University of Colorado: National Security

High-impact national security research and workforce development enabled by essential infrastructure, intellectual capital and processes

With longstanding strengths in national security research, infrastructure and workforce development throughout its four campuses, the University of Colorado is well-positioned to help address the nation’s most pressing national security needs.

Aerospace & Defense Core Capabilities

- Hypersonics
- Space Domain Awareness
- Positioning, Navigation & Timing
- Autonomous Systems
- Optics and Photonics
- Combat Casualty Care
- Cybersecurity
- Manufacturing

Enabling Research Capabilities

- Remote Sensing Data Analytics
- RF Engineering
- Quantum Sensing
- SmallSat Technologies
- Materials Sciences
- Bioengineering
- Space Weather

A Powerful Convergence of Research & Technical Collaborators

University of Colorado
- CU Boulder
- CU Anschutz Medical Campus
- CU Colorado Springs
- CU Denver

GOVERNMENT
- Air Force
- Army
- Navy
- NGA
- NRO
- NSA
- DOE

DEFENSE CONTRACTORS
- Lockheed-Martin
- Ball Aerospace
- Sierra Nevada
- Northrop Grumman
- Raytheon
- L3-Harris
- many more

ACADEMIA

FOUR CAMPUSES UNITED
ALL FOUR: COLORADO
University of Colorado: Four Campuses United

University of Colorado Boulder
- National Security Initiative
- Tier-1 research university, $614M in research funding FY2019-20
- Top-10 ranked public aerospace program (graduate and undergraduate)
- Nation-leading institutes: LASP, CIRES, JILA

Iain Boyd
Faculty Director, National Security Initiative

James Olson
Executive Director, National Security Initiative

University of Colorado Anschutz Medical Campus
- Nationally ranked in 11 specialties
- $762M in research funding (basic science, translational research, clinical trials, bio-engineering) FY2019-20
- Innovative Center for COMBAT Research, focused on combat military and space health with 70+ researchers
- Two joint CU/NASA faculty and a novel joint medical/master’s degree in Aerospace Engineering
- CU Innovations entrepreneurial biomedical focus: 2,000 patents filed, launched 60+ startups
- Partnership with Colorado’s #1 hospital (University of Colorado Hospital)

Don Rabern
Dean, College of Engineering and Applied Science

Vik Bebarta
Director, Center for Combat Medicine and Battlefield (COMBAT) Research

University of Colorado Denver
- Expanding cybersecurity and data analytics research and training: two DoED training programs and new degrees for Fall 2021
- RF, spectrum, wireless systems technology and policy programs
- Aerospace manufacturing and design center (2021); AFOSR support and Lockheed Martin partnerships
- National Media Forensics Center supported by DoD
- Workforce development; strong diversity and inclusion

Martin Dunn
Dean, College of Engineering, Design and Computing

Douglas Sicker
Senior Associate Dean, Computing Initiatives

Colorado’s Front Range: A World-Class Innovation Ecosystem
- Colorado is the 2nd largest aerospace economy in the nation
- Home to Space Command, NORTHCOM and 4 DOD installations
- Colorado’s aerospace industry generates $15.4B in total annual output
- Colorado Front Range is one of the top entrepreneurial ecosystems in the nation
- CU Boulder is the #1 public university recipient of NASA research awards (#2 overall)
- 5,600+ active duty, reserve, National Guard, veteran and military dependent students across the University of Colorado
- CU is ranked in the top 20 universities globally for granted U.S. utility patents
- $1.41B total in annual sponsored research funding across the University of Colorado