

7 THINGS TO KNOW ABOUT COASTAL AND DISASTER RESEARCH AT UCF



NEARLY 80 PERCENT OF FLORIDA'S RESIDENTS AND 40 PERCENT OF THE WORLD'S POPULATION live in coastal communities just a few feet above sea level. The economies of regions with extensive coastlines often depend on the diversity and quality of the natural resources around them. But climate change, sea-level rise, invasive species, coastal over development, and emerging diseases all pose threats and cost taxpayers billions when disasters strike. UCF's Sustainable Coastal Systems cluster and the National Center for Integrated Coastal Research (UCF Coastal) bring together economists, biologists, business leaders, and planners, and others to come up with creative and sustainable solutions to coastal threats. Their work is shaping the world.

1 Research Powerhouse

Since 2018, the cluster and center have generated almost \$30 million in grant funding from an array of agencies because of UCF Coastal's unique approach and expertise.

3 Natural Partners

There's power in partnership, which is why cluster and center members are working with various government and non-profit agencies and other universities across the state including NASA, the National Academy of Sciences, FEMA, U.S. Army Corps of Engineers, National Science Foundation, Conservation Florida, Florida Department of Economic Opportunity, The Nature Conservancy, Florida Department of Health, USF and UF.



2 Recognized Experts

UCF Coastal researchers play key roles in national and international efforts, among them:

Engineering Assistant Professor Thomas Wahl is working with the United Nations on sea rise and climate change;

Emergency Management and Homeland Security Program Director Claire Knox is working with emergency managers across Florida to help communities better prepare for hurricanes;

Boardman Endowed Associate Professor of Environmental Science and Public Administration Chris Emrich is leading a major National Academy of Sciences funded project looking at building community resilience in the Gulf of Mexico region;

College of Medicine Assistant Professor Salvador Almagro-Moreno is advising the Food and Drug Administration (FDA) about the risks associated with flesh-eating bacteria.



6 Interdisciplinary Prep

Creative solutions mean an interdisciplinary approach. UCF Coastal is comprised of 46 faculty representing 12 departments in 7 colleges. They include members who bring unique perspectives ranging from the Rosen College of Hospitality Management, one of the world's best, to the social and natural sciences, engineering, and the College of Medicine.

4 Investing in Jobs

The U.S. spends over \$200 billion annually on environmental protection and conservation. The U.S. Bureau of Labor Statistics projects employment of environmental scientists and specialists to grow by 11% over the next ten years, faster than the average for all occupations. The U.S. Bureau of Labor Statistics also projects emergency and relief work jobs will grow from 174,440 in 2020 to more than 180,600 by 2026. The same agency reported that the emergency management director's median salary in 2019 was \$76,250.

7 Changing the World

UCF research makes an impact. From helping coastal communities best prepare for possible disaster impacts to providing data that has led to the removal of certain chemicals in sunscreens linked to coral reef bleaching, the world is a better place thanks to UCF researchers.

5 Top 10

UCF's Emergency and Homeland Security Graduate Program is ranked No. 2 in the nation according to the *U.S. News and World Report*.





UCF Office of Research and College of Graduate Studies

The University of Central Florida (UCF) is one of the largest universities in the nation with more than 71,000 students, including 10,000 graduate students pursuing degrees in more than 220 programs. UCF is classified as a very high research activity institution according to The Carnegie Foundation of Advancement of Teaching.

The Office of Research fosters the creation of intellectual capital that can solve today's pressing problems, improve the quality of life, and provide an engine for economic growth. The Office serves as the official liaison among researchers and government and commercial sectors. UCF's strength in innovation and research propelled the university to \$212.9 million in funding in FY 2021. We are known for many things, but are internationally recognized for our College of Optics and Photonics and our Institute of Simulation and Training.

UCF is home to 13 colleges developing the next generation of scientists, engineers and technology leaders with critical thinking skills and hands-on research skills to tackle any problem.

PRIDE POINTS

UCF is among the **TOP 100** in the World for Patents.

UCF is among the **TOP 50** Public Research Universities in the Nation.

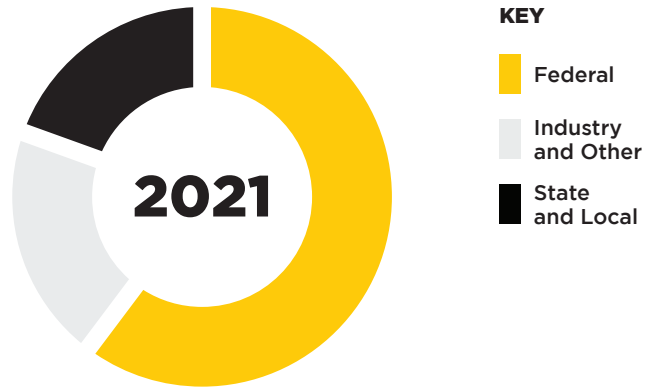
27 UCF Graduate Programs Ranked among the **TOP 100** in the Nation.

UCF Ranked among the **BEST IN NATION** for Research Leading to New Tech and Spin Offs.

20 UCF FACULTY are National Academy of Inventor Fellows.

RESEARCH BY THE NUMBERS

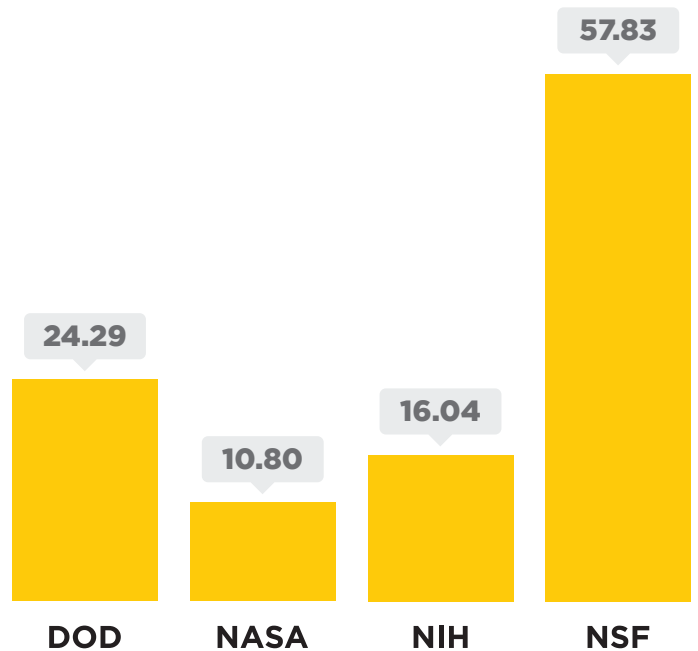
TYPES OF FUNDING



	2020	2021
Federal	110.82M	128.78M
Industry and Other	46.63M	42.33M
State and Local	46.69M	41.83M

Totals are in United States Dollars (USD)

KEY FUNDING SOURCES



Totals are in United States Dollars (USD)

Department of Defense
National Aeronautics and Space Administration
National Institutes of Health
National Science Foundation

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