

UNIVERSITY OF  
LOUISVILLE

# MOVERS, SHAKERS, MAKERS & INNOVATORS

ANNUAL REPORT 2015-16





The Focault pendulum swings in Crawmeyer Hall. COVER: Students cross the quad on Belknap Campus.

With unparalleled research activity in emerging fields, unwavering commitment to community service and unyielding dedication to academic excellence, the University of Louisville is producing graduates who are changing the world.

We are movers and shakers, makers and innovators, propelling the university forward into a new era. The stories in this annual report represent a small portion of the immense amount of activity that takes place at UofL. The details may change, but the actions of our students, faculty, staff and supporters achieve the same result: They move our university and our region forward, they shake up the status quo, they make a difference in the community and they pioneer innovation through research and creative activity.

# MOVERS



Continuing the march forward is our university's ultimate goal. We are blazing new trails in academics and community service. We are movers — pushing UofL and our community to the forefront with every action we take.

One of our best moves? Blending the fields of robotics and health care to give 6-year-old Lucas Abraham born without fingers on his right hand — a bionic hand. Undergraduate biomechanics students worked with the latest computer-aided drafting and engineering software to 3-D print a “robo-hand” for Lucas. By pushing the academic limits of bioengineering through creative thought, UofL students helped Lucas gain mobility, functionality and movement.

## LEADERS, TRAILBLAZERS, CHARACTERS AND PLAYERS

UofL was one of only seven schools nationwide to receive a 2015 Gold Level Student Actions Award from Purposeful Networks. The honor is given to those colleges that create a culture of community service, sustainability and wellness.

When it comes to academics, our students are blazing new trails around the globe. A top producer of Fulbright scholars, UofL once again broke our single-year record with 15 scholars who will study in countries like Brazil, Namibia and Belarus. UofL also is home to Hannah Wilson, Kentucky's only 2016 Truman Scholar.

By taking their talents on the road, members of the UofL Repertory Company have performed for more than 150,000 audience members over the years, furthering the city's exposure to the arts. The graduate students from UofL's theatre department often perform plays with themes including social justice, character-building, cultural diversity and inclusion.

Our students also make moves in the athletics realm. The NCAA recognized the baseball team as the best men's team for community service, and the ACC honored the men's soccer team with the ACC “Game Changers” award. Cardinals lead the country in Academic Progress Rates, with men's basketball, women's lacrosse, and women's golf ranking in the top 10 percent nationally.



OPPOSITE: Lucas Abraham tests out a robotic hand developed by UofL students. ABOVE: UofL's 2015-16 honor scholars celebrate at Amelia House. MIDDLE: The UofL Repertory Theatre performs at a local school. BOTTOM: UofL baseball coach Dan McDonnell and team members during a service trip to the Dominican Republic.



# SHAKERS



By leading a paradigm shift in manufacturing techniques, unearthing pieces of world history, and upending the nation’s legal system, UofL is shifting the status quo. We are shakers — changing the way our campus and the world works, acts and thinks, one discovery at a time.

UofL changed the way product invention works by harnessing the power of social media to encourage community-based, collaborative cultures of innovation. The Engineering Education Garage and GE’s FirstBuild microfactory help start-ups bring products to market, focusing on co-creation to connect entrepreneurs and inventors from around the world. Meanwhile, the College of Arts and Sciences and the Speed School of Engineering began offering an industrial design class that links art and engineering to marry form with function.

## PIONEERS, SAVERS, DEVELOPERS AND SHAPERS

Members of the UofL community have long been pioneers of civil rights, and the university renamed a part of campus to honor their determination. Freedom Park is now known as the Charles H. Parrish, Jr., Freedom Park in remembrance of Parrish, UofL’s first African-American educator and a leader in civil rights and public service.

History made its way into the present when a UofL librarian unearthed the earliest-known version of the world’s most famous song — “Happy Birthday” — at the Dwight Anderson Memorial Music Library. The rediscovered composition will be digitized to provide public access to composer Mildred Hill’s music a century after her death.

Change starts from within, and the university is constantly providing students with top-tier development to round out their educational experience. Our 26-year-old Student Activity Center is getting a multimillion dollar upgrade, and we began construction on a new pediatrics building at our Health Sciences Center, as well as a new academic building on the Belknap Campus.

In addition to transforming the campus and region, UofL shaped the nation. Several Brandeis School of Law alumni were instrumental in the country’s legal fight on same-sex marriage. Five law school alumni represented the Kentucky plaintiffs in *Obergefell vs. Hodges*, the case in which the Supreme Court ruled that same-sex couples have the fundamental right to marry.



OPPOSITE: Walter Hargrove, an adjunct professor, leads the Industrial Design Co-creation class comprised of students from the College of Arts and Sciences and the Speed School. TOP: The Rev. Kevin Cosby speaks at the renaming of Charles H. Parrish, Jr. Freedom Park. BOTTOM: Brandeis law school alumni celebrate the Supreme Court ruling in *Obergefell vs. Hodges*.

# MAKERS



UofL is dedicated to making things work, through original ideas and by producing something tangible. We are makers — turning ideas into objects and spaces that improve quality of life.

At the same time, we want to make a difference. UofL's J.B. Speed School of Engineering partnered with low-income schools across Louisville to install maker spaces — cutting-edge labs equipped with technology like 3-D printers, band saws and laser cutters to help K-12 students gain hands-on experience with projects in the STEM fields. Elementary and middle school students at the West End School and middle school students at Nativity Academy now have dedicated space to engage directly in engineering projects.

## BUILDERS, ORIGINATORS, HEALERS AND CREATORS

UofL students took over a construction site to build the first-ever entirely student-funded Habitat for Humanity House in Louisville. UofL student volunteers joined with Habitat for Humanity of Metro Louisville for a three-day build to construct a home for a single mother and her two children in the Portland neighborhood.

The ingenuity of researchers at UofL led to the university being named one of the top 100 universities in the world for utility patents produced in the United States. Among the recent patent-receiving projects by UofL researchers were a substitute bone graft material, software to detect areas of depleted lung function during radiation treatment and a synthetic compound that could eliminate gum disease.

Pediatric doctors at UofL created a combination vaccine that protects children against six diseases at once, allowing youth to get fewer shots without losing immunization protection. The DTap5-IPV-Hib-HepB vaccine protects against diphtheria, tetanus, pertussis, polio, *Haemophilus influenzae* type b and hepatitis b.

Along with making medical breakthroughs, UofL academics are helping businesses. Graduate entrepreneurship students from the College of Business won the 2015 Alltech Innovation competition for an oil filtration and transport device that allows restaurants to lower their consumption of cooking oil, reducing their related costs by more than 50 percent.



OPPOSITE: Students at Nativity Academy work in their new maker space. ABOVE: UofL nursing student Hillary Clay illustrates administering vaccines for children.

One idea can start a revolution, and UofL is at the forefront of creative thought to better the world. We are innovators — developing and honing new techniques to address everyday issues.

One of our bright ideas came out of the Hite Art Institute, where graphic design professor Steve Skaggs invented a font that makes reading easier for people with macular degeneration. Maxular, a typeface that uses elements of a serif font with unusual spacing, helps counteract the distortion found in the country's leading cause of vision loss, meaning those with the incurable disease may be able to read text printed in the new font for a longer amount of time than their failing eyesight would previously allow.

# INNOVATORS



Graphic design professor Steve Skaggs with his new font, Maxular, that makes it easier for people suffering from macular degeneration to read. TOP TO BOTTOM: Muhammad Ali and his wife, Lonnie, at the Grawemeyer Spirit Award ceremony; Mayor Greg Fischer at the announcement of UofL's Youth Violence Prevention Research Center; UofL student teachers demonstrate drama techniques as part of the PNC Grow Up Great Fellows program; Professor Armon Perry, right, announces his 4 Your Child project.



## DREAMERS, NEIGHBORS, TEACHERS AND INITIATORS

One of UofL's biggest supporters was also one of the world's biggest proponents of change: Muhammad Ali. Shortly before his death from Parkinson's, the university honored the legendary Ali with the first-ever Grawemeyer Spirit Award. Ali and his wife, Lonnie, further cemented his legacy by establishing a leadership scholarship for student-athletes on the UofL baseball team.

In a game-changing way of combating youth violence, UofL's School of Public Health and Information Sciences (SPHIS) recruited six teenagers and young adults to develop anti-violence campaigns and community interventions. The Louisville Youth Voices Against Violence will play a central role in preventing violence in their own neighborhoods.

College of Education and Human Development students are bringing a new twist to teaching. With a grant from the PNC Foundation and partnerships with StageOne and Jefferson County Public Schools, UofL students are using drama and storytelling to engage students in the preschool classroom. More than 400 preschoolers across the county have been introduced to the new techniques.

Meanwhile, a Kent School of Social Work professor is strengthening relationships between fathers and children as part of a nearly \$5 million grant to study fatherhood. Professor Armon Perry's 4 Your Child project provides fathers with curriculum and training on issues including health, emotions, fathers' roles, co-parenting and work-life-family balance.



## ENROLLMENT, FINANCIAL AID

UofL was home to

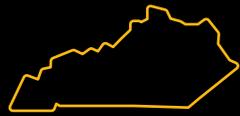
# 22,367

students in 2015-16.

Of those, nearly

# 17,000

were Kentucky residents.



Population included students from: **82** countries

**54** U.S. states and territories

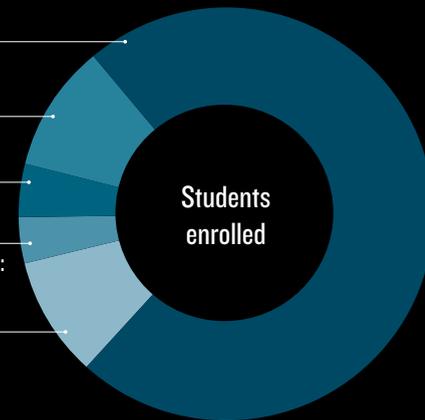
White: 73%

Black: 10%

Asian: 4%

Hispanic or Latino: 4%

Other: 9%



Money spent on student financial aid in 2015-16: **\$129M\***

Average scholarship or grant aid for undergrads in fall 2015: **\$4,211\***

Amount paid toward tuition by 26 percent of undergrads: **\$0\***

*\*Preliminary numbers*

## RETENTION, GRADUATION & ACADEMICS

Average ACT score for incoming freshmen: **25.5**

Graduation rate: **52.9%**

Retention rate for first-time, full-time bachelor degree-seeking students: **79.4%**

Degrees awarded in May 2016: **2,940**

Total degrees awarded in 2015-16:



# 4,823

**2,704**  
bachelor degrees

**1,375**  
master's degrees

**541**  
doctoral or first professional degrees

UofL alumni residing in the U.S. and around the world:

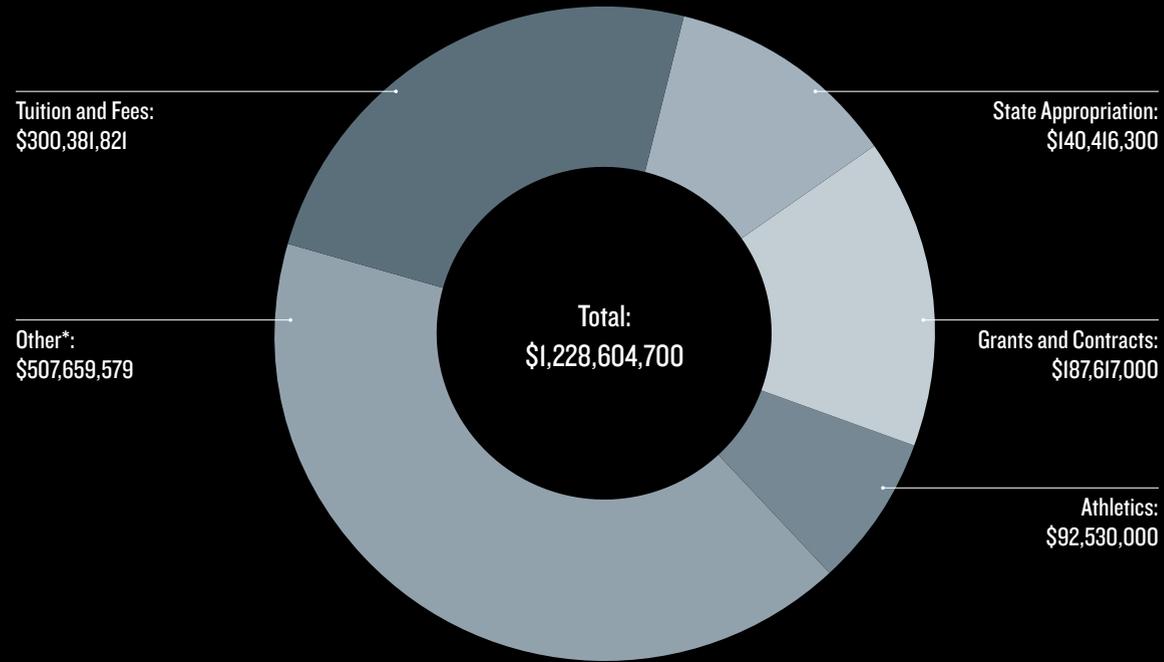


# 141,000

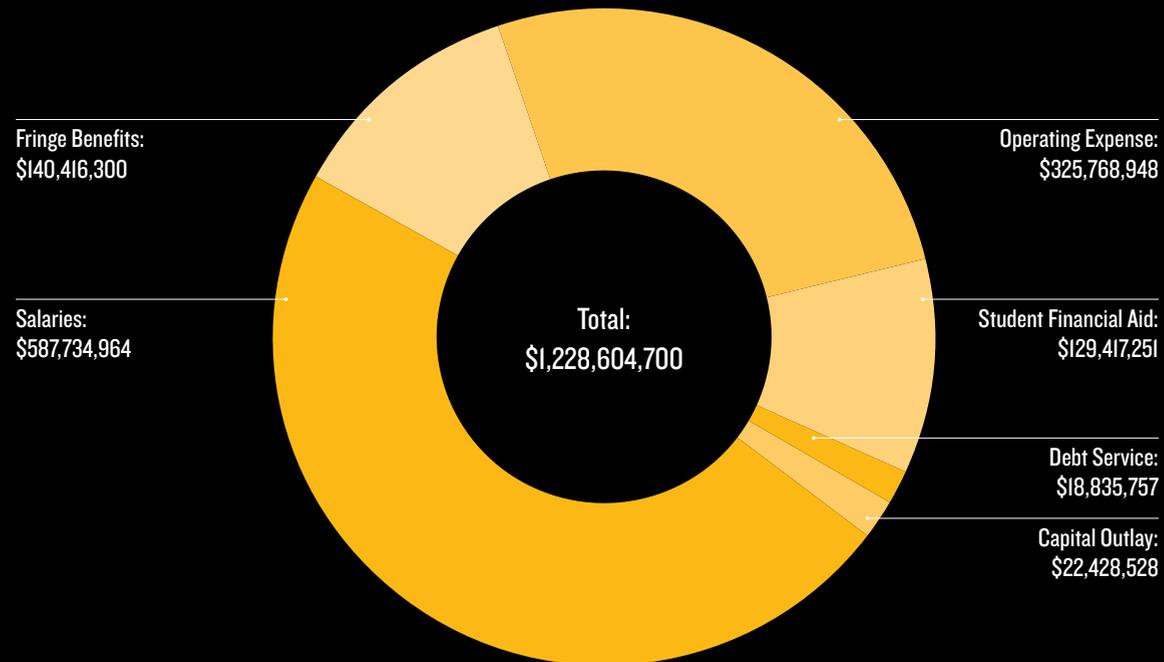
## OPERATING BUDGET

The university's 2015-16 operating budget was \$1.2 billion, which included \$140.4 million from the Commonwealth of Kentucky.

## REVENUE



## EXPENDITURES



\*Other includes: Clinics, QCCT Med Fund, Gifts, and Endowments

## ABOUT UofL

The University of Louisville is a premier metropolitan research university located in Louisville, Ky. The university boasts three campuses — Belknap Campus, the Health Sciences Center Campus and Shelby Campus — where more than 22,000 students choose from more than 170 degree programs in 12 colleges and schools.

The university's mission is to educate undergraduate, graduate and professional students in order to develop future leaders, engage in world-renowned research and creative activity, and provide community service and outreach that better lives.

Founded in 1798, the university's location in the state's largest metropolitan area and its esteemed academic offerings have attracted students from every state and across the globe. The university is an economic engine for the area, providing employment for nearly 7,000 faculty and staff members.



UNIVERSITY OF  
LOUISVILLE