

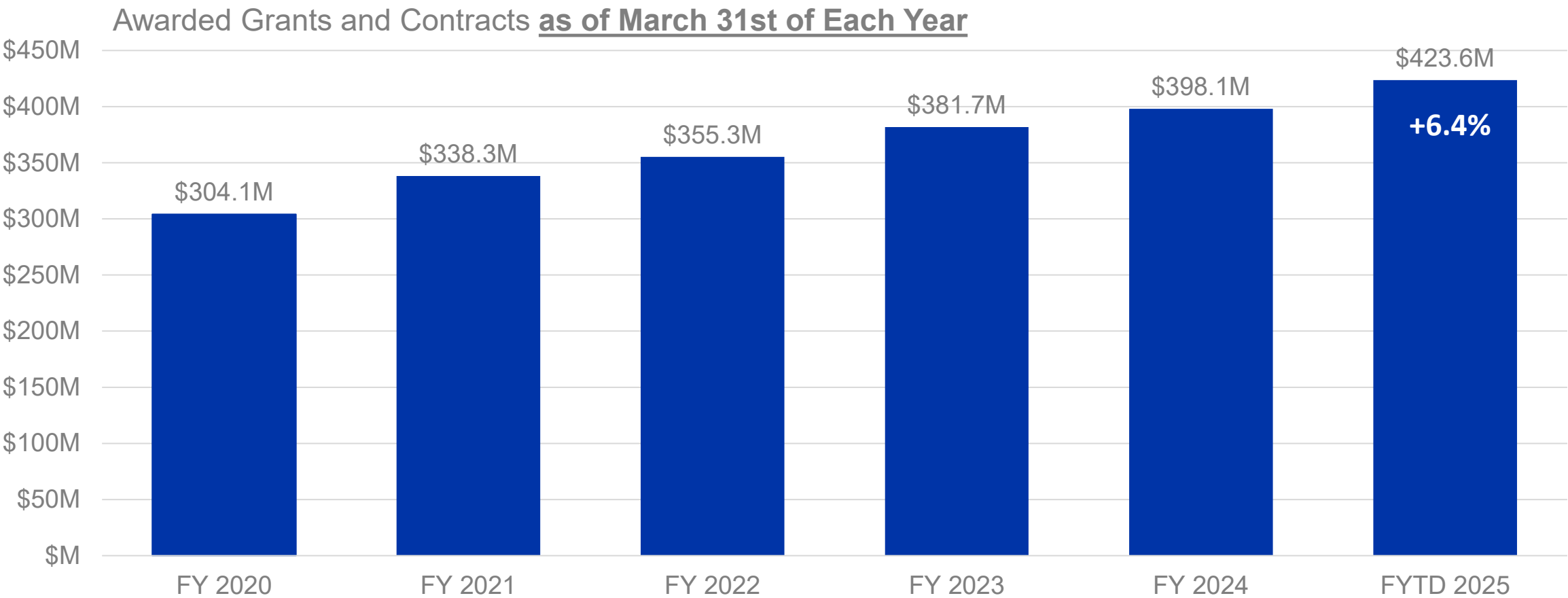
UNIVERSITY OF KENTUCKY BOARD OF TRUSTEES

Ilhem Messaoudi, Acting Vice President for Research

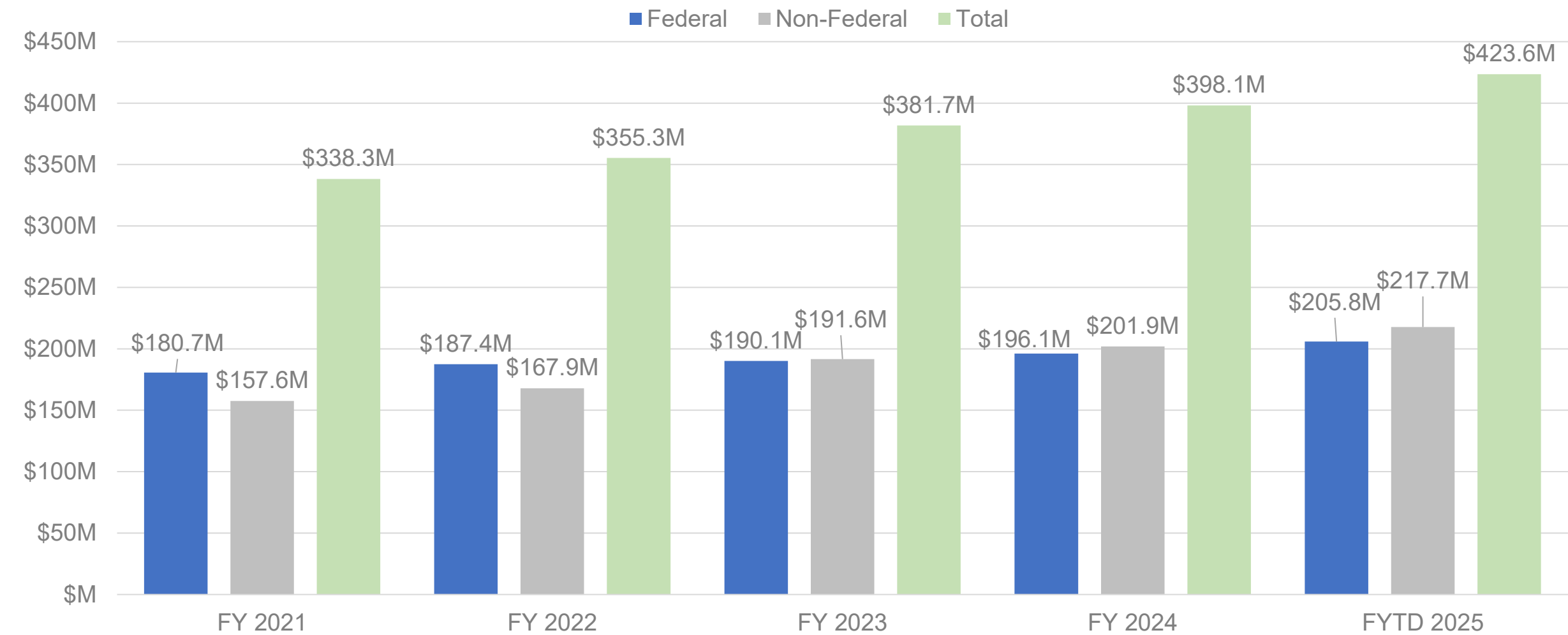


SPONSORED GRANT AND CONTRACT UPDATE

UK-sponsored Grant and Contract Award Data



UK-sponsored Grant and Contract Award Data, Sponsor Type



Source: University of Kentucky, Office of Sponsored Projects Administration Database, as of March 31st of each year.

NIH FUNDING IMPACT

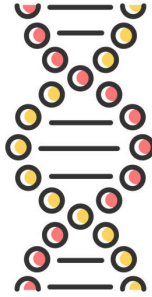
Project Inherited Cancer Risk



Offer study to patients
and families



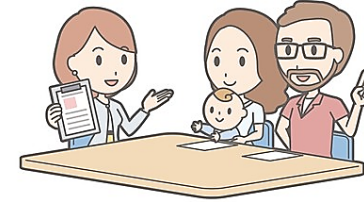
Blood sample



DNA sequencing > 80
cancer genes



Results considered by
a panel of experts



Recommendations
offered to patients and
families



Personalized
management plans

John D'Orazio, M.D., Ph.D.

Professor of Pediatrics, College of Medicine

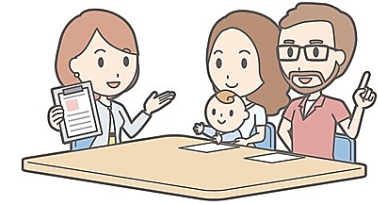
- Clinical study designed to identify inherited cancer in children and young adults
- ~250 enrolled since 8/21, syndromes identified, cancers prevented
- Advisory council since 2023, annual symposium, statewide program
- Utilize six shared resource facilities of Markey Cancer Center (National Cancer Institute P30 CA177558)

Treating Spinal Cord Injury, Training the Next Generation of Researchers

John Gensel, Ph.D.

Professor of Physiology, College of Medicine, Director of Spinal Cord and Brain Injury Research Center

- Translational treatments for Spinal Cord Injury (SCI) through industry partnerships and collaborations
- Training doctors and scientists, creating research opportunities for medical students at UK satellite campuses through a trauma registry clinical study
- Six-fold return on investment in health care/scientific professionals in Kentucky
- ~\$2.6 million per year as Principal Investigator on grants from the National Institute of Neurological Disorders and Stroke (NINDS), part of the National Institutes of Health



**Recruiting Kentuckians
with SCI for
biomarker clinical trial
(5 patients/week)**



**Developing diagnostic
biomarkers for
degenerative cervical
myelopathy
(>100 patients)**

New Treatments for Alcohol Use Disorder

Madison Blanton

Ph.D. candidate, Department of Microbiology, Immunology and Molecular Genetics, College of Medicine

- Research focuses on how chronic alcohol misuse affects the immune system and increases the risk of organ damage
- Alcohol use is the leading form of substance use in the U.S.
- Alcohol use disorder is increasingly prevalent in Kentucky, as is the need for treatments
- NIH provides funding for tuition, stipend, health care and research costs

53.5% of excessive alcohol use deaths in Kentucky are from chronic causes, such as alcohol use disorder



NIH FUNDING IMPACT

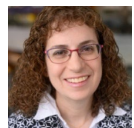
NIH Impact on Basic Research: Practice-Changing Treatment for Melanoma Resistance

Led by Rina Plattner, Ph.D.

Professor of Pharmacology and Nutritional Sciences

Funded by R01 CA211137; R01 CA258751; MCC internal seed funding

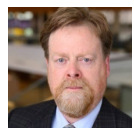
Key publications: Science Signaling 2018; Nature Communications 2020



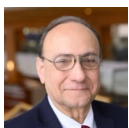
PLATTNER



P. WANG



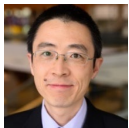
DURBIN



TUCKER

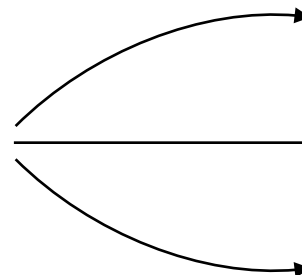


RICHARDS



C. WANG

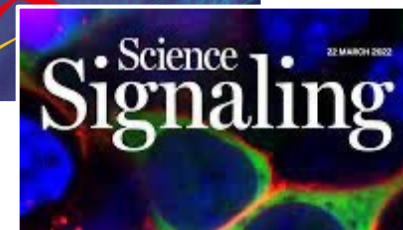
NIH-funded basic science research from the Plattner laboratory on repurposing nilotinib resulted in a multi-site, Phase I clinical trial (NCT04903119).



Markey
Cancer Center



VANDERBILT UNIVERSITY
MEDICAL CENTER



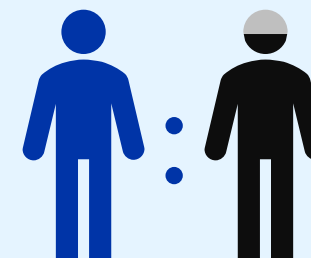
Impact: This research represents a paradigm-shifting mechanism to mediate melanoma therapeutic resistance.

Investing in Kentucky's Economy

The **\$527.7M** UK spent on research and development in FY24 generated **\$937M** in economic activity across Kentucky.

As a result, **4,712 jobs** were supported throughout the state, with **2,376 (50%)** of those jobs directly supported by research initiatives.

For every **1** job the Markey Cancer Center supports, **0.89** of a **new** job is created in Kentucky - nearly a **1:1** ratio.



QUESTIONS

