

## Take your best shot

By Dr. E. Kirsten Peters

When I was a youngster in the 1960s I had all the shots little kids went through back in the day. And because I'm a klutz and regularly hurt myself outdoors, I've periodically had my tetanus immunity updated. A few years ago, I underwent a series of shots for rabies after having a scary adventure with an ill coyote. Last summer I got the shingles vaccine when my assistant was suffering from a shingles outbreak. And to round it all out, tonight after work I'll be getting the influenza vaccine for this season's strains of flu virus.

My long history of receiving vaccinations — even including the potent shots given for rabies — has not caused me more than temporary discomfort. I'm truly glad I live in a time and place where vaccines are available for many infectious illnesses.

Simply put, I'm puzzled that millions of Americans fear potential side effects of vaccines more than they fear the diseases against which the shots can protect us.

In a recent NPR-Thomson Reuters Health Poll, an amazing 21 percent of those interviewed said they believe that autism is linked to vaccines. And of people who say they've changed their views about vaccines in the last five years, most said their opinions are becoming less favorable. That's apparently why the vaccination rate for measles, mumps and rubella (MMR) recently fell almost three percent.

Of course, nobody likes getting injections. But to believe that vaccinating children leads to autism is, at this point in history, to ignore the evidence. And this rock head feels strongly that willfully closing our eyes to the facts puts our kids at risk.

The noise that sprang up around childhood vaccines mostly comes from a study by a British doctor, one Andrew Wakefield by name. In 1998 Dr. Wakefield published a paper based on the medical histories of 12 patients with respect to the MMR vaccine. Wakefield's study led many parents to fear that the MMR shot increased the chance a young child would develop autism.

It's true that the first signs of autism or other serious developmental issues often arise in young children right around the time they are receiving lots of vaccines from their pediatricians. This, of course, doesn't mean the vaccines are causing the developmental problems. (The fact that I first notice I'm coming down with a sore throat while I'm reading one evening doesn't mean the act of reading is causing the sore throat.)

Long after the initial study hit the streets, a careful reexamination of Wakefield's work was done. It showed that of the 12 children in the study, three actually never had autism, and five showed signs of developmental problems before they got the vaccine. Further, doctors reviewing the study came to believe not that Wakefield had made honest mistakes in his study, but that he had deliberately falsified the data on which his published study rested. And perhaps most damning of all, it came to light that Wakefield was paid more than \$670,000 by a law firm that planned to sue the manufacturers.

In short, the case was a gut-wrenching example of what can go wrong with medical research. Wakefield's conduct was so destructive and misleading that British authorities stripped him of his medical license.

But the damage lingers.

Wakefield's original paper led a number of parents to withhold the MMR vaccine from their kids. In Britain vaccination rates dropped significantly and, sure enough, the number of kids coming down with measles went up.

Children — and adults — are protected from an amazing array of infectious illness due to vaccines. But the fact that vaccines are so effective may be what blinds us to their value.

I suspect that if we still intensely feared polio, as we did until effective vaccines were developed for it, we'd appreciate modern shots a lot more.

Roll up your sleeves with me. It's time for influenza shots — and I think it's high time for all of us, including presidential candidates, to quit fear-mongering about childhood immunizations.

*Dr. E. Kirsten Peters, a native of the rural Northwest, was trained as a geologist at Princeton and Harvard. Follow her on the web at [rockdoc.wsu.edu](http://rockdoc.wsu.edu) and on Twitter @RockDocWSU. This column is a service of the College of Agricultural, Human and Natural Resource Sciences at Washington State University.*

## Family holiday open house

(Submitted by the Lakeshore Museum Center)

If you need something to do with your kids or grandkids over the holiday break, consider the Family Holiday Open House.

Join the Lakeshore Museum Center's education staff on Wednesday, December 21 from 1 to 4 p.m. where kids will get a chance to do fun and historic Victorian holiday crafts. Participants can drop by one of the many craft stations to create a take-home item and then stay to explore the museum's galleries and hands-on rooms. The museum is located at 430 W. Clay Avenue in downtown Muskegon.

Additional details are available on the website, [www.lakeshoremuseum.org](http://www.lakeshoremuseum.org).

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## Stepping back from Dam power

By Dr. E. Kirsten Peters

Just over a century ago, when William Howard Taft was president and I was a young woman, an entrepreneur named Thomas Aldwill started building a dam in the Northwest woods of the Olympic peninsula in Washington. The 108-foot-high Elwha dam became an early hydroelectric powerhouse, helping to fuel population and industrial growth related to activities as varied as forestry and shipbuilding.

Over the following decades, more hydro-dams in the west were built. Mega-dams like Grand Coulee and Boulder rose across rivers, and the cost for electricity to users dropped sharply.

After our original investment in construction, many dams have operated at modest cost and generated electricity while also helping to control flooding that used to routinely threaten cities like Portland, Oregon. Some rivers, such as the lower Snake and Columbia, have also been transformed into bodies of slack-water connected by locks that allow ocean-going barges to ship goods far inland from the sea.

We haven't built a major dam in the U.S. for many a year, while China is going through an orgy of dam construction. But we pretty much filled up our best locations for hydropower a good while back.

And now we're pivoting around another corner in history, marking it by turning off the turbines at the Elwha Dam and a slightly younger sister facility on the same river. The two dams were taken off-line this summer as the first step toward their demolition. Over the next three years at a cost north of \$300 million, a construction firm will remove the dams, restoring the free-flow of the Elwha River.

Prior to having dams thrown across it, the Elwha River was home to rich salmon runs. But because the dams had no fish ladders, they cut off streams in and near Olympic National Park from the annual migration of fish moving inland from the sea. Local tribal members have long supported removing the dams as the first step toward restoring the fish runs, a central part of their cultural traditions.

The federal government actually agreed to remove the Elwha River dams back in 1992, but political supporters of the dams blocked appropriations for removal over nearly 20 years. Now the money has been authorized and the work of breaching the dams started in September.

The story of the Elwha dams matters to us all because, as we start to step back from hydroelectric power, we will increase our reliance on other energy sources.

About half our national appetite for electricity has



**Caleb Ahumada**, pictured here with the two SJO Michigan State Fair series SX championship trophies he won for the 2011 Motocross racing season. Caleb raced in the 12 to 15 year old 85 cc advanced class and also the super mini categories. He raced in 19 events and won 17 in the 85 cc category and 16 in the super mini to give him the state championship in both classes by a wide margin. Caleb was 14 years old during the racing season and goes to Calvary Christian School. He raced a YZ85 Yamaha and was sponsored by Team Babbitts. His parents are Joe and Lana Ahumada.

been satisfied by burning coal. Coal gives us cheap energy, but most people don't want to use more coal to generate electricity because of its environmental impacts.

In recent years, we've built many new power plants that burn natural gas. But some people argue we should save our natural gas to meet more of our transportation needs, as well as to economically supply gas to consumers who rely on it for home heating and cooking.

About a fifth of our natural electricity is generated by nuclear reactors. Our civilian nuclear power plants have a good safety record stretching over many decades, but after events in Japan earlier this year, many Americans are wary of nukes and likely won't support building new ones.

While we've seen sharp growth in wind power in recent years, the total electricity delivered by wind is small. Some citizens don't want windmills near them due to what they term noise and visual pollution.

But it's a simple fact that our homes, offices, stores and manufacturing plants are all fueled by electricity. That's the case because electricity is the miraculously flexible energy that can either heat or cool a space, as well as run devices as varied as a computer or a washing machine. Soon electricity may power your cousin's commute to work.

Life is about tradeoffs. We Americans decide what we are willing to exchange for what when it comes to creating the energy on which we all depend. We can remove dams in the West, and in some places we'll help salmon runs if we do. But we can't usefully address our energy needs if all we do is say no to our various power sources.

The time for a good public discussion of the evolving landscape for electricity is past due.

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## Energy certificates for Christmas giving

(Submitted by Consumers Energy)

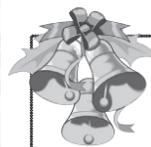
Holiday shoppers looking for a practical gift for a relative, neighbor, or person in need might consider a Gift of Energy certificate from Consumers Energy.

"There are few gifts more helpful than the gift of a warm home," said Doug Detterman, manager of small customer care for Consumers Energy. "Buying a Gift of Energy certificate for someone in need is truly a heart-warming act this time of year. Many service clubs, charitable organizations and emergency responders, including fire departments, buy multiple Gift of Energy certificates and provide them to neighbors in need."

Those receiving gift certificates just mail them in with their monthly Consumers Energy bill payment, and the amount of the certificate is deducted from the bill total. Certificates cannot be redeemed for cash. The certificates are available in amounts of \$10, \$20, \$25 and \$50.

"The gift certificates don't have the buyer's name on them, so if desired, you can anonymously help someone in your family, your neighborhood or your place of worship," said Detterman.

The certificates are available at the Consumers Energy office on Hoyt Street in Muskegon, or can be purchased through the mail by sending a check or money order to Consumers Energy, P.O. Box 30079, Lansing, MI 48937-0001. Credit card charges are not accepted for gift certificates.



## Christmas

by Dorothy Anna Birkholz

*The holidays will soon be here  
And everyone is rushing around  
Shopping and buying gifts and toys  
How many are thinking...  
About the true meaning of Christmas?  
Remember that it is not  
Parties and gifts and big dinners.  
It is Jesus Christ's birthday  
The most wonderful birthday ever.  
Jesus later died on the cross for us  
Please remember this every day  
And most of all...  
Celebrate Jesus Christ's birthday  
On Christmas Day!*