CU Connections Issue: October 28, 2021

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CU draws \$1.45 billion in sponsored research funding[1]

[2]

University of Colorado faculty this year attracted \$1.45 billion in sponsored research funding and gifts supporting research. The support fuels discovery and impact that benefits Colorado and beyond.

The 2020-21 systemwide total marks the fifth consecutive year that CU's annual sponsored research funding and gifts have topped \$1 billion. This year's tally increased 3% over the previous year's \$1.41 billion mark.

"In addition to meeting Colorado's workforce and education needs, CU is distinguished by the far-reaching and profound impact of its research and discovery," said President Todd Saliman. "That our faculty continue to attract such impressive levels of funding speaks volumes about the caliber of their work and its potential to transform lives."

Federal agencies award most of CU's sponsored research funding. In 2020-21, CU received \$868.7 million in federal awards and \$427.5 million in non-federal awards. Gifts toward research via the CU Foundation added \$148.8 million.

Following are the year's totals in sponsored research funding and gifts at each of the four CU campuses, plus highlights of the endeavors that are advancing knowledge, inspiring innovation, fostering creativity and improving quality of life for Coloradans:

University of Colorado Anschutz Medical Campus: \$770.3 million. Faculty from the CU Anschutz Medical Campus contributed to many aspects of addressing the COVID-19 pandemic. The Colorado School of Public Health and colleagues from other CU schools, led by Dean Jon Samet, M.D., and Lisa Miller, M.D., and Elaine Scallan Walter, Ph.D., worked with the Colorado Department of Public Health and Environment on COVID modeling, contact tracing and public health initiatives, assisted by \$3.7 million in funding. Having received \$11.7 million, Thomas Campbell, M.D., and Myron Levin, M.D., facilitated vaccine trials for adults and children. Adit Ginde, M.D., received over \$8.7 million to lead trials to help define the use of monoclonal antibodies and other new therapies to treat those with COVID infections. University of Colorado Boulder: \$634.4 million. A new \$20 million research collaboration led by CU Boulder and called the U.S. National Science Foundation (NSF) Al Institute for Student-Al Teaming is exploring the role that artificial intelligence could play in the future of education and workforce development – especially in providing new learning opportunities for students from historically underrepresented populations. The new institute is led by Sidney D'Mello, Ph.D., a professor in the Institute of Cognitive Science and the Department of Computer Science. The five-year project brings together a team of researchers from nine universities in close collaboration with two public school districts, private companies and community leaders, and taps researchers from across the CU Boulder campus. Read more in CU Boulder Today. [3] University of Colorado Denver: \$24.3 million. The National Human Genome Research Institute awarded Audrey Hendricks, Ph.D., associate professor in the Department of Mathematical and Statistical Sciences, \$2 million as part of its 2020 Genomic Innovator Awards. Hendricks will develop efficient methods to improve the use of genetic summary data that will help make huge genetic databases useful regardless of ancestral background. Because many databases include mixtures of ancestry, such as "African American" samples including both African and European ancestry, incorrect research can occur, leading to difficulty in studying underrepresented populations. Hendricks seeks to ameliorate this inequity and improve research and clinical use of genetics. CU Denver's aspiration to be internationally known for its research and creative work, as described in the 2030 Strategic Plan, is advanced by these types of leading-edge projects. University of Colorado Colorado Springs: \$15.9 million. Gedare Bloom, Ph.D., assistant professor in the UCCS Computer Science Department, received a National Science Foundation CAREER award of \$600,000 for his research project "Foundations for Real-Time System Security." This project aims to solve problems in a wide range of systems people use every day, exploring solutions for security in vehicles like cars and semi-trucks; industrial control systems such as power grids, water plants and particle accelerators; and space systems including satellites, solar probes and rovers. Bloom plans to write a new textbook about real-time system security so that students around the world can benefit from the project's outcomes. Sponsored research funding from federal, state, international and foundation entities targets specific projects to advance research in laboratories and in the field. Research funding also helps pay for research-related capital improvements, scientific equipment, travel and salaries for research and support staff and student assistantships. CU cannot divert this funding to non-research-related expenses.

A significant amount of sponsored research funding is directed to departments and researchers with unique expertise, such as biotechnology and aerospace, which stimulates industry.

University of Colorado Denver | Anschutz Medical Campus recognized as a Hispanic-Serving Institution[4]

<u>Transformation and Innovation Program projects move to IT Governance management</u>[5] [6]

With the decision to consider the components of what had been called the Transformation and Innovation Program (TIP) as individual projects, oversight of key projects has transitioned to CU's Information Technology (IT) Governance Committee.

Launched in 2019, TIP's goal was to help CU efficiently and effectively deliver technology services, and leverage technology's role in advancing the university's mission.

This summer, TIP efforts were reoriented to emphasize campus needs and priorities to best serve students, faculty and staff. At the same time, project management for TIP initiatives transitioned to the University Information Services (UIS) Project Management Office.

The IT Governance Committee collaborated to recommend TIP project priorities and to identify areas of shared benefit and risk. The committee brings together the COOs, CFOs and IT leadership from each campus, the system administration and Advancement to develop and align IT projects and strategies.

"I'm grateful to everyone involved with TIP for the technology assessment they completed and the priorities they identified," said CU President Todd Saliman. "The collaborative IT Governance conversations facilitated around the TIP transition and their outcomes will give leadership the information we need to make informed decisions."

IT Governance Committee's collaboration recommended the following priorities to CU leadership: IT procurement Data governance and management Cybersecurity UCCS recruiting and admissions With approval from the president and chancellors, those four projects, as well as governance enhancements, will follow the IT Governance project management process, with updates regularly posted to the IT Governance website[7].

Ultimately, the transition to a campus-centered approach sparked the IT Governance Committee's work to enact a collaborative, consensus-based approach to deliver technology services that work for all campuses.

"The collaboration seen through the IT Governance conversations allows us to take a thoughtful, sustainable approach to ensure the mission of each campus is served," said Scott Munson, Associate Vice President and Chief Information Officer of UIS at CU system administration.

Learn more about IT Governance's framework, committee members and projects by visiting CU IT Governance[7].

Mini Medical School first CU course to launch on FutureLearn MOOC platform[8] [9]

The CU School of Medicine at the CU Anschutz Medical Campus launches the new way to take its renowned Mini Medical School [10] on FutureLearn, the leading European MOOC (massive open online course) platform. FutureLearn [11] is the second MOOC platform partner with CU system in addition to its partnership with Coursera.

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The Mini Medical School is an online sequence of two short courses: "Introduction to Medical Science" and "Hot Topics in Medical Science." Based on a live on-campus course that was taught at the School of Medicine for 25 years, J. John Cohen, M.D., Ph.D., leads learners on a journey through the basic science principles that underlie the modern practice of medicine.

Cohen teaches Mini Med the way many actual medical schools teach in the first year or two of school: As he discusses the science, he points out its clinical relevance. For example: The heart is a pump whose smooth functioning is coordinated by the flow of bio-electrical currents. We can listen in on these currents, and diagnose abnormal conditions, by doing an electrocardiogram.

The teaching level is appropriate for a busy audience. The purpose is to help participants understand the human body, enabling them to take charge of their health. The learning modules are brief and translate the medical language into everyday terms.

Discussions among students are encouraged. There are no prerequisites; students range from high schoolers to people considering a career in health care to working and retired professionals with highly varied backgrounds.

Cohen has been honored for his innovative and interactive education models, which have served to demystify and communicate the medical sciences. In 2001, he was awarded the Robert J. Glaser Distinguished Teacher Award, a national recognition of exceptional teachers in schools of medicine. He received the AAAS Award for Public Understanding of Science and Technology in 2010.

Distinguished lecturer to discuss the science of miniaturization in Nov. 2 presentation[12]

CU Boulder to host Los Seis de Boulder 2021 Symposium [13]

\$3 million UCCS grant to address childhood trauma curriculum for psychology providers [14]

New engineering, design and computing building will serve as anchor for innovation district outlined in 2030 strategic plan[15]

Leading in prevention of elder abuse: CU Anschutz boasts one of only two teams in nation[16]

CU recognizes 2021 Regent Award recipients[17]

CU Connections Issue: October 28, 2021

Published on CU Connections (https://connections.cu.edu)

Sullivan brings conversations on gender and leadership to the U.N.[18]

Dunn: 'Research is becoming a team sport'[19]

Links

[1] https://connections.cu.edu/spotlights/cu-draws-145-billion-sponsored-research-funding[2]

https://connections.cu.edu/sites/default/files/spon-res feat 0.jpg[3] https://www.colorado.edu/today/2021/10/25/cu-boulder-attracts-record-634-million-research[4] https://connections.cu.edu/stories/university-colorado-denver-anschutz-medical-campus-recognized-hispanic-serving-institution[5] https://connections.cu.edu/stories/transformation-and-innovation-program-projects-move-it-governance-management[6]

https://connections.cu.edu/sites/default/files/tip 01.png[7] https://www.cu.edu/it-gov[8]

https://connections.cu.edu/stories/mini-medical-school-first-cu-course-launch-futurelearn-mooc-platform[9]

https://connections.cu.edu/sites/default/files/mini-med_top.jpg[10] https://www.futurelearn.com/courses/university-of-

colorado-mini-medical-school-part-1[11] https://www.futurelearn.com/[12]

https://connections.cu.edu/stories/distinguished-lecturer-discuss-science-miniaturization-nov-2-presentation[13]

https://connections.cu.edu/stories/cu-boulder-host-los-seis-de-boulder-2021-symposium[14]

https://connections.cu.edu/stories/3-million-uccs-grant-address-childhood-trauma-curriculum-psychology-providers[15]

https://connections.cu.edu/stories/new-engineering-design-and-computing-building-will-serve-anchor-innovation-district-outlined[16] https://connections.cu.edu/stories/leading-prevention-elder-abuse-cu-anschutz-boasts-one-only-two-teams-

nation[17] https://connections.cu.edu/people/cu-recognizes-2021-regent-award-recipients[18]

https://connections.cu.edu/people/sullivan-brings-conversations-gender-and-leadership-un[19]

https://connections.cu.edu/people/dunn-research-becoming-team-sport