



MEETING *the* CHALLENGE

The Environmental Resilience Institute (ERI) at the University of Virginia identifies solutions to society's most challenging and complex socio-environmental problems. From climate change to water and energy security, the Institute brings pre-eminent UVA faculty, students, and external partners together to conduct trans-disciplinary research at the intersection of environmental change and human wellbeing to foster a more sustainable and resilient future for the global common good.

TWO CHALLENGES FACE SOCIETY:

- 1** The pace and extent of environmental change are now greater than any other time in human history. This places people, ecosystems, and infrastructure at risk worldwide and poses a significant threat to public health and economic prosperity.
- 2** The past is no longer a reliable guide to the future. More extreme conditions and changing patterns are part of our new reality.

UVA is in a unique position to bring together the disciplines of the arts and sciences with leading schools of engineering, architecture, business, and policy to meet these challenges and find solutions that lead to a better future.



A COURSE *of* ACTION

ERI is the hub of environmental resilience and sustainability research at UVA and builds on a legacy of distinguishing research and partnerships that span many decades. Programs focus on proactive and actionable research that link people, the environment, and technology in new and innovative ways.

Current priorities for ERI funding reflect grand challenges for which UVA is emerging as a global leader:

- *Climate Resilience*
- *Water & Energy Futures*
- *Environment & Health*

INNOVATION *through* COLLABORATION

These challenges involve complex systems and their solutions require collaborations that transcend traditional disciplinary boundaries. By defining problems together, creating a common language, sharing methods, and measuring impact, research teams develop new frameworks and paradigms that form sustained collaborations across diverse communities. This accelerates the rate of discovery and the translation of research to action.

OUR *THREE* GOALS

1. CATALYZING RESEARCH

CoLabs – bring diverse collaborative teams of researchers from across Grounds to work together on specific challenges. By actively building a culture of team research the institute helps surface novel research frameworks, theories, models, and applications.

Rapid Response Grants – for urgent, time-sensitive work that allows researchers to respond immediately to needs and opportunities.

Faculty Fellowships – for UVA and visiting faculty from other institutions bring a constant infusion of fresh thinking and new ideas.

2. TRAINING NEW LEADERS

Research Fellowships – through tiered mentoring of post-doctoral fellows, graduate, and undergraduate students for cross-disciplinary research.

Externships – job-shadowing with alumni mentors exposes students to professional careers in multiple sectors, including industry, non-profit organizations, and governmental agencies.

Curriculum Enhancement – through cross-school, cross-disciplinary seminars.

3. TRANSLATING TO POLICY & PRACTICE

Partnerships – by working with external stakeholders, we are ensuring that our research is relevant and actionable. ERI connects world-class scholars with change agents – citizens, policy makers, entrepreneurs, industries and NGOs.

Resilience Summits – bring together scholars and policy experts.

Decision-support tools – visualizations, participatory games, and models allow stakeholders to envision future scenarios.

WHO *we* ARE

80

**FACULTY FROM 10
UVA SCHOOLS AND
5 UVA CENTERS OR
INSTITUTES**

6

**FACULTY CLUSTER
HIRES IN ARTS
& SCIENCES,
ENGINEERING,
AND ARCHITECTURE**

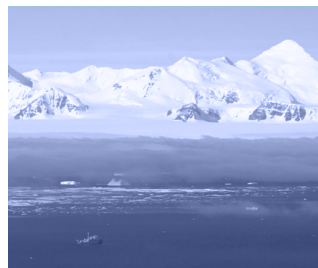
200+

**IN OUR COMMUNITY,
AND GROWING**

WHAT *we* DO

From nucleating ideas to building teams, the ERI is able to be proactive, integrated, and actionable. We understand and anticipate change. We accelerate discovery by promoting innovation. Our outcomes make a difference.

EXAMPLE 1: ARTIC



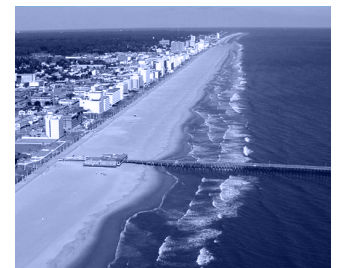
The Arctic is warming twice as fast as any region on earth. Environmental scientists, architects, and engineers are teaming up to develop proactive strategies for Arctic towns to better manage the changing climate.

EXAMPLE 2: WATER



Nearly half the world's population suffers from water scarcity, especially in cities. Collaborative teams connect research on water availability and infrastructure needs with governance and policy.

EXAMPLE 3: COAST



Over half the population live within 100 miles of the coast, and even more depend on coastal resources. UVA is a global leader in understanding how healthy ecosystems make coastal communities more resilient.

CONTACT INFORMATION

KAREN MCGLATHERY

**DIRECTOR, ENVIRONMENTAL RESILIENCE INSTITUTE
PROFESSOR, DEPARTMENT ENVIRONMENTAL SCIENCES**

kjm4k@virginia.edu | www.eri.virginia.edu