory Marine Research Informs Public and Policymakers

As director of the Rosenstiel School of Research and Conservation program, Hammerschlag and his team of graduate students and staff study and tag sharks year-round, tracking their movements to better understand the biology, ecology, and behavior of a species that swam the world's oceans long before dinosaurs even roamed the Earth.

His message to the world: We should be afraid for sharks, not of them. As apex predators, they help maintain healthy marine ecosystems, preying on fish below them in the food chain and helping to keep prey populations in check.

Sharks are a critical barometer of ocean health. Yet many shark populations around the world are in decline—nearly 20 percent of all known species face extinction, their numbers dwindling primarily as a result of overfishing but also due to climate change and the loss of their habitats. These warning signs provide a comprehensive reading of Marine and Atmospheric Science's Shark threats throughout intersecting and interdependent natural systems.

Hammerschlag's exhaustive research from identifying critical shark habitats and examining the effects of urbanization on shark movement and health to evaluating how sharks may respond to climate change stressors—offers the promise to shed light not only on our understanding of this fascinating marine predator but also to influence U.S. and global policymakers who enact laws that impact the marine environment and natural world.

His efforts are paralleled in a range of ring the next generation of scientists." areas by a stellar team of Rosenstiel scientists, whose research is advancing oil spill science; spurring the development of aquaculture businesses; yielding deeper understanding of the marine environment, coral reefs, and human-caused climate change; and enhancing knowledge of the Gulf Stream and the connectivity between South Florida and Cuba.

In May, at the gala marking the school's 75th anniversary, President Julio Frenk said of the Rosenstiel School: "Your steadfast pursuit of greater knowledge has been essential to improved hurricane forecasts, expanded knowledge of ocean and atmospheric processes, natural blizzards and catastrophes, weather and climate change, sea-level rise, marine conservation, and much more—with the end reward of providing the scientific basis for influencing sound policy. And all of this while developing and mento-

Research on sharks, considered a critical barometer of ocean health, is providing an illuminative understanding of interdependent natural systems and offers the promise of influencing laws and policy that impact the marine environment.





#### THE YEAR IN REVIEW



From the heft of the first massive columns in place for the new Student Housing Village in early summer to the array of renowned speakers—global changemakers—who inspired several thousand graduates at Spring Commencement ceremonies, 2017-18 has been an amazing year of progress and achievement at the U.



#### **June 2017**

#### Student Housing Village Construction (1)

The first lift of the tallest columns for the 540,000-square-foot lakeside Student Housing Village is completed over a four-week period. purchase a rare, early 18th-century The on-campus housing project occupies a 12-acre construction site on the Coral Gables campus.

#### Civic Engagement Scholars (2)

Thirteen Community Scholars from the Center for Civic Engagement make final presentations on a range of housing-related topics, from substandard housing to housing finance.



#### Rare Violin Launches Music Instrument Collection (3)

The Miller family initiates a Frost School of Music Instrument Collection with a donation used to Guarneri violin, named the Sue Miller STARS Rating for Sustainability Violin and valued at \$1.1 million.

#### First Lady Honored (4)

UM's first lady, Felicia Marie Knaul, director of the Institute for Advanced in Higher Education. Study of the Americas, becomes the first economist admitted into the prestigious Mexican National Academy of Medicine.



### July

#### Leading Music Law Program

The School of Law is highlighted "nation's leading schools for music law programs."

UM earns a STARS silver rating in recognition of its sustainability achievements from the Association for the Advancement of Sustainability Bascom Palmer Eye Institute is



#### Foster Care Youth on Campus (5)

The School of Law and School of in *Billboard Magazine*'s listing of the Education and Human Development combine to welcome the inaugural First Star Academy, a five-week summer residential program for foster care youth on the Coral Gables campus.

#### Bascom Palmer No. 1 Again (6)

ranked the nation's best in ophthalmology by U.S. News & World Report.





#### September













#### University in Full Recovery Mode After Hurricane $\overline{7}$

Hurricane Irma disrupts operations and requires the evacuation of University campuses. In a show of strength and resilience, the University community works together to restore campuses to normal operations and helps its neighboring communities.

#### Simulation Hospital Opens (8)

The School of Nursing and Health Studies dedicates its new state-ofthe-art, five-story Simulation Hospital heralding a new era of engaged learning across the U.

### Housing Village Hits the Roof (9)

Construction reaches the roof level on the first third of the 25 interconnected buildings of the Student Housing Village. The village will eventually provide modern suites and Award for Math Professor (1) apartments for 1,115 upperclassmen.

#### Collaborative Education

The Office of Professional Advancement in the Division of Continuing and International Education collaborates with Universidad Andrés Bello a member of the Hemispheric University Consortium—to launch an online advanced engineering project development and evaluation certificate program in Spanish.

Rosenstiel Oil Spill Research (10) Rosenstiel School scientists are awarded \$12 million to advance oil spill science.

Math professor Ludmil Katzarkov is awarded a Simons Investigator Award, one of the most prestigious recognitions in the field of mathematics.

### October

#### Medical Help for Puerto Rico (12)

The Miller School of Medicine mobilizes physicians and supplies to help Puerto Rico's medical community after the devastation of Hurricane Maria.

#### Motion Pictures Program: the Reel Thing (13)

The School of Communication Motion Pictures Program is named one of the top 50 film schools in the country.

#### Frost Music Presidential Scholar at the Arsht Center (14)

Presidential Scholar Sir James Galway performs with the UM Frost Symphony Orchestra at the Adrienne Arsht Center for the Performing Arts.

#### 3D Printing Center Opens (15)

The College of Engineering-Johnson & Johnson 3D Printing Center of Excellence Collaborative Laboratory opens.

#### UHealth Achieves Single Licensure

Our three hospitals are reorganized into a single, multifacility hospital operating under the same state license and Medicare numbers, a venture that affords greater efficiencies in space, operations, and patient-care coordination.

#### THE YEAR IN REVIEW



#### November

#### Football Coach Wins Top Honors (16)

Head Coach Mark Richt is named ACC Coach of the Year and Walter Camp National Coach of the Year.

#### UM Libraries Launch Digital Public Library

The Libraries' Digital Strategies team for the Frost School (18) and university partners launch the Sunshine State Digital Network, the hub for Florida-based collections in the Digital Public Library of America.

28 University of Miami 2018 President's Report



## Panoply of Awards

for Architecture School (17) School of Architecture faculty, students, and leadership win nine awards at American Institute of Architects Miami Design Awards.

# Landmark Gift

Composer Thomas Hormel's two landmark gifts totaling \$3.4 million to Comprehensive Cancer Center, the the Frost School of Music support the UM Center for AIDS Research, and Hormel Music Innovation Stage, part of the new Knight Recital Hall, and three endowed graduate fellowships.



#### December

#### ACC Champs and Orange Bowl Bound (19)

Football 'Canes earn an invitation to the Capital One Orange Bowl after capturing the ACC Coastal Division title.

#### Prestigious Cancer Research Grant

A consortium composed of Sylvester institutions in Argentina is awarded a The Miami Business School's prestigious National Cancer Institute U54 grant to pursue research in AIDS-related malignancies.

#### Speakers Share Wisdom at Fall Commencement 囪

Trustee and retired baseball star Alex Rodriguez, and alumnus and engineering whiz Rony Abovitz celebrate 1,000 graduates at two commencement ceremonies, urging them to "swing for the fences" and to "learn to love and respect and create."

#### Marketing Department in the Top 10 (21)

Marketing Department is recognized as one of the top 10 programs in the world by the University of Texas Dallas ranking of academic productivity.



Pancreatic Cancer Research Gift

Julio Miguel Orlandini-Agreda makes

a \$5 million commitment to establish

Research Institute Fund. This gift will

be used to recruit and retain the top

researchers, medical oncologists, and

surgeons in the field of pancreatic

cancer research and related disease

portion of the gift also created the

Global Oncology Kickstarter Fund to

stimulate the development of oncology

training in Latin America, with a focus

on Bolivia.

groups in order to expand and deepen

the research program in these areas. A

the Sylvester Pancreatic Center

#### First Future of Career Education Meeting (22)

The Toppel Career Center hosts the inaugural meeting of the UM Career Alliance–employers, students, faculty, and staff—to discuss the future of career education.

#### Students Win Public Space Challenge (23)



#### January 2018

School of Architecture students win Miami Foundation's Public Space Challenge, constructing a performance venue of 1,001 orange poles under a downtown Metrorail station.

#### CARD Center Celebrates 25th Anniversary

The Center for Autism and Related Disabilities (CARD), under the College of Arts and Sciences, celebrated its 25th anniversary as a hub of autism research and of helping families receive the best in clinical care.

### February

#### Law Clinic Recovers \$1 Million for Its Clients (24)

The Miami Law Investor Rights Clinic, the only arbitration clinic in Florida providing free assistance to small claims investors, reaches and crosses the \$1 million milestone mark in client recoveries.

#### Cyclists, Runners, and Walkers Support Lifesaving Research (25)

Thousands of cyclists, runners, and walkers participate in the Dolphins Cancer Challenge. This annual fundraiser, pedaling strong now for eight years, has raised more than \$26.7 million to support lifesaving research at Sylvester Comprehensive Cancer Center.

#### Bequest to Support Future Marine Geoscientists (26)

Robert N. Ginsburg, who devoted more than half a century of his professional life to the Rosenstiel School of Marine and Atmospheric Science as professor of marine geology, makes a \$4.9 million bequest history and the \$30 million gift of his to endow two faculty chairs and a fellowship in the Department of Marine Geosciences. His gift provides vital support to future generations of marine geoscientists.



#### March

#### Kislak Center Debuts (27)

The grand opening of the Kislak Center features the debut of an exhibition showcasing materials from the Kislak Foundation, Special Collections, and University Archives. Jay I. Kislak's passion for preserving Collection of the Early Americas, Exploration and Navigation to UM and Miami Dade College "opens new worlds" for learning.

#### THE YEAR IN REVIEW











#### Lois Pope Gift to Study Macular Degeneration (28)

Trustee Lois Pope makes a landmark \$12 million commitment to the Bascom Palmer Eye Institute to establish the collaborative Lois Pope Center for Retinal and Macular Degeneration Research and to create a clinical research endowment that will ensure researchers have the resources in perpetuity to seek out new treatments.

#### Cornfeld Gift (29)

Robert M. Cornfeld and his wife, Judy, make a \$4 million gift to the Department of Neurology at the Miller School of Medicine to create the Judy and Robert Cornfeld Neuro-Imaging Center, a multidisciplinary research environment using advanced imaging to understand brain function and memory.

#### Shelter from the Storms (30)

The opening of the new B.E. & W.R. Miller BuildLab allows students in the School of Architecture to build their designs in an open-air setting streamlined for their projects. The concrete-frame structure is enclosed by team heads to the NCAA tournament louvered walls to encourage visibility and airflow through the building.

#### Landmark Gene Therapy 🕢

A 9-year-old legally blind boy becomes the first patient to undergo a landmark gene therapy at Bascom Palmer Eye Institute. Within a day after the hour-long procedure, Creed Pettit could tell his vision was improving. Within a month, he was able to see details of a world he had never seen before.

#### Banner Month for Women's Athletics (32)

Randy Ableman is named ACC Female Diving Coach of the Year, Amy Deem is named ACC Outdoor Track and Field Women's Coach of the Year, and the women's basketball for the seventh time in eight years.

#### Best-Ever Pass Rates

The School of Nursing and Health Studies records a 98 percent overall first-time pass rate for nursing master's students—its best score ever. Outstanding Teaching Award, and First-time pass rates for B.S.N. students also are well above national and state averages.

#### Stars at the Miami Film Festival (33)

An impressive representation of eight films produced, edited, and directed by School of Communication students, faculty, and alumni compete in the 2018 Miami Film Festival.

### April

#### Faculty Senate Awards (34)

Patricia Abril, vice dean of the Miami Business School Graduate Business Programs, is awarded the 2018 Trustee Stuart Miller is recognized with the James W. McLamore Service Award.

#### **Statewide Competition** for Doctoral Students (35)

Graduate School students compete for the first time in the statewide 3MT Competition.

#### Hemispheric University Consortium Is Established

Leaders representing 11 universities convene at UM to sign an unprecedented academic agreement spanning the hemisphere.



#### May

Engaging People in the Arts (36) The Lowe Art Museum is funded by the John S. and James L. Knight Foundation to create a new position, director for digital engagement strategies, to use technology to better Stadium. engage people in the arts.

#### New Frost School Building (37)

The Frost School Messinger Music Executive Building opens. A donation by arts patron Marty Messinger spurred the renovation of this facility at the center of the music quad.

#### Women Are Track and Field Champs (38)

The women's track and field team is crowned ACC outdoor champions in front of a home crowd at Cobb

#### Frost Institute Groundbreaking (39) A groundbreaking ceremony takes place for the Phillip and Patricia Frost Science and Engineering Building, which will house an intertwined network of institutes aimed at boosting STEM across our campuses.

Architectural Innovation 🕢

The School of Architecture is welcomed as a founding member of the World Innovation and Entrepreneurship Expo in Shanghai, China.

75th Year Gala Celebration (4)

The Rosenstiel School celebrates its 75-year anniversary with a gala that honors the incredible history of the small laboratory boathouse that became a marine research powerhouse.

#### Stepping Out in the World (42)

A commanding cadre of graduation speakers—authors, researchers, humanitarians, artists, and legal and business experts—inspire several thousand "innovative, confident, and mightily impressive" new UM graduates at seven commencement ceremonies.

#### Final Construction for Indoor Practice Facility (43)

Construction nears completion on the 83,000-square-foot Carol Soffer Indoor Practice Facility. Studentathletes practiced for the first time in the building in August 2018. This project surpassed its goal of \$34 million with gifts from the community as well as from several 'Cane football alumni.







# Increase in Total Net Assets Reflects the University's Commitment to Excellence and **Continuous Improvement**



The University's net assets grew by \$204.3 million, or 10.2 percent, in fiscal year 2018, driven by investment returns of 9.4 percent, improved operating results, and the continued support from philanthropy.

Jacqueline A. Travisano Executive Vice President for Business and Finance and Chief Operating Officer

The fiscal vear 2018 result signals a second straight year of \$200 million-plus partially offset by the University's growth in net assets, contributing to the University's overall financial position of over \$2.2 billion in net assets.

Operating activities for the year contributed to the overall increase of net assets, as total operating revenue \$269.5 million, or 16.9 percent. growth outpaced the year-over-year growth of operating expenses, resulting The reorganization of our three in an operating surplus of \$74.6 million, or 2.3 percent operating margin.

Total operating revenues increased by \$303.8 million, or 10.3 percent, to \$3.3 billion.

Tuition revenue, net of scholarship and fellowship costs, increased by \$22.0 million, or 4.3 percent, as a result of increasing graduate enrollments

and a modest tuition increase. commitment to providing financial assistance to its students.

Net patient service revenues across UHealth, the University of Miami Health System, increased by a robust

hospitals into a single, multifacility hospital operating under the same state license and Medicare numbers resulted in greater efficiencies in the utilization of clinical space, streamlined clinical and managerial operations, and continued enhancements in the coordination of patient care. The venture allowed UHealth to convert information technology systems into a consistent platform,



including those related to patient care. These efforts, amongst others, have led to success in maintaining a dynamic position in the regional health care market.

Sylvester Comprehensive Cancer Center/University of Miami Hospital and Clinics, with its leading-edge treatments, growing outreach and education activities, and expansion of basic and transdisciplinary research, continued to build a platform of success for the pursuit of the National Cancer Institute designation.

The Bascom Palmer Eye Institute continued its standing as the No. 1 ophthalmology program in the nation the 2018 Chamber South Business as recognized by U.S. News & World *Report*. This is the 17th time Bascom

Palmer has received the nation's top ranking.

In the recently issued U.S. News & World Report rankings, UHealth Tower (formerly University of Miami Hospital) was ranked the third best hospital in the Miami-Fort Lauderdale metropolitan market and the 13th best in the state of Florida.

The Lennar Foundation Medical Center (LFMC) continues steady growth in clinical operations in its first full year of operations. LFMC was honored with the 2018 Press Ganey Guardian of Excellence Award for superior patient experience and Excellence Award for Innovation and Technology.

UHealth continued to expand its presence in the Miami-Dade market with the opening of two additional urgent care centers in partnership with the Jackson Health System and the delivery of health care at 16 clinic locations in partnership with Walgreens throughout the tri-county area of southeast Florida.

Grants and contracts revenue was stable compared to the previous year, increasing slightly by \$1.0 million, or 0.2 percent, to a total of \$519.1 million.

Auxiliary enterprise revenue, which is derived from housing, dining, and athletics, increased \$18.5 million, or 15.3 percent. The increase was primarily attributable to football operations.

#### TOTAL OPERATING REVENUES



Total operating expenses for the University increased by \$181.8 million, the University's Growth Pool was or 6.0 percent, compared to the prior fiscal year. Compensation and benefits increased \$96.6 million. or 5.4 percent, while supplies and services increased \$51.1 million, or 6.8 percent. These increases are primarily related to increased patient services and a full year of operations at LFMC.

Depreciation, utilities, and interest respectively. These increases were expected based on new construction and maintenance of new facilities.

Other expenses increased by \$9.3 million, or 4.2 percent.

The change in unrestricted net assets from non-operating activities was



\$10.5 million. Investment return on 9.4 percent compared to last year's gain of 13.5 percent.

The change in unrestricted net assets due to post-retirement related changes other than net periodic benefit costs was \$53.7 million, a decrease of \$22.2 million. The defined-benefit pension plan, which has been frozen to new participants since June 2007, was increased by \$13.5, \$10.7, and \$0.6 million, positively impacted by a change in the interest-crediting rule that lowered the pension obligation and investment returns. At year-end, plan assets were \$800.2 million, and the plan's unfunded liability was \$98.4 million.

> For the fiscal year, total donations for operating, non-operating, and restricted uses totaled \$139.2 million,



a decrease of \$145.0 million: this decrease was to be expected as last fiscal year included Dr. Phillip and Patricia Frost's transformational gift of \$100 million.

The University's total assets increased by \$395.7 million, or 9.9 percent, primarily contributed by increases in cash and cash equivalents, deposits with bond trustee, and property and equipment, net.

\$75.4 million compared to the prior fiscal year, primarily attributable to operating activities, resulting in an improvement in days cash on hand. Deposits with bond trustee increased ongoing investment in its \$193.8 million due the 2018 bond issuance supporting the Student

Housing Village and Proton Therapy Center projects. Property and equipment net increased \$50.0 million due to the University's ongoing investment in its facilities. Other increases in assets include accounts and loans receivable, net by \$30.2 million, contributed by the single license agreement and associated growth in patient volume. Additionally, investments increased \$34.5 million attributed to continued support from philanthropy and investment returns. The Cash and cash equivalents increased University's endowment market value crossed the \$1 billion mark in fiscal year 2018.

> With regard to the University's facilities, construction on the Carol Soffer Indoor Practice Facility,

#### **REPORT ON BUSINESS AND FINANCE**







an 88,800 square-foot facility that houses a 65-yard field with two end zones, 60-foot clear height for kicking, and a 20-yard skill area, progressed well during fiscal 2018, and the building was delivered on time. A mezzanine in the facility houses football coaches' offices and meeting rooms. The first phase was completed in August 2018, and further enhancements will continue taking place while the facility is

Construction is also underway for phase 1 of the University's housing living and learning environment strategic plan, the Student Housing Village, which is slated to open in fall 2020. The project was supported by a bond issuance. The 12-acre project comprises 25 interconnected buildings and

being utilized

a multitude of outdoor spaces, including a grand courtyard, study spots, recreational spaces, and outdoor terraces. In addition to five floors of student housing for 1,115 upperclassmen, the first floor and mezzanine level of the main structure are planned to serve as retail, event, and office spaces. The project includes programming elements on the ground level, both indoor and outdoor, that will energize the campus area across Lake The University's total liabilities Osceola from the Shalala Student Center and contribute to an improved 9.6 percent, which was primarily for all students.

Groundbreaking for the Sylvester Comprehensive Cancer Center proton therapy program took place in spring 2018. The Varian

single-room system capable of fully rotational intensity modulated proton therapy (IMPT). It includes integrated cone beam CT imaging for positioning the patient based on high quality anatomical images with excellent soft tissue resolution. This project was also supported by the aforementioned bond issuance.

increased by \$191.4 million, or related to increases in bonds and notes payable, and accounts payable and accrued expenses. Bonds and notes payable, totaling \$1.3 billion, increased \$255.7 million attributed to a bond issuance for capital investments, including the Student

ProBeam system is a highly advanced Housing Village and Proton Therapy Center. The University holds credit ratings of A3 and A- with Moody's and Standard and Poor's, respectively, and the University's average cost of debt was 4.5 percent.

> Accounts payable and accrued expenses reflects an \$11.7 million increase, contributed by payrollrelated liabilities as well as an increase in supplies and services expenses at the hospitals, which is directly correlated to the increase in patient volume. Accrued pension and post-retirement benefit costs decreased by \$67.7 million primarily related to the University's defined benefit pension plan. The plan's obligations decreased by \$45.9 million due to cash contributions, investment returns

and changes in certain assumptions, most notably the discount rate used to calculate benefits.

Our fiscal year 2018 results provide a layer of strength to the University's financial platform, strengthening and enabling the progress of our strategic Roadmap to Our New Century. As we progress toward achievement of the goals of the Roadmap, the Division of Business and Finance will continue to pursue operating efficiencies, administrative excellence, and revenue-generating initiatives to support a perpetually strong U.

#### Jacqueline A. Travisano

Executive Vice President for Business and Finance and Chief Operating Officer

2014 2015 2016 2017 2018 <sup>1</sup> Net of Fees

Public E Absolute Private B Real Ass Fixed In Cash

> Beginni Returi Unrea (Depi Distril Oper Gifts

Addi Net Inci Ending

For most endowments, this is pursuant to the University's Endowment Spending Policy.

#### **REPORT ON THE ENDOWMENT**

HISTORICAL GP PERFORMANCE vs. BENCHMARKS				
	Benchm	Benchmarks		
Actual <sup>1</sup>	Total Portfolio	60/40		
12.92%	14.43%	11.29%		
3.42%	5.00%	4.36%		
-4.40%	-2.71%	-1.87%		
13.52%	13.75%	10.93%		
9.40%	9.65%	6.89%		

POLICY PORTFOLIO TARGET AND RANGES						
	Range	Target	May 31, 2018			
Equity	50-70%	60%	66%			
e Return	5-20%	13%	16%			
Equity	5-10%	8%	2%			
sets	0-15%	4%	1%			
ncome	5-15%	13%	14%			
	0-5%	2%	1%			

ENDOWMENT GROWTH AT MARKET (in millions)							
	One Year	Five Years	Ten Years	Fifteen Years			
ing Balance rn, Including alized Appreciation preciation)	\$ 948.6 87.3	\$ 777.9 280.2	\$ 736.2	\$ 413.7 646.4			
ributions to erations, etc. <sup>1</sup>	(44.3)	(200.8)		(489.8)			
and Other Net litions	29.9	164.2	270.2	451.2			
erease (Decrease)	72.9	243.6	285.3	607.8			
Balance	\$ 1,021.5	\$ 1,021.5	\$ 1,021.5	\$ 1,021.5			

# Endowment Growth Pool Tops \$1 Billion with Strong Returns and Generous Philanthropy

Building on the shift in strategy implemented in fiscal year 2017, the University of Miami Endowment Growth Pool (GP) posted another year of strong results. The portfolio is managed with the goal of maximizing long-term global risk-adjusted returns, while maintaining a streamlined fee profile. Highlights for the year include:

- The endowment crossed the \$1 billion mark for the first time in its history, thanks to generous philanthropic support and investment returns
- 9.40 percent Net Investment Return
- Continued momentum in domestic equities and tactical overweight in international equities fueled outperformance

On a relative basis, the GP exceeded the 60 percent equity/40 percent fixed income benchmark by 2.51 percent, the second largest outperformance in the past five years. The portfolio's tilt toward equities helped drive excess returns given strong performance across strategies. The Total Portfolio benchmark only narrowly eluded the GP, yielding 9.65 percent. We continue to invest in asset classes and managers where there is conviction that the long-term results will be optimal for the University.

The preceding two fiscal years were marked by high levels of manager turnover and reallocation among asset classes. As a result of these efforts, the GP was able to enjoy a full year of reduced fees and increased liquidity. New and existing managers are continually screened based on their ability to improve portfolio positioning, considering not only fees and liquidity, but also total portfolio and sub asset class risk and return efficiency.

The University's GP strategy is to ensure that current and future spending requirements are supported while preserving purchasing power through asset growth. Under the guidance of the Board of Trustees, portfolio construction is cognizant of the importance of asset allocation in driving returns, while utilizing selective active management where an opportunity is definable and probable. We remain confident that our current investment framework will prove fruitful in enabling the GP to have the maximum possible impact.

#### Charmel Maynard

Associate Vice President and University Treasurer

#### UNIVERSITY OF MIAMI BOARD OF TRUSTEES

Richard D. Fain Chair

Hilarie Bass Vice Chair

H. T. Smith, Jr., Esq. Vice Chair

#### SENIOR TRUSTEES

Betty G. Amos Jose P. Bared Investor

Fred Berens<sup>3</sup> Managing Director - Investmen Wells Fargo Advisors, LLC

Charles E. Cobb<sup>2</sup> Senior Managing Director and Chief Executive Officer Cobb Partners, Limited

Edward A. Dauer, M.D. President Florida Medical Services, Inc

George Feldenkreis Chief Executive Officer GFX Corp.

Phillip Frost, M.D. Chairman and Chief Executive Officer Opko Health Inc.

Phillip T. George, M.D.

**Rose Ellen Greene** Arva Moore Parks

President Arva Parks & Company

Ronald G. Stone<sup>2</sup> President The Comprehensive Companies

Patricia W. Toppel General Partner Toppel Partners

David R. Weaver<sup>3</sup> Managing Partner and Chairman Intercap Energy Systems, Inc.

36 University of Miami 2018 President's Report

G. Ed Williamson II<sup>2</sup> Chairman and Chief Executive Officer Williamson Automotive Group

#### NATIONAL TRUSTEES

Nicholas A. Buoniconti Lois Pope

President Leaders in Furthering Education, Inc.

Alex. E. Rodriguez A-Rod Corporation

**REGULAR TRUSTEES** 

#### Leonard Abess Chief Executive Officer

Chairman and

ThinkLAB Ventures

Hilarie Bass, Esq.

Greenberg Traurig, P.A.

Executive Vice President

The Batchelor Foundation

Tracey P. Berkowitz

Marc A. Buoniconti

The Miami Project

Alfred R. Camner

Wayne E. Chaplin

Adriana Cisneros<sup>1</sup>

Cisneros

President

Deloitte LLP

David L. Epstein<sup>1,2</sup>

Managing Partner

Richard D. Fain<sup>1, 2, 3</sup>

Chief Executive Officer

Chief Executive Officer

Royal Caribbean Cruises Ltd.

Miguel B. "Mike" Fernandez

MBF Healthcare Partners

Barbara Hecht Havenick

Flagler Greyhound Track

and Magic City Casino

Hecht Properties, Ltd.

President and CEO

General Partner

JadeSuites and

Infinite Access

Chairman and

Chairman

Evan De Joya

Paul J. DiMare<sup>3</sup>

Chief Executive Officer

Chief Executive Officer

DiMare Homestead, Inc.

Joseph J. Echevarria, Jr. <sup>1, 3</sup>

Camner Professional Group, P.A.

Southern Glazer's Wine & Spirits

to Cure Paralysis

Senior Advisor

Co-President

Jon Batchelor

President

Partner Holland & Knight, LLP Manuel Kadre<sup>2</sup>

> Chairman and Chief Executive Officer MBB Auto Group

Allan M. Herbert<sup>3</sup>

Owner and President

Richmond Hotel Corp.

Marilyn J. Holifield, Esq.

Marcus Lemonis Chairman and Chief Executive Officer Camping World

#### Jayne Sylvester Malfitano

Marilu C. Marshall Senior Vice President Executive Management, Chief Inclusion and Diversity Officer Estée Lauder Companies, Inc.

Stuart A. Miller Executive Chairman Lennar Corporation

William L. Morrison Vice Chairman Northern Trust Corporation

Jorge M. Pérez Founder, Chairman and Chief Executive Officer The Related Group

Judi Prokop Newman

Aaron S. Podhurst Senior Partner Retired Chief Executive Officer Podhurst Orseck, P.A.

> Steven J. Saiontz<sup>2</sup> Managing Member Capstrat Group LLC

Robert E. Sanchez<sup>2</sup> Chairman and Chief Executive Officer Ryder System, Inc.

Marvin R. Shanken Chairman and Owner M. Shanken Communications, 1

Laurie S. Silvers, Esq<sup>1</sup> President Hollywood Media Corp.

H.T. Smith, Jr., Esq. H.T. Smith P.A.

Jacqueline R. "Jackie" Soffer Co-Chairman and Chief Executive Officer Turnberry Associates

E. Roe Stamps, IV 1, 2 Founding Managing Partner Summit Partners

Johnny C. Taylor, Jr.<sup>3</sup> President and Chief Executive Officer Society for Human Resource Management

Ana VeigaMilton President José Milton Foundation

Jonathan Vilma<sup>2</sup> ESPN College Football Commentator and Studio Analyst

Geisha Jimenez Williams Chief Executive Officer and President Pacific Gas and Electric Corp.

#### EX OFFICIO MEMBERS

Brenda Yester Baty Immediate Past President Alumni Association

Julio Frenk 1, 2, 3 President University of Miami

Kourtnev Gibson President-Elect Alumni Association President Loop Capital Markets

Frank R. Jimenez President Alumni Association Vice President, General Counse and Corporate Secretary

Raytheon Company Eric Todd Levin President Citizens Board

President SeamLev Investments

Alejandro F. "Alex" Vicencio Immediate Past President Citizens Board Managing Director - Investments Vicencio Wealth Management Group of Wells Fargo Advisors

#### EMERITI MEMBERS

Michael I. Abrams Ballard Partners Adrienne Arsht

M. Anthony Burns Chairman Emeritus Ryder System, Inc

Paul L. Cejas Chairman and Chief Executive Officer PLC Investments, Inc.

#### Laura G. Coulter-Jones

Carlos M. de la Cruz. Sr. Chairman of the Board and Chief Executive Officer CC1 Companies, LLC

Edward W. Easton Chairman and Chief Executive Officer The Easton Group

Gloria M. Estefan Estefan Enterprises, Inc.

Enrique C. Falla, Sr. Executive Vice President (Retired) Dow Chemical Company/ Guidant Corporation

Alfonso Fanjul Chairman and Chief Executive Officer Fanjul Corp. and Florida Crystals Corporation

Peter T. Fay Senior United States Circuit Judge Court of Appeals Eleventh Circuit

David I. Fuente Managing Partner

Dash Ventures, LLC Thelma V. A. Gibson President Emeritus Theodore R. Gibson Memorial Fund

Bernard J. Kosar, Jr. Fredric G. Reynolds Eduardo M. Sardiña

Frank P. Scruggs, Esq. Berger Singerman

Steven Sonberg Managing Partner Holland & Knight, LLP

Robert C. Strauss Gonzalo F. Valdes-Fauli Chairman Broadspan Capital

Marta S. Weeks Wulf

Frances L. Wolfson President, Owner and Director Marine Corporation

Thomas D. Wood, Sr. Chairman Thomas D. Wood and Company

CORPORATE OFFICERS Julio Frenk President

Jeffrey L. Duerk Executive Vice President for Accademic Affairs and Provost

Jacqueline A. Travisano Executive Vice President for Business and Finance and Chief Operating Officer

Edward Abraham Executive Vice President for Health Affairs and CEO UHealth

Joshua M. Friedman Senior Vice President for Development and Alumni Relations

**Rudy Fernandez** Senior Vice President for Public Affairs and Communications and Chief of Staff to the President

Lourdes Dieck-Assad Vice President for Hemispheric and Global Affairs

Mary Beth Briscoe Vice President and Chief Financial Officer UHealth and the Miller School of Medicine

Jessica Brumley Vice President for Facilities Operations and Planning

Brandon E. Gilliland Vice President and Chief Financial Officer

John G. Haller Vice President of Enrollment Management

Jacqueline R. Menendez Vice President for University Communications

#### Aileen M. Ugalde Vice President and General Counsel

Patricia A. Whitely Vice President for Student Affairs

Mary Harper Hagan Interim Vice President for Human Resources

Leslie Dellinger Aceituno Secretary to the Board of Trustees

Charmel Maynard Associate Vice President and University Treasurer

#### DEANS

Rodolphe el-Khoury School of Architecture

Leonidas Bachas College of Arts and Sciences

John Quelch Miami Business School

Gregory J. Shepherd School of Communication

Laura Kohn-Wood School of Education and Human Development

Jean-Pierre Bardet College of Engineering

Patricia D. White School of Law

Henri R. Ford Miller School of Medicine

Shelton G. Berg Phillip and Patricia Frost School of Music

Cindy Munro School of Nursing and Health Studies

Rosenstiel School of Marine

and Atmospheric Science

Guillermo "Willy" Prado

Rebecca MacMillan Fox

International Education

Division of Continuing and

<sup>1</sup>Member of Executive Committee

<sup>3</sup> Member of Audit and Compliance

<sup>2</sup> Member of Finance Committee

Charles D. Eckman

Graduate School

Roni Avissar

Libraries

Committee

Strong, connected, and united. Who we are is how we lead.



miami.edu

Sec. 1

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER UNIVERSITY COMMUNICATIONS 17-077

