



Rototeller - Rotary Club of Forest Grove

FGRotary.org

Club Leaders

Blake Timm

President

Tim Pearson

President-Elect, Program
Chair

Alma Lozano

Executive Secretary

Ken S. Cunningham

Treasurer

Claudia Yakos

Membership Chair

Julia Kollar

Vice President

Tom Raabe

Past President

Mike Yakos

Rotary Foundation Chair

Duties

Program

Dec 12 Dennis Wickham

-Polio Plus

Dec 19 Forest Grove HS

Music Program (With
Daybreak)

Dec 26 No Meeting

Jan 2 - Sharon Olmstead

- Scholarship Committee

Rototeller Article

Dec 12 Alma Lozano

Dec 19 Mike Hundley

Dec 26 No Meeting

Jan 2 Paul Waterstreet

Greeting Partners

Dec 12 Dayna Mullins &

Jeannine Murrell

Dec 19 Mark Nakajima &

Greg Nemchick

Dec 26 No Meeting

Jan 2 Bob Nixon &

Virginia Ohler

Thought For The Day

Dec 12 Doug Thompson

Dec 19 Alma Lozano

Dec 26 No Meeting

Jan 2 Mary Welch

We Are Meeting In The MPR At Pacific University This Week!

December 12, 2018

A Freeze-Dried Polio Vaccine Could Help Finally Eradicate The Disease

Polio once paralyzed more than 350,000 people each year worldwide. Today, vaccines have dropped the number of reported cases to just 407 in 2013, [according to the CDC](#).

But the disease still lurks in developing countries because vaccine storage and transport requires refrigeration. Now, scientists find freeze-drying a polio vaccine keeps it stable for as long as four weeks even in hot temperatures. The stability could enable vaccine distribution that could lead to the end of the disease.

“No matter how wonderful a drug or vaccine is, if it isn’t stable enough to be transported, it doesn’t do anyone much good,” Woo-Jin Shin, a virologist at the University of Southern California in Los Angeles and co-author of the new research, said in a statement.

Polio Paralysis

Poliovirus causes the malady known as polio, a highly infectious disease that often starts out with flu-like symptoms but can lead to permanent paralysis. The condition becomes deadly when an infected individual’s breathing muscles become immobile.

In the U.S. and other developed countries, vaccines eliminated the disease, yet the virus still has strongholds in Afghanistan, Nigeria and Pakistan. Storing the vaccine depends on keeping it cold. But refrigeration is not reliable or available in many developing countries. Jae Jung, a microbiologist and Shin’s advisor, wanted to make a shelf-stable vaccine.

Suitable Stability

Jung and his research team first isolated an injectable polio vaccine. Then, like bakers playing with various amounts of sugar, milk and butter to make the perfect frosting, the researchers tried many ways to stabilize the vaccine. Among other things, they tested how much moisture to extract from the vaccine and the concentration of different stabilizers to add.

The scientists discovered they needed to remove a lot of moisture from the vaccine. The moisture content of the winning formulation was only 0.77 percent, the team reports [today in the journal mBio](#).

Raffle Prize

Dec 12 Mark Nakajima
Dec 19 Greg Nemchick
Dec 26 No Meeting
Jan 2 Bob Nixon

Meeting Place

Dec 12 MPR Pacific U
Dec 19 MPR Pacific U
Dec 26 No Meeting
Jan 2 MPR Pacific U

Events

Concours Board Meeting

December 11, 2018

Rotary Board Meeting

December 20, 2018

Thirsty Thursday

December 20, 2018

Crab Feed

March 27, 2019

Forest Grove Concours d'Elegance

July 21, 2019

Board Members

Director 2016 - 2019

Pete Van Dyke

Director 2016 - 2019

Lorrie Hutchins

Director 2016 - 2019

Bryce Baker

Director 2017 - 2020

Doug Thompson

Director 2017 - 2020

Mackenzie Johnston

Carey

Director 2017 - 2020

Josh Shinoda

Director 2018 - 2021

Michelle Thomas

Director 2018 - 2021

Paul Waterstreet

Director 2018 - 2021

Ryan Garcia

Satellite Club Director

Stan Reasoner

Community Outreach Chair

Mike Hundley

Fund Raising Treasurer

Jim Crisp

Club Services Group Chair

Geoff Faris

New Generations Chair

Ryan Garcia

The researchers then put their discovery to the test. They stored the freeze-dried vaccine for four weeks at 37 degrees C (that's 98.6 degrees F). When the scientists vaccinated mice with the unrefrigerated vaccine, the rodents' immune systems responded as though they had received the refrigerated vaccine. The new vaccine also protected the mice from infection with the poliovirus as well as a commercial vaccine.

Health centers only have so much space to store vaccines, but if scientists can extend the medicine's shelf life to perhaps three or even 12 months, then the vaccine supply chain could get rid of the need for cold storage and bring the world one step closer to polio eradication.

Roni Dengler in Discover Magazine November 27, 2018

Submitted by Alma Lozano

Christmas Shopping Alert!

Our "Hope for the Holidays" committee will continue collecting money this week for our annual shopping spree for needy families but this will be the last day! Last year you were extremely generous and we were able to help 20 families. Please consider making a donation to help families have a wonderful holiday season.

As in the past, when you make your donation to this worthy cause, if you write a check payable to the Forest Grove Rotary Foundation, you will receive a letter our club president acknowledging the amount you contributed. This donation may be tax deductible.

Number of Wild Poliovirus Cases Globally as of December 4, 2018

New Cases Last 7 Days	1
YTD - 2018	28
YTD - 2017	16
Total - 2017	22
Total - 2016	37
Total - 2015	74
Total - 2014	359
Total - 2013	416
Total - 2012	223
Total - 2011	650
Total - 2010	1,352
Total - 2009	1,604
Total - 2008	1,651

Source: <http://polioeradication.org/polio-today/polio-now/this-week/>