

6 Cities opt out of games

Sweden, Italy go for 2026 Olympic bid



3 Feeding man's best friend

Pet stores prioritize natural food



2 November in photo

Universe photographers on assignment



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November 20 - 26, 2018

THE UNIVERSE

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Provo, Utah

Church expanding missionary opportunities



mormonnewsroom.org



Synne Josefa Silva

Left: The Church of Jesus Christ of Latter-day Saints is changing its approach to service missions starting in 2019. Right: Sister Synne Josefa Silva, a service missionary in the Norway Oslo Mission, holds her two missionary nametags: one from her full-time proselyting mission in France, left, and one from her service mission in Norway.

By JENNA ALTON

The Church of Jesus Christ of Latter-day Saints announced changes to its missionary program that expand opportunities for missionaries unable to serve full-time proselyting missions.

Starting Jan. 2, 2019, all prospective missionaries in the U.S. and Canada will submit the same online missionary recommendation form regardless of health issues that may impede a proselyting mission, according to mormonnewsroom.org.

Currently, missionaries set to serve full-time proselyting missions use the missionary online recommendation system. The process includes health evaluations and interviews with local bishops and stake presidents.

Members who intend to serve a service mission search and apply for available Church-service opportunities through an online search engine. The application is then sent to Church leaders, who may choose

to interview the prospective missionary, for approval. Upon approval, the missionaries receive their call from their stake presidents a few days later, according to LDS.org.

The announced changes consolidate the process. All prospective missionaries in the U.S. or Canada will use the same missionary online recommendation system and be assigned to either a proselyting or service mission. All calls will be issued by the president of the Church.

All missionaries will first be considered for proselyting missions, according to mormonnewsroom.org. Missionaries may be called to service missions for physical or mental health reasons. Missionaries who return home early from full-time proselyting missions for health reasons will also be considered for service missions.

Dixie State student Bradley Wade was set apart as a service missionary in September 2016, the day after returning home early from a full-time proselyting mission in Santiago, Chile. He completed a service mission in St. George, his hometown.

Wade said he thinks the changes to service missions will encourage more people to serve missions who may not have previously considered doing so.

"It's an experience that I wouldn't have traded for anything," Wade said about his service mission. "Instead of coming home off my mission and being like, 'Oh man, I just feel like I let everyone down,' I was able just to transition into something that was just as honorable as anything else and was able to serve the Lord just like anybody else."

According to Elder Dale G. Renlund of the Quorum of the Twelve Apostles, most missionaries will be called to serve proselyting missions.

Elder Renlund said service missionaries live at home and serve for either the Church or the local community. He said service missionaries make a "huge difference."

"They're dependable, they show up, they do the work," Elder Renlund told mormonnewsroom.org about service missionaries. "They're cheerful, they're positive, they're enthusiastic. They bring life and energy."

Sister Synne Josefa Silva from Oslo, Norway, has been a service missionary since September.

Sister Silva initially reported to the France León Mission in June, where she spent one transfer before returning home to Oslo because of anxiety. As soon as Sister Silva returned home in August, she spoke to her stake president about completing a service mission.

"I was not ready to be done with my mission, and I knew that I had to continue," Sister Silva said.

Sister Silva now serves as the referral manager in the Norway Oslo Mission. She works five days a week for about 11 hours a day in the mission office. In addition to her responsibilities as a referral manager, Sister Silva studies her scriptures, helps full-time missionaries with Norwegian and sometimes teaches lessons with the missionaries.

"I just love the fact that I'm sacrificing my time and setting my normal life on hold," Sister Silva said. "I am not studying or working on the side. I'm not dating. I truly love the fact

that I'm still doing the same sacrifice as a full-time missionary."

A church service mission is more accommodating to Sister Silva's anxiety, she said, as she can set her own schedule and set apart time for herself when she needs it.

"When I'm having a bad day, I can tell the mission president, 'Hey, I'm not feeling good,'" Sister Silva said. "I don't feel bad about it because I know I'm able to do the work when I'm here."

Sister Silva called the changes to service missions "amazing." She said the changes will give service missionaries an experience more similar to that of full-time proselyting missions, including getting a call from the president of the Church.

"It's really important to make that foundation for service missionaries and give them motivation, like, 'Yes, I am serving a mission. I'm giving and sacrificing my time to the Lord, and a prophet or one of the (members of the Quorum of the Twelve Apostles) are recognizing this,'" Sister Silva said. "It's really empowering, starting off like that."

BYU demolishing FOB, constructing new faculty building

By JENNA ALTON

The Faculty Office Building on West Campus Drive will be demolished and replaced with the new West View Building, BYU News announced Nov. 15.

The Faculty Office Building, built in 1955 as two buildings, will be demolished by early 2019, and the West View Building is expected to be completed by Spring 2020.

When completed, the West View Building will house the Department of Economics, the Department of Statistics and the Neal A. Maxwell Institute for Religious Scholarship.

The West View Building is the latest in a series of new buildings constructed on the BYU campus.

The new Engineering Building was completed on Sept. 4 of this year. The Life Sciences Building opened its doors in Spring 2014.

The Faculty Office Building is currently home to the Department of Economics, which will relocate to the Crabtree Building until construction of the West View Building is complete. The building initially housed departments such as language studies, anthropology, political science, and sociology.

The Faculty Office Building began as the restrooms and ticket office for



BYU

Architectural rendering shows what the West View Building replacing the Faculty Office Building on campus will look like. The building, located behind the Joseph Fielding Smith Building on West Campus Drive, is expected to be completed by Spring 2020.

the old stadium, according to an article from the BYU College of Family, Home and Social Sciences.

According to a 1972 Herald article, the old stadium — located where the Richards Building currently stands

— was used for football from 1928 to 1964.

In 1968, the Faculty Office Building was completed, with architects including the stadium's bathrooms and the ticket office in their plans for

the building. The building, along with the indoor tennis courts and the new football stadium (what is now LaVell Edwards Stadium), were dedicated by Elder Ezra Taft Benson on Oct. 6, 1970.

Eventually, the old, deteriorating stadium was dismantled in 1972, according to the Herald article.

The Faculty Office Building was also used for research rooms until the early 2000s.

November in photos



Lexie Flickinger

This Nov. 15 photo shows butterflies on display at the Thanksgiving Point's new butterfly pavilion which will open beginning of 2019.



Hannah Miner

Jahshire Harnett drives the ball down the court in the basketball game against Oral Roberts on Nov. 15.



Claire Gentry

Elder Jeffrey R. Holland of the Quorum of the Twelve Apostles gave the 2018 Neal A. Maxwell Lecture on Nov. 10.



Lexie Flickinger

Residents stand in line at the Provo Rec Center to vote in the midterm elections on Nov. 6. Wait times for the voting lines reached a high of four hours.

University of Utah OKs \$80M bond for Rice-Eccles expansion

ASSOCIATED PRESS

SALT LAKE CITY — The University of Utah board of trustees approved an \$80 million bonding plan to upgrade and expand the school's football stadium.

The board voted unanimously Tuesday to approve athletic revenue covering the bond debt apart from any state funding.

The Utes have sold out 56 consecutive football games at Rice-Eccles Stadium, which has a capacity of about 46,000 — although, with standing room, the school announced 47,825 for Michigan's visit in 2015.

University of Utah Athletics Director Mark Harlan says the expansion would bring the capacity to more than 51,000 seats, including premium seating in the south end zone, with terraces, loges and suites. According to the BYU ticket office, LaVell Edwards Stadium has a capacity of about 64,000.

Construction is set to begin after the 2020 football season and be completed in August 2021.

Harlan says the project also will be supported by \$35 million in private donations.

Paradise is reduced to ash, but memories survive the flames

ASSOCIATED PRESS

PARADISE, California — There's a sweet legend about this town: On a blazing summer day in the 1850s, a lumber mill crew with a wagon and ox took a break under a grove of tall evergreens. The air was cool, the pine needles fragrant.

"Boys," said the team boss, "this is paradise."

Thus, more than 170 years ago, Paradise was born. From the start, it was enriched with gold mined from nearby hills and lumber harvested from the forests. Over generations, thousands lived and loved here; they built homes and businesses, schools and houses of worship, parks and museums that proudly honored Paradise's place in American history.

In a matter of hours last week, it all disappeared.

Nearly 10,000 homes. Hundreds of shops and other buildings. The Safeway supermarket. The hardware store. The Dolly-O-Donuts & Gifts, where locals started their day with a blueberry fritter and a quick bit of gossip.

This California town of 27,000 literally went up in smoke in the nation's deadliest wildfire in a century. The death toll is in the dozens, and many more are missing. And memories are all that's left for many of the survivors.

Driving past the smoldering

ruins of downtown, Patrick Knuthson, a 49-year-old, fourth-generation local, struggled to make sense of what he was seeing. He pointed out places that once were, and were no more: a saloon-style pub, his favorite Mexican restaurant, a classic California motel, the pawn shop, a real estate office, a liquor store, the thrift center and auto repair shop, the remodeled Jack in the Box burger outlet, entire trailer parks.

At the ruined Gold Nugget Museum, the ground was crunchy and hot, and a few birds chirped nearby, and a half dozen soot-covered deer stood eerily still under a blackened tree.

Paradise was a town where families put down roots, and visitors opted to stay. Children could bike to the park, go fishing in the town pond, shoot bows and arrows at the nearby archery range. As they got older, they would kayak in the canyons or hike in the forests after school.

"We could tell the kids to go outside and play, and be back when the street lights come on," said Kaitlin Norton, whose uncle is still missing. She does not know if her home still stands.

Like all places, Paradise had problems. There were issues with addiction and poverty, but residents felt safe. And while prices were rising, it was still affordable for many in a state where housing costs have soared.

"You would never miss a meal here," said Terry Prill, 63, who often sought lunch and dinner at



Associated Press

A sign stands at a community destroyed by the Camp Fire in Paradise, California on Nov. 13. Most homes are gone, as are hundreds of shops and other buildings. The supermarket, the hardware store, Dolly-O-Donuts & Gifts where locals started their day with a blueberry fritter and a quick bit of gossip, are all gone. The town quite literally went up in smoke and flames in the deadliest, most destructive wildfire in California history.

community churches. "The people are good people. They don't look down at you."

The pace was relaxed. Neighbors waved to each other in the morning, shouting hello as they headed off to work on tree-lined, winding streets and cul-de-sacs. Families kept tidy gardens and planted vegetables, trading their bounty up and down the block.

Louise Branch, 93, says Paradise was a lovely place to retire.

"It's a slow town, really. People have yards and dogs," she said. "I especially liked it in the fall when the trees are full of color."

Parks burst with bright-orange California poppies and wildflowers in the spring and soften with light snow in the winter. At 2,500 feet (762 meters), on a ridge that rises above deep canyons carved by the Feather River and Butte Creek, Paradise offers cool respite from hot, dry weather in the valleys below.

Spanning the creek was the Honey Run Covered Bridge, built in 1886. It was put on the National Register of Historic Places in 1988 and was the only covered bridge in America with three unequal sections. It, too, is gone.

Glenn Harrington raised two sons in Paradise. He found it so picturesque he started the Visions of Paradise page on Facebook; image after image chronicles the town's history and spirit, its seasonal colors and its many festivals.

Each spring, there were Gold Nugget Days, marking the discovery of a 54-pound lump in 1859. The Donkey Derby in nearby Old Magalia would get silly, as locals re-created how miners heaved the famous chunk of gold into town. The highlight was a parade of homemade floats.

"My daughter's going out for the Gold Nugget Queen this year," said Krystin Harvey, whose mobile home burned down. "Well, it's been going for



Associated Press

Patrick Knuthson walks along his property near trees burned in the Camp Fire in Paradise, California on Nov. 10. Paradise, Calif., literally went up in smoke in the deadliest, most destructive wildfire in California history.

100 years, but we don't know — there's no town now."

In the fall, they would celebrate Johnny Appleseed days, gathering at the recreation center for a crafts fair and games. This is when residents would feast on more than 1,000 pies baked with fruit from Noble Orchards, a nearly century-old farm on Paradise Ridge where trees were heavy with cherries, nectarines, pluots and 17 varieties of apples.

"Paradise is everything the name implies," said Tom Hurst, 67, who grew up there and raised horses at his 7-acre Outlaw's Roost ranch.

He has relatives in the local cemetery dating back to the early 1900s, and he refuses to talk about the town in the past tense. In fact, some buildings still stand, among them the town hall, the 750-seat performing arts center and the Feather River Hospital, its newer sections damaged but intact.

"Don't use the word 'was,' use the word 'is,' because we ain't done, we're just getting restarted," Hurst said.

And yet, there's so much to mourn.

A month ago, the Paradise Symphony was rehearsing for the local "Nutcracker" ballet, and

kids were pulling out their skates as the outdoor ice rink was set to open for the winter. The Paradise Post reported that fifth-graders were building cardboard arcade games and warned of backyard bats with rabies.

Now, crews search for live power lines and gas leaks. Rescue teams pull human remains from cars and homes. Fire crews tamp out smoking piles, and a heavy layer of gray-brown haze hangs over the town.

The toxic, smoky air is a visceral reminder of what's missing in this place where the skies were so blue by day, and dark by night.

"The most cherished thing for me about Paradise were the summer nights my mother and I would sit out on the porch under the clear, starry night," said Harold Taylor, who moved to Paradise eight years ago, caring for his mother until she died.

Patrick Knuthson said visitors always were amazed by the glittering stars and the meteor showers, brilliant streaks of light that shot across the summer skies.

"We used to tell people all the time, 'We made sure to turn all of them on for you,'" he said. "It's going to take a long time to get that back."

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Petco, others respond to demand for natural pet foods

ASSOCIATED PRESS

Demand for healthy, natural food is extending from humans to their pets.

Petco announced on Nov. 13 it will stop selling dog and cat food and treats with artificial colors, flavors and preservatives, both online and at its nearly 1,500 stores in the U.S. and Puerto Rico.

"We are making sure we are always taking the nutritional high ground," Petco CEO Ron Coughlin told The Associated Press.

Petco's move, the first of its kind among major pet stores, comes at a time when sales of natural pet foods are steadily rising.

Natural pet products still account for a small portion of the U.S. market share but growth has more than doubled to 6.5 percent between 2013 and 2017, according to Nielsen, a data company. Nielsen said sales of pet food free of genetically modified ingredients jumped 29 percent last year. Sales of pet food without artificial preservatives and colors grew 4 percent.

Americans spent \$69.5 billion on their pets last year, up 4 percent from the year before, according to the American Pet Products Association.

Pet food has long mimicked human food, says John Owen, a senior food analyst for market researcher Mintel. In 1959, for



Associated Press

Lauren Ray pets her 9-month-old dog Bear in her Milwaukee home on Nov. 10. Ray says she is happy to hear Petco is announcing Tuesday, Nov. 13, that it plans to stop selling dog and cat food and treats with artificial colors, flavors and preservatives.

example, Gravy Train dog food was introduced so dogs could enjoy gravy too.

As human tastes have grown more sophisticated, so have their demands for their pets, Owen said.

For dogs, there are bags of organic, vegetarian and grain-free food. Some brands claim to mimic ancestral diets, with

kibbles made from venison or wild boar. Cans of cat food feature tilapia, rabbit and pumpkin.

Sensing the growing trend, two big food companies — J.M. Smucker Co. and General Mills — spent billions to acquire the natural pet food brands Nutrish and Blue Buffalo earlier this year.

Ashley Murphy, a 33-year-old project manager in Atlanta, has

been watching the amount of sugar and preservatives in her own food. That made her question the ingredients in the food she feeds her dog Maddie, a Jack Russell mix.

Murphy recently switched to Canidae Grain Free Pure Ancestral dry dog food after reading the ingredients on lots of bags. Murphy wanted a food with more

meat, fewer fillers like grains and corn, and fewer chemicals.

"Minus some of the minerals and some of the fermentation products at the very bottom of the list, I can pronounce every single ingredient in her new food," said Murphy, who said she doesn't mind spending more for the food.

Owen says young people like Murphy are driving the trend

in natural pet food. He expects it will keep growing and lead to even more "natural" innovations, like freeze-dried raw food.

Coughlin says the majority of pet food Petco sells now doesn't contain artificial ingredients. Still, the change isn't insignificant; Petco sells around \$100 million worth of dog and cat food with artificial ingredients each year.

Coughlin said food with those ingredients will start coming off the shelves in January. Some suppliers are reformulating their food; others simply won't sell through Petco anymore, he said. Food with artificial ingredients that isn't sold by May will be donated to animal shelters.

Eventually the store plans to expand its ban on artificial ingredients to foods it sells for other animals, he said.

Dr. Whitney Miller, Petco's top veterinarian, said there is limited research into the impact of artificial ingredients on dogs and cats. And Dr. Hollie Rebo, a veterinarian based in Dearborn, Michigan, said consumers shouldn't be overly concerned since pet food makers already limit those ingredients because they add costs.

When they do add things like artificial colors, it's because it makes the food more palatable to humans.

"I love the idea of getting rid of a lot of useless junk, but it's really there to sell more product," she said.

CIA considered potential truth serum for terror suspects

ASSOCIATED PRESS

WASHINGTON — Shortly after 9/11, the CIA considered using a drug it thought might work like a truth serum and force terror suspects to give up information about potential attacks.

After months of research, the agency decided that a drug called Versed, a sedative often prescribed to reduce anxiety, was "possibly worth a try." But in the end, the CIA decided not to ask government lawyers to approve its use.

The existence of the drug research program — dubbed "Project Medication" — is disclosed in a once-classified report that was provided to the American Civil Liberties Union under a judge's order and was released by the organization Nov. 13.

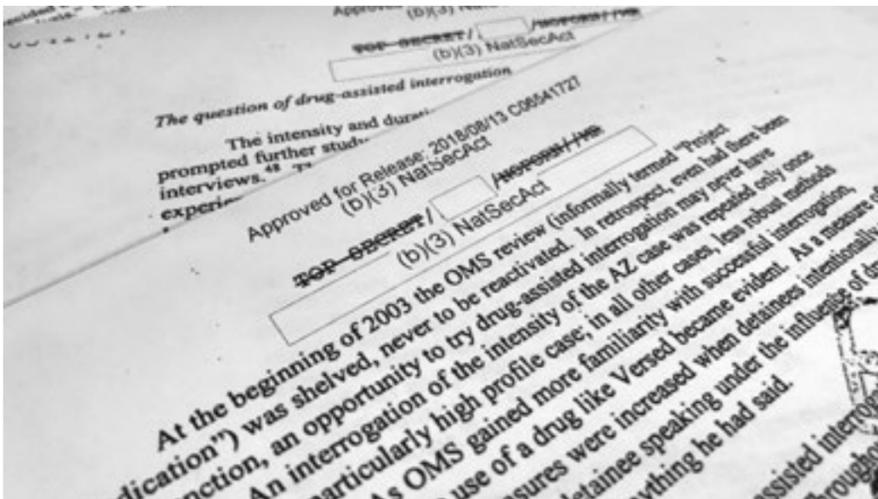
The 90-page CIA report, which was provided in advance to The Associated Press, is a window into the internal struggle that medical personnel working in the agency's detention and harsh interrogation program faced in reconciling their professional ethics with the chance to save lives by preventing future attacks.

"This document tells an essential part of the story of how it was that the CIA came to torture prisoners against the law and helps prevent it from happening again," said ACLU attorney Dror Ladin.

Between 2002 and 2007, CIA doctors, psychologists, physician assistants and nurses were directly involved in the interrogation program, the report said. They evaluated, monitored and cared for 97 detainees in 10 secret CIA facilities abroad and accompanied detainees on more than 100 flights.

The CIA ultimately decided against asking the Justice Department to approve drug-assisted interrogations, sparing CIA doctors "some significant ethical concerns," the report said. It had taken months for the Justice Department to sign off on brutal interrogation tactics, including sleep deprivation, confinement in small spaces and the simulated drowning technique known as waterboarding. The CIA's counterterrorism team "did not want to raise another issue with the Department of Justice," the report said.

Before settling on Versed, the report said researchers studied records of old Soviet drug experiments as well as the CIA's discredited MK-Ultra program from the 1950s and 1960s that involved human experimentation with LSD and other mind-altering drugs on unwitting individuals as part of a long



Associated Press

A portion of a once-classified CIA report that disclosed the existence of a drug research program dubbed "Project Medication" is photographed in Washington, Tuesday, Nov. 13.

search for some form of truth serum. These experiments were widely criticized and, even today, some experts doubt an effective substance exists.

"But decades later, the agency was considering experimenting on humans again to test pseudo-scientific theories of learned helplessness on its prisoners," Ladin said.

Versed is a brand name for the sedative midazolam, used since the late 1970s and today sold commonly as a generic. It causes drowsiness and relieves anxiety and agitation. It also can temporarily impair memory, and often is used for minor surgery or medical procedures such as colonoscopies that require sedation but not full-blown anesthesia. It's in a class of anti-anxiety medications known as benzodiazepines that work by affecting a brain chemical that calms the activity of nerve cells.

"Versed was considered possibly worth a trial if unequivocal legal sanction first were obtained," the report said. "There were at least two legal obstacles: a prohibition against medical experimentation on prisoners and a ban on interrogational use of 'mind-altering drugs' or those which 'profoundly altered the senses.'"

Those questions became moot after the CIA decided against asking the Justice Department to give it a green light. "At the beginning of 2003, the Office of Medical Services' review, informally termed 'Project Medication' was shelved, never to be reactivated," the report said.

The CIA had no comment on the report's release, but government lawyers emphasized in a court filing in the case early last year that the report, expressly marked "draft," was just one agency officer's impressions of the detention and interrogation program. The document is not

the CIA's or the Office of Medical Service's "final official history, or assessment, of the program," the lawyers wrote.

The ACLU spent more than two years in court trying to get the report released. In September 2017, a federal judge in New York ordered the CIA to release it. Government lawyers tried three more times to keep information contained in the report under wraps, but the ACLU received the bulk of the report in August. The government is still fighting to keep portions secret. They are to file briefs in a federal appeals court in New York on Nov. 14, arguing that the judge ordered too much released.

While the CIA's harsh interrogation program ended in 2007, the ACLU believes it's important to continue seeking the release of documents about it, especially since President Donald Trump declared during his campaign that he would approve interrogating terror suspects with waterboarding, which is now banned by U.S. law, and a "hell of a lot worse."

CIA Director Gina Haspel, who was involved in supervising a secret CIA detention site in Thailand where detainees were waterboarded, told the Senate during her confirmation hearing that she does "not support use of enhanced interrogation techniques for any purpose."

The report cites many instances where medical personnel expressed concern or protected the health of the detainees. Those who were thrown up against walls — a practice called "walling" — had their necks protected from whiplash by rolled towels around their necks, the report said. When one detainee, who had been wounded during capture, was confined to a box, care was taken not to force his legs into a position that "would compromise wound healing."

Physician assistants overruled using duct tape over the mouths of detainees during flights because air sickness could lead to vomiting and possible aspiration.

"That doesn't mean that the

doctors were sadistic or anything like that," Ladin said. "But it means they were complicated because this pseudo-scientific torture could not have happened without the doctors' participation."

At the same time, the medical office's report said waterboarding was not "inherently painful." It said there was "physical discomfort from the occasional associated retching," but that two detainees who endured the most extensive waterboarding sessions complained only "of the pain of the restraining straps."

That contrasts with the Senate's 2014 report on the CIA's interrogation program, which stated that a prisoner known as Abu Zubaydah, a suspected al-Qaida operative who was waterboarded more than 80 times, "cried, begged, pleaded, vomited, and required medical resuscitation after being waterboarded."

Some CIA medical personnel called waterboarding "little more than an amateurish experiment" and others worried that the practice would trigger

spasms of the vocal cords, which could, at least temporarily, make it hard to speak or breathe.

At the same time, other medical personnel contended waterboarding actually "provided periodic relief" to a prisoner because it was a break from being forced to stand for long periods of time. The agency medical personnel also said the harsh interrogation program was "reassuringly free of enduring physical or psychological effects."

Dr. Sondra Crosby, who has treated victims of torture, including two who were held at CIA secret sites, disagreed.

"The enduring pain and suffering experienced by the survivors of the CIA program is immense, and includes severe, complex post-traumatic stress disorder, depression, physical ailments, and psychosocial dysfunction," said Crosby, of Boston University's School of Medicine and Public Health. "At least one detainee was tortured to death. Their physical and psychological scars will last a lifetime."

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Franklin's 'Amazing Grace' finally in theaters

ASSOCIATED PRESS

NEW YORK — Three years ago, Alan Elliott was at the Telluride Film Festival, prepared to unveil the holy grail of musical works: A documentary on the making of Aretha Franklin's "Amazing Grace," which had been lost to the archives for decades until Elliott spent decades restoring it so it could finally be seen.

But then, through lawyers, he got word that the Queen of Soul herself was trying to prevent the film from being shown. Elliott's business partner, Tirrell Whittley, recalls the moment as "deflating."

"It was disappointing. ... You try to figure out what is it that happened," Whittley said.

But as determined as Elliott and Whittley were to get the documentary to the world, they decided not to fight Franklin.

"It would just be the wrong and the wrong spirit," Whittley said, adding later: "In talking to Alan, it was really around patience and saying, 'You know what? God may not have meant it right now. And that's OK. Let's just be patient. When God says it's the right time it will be the right time, not just for us but for her, for her family, for her legacy.'"

That time has arrived, three months after Franklin's death from pancreatic cancer, with the blessing of her family. And while there are parts of "Amazing Grace" that are rough, from a few off-kilter camera angles to choppy editing, it's a profound, brilliant display of one of the world's greatest singers performing in her element — the church.

"It's the most important document of American popular music ever filmed," said Elliott. "It's

completely unique to any other experience that I've ever seen, and I've seen a lot of them."

The album "Amazing Grace" is one of the seminal albums in not only Franklin's discography, but the canon of American pop music. Franklin, then 29 and at the height of her fame, recorded the album in a Los Angeles church in 1972, with a full choir and an audience that included Mick Jagger, over two nights. Legendary gospel star James Cleveland directed the choir. Franklin's famed father, the Rev. CL Franklin, spoke at the pulpit in praise of his daughter while the revered gospel star Clara Ward sat in the front row.

Warner Brothers Films contracted Oscar-winning director Sydney Pollack to helm the movie, with hopes it could be as popular as the concert film of Woodstock. But Pollack made critical errors, including not utilizing a machine to sync the audio to the visuals. With such problems, the film was written off by the movie studio. While the album would go double platinum and become one of best-selling gospel albums of all time, the film was forgotten — but not by everyone.

Jerry Wexler, the renowned Atlantic Records producer who helmed many of Franklin's greatest hits, told Elliott — his protege, a then-25-year-old music executive — about his hopes to one day get the film to screen, and it would become Elliott's "passion project" for two decades.

According to Sabrina Owens, Franklin's niece, the legend spoke about her love for the film. But by the time Elliott and Whittley were ready to release it, Franklin wasn't ready for the world to see it.

"I honestly don't know what her concerns were," said Owens. "We never really discussed her



Associated Press

Aretha Franklin performs at The Mann Center for the Performing Arts in Philadelphia on July 27. More than 40 years after its filming, the documentary of the making of "Amazing Grace" has been released.

business ... I do know for a fact that she did love the movie."

Elliott suspects it may have been frustration at the poor handling of the project.

"I'm sure she was upset that Warner Films couldn't finish the movie in the way that she was expecting it to be done and that was probably something that stuck with her," he said.

Elliott spoke to Franklin about the project only once — and very briefly. Elliott went to a concert of Franklin's and afterward waited backstage for the Queen of Soul to beckon him, and when she did, he nervously talked about the film project he had embarked on

with Wexler.

"And she said, 'Yes we'll be talking.' And she walked away."

He never spoke to her after that, but kept in touch with her family over the years, particularly Owens, to give her updates on the project. After the Telluride injunction, Elliott reached out again, and Owens explained her aunt was ill. That revelation reinforced Elliott's approach to be patient; he had hoped a recovered Franklin would be involved in the project at some point.

"There was no place to have her be a part of the movie while she was not doing well," he said. "We didn't know how sick she

was, and we didn't know how long she had been ill."

Owens invited Elliott to Franklin's funeral, and a few weeks later, Elliott screened the film for about 60 members of her family. The reaction was immediate and effusive, and soon afterward, the family agreed to the film's release.

"It was just interesting seeing her at that age and her voice was crystal clear, and she just sang her heart and soul out, and almost every song makes you cry or makes you feel some kind of way just like all the rest of her music," Owens said. "So it was it was wonderful. I loved the

performance."

"Amazing Grace" does not yet have a distributor, but Whittley and Elliott are showing it in New York and Los Angeles to give it a push during Oscar season in hopes it could garner a nomination for best documentary, and it has received resplendent praise since its release.

"This film, it's going to take you to church," said Franklin's nephew Vaughn Franklin. "You know, I expect to see people up on their feet, tears coming down and holding hands and laughing and joking ... the whole gamut of emotions I think is going to come out there."

Democrats openly flirt with 2020 White House bids

Candidates are transparent in their efforts to unseat President Trump

ASSOCIATED PRESS

WASHINGTON — In the days after the midterm election, New Jersey Sen. Cory Booker worked the phones with Democratic luminaries in Iowa. Montana Gov. Steve Bullock courted high-dollar donors in New York. Other Democrats openly mused about their White House ambitions on live television.

Motivated by an urgency to unseat President Donald Trump and the prospect of a historically large primary field, Democrats see little incentive to delay or downplay their 2020 presidential hopes. Their more transparent approach is



Associated Press

Montana Gov. Steve Bullock speaks at the Des Moines Register Soapbox during a visit to the Iowa State Fair in Des Moines, Iowa on Aug. 16.

depending one of Washington's favorite "will they or won't

they" parlor games and pushed the campaign calendar up

earlier than ever before.

"No one is waiting for anyone in the race to run for president," said Jim Messina, who managed President Barack Obama's 2012 campaign. "Those days are long, long over."

Running for president used to involve a familiar routine, with potential candidates spending months publicly demurring about their ambitions and professing to be content in their current roles. Advisers labored to keep meetings with donors and potential staff under wraps ahead of formal, carefully choreographed campaign announcements.

This time around, many Democrats believe it would be too risky to wait much longer before making their intentions known, particularly those with lower national profiles who could quickly be overshadowed by a field that could have more than two dozen candidates.

There are practicalities to consider, given the limited supply of money and top-flight staff available to run a campaign. But another driving factor is more visceral: Democrats are simply eager to take on the president.

"This is starting very fast,"

said former Iowa Democratic Party Chairwoman Sue Dvorsky. She said that given the imperative to beat Trump, "it kind of needs to."

Two long-shot Democrats have already declared their candidacy.

West Virginia state Sen. Richard Ojeda, a retired Army paratrooper who lost a race for Congress last week, announced his plans to run for president on Nov. 12. Ojeda joins Maryland Rep. John Delaney, who has been running for the Democratic nomination since July 2017, and has already traveled to Iowa 19 times and made 12 trips to New Hampshire.

Delaney said he believes his early start will help put him at an advantage ahead of would-be rivals.

"We not only know what the talent is, but they know us and they know about our message," said Delaney, whose campaign currently has about 10 staffers in Iowa. He expects that number to grow to at least 20 by January and 100 by June.

Higher-profile Democrats have also started to lift the veil on their White House hopes.

On Nov. 12, Ohio Sen. Sherrod Brown, said he was "seriously looking at" a presidential campaign, saying in an interview that his election to a third term shows "a strong progressive can win." He called his Senate campaign "a blueprint for our nation in 2020."

New York Sen. Kirsten Gillibrand was also up front about her White House ambitions, telling ABC's "The View" Nov. 12 that she was indeed considering a campaign.

"I believe right now every one of us should figure out how we can do whatever we can with our time, with our talents, to restore that moral decency, that moral compass and that truth of who we are as Americans," Gillibrand said.

Unlike in 2016, when Hillary Clinton's shadow loomed large over the party, Democrats enter the 2020 campaign without a clear favorite. Former Vice President Joe Biden occupies the most similar role, with broad name recognition and a deep political network.

But Biden associates say he is still conflicted about whether to

run, and he has pointedly said other would-be 2020 candidates should not defer to his plans. Biden is expected to make a decision by January.

Booker has been among the most aggressive in courting supporters in early-voting states. After the midterms, he called each member of the Iowa Democratic statewide ticket, for whom the New Jersey senator campaigned ahead of the midterm, the day after the election.

Booker was in touch with former Gov. Tom Vilsack, a veteran Democrat in the early-voting state, as well as candidates and operatives in other early-voting states he visited this fall.

California Sen. Kamala Harris, who would be considered an early favorite in the White House race, also called candidates she campaigned for in early-voting presidential states, including Deidre DeJear, who was Iowa's first African-American woman nominated for statewide office but lost in her bid for secretary of state.

Montana's Bullock, who has made several stops in Iowa this year, traveled to New York after Election Day to meet with potential donors. Though Bullock has a lower profile than many possible Democratic contenders, he has an experienced team of political advisers, including chief of staff Tom Lopach — the former executive director of the Democratic Senatorial Campaign Committee — and Nick Baldick, a veteran Democratic strategist.

Bullock also sent a staffer to Iowa to work for Tim Gannon, who lost his race for state agriculture secretary last week, a move aimed at giving Bullock an early foothold in the crucial caucus state.

And while the midterms showed that Trump remains a powerful force in the GOP, at least two Republicans are considering taking Trump on: retiring Arizona Sen. Jeff Flake and outgoing Ohio Gov. John Kasich.

Kasich will be in New Hampshire on Thursday for a speech at a First Amendment event. Ahead of his remarks, Kasich will have private meetings with several prominent New Hampshire Republicans, including state and county GOP chairs.

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Big question for Amazon's 2 chosen cities: Will it pay off?

ASSOCIATED PRESS

The awarding of Amazon's second headquarters to two affluent localities has fanned intense speculation around a key question: For the winning cities, will the economic payoff prove to be worth the cost?

Amazon's decision will bring to Arlington, Virginia, and the Long Island City section of New York a combined 50,000 jobs and \$5 billion in investment over the next two decades. But the influx is sure to swell already-high home prices and apartment rents and could overwhelm public transportation systems. And the two areas combined are providing over \$2 billion in subsidies to one of the world's richest companies — a bounty that many analysts say probably wasn't necessary to sway Amazon.

The decision to bring those jobs, which Amazon says will pay an average of \$150,000 a year, to the New York and Washington areas will also exacerbate U.S. regional inequalities, economists say. Such Midwestern cities as Columbus, Ohio, and Indianapolis, Indiana, which made Amazon's short list, would have helped spread the tech industry's high-skilled, high-paying jobs more broadly.

"It's ambiguous for the winners, not good for the 'losers' and not good at all for the nation," said Mark Muro, a senior fellow at the Brookings Institution.

Still, on the surface, the deal appears to be better than most. Amazon says it's receiving \$1.525 billion in incentives and subsidies from New York state and \$573 million from Virginia and Arlington County. That works out to \$61,000 in incentives provided to Amazon for each job in Long Island City and roughly \$23,000 for each job in Arlington.

That compares with a much larger average figure of \$658,000 per job for other large deals, said Greg LeRoy, executive director of Good Jobs First, a nonpartisan watchdog group. Taiwanese manufacturer Foxconn, for example, received \$4.8 billion in subsidies for a plant in Wisconsin on which it broke ground this



Associated Press

Virginia Gov. Ralph Northam, center, talks with former Virginia Gov. Terry McAuliffe, right, before the start of a news conference in the Crystal City neighborhood in Arlington, Virginia, Tuesday, Nov. 13. Amazon, which has grown too big for its Seattle hometown, said it will split its much-anticipated second headquarters between New York and northern Virginia.

year. That deal is expected to bring just 13,000 jobs.

Yet the true figure for New York's subsidies is likely closer to \$2.8 billion. Amazon will also qualify for \$897 million in tax credits from New York City over the next 12 years if it hits its target of creating 25,000 jobs. That's based on a tax credit of \$3,000 for each new employee. It would also receive a 15-year abatement of property taxes on its new Queens campus, worth an estimated \$386 million, according to New York's governor.

Those city tax credits aren't unique to the Amazon deal. The job creation tax credit is available to all companies in the city. And the property tax abatement is available for most development projects outside of business districts in Manhattan.

But Amazon's final selections suggest that all the subsidies and giveaways probably weren't needed, some economists said. Other state and local governments offered a lot more, including at least \$8.5

billion on behalf of Montgomery County, Maryland, and \$7 billion for Newark, New Jersey.

"If Amazon was pursuing subsidies, it made the wrong decision," said Michael Farren, a research fellow at George Mason University's Mercatus Center. "Even the biggest subsidies you can imagine really don't sway these kinds of decisions."

Rather, Amazon's top priority was having access to a sizable pool of highly skilled employees, Farren said, and it likely would have chosen the same two locations even without the subsidies.

"The only things they're useful for are the companies that get them and the politicians who get the credit," he said.

Indeed, Jay Carney, an Amazon senior vice president, acknowledged in an interview on CNN that the company had chosen two locations that offered less in subsidies than others had.

"That reflects that talent was really the driving factor

for us," Carney said.

Some experts in regional economics suggested that the payoff for the selected cities would go well beyond Amazon's initial investment. Stephen Fuller, an economist at George Mason University, estimates that the new headquarters in Arlington would generate roughly \$1.3 billion in spending each year after the initial construction is complete. That would support nearly 50,000 jobs in the state, Fuller said, in addition to those at Amazon.

"It's really a no-brainer," Fuller said. "They're going to pay an enormous amount in real estate taxes and sales taxes."

Fuller also argues that the region is large enough to absorb the influx of new workers.

"The region adds 50,000 jobs every year, and no one complains about that," Fuller said. "They're not all coming at one time; they're coming over 15-20 years. It isn't as overwhelming as people think it's going to be."

At the same time, Tim Bartik, a senior economist at the Upjohn Institute, cautioned that with unemployment so low in both cities, many of the jobs Amazon will bring will likely go to people who don't now live in either Arlington or New York. The inflow of those workers could burden schools and transportation systems.

A coalition of nonprofit groups warned that Amazon's arrival will likely worsen housing affordability for many lower-income workers in the two cities. Roughly one-third of residents in Washington, D.C., and 40 percent in New York pay more than 30 percent of their income on housing, the groups, which include LeRoy's Good Jobs First, pointed out. The typical rent in Queens, which includes Long Island City, is already \$3,000 a month.

Some analysts had thought Amazon might follow a trend that other companies have set and add jobs in cities where salaries and housing were often cheaper. A few Wall Street banks, for example, have sent many of their back-office jobs to states far from New York. The auto factories that once filled the Midwest have migrated to the South, where labor unions have held less sway.

Instead, Amazon chose to expand its footprint to two places where salaries and home prices are relatively close to those of Seattle, its current sole headquarters city, said Aaron Terrazas, senior economist at the real estate firm Zillow.

"These two markets definitely can absorb this kind of employment shock — and they have some time to prepare for it," he said.

Study finds healthy group of polar bears in sea near Alaska

ASSOCIATED PRESS

The first formal count of polar bears in waters between the United States and Russia indicates they're doing better than some of their cousins elsewhere.

Polar bears are listed as a threatened species because of diminished sea ice due to climate change. But university and federal researchers estimate a healthy and abundant population of nearly 3,000 animals in the Chukchi Sea off Alaska's northwest coast, according to a study published Wednesday in Scientific Reports.

"It the near-term, it's absolutely good news," said lead author Eric Regehr, who began the project more than a decade ago as a U.S. Fish and Wildlife Service biologist and last year joined the University of Washington's Polar Science Center.

In the longer term, it doesn't mean the Chukchi Sea bear population will not be affected.

"Polar bears need ice to hunt seals, and the ice is projected to decline until the underlying problem of climate change is addressed," Regehr said.

The study shows there is variation around the world in the effects of sea ice loss on polar bears, he said Thursday.

"Some subpopulations are already declining while others are still doing OK," he said.

Polar bears are classified as marine mammals because they spend most of their lives on sea ice. Less sea ice means less productive time to hunt ice seals, more time on shore and longer, energy-sapping swims.

The world's polar bears are divided into 19 subpopulations, including two in U.S. waters. Besides Chukchi bears, the



Associated Press

In this undated photo provided by Eric Regehr, polar bears are seen on Wrangel Island in the Arctic Circle.

United States shares the southern Beaufort Sea population with Canada.

Stress in southern Beaufort bears from a loss of sea ice was partly why the United States in 2008 declared polar bears a threatened species.

Fewer cubs were surviving into their second year and adult males weighed less and had smaller skulls, the U.S. Geological Survey found. Researcher Steven Amstrup at the time said the trends were consistent with changes in nutritional status likely associated with declines in sea ice.

A more recent study by USGS researcher Karyn Rode found that Chukchi bears spend more time on shore and have almost 30 fewer days to hunt seals on ice than 20 years ago, Regehr said. However, that doesn't appear to have affected the population, he said.

Polar bears have an amazing ability to build fat reserves, Regehr said, and the Chukchi's abundant seal population apparently allows bears to compensate for the loss of hunting time. The difference with the southern Beaufort was obvious from

an airplane, he said.

"It's visually striking to me, the difference, having worked in both places," Regehr said.

When ice melts, many Chukchi bears rest on Russia's Wrangell Island, where they occasionally can find a whale or walrus carcass.

The Chukchi population study used data collected by sampling about 60 polar bears between 2008 and 2016. Some were fitted with GPS transmitters. The data was used in a model designed to estimate population size for highly mobile large carnivores.

Blaine Griffen, an associate professor of biology at Brigham Young University, said the study was good news.

"It's nice to see that there's at least one population that's doing better than others," he said.

The difference may be geography, he said. The Chukchi Sea has a more extensive continental shelf area with primary productivity that enables the food chain to support seals.

The research agrees with past studies that suggested Chukchi bears would do better than bears elsewhere, Griffen said.

Simple Bites

PUMPKIN CRUNCH CAKE

For 2	For 4	8 or more	
4 oz	8 oz	15 oz	canned pumpkin puree
3 oz	6 oz	12 oz	evaporated milk
1 egg	2 eggs	4 eggs	eggs
1/4 cup	1/2 cup	1 cup	granulated sugar
1/8 cup	1/4 cup	1/2 cup	brown sugar
1/2 tsp	1 tsp	2 tsp	pumpkin pie spice
1/4 tsp	1/2 tsp	1 tsp	cinnamon
1/8 tsp	1/4 tsp	1/2 tsp	nutmeg
1 pinch	1/8 tsp	1/4 tsp	ground clove
1 pinch	1/8 tsp	1/4 tsp	ground ginger
1/4 tsp	1/2 tsp	1 tsp	salt
1 cup	2 cups	1 pkg.	vanilla cake mix
1/4 cup	1/2 cup	1 cup	chopped pecans
1/4 tsp	1/2 tsp	1 tsp	cinnamon
1/4 cup	1/2 cup	1 cup	butter or margarine
4 x 4	8 x 8	9 x 13	oven proof baking pan

Preheat oven to 350 degrees. Lightly grease baking pan or mug with spray oil.

In a large bowl, combine pumpkin, evaporated milk, eggs, sugar, brown sugar and spices. Mix well.

Spread pumpkin mixture into appropriate sized baking pan.

Open cake mix and sprinkle on top of pumpkin mixture gently patting down.

Sprinkle with chopped pecans and remaining cinnamon.

Melt butter in microwave (about 1 minute) then drizzle over top of cake.

Bake for approximately 1 hour or until sharp knife inserted in center comes out clean.

Can be served warm or cold topped with whipped topping or vanilla ice cream.

Scan the photos with the Universe Plus app to see a video demonstrating how to make this recipe.

Games on? Calgary vote shakes up Olympic bid game again



Associated Press

A worker grooms the snow after installing a set of Olympic Rings on the ski jump hill on Feb. 10, at the 2018 Winter Olympics at the Alpensia Ski Jumping Center in Pyeongchang, South Korea.

ASSOCIATED PRESS

Does anyone really want to host the Winter Olympics? Residents in Calgary answered that question with a resounding “No,” and now the International Olympic Committee has some soul-searching to do. Again.

After being rejected in yet another public vote, the IOC is down to two candidates to host the 2026 Games — Stockholm, Sweden, and a joint Italian bid from Milan and Cortina d’Ampezzo. Both of those bidders also have issues, and organizers are scrambling to hand the next available Winter Games to one of them before either bid gets derailed. They will award the Games next June.

If either of those candidates work out, it will be a victory in that Sweden or Italy will break a string of three straight Winter Games in Asia, two of which — Sochi (2014) and Beijing (2022) — have been run by authoritarian governments that didn’t have to answer to the public for the money they spent to host.

But that’s not to say Western

democracies are falling back in love with the movement. Despite the IOC’s attempts to streamline the bidding process and control the costs of the Games, no fewer than eight Western cities and countries have rejected the idea — either through elections or government action — of bankrolling what is increasingly viewed as a bloated, expensive sports festival with little upside for the city that takes them on.

“I think Calgary is another example of a democracy, more specifically, voters in a democracy, deciding that the hosting of the Olympic Games is just not in their best interest — and they have other things to focus on,” said Chris Dempsey, who spearheaded Boston’s opposition to hosting the 2024 Games.

Here’s a look at some of people, places and things in the bidding game, and where they stand after Tuesday’s vote:

Italy

The nation’s federal government has vowed not to pay a penny after Turin was removed from this multi-city bid. It means regional governments will foot the brunt of the bill. Rome

has bailed on two previous bids for the Summer Games, most recently in 2024, which certainly isn’t a comforting thought for the IOC.

Stockholm

Only three days after the IOC put the Swedish capital on its short list of finalists, a newly formed government in the city announced it would not provide funding to host the Games. Negotiations are ongoing.

Salt Lake City

They have kept venues intact and, in many cases, improved on them, and there is no significant public opposition. To sum it up, the 2002 hosts could probably hold another Olympics in a few months, if pressed. IOC President Thomas Bach would be wise to award them 2030 right now — that is, only if they don’t want 2026.

Denver

The only city to be awarded the Olympics, for 1976, only to turn around and reject them, is officially in the running to be the U.S. candidate for 2030. But it’s not much of a contest. Not helping matters: Colorado’s incoming

governor, Jared Polis, recently channeled his inner Richard Lamm — the then-governor-to-be who led the opposition in the 1970s — calling the Olympics “fun things for millionaires and business people” that leave others paying the bill.

Thomas Bach

The president of the IOC looks more brilliant by the day for his decision to award two Summer Games — 2024 to Paris and 2028 to Los Angeles — in one shot at last year’s IOC meeting. Acknowledging there were “too many losers” in the bidding game, he took the only two suitors he had left for the more-expensive, more-grandiose Summer Games and gave them both a victory. He might consider a two-for-one approach on the Winter side, as well.

Casey Wasserman

Bach might be the president, but it would be difficult to find someone who wields more power in the movement than the head of the LA 2028 organizing committee. He’s had a major role in shaping the new U.S. Olympic Committee, signing off on the hiring

of the new CEO and CFO. Because he agreed to take the consolation prize, 2028, in what began as a contest for the 2024 Summer Games, he brokered an advantageous marketing deal with the USOC. And his blessing — and only his blessing — would be crucial to pushing Salt Lake City into the 2026 slot — a move that is currently untenable because of how it would impact the LA marketing arrangement.

Rotating cities

The fantastical notion of rotating Olympics between three or four cities — say Sydney, London and Beijing on the Summer side, and Salt Lake City, Sochi and Vancouver on the Winter side — suddenly doesn’t seem so outlandish. Given the current trend, there’s no guaranteeing any city will want to host this behemoth past 2030. Dempsey, the Olympic skeptic, concedes the Olympics provide plenty of magic and power, “but that magic and power would be just as strong if there were one Winter and one Summer location for the Olympics, or some other process that allows you to host the Games without making exorbitant promises that lead to exorbitant costs.”

As many as 9 SEC schools could have 1st-round draft picks

ASSOCIATED PRESS

Not surprisingly the top-rated SEC prospect with one week left in the regular season is from Alabama. Offensive tackle Jonah Williams is picked by some to be drafted as high as No. 2 after starting all 39 games in his career with the Crimson Tide and earning All-America honors at left tackle last season.

“He’s one of those guys that’s a perfectionist,” Alabama coach Nick Saban said. “He wants to be the best player, and he’s one of the guys that’s willing to do the things that you have to do to be the best player.”

Other possible first-round picks from Alabama include defensive tackle Quinnen Williams, safety Deionte Thompson, defensive lineman Raekwon Davis, linebacker Mack Wilson and running back Damien Harris.

LSU has two top-20 prospects in cornerback Greedy Williams and linebacker Devin White. Williams led the SEC with six interceptions as a red-shirt freshman last season and has two interceptions and 28 tackles and has defended eight passes this year. White ranked first in the country with 96 assisted tackles last season and has 89 tackles, including seven for losses, a forced fumble and two fumble recoveries this year.

Kentucky hasn’t had a player taken in the past two drafts with the Wildcats’ most recent draft pick coming when Josh Forrest was selected by the Rams in the sixth round in 2016. Their drought should end this year with outside linebacker Josh Allen expected to be chosen in the first round. If he is, it will give the Wildcats a first-round pick for the first time since Bud Dupree was selected by the Steelers with the

22nd overall pick in the 2015 draft.

Kentucky coach Mark Stoops isn’t shy about bragging about his star player and called him the: “best defensive player in the country,” on his radio show last month.

Allen, who is a senior, leads the SEC in tackles for losses (16) and sacks (11) and his five forced fumbles lead the nation. The 6-foot-5, 260-pound Allen has 65 tackles and has recovered two fumbles.

Mississippi could have two first-round picks with offensive lineman Greg Little and wide receiver A.J. Brown both projected to be top-25 selections. The Rebels entered the season with three first-round prospects, but receiver D.K. Metcalf could choose to return for another season after suffering a season-ending neck injury which required surgery last month.

Brown’s 72 receptions and 1,047 yards receiving both lead the SEC and he’s had five 100-yard receiving games this season, including three in a row. The 6-1, 225 pound Brown became the school’s all-time leading receiver in a loss to Texas A&M on Nov. 10. He has 2,711 yards receiving to move in front of Shay Hodge, who had 2,646 yards receiving from 2006-09.

“Been around a lot of great receivers here at Ole Miss, for him to be the all-time leading receiver, that’s a pretty special accomplishment for him,” Mississippi coach Matt Luke said. “He’s been very unselfish, playing inside, playing outside. He’s very versatile. That will do nothing but help him going forward, his ability to do a bunch of different things.”

Georgia, which had three first-round picks selected in the 2018 draft, could have another one next year in cornerback Deandre Baker. He flirted with the draft last offseason before returning for his senior year and has

two interceptions and leads the SEC with nine passes defended.

Mississippi State has two defensive linemen who are among the best in the nation and could both be first-round draft picks. Jeffery Simmons, a 6-4, 300-pound tackle, is a three-year starter whose 12.5 tackles for losses rank fourth in the SEC. Simmons has 27.5 tackles for losses and five sacks and has piled up 148 tackles in his career.

Montez Sweat is a defensive end who led the SEC with 16 tackles for losses and 11 sacks last season. This year he also ranks high on the SEC charts and is fourth with 13 tackles for losses and second with 10 sacks.

At Missouri, two offensive stars could be selected in the first round in 2019. Tight end Albert Okwuegbunam led the SEC with 11 touchdown receptions last season and is fourth this year with six TD grabs and has 466 yards receiving. His quarterback Drew Lock could join him as a first-round pick after a four-year career where he’s thrown for 11,342 yards and 92 touchdowns with just 39 interceptions.

Lock led the nation with 44 touchdown passes last season and ranks second in the SEC this year with 21 TD tosses. He has thrown for 2,647 yards which also ranks second.

Florida has a top-10 draft prospect in defensive lineman Jachai Polite. The junior is third in the country with four forced fumbles and his 12.5; tackles for losses and 7.5 sacks are both No. 4 in the SEC.

Defensive tackle Derrick Brown could be the first player from Auburn taken in the first round since the Tigers had two first-rounders in 2014. Brown has 9.5 tackles for losses and 3.5 sacks this season and has 20 tackles for losses and 8 sacks in three years at Auburn.



Associated Press

Alabama running back Josh Jacobs, 8, is tackled by Mississippi State defensive end Montez Sweat, 9, as he carries the ball during the first half of an NCAA college football game, Saturday, Nov. 10, in Tuscaloosa, Alabama.

Next generation of biotech food heading for grocery stores

ASSOCIATED PRESS

The next generation of biotech food is headed for the grocery aisles, and first up may be salad dressings or granola bars made with soybean oil genetically tweaked to be good for your heart.

By early next year, the first foods from plants or animals that had their DNA “edited” are expected to begin selling. It’s a different technology than today’s controversial “genetically modified” foods, more like faster breeding that promises to boost nutrition, spur crop growth, and make farm animals hardier and fruits and vegetables last longer.

The U.S. National Academy of Sciences has declared gene editing one of the breakthroughs needed to improve food production so the world can feed billions more people amid a changing climate. Yet governments are wrestling with how to regulate this powerful new tool. And after years of confusion and rancor, will shoppers accept gene-edited foods or view them as GMOs in disguise?

“If the consumer sees the benefit, I think they’ll embrace the products and worry less about the technology,” said Dan Voytas, a University of Minnesota professor and chief science officer for Calyxt Inc., which edited soybeans to make the oil heart-healthy.

Researchers are pursuing more ambitious changes: Wheat with triple the usual fiber or that’s low in gluten. Mushrooms that don’t brown. Better-producing tomatoes. Drought-tolerant corn. Rice that no longer absorbs soil pollution as it grows. Dairy cows that don’t need to undergo painful de-horning. Pigs immune to a dangerous virus that can sweep through herds.

Scientists even hope gene editing eventually could save species from being wiped out by devastating diseases like citrus



Associated Press

Fred Gmitter, a geneticist at the University of Florida Citrus Research and Education Center, right, visits a citrus grower in an orange grove affected by citrus greening disease in Fort Meade, Florida, on Sept. 27. “If we can go in and edit the gene, change the DNA sequence ever so slightly by one or two letters, potentially we’d have a way to defeat this disease,” says Gmitter.

greening, a so far unstoppable infection that’s destroying Florida’s famed oranges.

First they must find genes that could make a new generation of trees immune.

“If we can go in and edit the gene, change the DNA sequence ever so slightly by one or two letters, potentially we’d have a way to defeat this disease,” said Fred Gmitter, a geneticist at the University of Florida Citrus Research and Education Center, as he examined diseased trees in a grove near Fort Meade.

Genetically modified or edited

Farmers have long genetically manipulated crops and animals by selectively breeding to get offspring with certain traits. It’s time-consuming and can bring trade-offs. Modern tomatoes, for example, are larger than their pea-sized wild ancestor, but the generations of cross-breeding made them more fragile and altered their nutrients.

GMOs, or genetically modified organisms, are plants or animals that were mixed with another species’ DNA to introduce a specific trait — meaning they’re “transgenic.” Best known are corn and soybeans mixed with bacterial genes for built-in resistance to pests or weed killers.

Despite international scientific consensus that GMOs are safe to eat, some people remain wary and there is concern they could spur herbicide-resistant weeds.

Now gene-editing tools, with names like CRISPR and TALENs, promise to alter foods more precisely, and at less cost, without necessarily adding foreign DNA. Instead, they act like molecular scissors to alter the letters of an organism’s own genetic alphabet.

The technology can insert new DNA, but most products in development so far switch off a gene, according to University of Missouri professor Nicholas Kalaitzandonakes.

Those new Calyxt soybeans? Voytas’ team inactivated two genes so the beans produce oil with no heart-damaging trans fat and that shares the famed health profile of olive oil without its distinct taste.

The hornless calves? Most dairy Holsteins grow horns that are removed for the safety of farmers and other cows. Recombinetics Inc. swapped part of the gene that makes dairy cows grow horns with the DNA instructions from naturally hornless Angus beef cattle.

“Precision breeding,” is how animal geneticist Alison Van Eenennaam of the University of California, Davis, explains it. “This isn’t going to replace traditional breeding,” but make it easier to add one more trait.

Rules aren’t clear

The Agriculture Department says extra rules aren’t needed for “plants that could otherwise have been developed through traditional breeding,” clearing the way for development of

about two dozen gene-edited crops so far.

In contrast, the Food and Drug Administration in 2017 proposed tighter, drug-like restrictions on gene-edited animals. It promises guidance sometime next year on exactly how it will proceed.

Because of trade, international regulations are “the most important factor in whether genome editing technologies are commercialized,” USDA’s Paul Spencer told a meeting of agriculture economists.

Europe’s highest court ruled last summer that existing European curbs on the sale of transgenic GMOs should apply to gene-edited foods, too.

But at the World Trade Organization this month, the U.S. joined 12 nations including Australia, Canada, Argentina and Brazil in urging other countries to adopt internationally consistent, science-based rules for gene-edited agriculture.

Are these foods safe?

The biggest concern is what are called off-target edits, unintended changes to DNA that could affect a crop’s nutritional value or an animal’s health, said Jennifer Kuzma of the Genetic Engineering and Society Center at North Carolina State University.

Scientists are looking for any signs of problems. Take the hornless calves munching in a UC-Davis field. One is female and once it begins producing milk, Van Eenennaam will test how similar that milk’s fat and protein composition is to milk from unaltered cows.

“We’re kind of being overly cautious,” she said, noting that if eating beef from naturally hornless Angus cattle is fine, milk from edited Holsteins should be, too.

But to Kuzma, companies will have to be up-front about how these new foods were made and the evidence that they’re healthy. She wants regulators to decide case-by-case which changes are no big deal,

and which might need more scrutiny.

“Most gene-edited plants and animals are probably going to be just fine to eat. But you’re only going to do yourself a disservice in the long run if you hide behind the terminology,” Kuzma said.

Avoiding a backlash

Uncertainty about regulatory and consumer reaction is creating some strange bedfellows. An industry-backed group of food makers and farmers asked university researchers and consumer advocates to help craft guidelines for “responsible use” of gene editing in the food supply.

“Clearly this coalition is in existence because of some of the battle scars from the GMO debates, there’s no question about that,” said Greg Jaffe of the food-safety watchdog Center for Science in the Public Interest, who agreed to join the Center for Food Integrity’s guidelines group. “There’s clearly going to be questions raised about this technology.”

Sustainability or hype?

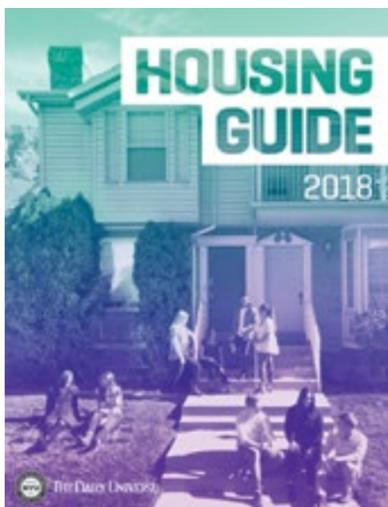
Gene-editing can’t do everything, cautioned Calyxt’s Voytas. There are limitations to how much foods could be changed. Sure, scientists made wheat containing less gluten, but it’s unlikely to ever be totally gluten-free for people who can’t digest that protein, for example — or to make, say, allergy-free peanuts.

Nor is it clear how easily companies will be able to edit different kinds of food, key to their profit.

Despite her concerns about adequate regulation, Kuzma expects about 20 gene-edited crops to hit the U.S. market over five years — and she notes that scientists also are exploring changes to crops, like cassava, that are important in the poorest countries.

“We think it’s going to really revolutionize the industry,” she said.

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