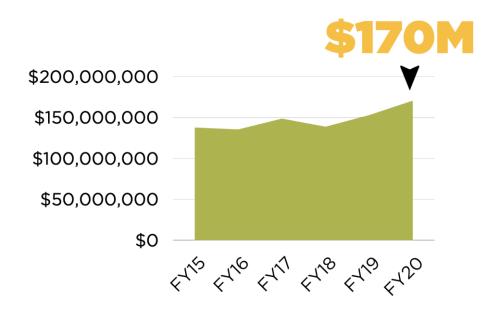


### Research and Innovation Update

April 6, 2021



#### Best Year Ever for Research



FY 2020 was our best year on record for research, with:

- \$170 million in competitive awards;
- +24% since FY2015.



### Our Grand Challenges

- Empowering our Communities;
- Advancing our Health; and
- Engineering our Future Economy.





### **Robot Classmates**

- Project uses robots to help kids with autism develop social and learning skills;
- Eliminates disparities that would make it more difficult to succeed in school.





#### **EMPOWERING OUR COMMUNITIES**

Youth Violence Prevention

#### Research Center

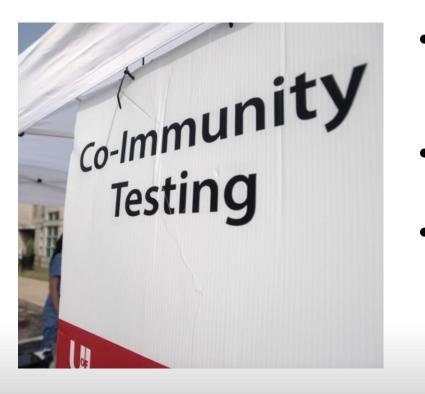
- 1 of 5 National Centers of Excellence in Youth Violence Prevention funded by the CDC.
- Partnering with West Louisville to advance social and health equity.
- Deployed three-year, award-winning "Pride, Peace, Prevention" campaign.
- Addressing the structural violence of systemic racism as a root cause of youth violence.
- Uncovering, healing, and working to prevent the trauma of violence.
- Engaging West Louisville youth as change agents in their community.







# **Co-Immunity Project**



- Groundbreaking partnership to better understand and control COVID-19;
- Widespread community testing for infection and antibodies;
- Innovative wastewater testing.





### Regional Biocontainment Laboratory



- **six** products developed and tested in the RBL over the past year are in the clinic, or soon will be:
- two vaccines are in Phase 1 clinical trials;
- three antivirals will be in the clinic within the next two months; and
- the phase 1 trial of the Q-GRFT prophylactic nasal spray will be performed in our Clinical Trials Unit in the summer.





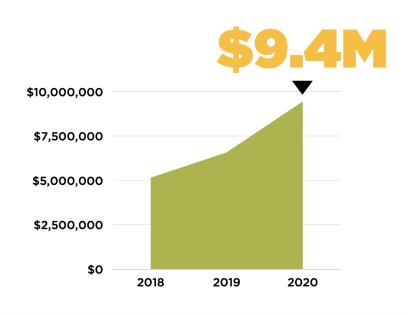
### **Airport Innovation**

- Partnership with Louisville Muhammad Ali International Airport;
- Researchers will use airport as 'innovation lab';
- Goal is to use cutting-edge tech and processes to improve travelers' experience and overall airport operation.





### Best Year Ever for Innovation



FY 2020 was also our best year on record for innovation, with:

- \$9.4 million in income;
- 7 new startups created;
- 18 new license/option deals;
- 48 new patents awarded.



# **EPIC Innovators**











### **Employee Engagement Scale**



- New way to measure employee engagement;
- First license out of CEHD;
- New startup founded with UofL EIR as founder.



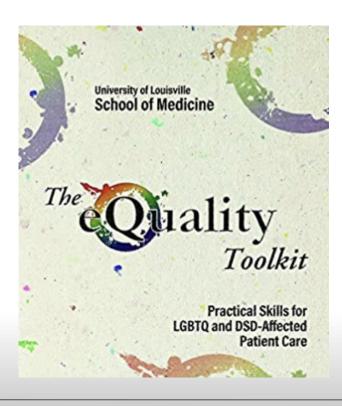
### Cultural Wellbeing

- Index for companies to measure wholistic organizational wellbeing;
- Includes factors like creativity, health and inclusion;
- First ever public benefit spinout from UofL - UPOP.





## eQuality Toolkit

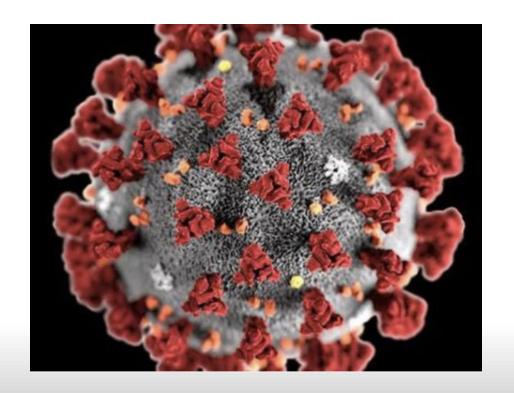


- First-of-its-kind medical training manual;
- Meant to improve equitable care for LGBTQ and other non normative patients.



### Breakthrough in COVID-19

- Promising tech believed to block the novel coronavirus SARS-CoV-2 from infecting human cells;
- Licensed to publicly traded
  California biotech company;
- Now working toward market.





### Even Stronger in FY2021

- As of the second quarter of FY2021, we marked:
  - \$122 million in awards \$30 million ahead of this time last year.
  - \$20.5 million in innovation income ten times our number this time last year.



### Goals for 2021

- Launch and adoption of our new Electronic Research Administration system (Cayuse);
- Launch of new Research and Innovation website;
- Increased focus and growth in business engagement;
- Launch of new Research and Innovation annual report;
- Improved contracting terms to accelerate sponsored research and technology licensing;
- And much, much more.



### Research and Innovation Update

April 6, 2021