

St. Pauli Lutheran Church  
P.O. Box 944  
Thief River Falls, MN 56701  
historicstpauli.org

# March 2021 Newsletter



***SPRING!***

*Faye's tulips on her dining room table*

# IN MEMORIAM

**Fern Williams**

**February 15, 1929 – February 22, 2021**

*Fern was the daughter of Valborg and Edwin Hanson. Valborg is fondly remembered as the "Quilt Lady" for the dozens of quilts she made for St. Pauli to donate to Lutheran World Relief.*

Fern Williams, 92, of Thief River Falls, MN passed away on Monday, February 22, 2021 at her home.

Private family services will be held on Saturday, February 27, 2021 at Trinity Lutheran Church in Thief River Falls, MN with Rev. Genelle Netland officiating. Burial will follow at Greenwood Cemetery in Thief River Falls. A Celebration of Life is planned for this coming summer when friends and family can safely gather to more fully commemorate Fern's earthly life.

Fern Phyllis Hanson was born February 15, 1929 at Mercy Hospital in Thief River Falls, MN the daughter of Edwin and Valborg (Engelstad) Hanson. She was baptized and confirmed into the Lutheran faith. Fern grew up in Rocksbury Township, Pennington County, MN on the Peder and Mathilde Engelstad homestead. She attended Rosehill District 165 Country School in Rocksbury



Township and graduated from Lincoln High School in Thief River Falls with the class of 1946.

Following high school, Fern attended vocational schooling in Minneapolis staying with her cousin Alice (Bill) Munt. She returned to Thief River Falls in 1947 and did clerical work with the Soo Line Railroad.

On October 2, 1948, Fern was united in marriage to Russell Williams at Trinity Lutheran Church in Thief River Falls. They raised their two children, Douglas and Debra.

Fern worked at the Falls Starkow Clinic for many years in various capacities until her retirement on February 1, 1994.

Fern was an active member and dedicated volunteer of Trinity Lutheran Church. She was a member of the B.P.O.E. Does where she held offices at the local and state level. Fern served on the board of the Peder Engelstad Pioneer Village for many years.

Fern, Russ and their family enjoyed numerous camping trips each summer in the state and provincial parks of Minnesota and Canada. She enjoyed doing crossword puzzles in ink, collecting antiques especially depression glass, needle crafts, bird watching, and traveling with Russ to visit family. She was especially jazzed when spending time with her five grandchildren. After Russ's passing, she spent many winter vacations in Arizona with Deb's family.

Fern was a delightful combination of contrasts. She loved history but was always interested in learning new things. Fern was thoughtfully intelligent but a minute later she could be joyously silly. She was calm and sweet as well as actively directive.

Fern loved the outdoors and driving through the countryside but was also content sitting indoors engaged in quiet activities. She was highly organized but willing to take on new projects. She was a life-long learner, anticipating each new day.

Survivors include her son, Dr. Douglas (Kim) Williams of Bemidji, MN; daughter, Debra (Mike) Schmit of Phoenix, AZ; grandchildren, Baret (Dane) Williams-Furfaro, Kari (Mark Bailey) Williams, Marin (Dustin) Oldenburg, Matt Schmit, and Jesse Schmit; great-grandchildren, Nilla, Kai, Espen, Sawyer and a fifth to arrive in August; sister-in-law, Lois Williams; next door neighbor and wonderful friend, Wanda Murphy; and many cousins, nieces, and nephews.

She is preceded in death by her husband, Russell; parents, Edwin and Valborg; siblings, Pearl Hanson, Florence Hanson, Anna (Bill) Huber, and Dennis Hanson.

*In lieu of flowers, memorials are suggested to Trinity Lutheran Church and Peder Engelstad Pioneer Village.*

# Minutes of the Church Council

## January 7, 2021

The St. Pauli Church Council Met on Thursday January 7, 2021 at 7:00pm at St. Pauli Church. Board Members Present: Virginia Anderson, Wade Benson, Craig Folkedahl, Ivette Garrett, Erin Rondorf and Pastor Carl Hansen.

The meeting was called to order by President Garrett at 7:05. Pastor Carl opened the meeting by reading Psalm 30.

Approval of Agenda: The agenda was reviewed and approved.

Secretary's Report: M/S/C – (Benson/Hansen) to approve the December 2020 secretary's report

Treasurer's Report: M/S/C (Anderson/Rondorf) Wade presented the Treasurer's Report.

Total church account balances were not prepared yet, as all documents had not been received yet (meeting earlier in the month than normal).

Pastor Carl's Report: Pastor Carl will be sending over his report digitally to be included in the annual report.

Reports of members in sickness or distress: Shirley Johnson is in need of our prayers.

New Members or interested in membership: No Report Given

### Reports:

- a. Welca – n/a
- b. Board of Education- n/a
- c. Other – n/a

### Old Business:

- a. Annual Meeting:

Due to the mandated meeting restrictions caused by the Covid-19 pandemic, the Council voted at its December 17, 2020, that the 2020 Annual Meeting and the Congregation vote will be held via mailed agenda, mailed constitution with the highlighted underlined additions and stricken words, reports, budget, pertinent information and ballot forms. All votes will be presented, in person for designated person, at the church on the date of the meeting during 10am to noon. The votes will be tabulated and reported the same day.

Material pertaining to the annual meeting including the proposed Constitution, agenda, annual meeting notes, and ballots will be mailed in a timely manner to give voting members ample time to review, ask questions, and mark their ballots.

- b. 125th Anniversary - Decide in March to set date. Will have a better handle on vaccination timeline.
- c. Bathroom remodel- Don needs the shut -ff valves moved. BNJ was able to do that. Virginia will call Kathy Alberg to ask if she is interested in painting.

### New Business:

- a. Motion to approve the February 7, 2021 Annual Meeting Agenda – Benson/Anderson
- b. Motion to approve the Secretary's Report of the February 2, 2020 Meeting – Folkedahl/Anderson

- c. Motion to approve the Treasurer's Report for Jan 1- Dec 31 2020 – Rondorf/Garrett
- d. Motion to approve the Membership Report- Folkedahl/Benson
- e. Motion to approve the Board of Education/Sunday School Report- Garrett/Benson
- f. Motion to approve the WELCA Report- Anderson/Rondorf
- g. Motion to approve the proposed Budget for 2021- Garrett/Folkedahl
- h. Motion to approve council trustees for 2021:
  - a. Craig Folkedahl as President
  - b. Virginia Anderson as Secretary
  - c. Wade Benson as Treasurer
  - d. Tammy Haugen as Trustee
  - e. Jim Strandlie as Trustee
- i. Motions to approve staff for 2021: Anderson/Benson
  - a. Myles Alberg as Heat Caretaker
  - b. Faye Auchenpaugh as Organist
  - c. Valarie Torstveit as Church Recorder
  - d. Gary Iverson as Financial Secretary
  - e. Kari Torkelson as President of the Board of Education/Sunday School

The meeting was closed with the Lord's Prayer. The meeting was later adjourned via email on January 11th by Garrett/Rondorf.

Erin Rondorf St. Pauli Church Secretary

### **Treasurer's Monthly Report for St. Pauli January 2021**

Checking Acct. Balance End of Dec 2020:	\$12,405.40
January 2021 Revenue:	\$3,600.00
January 2021 Expenses:	(\$2,877.97)
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Checking Acct. Balance End of January 2021:	\$13,117.43
Other Account Balances End of January 2021:	
Education Fund	\$1,100.23
Edward Jones	\$73,844.59
Memorial Fund	\$13,000.56
Mission Grant	\$4,433.29
Savings	\$36,565.03
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<b>Total Account Balances End of Jan 2021</b>	<b>\$142,061.13</b>
<b>Cemetery Ass'n Funds End of Jan 2021:</b>	<b>\$ 59,520.21</b>

## March Milestones

### Birthdays

- Mar. 4 Ken Cedergren
- Mar. 10 Laurie Nelson
- Mar. 13 Gabe Haugen
- Mar. 15 Sue Kotz
- Mar. 22 Deone Cerny
- Mar. 26 Staci Reay



### Anniversaries

- Mar. 12 Neil and Sharon Bugge

# Wednesday Meditations

At the February church council meeting, Pastor Carl offered to do weekly Wednesday meditations during Lent. The council accepted his offer and you will be receiving these on either Tuesday or Wednesday of each week.

## Sermons from Pastor Carl

*Our last in-person worship service at St. Pauli was March 15, 2020. These two sermons are particularly fitting and reflect our shared feelings as we grapple with separation. Pastor Carl does a weekly sermon and is also doing a Wednesday reflection during Lent. If you would like to be included on the email notices, let Faye know at [auchenpaugh@gmail.com](mailto:auchenpaugh@gmail.com).*

**Epiphany 5B, Isaiah 40:21-31  
February 7, 2021**

***“Those who wait for the Lord shall renew their strength. They shall mount up with wings like eagles, they shall run and not be weary, they shall walk and not faint.”***

Americans hate to wait; for the Lord—or anyone else. I was raised by a mother who made sure that we got to church 30 minutes early so that we would get a seat—and we always did. Later I married a lovely wife who understood that the time I said that we needed to leave was the earliest time that we might depart. So, I learned to wait with lips zipped, but stomach churning.

When we go to the doctor, we would like the problem solved yesterday and our pain alleviated by means of a magic pill. We do not wish to hear that our problems might relate to the fact that we have more than enough insulation around our waistlines to sustain a Grizzly Bear through a winter’s hibernation. When the doctor suggests that we should exercise a bit more, we wonder why the frequent pressing of the buttons on the remote control is not sufficient exercise. In America, it is ironic that one who is hospitalized is called a patient, because most of us are anything but patient when we are hospitalized.

This weekend, Americans celebrate Super Bowl Sunday. I remember a previous Super Bowl Sunday when the commentators remarked that it was very unusual that the Pittsburgh Steelers had only 2 coaches in 37 years. For most NFL teams and businesses and politicians the question is, “What have you done for me lately?”

Now the people who originally heard the prophecy of Isaiah had a legitimate beef. Their grandparents had been shipped from the Holy Land into exile in Babylon. They had waited and waited; and prayed and prayed and prayed to go back to Israel. But there they were, stuck in Babylon. Stuck in a place that God’s promised to make a great nation of Abraham and his descendants; a nation through whom all the families of the earth would be blessed; that promise now seemed null and void.

For almost a year, we have been stuck in place by the virus. Our last in-person worship service took place at St. Pauli on March 15, 2020. While my father, Woody Hansen, was born in Livermore, Iowa on September 19, 1918 during the height of the Spanish Flu Pandemic, I never considered the possibility that I too might experience a pandemic.

I miss you. While I enjoy preparing sermons and am thankful that electronics enable us to share God’s word online, I miss your presence, congregational singing, sharing the Lord’s

Supper, and gathering for food and fellowship after worship. You are a very special community of faith.

Fortunately, there are a number of worship services available on TV. Lately I have been singing along with the Hour of Worship at 11 a.m. from Messiah Lutheran Church in Fargo.

Their choice of hymns has helped me to refresh the vocal cords that God gave me. But I am really looking forward to the day when we can join in making a joyful noise to the Lord with you at St. Pauli.

Today’s first lesson from Isaiah 40 is an ideal scripture to encourage us as we wait for the Lord. When Israel was stuck, and when you and I are stuck, which way do we look? We tend to look down. That’s often the only reality that we see. But God says, “**Lift up your eyes on high and see.**” See what? See me, the Lord says—the one who knows you by name and who has made you his own.

***“Have you not known? Have you not heard?”***

***The Lord is the everlasting God, the Creator of the ends of the earth. He does not faint or grow weary; his understanding is unsearchable. He gives power to the faint and strengthens the powerless. Even youths will faint and be weary; his understanding is unsearchable. He gives power to the faint and strengthens the powerless.***

***Even youths will faint and be weary, and the young will fall exhausted; but those who wait for the Lord shall renew their strength, they shall mount up with wings like eagles, they shall run and not be weary, they shall walk and not faint.***  
Amen.

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**Transfiguration of Our Lord, Mark 9:2-9, B  
February 14, 2021**

Since March 15, 2020, I have been watching and participating in TV worship services. After 54 years of writing and delivering sermons in person, I now am taking the opportunity to listen to a sermon that someone else has prepared, as well as preparing and preaching an on-line sermon for St. Pauli. It has been and is an edifying experience.

When I was in seminary in the 1960’s, I purchased a book that listed the more than 300 Christian denominations that were in existence in the United States at that time. I am confident that that number has multiplied in the last half century. In the early part of the current twenty-first century, one of the most common expressions of American Christianity is what I call “triumphant Christianity.” It is not unique to any one denomination. But it is found across a whole range of Christian churches from

independent congregations to Baptists, to Episcopalians and even some Lutherans. “Triumphant Christianity” is particularly prevalent among electronic expressions of the church.

Triumphant Christianity promises that if you follow all the rules, maintain a positive mental attitude, believe a secret formula to which they have the key—all will be well with you. While you might have occasional frustrations, your life will be a succession of triumphs. You will be successful; Your children will be terrific; No harm, injustice, illness, death, tragic conflict or any other major malady of body or spirit will touch your life. That is a very appealing message. It is not, however, a biblical message.

There is a part of me and, I suspect, a part of you that would like to believe the message of triumphant Christianity. There is a part of each of us that wants to make a deal with God. “Now God, I will be good, and you give me the goodies. I’ll do all these things and you will give me a trouble-free life. Sure, I expect bumps and bruises to keep me humble, but you know what I mean, Lord.” There is an unspoken contract that sits back in the recesses of our spirits and expects that if we do certain things, God will do what we want God to do. God will accomplish our agendas.

The disciples thought that God would accomplish their agendas. They thought that because they were following Jesus, everything would be smooth sailing. But in the passage just before today’s Gospel reading, when Peter rebukes Jesus for saying that the Son of Man must suffer and die and rise again, Jesus tells his #1 disciple Peter, “Get behind me, Satan, for you are setting your mind not on divine things, but on human things.” Peter’s notion of success did not involve suffering and death. The disciples wanted and we want smooth sailing, no strife and a comfortable end. It was not that way for Jesus. It was not that way for Peter, James and John. It is not that way for us.

On the surface, the story of the Transfiguration might seem to contradict what I have just said. For it provides Peter, James, and John with a vision of heavenly glory beyond their wildest

dreams. Jesus appears in heavenly glory with Moses, the giver of God’s law, and Elijah—Israel’s first prophet. In his perplexity, Peter wants to hang on to that glorious glimpse of the future by building accommodations for Moses, Elijah and Jesus so that they may remain on the mountaintop. He wants to bring the future into the present. Peter wants life to be lived on the mountaintop. But the vision ends as a cloud descends upon the disciples, and a voice says, “This is my beloved son, listen to him.” Then Jesus leads the disciples back down the mountain, back into the joys and frustrations of everyday living. Back to the way of the cross and the empty tomb.

Today, you and I are in the same position as Peter, James, and John. We struggle to understand Our Lord. We struggle with the message that not all is sweetness and light for a follower of Jesus. We wish that life would be the way that Triumphant Christianity says that it is.

Life is different because of the Transfiguration. It is not different because it is any easier. But life is different because we now know the end of the story. We know that the end of the story is the heavenly glory of Our Lord. A heavenly glory that even dense disciples like Peter, James, John, you and me will share at the end of time. The resurrection is the glorious conclusion of the story. But the cross comes first.

So we go back to the plains of life. To families where children, grandchildren, spouses and selves don’t always do what you want them to do or what you hope they will do. Back into a world with hard heads, disappointments, detours, suffering, tragedy and frustrated dreams. Back into what we call “the real world.” We cannot zap it. It will not go away.

But things have changed. We have changed. We go back into our everyday lives with a difference. We go back with a glimpse of heaven. We go back with the sound of heaven ringing in our ears. “This is my Beloved Son. Listen to him.” As we listen to him and as we live in him, we now see the darkest night in the light of what is to come.”

Amen.

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## Lutheran Disaster Response

Our neighbors to the south have been impacted by storms that they were not prepared for and are devastated by. St. Pauli’s 2021 budgeted amount of \$1,750.00 for Lutheran Disaster Response was sent to the Synod on February 25<sup>th</sup> to help churches and people in the affected areas recover.

From *Lutheran Disaster Response*:

Beginning Feb. 14, a polar vortex descended over the United States. It was responsible for subfreezing temperatures and heavy snow across the country, impacting millions of people. The harsh conditions severely impacted Southern states, such as Texas, which lack the infrastructure to handle the freezing temperatures and record-setting snow and ice. This led to power, food and water shortages throughout the region.

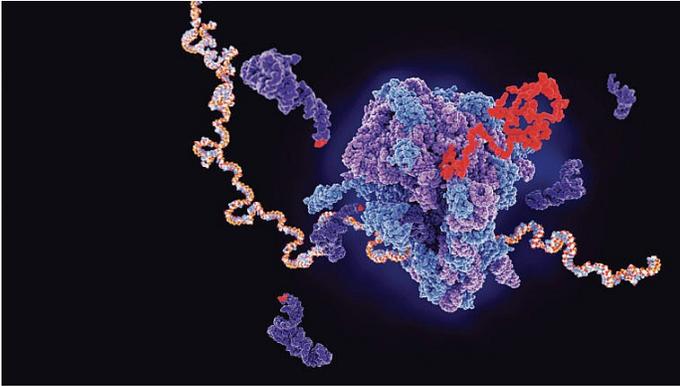
At the peak of power shortages, 4.5 million homes and businesses in Texas were without electricity and heat. Around 13 million Texans are also facing water disruptions due to bursting pipes and damaged water systems. As temperatures rose, melting ice and snow were expected to cause even more water damage.

Lutheran Disaster Response has been communicating with and stands ready to support the Texas-Louisiana Gulf Coast Synod, the Southwestern Texas Synod, the Northern Texas-Northern Louisiana Synod, and Lutheran Social Services Disaster Response. Congregations are already conducting relief efforts such as supplying water, food and generators to those in need, and opening their doors to serve as shelters. With such extensive damage, long-term recovery may include repairing water-damaged homes, disaster case management and supporting vulnerable populations.

# Researchers looking for mRNA were ridiculed by colleagues. Luckily, that didn't stop them.

*Sixty years ago, the scientists who were pioneering the technology that would make today's COVID-19 vaccines possible were mocked and dismissed. (This is a lengthy article, but is enlightening and gives us reason to thank scientists around the world.)*

By Christina Frangou, *Maclean's Magazine*, February 18, 2021



*In this illustration, a ribosome (centre) is producing a protein (red) from an mRNA template (multicoloured); the COVID-19 vaccine uses mRNA to teach our bodies to recognize and attack the virus's protein. (Juan Gaertner/Science Photo Library/Getty Images)*

A few days before Christmas this year, Matthew Meselson, a 90-year-old professor at Harvard, called his university's health service to inquire about being vaccinated against COVID-19. He was eager for his shot. Meselson felt imprisoned in his Cambridge apartment, just blocks from the campus where he'd worked for six decades. He'd officially retired from teaching at the beginning of 2020, but had continued his research as much as possible throughout the pandemic, wearing a K95 mask to work in his lab.

He longed to re-engage in the world around him. He missed his weekly date with close friends over lunch at Boston's best French restaurant. They'd switched to Zoom, but staring into a computer screen is no replacement for lingering at linen-covered tables. He longed for his wife of 32 years, Jeanne Guillemin, who died from cancer late in 2019. Meselson was still figuring out how his world worked without her, and isolation made this hard task harder.

The person on the other end of the phone apologized to the professor. "We don't have a vaccine schedule yet," she told him.

The first two COVID-19 vaccines to be approved for use in North America were developed, tested and delivered into freezers before many jurisdictions figured out how to administer them. The vaccines from Pfizer-BioNTech and Moderna are the first approved vaccines ever to employ modified mRNA, which is delivered sealed in a lipid shell. The mRNA slips into our cells, carrying instructions to make antibodies that target SARS-CoV-2. The vaccines function almost like a wanted poster: if you see these guys, get 'em. Then, the mRNA degrades, leaving no trace.

The fact that mRNA is the basis of these vaccines contributed to their rapid development. In November, the *New York Times* reported that within two days of China releasing the genetic

sequence of SARS-CoV-2, scientists at Moderna Inc., a 10-year-old company headquartered not far from Meselson's home in Cambridge, "plugged that data into its computers and came up with a design for an mRNA vaccine." Meanwhile, BioNTech, a small biotech company in Germany that had been working on mRNA flu vaccines with the pharmaceutical powerhouse Pfizer, soon similarly turned its resources to generating an mRNA COVID vaccine.

But these fastest vaccines in history have been decades in the making. They're the product of generations of scientists who built on one idea after another, and kept at it despite failed experiments, rejections, threats of deportation, a lack of funding and skepticism from contemporaries. They were inspired by the discovery of DNA: in 1951, a young English physical chemist named Rosalind Franklin took X-ray photographs that captured DNA's helical shape; two years later, James Watson and Francis Crick of Cambridge University published the first report describing DNA's double helix, for which they received the Nobel Prize. (Franklin died of ovarian cancer in 1958; her contributions were largely overlooked in her lifetime.) And they were driven not by a race to halt a raging pathogen or by the chance to patent a multi-billion-dollar drug, but by one big, irresistible question: What makes life?

"These weren't people who wanted to solve little problems," says Meselson. "These were people who wanted to solve a great big problem."

He was one of them.

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Born in Colorado in 1930, Meselson zipped through the sciences at a young age. By 16, he enrolled at the University of Chicago. In 1957, while doing post-doctoral work at the California Institute of Technology (Caltech), Meselson and Frank Stahl demonstrated how DNA replicates itself, a model that had been suggested but never shown. Science historian Frederic Lawrence Holmes later characterized their work as "the most beautiful experiment in biology," having revealed how life worked.

But many unanswered questions remained about what happens inside our cells. Meselson and colleagues knew that DNA resides in the nucleus, a compartment barricaded off from the rest of the cell by a membrane. On the other side of the membrane is the cytoplasm, a gelatinous liquid that fills the remainder of the cell. This is the home of tiny granules called ribosomes, which house RNA.

Around the same time that Meselson and Stahl published their groundbreaking work on DNA, French scientists discovered that cells made proteins through the ribosomes. DNA, despite holding the critical codes for life, is a relatively passive molecule. Ribosomes do the busy labor, building proteins to carry out the biological processes of survival. The question was how?



Meselson at Caltech in 1958 (Caltech Archives)

One of the French scientists, Dr. François Jacob, theorized that there must be an “unstable intermediary” that went between the DNA and the RNA—sending messages from the DNA to the RNA, and then disappearing.

Jacob, a physician who’d been forced from medical school when Germany invaded France in 1940 and spent the war years fighting with Charles de Gaulle’s Free French Forces, called this theoretical intermediary “X.” Other researchers “rolled their eyes in horror” when he presented his theory, Jacob recalled in his memoir, *The Statue Within*. “With a little encouragement, my audience would have jeered and left,” he wrote.

In spring 1960, Jacob wrote to Meselson with a proposal: he and Sydney Brenner, a South African biologist at the University of Cambridge, would meet at Meselson’s lab at Caltech to find X. Meselson, who was in his first year on faculty, had developed a technique to track



François Jacob

smaller molecules inside a cell. Jacob believed this technique would help identify X. That summer, with Jacob and Brenner in his lab, Meselson set up initial cultures and tests. Brenner took over the operations, while Jacob sat in a chair taking notes—pain from bomb fragments in his legs was worsened by the California humidity, says Meselson. For three weeks, they met with one failure after another. The ribosomes kept falling apart. Other scientists poked their heads in periodically and asked sarcastically for news of X. Jacob wrote that they “came to visit as one would visit the zoo.” On the trio’s very last scheduled day in the lab, Meselson, having given up on X, left. He flew to Boston to propose to his first wife.

Dejected, Jacob and Brenner went to Malibu Beach. The duo lay on the beach, watching huge waves of the Pacific crashing onto the sand and contemplating where their idea had gone wrong. Jacob wrote in his memoir: “Suddenly, Sydney gives a hoot. He leaps up, yelling, ‘The magnesium! It’s the magnesium!’” They raced back to the lab to run the experiment one last time, with additional magnesium. The result was spectacular. X existed.

The pair gave a seminar the same day at Caltech to demonstrate X. Even then, no one believed them. They contacted Meselson in Boston that night to tell him. He was delighted. “It didn’t occur to me that they would figure out what was going wrong on the very last day,” he says. When the trio published their findings in 1961, they renamed X as messenger RNA.

They did not imagine that their finding would be used for therapeutics or a vaccine. Their questions were more philosophical. Meselson says, “We wondered what is it that allows you to put together the atoms of the ordinary periodic chart and end up with something that’s alive?”

Their work became the central tenet of molecular biology: DNA makes RNA makes protein makes life. It took another generation of scientists to find a way to harness RNA to treat and prevent illness.

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As a kid in Kisújszállás, Hungary, Katalin Karikó watched her father, a butcher, dismember the carcasses of pigs. It was her first introduction to science. In the 1970s, while studying biochemistry at the University of Szeged, Karikó heard about a new report from London: interferon, a type of protein made by the body to trigger a defense against a virus, was mediated by an RNA called 2-5A. Karikó remembers a mentor talking to her about the discovery and being thrilled by the possibilities. He suggested to her that if they could make a synthetic version of a 2-5A molecule, they might be able to treat cancer or viral disease. “I immediately thought that what I was doing was tremendously important,” she says. It was the start of a 40-year quest to make synthetic RNA that could cure illness.

But she couldn’t secure funding in Hungary. Married with a two-year-old daughter, Karikó saw no way to continue her work in her home country. She wrote to professors throughout Europe about joining their labs, but no one could hire her. In 1985, she received an offer from Temple University in Philadelphia. If she could get to the United States, a job was waiting for her.

At the time, Hungarian money could not legally be converted to another currency and taken out of the country. Worried about how their family would survive until her first paycheck, Karikó and her husband, Bela Francia, sold their Russian-made car and converted the proceeds on the black market for a total of 900 British pounds. They sewed the money into their daughter’s teddy bear to smuggle it out of the country. The teddy bear’s owner, their daughter, Susan Francia, grew up to become a two-time Olympic gold medallist for the United States in rowing.

In their new home, things did not go as planned. Karikó’s bosses changed, she couldn’t get funding and she lost her job. Her supervisor cited her for deportation. Desperate to stay in the United States as her daughter entered first grade, Karikó accepted a researcher post in Bethesda, Maryland. She commuted from Philadelphia every Monday morning at 3 a.m. and returned late Friday. In Bethesda, she slept at colleagues’ houses or in her office rather than renting a place of her own. On the weekends, she brought home lab

equipment for her husband to fix. “From the outside, if somebody looked at me, they could smell sweat and struggle,” she says.



*Karikó at home in Pennsylvania (Rachel Wisniewski)*

For all its promise, synthetic RNA was proving to be a headache. Around the world, scientists were encountering the same problem: cells dying off in the culture dish.

In a human body, when a virus like a coronavirus injects its nucleic acids—DNA or RNA—into a cell, the nucleic acids make proteins to build more virus. That way, a virus goes on to infect a whole animal or person. The infection can be halted when a cell identifies the intrusion and rallies its antiviral forces through a variety of immune cells. “The immune cell recognizes that, ‘My God, we are under attack,’ ” Karikó explains, “and they will alert all the other cells. ‘Come, there’s an enemy here.’ ” In the most extreme response, a cell responds by committing a kind of altruistic suicide, killing itself off in order to prevent an infection from running rampant within an organism. That’s what was happening in labs when researchers injected synthetic RNA.

Karikó, who moved to the University of Pennsylvania in 1990, was convinced there was a workaround that would allow her to make RNA that could glide into a cell without triggering an attack from the cell’s defence forces. Evidence suggested it was possible—in 1990, researchers at the University of Wisconsin successfully injected RNA into mice. The same year, Karikó submitted a grant application for mRNA-based gene therapy. It was denied. So were her following applications. Without funding, she was demoted.

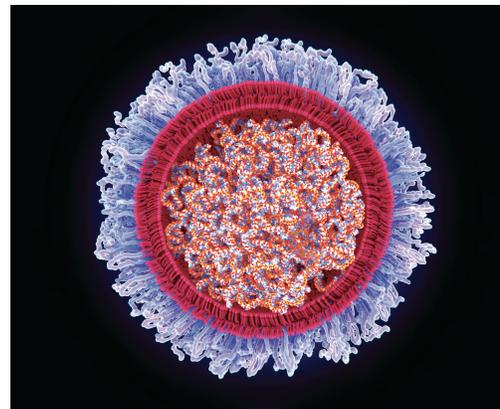
But she remained convinced. “I always had a Cassandra feeling,” she says, referring to the priestess in Greek mythology who possessed the gift of prophecy but was cursed to never be believed. Karikó was not a good salesperson for her idea, she admits. “I couldn’t get money. I couldn’t convince people.”

By 1997, Karikó was spending hours at the office’s Xerox machine, photocopying scientific journals to take home for reading. There, she met Dr. Drew Weissman, a physician and immunologist. The pair started chatting about their work. Weissman had just joined the faculty, fresh off a post-doctoral fellowship at the National Institutes of Health under Dr. Anthony Fauci. Weissman was working with dendritic cells, human cells that digest parts of foreign invaders and present

remnants as evidence to the immune system. They decided to collaborate.

Over the next decade, Karikó and Weissman discovered that cells in the lab were dying because synthetic mRNA provoked an inflammatory reaction. But if they modified one of the four building blocks of RNA, known as nucleosides, the cell no longer flagged synthetic RNA as a foreign invader. It could be delivered into a cell without causing inflammation. “This was a game-changer for the field,” says Dr. Norbert Pardi, a research assistant professor at the University of Pennsylvania who works with the duo.

Pardi’s grandfather worked as a butcher alongside Karikó’s father in Hungary, and he sought her mentorship as a student. Eventually, he became an accomplished mRNA researcher in his own right and followed Karikó to the United States. Working with Karikó and Weissman, Pardi found that if they packaged mRNA inside a coating of lipid nanoparticles, mRNA could be protected from rapidly disappearing after delivery, making it more effective.



*An illustrated cross section of the COVID-19 mRNA vaccine with its lipid coating (Juan Gaertner/Science Photo Library)*

Weissman and Karikó immediately recognized that their discovery had huge potential. Usually, when someone invents a new drug, that drug works for one disease, says Weissman. “But RNA had the potential to act on many different diseases,” he says. They believed it could work as a vaccine, a therapy or a gene editing system. “It could treat hundreds, if not thousands, of different diseases.”

Their findings were published in the journal *Immunity* in 2005. To their frustration, the report went unnoticed in the scientific community. Undeterred, they started a company called RNARx, which received nearly \$1 million in small business grants from the U.S. government. But it never really got off the ground, hampered by the university’s constraints over the licensing of the intellectual property.

Asked if he was angry about the business outcomes, Weissman shrugs. “Thinking about the past is kind of useless because you can’t change it and you can’t fix it. It’s just how things happen,” he says.

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After finishing his first two degrees at the University of Toronto, Canadian-born Derrick Rossi was on his way to completing his Ph.D. when he announced to his colleagues that he was quitting to move to Paris. “They thought I was crazy,” he says. He remained in France for a year, working

late in a research lab and partying when he wasn't working. He left when he couldn't maintain the pace anymore. He hitchhiked around Europe, spent time researching in Texas and moved to Finland for a third go at his Ph.D., finishing in his late 30s. By that time, stem-cell research was a hot political issue, with American conservatives calling for blocks on federal funding for research that used newly obtained embryonic stem cells.

Rossi was intrigued by the work of Japanese researcher Dr. Shinya Yamanaka, which seemed to offer a way around the use of embryonic stem cells. Yamanaka discovered that mature cells could be converted into stem cells with the addition of four transcription factors, known as Yamanaka factors, a finding for which he received the Nobel Prize. But there was a catch, and a frustrating one. Yamanaka used retroviruses to deliver these transcription factors into the cell. The strategy would not work in humans. Retroviruses, while very good at delivering cargo like transcription factors, can integrate into the cell's DNA and remain there forever, explains Rossi. He wondered if he could use mRNA as the delivery service. Again, the same problem came back: cells dying in dishes.



*Canadian-born, Rossi co-founded Moderna in 2010  
(Photograph by Jake Belcher)*

Searching for a solution, Rossi came across Karikó and Weissman's discovery, then almost three years old. In their first experiment using this approach, Rossi and post-doc student Lior Zangi made a modified mRNA for luciferase, the enzyme in fireflies that makes them emit light. They injected the modified mRNA into the thigh muscles of anaesthetized mice and placed the animals in a machine devoid of light. As the researchers watched, the legs of the mice glowed.

"It worked on the very first shot. That tells you something about the robustness [of the technology]," says Rossi. The implications were clear: modified mRNA could be used to express a protein, possibly any protein—whether it was needed to treat disease, cure it or maybe prevent it.

Rossi co-founded Moderna in 2010. A charismatic storyteller with a talent for explaining complex scientific concepts in easy-to-understand terms, he persuaded giants in America's biotech industry to invest. In 2013, after two years of functioning under the radar, Moderna announced that it was on the verge of introducing an entirely new drug category to the pharmaceutical arsenal in the fight against diseases. Within two years, Moderna Therapeutics brought in more than \$950 million from investors and corporate partners—a figure the *New York Times* called "somewhat remarkable" for a

company that did not yet have an experimental drug in clinical trials.

\* \* \* \* \*

Every person has hundreds of millions of copies of mRNA in their body, sending the instructions for vital activities of life in our cells. The mRNA in vaccines differs in two ways from our regular mRNA: one, it's made by machines rather than in the nucleus of our cells; and two, it's introduced from outside of the cell. Once inside, it does what mRNA does. Ribosomes read the mRNA and get to work, building the corresponding protein.

In the case of the COVID-19 vaccine, cells build the spike protein of the SARS-CoV-2 virus. Our bodies learn to recognize the spike protein as an invader, putting our immune system on alert. As we go about the world, walking into stores and churches and schools, many of us will unknowingly encounter the virus for the first time. If we are vaccinated, our immune system is already primed to respond to it.

Vancouver-based Acuitas Therapeutics makes the lipid delivery system for several kinds of therapeutics, including the mRNA vaccine by Pfizer-BioNTech and a second one that is still in trials from Germany's CureVac. Acuitas CEO Thomas Madden likens the lipid packaging around the mRNA to the protective wrapping around a delicate Christmas ornament; ideally, the wrapping comes off just before the ornament is hung on a tree. For mRNA vaccines, a sturdy delivery system means less mRNA is required to get the job done—in other words, a smaller dose. "We can vaccinate far more people from a given amount of the vaccine if the delivery system is very efficient," says Madden.

The advantages of mRNA vaccines are remarkable: there is no risk of infection from the virus or permanent changes to the genome, and the mRNA rapidly degrades by normal cellular processes so nothing remains. The vaccine can be designed on a computer and rapidly scaled up for manufacturing. Over the last four years, there's been an explosion of interest in mRNA vaccines, with work underway on vaccines for cancer, influenza, Ebola and Zika. There are questions, too. How long will protection last? Can it eliminate transmission risk? Exactly who is at risk for side effects, and do we know all the side effects?

When the hunt for a COVID vaccine began, years of research came to fruition within months, accelerated by infrastructure and financial support from governments around the world. And by November, both Moderna and Pfizer-BioNTech reported results from phase 3 trials, showing the vaccines were more than 90 per cent effective in protecting against severe illness from SARS-CoV-2. Scientists who spoke to *Macleans* called Nov. 9, the day Pfizer-BioNTech reported the trial data, the highlight of an otherwise terrible year. "The results just blew everyone's mind," says Weissman, who has lost friends to COVID. In Vancouver, Madden heard the results on the BBC early in the morning and emailed everyone in the 29-person company, many of whom were working in shifts in order to maintain social distancing in the lab. The company sent deliveries of champagne and charcuterie to all its employees.

The pandemic has been "a coming of age" for mRNA vaccines, says Madden. The fact that the first vaccines

approved are mRNA vaccines indicates that this technology could be used to respond quickly and effectively to future threats, he says. He adds that he is hopeful the stringent storage criteria for the Pfizer-BioNTech vaccine will change in the next two months, facilitating easier administration. The current requirement of -70° C was selected to expedite approval because testing the vaccine's stability at warmer temperatures would have delayed the delivery. Those studies are ongoing, he notes.



Madden (right) and a colleague at an Acuitas lab in Vancouver (Photograph by Alia Youssef)

Karikó, who joined BioNTech in 2014, and Weissman have been suggested as deserving candidates for the Nobel Prize,

\* \* \* \* \*

## PART SCULPTURE, PART THOROUGHFARE

Living on an island nation has its challenges, not the least of which is transportation. In 2000, the government of the Faroe Islands approved construction of the country's first underwater commuter tunnel. A boon to air travel, the tunnel made it easy to drive between the airport on Vagar island and the capital city of Tórshavn on Streymoy, the largest of the islands.

Building on that success, in 2014, the Faroese parliament started planning an even more ambitious underwater endeavor. After three years of construction, the new "Eysturoyartunnin" tunnel system was opened for commuters in December of 2020. At the heart of this unusual road network is the world's first underwater roundabout.



Photo: ESTUNLAR.FO

given their groundbreaking contributions to vaccines. Karikó says she's not motivated by rewards. "I do not care about any reward. I care about one thing: that this vaccine stops the infection."

The pair received their first dose of the Pfizer-BioNTech vaccine in Philadelphia on Dec. 18. Rossi is waiting for his shot and says he will happily take either of the approved vaccines. In Vancouver, Madden expects to be vaccinated as part of the rollout to the general population. He, too, will gladly accept either, though he has a soft spot for one using his company's lipid delivery system.

In Boston, Meselson is working on, among other things, the theory that oxidative damage drives the aging process. He has started taking cello lessons over FaceTime and is reading the unpublished works of his late wife, a renowned anthropologist and writer who exposed a secret biological warfare lab in the Soviet Union as the source of a lethal anthrax outbreak. He lost one close friend to COVID who died in the United Kingdom in April, barely a month after Meselson had visited.

The famed scientist believes vaccines are a vital part of the response to the pandemic, but cannot be the only one. Proper ventilation and air filtration of enclosed spaces will be essential for preventing future pandemics, he says. "That's what we need to do," he says.

In the meantime, he eagerly waits for his vaccination date.

Glowing like a primordial jellyfish near the eastern end of the concourse, the massive traffic circle—like the rest of the nearly seven-mile tunnel—features walls that appear to be rough-hewn out of the sea bed itself. Eerie shapes are illuminated by washes of yellow, green and blue light, reminiscent of an underground aurora.

A metal sculpture created by renowned Faroese artist Tróndur Patursson wraps around the core of the roundabout, featuring human silhouettes performing a traditional circle dance.

While beautiful, the tunnel is of course also practical. It has reduced travel time between the capital city to the busy seaport of Runavík from 74 minutes to only 16 minutes, offering a great convenience for residents and tourists alike. Entering the tunnel costs a toll of about \$12 one way, but locals can sign up for a yearly pass to reduce the expense. The Faroe Islands now features a total of 19 traffic tunnels connecting its 18 major islands. A 20<sup>th</sup> tunnel is under construction and will connect Sandoy and Streymoy, the largest island.

Not surprisingly, Norway also has many tunnels; in fact, over 900, and some of these have roundabouts, but no roundabout there is under water—yet.

## Norway's neighbor to the west

The rugged Faroe Islands rise from the frigid north Atlantic about halfway between Iceland and Norway, and only 200 miles northwest of the Shetland Islands of Scotland. After wresting control from the Irish monks who first inhabited the islands, the Vikings made themselves at home starting around 400 to 600 AD. Medieval visitors referred to the islands as a paradise of birds, and were impressed by the vast crowds of sheep that roamed freely in the green, rocky and treeless landscapes.

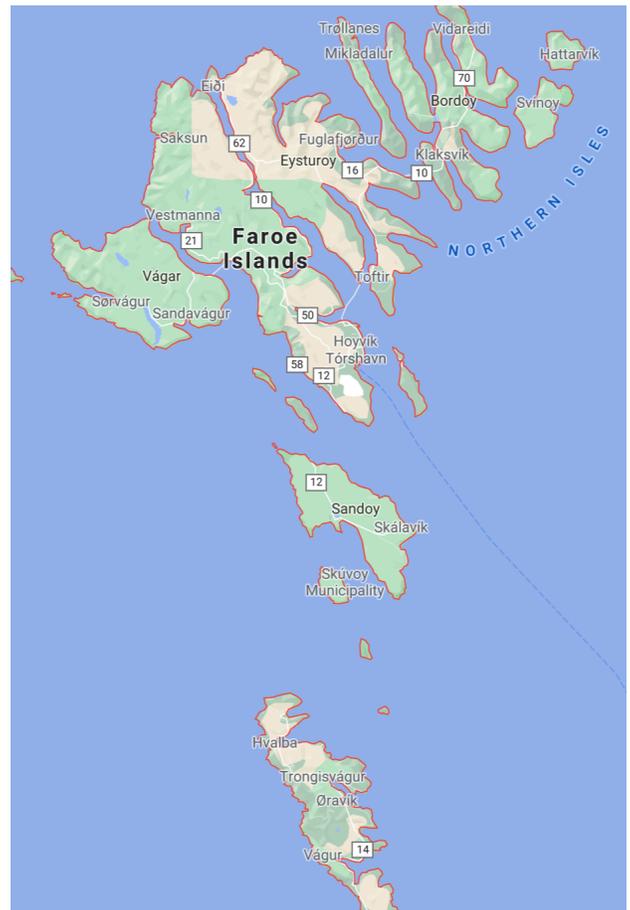
The archipelago became a part of the Kingdom of Norway in 1035, but this kingdom was taken over by the Danes in the late 1300s. Then in 1814, the Treaty of Kiel transferred Norway to the King of Sweden, who was on the winning side of the Napoleonic Wars, whereas Denmark retained the Faroe Islands, along with Greenland.

Now home to about 53,000 people, the Faroe Islands have been self-governing since 1948, controlling most areas apart from military defense, policing, justice, currency, and foreign affairs. Because the Faroe Islands are not part of the same customs area as Denmark, the country has an independent trade policy, and can establish trade agreements with other states. The Faroes have an extensive bilateral free trade agreement with Iceland. In the Nordic Council, they are represented as part of the Danish delegation. In certain sports, the Faroe Islands field their own national teams.

The primary language is Faroese, whose closest linguistic cousins are Icelandic and Old Norse. Scandinavian culture and heritage persist in the Faroes, as do the sheep, which now number in the 70,000s. Despite only having one laureate, the Faroe Islands currently have the most Nobel laureates per capita worldwide.

**Niels Ryberg Finsen** (15 December 1860 – 24 September 1904) was an Icelandic-Faroese physician and scientist. His father was Hannes Finsen, who belonged to an Icelandic family with traditions reaching back to the 10th century.

In 1903, Finsen was awarded the Nobel Prize in Medicine and Physiology in recognition of his contribution to the treatment of diseases, especially lupus vulgaris, with concentrated light radiation, whereby he opened a new avenue for medical science.



## FUN FACTS ABOUT THE FAROE ISLANDS

- Tinganes, where parliament met for the first time in year 825, is thought to be one of the oldest parliamentary meeting places in the world still in use.
- During the Second World War, the British military occupied the Faroe Islands. Approximately 170 marriages took place between British soldiers and Faroese women.
- Faroese company “Bakkafrøst” is the eighth largest salmon farming company in the world.
- The Faroe Islands is one of the world’s leading nations in producing sustainable electricity with over 50% of the nation’s electricity deriving from renewable energy sources.
- The aim is that the nation’s electricity will be sourced solely from renewable energy by 2030.
- No point in the Faroe Islands is further than 3 miles from the sea.
- The Faroe Islands is not a member of the European Union despite the fact that it is a self-governing region.
- Many houses in the Faroe Islands have grass roofs. Sheep – not mowing machines – are used for mowing the grass.
- The Prime Minister’s phone number is in the phone book.
- People population: 50,000. Sheep population: 70,000.

- There is no prison in the Faroe Islands. Prisoners being held for more than a year and a half are sent to prisons in Denmark.
- There are a total of five traffic lights in the Faroe Islands.
- The population of the Faroe Islands consists of 80 different nationalities.
- There are only two international fast-food outlets in the Faroe Islands: Burger King and Sunset Boulevard.
- There are approximately 110 different species of birds in the Faroe Islands.
- Many think the national bird is the puffin. It is, in fact, the oystercatcher.
- In the capital, Tórshavn, transport with city buses is free of charge.

- Niels R. Finsen, a Faroese physician, won the Nobel Prize in Physiology or Medicine in 1903.
- Faroese people have an average lifespan of 82.6 years old, which ranks 12th out of 186 countries worldwide (2019 estimate).
- 83.9% of Faroese people of working age were part of the labor force in 2019, which is one of the highest of any European country.
- The average winter temperature is 37° Fahrenheit, one of the highest averages among the Nordic countries.
- 97.4% of Faroese households have wireless internet.
- One must be 18 years of age to drink and drive in the Faroe Islands (not at the same time, obviously). Sexual consent is 15 years of age

Tinganes, at right, is the historic location of the Faroese government and is located in the town of Tórshavn. The name means “parliament jetty” or “parliament point” in Faroese. The parliament met there for the first time in Viking ages when Norwegian colonists placed their Ting (parliament) on the location in 825. It is one of the oldest parliamentary meeting places in the world, along with Tynwald hill on the Isle of Man and Pingveller in Iceland.



Faroese sheep with town of Sumba in background.

# Scotland names its snowplows and their titles for 2021 are interesting

Sean Szymkowski, *cnet.com* "Road Show", February 11, 2021

"Lord Coldemort, reporting for duty." Imagine hearing that over a dispatch radio. Guess what? It's a real name, for a real snowplow in Scotland, because the Scots clearly know how to have more fun with things – this is from the country that gave us Boaty McBoatface, after all.

Last December, social media began picking up on the fact Scotland names its whole snowplow fleet and a map of the current active plows began pushing into viral status. Yes, you can follow the snowplows on a "Trunk Road Gritter Tracker" page. (See column to the right.)

On first glance, some of the names may not make sense to people in the U.S., but note that the country calls these vehicles "gritters" – that makes "Gritney Spears" make much more sense. This week, social media again took note when revamped names started appearing on the national map of snowplows. The pun game is still very strong.

My personal favorites? "Buzz Iceclear," and "Sweet Child O' Brine." Very good stuff, Scotland.

Who else do we have here? Ah, yes, "Megameltasaurus" was out for deployment, as was "Creedence Clear-Road Revival." Let's not forget about "License to Chill" or "On Her Majesty's Slippery Surface." The James Bond references are strong with the Scots. "Spreddie Van Halen" is another name worthy of our round of applause.

I do wonder where "Fred" went. Oh, Fred. Back in December I asked how the little dude earned such a name among these amazing over-the-top titles. Imagine being on that Scottish gritter crew, when your pals get to plow through the dreaded snow in machines named "Yes Sir Ice Can Boogie" and "Grittest Hits." At least Fred has a couple other toned-down (possibly Simpsons-related) names to run with, like "Mr. Plow" and "Snowball."

The BBC reports the practice of naming the plows goes back to 2006 when the Scottish Transport Ministry encouraged wee school children to come up with funny monikers for them. It launched its online tracker in 2016.

We salute you, Scotland, for the continued laughs.



## Trunk Road Gritter Tracker

### **Disclaimer**

*The Trunk Road Gritter Tracker page provides live tracking of gritters on the trunk road network. It displays the current location of gritters and a trail with an age range for where gritters have previously passed along the trunk routes across Scotland. The Gritter Tracker does not provide road treatment or gritting information.*

### **Useful Tips on using the Gritter Tracker**

The initial map view (default extent) on the Trunk Road Gritter Tracker provides vehicle trails for the 0-2 hrs range and the current location of all gritters. Active gritters, in yellow, will orientate according to the direction of travel. Inactive gritters, i.e. parked up at a depot, will be greyed out with the icon facing East.

To view gritter trails above the 0-2 hrs ranges (2-4hrs up to 12+hrs) and to view a number of gritters at the same location i.e. at a depot, then you must zoom into the map view on a specific area or trunk route to view this information.

You can use the search bar at the top left to search for a gritter by name. Enter the first few letters of the name, then pick from the resulting list.

To view traffic information, enable the Traffic layer by clicking on the 'Layer List' button located at the top left of the map, under the search bar.

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## Let's Have Some Fun with "March"

March, the third month of the year, was named for the Roman god of war, Mars. Traditionally, this was the time of year to resume military campaigns that had been interrupted by winter.

In the early Roman calendar, March (or *Martius*) was the first month of the calendar year. As March brought the first day of spring with the vernal equinox, it was the start of new beginnings. But then, March became the third month when January and February, which were added to the end of the Roman calendar around 700 BCE, instead became the first and second months around 450 BCE.

### **Beware the Ides of March. But Why?**

It's unlikely even Shakespeare could have predicted how his famous phrase would have evolved.

You've probably heard of the soothsayer's warning to Julius Caesar in William Shakespeare's play of the same name: "Beware the Ides of March." Not only did Shakespeare's words stick, they branded the phrase—and the date, March 15—with a dark and gloomy connotation. It's likely that many people who use the phrase today don't know its true origin. In fact, just about every pop culture reference to the Ides—save for those appearing in actual history-based books, movies or

television specials—makes it seem like the day itself is cursed.

But the Ides of March actually has a non-threatening origin story. Kalends, Nones and Ides were ancient markers used to reference dates in relation to lunar phases. Ides simply referred to the first full moon of a given month, which usually fell between the 13<sup>th</sup> and 15<sup>th</sup>. In fact, the Ides of March once signified the new year, which meant celebrations and rejoicing.

Yet when heroes in movies, books and television shows are faced with the Ides of March, it's always a bad omen. Several television shows have had episodes named "The Ides of March." And it's never good news.



Reverse side of a coin issued by Caesar's assassin Brutus in the autumn of 42 B.C., with the abbreviation EID MAR (Eidibus Martiis – on the Ides of March).

Did the death of Caesar curse the day, or was it just Shakespeare's mastery of language that forever darkened an otherwise normal box on the calendar? If you look through history, you can certainly find enough horrible things that happened on March 15, but is it a case of life imitating art? Or art imitating life?

Perhaps it was Julius Caesar himself (and not the famous playwright) who caused all the drama. After all, he's the one who uprooted Rome's New Year celebration from their traditional March 15 date to January...just two years before he was betrayed and butchered by members of the Roman senate.

### The March Sisters

Gillian Brockwell, *The Washington Post*, Dec. 25, 2019

Above all else, Louisa May Alcott was a radical. From an early age, she was an abolitionist. She was also a feminist, committed to never marrying, and loved to pull up her skirts and go for a long run through the woods.

Alcott's most famous work, "Little Women," was nearly the opposite — a light, juvenile novel focused on sisterly love and domestic peace. And though it was semi-autobiographical, she hated it.

Alcott's father, Bronson Alcott, with whom she was close, was also a radical. He hung out with Transcendentalist poets and used the family home as a stop on the Underground Railroad. He was also a teacher who was disgraced after publishing a book with ideas about education that were a little too innovative.

And he was prone to depression. Once he was fired from his school, he didn't work again for years. An attempt to start a utopian community failed utterly, deepening his depression, and his wife and daughters were forced to take any work they could to keep the family afloat.

Alcott took on sewing projects, worked as a maid to a rich woman on a trip to Europe, and tried to sell stories she had written to women's magazines. She also worked as a Civil War nurse, and her written account of this period turned into her first literary success.

But her favorite things to write were suspense novels, which she published under the name A.M. Bernard. These stories featured liberated women following sensational passions across the high seas and in glamorous locales. She wrote dozens of these stories for women's magazines but earned only a pittance.

Then she dipped her toes into children's stories, where the market was bigger and the pay slightly better. An editor friend who worked at a publishing house, Thomas Niles, urged her to write a "simple" novel about girls. She tried, but found it boring and gave up.

Soon afterward, according to *Humanities* magazine, her father went to the same editor with a manuscript of his philosophical musings. Niles agreed to publish it on the condition that his daughter try again to write a novel about girls.

In May 1868, she wrote in her journal, "Mr. N wants a girls' story, and I begin 'Little Women.' ... I plod away, though I don't enjoy this sort of thing. Never liked girls or knew many, except my sisters; but our queer plays and experiences may prove interesting, though I doubt it."

Yet her dutiful eldest sister Anna became Meg; headstrong Louisa became Jo; artistic sister May became Amy; and sweet sister Lizzie, who had died of scarlet fever at 22, became doomed Beth. Marmee was Marmee, and her dad, in reality emotionally absent because of his depression, became physically absent because of his heroic service in the Civil War.

Alcott plowed through writing the book in two months. Halfway through, she delivered 12 chapters to Niles, confiding in her journal, "He thought it *dull*; so do I."

But their tunes changed after Niles gave it to some young girls as a test audience; they told him it was "splendid." "As it is for them, they are the best critics, so I should be satisfied," Alcott wrote in her journal. She also noted that the publisher advised her to retain the copyright, a decision that would soon make her a fortune.

Released that September, the book was a hit. Alcott was an overnight literary star. Though she was grateful to finally have financial stability, she was never comfortable with the acclaim she got from writing something about which she cared little. When adoring fans would knock on the door of her home, she would pretend to be a servant and usher them away.

What we now know as the novel "Little Women" was released as two volumes; when the first book covering the March sisters' childhood did well, fans demanded a second volume so they could find out what happened to the sisters as adults. And there was one particular request she resented deeply;

young girls really, really wanted Jo to marry her neighbor friend Laurie.

“Girls write to ask who the little women marry, as if that was the only end and aim of a woman’s life,” she complained in her journal. “I *won’t* marry Jo to Laurie to please anyone.”

Just like the other characters in “Little Women,” there had been a real-life Laurie to Alcott’s Jo. His name was Laddie, and he was a Polish man 10 years her junior with whom she had carried on a flirtation during a trip to Europe. In the end though, Alcott chose to stick with her vow of “spinsterhood” — a decision her fans seemed to unintentionally condemn.

So, she wrote to a friend, “out of perversity” she “made a funny match” for Jo in the sequel: not Laurie, but old German Professor Bhaer. It was a literary decision that breaks hearts to this day.

“I expect vials of wrath to be poured upon my head,” she told her friend, “but rather enjoy the prospect.”

Alcott continued to serve the public appetite for stories about the domestic lives of the March family for the next decade, writing sequels “Little Men” and “Jo’s Boys.” Finally, in 1877, she returned to her true passion, her “blood and thunder tales.”

### The March Hare



“Have some wine,” the March Hare said in an encouraging tone.

Alice looked all round the table, but there was nothing on it but tea. “I don’t see any wine,” she remarked.

“There isn’t any,” said the March Hare.

“Then it wasn’t very civil of you to offer it,” said Alice angrily.

“It wasn’t very civil of you to sit down without being invited,” said the March Hare.

### The March King

Unequaled by his predecessors, John Philip Sousa is responsible for bringing the United States Marine Band to an unprecedented level of excellence: a standard upheld by every Marine Band Director since. Sousa grew up with the Marine Band, and his intimate knowledge of the band coupled with his great ability provided the ideal medium to showcase the marches which would earn him the title, the “March King.”

Sousa was born Nov. 6, 1854, in Washington, DC, near the Marine Barracks where his father, Antonio, was a musician in the Marine Band. He received his grammar school education in Washington and for several of his school years enrolled in a private conservatory of music operated by John Esputa, Jr. There he studied piano and most of the orchestral instruments, but his first love was the violin. John Philip Sousa gained great proficiency on the violin, and at the age of 13 he was almost persuaded to join a circus band. However, his father intervened and enlisted him as an apprentice musician in the Marine Band. Except for a period of six months, Sousa remained in the band until he was 20.

In addition to his musical training in the Marine Band, he studied music theory and composition with George Felix Benkert, a noted Washington orchestra leader and teacher.

After his discharge from the Marine Corps, Sousa remained in Washington for a time, conducting and playing the violin. He toured with several traveling theater orchestras and moved, in 1876, to Philadelphia. There he worked as a composer, arranger, and proofreader for publishing houses. While on tour in St. Louis, he received a telegram offering him the leadership of the Marine Band in Washington. He accepted and reported for duty on Oct. 1, 1880, becoming the band’s 17<sup>th</sup> Leader.

The Marine Band was Sousa’s first experience conducting a military band, and he approached musical matters unlike most of his predecessors. He replaced much of the music in the library with symphonic transcriptions and changed the instrumentation to meet his needs. Rehearsals became exceptionally strict, and he shaped his musicians into the country’s premier military band. Marine Band concerts began to attract discriminating audiences, and the band’s reputation began to spread widely.

Sousa first received acclaim in military band circles with the writing of his march “The Gladiator” in 1886. From that time on he received ever-increasing attention and respect as a composer. In 1888, he wrote “Semper Fidelis.” Dedicated to “the officers and men of the Marine Corps,” it is traditionally known as the “official” march of the Marine Corps.

In 1889, Sousa wrote the “Washington Post” march to promote an essay contest sponsored by the newspaper; the march was soon adapted and identified with the new dance called the two-step. The “Washington Post” became the most popular tune in America and Europe, and critical response was overwhelming. A British band journalist remarked that since Johann Strauss, Jr., was called the “Waltz King” that American bandmaster Sousa should be called the “March King.” With this, Sousa’s regal title was coined and has remained ever since.

Under Sousa the Marine Band also made its first recordings. The phonograph was a relatively new invention, and the Columbia Phonograph Company sought an ensemble to record. The Marine Band was chosen, and 60 cylinders were released in the fall of 1890. By 1897, more than 400 different titles were available for sale, placing Sousa’s marches among the first and most popular pieces ever recorded, and the Marine Band one of the world’s first “recording stars.”

The immense popularity of the Marine Band made Sousa anxious to take his Marine Band on tour, and in 1891 President Benjamin Harrison gave official sanction for the first

Marine Band tour, a tradition which has continued annually since that time, except in times of war.

After the second Marine Band tour in 1892, Sousa was approached by his manager, David Blakely, to organize his own civilian concert band, and on July 30 of that year, John Philip Sousa resigned as Director of the Marine Band. At his farewell concert on the White House lawn Sousa was presented with a handsome engraved baton by members of the Marine Band as a token of their respect and esteem. This baton was returned to the Marine Band by Sousa's daughters, Jane Priscilla Sousa and Helen Sousa Abert, in 1953. The Sousa baton is now traditionally passed to the new Director of the Marine Band during change of command ceremonies.

In his 12 years as Leader of the Marine Band, he served under five Presidents, and the experience he gained with the Marine Band would be applied to his civilian band for the next 39 years. With his own band, Sousa's fame and reputation would grow to even greater heights.

Sousa's last appearance before "The President's Own" was on the occasion of the Carabao Wallow of 1932 in Washington. Sousa, as a distinguished guest, rose from the speaker's table, took the baton from Director Captain Taylor Branson, and led the orchestra through the stirring strains of "Hands Across the Sea."



John Philip Sousa died on March 6, 1932, at Reading, PA, where he was scheduled to conduct the Ringgold Band. His body was brought to his native Washington to lie in state in the Band Hall at Marine Barracks. Four days later, two companies of Marines and Sailors, the Marine Band, and honorary pallbearers from the Army, Navy, and Marine Corps headed the funeral cortege from the Marine Barracks to Congressional Cemetery.

His music was not the only memorial to John Philip Sousa. In his native city on Dec. 9, 1939, the new Pennsylvania Avenue Bridge across the Anacostia River was dedicated to the memory of the great American composer and bandmaster. More recently, Sousa was enshrined in the Hall of Fame for Great Americans in a ceremony at the John F. Kennedy Center for the Performing Arts in 1976.

In a fitting tribute to its 17<sup>th</sup> Leader, in 1974 the Marine Band rededicated its historic band hall at Marine Barracks as "John Philip Sousa Band Hall." The bell from the S.S. John Philip Sousa, a World War II Liberty ship, is there.

Perhaps the most significant tribute to Sousa's influence on American culture, "The Stars and Stripes Forever" was designated as the national march of the United States on Dec. 11, 1987. A White House memorandum states the march has become "an integral part of the celebration of American life."

In 2004, 26th Director Colonel Timothy W. Foley opened the season with a Sousa-style concert in honor of the Director's sesquicentennial (150) year. This rousing performance has since become an annual tradition of opening each concert season in early January, and is reminiscent of Sousa and his sold-out concerts. On Nov. 6, 2004, "The March King's" 150th birthday, "The President's Own" and 33<sup>rd</sup> Commandant of the Marine Corps General Michael W. Hagee dedicated the new band hall at Marine Barracks Annex John Philip Sousa Hall.

"The President's Own" concluded his sesquicentennial year on Nov. 5, 2005, by unveiling an eight-foot bronze statue of Sousa outside the band hall. The statue, funded by the Marine Corps Heritage Foundation, private donor Mickey Gordon, and the John Philip Sousa Foundation, is the only one of its kind. Sculpted by artist Terry Jones, the statue is an enduring testament to Sousa's contributions to the Marine Band.

### **The Marcher Lords**

By David Ross, Editor, *Britain Express*

At the risk of over-simplification, the Marcher Lords were the Norman-English barons who held lands in Wales and on the Welsh borders. But that bald statement ignores some of the complexities of the situation.

The Marches of Wales did not revolve around the current borders of Wales. The Normans held lands deep within Welsh territory and maintained castles in Wales as far west as the Irish Sea. Yet the Lords of the March were not subject to the laws of England, and the March was not part of England. The Lords held their own courts and did not bend to the writ of royal law.

Within the lands of these Norman lords were pockets of Welsh territory. To simplify the situation once more, we can say that the English held the lowlands and the Welsh held the highlands, but again there enough exceptions to make this a dubious statement.

The authority of the Marcher Lords was far different from that enjoyed by English barons. The right to crenellate (i.e. build castles or fortify existing structures) was jealously guarded by the king within England. He granted that right carefully, and then only to men he deemed trustworthy. Yet the Marcher Lords could build and fortify castles at will.

They could also wage war on their own, a right definitely not available to their English counterparts. Yet many of the Marcher Lords also owned large estates in England, where they spent most of their time.

Henry I did his best to extend royal power in Wales. If we can judge by his various bequests of land and titles, he believed that he had the right and the authority to administer Wales. In so doing, he sought to grant holdings in Wales to those men he deemed trustworthy and supportive of royal rights.

Peasants, as well as knights, came to Wales in large numbers to serve the Marcher Lords. Henry I encouraged Bretons, Flemings, Normans, and English settlers to move into Welsh territory, mostly in the south. Knights were granted their own lands, which they held in feudal service to the Norman lords. Settlement was also encouraged in towns, most of which grew up under the protective shadow of Norman castles.

## March Birthstone

Birthstones are gemstones that accompany a birth month, each having a unique meaning and historical significance. The popularity of birthstones dates back to ancient times when civilizations believed that gemstones had incredible powers such as luck, health and prosperity.

Birthstones associated with birth months today are not necessarily the same ones that were used in ancient times. In those days, color was the most important feature of a gemstone so they did not distinguish between gems the way we do today. For instance, they did not distinguish between a Ruby and a Garnet.

The name Aquamarine immediately brings to mind a stunning pastel sky blue or the bright color of the sea. For centuries, this timeless gemstone has been a symbol of youth, hope, health and fidelity. Since this gemstone is the color of water and the sky, it is said to embody eternal life. It was long thought that Aquamarine has a soothing influence on married couples, making it a great anniversary gift.

Aquamarines are found in a range of blues, from a pale pastel to a greenish-blue to a deep color. Darker shades of blue are increasingly rare and make the value increase. Aquamarine is frequently a pastel gemstone. While the color can be more intense in larger gemstones, smaller aquamarines tend to be less vivid.

Most of the aquamarine on the market today comes from Brazil, Madagascar, Sri Lanka, Pakistan, Colombia, India, Russia, and several other countries.



The name *aquamarine* means *sea water* and Aquamarine, like the emerald, is a variety of beryl. In its light blue-green shades, aquamarine can be quite affordable but the deeper blue color of aquamarine can command high fees. Most aquamarine used in high-end jewelry is heat-treated to deepen its blue color, but raw aquamarine has the benefit of a more potent energy.

Just like the emerald, aquamarine has a 7.5 to 8 Hardness on the Mohs scale, meaning it is relatively strong compared to other gems but can still be broken without much effort. Aquamarine can also lose some of its color if exposed to strong sunlight for extended periods of time.

### March 20 – Spring Equinox

In 2021, the spring equinox occurs on Saturday, March 20. This event marks the astronomical first day of spring in the Northern Hemisphere. On the equinox, the length of day and night is nearly equal in all parts of the world and it happens at the same moment worldwide, though our clock times reflect a different time zone.

Our ancestors lived amidst nature more than most of us do today. They observed the universe, marveling in its rhythms. They used the Sun and the Moon as a sort of calendar, tracking the Sun's path across the sky. Here are some examples of the ancient sites and monuments that were built to align with the solstices or equinoxes.

**Stonehenge, England** – On the dawning of the summer solstice, the sun rises directly above the Heel Stone—a mysterious prehistoric monument whose origins, depending

on interpretation, were as an ancient burial ground, an astrological observatory, even a supernatural phenomenon.

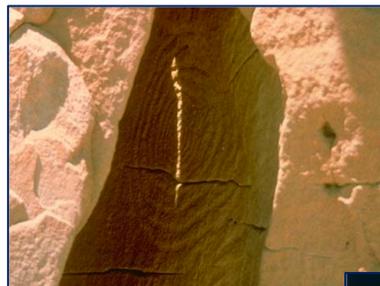
**Machu Pichu, Peru** – There is a giant stone at the top of this sacred mountain called *Intihuatana*, which means “the place when the sun gets tied.” Amazingly, the stone is perfectly positioned so that each corner sits at the four cardinal points (north, south, east, and west), and at an angle of about 13 degrees northward. Usually, the stone casts a shadow throughout the day, as any other structure would.



However, at exactly noon on the date of the spring or fall equinox, the Sun's shadow disappears! Therefore, the stone is a precise indicator of the date of the two equinoxes.

**Chichen Itza, Mexico** – Mayans built a huge pyramid around the year A.D. 1000. The play of the Sun's light on it signals the beginning of the seasons. On the spring equinox, the light pattern looks like a snake. Mayans called this day “the return of the Sun serpent.”

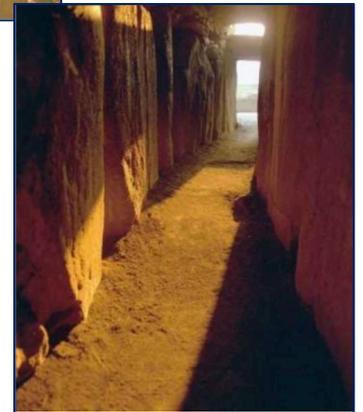
**Chaco Canyon, New Mexico** – The Ancestral Puebloan people, who were expert sky watchers, carved spiral designs into rock to track the seasons and record the passage of time.



In this canyon is a petroglyph called the Sun Dagger because of the way the Sun's wedge-shaped beams strike it in midday during the summer and winter solstices.

**Newgrange, Ireland** – Around 3200 B.C., ancient people in Ireland built a huge mound of dirt and surrounded it with stones. Today, the knoll is called Newgrange.

For five days around the winter solstice, a beam of sunlight illuminates a small room inside the mound for 17 minutes at dawn. The room holds only twenty people at a time. Every year, thousands enter a lottery in hopes of being one of the hundred people allowed to enter.



**Great Sphinx, Egypt** – On the spring or fall equinoxes, a peculiar phenomenon occurs. If you stand directly in front of the Sphinx (facing it) at sunset on the date of either equinox, as the Sun nears the horizon, you'll observe it settle directly onto the Sphinx's right shoulder. At this angle, the Sun also sits at the southern corner of the Pyramid of Khafre, located behind the Sphinx.

