



Inspired Life Science Technology

Going Viral

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Seeking Your Feedback - A Survey from InDevR

It takes a variety of people to make a team. InDevR is interested in what our readers' roles are at work. Please take a brief moment to respond to this question by participating in our third readership survey.

[Click here to begin.](#)



News in Life Science Technology

FDA approves new influenza diagnostic kit

Qualified international health laboratories will soon have a new method to quickly identify seasonal influenza and novel influenza A with pandemic potential. The Centers for Disease Control and Prevention (CDC) have developed a kit that uses a three-model design to identify and distinguish between different influenza types. The kit will result in less material waste and more savings for the government and qualified health agencies.

While upper respiratory tract tests are commonly available, this is the only FDA-approved kit for lower respiratory tract specimens. Studies have shown that lower respiratory tract tests can detect influenza virus infections that upper respiratory tract tests miss.

[Read more](#)

Infants being vaccinated against rotavirus can prevent serious disease in unvaccinated older

children and adults

The CDC recently found that vaccinating infants against rotavirus could prevent the disease in older children and adults.

Tens of thousands of unvaccinated infants and children are hospitalized each year due to severe diarrhea, which can be caused by rotavirus. Vaccinations began in 2006 and the number hospitalized has significantly declined since then.

Researchers also analyzed nationally representative hospital records from 2000-2008 to determine if infant vaccinations for rotavirus affected hospitalization of older populations for the disease or severe diarrhea. Hospitalizations across all age groups, including those ineligible for the vaccine, decreased.

Researchers believe that the vaccination also has the potential to prevent the spread of the disease and resulting deaths in low-income countries where rotavirus occurs year-round.

[Read more](#)

Debugging Dengue

This TWiV podcast discusses the findings of three papers that studied the use of Wolbachia to prevent the spread of dengue, a mosquito-borne viral disease that infects an estimated 50 million people around the globe every year.

Wolbachia is a harmless endosymbiotic bacterium that affects a wide variety of insect and arthropod species. Its presence prevents some diseases including dengue virus from spreading to humans.

Listen to the TWiV hosts discuss their ideas on how Wolbachia prevents the spread of dengue [here](#).

Virus of the Month: Chikungunya

Chikungunya fever is a viral disease that is a member of the genus *Alphavirus* in the family *Togaviridae*. It is spread by mosquitoes, which become infected when they feed on humans who have the disease. The virus then spreads to those whom the mosquito bites afterwards. The aggressive daytime biter, *Aedes aegypti*, is the primary vector of this virus to humans. *Aedes albopictus* (the Asian tiger mosquito) has also transmitted the virus in Asia, Africa and Europe.

Chikungunya was first described in Tanzania in 1952. Its name means, "to become contorted" in the Kimakonde language, which describes the appearance of those who suffer joint pain.

Humans can become infected with the chikungunya virus through mosquito bites. The best ways to prevent chikungunya infection are similar to preventing dengue or West Nile: use insect repellent containing DEET, Picaridin, oil of lemon eucalyptus or IR3535, wear long sleeves, screen windows and doors and empty water from mosquito sources such as flowerpots, buckets and barrels. There is no vaccine or preventative drug available against chikungunya.

Diagnosis of the virus can include serological tests and reverse transcriptase-polymerase chain reaction (RT-PCR) methods. Chikungunya is usually not fatal and treatment is determined by what relieves the sufferer's symptoms. Symptoms could include illness with fever, joint pain, headache, fatigue, nausea, vomiting, muscle pain, rash and joint pain. "Silent" chikungunya (infection without illness) can occur, but it is unknown how often.

Acute chikungunya lasts between a few days to two weeks, but in some cases the virus could last several weeks. While most patients fully recover, joint pain can sometimes last years. It is believed that infection confers life-long immunity.

The following online resources were utilized for this section of *Going Viral*:

<http://www.cdc.gov/ncidod/dybid/chikungunya/>

<http://www.who.int/mediacentre/factsheets/fs327/en/>

Green Ideas



Green Marketing

Your organization might already do its part for Mother Nature, but does it convey that green message to your customers? If not, it'd be wise to start. According to a study by Ryan Partnership Chicago, environmental friendliness is an important factor to consumers, along with quality and healthiness.

While there is not a clear sustainability ranking for products and companies yet, One Green Score for One Earth reports that 80 percent of U.S. consumers desire knowing the impact of their choices. The study suggests that if consumers know that impact, it could sway their purchasing decisions.

A business that provides services rather than products could also benefit from highlighting its commitment to sustainability. Corporate interviewees indicated the importance of increasing energy and supply chain efficiency to promote an organization's "green" side.

Wondering how your company can highlight its sustainability efforts or which new direction to take? The study's Sustainable Purchase Influence Factors offers ideas. The factors indicate categories relevant to consumers ranked by "Green Importance". Categories include "Natural", "Eco-packaging", "Fair trade" and "Supports local community".

Read more [here](#).

InDevR would like to learn more about things you are doing to make your business and our planet a little "greener". Feel free to send any tips or solutions to info@indevr.com. They may be featured in an upcoming issue of *Going Viral*!

Upcoming Events

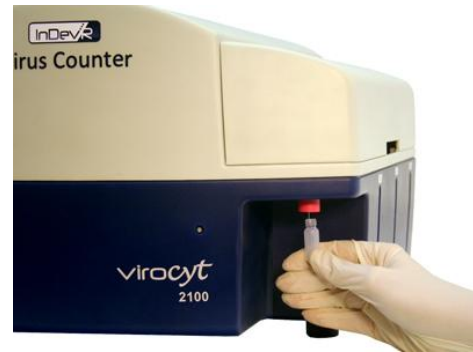
Interested in learning more about the virus quantification and pathogen detection technologies being developed at InDevR? Sign up for one of our Webinars or connect with an InDevR team member at an upcoming biotechnology conference.

New Virus Quantification Method Webinar

Thursday, September 22, 2011

1 - 2 p.m. (MST)

The Virus Counter is a revolutionary new instrument developed explicitly for virus quantification as an alternative to plaque titer assay.



Learn how the Virus Counter's capabilities will help with your research and development efforts. We will begin with a brief overview of the operation principles of the instrument and subsequently discuss several datasets detailing viral stock quantification and real-time cell culture monitoring.

[Click here](#) to learn more about the New Virus Quantification Method Webinar.