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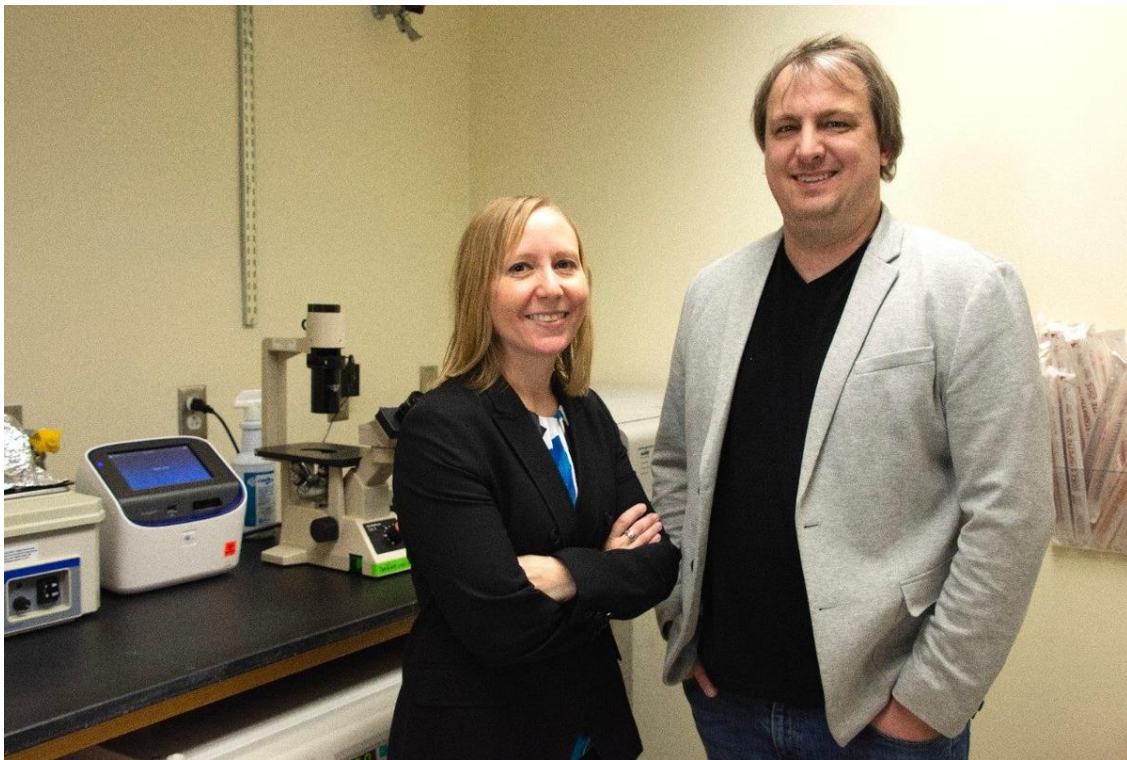
Seeking Better Pain Management, VT Scientists Test New Potential Drug

By Robbie Harris

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The Centers for Disease Control say, around one in five adults suffers chronic pain. Non-addictive pain killers, known as N-SAIDS, don't always work. And while opioids often do, they can be addictive if not used properly.

Scientists at Virginia Tech are testing a new potential drug that may hold promise.



Ann Gregus and Matt Buczynski of the Virginia Tech School of Neuroscience
Credit Virginia Tech

At this point, the drug compound doesn't have a name, only a number, ML315. It appears to act on an enzyme in the body similar to one that dulls pain when you take a non-steroidal anti-inflammatory drug, or N-SAID.

The compound appears to have “the pain killing, analgesic effects of opioids without the side effects,” says Virginia Tech research scientist Ann Gregus. She's part of a team that is testing the compound, first discovered at the National Institutes of Health. Gregus says more testing needs to be done to confirm that the new drug won't be addictive.

“There are studies to show that N-SAIDS don’t have addictive properties. We might surmise that, being part of a similar pathway, we wouldn’t necessarily expect that to be the case but, again we would need to test that.”

And while opioids remain the drug of choice for severe, acute pain, such as in surgery, cancer or end of life treatment, they’re not as good for chronic pain. Syndromes like diabetic neuropathy, rheumatoid arthritis and other autoimmune diseases depend on safe, long term pain management.

On average it takes around ten years to develop a new drug. If it proves effective, it could begin as a prescription and ultimately become available over the counter.

A paper published on the drug and its likely impact on treating certain types of chronic pain appears in this month’s issue of the medical journal PAIN. The paper was written by Gregus and Buczynski, with coauthors Tony Yaksh, a pain expert at the University of California San Diego, and Anton Simeonov, scientific director of NIH’s and the National Center for Advancing Translational Sciences. Ganesha Rai, Dave Maloney, and Ajit Jadhav, all of the NIH, codeveloped the drug compound.