

ENVIRONMENTAL RESILIENCE INSTITUTE

INVESTMENT OPPORTUNITIES

The pace and extent of global environmental change are now greater than at any other time in human history, and they are accompanied by ever more common extreme climate events. Greater periods of floods in some regions, droughts in others, heat waves, and more extreme storms are our new reality. This places people, infrastructure, and ecosystems at risk and threatens the critical resources necessary to support a healthy and prosperous society. From climate change to water and energy security, today's environmental challenges involve complex systems that require interdisciplinary solutions. The need for these solutions is urgent. Current predictions are that we cannot meet climate change goals and avoid permanent harm to the planet unless humans dramatically reduce our carbon dioxide emissions in the next ten years.

The Environmental Resilience Institute (ERI) at the University of Virginia brings together a diverse and collaborative community to accelerate the rate of discovery, train the next generation of leaders in integrative climate-focused research, and develop external partnerships to translate research findings into policy and practice. By linking research to action, we can develop new management strategies, policies, financial tools, and technologies to mitigate and adapt to environmental change. As one of the nation's only environmental resilience institutes, ERI is uniquely positioned to enable collaborations and discoveries that will enrich and improve lives in Virginia, our nation, and the world.

OUR VISION

Global climate change is the signature challenge of our time, and it threatens every aspect of our society, including health, commerce, and democracy. Solutions to threats as complicated as climate change cannot be found in any one silo. ERI exists to work collaboratively to yield actionable research and discoveries that will be highly valuable to policymakers, businesses, and communities as they adapt to a rapidly changing environment. We believe a bold investment in ERI will allow us to build on our signature seed funding and training programs to develop larger and longer-term initiatives that will accelerate and enhance our impact on these challenges. Complex problems require exploration from every angle to form effective and lasting solutions. We invite you to join us in accelerating the pace of discovery and action in fighting climate change by investing in the following opportunities.

Integrated Initiatives

ERI hosts three cornerstone integrated research programs: **Water Futures Initiative**, **Climate Restoration Initiative**, and **Coastal Resilience Initiative**. These initiatives bring together faculty and students from across Grounds with external partners and change agents to tackle our most pressing challenges including water scarcity, negative emissions strategies, and coastal ecosystem restoration. Our faculty have recognized expertise in multiple facets of these issues, from engineering to nature-based solutions to governance. In a recent example, a private donor's \$300,000 investment, matched with University funds, launched the Water Future Initiatives, which now has research under consideration for \$10 million in national funding. Support for these initiatives provides for faculty and student fellowships, communications and outreach, and research funding that allow a 360-degree approach to tackling climate change.

A gift of \$400,000 would fund one initiative for a year and a gift of \$1.2 million would sustain all three initiatives for a year.

Seed Grants

ERI's seed funding through **Collaboration Labs** and **Rapid Response** grants provides smaller immediate-use grants that play an important role in growing the capacity of the University to work collaboratively and nimbly to address emergent threats.

Our **Collaboration Labs (CoLabs)** facilitate the interdisciplinary connections needed to form sustainable research and multi-sector collaborations that serve the public good. By actively building a team culture we help surface novel research frameworks, theories, models, and applications. For example, the Arctic Design Group is a multidisciplinary research group focused on the arctic region—the first in the US to tackle complicated issues in the arctic—led by UVA faculty from Architecture, Environmental Sciences, and the School of Engineering and Applied Sciences. Their project includes student research, new course development, and the launch of a three-day symposium. Funding for CoLabs provides seed money for research collaborations to connect faculty, postdoctoral fellows, and students working together on problems related to the institute's mission. ERI seeks to fund three CoLabs each year.

A gift of \$60,000 - \$200,000 would fund one CoLab for one to two years.

Rapid Response grants are another key component of the Institute's mission. When climate disasters happen, researchers simply cannot wait for the traditional grant cycle and must respond quickly to collect ephemeral data that is otherwise easily lost. For example, when Hurricane Maria wrecked Puerto Rico's electric power grid, leaving almost all the island's 3.3 million people without electricity and creating one of the worst blackouts in American history, a UVA's undergraduate student's ERI project became the impetus behind a critical improvement to energy system optimization models. ERI Rapid Response grants ensure that faculty, postdoctoral fellows, and

students can work on time-sensitive issues as they arise. ERI seeks to fund two Rapid Response grants per year.

A gift of \$20,000 would seed a Rapid Response project.

Student Experiential Learning

Training the next generation of climate researchers and advocates is essential ensuring we have the talent necessary to address future climate crises. ERI provides opportunities for undergraduate, graduate, and PhD students to explore career opportunities and receive professional guidance from experts in government agencies, nonprofit organizations, and industry. Funding supports summer research fellowships and internships, job-shadowing externships, and graduate capstone fellowships, all designed to build a pipeline of future climate advocates.

Gifts of \$5,000 – \$75,000 provide critical educational and research opportunities for students at all levels.

Expanding Community Engagement and Communication

As ERI scales its research to effectively address climate change, we require staff to help us make our findings actionable. To achieve our vision for ERI to serve as a central hub for translation of climate change research to policy and practice, we must build strong and meaningful relationships with community partners. A dedicated **Community Engagement Coordinator** would allow ERI to build these critical relationships by identifying partners, acting as a bridge with collaborative teams, and developing meaningful experiential opportunities for students.

Additionally, to maximize their impact, research findings must be effectively communicated to policymakers, businesses, communities, and other stakeholders. A **Strategic Communications Director** will develop multiple communication outlets for diverse audiences, including policy-relevant research briefs, news outlets, social media, and proposal preparation.

A gift of \$225,000 would provide three years of support for a Community Engagement Coordinator or a Strategic Communications Director.

YOUR IMPACT

As we confront the existential threat climate change poses, ERI is poised to address that threat directly and powerfully. You can help us in our work to connect world-class scholars with the citizens, policymakers, entrepreneurs, and industries best positioned to put our innovative research into effective action. Thank you for considering these opportunities to significantly impact environmental resilience in Virginia and beyond with your financial support. We look forward to discussing these opportunities with you further.