

OIL PRICES UP, BUT STOCKS MOSTLY DIP

Stocks moved mostly lower yesterday as gains in blue-chip energy companies and banks were not enough to make up for losses in the broader market.

The bond market took heavy losses, with prices falling sharply and the yield on the 10-year U.S. Treasury note rising to 2.38 percent, its highest level in a year and a half.

Oil stocks climbed after OPEC nations, which produce one-third of the world's oil, agreed to trim production for the first time in eight years.

The Standard & Poor's 500 index lost 0.27 percent, to close at 2,198.81, and the Nasdaq composite dropped 1.05 percent to 5,323.68. The 30-member Dow Jones industrial average closed up 1.98 points to 19,123.58. The gain was attributable to big increases in a handful of Dow components, mainly Goldman Sachs, Chevron and DuPont.

Donald Trump's election has sent investors fleeing out of safeplay assets such as bonds, gold and dividend-paying stocks this month and into riskier investments like small companies, which would benefit the most from a growing domestic economy. The Russell 2000 index of mostly small to mid-sized companies soared 11 percent in November, its biggest one-month gain in five years.

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Deal on vaccine tech

Codagenix, Stony **Brook University in** license agreement

BY JAMES T. MADORE

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A Farmingdale-based startup has secured exclusive rights to a technology developed at Stony Brook University that could spur the creation of new vaccines for influenza, Zika and other diseases, officials said yesterday.

Codagenix Inc. has signed a 20-year licensing agreement with the university for use of a software algorithm that weakens a virus by changing its DNA. The weakened virus is then used to make a vaccine that produces a stronger immune system response than that caused by other vaccines.

The algorithm was developed in the Stony Brook laboratory of Eckard Wimmer, a microbiology professor. He and fellow researchers Steffen Mueller and J. Robert Coleman then established Codagenix in 2012 to commercialize the technology.

"The advantage to our strategy and the technology behind it is that we can design virus vaccine candidates quickly," Wimmer said.

Stony Brook professors Bruce Futcher and Steven Skienna also worked on the algorithm.

Coleman, chief operating officer at Codagenix, said the li-



SBU and Codagenix researchers in the lab of Dr. Eckard Wimmer (rear center), where a software algorithm was developed to change viral DNA. The deal provides an edge against competition.

censing agreement "provides us with a competitive advantage to prevent others from using the approach."

He also said the agreement allows Codagenix to take on partners to develop additional vaccines and to raise more funds from investors.

"Without the license no one would invest because there is no protection against competition and copycats," Coleman said. "An exclusive license is a must if a company wants to secure investors or large pharmaceutical partners as we do."

Codagenix has seven employ-

ees and has secured more than \$6 million in federal research grants and venture capital.

The licensing agreement stipulates that Codagenix pay Stony Brook, via the Research Foundation for the State University of New York, a yearly fee plus payments when objectives are met, and royalties from vaccine sales. The amounts were not disclosed yesterday.

The agreement is the 16th to be completed by the university so far this year. Eleven licensing agreements were completed last year, records show.

Stony Brook has received

royalty payments totaling \$8.6 million so far this year and \$13.2 million in 2015. The revenue is a key element in the university's annual budget.

Stony Brook's president, Dr. Samuel L. Stanley Jr., said the licensing agreement would yield benefits to medicine, the university's finances and the economy.

"Finding new and better ways to protect against infectious diseases is extremely important in the 21st century," he said. "This collaboration with Codagenix is groundbreaking science that elevates approaches to developing new vaccines."

Netflix offering offline option for videos

The Associated Press

Netflix subscribers can now binge on many favorite shows and movies when they don't have an internet connection.

The offline option nounced yesterday gives Netflix's 87 million subscribers offline access to videos for the first time in the streaming service's decade-long history.

Netflix is matching a downloading feature its rival Amazon.com has been offering to its video subscribers for the past year. It's also been available on YouTube's popular video site, via subscription. The new feature puts Netflix a step ahead of two other major rivals. Offline



On-demand internet-streaming service Netflix is making movies and TV shows available offline via updated apps.

options aren't available on HBO's internet-only package, HBO Now, or on Hulu.

Netflix subscribers wishing to download a video on a smartphone or tablet need to update the app on their Apple or Android device. Not all of the selections in Netflix's video library can be downloaded, but several of the most popular shows, including "Orange Is The New Black," "House of Cards," and "Stranger Things," are now available to watch offline.

Downloadable movies include "Spotlight," this year's Oscar winner for best film. Missing from the downloadable menu are movies and TV shows made by Walt Disney Co. Those still require an internet connection to watch on Netflix.

The California company is promising to continue adding more titles to its offline roster.

Netflix's DVD-by-mail service has access to recent theatrical releases before they are available for streaming. In September, the service had 4.3 million subscribers, a drop of 10 million during the past five years.