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January 2021

Ó Máille

O'Malley Clan Association Monthly Newsletter

This month's highlights

- Happy New Year from The O'Malley Clan!
- Another time, another plague, Bubonic plague in Glasgow
- Councilor O'Malley and the space saving crusade in Boston
- Fluoride to the Rescue in the fight against antibiotic resistant bacteria
- About the O'Malley Clan Association
- The O'Malley Clan DNA Project on Family Tree DNA

Happy New Year from The O'Malley Clan Association

Chieftain Tom O'Malley, and all of us in The O'Malley Clan Association hope that you're all doing well out there and staying safe. We'd like to wish you a happy new year and hopefully 2021 will be a much brighter affair.

With vaccines now being rolled out, its only a matter of time before We're on top of the situation and things will get back to a point where we'll all be able to meet up again and get back to a more normal way of life.

For the moment, lets keep up our efforts to suppress the virus, not long to go now!


O'Maille

O'Malley Clan Association MonthlyNewsletter

Welcome to our new newsletter from Clan Chieftain Brigid O'Malley

The New US Ambassador to Ireland Mr Kevin F O'Malley

Get in touch and share your O'Malley Heritage!

Have you got an article or old photographs that you'd like to submit for future editions of "O Maille" The O'Malley Clan Association Newsletter.

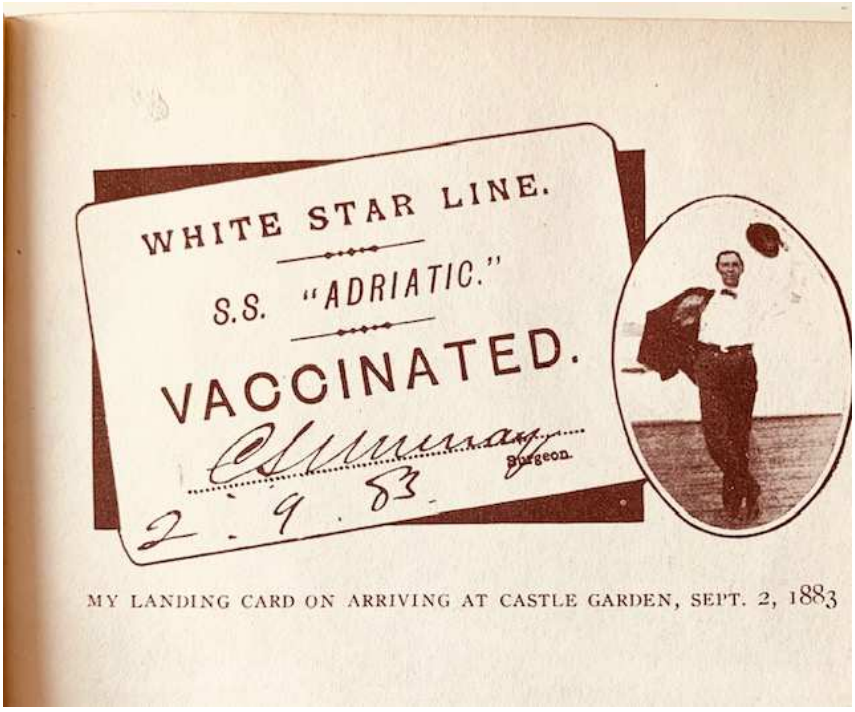
We'd love to hear from you wherever you're based around the world. Old photographs and stories to go with them, old letters, family trees or just an article that you'd like to share with the rest of the clan. Drop us a line and We'll get right to it!

Another time, another plague!

I write this on my 74th birthday, sheltered at home in Boulder, Colorado, USA.

Plagues do that to people. You hunker down, then move on. My O'Malley ancestors did. In the isolation of the moment, my thoughts turned to my grandfather by whom I am an Irish citizen.

Charles Joseph O'Malley was born in Newport, CO Mayo in 1867. He was the youngest of seventeen. His father was born in 1800; his mother in 1815. Gramps's youngest daughter, my mother's sister, turned 102 this year.



MY LANDING CARD ON ARRIVING AT CASTLE GARDEN, SEPT. 2, 1883

Gramps' parents left Ireland after the famine years of 1846-47-48 for more secure prospects in Glasgow. Gramps writes in his book, *It Was News To Me* (1939),

"Business boomed in Glasgow prior to and during the Russo-Turkish War of 1854-56, and my mother decided that she would open several stores in that city in order to give employment to the Irish and make a profitable enterprise.

At the close of the conflict the returning British soldiers who fought on the Turkish side against Russia brought back to Scotland the Bubonic Plague. This frightful scourge killed hundreds of thousands of people. My parents lost seven children in three weeks. Describing the horrors of that fearful time, my mother told me that she would see one of the children afflicted by the plague in the morning and it was dead that evening."

> *The* [bubonic] *disease is said to be sudden in its onset and attended with high fever followed by swelling of the glands in the groin, axilla, neck and other parts, and in most cases to prove fatal in from twenty-four to fifty-six hours, death being preceded by comatose symptoms.*

When the seventh child had passed away, the parents returned to Newport to save the lives of the remaining children. The eldest, John, and the youngest, my grandfather, were the only two born in Ireland.

Another time, another plague!

War and pestilence in a symbiotic relationship have been around for a while. A long while. The Russo-Turkish War of 1854, of which Gramps writes, is now referred to as the Crimean War. It was but one in a series of twelve wars fought between the Russian Empire and the Ottoman Empire spanning 4 centuries, the 16th through the 20th. They represent the longest series of military conflicts in European history, resulting in ascendency of Russia as a European power at the expense of a stagnating Ottoman Empire. Naturally, there were religious underpinnings, which only provided convenient excuse for even greater carnage.

Battle casualties were heavy, but the majority of deaths were due to disease. Surviving British soldiers carried the plague back home. All that a plague requires is an outbreak, a carrier, and an unsuspecting, ill-prepared populace. The young O'Malley family in Glasgow just happened to be the next iteration of the scourge. Plagues at the time were almost a fact of life.

The Bubonic Plague ('bubo' is another term for a boil; 'axilla' a more decorous term for armpit) was known as the Black Death in Europe and Asia in the 1300's. The pathogen was only discovered at the end of the 19th century by a French biologist, Alexandre Yersin, hence *Yersinia pestis*. It had been around for hundreds of years, perhaps as early as 3000 BC, spread by trading ships - or more accurately by fleas aboard rats aboard trading ships. Once ashore the fleas bit and infected. Subsequently the bacillus traveled from person to person through the air, inevitably with devastating effect.

Terms still linger from 1347 when ships from the Black Sea docked at the Sicilian port of Messina. At first, sick sailors were held on their ships for 30 days, known in Venetian law as a *trentino.* In time, 40 days, *quarantino,* was found to be more effective. Now quarantine is part of the world's lingua franca, duration to be determined by government decree.

(Yachts entering a foreign port have long been required to fly the yellow International Code Flag "Q" and await inspection by a Custom's Official. Today, one cannot come ashore until cleared by the Harbor Master. Or remain at anchor for 14 days.)

Throughout history, bubonic plague by any name has wreaked havoc on mankind. The Plague of Justinian arrived in Constantinople in 541 CE via grain as tribute to the victorious Emperor Justinian. Some tribute. The Trojan Horse spread like wildfire across Europe, Asia, North Africa and Arabia killing an estimated 30 to 50 million people, perhaps half of the world's population.

The bubonic plague resurfaced in London roughly every 10 years from 1348 to 1665. Forty outbreaks in just over 300 years, claiming thousands of lives per onset.

Another pestilence, smallpox, made its way to the New World in the 15th Century with the arrival of European explorers. 90-95% of the indigenous population was wiped out over a century. Mexico went from 11 million people preconquest to one million. It was not until late in the 18th Century that a vaccine was developed that led to eradication of the disease.

Another time, another plague!

But back to mine and me: The first O'Malley in America, a distant relative also named Charles O'Malley, arrived at Mackinac Island on Lake Michigan in 1821. He worked for John Jacob Astor in the fur trade. Mackinac Island quickly became an Irish refuge/enclave "for about fifty families, most of whom were relatives of mine [Gramps]". The O'Malleys prospered and contributed, even to the extent of claiming naming rights: Antrim, Clare, Roscommon and Wexford counties exist in Michigan today.

When Gramps' parents returned to Ireland, John, the eldest brother and 20 years Gramps's senior, had been left behind in Glasgow to mind the family stores. John was soon suspected of smuggling arms back into Ireland. Avoiding arrest, he was transported to Queenstown in a shipping crate, then on to America to join his relatives. He became publisher of the local newspaper in Michigan, *The Manistee Advocate.*

Gramps returned to Glasgow to further his education. In 1883 at the age of 16 he used his tuition to book passage from the Broomielaw to Liverpool to Queenstown and then on to America aboard the *Adriatic* of the White Star Line. (The *Adriatic* made the crossing in approximately 10 days, averaging over 30knots. The ship was capable of accommodating 1150 passengers – 150 in the saloon and 1,000 steerage.) Having been befriended by a returning prominent New York alderman, he was met with considerable pomp and ceremony upon arrival at the Battery in lower Manhattan.

He left New York shortly thereafter to join John in Manistee. He began as a printer and rapidly ascended to newspaperman. Gramps rode the rails west to Denver to report on Colorado Scale, a disease that destroyed potatoes. "Few people were living between Chicago and Denver in those days," he wrote in his book. (A distance of over 1,000 miles. Three years removed from Ireland, Gramps clearly took the expanse of America in stride.) He wrote for *The Rocky Mountain News* from 1886-1890.

"Denver in the 80's had all that abandon which is usually associated with the establishment of a new community in the wilderness. There was not a paved street in the town. The lawless element was there in droves. There were shooting tragedies almost hourly. Graft and greed prevailed … those elected to reform the law were reformed pirates, dividing the spoils."

Gramps met Lucille Fusz, the daughter of a wealthy mining family, themselves immigrants from

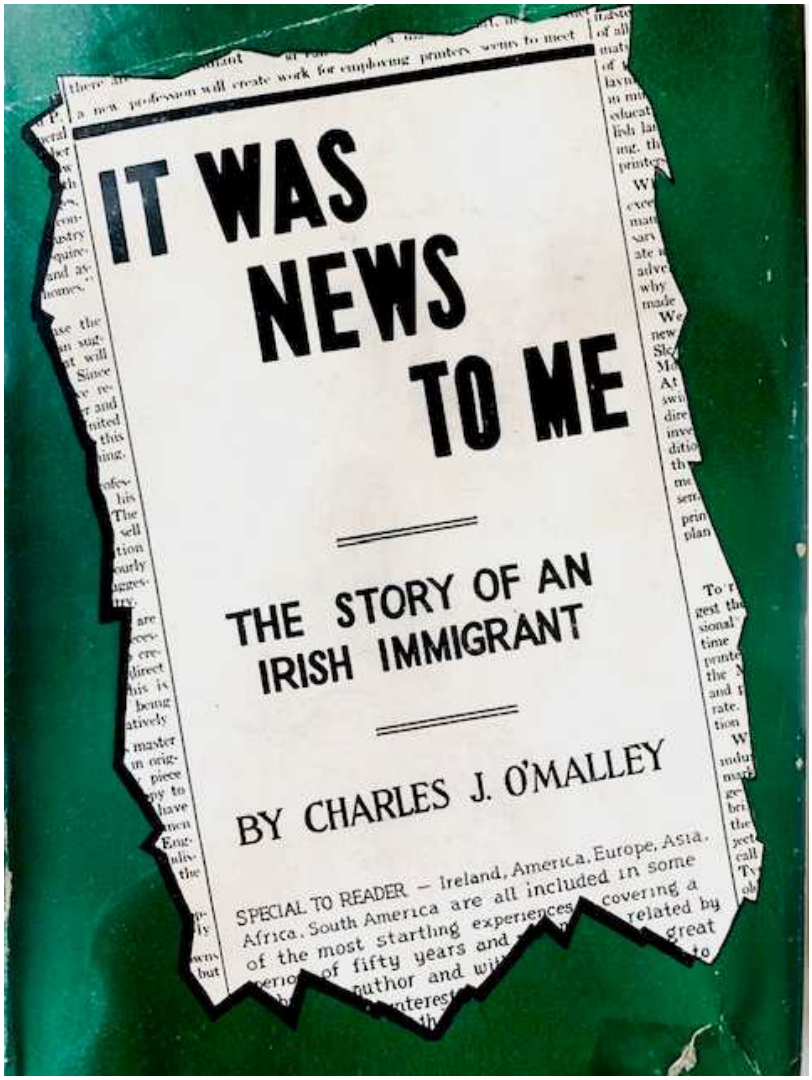
Another time, another plague!

the Alsace, at the St. Louis World's Fair of 1904. They settled among their (his) own in the more accepting environs of Boston becoming a part of the Irish Establishment.

I knew Gramps in his later years summering with the family at his seaside home on the south shore of Boston. Gramps would enter the dining room invariably reciting a limerick from a recalled yesterday, a distant look in his eyes. It was only years later when attending the festival that I learned one of his favorites was the *Rose of Tralee*, not the road to Tralee.

As a kid, I never fully appreciated what in his past gave him his love of life or his grateful embrace of his adopted country. Only in time do I have an inkling. Gramps never forgot where he came from or how he got here. But for the famine, the plague, an unyielding Faith and the perseverance of the Irish…

Copies of *It Was News To Me* are now in the archives of the Western Genealogy Division of the Denver Public Library and the History Colorado Museum.



Paul McLoughlin was born in Brooklyn, NY, where the first McLoughlin arrived from Ardee, CO Louth in 1825. A family of priests, writers, educators and merchants, the intertwined McLoughlin and McSweeny families were at the core of the Irish influence in New York City in the late 19th century.

Paul McLoughlin

Boulder, Colorado

15 December 2020

O'Malley on crusade against "Space Saving"

'It's barbaric': Councilor Matt O'Malley takes a stand against space savers

Matt O'Malley is apparently unafraid to speak out about one of Boston's most divisive topics: space savers.

"This may be unpopular to say," the West Roxbury City Councilor tweeted Wednesday night, as a nor'easter that later dropped over a foot of snow in the city barreled into the region, "but it's high time we stop using space savers, Boston."

The city of course has a time-honored practice of using just about any inanimate object — from trash cans to beach chairs — to save parking spots once they're shoveled out by a car owner. The argument over whether to embrace or reject the tradition, however, is an arena local politicians tend to avoid.

But O'Malley, who recently announced he would not seek re-election next year after a 10-year stint on the council, seems to no longer have such hesitation.

"At the end of the day, it's barbaric what we have been doing," O'Malley told *The Boston Globe*'s Billy Baker. "We've been claiming public land. The whole thing is being abused. People are putting out space savers before the first flake even drops. And my fear is that there could be violence happening as a result. People are wound up and angry right now for a myriad of reasons."

Space savers are allowed throughout the city, with the exception of the South End, which banned the tradition. But city rules provide certain parameters: Space savers can only be used when a snow emergency has been declared and for 48 hours after the emergency has ended.

"Spaces are going to be difficult to find, but spaces are difficult to find in good weather," O'Mal-

O'Malley on crusade against "Space Saving"

ley told the *Globe*. "It's going to be an adjustment, but if we abandon the practice it will become unnecessary."

Other officials, however, are not ready to line up behind the city councilor.

According to the *Globe*, when asked about O'Malley's remarks, a spokesperson for Mayor Marty Walsh sent a statement outlining the current city policy and saying that the city would support any neighborhood that decides to ban space savers after completing a public process.

City Councilors Michelle Wu and Andrea Campbell, who are both running for mayor in next year's elections, did not respond to the newspaper's requests for comment.

City Councilor Ed Flynn, who represents South Boston — where space saving is believed to have originated — sent the *Globe* a statement that did not even contain the words "space savers." Instead, Flynn urged "each of us to not lose sight of the big picture and to continue to treat all our neighbors with respect and empathy."

The Boston Globe

Fluoride to the rescue!

In Michelle O'Malley's lab, a simple approach suggests a big leap forward in addressing the challenge of antibiotic-resistant bacteria.

Scientists have long been aware of the dangerous overuse of antibiotics and the increasing number of antibiotic-resistant microbes that have resulted. While overprescription of antibiotics for medicinal use has unsettling implications for human health, so too does the increasing presence of antibiotics in the natural environment. The latter may stem from the improper disposal of medicines, but also from the biotechnology field, which has depended on antibiotics as a selection device in the lab.

"In biotech, we have for a long time relied on antibiotic and chemical selections to kill cells that we don't want to grow," said UC Santa Barbara chemical engineer Michelle O'Malley. "If we have a genetically engineered cell and want to get only that cell to grow among a population of cells, we give it an antibiotic resistance gene. The introduction of an antibiotic will kill all the cells that are not genetically engineered and allow only the ones we want — the genetically modified organisms [GMOs] — to survive. However, many organisms have evolved the means to get around our antibiotics, and they are a growing problem in both the biotech world and in the natural environment. The issue of antibiotic resistance is a grand challenge of our time, one that is only growing in its importance."

Further, GMOs come with a containment issue. "If that GMO were to get out of the lab and successfully replicate in the environment, you could not predict what traits it would introduce into the natural biological world," O'Malley explained. "With the advent of synthetic biology, there is increasingly a risk that things we're engineering in the lab could escape and proliferate into ecosystems where they don't belong."

Now, research conducted in O'Malley's lab and published in the journal *Nature Communications* describes a simple method to address both the overuse of antibiotics, as well as containment of GMOs. It calls for replacing antibiotics in the lab with fluoride.

O'Malley described fluoride as "a pretty benign chemical that is abundant in the world, including in groundwater." But, she notes, it is also toxic to microorganisms, which have evolved a gene that encodes a fluoride exporter that protects cells by removing fluoride encountered in the natural environment.

The paper describes a process developed by Justin Yoo, a former graduate student researcher in O'Malley's lab. It uses a common technique called homologous recombination to render non-functional the gene in a GMO that encodes a fluoride exporter, so the cell can no longer produce it. Such a cell would still thrive in the lab, where fluoride-free distilled water is normally used, but if it escaped into the natural environment, it would die as soon as it encountered fluoride, thus preventing propagation.

Prior to this research, Yoo was collaborating with the paper's co-author Susanna Seppala, a project scientist in O'Malley's lab, in an effort to use yeast to characterize fluoride transport proteins that Seppala had identified in anaerobic fungi. A first step in this project was for Yoo to remove native yeast fluoride transporters.

Fluoride to the rescue!

Shortly after generating the knockout yeast strain, Yoo attended a synthetic biology conference where he heard a talk on a novel biocontainment mechanism intended to prevent genetically modified E. coli bacteria from escaping lab environments. At that talk, he recalled, “I realized that the knockout yeast strain I had generated could potentially act as an effective biocontainment platform for yeast.”

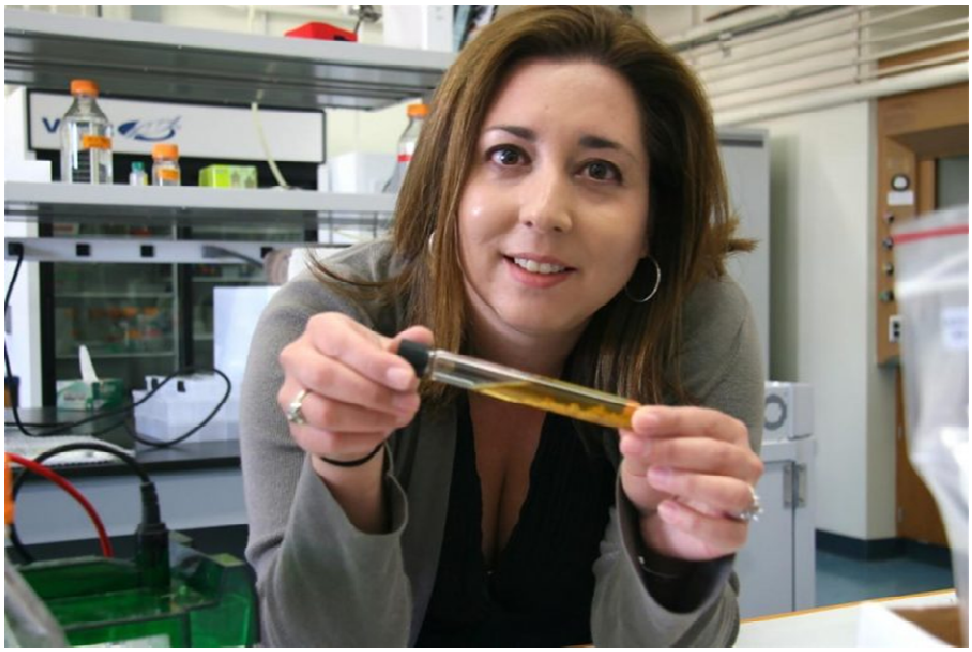
“Essentially, what Justin did was to create a series of DNA instructions you can give to cells that will enable them to survive when fluoride is around,” O’Malley said. “Normally, if I wanted to select for a genetically engineered cell in the lab, I’d make a plasmid [a genetic structure in a cell, typically a small circular DNA strand, that can replicate independently of the chromosomes] that had an antibiotic resistance marker so that it would survive if an antibiotic was around. Justin is replacing that with the gene for these fluoride exporters.”

The method, which O’Malley characterized as “low-hanging fruit — Justin did all of these studies in about a month,” also addresses a simple economic limitation to antibiotic-driven cell selection in biotechnology labs. Aside from fueling the rise of resistant strains of bacteria, she continued, “from a biotech standpoint, the process of creating antibiotic-resistant organisms is also pretty darn expensive. If you were going to run a ten-thousand-liter fermentation, and it may cost you thousands of dollars per fermentation to add some antibiotics, that’s a crazy amount of money.” Notably, using fluoride at a low concentration would cost only about four cents per liter.

Clearly, said Seppala, “we’d much rather use a chemical like fluoride that’s relatively benign, abundant and cheap, and can be used to do the same thing that is achieved using a conventional antibiotic.”

Yoo explained that the role of the fluoride transporters had only recently been elucidated, in 2013, when this project began. Emerging approaches to implementing biocontainment have focused on using biological parts that are foreign to the organism of interest, shifting focus toward what Yoo described as “brilliant, yet complex, systems,” while perhaps diverting attention from this simpler approach.

Reference: “Engineered fluoride sensitivity enables biocontainment and selection of genetically-modified yeasts” by Justin I. Yoo, Susanna Seppälä and Michelle A. O’Malley, 29 October 2020, Nature Communications.



UC Santa Barbara chemical engineer Michelle O’Malley

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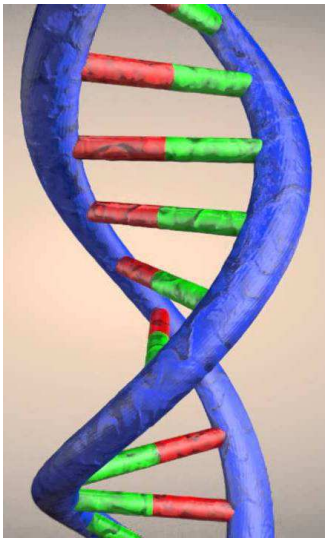
The O'Malley Clan Association aims to reach out to O'Malleys from all around the world and foster links between the O'Malleys around the globe and the clan at home here in Ireland.

The Clan Association formed in 1953 has been connecting O'Malleys around the world in The US and Canada, Britain, Australia, South Africa, New Zealand, South America, and anywhere else you can think of for over 60 years now.

We hope with our new website, and newsletter, that We can go from strength to strength in our aim to connect all the O'Malleys around the world.

The O'Malley Clan DNA Project on Family Tree DNA

The most common queries we get at The O'Malley Clan Association are queries in relation to helping to trace peoples ancestors in Ireland. As we all know, written records can only take us so far, (if you're lucky you'll get back to the early 1800's or late 1700's).



Many of the Irish Census Records and other historic documents were destroyed during the early part of the 20th century and as a result it can be very hard to trace ancestors back beyond the 19th century. Church records are a help, but can be patchy at times.

One way of narrowing down the search is through DNA testing. The O'Malley Clan Association is involved in a project with Family Tree DNA to test as many O'Malleys as possible to try and expand our knowledge of our roots as much as we possibly can.

There's a specific page for the project on the Family Tree DNA website:

https://www.familytreedna.com/groups/omalley/about

Check it out, there's lots of info there, and administrators also for any questions.