



# COLORADO



## FY 2021 Fast Facts



**\$356,923,000**

Total NSF Awards to Colorado



**\$325,920,000**

Invested in Fundamental Research in Colorado



**\$31,003,000**

Invested in STEM Education in Colorado



**\$7,346,000**

Invested in Colorado startups

## Top NSF-funded Academic Institutions for FY 2021

**\$112,402,000**

University of Colorado Boulder

**\$31,049,000**

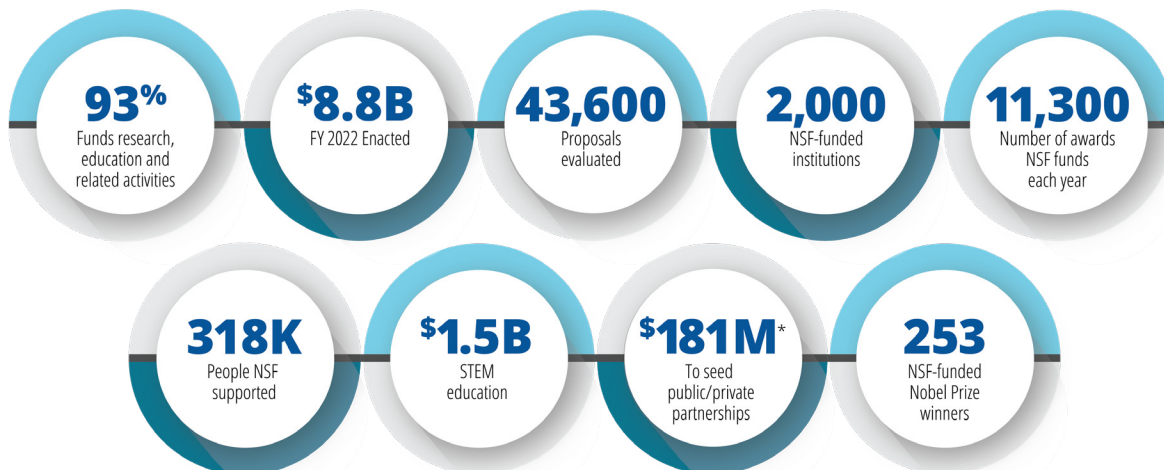
Colorado State University

**\$23,008,000**

Colorado School of Mines

## NSF By The Numbers

The National Science Foundation (NSF) is an [\\$8.1 billion](#) independent federal agency created by Congress in 1950 to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense. NSF's vital role is to support basic research and researchers who create knowledge that transforms the future.



Data represents FY 2021 Actuals unless otherwise indicated.  
\*Corresponds to NSF investments initiated in FY 2021 and spanning multiple years.



### NSF-funded COVID-19 Research and Recovery

The **University of Colorado-Colorado Springs** ADVANCE Adaptation program’s Project CREST aims to significantly enhance the research capacity and opportunity of women faculty in STEM and the social behavioral sciences. Project CREST will employ sophisticated evaluation and assessment methods to make data-driven recommendations to other emerging high research activity institutions for how to mitigate research inequities that limit women’s career advancement. Project CREST provides a unique opportunity to test the replicability of existing evidence-based strategies, while adapting to and addressing the short and long-term impacts of COVID-19 on women’s research. Project CREST has the potential to advance the national research agenda by including more women in the discovery of new ideas and new technologies. The NSF ADVANCE program is designed to foster gender equity through the identification and elimination of organizational barriers that impede the full participation and advancement of diverse faculty in academic institutions. ADVANCE adaptation awards provide support for the adaptation and adoption of evidence-based strategies to academic nonprofit institutions of higher education as well as nonacademic, nonprofit organizations.



### STEM Education

With NSF-support, **Front Range Community College** will develop a new cybersecurity P-TECH program implemented across the St. Vrain Valley School District and several major companies. With college coursework beginning in students’ ninth grade year, this project will provide participants with a high school diploma, an associate degree with a concentration in cybersecurity, and significant industry experience, all within four to six years and at no cost to the students. Upon graduation, students will have the skills and competencies necessary to successfully transition to a cybersecurity position at one of the partnering companies.



### Research Driving Innovation

Recent progress in quantum information science and technology, or QIST, promises advances that will fundamentally reshape today’s leading technologies, including computing, communications and sensing. A well-prepared workforce is essential to fulfilling this promise. In response to this critical workforce need and with support from NSF, the **Colorado School of Mines** will develop rigorous, integrated, interdisciplinary training programs preparing graduate students for careers in QIST. The research program addresses three grand challenges in quantum technology: (1) How can a demonstrable increase in quantum speed be achieved by using existing or near-term quantum computing architectures? (2) How can materials and electrical engineering interface with quantum technology to provide meaningful advances in device development and fabrication? (3) How can new directions in quantum algorithms advance and challenge the notion that quantum technology can solve problems that are impossible to tackle with conventional technology? These interdisciplinary challenges require close synergy between fundamental physics, materials science, electrical engineering and algorithm development. Through classroom training and research, trainees will be exposed to the full range of quantum technology architectures, providing a holistic view of this rapidly developing field.



### Infrastructure

Boulder, Colorado, is home to the National Center for Atmospheric Research. NCAR is an NSF-sponsored Federally Funded Research and Development Center serving a broad research community, including atmospheric and geospace scientists and researchers in complementary areas of the environmental sciences and geosciences.

### NCSES

According to the [National Center for Science and Engineering Statistics \(NCSES\)](#), which is housed in NSF, Colorado ranks 5<sup>th</sup> in the nation for SBIR awards. Visit Colorado’s science and engineering state profile to learn more!

- 7.79% of Colorado’s workforce are employed in S&E occupations.
- 37.67% of Colorado’s higher education degrees are concentrated in S&E fields.

### Learn More

**COVID RELIEF** - Congress provided NSF with funding to prevent, prepare for, and respond to COVID-19 in the CARES Act of 2020 and the American Rescue Plan (ARP) Act of 2021. For more information on NSF-funded COVID-19 research and recovery, visit NSF’s award database for [CARES Act](#) and [ARP](#) awards, and NSF’s Toolkit for [COVID funding updates](#).

**NSF FACT SHEETS** – NSF provides fact sheets about the agency and its bold investments in basic research. These fact sheets profile NSF investments in research across all fields of science and engineering, including [quantum](#), [artificial intelligence](#), and [advanced manufacturing](#), and the NSF-supported [research](#) and [computing infrastructure](#) powering the U.S. response to COVID-19.

**CONNECT WITH NSF** – For more information on NSF’s impact in your state, please contact NSF’s Office of Legislative and Public Affairs at [congressionalteam@nsf.gov](mailto:congressionalteam@nsf.gov).