

# Growing Knowledge Where It Belongs

Climate, Appalachian Plants, and the Future of Well-Being

*A pilot collaboration between Warren Wilson College  
and Sensorium Therapeutics*



**Warren Wilson College** and **Sensorium Therapeutics** are launching a pilot collaboration to understand how climate change is reshaping the chemistry of native Appalachian medicinal plants—and to build new educational, scientific, and community opportunities for Western North Carolina.

Southern Appalachia is one of the most botanically diverse regions in North America, home to plants long used in Cherokee, Appalachian, and modern herbal traditions. Many of these species contain compounds that influence stress, mood and other ailments that plague billions around the world.

Yet despite their cultural and scientific importance, no regional institution has ever undertaken a **systematic, long-term effort** to understand:

- how changing environmental conditions affect medicinal plant chemistry
- which factors—light, drought, temperature, nutrients—drive key compounds
- how climate change may alter the value, resilience, and cultural relevance of these plants

“We chose to partner with Warren Wilson College because its hands-on, place-based educational model and deep stewardship of Appalachian landscapes make it uniquely suited to host a living laboratory – one that grows more valuable over time, scientifically and educationally.”

Jacob Hooker, Sensorium Therapeutics

“This collaboration allows Warren Wilson students to study how climate change is reshaping Appalachian medicinal plants—using modern science, grounded in place, to serve the region and the future.”

Dave Ellum, Center for Working Lands

This collaboration positions Warren Wilson as a **regional hub for climate-informed medicinal plant research**—an area of growing national and global interest and a natural jumping off point for commercialization of compelling natural products.

## What We're Building Together

The program brings together The Center for Working Land's strengths in ecological cultivation and hands-on education with Sensorium's expertise in plant chemistry and analytical science. Together, we are:

- growing and studying key Appalachian medicinal plants in climate-relevant conditions
- using state-of-the-art analytical tools to measure how plant chemistry responds
- developing the first multi-year dataset linking environment, climate stress, and CNS-relevant plant compounds
- training students through living research plots on campus
- creating a model for responsible, culturally respectful botanical stewardship

**Special thanks to the Pisgah Investments Foundation for early investment in this partnership.**

### Potential for Donor Impact

This initiative strengthens Warren Wilson's role as a trusted resource for growers, nonprofits, tribal leaders, and community partners who depend on Appalachian plants for cultural, ecological, and economic reasons.

It resonates across issues donors care deeply about:

- climate resilience and environmental stewardship
- biodiversity and conservation
- education that blends science with hands-on learning
- ethical innovation and regional economic development
- the future of plant-based medicine and wellness

Philanthropic support allows the College to expand research capacity, fund student experiences, add analytical capabilities, and deepen community partnerships.

### What This Means for Students

#### A New Anchor for Experiential Learning

Students gain hands-on experience in cultivation, chemistry, ecological monitoring, and data analysis—opportunities typically reserved for graduate programs or biotech labs.

#### Pathways to Biotech and Science Careers

Through Sensorium's engagement, students access guest lectures, mentorship, internships, and exposure to real-world scientific careers.

#### Entrepreneurship & Innovation

Many of these plants already support herbal and natural-products markets. As students learn to grow and analyze them, new ideas emerge—from capstone projects to student-led ventures rooted in sustainability and science.

### A Long-Term Vision

This is the beginning of an evolving collaboration—not a one-off project. There is no fixed expectation around commercial outcomes. Instead, we are building:

- a living laboratory that grows more valuable each year
- a pipeline of students grounded in ecological and chemical literacy
- a regional center for discovery rooted in the Appalachian landscape

As the work unfolds, the most meaningful opportunities—scientific, educational, and community-driven—will emerge organically.

**A living laboratory. A learning engine. A gift to the future of the region.**

