2015-16 UNIVERSITY ANNUAL REPORT





What would Virginia Commonwealth University be without "yes"





A small but profound word, it makes all the difference in the work we do. It empowers us. Ignites our imaginations. And strengthens our partnerships. Together, let's celebrate some of the "yes" moments that led to so many outstanding achievements in FY 2016.

michaeloo

Michael Rao, Ph.D., president, VCU and VCU Health System

When there's a "yes,"

Voices are heard

At VCU, we put our grit to work to achieve real results for some of the most pressing issues facing our nation. From speaking out against injustice to improving care for the region's children and aging populations to changing the way homeless people are helped, we aren't afraid to challenge the norm.

> November 2015: After VCU students held protests advocating for social justice, President Rao hosted a forum on diversity and inclusion with more than 400 faculty, staff and students in person and another 100 participating online. Together, we launched a universitywide conversation that continued throughout the year, helping to shape the university's multiyear Diversity and Inclusion Action Plan.





4 Virginia Commonwealth University





number of student-athletes, faculty and staff from the Athletics Department participated in Safe Zone, a workshop to understand and support the unique needs of the LGBTQIA community.

"YOU CAN PLAY" CAMPAIGN

There's a national movement underway. LGBTQIA athletes are teaming up with straight allies for respect. At VCU, faculty and staff leaders launched a survey to understand the current climate of diversity, equality and inclusiveness within our athletics teams. The findings showed a small percentage of athletes perceived a negative environment, but more than half had heard negative comments. They saw an opportunity for awareness among players and coaches. "You Can Play" launched. And VCU Athletics, with the help of the university's leadership team, took the message a step further: to promote and support VCU's mission of diversity and inclusion everywhere. That message was sent loud and clear at VCU's sporting events, including annual PRIDE games where the athletes warm up in PRIDE shirts and staff provide LGBTQIA resources and support information. And our teams embraced it, participating in Safe Zone training where they learn how they can help make our campus a safer and freer environment for all members of our community.

Can everyone play? Yes.

Can we change the way we serve homeless people? Yes.



IRISE

Kevin Amir Ghaffari, Class of 2015 and currently pursuing a master's in biology, decided Richmond needed an organization that helps homeless people in a more holistic fashion. The strategy was to help a small number of candidates at a time, but focus on meeting all of that candidate's needs (e.g., temporary and permanent housing, job search assistance, substance abuse and mental health counseling, transportation and just about anything else). Within months, he started I RISE, obtained 501(c)(3) nonprofit status, recruited 20 other VCU students to help and began to line up grants, including a community grant from the Walmart Foundation. Now I RISE includes more than 100 active members and has helped three candidates.

> I RISE founder Kevin Amir Ghaffari (left) and I RISE member Ashkhan Hojati.



Can children be at the center of care? Yes.



THE CHILDREN'S PAVILION

At 640,000 square feet, the new Children's Pavilion was no small feat. And children are at the center of it all. With the opening of the Richmond region's largest, most advanced outpatient facility dedicated to children, families can say goodbye to the days of hopping from clinic to clinic

> exam rooms arranged in clinic

pods to optimize

a multidisciplinary

care model

to see various specialists in different buildings. The new pavilion brings the various clinics, lab testing, dialysis, infusions, same-day surgery and family-friendly amenities under one roof. It was a vision informed by a changing health care landscape, which indicated that the demand for outpatient children's health services will outpace the need for inpatient care. And it was a vision inspired by our unrelenting commitment to make the patient and family experience second to none.

Brianna Burke, age 10 and a frequent patient at CHoR, receives a tour of the new pavilion from Jan Kirby, patient advocate, just before helping to cut the ribbon.

PALETTE

Music booming. Hearts pounding. Twenty VCU students and 10 senior adults — ranging in age from 20 to 88 — mirror one another's motions as they dance to the beat. They are part of PALETTE in Motion, the dance component of an intergenerational arts program that partners VCU students with senior adults in the community to collaborate on creative projects. It provides a forum for future health care professionals and older adults to build meaningful relationships outside of the usual medical model. As they learn together about artistic expression, they transcend the generational divide that often leads to ageism and gerontophobia. And older adults learn about aging gracefully.



Can dance overcome ageism? Yes.

When there's a "yes,"

maginations flourish

At VCU, we thrive on believing anything is possible. From dissolving barriers through digital literacy and designing medical breakthroughs to launching student startups and capturing the sound of a culture, we know no limit. The \$50.8 million James Branch Cabell Library expansion and renovation project transformed a place of stacks into a place of discovery, including the media studio that features a variety of maker tools and technology, such as 3-D printers and scanners, laser cutters and robotics.

James Branch Cabell Library



URBAN CHOICE MUSHROOM FARM

A VCU student duo's venture, Urban Choice Mushroom Farm, has blossomed into Richmond's only urban gourmet mushroom farm, thanks in part to VCU's Pre-Accelerator Program. Jake Greenbaum, VCU business Class of 2015, and Lindsay Hawk, a junior majoring in sculpture, are satisfying a growing demand for fresh, local mushrooms. How? Most mushrooms consumed on the East Coast come from a single county in Pennsylvania. Urban Choice cuts that distribution time by growing them indoors right here in the city.

Urban Choice Mushroom Farm owners Jake Greenbaum (left) and Lindsay Hawk.



hrough Venture Creation University, 24 teams have formed companies — threequarters of which are woman or minority led — and they nave created 29 full- or part-time jobs. The students' companies have brought in \$1,002,348 in total revenue, grants and investments.

Can we prevent Lyme disease? Yes.

NEW VACCINE FOR DOGS

by ticks. If not diagnosed and treated early, Lyme disease can potentially be a lethal infection. According to Richard T. Marconi, Ph.D., professor of microbiology and immunology, the best approach to minimizing disease VCU's research activity increased from \$227 million in canines, as well in sponsored research as in humans, is in 2007 to \$271 million in FY 2016 — a 19 percent to block infection increase in 10 years. in the first place. And he co-developed a



Ticks. They are a pest to our furry friends. They also play a big role in the cause of Lyme disease. One in every 16 dogs tested will receive a positive diagnosis of Lyme disease because of the bacteria transmitted way to do just that. In January 2016, VANGUARD® crLyme, licensed to Zoetis, became available to the public through veterinarians. What's next? Marconi and his team are now working to develop a human Lyme disease vaccine and new diagnostic tests for Lyme disease.

Can our idea generate a business? Yes.

 \mathbf{A} S



REALRAAG

The traditional stringed rubab, its technique, sounds and importance in Afghan culture would soon be lost to future Afghan generations. But no more. Sulaiman Popal (B.F.A. '15), a music alumnus who, along



with Matthew Hill (B.S. '14). a computer science alumnus, developed RealRaag. The two teamed up two years ago to develop their idea with a research grant from the School of the Arts. By spring 2015, the app launched and became available in the Apple Store.

Now, Popal is in Kabul where he's working with rubab masters to add tutorials and educational materials to RealRaag, relaying the information to Hill, who's now in Los Angeles working as a music studio engineer.

Can a lost sound be saved? Yes.

simulation app for the Afghan rubab

The rubab is a lute-like musical instrument originating from central Afghanistan.

Can we bring internet-based learning to impoverished nations? Yes.

DIGITAL LITERACY TO STUDENTS IN HAITI

No textbooks. No training materials. None. Nabeel Janjua, an the impoverished nation. But how? Janjua sought solutions and helped adapt Internet-in-a-Box, an open-source alternative internet for those who don't have online access; a computer on a stick, a self-contained USB students and teachers received bootable Linux operating system tutorials in five days. that can be plugged into any laptop: and software tutorials



economics and information systems major, teamed up with associate professor Manoj Thomas, Ph.D., in the School of Business to bring internet-style learning to Haiti and to help increase digital literacy in to teach basic technology skills to students. Five days, more than 300 students and teachers, five different schools. Janjua gave tutorials and opened the world to these students and teachers. What's next? Proposing the data to Google's Project Loon, a network of balloons designed to connect people in remote locations to the internet.

Nabeel Janjua, economics and information systems double maior

When there's a "yes,"

Partnerships strengthen

Better together is an understatement to what has happened when we partner with the communities we serve. People are healthier. Education soars. And eyes open to the future. VCU is integrated into the fabric of Richmond, and this relationship very much shapes the VCU experience. Our students consistently contribute more than 1 million hours of service each year. In the 2014-15 academic year, they performed a record 1,462,854 hours.

NO 10 1 X X



Can we reduce obesity? Yes.

WELLNESS ENGAGEMENT

Health outcomes were looking bleak in Petersburg, Virginia. The locality ranked 131 out of 133 in the state. Its adult obesity rate was 36 percent, higher than the national and state rates. An intervention was needed. The community wanted it. Something tangible. Something sustainable. Something the community could own. Associate professor Maghboeba Mosavel, Ph.D., agreed. She, along with members of the Petersburg community, several nonprofits, community partners, Pathways, the Petersburg YMCA, Crater Health District, several VCU schools and departments and the Virginia State University Cooperative Extension, launched WE, the Petersburg Wellness Engagement Project. Funded by the National Institutes of Health, WE conducted an extensive community-engaged needs assessment. It wasn't the typical research project with a set finish. It was a start. A foundation. Results included walking groups, partnerships, wellness ambassadors, capacity building, grassroots house chats and reports in academic journals. But the real result? What the community could call its own? The formation of the Petersburg Wellness Consortium, an independent, volunteer-run coalition of more than 30 community partners working to nourish a culture of health and continue work well into the future.

750,000 MILES LOGGED

WE trained more than 20 community members as researchers, developed community partnerships, created GIS asset maps and initiated 10 walking groups that logged 750,000 miles.

SAFETY NET COLLABORATIVE

Three of Richmond's safety net primary care clinics found they could not meet the mental health needs of their patients — the city's most vulnerable and medically underserved populations. They needed a solution. But what? And how at little or no cost? Psychology professor Bruce Rybarczyk, Ph.D., had an answer: embedding his doctoral trainees in primary care clinics where patients could easily access services. Now one of the largest programs of its kind in the U.S., the VCU Primary Care Psychology Training Network has trained more than 100 doctoral students in recent years. These trainees have delivered more than 12,000 pro bono sessions. And the patients are getting access to the care they need.

\$**1,000,000**

A \$1 million U.S. Department of Health and Human Services grant will more than double the capacity of the VCU Primary Care Psychology Training Network, providing more than 15,000 sessions of pro bono services during the next three years.

Can we provide free mental health services to those without? Yes.

Can we solve our future environmental challenges? Yes.

TEAM WARBLER

Creating a personal connection to the outdoors. That's the idea local middle school teacher Anne Moore and a VCU research consortium - led by environmental studies assistant professor Cathy Viverette, Ph.D., and environmental studies and biology assistant professor Lesley Bullock, Ph.D. — had to help middle school students understand the science behind the natural world. They are called Team Warbler. And they are studying the prothonotary warbler, a migratory bird that breeds along rivers that feed into the Chesapeake Bay and spends winters in Panama. By studying these birds, the students can begin to learn about population genetics, disease and migration ecology, and even climate change. Moore's students have been hands on, from collecting data on nest predation rates to designing and building nest boxes used at VCU's long-term study sites along the James River. And President Barack Obama has noticed, naming Moore one of 15 environmental educators nationwide to receive the Presidential Innovation Award for Environmental Educators.

Team Warbler includes middle school students working with community partners such as the Audubon Society along with the VCU Center for Environmental Studies and the VCU Rice Rivers Center.



MAKE IT REAL CAMPAIGN FOR VCU

Growing up in Jamaica, Shadae Anderson witnessed a severe lack of dental care in her own community. She made it her mission to fill that need. The scholarship she received has allowed her to pursue her dental degree and will help her one day start a practice back home. Making an impact is what we do, and we know we can't do it alone. In fall 2016, we launched the Make It Real Campaign for VCU, our most ambitious fundraising initiative ever. Together with our alumni, faculty, staff, neighbors and community partners, we aim to raise \$750 million to support people like Anderson, fund innovations and enhance environments.

Can we better support our students and faculty? Yes.

\$750,000,000 fundraising goal for the Make It Real Campaign for VCU

18 Virginia Commonwealth University

¥

Shadae Anderson, scholarship recipient, is pursuing her degree in dentistry.

Looking ahead

"Yes" creates optimism. It opens possibilities. It allows us to reimagine a premier research university. To redefine the university of the 21st century. To look ahead.

ATTENDED AND A CALL

Facilities on the horizon

GLADDING RESIDENCE CENTER

Ground broke on the \$96 million project that will replace the current Gladding Residence Center I and II with a 12-story, 360,000-squarefoot residence hall for 1,524 students, an increase of 600 beds. The center, expected to open fall 2018, will consist of traditional housing and semi-suites.

SCHOOL OF ALLIED HEALTH PROFESSIONS

The \$87.3 million, 154,100-square-foot facility will unite — through curriculum and design — the school's academic units, the dean's office and the Virginia Center on Aging, which have occupied 13 buildings in the past 45 years and are now scattered among five buildings on two campuses.

VCU HEALTH STRATEGIC MASTER SITE PLAN

VCU Health System Board of Directors approved the next phase of the comprehensive strategic facility and capital funding plan to realize our vision of VCU Health as the premier academic health center on the East Coast — reinventing our physical landscape to provide the best patient experience and environment for clinical care, education and research.

One united School of Allied Health Professions building creates more than 11,000 square feet of space.

Administration Q&A

REDESIGNING OUR HR SYSTEM



Taking great care of our employees and creating an atmosphere where everyone can be successful, enjoys working and is appreciated and celebrated for who they are and their unique contributions to VCU is what a great place means to me. Creating this environment is tremendously important. It forms the basis for all the exciting and important things we will do together.

How will the HR redesign transform the VCU experience?

The redesign will help us attract, develop and retain exceptional employees by creating a positive, kind, psychologically safe work environment in which people from all backgrounds, abilities, perspectives and experiences contribute, are valued, are engaged and enjoy working. We'll be investing more in training and development to support each professional's growth; recognizing, valuing and celebrating contributions from individuals and teams; aligning individual and university goals; growing leaders throughout the organization; and so much more.

Why is now the right time to make these changes?

The current state classified system was developed more than 100 years ago and is not the type of HR program that today's — and tomorrow's - higher education workforce is expecting and deserves. It's time to modernize our HR practices.



Q&A: Meredith Weiss, Ph.D. Vice president for administration

VCU has set out to design a new HR plan that will help make VCU an even greater place a place of opportunity, where the success of our employees is supported and their careers thrive. Meredith Weiss, Ph.D., gives her take on the Great Place Initiative.

What does a great place mean to you?

REDESIGNING THE VCU BUDGET



Q&A: Karol Gray Vice president for budget and finance

The planning and budgeting process in higher education takes strategy, collaboration and transparency. Karol Gray gives her perspective on what a transparent and inclusive budget process looks like with an eve toward the future.

What does this change mean for VCU?

The new budget model will facilitate an academic entrepreneurial spirit, create a

multivear plan and provide more engagement aligned with our strategic goals.

What does it mean to have a transparent and inclusive process?

We are striving for a transparent and inclusive process both in developing the new budget model and making strategic decisions. The new budget model is being developed at the working-group level reporting upward to senior administration instead of a traditional top-down approach.

Why is now the right time to make this change?

The current model no longer fits our needs. VCU is joining a wide array of higher education institutions that are moving from the more traditional, incremental budget to one that is more strategic and inclusive. We need a model that will provide more detailed information for deans and vice presidents to better understand revenue streams and expenditures so that they can make the best strategic decisions to advance our mission.

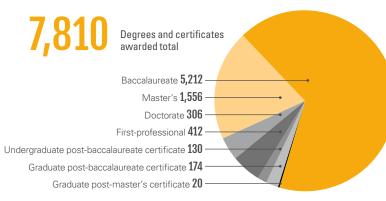
Facts & figures

"Yes" makes us one of America's premier research universities.

"Yes" gives opportunity to the students we admit, to the leaders we graduate, to the faculty we celebrate. But our tenacity makes us. Our work defines us. And the proof is in these facts and figures.

ENROLLMENT, GRADUATION AND RETENTION 31,242 Student enrollment total Six-year Under-Minority graduation represented 39.9% rate 62.3% 27.8% Six-year Students taking First-year graduation rate 15 credits or retention (African American more (first-time rates **85.8%** freshmen) 84% students) 59.7%

DEGREES AND CERTIFICATES

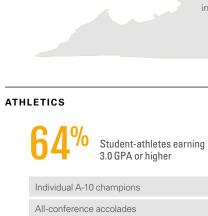


PHILANTHROPY

\$750,000,000 Make It Real Campaign for VCU goal

\$91,845,814 New philanthropic commitments

TOTAL NUMBER OF LIVING ALUMNI 183,067



EMPLOYEES



Cumulative GPA of student-athletes

Total number faculty (full-time, T&R and

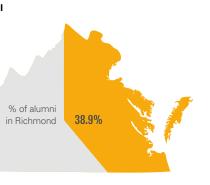
% of T&R minority

A-10 championships

% of T&R underrepresented

of female tenure and tenure-track fac

Faculty hires



	7
	39
	4
3	.02

11,477 University employees **10,202** VCU Health System employees

d A&P)	3,106
	21.7
	7.9
ulty	363
	364

COMMUNITY ENGAGEMENT

Number of VCU students participating in service work

Hours of service by students	1,462,854
Number of VCU employees participating in leave service program	1,460
Hours of service by VCU employees	15,486
Total dollars awarded by VCU Council for Community Engagement, supporting six university-community projects	\$100,000
Number of community-engaged research projects	64
Number of VCU academic units participating	26
Number of community partners participating	80



RESEARCH AND INNOVATION



\$144 MILLION Total federally funded grants

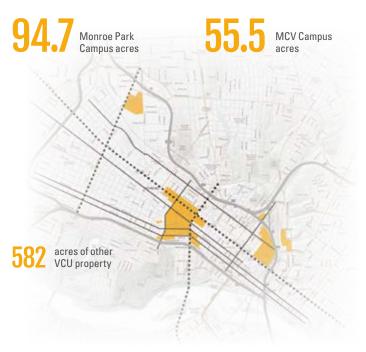
Invention disclosures	134
Patents filed	156
Patents issued	13
Copyrights	1
Licenses/options	17
Research support agreements	48

\$1 MILLION+ Total revenue/grants/investments generated by student startups

Total revenue/grants/investments	
generated by student startups	

	Entrepreneurial programs for students (#)	18
	Student participation	2,079
	Pitches heard	256
	Ideas assisted	37
	Businesses formed	24
	Businesses at initial revenue	15

PHYSICAL CAPACITY



FINANCES

\$3,720.4 MILLION Revenue and capital additions \$3,441.5 MILLION Expenditures

Total for VCU, VCU Health System and affiliated foundations (2014-15)



ON THE COVER

MEET JONEL JONES, VCU CLASS OF 2020

I was from a small school in a small town. When I first saw Richmond, I knew I wanted to come to VCU. The city is extremely artistic. It is very creative. And there is so much energy. It felt right then. Now that I am here, I know it is right.

It's about connections.

I'm in TRiO, a program for first-generation and low-income students. That program led me to a work-study job at a theater. And that work led me to my first audition.

There's so much opportunity here.

l identify as gay. So in a small town, I never had much experience in the LGBTQIA+ community. And then I came here. Two friends told me about the Lavender Empowerment Summit. I applied and got in. That empowerment summit makes me feel like I am becoming a leader — helping me to step up my leadership skills.

I don't have time to be shy. Life is going by. So I need to stand tall and walk toward life confidently. That is what I am learning, and that is how I am going to become who I want to be.

Yes. Virginia Commonwealth University



Virginia Commonwealth University Office of the President P.O. Box 842512 | Richmond, Virginia 23284-2512 vcu.edu | annualreports.vcu.edu/university

> A VCU University Relations publication an equal opportunity/affirmative action university 002797-01