

# UNIVERSITY OF KENTUCKY BOARD OF TRUSTEES

Chipper Griffith, Dean, College of Medicine

Ilhem Messaoudi, Acting Vice President for Research

Jay Miller, Dean, College of Social Work



AN EQUAL OPPORTUNITY UNIVERSITY

## In 2022, Kentucky ranked:

- 2<sup>nd</sup> in **cancer** deaths
- 4<sup>th</sup> **Hepatitis C** deaths
- 18<sup>th</sup> in **HIV** deaths
- 3<sup>rd</sup> in **septicemia**
- 4<sup>th</sup> in **influenza and pneumonia** deaths
- 7<sup>th</sup> in **overdose** deaths
- 2<sup>nd</sup> in **COPD** prevalence
- 8<sup>th</sup> in **heart disease** deaths (no change)
- 16<sup>th</sup> in **strokes**
- 10<sup>th</sup> in **obesity prevalence**
- 9<sup>th</sup> in **diabetes-related** deaths
- 7<sup>th</sup> in **preterm births**
- 6<sup>th</sup> in **maternal mortality**

# THE UNIVERSITY OF KENTUCKY

A nighttime photograph of the University of Kentucky campus. The central focus is a large, multi-story brick building with a prominent dome on top. The building has several large arched windows and a balcony. In the foreground, there are paved walkways, green lawns, and some trees. The sky is dark blue, and the campus lights are visible in the background.

- 1 of only 34 institutions in the country with the trifecta of National Institutes of Health research designations for excellence in cancer, aging and translational science.
- 1 of only 8 institutions in the country with the full complement of liberal arts, engineering, professional, agricultural and health sciences colleges on one campus.
- Connected to communities through the Cooperative Extension Service in all 120 counties.
- Educational campuses and affiliate hospitals across the state to educate and serve Kentuckians close to home.
- In FY24, UK received **\$488,446,297** in awards including **1,920** new projects awarded to **830** principal investigators from **633** sponsors

# Reaching Kentuckians Where They Are — Comprehensive Hepatitis C Eradication and Care in Kentucky Emergency Departments (CHECKED)

- Developed a screening model in Emergency Departments (ED) across three rural sites in Kentucky:
  - St. Claire Healthcare, Morehead
  - Hazard Appalachian Regional Healthcare
  - King’s Daughters, Ashland
- Screening
- Linkage to care

| Ordering Facility Zip Code | RNA+ Tests | Percent | County    |
|----------------------------|------------|---------|-----------|
| 40031                      | 1,201      | 3.1%    | Oldham    |
| 40202                      | 2,154      | 5.5%    | Jefferson |
| 40207                      | 1,067      | 2.7%    | Jefferson |
| 40351                      | 1,026      | 2.6%    | Rowan     |
| 40701                      | 793        | 2.0%    | Whitley   |
| 41017                      | 1,674      | 4.3%    | Kenton    |
| 41101                      | 808        | 2.1%    | Boyd      |
| 41501                      | 800        | 2.1%    | Pike      |
| 41653                      | 976        | 2.5%    | Floyd     |
| 41701                      | 1,130      | 2.9%    | Perry     |
| 42701                      | 1,013      | 2.6%    | Hardin    |

\*Prevalence of Hep C Infection identified from nontargeted screening among adult visitors in an academic Appalachian regional ED. Moore, et al. *Open Forum Infectious Disease*. July 2021.

\*\*Non-Targeted hep C virus Screening in acute care health care settings in the Southern Appalachian region. Chastain et al. *JACEP Open* 2022;3:e12819., Aug. 2022



## UK Addresses Maternal Mortality

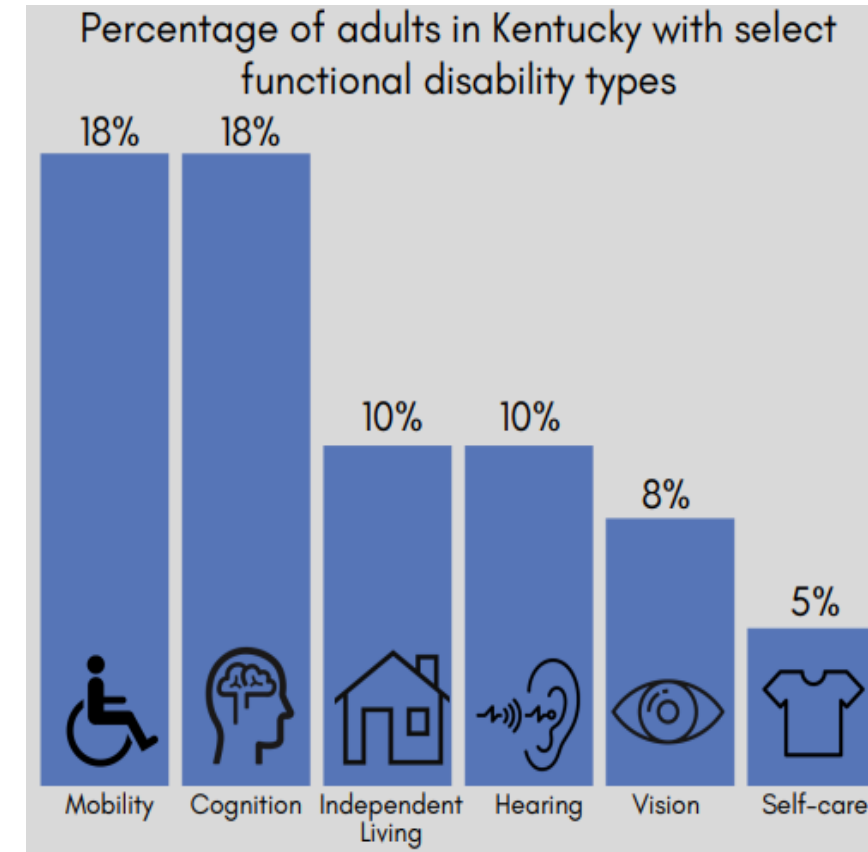
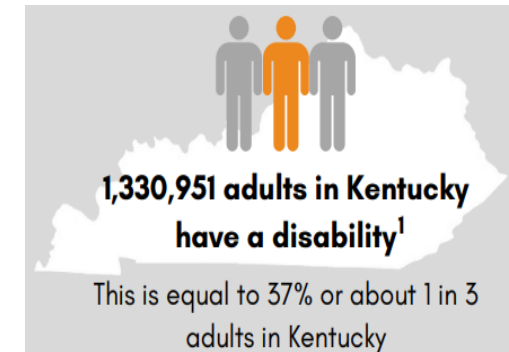
UK is home to a grant from Health Resources and Services Administration (HRSA) to form the KY Maternal Morbidity and Mortality Task Force.

### Goals:

- Collect data for severe maternal morbidity from UK's Kentucky Injury Prevention and Research Center to prevent near misses.
- Expand statewide collaborations to target obstetrical causes and social determinants associated with maternal mortality.
- Expand the use of telehealth to promote access to subspecialty care.
- Expand simulation and trainings to hospitals and networks statewide, including intimate partner violence training from UK's Center for Research on Violence Against Women.

# Human Development Institute; Addressing Health and Disability in Kentucky

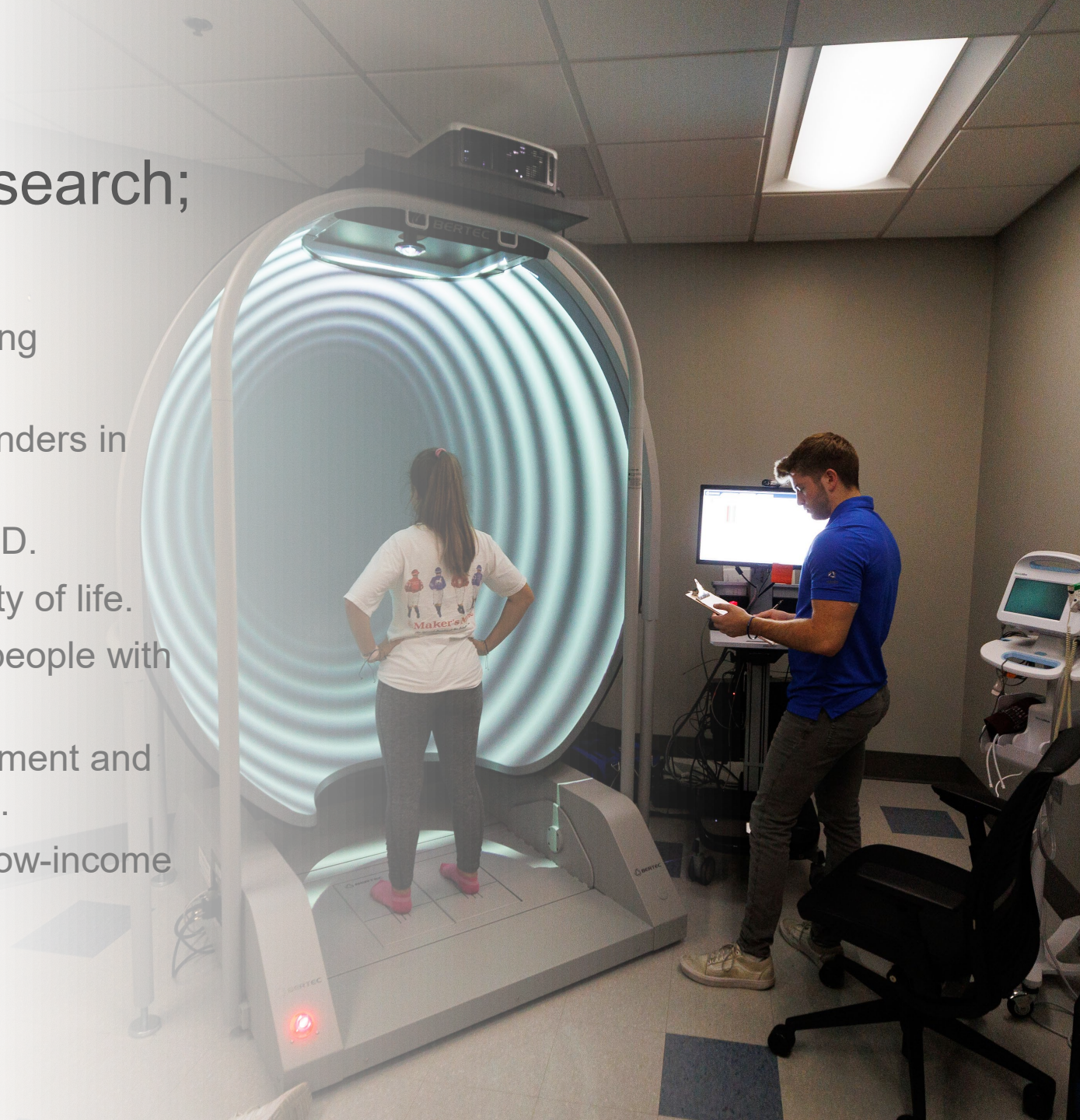
- Adults with a disability are more likely to report depression, obesity, diabetes, smoking, heart disease and long COVID.
- RETAIN Kentucky (US Department of Labor): Improving Return to Work outcomes for Kentuckians with injuries, illnesses and impairments.
- Kentucky LEND – Leadership Education in Neurodevelopmental Disabilities (HRSA): Improving health for children with neurodevelopmental disabilities through interdisciplinary training.
- Merge (sponsor: Administration for Community Living): Improving mental health services for people with intellectual and developmental disabilities.
- Patient-Centered Outcomes Research Institute project to improve dissemination of patient-centered outcome research to Black and Hispanic new and expectant parents of children with down syndrome.



Source: CDC 2024

# College of Health Sciences Research; Reducing Disability

- Provide rehabilitation free of charge, benefiting underinsured individuals.
- Prevent injuries in firefighters and first responders in Kentucky.
- Reducing the effect of sepsis and long COVID.
- Improving community participation and quality of life.
- Promote access to assistive technology for people with disabilities.
- Distribute refurbished durable medical equipment and adapted toys throughout the Commonwealth.
- Developed a “meals that heal” resource for low-income African American women in Lexington.



## UK Superfund Research Center; Empowering Communities Through Research

**Director:** Kelly G. Pennell, PhD, PE  
Pigman College of Engineering

**Deputy Director:** Kevin Pearson, PhD  
College of Medicine

- Pigman College of Engineering
- College of Medicine
- College of Public Health
- College of Nursing
- Martin-Gatton College of Agriculture, Food and Environment

### Research output over last five years:

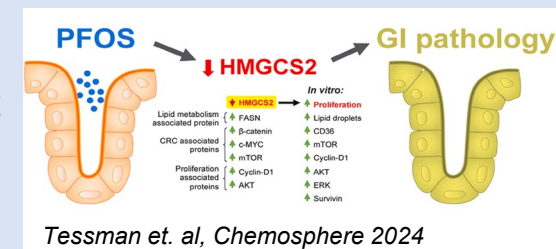
- 100 peer-reviewed publications
- 3 novel data tools
- 3 large data sets
- 4 patents for air/water treatment
- 40 grad students entered workforce



Funded since 1997 bringing more than \$45 million to UK.

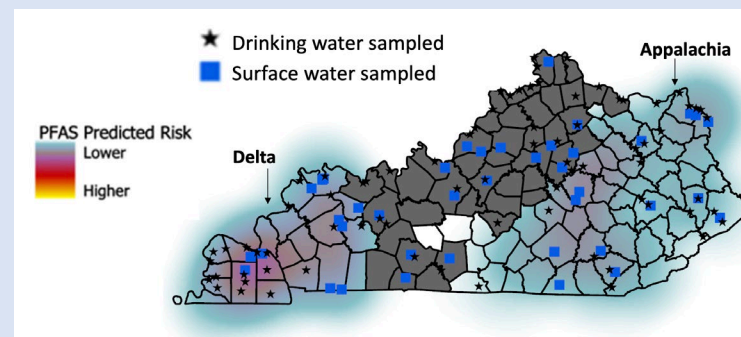
### Links ‘forever chemicals’ with colorectal cancer

“Forever chemicals” (such as PFOS) may play an important role in understanding and preventing disproportionate colorectal cancer risks experienced by Kentuckians.



### Identifies health risks and fosters informed decisions

Precision diagnostic tools help identify locations vulnerable to health risks and assess uncertainty to foster informed decisions in communities with severe resource constraints.



### Advances safe drinking water locally and globally

New membrane techniques can remove pollutants from waste streams to improve availability and affordability of safe drinking water in rural areas.





# College of Social Work Research; Robust, rigorous and relevant

Housed at the Coldstream Research Campus, researchers, practitioners, academicians and students conceptualize and conduct cutting-edge research in:

- Training Resource Center
- Interdisciplinary Research Center on Children and Families
- Self-Care Lab
- Suicide Prevention and Exposure Lab
- Military Behavior Health Lab
- Kentucky Kinship Resource Center
- Institute for Facilitation Innovation



# How do we advance our research mission to meet the needs of the Commonwealth?

- Cultivate and Recruit Talent
  - Recruit talent from within and outside the state.
  - Turn KY into a magnet for talented researchers.
  - Develop a pipeline of talent from within our communities.
- Invest in Talent
  - Evaluate our research priority areas to ensure alignment with state-wide needs.
  - Support for faculty effort.
- Enhance Infrastructure/Capacity to Accommodate Talent
  - Need for new or renovated research space.
  - Modernize our shared services cores.



# DISCUSSION

