

# Commentary: Innovative Thinking

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With the holidays upon us, so are novelties, gadgets and the latest appliances. From blankets with arms to robotic pet hamsters, these products are independently unique and sometimes amusing, but they all have one unifying trait: they're the result of innovative thinking.

Innovation is hard to define. The term conjures up images of light bulbs and laboratories, but it represents so much more than fresh ideas and scientific discoveries – it means new outcomes that continually move our lives forward. Technically, innovation is any new invention, but it also can be the result of using existing ideas in new ways.

We see innovation in the hybrid cars we pass on the street, in the high-definition televisions lining our stores and in the vaccines we use to protect our loved ones. But it's also originating in our own backyard.

While West Virginia is home to well-known innovations, like styrofoam and anti-freeze that emerged from the heyday of the chemical industry, many new ideas are in the works right now.

At West Virginia University, researchers are tackling research to help move us toward energy independence, improve treatment strategies for childhood leukemia and help our military better detect threats. Scientists at Marshall University have discovered that acetaminophen may help prevent muscle loss and other age-related conditions, while others are studying genes in an effort to better indicate the origins of certain diseases.

Innovative thinking can be found in each of our higher education institutions across the state, as well as in forward-thinking businesses that are commercializing novel ideas, helping to grow our economy and making a real difference in people's lives.

Protea Biosciences in Morgantown is manufacturing new products – 200 of them – based on the biotechnologies developed at our universities and selling them to medical researchers from around the world. And BomBots, developed by Innovative Response Technologies, a subsidiary of the West Virginia High Technology Consortium, are helping our soldiers in Iraq and Afghanistan combat improvised explosive devices.

All of this work is real and important and should never be overlooked, but the reality is – we must continue working to drive West Virginia's economy with knowledge and innovation.

The state's Higher Education Policy Commission is making more investments in research and innovation than ever before. We are working to leverage state funding to bring

external research dollars to our faculty and students. Science, technology, engineering and mathematics programs and graduation rates are growing as a result.

West Virginia's investments in innovation are aimed at turning research into direct economic development opportunities – going beyond the laboratory to create high-tech job opportunities and new business spin-offs as a result of our discoveries.

This is a formula that allows us to produce intellectual capital, inspiring new ideas and promising opportunities for West Virginians.

When people, resources and ideas combine, innovative thinking results – and almost anything is possible.

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