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The ruins of an ancient Norse settlement still stand near Hvalsey Fjord in Greenland. (Wolfgang Kaehler/CORBIS)

By Sarah Zielinski
smithsonian.com
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In 1721, Norwegian missionary Hans Egede sailed to Greenland to convert the Norsemen living there from Catholicism to Lutheranism. But instead of finding a land full of potential new followers, he discovered one of the world’s greatest mysteries: The two settlements that had been founded there more than seven centuries earlier were in ruins. The Norse settlers had vanished, and the only people left on the island were Inuit.

There have been many theories as to what happened: The Norse got sick and died, perhaps, or they moved back to Europe. One enduring theory, though, has been related to climate.

The Norse settled Greenland starting in 985, at the beginning of the Medieval Warm Period, when temperatures in Europe were slightly warmer than average. By the time Egede arrived to find no Norse in sight, Europe was in the midst of the Little Ice Age,
when it was slightly cooler than average. Perhaps the Norse weren’t able to adapt to the change in climate, and that killed them off.

However, a new analysis of glacier remains from the region north of the Norse settlements is adding to evidence that conditions in Greenland during the Medieval Warm Period may not have been so different from those of the Little Ice Age. If so, something other than climate change may have caused the Norse to disappear from the region.

The evidence comes from moraines, the big piles of debris that build up at the end of a glacier and are left behind after the glacier retreats. Moraines mark a time not only when a glacier was larger than it is now, but also when the climate was cooler.

“The trick is figuring out exactly when the moraines were deposited,” says Nicolas Young, a glacial geologist and paleoclimatologist at the Lamont-Doherty Earth Observatory of Columbia University.

When the rocks and boulders that make up a moraine are exposed to sunlight, they are also exposed to incoming cosmic rays, Young explains. These high-energy particles bombard the rocks and create a buildup of isotopes, such as beryllium-10, on their surfaces.

“We can sample these boulders, we can extract the beryllium, and essentially the amount of beryllium in that sample tells us in years how long that boulder has been exposed to the atmosphere,” he says.

The technique has been widely used on moraines deposited at the end of the last glacial maximum around 10,000 years ago or more, but Young and his colleagues were curious whether it would work on younger ones. So they tried applying it to moraines on Baffin Island and western Greenland.

To their surprise, the technique told them that the moraines there dated to the Medieval Warm Period, the team reports this week in Science Advances. But if the climate of the region had been cooler during the Little Ice Age, glaciers would have lasted longer and the moraines would have been younger.

“There are a few other [climate] records that broadly point to the same thing,” that the Medieval Warm Period didn’t stretch to western Greenland, Young says.

What caused the Medieval Warm Period still isn’t known, but there’s growing evidence that the phenomenon may not have been global. Young and his colleagues suggest that the culprit might be a circulation pattern called the North Atlantic Oscillation (NAO) that fluctuates between two modes, positive and negative.

“When the NAO is in a positive state, what typically happens is Europe is relatively warm, but the western north Atlantic region, and particularly Baffin Bay, is relatively cool.” Young says. Studies have suggested that during the Medieval Warm Period, the NAO may have been in a persistently positive state. If that were the case, then the climate for the Norse wouldn’t have been so different during the two time periods.

Young and his colleagues suggest, therefore, that factors other than climate—such as a reduction in the price for walrus tusk ivory, increased isolation from Europe or increased hostilities with the Inuit—may have been bigger contributors to the demise of the Norse Greenlanders.

Still, archaeologist Thomas McGovern of Hunter College in New York City isn’t convinced. “We can see really clear in the archaeological record that something happened” to the climate around 1250, he says.

For instance, seal bones found around the settlements come from species more associated with sea ice, suggesting especially cold, harsh conditions. And the chemical composition of human bones shows that the Greenlanders were moving away from farming and towards a more marine-based diet—another clue that climate was shifting dramatically.

McGovern and other archaeologists are still investigating what happened to the Norse Greenlanders. They have ruled out migration to Europe, because Europeans at the time would have recorded such an occurrence. Disease is also unlikely.

And while he agrees that factors such as isolation and conflict with the Inuit may all have played a role in the settlers’ decline, “the evidence suggests that climate change is very much part of the mix.”
Soaring through clouds and mist, the Chinese dragon dives into rivers, flying through the heavens and bringing life-giving rains to fields below. This mythical creature is considered to be one of the most difficult subjects to paint -- the artist must capture the likeness and spirit of a creature that is unseen by human eyes. Just so, the formless takes form in the art of Eric Jiaju Lee. He describes his work as "the intersection of contemporary abstraction and traditional Chinese painting."

At EXP, his most recent solo exhibition on view at the Michael Florio Gallery in Greenwich, CT, Eric Jiaju Lee presents work that incorporates a combination of materials, techniques, practices and philosophies spanning East and West. The title of the exhibition is borrowed from the title of the Jimi Hendrix song EXP, from Hendrix's debut album Are You Experienced? Explains the artist: "I would like to think that people consider viewing my work as an experience, just as it was for me during my creation of the works themselves. I see my works as the result of an inspired experience, ultimately a point of intersection, more than just an image to behold."

At EXP, Lee offers a series of highly chromatic works that are richly textured, incorporating the pouring and puddling paint, paired with the skills of the brush. Indeed, the EXP viewer can consider the paintings a unique experience shared with the artist.

Double Up is painted in acrylic on silk and satin in formatted frames reminiscent of a silk weaving loom. Lee’s textural interlacing of color, motifs and technique produces a compelling surface that is reminiscent of early silk textiles in China.
Photo Credit: Courtesy maryannerrussell.com

The artist himself appears to be made of the same colorful materials and complex techniques as his paintings. In a photograph taken at the...
gallery, his blue hair and red trousers echo the palette of his works. His boldly colored shoes laced with orange ties, and the textured faux fur throw on which he sits, reflect the complexity and sensuality of the art and the man himself.

Lee spent the years 2004-2006 elevating his artistic formation and establishing an art practice in Beijing. There, in 2006, he attended the Red Gate Residency, joining other artists in the exploding art scene in the Chinese capital city. His studio was located in the famous 798 Art District in Beijing. A 50-year-old decommissioned military complex of factory buildings, complete with leftover Mao slogans on the walls, 798 is named after Factory #798, just one of the former factories in the complex that now houses a thriving artistic community. The art of 798 alumni is now found at some of the world’s major museums.

Photo Credit: 798 Art Zone Beijing, China, via Wikimedia Commons, GNU Free Documentation License Version 1.2.

Lee’s years in Beijing coincided with a powerful release of artistic intention in Chinese art, and an experiment testing the country’s taste for new freedom, new taste, new prosperity and new technology. No longer viewed as decadent or illegal, Chinese art broke free from concepts and methods of Western art during these years. At the same time, Lee was free to explore his own artistic identity as a Chinese-American in China, a cultural heir to both Western and Eastern traditions. Lee found the Beijing art scene a place to develop the art of identity in his work, to perfect his craft and explore his Chinese artistic heritage. Some of his pieces can be linked to an exploration of conspicuous indicators of Chinese culture.

Photo Credit: Courtesy MaryanneRussell.com
In his current solo exhibition, the painting Red Pi, is a mottled ring of red pigment on the background of raw canvas. This is Lee's contemplation of jade, a rare semi-precious hardstone, laboriously worked with abrasives. A passion for jade has been an enduring hallmark of Chinese civilization for millennia.

The round, flat jade disk that emerged during China's Neolithic era, the pi represents heaven, which Lee credits as the source of his artistic inspiration. For the early Chinese, jade had inherent supernatural properties. The earliest jade objects, such as the pi disk, were tools for shaman wizards that they used to perform magic and spiritual rites. The earliest jade acted as a medium of communication with the gods and ancestors, while later jade was valued as an indicator of social status.

Photo Credit: Jade bi disk, Western Han dynasty, via Yongxinge, Wikimedia Commons, CC-BY-SA-30.

Lee consciously selects his material, techniques and motifs to span two cultures and millennia in a single work. Lee translates the round form of the pi disk onto a perfect square, the Chinese motif used to represent the earth, thus conflating heaven and earth in a single artistic form. But Lee employs not precious Chinese jade, but common acrylic and canvas, the tools of the Western painter. He chooses not the rock and sand of Neolithic jade-working abrasives, but the power of water to add surface adornment by dispersing the pigments of his painted pi disk.

Eric Jiaju Lee

Coinciding with the birth of his first child, Lee returned stateside in 2007, while maintaining his Beijing studio for another year. His experience at 798 in Beijing, and the cross-fertilization of artistic ideas and exchanges, led him to seek a similar artistic community on his home turf. Lee's quest brought him to Bushwick, then a gritty area of Brooklyn that had the basic ingredients needed to build an artistic
community: large spaces and cheap rents; access to New York's cultural institutions and numbers of like-minded individuals willing to work together in a grass roots effort.

In Bushwick, Lee participated in numerous group shows and events to promote and publicize the area, including Bushwick Open Studios. He also began teaching in the well-regarded Hunter College Department of Art and Art History, where he had received his MFA in 1999. His growing reputation began to garner solo exhibitions, high-profile corporate and private commissions and other artistic residencies.

Last year, during a summer residency at Lake George in upstate New York sponsored by Openings Artist Residency, Lee experimented with new forms, techniques and materials, while continuing to take inspiration from masters of traditional Chinese art and modern, abstract painters. Lee used both paper and canvas to unite the bold impressionistic brushstrokes of the monk painter Shi Tao and the kinesthetic movement of Jackson Pollock.

![Image](Photo Credit: Shi Tao’s Reminiscences of Qinhuai, Qing dynasty, ink and colors on paper, collection of the Cleveland Museum, via Vassar College Slide Library, Wikimedia Commons, PD-art.)

Much of his work is gestural, evoking a sort of performance art of brush and paint on paper without ever actually using a brush. Lee adopted tai chi gestures when applying his paint by pouring while tilting the surface of the painting. The work is premeditated, but improvisational. “Water is the most powerful element of nature,” explains Lee as he gestures towards bottles of paint prepared on his work table. “Fluid paint will find its own way, a path of least resistance, like water.” There’s a natural way to paint when the artist adheres to the movements of tai chi, just as tai chi is fashioned after the movements of nature. In this way, by substituting a pouring method in place of the brush, Lee preserves but employs an innovative approach to the calligraphic form and spirit of line.
During one of his residencies, Lee abandoned paints all together. He began experimenting with charcoal, likely the medium used by the earliest artists of all cultures.

Then, Lee cast aside his brushes for a more direct, literally hands-on approach.
Photo Credit: Courtesy of the artist.

The resulting monochrome work shows the form of the artist's hands blurred by the artistic process. The mark making has resulted in an intricate and nuanced interplay between the mode of production and the medium that is highly reminiscent of Chinese landscape painting master, Gong Xian, whose picture of the tall, serene mountains of northern Chinese, is translated by the hand of a 21st-century master in New York.

Photo Credit: Courtesy of the artist.
Chinese landscape is known as shanshui, literally mountain/water, a balance of yin/water, clouds, empty space and yang/stone, mountains, land. Lee acknowledges the influence of Taoist philosophy in these works, citing a great-grandfather who was a Taoist practitioner and heeded the rules of nature in his own painting practice. Yet as an artist, he readily admits that breaking rules and reinventing forms and techniques, reinterpreting media and motifs is the essence of his art.

"As an artist, you create the game and you create the rules. Then you master the game, break the rules and create a new game," Lee says. "There is a saying, 'The journey is the reward.' I believe that each of my works can act as a meeting place for contemplation between myself and a viewer, enabling us to share an experience of a more profound and beautiful nature."
Martin Shkreli, the Bad Boy of Pharmaceuticals, Hits Back

By JULIE CRESWELL and ANDREW POLLACK  DEC. 5, 2015

Martin Shkreli was trying to explain himself, so he turned to YouTube.

In the conference room at Turing Pharmaceuticals, the company he heads, his fingers flew across a laptop keyboard, and up popped a YouTube video on a large wall screen. It was a heartfelt appeal from three young brothers in North Dakota who suffer from a degenerative and often fatal brain condition. “Only 300 people in the country have this disease,” Mr. Shkreli said.

Why show the video? “I invented a new drug,” to treat the disease, he said, shrugging nonchalantly. “But it’s hard to sell a drug for 300 people, to go through the process. You have to charge a lot per person to make it a viable product.”

His point was that new drugs — especially for rare conditions — don’t come cheap and someone has to pay for them. This is more truism than earth-shattering revelation. But Mr. Shkreli has become a public villain for twisting that notion to apply to a decades-old drug that Turing merely acquired. By raising the price of that drug overnight to $750 a pill from $13.50, Mr. Shkreli
became a caricature of pharmaceutical industry greed.

A former hedge fund manager, Mr. Shkreli drew the wrath of consumers, became a talking point in the presidential campaign, and spurred federal and state inquiries as well as a dialogue about how and whether to control rising drug prices. As proof of Mr. Shkreli’s toxicity, Bernie Sanders rejected his $2,700 campaign donation, turning it over to a health clinic instead. And in a sharp slap, just Tuesday, Express Scripts, the largest pharmacy benefit manager, endorsed the use of a compounded alternative to Daraprim, the $750 pill. That treatment will sell for about $1 a pill.

Mr. Shkreli’s price increase is likely to take another pummeling at a Senate committee hearing investigating skyrocketing drug prices next Wednesday.

Rather than cower as he takes a beating, Mr. Shkreli seems to relish his time in the ring. He taunts his critics on Twitter or wherever he can. (Mr. Shkreli on Bernie Sanders to Fox Business Network: “I don’t think he understands pharmaceuticals at all.”) Most recently, he live-streamed hours of himself at his desk, talking to co-workers and viewers about medical research and investments and tapping at his computer (action high point: hair-twirling). Last month, he and a group of investors took a large stake in another drug company. He sparred contemptuously with an executive of Express Scripts at a recent Forbes conference. And he still has time to occasionally post pictures of cats rolling in cash on Twitter.
In Turing’s Manhattan offices last Tuesday, Mr. Shkreli, 32, wore a simple black T-shirt and dark jeans and seemed less brash than his public persona, but no less boastful. That Mr. Shkreli’s elfin features are now the face of pharmaceutical greed is fine with him. While he contended that he receives little compensation from his companies, he proudly noted that he has become quite wealthy thanks to his investments.

Even before the Daraprim price increase, his business practices had come under scrutiny. He acknowledged the regulatory and criminal investigations into claims of wrongdoing at hedge funds he once controlled as well as at Retrophin, the public pharmaceutical company he ran — and from which he was expelled. But he was dismissive of their importance.

He also dismissed critics of the Daraprim price increase, saying his biggest duty is to his investors. He recounted how, at dinner the previous night, a hedge fund investor in the privately held Turing had “beat the crap out of me” for not raising a drug price more.

Besides, he said, returning to his theme: The high price on the drug Turing sells is a way to raise enough revenue to develop new medicines for debilitating illnesses.

Critics say that if Turing wants to develop new drugs, it should use money from investors, like most biotech start-ups do, not burden existing patients and hospitals.

“This is a stupid investment,” said Dr. Carlos del Rio, a professor at Emory University and chairman of the HIV Medicine Association, referring to Turing’s $55 million purchase of the Daraprim rights. “They paid a fortune for it, and now they have to recover their money.”

For Mr. Shkreli, money isn’t the sole motivation. His name is on two patents held by his former company, Retrophin, for drugs to treat the degenerative brain disease afflicting those North Dakota brothers. He says he’s
working on "an even better version" of the drug at Turing.

He’s doing this, he added, “partly to spite my old company.”

Then he gave a cheeky grin.

Mr. Shkreli was an indifferent student in high school and studied business in college. Yet almost anyone who knows him will remark on his ability to practically memorize medical journals and textbooks, accumulating an encyclopedic knowledge of drugs and diseases that interest him.

“Martin is the smartest guy in the room at all times,” said someone who worked closely with him on Wall Street. This person was reluctant to discuss Mr. Shkreli at all during a phone call, but did say, “The guy’s intellect is unparalleled.”

His brilliance does not preclude him from sometimes behaving like an immature teenager. “He’s driven by ambition to let people know that Martin Shkreli’s made it,” said an early investor in his first public company, who spoke on the condition of anonymity to preserve relations in the industry. “The affirmation is as important to him as the financial success.”

Mr. Shkreli grew up in a small apartment on Ocean Avenue in Brooklyn with his three siblings and parents, immigrants from Albania who, he said, worked janitorial and other odd jobs. Neighbors say the family kept to itself.

Mr. Shkreli was clearly bright. He was admitted into Hunter College High School, an elite Manhattan public school for the intellectually gifted. But former classmates said he was more interested in chess and playing electric guitar in a band, Coney Island Whitefish, named, he said, after a Joan Jett song. He stopped attending classes and was asked to leave before his senior year. “At the school, the difference between an A and an A-minus was significant,” Mr. Shkreli said. “So I said, ‘How about I get a bunch of F’s?’”

“I didn’t like the conformity of the school,” Mr. Shkreli said, “the
Mr. Shkreli received the credits needed for his high school degree though a program that also placed him in an internship at the Wall Street hedge fund Cramer, Berkowitz & Company.

He took classes at Baruch College, worked briefly for a Wall Street investment bank and then, in his early 20s, started his own hedge fund, Elea Capital, using a couple of million dollars he obtained from an investor.

Elea met its demise in 2007, when Mr. Shkreli made a $2.6 million bet that the stock market would decline. It didn’t. At least not at the right time for him.

“I learned a lot about using leverage, the perils of leverage,” Mr. Shkreli said. “Back then, this was almost 10 years ago, I was rushing to succeed. I made a monster bet that the market would crash, and I was wrong.”

The lesson didn’t sink in right away, as Mr. Shkreli kept taking big risks. Despite Elea’s failure, Mr. Shkreli was able to attract enough money to start a second, bigger hedge fund, MSMB Capital.

In 2011, while still running MSMB, Mr. Shkreli started Retrophin, which adopted a business strategy that had been used by other companies like Questcor Pharmaceuticals and Valeant Pharmaceuticals. It acquired old, neglected drugs, usually for rare diseases, and raised their prices to be closer to those of modern drugs. Retrophin, for instance, raised the price of Thiola, used to treat a disease that causes kidney stones, to $30 a pill from $1.50.

Mr. Shkreli said that higher prices made the supply more secure and were better for patients because they gave the company the financial wherewithal to educate doctors about the diseases and possible treatments. Many cases of cystinuria, the disease Thiola treats, are undiagnosed, he has said.

But there was discord within the company. On Sept. 30, 2014, Retrophin
announced that its board had replaced Mr. Shkreli, effective immediately.

A lawsuit filed by Retrophin this summer illuminates some of the strife. According to the suit, which seeks $65 million in damages, when the MSMB hedge fund ran into trouble on a bad bet in the market, Mr. Shkreli began an elaborate shell game, using Retrophin cash and assets to pay off discontented MSMB investors. Retrophin also disclosed in regulatory filings that it had received a subpoena relating to an investigation by the Justice Department into Mr. Shkreli’s transactions.

In an emailed statement, a spokesman for Retrophin said that the board replaced Mr. Shkreli "because of serious concerns about his conduct" and that a subsequent investigation "identified substantial self-dealing and breaches of fiduciary duty."

When asked about the lawsuit, Mr. Shkreli waved his hand dismissively. "It’s rife with inaccuracies," he said, adding it contained "vile accusations."

As with other setbacks, Mr. Shkreli’s ouster from Retrophin did not seem to impair his ability to start something new, in this case Turing. The company announced in August that it had raised $90 million, an unusually high amount for a first round of financing for a biotech company. Mr. Shkreli says he owns about half of the company. He would not reveal the other investors, but people on Wall Street say they include some hedge funds that made a lot of money on Retrophin.

Turing’s first big move was the one that made Mr. Shkreli notorious. He paid $55 million for the American marketing rights for Daraprim, a 62-year-old drug for toxoplasmosis, a parasitic infection that can be devastating for babies and people with AIDS. The immediate price increase brought the cost of a course of treatment for some patients to hundreds of thousands of dollars.

Mr. Shkreli could do this because in the United States, unlike many other countries, there are no drug price controls.
Daraprim is so old that it no longer has patent protection. A generic company could sell a lower-priced copy, but revenues from the drug were so small, until now, that no generic company was interested, and it would take a few years for one to get regulatory approval. Moreover, at both Retrophin and Turing, Mr. Shkreli has tightly controlled distribution of the drugs, making it difficult for generic companies to obtain the samples they need for testing. The New York State Attorney General’s office has asked Turing about this, saying it may violate antitrust laws.

Many proposals have been made for reining in drug prices, but they face opposition, particularly from the pharmaceutical industry. One that the Obama administration favors, but which is now prohibited by law, is to let Medicare negotiate with drug companies, using its huge buying power to wring discounts.

Another idea is to allow imports of drugs from Canada and other places where prices are far lower. Last month, the Republican senators Chuck Grassley of Iowa and John McCain of Arizona urged the administration to allow imports, particularly in cases like Daraprim, though they did not name that drug, in which a company has acquired the American marketing rights and jacked up the price but the drug remains available at a lower price abroad.

At first, in response to the outrage over the increase, Mr. Shkreli said he would lower the price. But he never lowered the list price of Daraprim, instead saying that Turing would offer discounts of up to 50 percent to hospitals. He now says the extra money will be used to develop better drugs for toxoplasmosis and other diseases. The company has begun a clinical trial of a drug for severe forms of epilepsy.

“Haters, please tell me about the latest in apicomplexa genetic drift,” Mr. Shkreli posted on Twitter to counter skeptics who say that a new drug for toxoplasmosis is not needed. “You are all Protozoa experts equipped to judge and advise me, right?”
Mr. Shkreli said that he made virtually no money from his hedge funds, but that his Turing stake and the $100 million he said he made selling Retrophin stock after he left made him very rich. Plus, he said he pocketed $30 million to $40 million this year selling short the stock of two companies, Celladon and Vital Therapies, whose products failed in clinical trials. This year, he flew some Turing employees to Las Vegas to watch a boxing match.

In late November, Mr. Shkreli led a group of investors that acquired 70 percent of KaloBios, a biotechnology company that days earlier had announced it would shut down because its drugs had failed in clinical trials and it was running out of cash.

Mr. Shkreli, who said he saw promise in one of KaloBios's experimental drugs, was named chief executive, and several other Turing executives were also appointed to top posts at KaloBios. While the two companies are being run separately, Mr. Shkreli said on Thursday that KaloBios was “exploring opportunities” with Turing. Shares of KaloBios, which were selling for a dollar or two when Mr. Shkreli bought them, are now above $30.

Still, it is likely to be a few years before Retrophin, Turing or KaloBios gets a new drug to market. Until then, it will be hard to say if Mr. Shkreli really is good at developing new drugs or just exploiting old ones.

Seemingly secure in his wealth, Mr. Shkreli has started putting money toward philanthropy. (He also collects arcana, including a credit card formerly owned by the Nirvana frontman Kurt Cobain and Enigma encoding machines.) Earlier this year, he started the Shkreli Foundation, run by his sister Leonora, which he said has given more than $3 million to various causes.

Dr. David Feifel, a professor of psychiatry at the University of California, San Diego, is also a recipient. He said Mr. Shkreli contacted him out of the blue two years ago and later donated $100,000 to help with his research on new treatments for depression. “He’s more complex than the cartoon character,” Dr. Feifel said.
The foundation also gave a $1 million gift to Hunter College High School. Was this a way of showing he had made it, despite not graduating? “Maybe. Maybe that’s right,” Mr. Shkreli said, nodding thoughtfully. “That you could do it, doing it your own way.” He added that he was considering an even bigger donation of $5 million or more.

Some alumni have started a campaign to raise $1 million so the school can return Mr. Shkreli’s donation. He smiled at that.

“Fine. Let them do it. Whatever,” he said. “But can they raise $5 million?”

Rachel Abrams contributed reporting.

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Half of community college students struggle to find housing, food
By Jillian Berman
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In the American imagination, higher education is supposed to be a ticket to a better life. But even for a large share of students who make it to college, poverty can be hard to escape, because its trappings plague them through school.

More than half of community college students experience some form of housing insecurity, ranging from struggles to afford rent to sleeping in abandoned buildings or shelters, according to a study released Friday by the University of Wisconsin's Hope Lab, a research organization aimed at increasing equity in higher education.

The study, which surveyed 4,000 community college students from across the country online, also found that more than half of students were at least marginally food insecure in the 30 days before the survey period. That means they experienced some kind of issue with access to food whether it's simply anxiety over how they would get it or disrupted eating patterns and reduced food intake.

As policy makers, including President Obama, and higher education leaders look for ways to boost the stubbornly low rates of graduation from community college — just 29% of students finish in three years — the study provides a window to some of the challenges students are facing as they try to get through school.

Moneyologist: Untangling who, how much to tip at hotels
(3:48)
When visiting a fancy hotel, who gets tipped and how much? Moneyologist Quentin Fottrell discusses.

The survey likely underestimates the problem because students struggling with housing or food issues are some of the hardest to reach, while others simply drop out of college, says Sara Goldrick-Rab, an educational policy studies professor at the University of Wisconsin and one of the study's authors. "My jaw was on the floor when I thought about that," she said.

Goldrick-Rab suspects there's long been a subset of community college students struggling with food and housing insecurity, but who were embarrassed or afraid to talk about it. Still, she said the issue has likely grown more pronounced in recent years as state funding to higher education dwindled and financial aid has failed to keep up with the rising cost of community college, which grew 28% since 2000.

Obama and others are looking for ways to ease the financial burden placed on community college students, who come disproportionately from low-income and first-generation backgrounds. The president proposed making two years of community college free earlier this year and community college programs across the country are offering their own fixes.

At the City University of New York, students can participate in a program where they get tuition, books, metrocards and other things paid for in exchange for attending school full-time, meeting with their advisers regularly and other criteria.
Forty percent of participants in the program graduated in three years, compared with 22% in CUNY’s general community college population. At Tacoma Community College in Washington, students who maintain a 2.0 GPA and are at risk of homelessness are eligible for housing vouchers provided by the school.

Still, Goldrick-Rab said more needs to be done on a broader level to meet poor students’ needs in the same ways they’re addressed as they go through the K-12 system. She’s heard students complain for example that they’re pushed throughout high school to get to college and then once they arrive, the resources that helped them get through school growing up are gone, like reduced-price or free lunch.

“I think they’re willing to go through a lot,” Goldrick-Rab said of the students. “At some point during the semester or a year into it, people going through this say, ‘I’m sorry it’s too much.’

More from MarketWatch
In Public Service: Williams pushes for a new New Deal in NYC

By Paula Katinas
Brooklyn Daily Eagle

The key to solving the problem of gun violence on New York City streets is to stop looking at it strictly as a law enforcement issue and to start taking a holistic approach to the situation, according to Councilmember Jumaane Williams.

Williams (D-Flatbush-East Flatbush-Flatlands), is the co-chair of the council's Gun Violence Task Force.

While it's important to have cops out there taking illegal guns off the streets, it's not enough to solve the problem, Williams said. "We also have to look at the demand for guns," he told the Brooklyn Eagle over lunch at the Woolworth Kitchen Restaurant near City Hall.

"We need a new New Deal," Williams said, adding that he'd like to see a comprehensive, Franklin Delano Roosevelt-type of all-out effort involving multiple city agencies, each contributing to improving the lives of the city's young people.

The departments of Education, Youth and Community Service, Health and Mental Hygiene, and Housing Preservation and Development should be a part of the solution, Williams said. The city should dedicate resources to these agencies so they can assist in the effort to improve young people's lives so that they don't have the desire to turn to guns and violence, he said.

"Public safety isn't just about law enforcement. You have to take a holistic approach. You have to broaden it out," he said.

Some steps are being taken, he said. The city has dedicated $57 million to the Summer Youth Employment Program to give teens jobs, and councilmembers are pushing for the establishment of an after-school jobs program for young people during the school year.

"For $100 million, we can find..."
a job for every kid who wants one," Williams said.

The city has also taken important steps in the past, according to Williams, who said the De Blasio administration deserved credit for its Cops and Kids approach, which opened up after-school centers.

"Beacon schools are very important," said Williams, who once directed a Beacon school himself.

Many ideas on curbing gun violence are contained in a 2012 report issued by the Gun Violence Task Force; a document that Williams said did not get the publicity or the public attention it deserved.

Williams is also a member of the National Network to Combat Violence, an organisation made up of council members from across the country who share their ideas on how to make the streets safer.

Williams was one of the architects, along with Councilmember Brad Landau (D-Park Slope) of a 2013 bill to change the NYPD's controversial stop-question-and-frisk policy to ensure that the civil rights of New Yorkers would be honored.

Opponents of the policy charged that police officers were stopping young African-Americans and Latinos on the streets for no reason. They also charged that the policy did not make the streets safer, since the vast majority of stops did not involve arrests.

"Stop-question-and-frisk is an important policy tool, but it was abused. It violated people's civil rights. It violated the Constitution. It went from being a tool to being a policy. Something had to change," Williams said.

"The PBA refused to have productive conversations about it," he said, referring to the Patrolman's Benevolent Association, the union representing police officers.

Williams said he found the PBA's stance ironic. "We support the police. We don't support bad policies. A lot of officers hated stop-question-and-frisk. It was a burden on them," he said.

Williams represents the 45th Council District, a seat that includes Flatbush, East Flatbush, Flatlands and parts of Midwood and Canarsie. He was first elected in 2009 and won re-election in 2013.

Williams is the deputy leader of the City Council. He serves as chairman of the council's Committee on Housing and Buildings and is a co-founder of the council's Progressive Caucus.

In addition, he is a member of the council's Black, Latino and Asian Caucus.

Williams, whose parents hailed from the West Indies, is a first-generation Brooklynite, according to his official City Council website. He is a graduate of Brooklyn Technical High School and Brooklyn College, where he earned a bachelor's degree in political science.

If he hadn't gone into politics, he would have been an actor or a movie director.

As a kid, "I loved acting," he told the Eagle. "I loved drama."

But he was always interested in social justice issues. His heroes were Spiderman and the Rev. Dr. Martin Luther King Jr.

"I always wanted to affect change, even in the arts," he said.

In school, he took film production courses and for a time set his sights on a career as a movie director.

He couldn't resist the siren call of politics, however. He became active in campus politics at Brooklyn College. He joined the Black Students' Union and ran for a seat in the student government. It was an important learning process, he said. "I saw how you could use electoral politics to affect change," he said.

Williams went on to earn a master's degree in urban policy and public administration from Brooklyn College.

After college, Williams went to work as an assistant director for the Greater Flatbush Beacon School and then worked as a director at the East Flatbush Community Development Corporation.

Later, he went on to serve as the housing director of the Flatbush Development Corporation and eventually became the executive director of the New York State Tenants & Neighbors group.
A friend and mentor, former Councilmember Lew Fidler, encouraged him to go into politics.

Williams found a political home at the Thomas Jefferson Democratic Club, where current Brooklyn Democratic Party Chairman Frank Seddio is a member.

As a councilmember, Williams dealt with first the Bloomberg administration and now the de Blasio administration.

"I worked well with both administrations. But with Mayor de Blasio, there is more of a common way of thinking. It's easier to not have to explain or convince the administration to see things your way," he said.

Under Bloomberg, Williams had to first convince administration officials to fund a particular endeavor.

In recent years, Williams sponsored a number of bills, including the Fair Chance Act, a bill to prohibit employers from requiring job applicants to answer on an initial job application whether or not they had been convicted of a felony.

The old system was wrong, he said, because employers would often dismiss job applicants out of hand, without so much as an interview, because they had served time in prison. "You were setting people up to fail," he said.

Current issues Williams is tackling include housing and transportation. He and other councilmembers are looking at legislation to allow dollar vans to operate as long as they adhere to laws.

The vans are a vital link for commuters who live in neighborhoods that are not well served by public transportation, he said.
Think finals are tough? Real challenge for growing number of college students is getting enough to eat

BY LAURA M. COLARUSSO, THE HECHINGER REPORT  December 4, 2015 at 3:54 PM EST

Every morning, as Christine Janumala prepares for her classes at Columbia University, she makes sure her bag is packed with all the essentials. Textbooks. Note pads. Pens. And at least one empty tub of Tupperware.

While the school supplies will help her get through her coursework, it’s the Tupperware that will get her through her day. After paying for tuition and other living expenses, Janumala often has no money left for food. She darts to club meetings between lectures to scoop up uneaten pizza or sandwiches. If she gets there early, she can grab enough to stow away for later.

“Being food insecure is so alienating to begin with, but there’s an extra layer of ‘I don’t belong’ when you go to such a prestigious university, where food is usually an afterthought for most people,” said Janumala, a 21-year-old junior from Santa Ana, California majoring in creative writing and the daughter of immigrants from India who is the first in her family to go to college in the United States. “Making sure I get three square meals a day requires a lot of planning.”

It may come as a surprise that an affluent school like Columbia, which has a $9.2 billion endowment and just raised another $1 billion for financial aid, has students who can’t afford to eat. But as more low-income students seek a higher education even as the cost of tuition soars, hunger is a problem that is seeping onto even the wealthiest and most elite campuses.

Related: Nonprofits step in to help students that colleges allow to ‘slip through the cracks’
A few community colleges have tackled the issue of hunger head on, but other higher-education institutions have left it up to student groups to take the lead in creating meal-share programs or food banks, or even shine a light on the problem. One exception is the University of California system, which allocated $750,000 earlier this year to answer the surreal question of how many of its students didn’t have enough food, and recommend what to do about it.

More than 200 food pantries have popped up on college campuses—50 of them this year alone.

At Columbia, for example, students who don’t use up all the weekly credit from their dining hall accounts can give some of it to classmates who don’t have enough to eat; some undergraduates have created an app that also pinpoints where on campus there is free food. A student at Otterbein University in Ohio started a program to send food home on the weekends with financially struggling students who have children; it serves 85 families a week.

Advocates say these remedies, however well-intentioned, don’t get at the root of the issue.

**Related: States moving college scholarship money away from the poor, to the wealthy and middle class**

Over the last decade, the number of students receiving federal Pell grants, which are given to the neediest of undergraduates, has grown from 5.3 million to 8.2 million. But the increase in the cost of attendance has eclipsed what these grants cover, including for such necessities as food. Meanwhile, median family income has flattened out or fallen not just for the poor, but for all but the wealthiest Americans.
This has left the lowest-income students, in particular, with crushing loans and tough choices.

"Historically, colleges and universities were for the middle and upper classes, and financial aid was developed to help those families go to college," said Clare Cady, co-founder and co-director of the two-year-old College and University Food Bank Alliance. More poor people may be going to college now, she said, "but the college system in this country hasn’t caught up. Colleges and universities are systemically out of step with the needs of a large and growing segment of the students on their campuses.”

**Related: The financial aid policy that shuts out millions of students**

A little less than half of Janumala’s tuition is paid for by a Pell grant and other financial aid, which means she’s covering the rest plus all of her living expenses in New York City. As a student in the School of General Studies — a Columbia program that caters to nontraditional undergraduates who often don’t live in the dorms — she said she has many classmates who, like her, are struggling to get by. To make ends meet, they Dumpster-dive and beg the local supermarkets for day-old food that would otherwise be thrown out.

One in three college freshmen has only inconsistent access to adequate food, according to a study by researchers at Arizona State University and the University of Minnesota released last month at the annual meeting of the American Public Health Association.

There has also been other research about this at individual institutions. One out of five students at the University of Hawaii at Manoa struggled with hunger, a 2009 study found. A survey by the City University of New York in 2011 said that roughly two in five undergraduates, or 100,000 students there, had trouble getting enough food.

And “we suspect that these are undercounts,” said Sara Goldrick-Rab, professor of educational policy studies and sociology at the University of Wisconsin. “College is making students poor. They are trading off food to cover their tuition.”

**Related: Catholic colleges tell poor students: Go somewhere else**

A new report produced by Goldrick-Rab at the Wisconsin HOPE Lab, which works to lower barriers to graduation, found that more than one in five students at 10 community colleges
studied have trouble getting enough to eat. About a quarter frequently skip meals because they can’t afford food.

Yet as policymakers and the broader education community look for ways to help first-generation, low-income students get into and through college, little if any of that discussion has been focused on hunger.

“It’s beyond dispute that in preschool and through high school, nutrition is important for learning,” said Wick Sloane, a professor of writing at Bunker Hill Community College, who said some of the advising he does with students is about how they can register for food stamps, and who wants other community colleges to do more for their students who are going hungry. “So we give those students free and reduced-priced meals. Then, after 12th grade, the whole thing falls off a cliff.”

Fourteen percent of households nationwide are grappling with a lack of nutritious food, the U.S. Department of Agriculture estimates. The Wisconsin report suggests that hunger may contribute to the fact that only a little more than half of students graduate with degrees in even six years—a rate that is actually falling.

It’s not just being hungry that’s a problem; students who have to work to make ends meet, or worry constantly about where their next meals may be coming from, have more pressing needs than making sure they get to class or finish their assignments on time.

“The idea that meal shares or individual food banks are going to solve this is embarrassing,” Sloane said.

“I applaud the food banks because they’re not sitting around wringing their hands and doing nothing,” he said. “But a monthly delivery of food is not going to help millions of hungry students.”

This story was produced by The Hechinger Report, a nonprofit, independent news organization focused on inequality and innovation in education. Read more about higher education.