



CENTER FOR CLIMATE AND LIFE

Accelerating Climate Science and Solutions

The Center for Climate and Life, based at Columbia University's Lamont-Doherty Earth Observatory, accelerates Earth science research that informs solutions to the climate crisis.

We accomplish our mission by:

- Supporting high-risk, high-value research to accelerate discovery
- Leveraging our investments to further research activities
- Improving understanding of climate risk
- Building public and private sector partnerships to fast-track solutions

Accelerating Discovery

Our unique model mobilizes philanthropic support to advance research, drive discovery, and engage stakeholders and business leaders. This work is led by the 14 scientists in the Climate and Life Fellows Program, our flagship initiative that supports transformative research by 120 Columbia climate, ocean, and life scientists.

Multiplying Investments

We've invested \$4 million in new research since our founding in 2016. The resulting discoveries have attracted \$19.2 million in new federal and private research funding to the Lamont campus—a nearly five-fold return on investment.

Understanding Climate Risk

We further research that increases understanding of the physical, economic, and societal risks associated with climate change. We help decision-makers use this knowledge to mitigate risk, find opportunities, and build climate resilience.

Focusing on Solutions

Our partnerships with the private sector provide vital funding for Center research. They enable our scientists to share their new knowledge with stakeholders in industry, finance, and all levels of government.

OUR IMPACT: RESEARCH HIGHLIGHTS

Solving the Biggest Big Data Challenges

A \$2.3 million grant from the Gordon and Betty Moore Foundation to Lamont oceanographer and Center affiliate Ryan Abernathey is enabling researchers to develop and use cloud computing tools to address climate data challenges. With support from the Center, Abernathey developed a way to harness the power of cloud computing to address these challenges. That approach is now an international, open-source effort to create powerful, scalable computational tools for climate data science.



Improving Climate Risk Models

Chia-Ying Lee, a Lamont atmospheric scientist and Center Fellow, uses computer models to understand how tropical cyclone behavior has changed and how climate affects extreme weather. Research she did as a Fellow led to a collaboration with the global reinsurance firm Swiss Re, which is working with Lee and her colleagues to improve risk models that help the firm confront the financial impacts of the climate crisis.



Understanding Wildfire Risk and Resilience

Park Williams, a Lamont bioclimatologist and Center Fellow, was awarded a \$640,000 grant from the Zegar Family Foundation. He's using it to create a tool to help fire-prone regions in the western United States understand how wildfires might behave in the future. The project builds on Williams' early work as a Fellow researching the causal factors linking forest fires and climate variability.



Invest in Our Work

In these challenging times we must expand our work to ensure we have a rational, science-based understanding of our future. Our unique model is extremely successful, and our investments secure funding in times of diminishing federal support. When you support our work, you invest in research that accelerates climate solutions. Thank you for contributing to our mission.

Donate and learn more at climateandlife.columbia.edu

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