

Ranking Member Gabe Amo (D-RI) of the Subcommittee on Environment

Environment Subcommittee Hearing: Innovations in Agrichemicals: AI's Hidden Formula Driving Efficiency

May 20th, 2025

Thank you, Chair Franklin, for convening today's hearing on innovations in agrichemicals. And thank you to our witnesses for sharing your insights.

Rhode Island may not be the first state that comes to mind when people think of "agriculture," but we are home to innovative aquaculture and many small farms and producers, including Wright's Dairy Farm in North Smithfield and Phantom Farms in Cumberland. Rhode Island's First Congressional District is also home to research institutions, scientists, and innovators working on the front lines of resiliency and sustainability.

In a state with a long coastline, finding solutions to the climate crisis is crucial to preventing long term damage from sea level rise. Agrichemical innovation to reduce the harmful climate impacts of farming—through artificial intelligence, data modeling, and chemical safety—is important and matters to us. AI systems depend on a foundation of long-term, high-quality data. For the agrichemical sector to operate safely and effectively, models must account for shifting climate and weather patterns. But that foundation is under attack as we speak.

The Trump-Musk Administration has crippled the National Oceanic and Atmospheric Administration's data infrastructure and hollowed out its scientific workforce. Dozens of important datasets, reports, and services have been thrown out the window over the past several weeks due to what I believe to be reckless actions, actions that will be problematic and cause irreparable harm. Without accurate and transparent forecasting and climate modeling, farmers cannot react and plan ahead.

Let's be clear: no algorithm is better than the data it runs on. And if we let politics dismantle the very systems that provide the data farmers use to determine when to plant, water, apply pesticides, and harvest, we are setting ourselves up for failure—across sectors, across states, and across our entire country. We must also remember innovation often begins with research—at public universities—funded by federal dollars. But these investments are being systematically eroded by the Trump administration.

The President has paused billions of dollars in federal grants to research institutions and universities—that is going to cause delays to critical work, destabilizing programs, and jeopardizing the very pipeline of talent and discovery that fuels our innovation economy in this great nation.

Our three witnesses today represent the direct benefits of federal investments in fundamental research. Thanks to federal funding, scientists at public universities throughout the country are working right now to develop AI models and data science that will make agriculture more efficient. The massive commercial and industrial opportunities available in agriculture today are only possible because of these fiscally responsible investments.

But the Trump Administration is not interested in this research. They are trying to slash the National Science Foundation's budget by \$4.9 billion. It is a 55% cut to our country's steward of basic research. It is the very agency that supports the underpinnings of agriculture technology, including AI.

The entities that will be most hurt by Trump are not academic elites - it's the rural institutions, agricultural extensions, our community colleges, and our young students who simply want to pursue and advance the field of science. Thanks to Trump, their opportunities are rapidly disappearing. We all suffer without federal investment in science to address challenges in agriculture and climate. Businesses cannot maintain their advantage, workers suffer, and our global leadership is diminished.

Innovation may be the topic today—but the foundation is science. And right now, that foundation is crumbling beneath our feet. I urge my colleagues to stand up for our federal scientific agencies and support current and future scientists. We need innovators to continue their work—responsibly, ethically, equitably, and well-funded.

Thank you. I yield back.