

Business

SUNDAY
ECONOMY & PERSONAL FINANCE

MONDAY
IDEAS & INNOVATION

TUESDAY
RETAIL & SMALL BUSINESS

WEDNESDAY
BIOTECH & HEALTH CARE

THURSDAY
TOURISM & RESTAURANTS

TODAY
TECHNOLOGY & ENERGY

SATURDAY
REAL ESTATE & GROWTH

MARKETS

▲ 79.92 Dow 16,416.58
▲ 5.32 Nasdaq 4,509.56
▲ 2.92 S&P 500 1,915.45
▼ 0.05 10-yr. T-note 1.84%
▼ \$0.56 Oil \$31.72
▲ \$16.30 Gold \$1,157.60
▲ \$0.12 Silver \$14.84

Euro 0.8920 • Peso 18.2860

LOWER DOLLAR HELPS: Equity markets rose Thursday as diminished expectations of U.S. interest rate hikes this year pushed the dollar lower, which in turn boosted the prices of many commodities.

BRIEFLY

ISSUE RESOLVED: The Internal Revenue Service said it had resumed processing individual and business tax returns on Thursday afternoon after a system outage, a day after a "hardware failure" forced the shutdown of several tax processing systems, including the e-file system.

QUAKE, OIL LINK: A 2005 spate of quakes in California's Central Valley almost certainly was triggered by a local surge in oil company injection of wastewater underground, a study published Thursday said in the first such link in California between oil and gas operations and earthquakes. Researchers are now studying other areas to see if California's high background level of shakiness is obscuring other seismic activity possibly linked to oilfield activity.

POWER MOVE: Viacom's board of directors named CEO Philippe Dauman as executive chairman, replacing majority owner Sumner Redstone, overriding calls for an independent board chief from Redstone's daughter, who voted against Dauman. Viacom said Thursday that the ailing 92-year-old Redstone was becoming chairman emeritus, a day after CBS said Redstone, also the CBS majority owner, was stepping down as executive chairman and being replaced by CEO Leslie Moonves.

APPLE KEEPS LOSING: A federal jury in East Texas ordered Apple to pay \$625.6 million after finding that its services like FaceTime and iMessage infringed on technology patents held by Nevada patent-holding company VirnetX, which had previously won a \$368 million verdict against Apple on similar claims in 2012. That award was overturned by an appellate court, which ordered a new trial. Apple vowed to appeal again.

UGLY MOVE: Marinello Schools of Beauty, a for-profit chain owned by B&H Education, shut down its entire operation Thursday — including its campuses in California — days after the Department of Education cut off its access to federal loans and grants for allegedly falsifying records. The move by the chain, which has two schools in San Diego County, will affect 4,300 students and 800 employees.

DIGITS

20M

Number of active accounts on the Alibaba Taobao e-commerce website that hackers in China tried to access, using Alibaba's own cloud computing service, according to a state media report. The company said it detected the attack in "the first instance," reminded users to change passwords, and worked closely with the police investigation.

U-T NEWS SERVICES

VIACYTE'S DIABETES STUDY GETS BOOST FROM RIVAL'S ASSETS

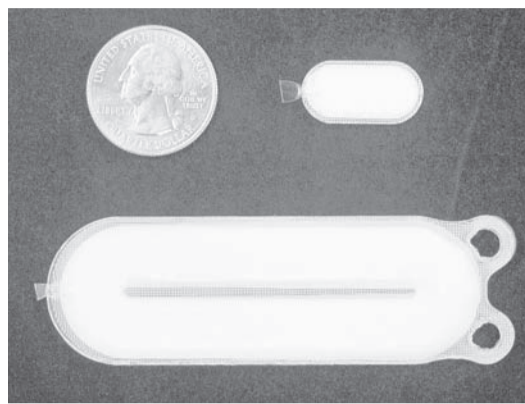
BY BRADLEY J. FIKES

San Diego-based ViaCyte, developer of an experimental treatment for Type 1 diabetes, said Thursday that it has acquired the assets of a rival company and strengthened its ties with a unit of health care giant Johnson & Johnson.

ViaCyte has taken over the intellectual property of Janssen BetaLogics and given more of its own equity to Johnson & Johnson, said Paul Laikind, ViaCyte's chief executive.

The acquisition comes as ViaCyte progresses with clinical trial testing for its therapy, VC-01, which the company said

SEE VIACYTE • C4



VIACYTE

The Encaptra, placed next to a quarter for size perspective, contains precursor pancreatic cells that are implanted under the skin and mature into insulin-producing cells.

COVERED CALIFORNIA ENROLLMENT IS 1.5M

In 2016 sign-ups, state edged out of top spot by Florida

BY PAUL SISSON

Preliminary Obamacare enrollment data released Thursday shows that California may have lost its top spot to Florida, which reported about 1.7 million sign-ups through Monday compared with about 1.5 million in the Golden State.

According to an estimate released on June 30 of last year, Covered California, the state's health insurance ex-

change, had about 78,000 more enrollees than Florida before Obamacare's third open enrollment period started on Nov. 1. Both states entered the latest sign-up season with more than 1.3 million enrolled residents.

A Covered California spokesman said one possible reason for Florida's enrollment surge since Nov. 1 was its decision not to expand Medicaid. That means some people who enrolled in Florida's health exchange would have qualified for the already-expanded Medicaid program in California, which

SEE COVERED • C4



BASILE STUDIO

Rendering of proposed Little Italy steakhouse that Airport Authority says could place diners in danger in the event of a plane crash.

Restaurateur finds turbulence

CH Projects appealing to city after Airport Authority ruling mostly kills its plan for Little Italy steakhouse

BY LORI WEISBERG

A San Diego restaurateur who wants to transform an old photo supply building in Little Italy into a steakhouse with a rooftop garden will make his case this month that his project is not an air-safety risk.

His mission: persuade council members to set aside a ruling by the San Diego County Regional Airport Authority that his restaurant could potentially put diners in jeopardy should a plane crash.

New airport safety regulations

that went into effect in 2014 threaten to kill the \$2.5 million project because they would limit occupancy of the 8,000-square-foot space to just 72 diners, compared with the desired 130.

Born & Raised, as the two-story restaurant is being called, would take over the former home of Nelson Photo, at India and Fir streets. It would be the fourth Little Italy dining venue for CH Projects, which has a total of 11 different concepts in its rapidly expanding hospitality portfolio.

It would also join a growing num-

ber of high-profile restaurants that have gravitated to what has become a hugely popular dining mecca. Among those restaurants is Ironside Fish & Oyster, one of CH Projects' more ambitious projects to date.

In order to override the Airport Authority decision, a two-thirds majority vote of the council is required. A hearing date has been set for Feb. 29.

"We've met with about five council members, and everyone we talk to sees it kind of like bureaucracy run amok," said CH Projects co-founder Arsalun Tafazoli. "Part of

our property isn't even in the safety zone, and it's not like we're in a residential hub. All of our neighbors are restaurants."

Joining Tafazoli in his appeal to the council will be Civic San Diego, the city agency that oversees downtown development. Born & Raised will be the first downtown project to seek an appeal since the Airport Authority rules were implemented, said Brad Richter, Civic San Diego assistant vice president.

"This restaurant use fits in with the rest of the neighborhood that's

SEE RULING • C2



MATT LUTTON NEW YORK TIMES

Ben Cutler (left) and Norman Whitaker, both of Microsoft Research, with the company's prototype underwater data center in Redmond, Wash.

MICROSOFT TAKES THE PLUNGE IN TEST OF PROTOTYPE UNDERSEA DATA CENTER

BY JOHN MARKOFF

Taking a page from Jules Verne, researchers at Microsoft believe the future of data centers may be under the sea.

Microsoft has tested a prototype of a self-contained data center that can operate hundreds of feet below the surface of the ocean, eliminating one of the technology industry's most expensive problems: the air conditioning bill.

Today's data centers, which power ev-

erything from streaming video to social networking and email, contain thousands of computer servers generating lots of heat. When there is too much heat, the servers crash.

Putting the gear under cold ocean water could fix the problem. It may also answer the exponentially growing energy demands of the computing world because Microsoft is considering pairing the system either with a turbine or a tidal energy

SEE UNDERWATER • C4

INVESTOR BECOMES NEW TRIBUNE CHAIRMAN

\$44.4M deal could help company's bid to buy O.C. Register

BY JAMES RUFUS KOREN

A Chicago entrepreneur who already owns one of that city's daily newspapers is now the largest shareholder in Los Angeles Times (and San Diego Union-Tribune) owner Tribune Publishing after making a \$44.4 million investment — one that could bolster the company's planned bid for the Orange County Register.

Michael Ferro, through his firm Merrick Media, bought 5.22 million newly issued shares of Tribune Publishing stock, giving him a 16.6 percent stake in the company, which also owns the Baltimore Sun, the Chicago Tribune and several other daily newspapers.

The investment makes Ferro, who also owns the struggling Chicago Sun-Times, the largest Tribune shareholder. It more than doubles the amount of cash Tribune Publishing has available to expand its Southern California footprint by pur-



FILMMAGIC

Chicago entrepreneur Michael Ferro is now the largest shareholder at Tribune Publishing.

chasing the Register and the Riverside Press-Enterprise from bankrupt Santa Ana publisher Freedom Communications.

One of Tribune Publishing's key growth strategies is to purchase more newspapers in its existing markets and combine operations to cut costs. Last year, it bought the Union-Tribune, and adding Freedom's newspapers to its portfolio would strengthen its position in the Southern California market.

SEE FERRO • C4

RULING Regulations based on state formula

FROM C1 already full of existing restaurants," Richter said. "We don't feel this single property is any different from all the rest in the neighborhood."

The safety regulations, which affect neighborhoods under the flight path, including Golden Hill, Point Loma and Bankers Hill, are not so much about building height but are tied to a state formula that restricts future developments to a particular neighborhood's average "intensity" — a measure of human activity in the area.

Tafazoli estimates that the unexpected delays associated with fighting the Airport Authority have cost his company \$100,000.

"Big developers do this all the time, but most people in my position would have just walked away," he said.

Marco Li Mandri, chief executive of the Little Italy Association, said he expects to see more appeals coming forward as the downtown neighborhood continues to redevelop. His group, he said, will be steadfast in fighting to overturn Airport Authority rulings that have the effect of stymying new development.

Tafazoli's take on the classic steakhouse includes two large bars, a main downstairs dining room plus patio seating, and a 1,500-square-foot rooftop terrace. In addition to featuring a retail butcher shop, plans are to dry-age the beef on-site, a process in which the beef carcasses are housed in a low-temperature, high-humidity room for weeks.

Should CH Projects win its appeal, Tafazoli is hoping that Born & Raised could open by August. According to Richter, the council would first vote on its "intent to override" the Airport Authority, and if that is approved, a second hearing, to be held no less than 45 days later, would be required.

Councilman Todd Gloria, whose district includes the downtown area, said he takes seriously the safety concerns of the Airport Authority but also wants to weigh their potential to interfere with a still-growing neighborhood that already has a high-density population.

"The potential for a major corner anchor property to go vacant is contrary to the wishes of that community and would not be helpful," Gloria said. "Obviously, public safety is our more important job, but it's not acceptable to me to leave a location like this underutilized in a very thriving community."

lori.weisberg@sduiontribune.com
(619) 293-2251 • @loriweisberg



LOS ANGELES TIMES FILE

Workers sort almonds for defects after the nuts have passed through laser sorters at a farm in Lost Hills.

GOOD NEWS FOR ALMOND FANS

Steep prices fall after overseas turmoil hits exports

THE WASHINGTON POST & ASSOCIATED PRESS

Almonds, the beloved snack that recently overtook peanuts as the most consumed nut in America, might have gotten a little too popular for their own good.

After years of steady price increases, thanks in large part to sky-rocketing demand, the protein-packed nut has suddenly become much cheaper. Almond prices, which reached record highs early last year, have fallen by about 25 percent since late 2014. A farmer who could sell a pound of almonds for nearly \$5 last summer is now getting as little as \$3.10.

The drop is giving environmentalists hope the slump will halt orchard plantings of the water-intensive nut, but experts say the industry's long-term prospects remain strong. Almonds remain California's No. 2 agricultural product, after the dairy industry, and are the state's leading farm export.

"They dropped a lot faster and further than anyone had expected," said Vernon Crowder, who is a senior analyst at Rabobank, a food and agribusiness research firm.

Farmers say a downturn was inevitable after years of rising prices and an explosion in production. The slowing down of economies in large world markets such as China has also contributed to the drop in prices.

"We hit record price levels, and at some point the elastic breaks," said Mike Mason, chairman of the Almond Board of California and a grower in Kern County, home to one-fifth of the state's almond crop. "Everybody expected that we would have a price correction."

Almonds are a famously water-intensive crop, requiring more than a gallon of water per almond. And California, which is responsible for producing about 80 percent of the world's almonds, has endured a crippling drought over the past few years. That has put a terrible strain on local nut farmers, who, without steady rainfall have found themselves with fewer nuts than in years past.

For almond growers, this hasn't been a huge problem. They sold fewer nuts, but made up for the harvest shortfalls by selling them at a premium — a simple adjustment to the shift in supply. They also passed the cost of the irrigation needed to combat the drought on to consumers. And everyone paid the extra bit, at least at first.

Volume sales fell by about the same amount as the crop yield fell, but dollar sales remained strong. But then the American dollar began to strengthen, flexing its muscles against foreign currencies, turning high but manageable prices into headaches for anyone purchasing almonds abroad. About 60 to 70 percent of U.S. almonds

are exported, the vast majority of which go to Europe and China.

A significant portion of almond sales goes to food manufacturers, who use them in various candy bars, trail mixes, cakes, pie crusts and other desserts. And this is where companies, reacting to swollen prices in recent years, have skimped out. Total shipments of almonds fell by 12 percent last year, while exports fell by 15 percent, according to the most recent numbers released by the Almond Board of California.

Last year's crop turned out to be far bigger than expected. Many new almond trees had been planted in recent years, as farmers, looking to capitalize on historically high prices, switched out less-profitable crops.

But prices have stabilized in recent weeks and even today's lower prices are above the average for the past decade. Almond farming remains profitable for most growers, said Crowder, the farm economist.

GOOGLE SEARCH PIONEER IS STEPPING DOWN

He will be replaced by official in charge of machine learning

U-T NEWS SERVICES

As one of Google's earliest search pioneers steps down and the company's leader in artificial intelligence takes his place, analysts say the move signals the company's desire to make its search engine more sophisticated.

Google parent Alphabet said Wednesday that Amit Singhal, the longtime chief of its Internet search business,

will retire Feb. 26. He will be replaced by John Giannandrea, the vice president of engineering who joined Google in 2010 and heads its efforts in machine learning, the process in which computers improve performance by analyzing users' actions.

Singhal joined Google as employee No. 176 in 2000, two years after the company was founded. He has led the technical development of the search engine since then, helping make it faster, smarter and able to peer into the inards of software running on mobile devices. At the same time, the tool was augmented with clever widgets like calculators and weather forecasts that materialize in response to certain queries.

During Singhal's tenure, Google developed Adwords, the technology that targets ads based on users' searches and one of its biggest money-makers. "When I started, who would have imagined that in a short period of fifteen years, we would tap a button, ask Google anything and get the answer," Singhal wrote in a



STEPHEN LAM REUTERS FILE

Amit Singhal, who has led the technical development of the Google's online search engine since he joined the Mountain View company in 2000, is retiring soon.

blog post. Singhal, 48, said he will spend the next 15 years giving back to "people who are less fortunate."

Analysts say Giannandrea's appointment was a sign that features dependent on machine learning, such as Google's personal assistant, which answers queries and conducts searches with the push of a button, will play a key part in the future of search. His work introduced

the technology to products such as image recognition for Google Photos search, which searches through online images, and the smart reply for Google Inbox, which provides auto-reply suggestions for emails. He recent artificial intelligence efforts include RankBrain, which saw Google plug an AI technology called a neural network into its search engine to boost the accuracy of results.

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THE ARAMCO REPORT

Hot markets in cold weather

By Mehran Aram, Real Estate and Mortgage Analyst

January is traditionally a slow month in the housing market with less homes available for sale and families not seeking to move right after the holidays. And this year, for the most part, followed that winter pattern nationwide. On average, homes for sale sat on the market 6 percent longer than they did last December.

However, Realtor.com shared its list of the hottest housing markets in January. Dominating the top spot again is San Francisco, with Dallas, San Jose and Vallejo following. San Diego landed in the fifth spot. Homes in these markets typically sell 30

to 50 days faster than other metropolitan areas and often have higher values.

Experts at Realtor.com expect that as the weather heats up, so will the housing market. Analysts predict this coming spring will see positive movement in home-buying volume. An optimistic employment forecast will usher in a wave of new buyers who are benefitting from solid wages and low mortgage rates. Today, conforming no point 30-year fixed mortgage rates are averaging 3.75 percent and 15-year rates are near 3.125 percent. These rates are near historic lows.

Do you have a question for Real Estate and Mortgage Analyst Mehran Aram? Submit your queries about a home purchase, refinance or reverse mortgage via aramco.biz, social media (@AramcoReport), or over the phone at (866) 381-8888 and your question could be featured in an upcoming article.

CALLAWAY GOLF SAYS REBOUND ON TRACK

Carlsbad company says exchange rates clipped its revenue

BY MIKE FREEMAN

Callaway Golf beat Wall Street's expectations for its fourth quarter, despite headwinds from a strong dollar.

The Carlsbad golf equipment maker reported sales of \$153 million, up 14 percent from the year-earlier quarter. It lost \$30 million, or 33 cents per share, in the winter quarter, which is typically slow for golf. The loss was smaller than the 36 cents per share that analysts had forecast on sales of \$149 million.

Chief Executive Chip Brewer told analysts in a conference call Thursday that the company continues to gain ground against competitors, particularly in the U.S. Callaway ended the quarter with an overall golf equipment market share of 21 percent — its highest level since 2003.

"We ended the year as the No. 1-selling brand ... in fairway woods, putters, irons and total clubs, and the No. 2 brand in drivers and golf balls," Brewer said.

For its full year, Callaway's sales came in at \$844 million, down 5 percent from the prior year, mostly because of unfavorable foreign exchange rates.

The company gets about half its revenue from overseas sales — led by Japan and Europe. So exchange rates clipped revenue reported in U.S. dollars.

But Brewer said Callaway remains the leading American golf brand in Japan with a 15 percent market share, and is the overall top golf brand in Europe with just under 21 percent market share.

Net income for the year was \$14.6 million, or 17 cents a share. That's down from \$16 million, or 20 cents per share, for 2014.

Looking ahead, Callaway expects first-quarter sales of about \$275 million and earnings per share between 33 cents and 39 cents.

The company also said it has reached a joint venture in Japan with clothing maker TSI Groove & Sports Co., where it will sell Callaway-brand apparel. Previously, Callaway had licensed its brand name.

And Brewer said Callaway — with \$50 million in cash and no long-term debt — will begin looking at acquisitions this year. "We are moving through the turnaround stage," he said. "We continue to be encouraged by what we see in the golf industry. Participation in the game has stabilized."

Total rounds played in the U.S. rose 2 percent last year, according to industry research firm GolfDatatech. Callaway released results Thursday after markets closed. Its shares fell 1.07 percent to \$8.34 on the New York Stock Exchange, but edged up 11 cents in after-hours trading.

mike.freeman@sduiontribune.com

MICROSOFT STEPS UP AI PUSH WITH SWIFTKEY DEAL

THE WASHINGTON POST

The humble keyboard hasn't changed much since it was first invented. Even the jump from physical keyboards to the digital ones you use on your smartphone still look virtually identical — save for the new emoji keys in a text message or tweet.

But for years now, scientists have been trying to crack the code behind natural language, a surprisingly difficult "technology" that, if only we could teach computers to use it, would transform how we interact with our devices. And now Microsoft appears to be investing heavily in that future of artificial intelligence, or AI, as well.

The software company is paying \$250 million to buy the British startup Swiftkey, which makes an intensely popular keyboard app that offers up the next word it thinks you'll want to type in a sentence.

The app quickly became a best-seller shortly after it launched in 2008. What sets it apart from other keyboard programs is the way it attempts to function like the human brain does, recognizing patterns, evaluating

meaning, making use of history to predict the future, in what's called machine learning. Instead of drawing its predictions from a set database of existing words, Swiftkey analyzes your particular writing style in an effort to help the future you.

Under Microsoft, Swiftkey's technology stands to spread into practically every product the Redmond, Wash., firm owns. Imagine if Microsoft Word or Outlook anticipated what you wanted to say in a document or email. It could be integrated into a host of other apps Microsoft has acquired, such as Wunderlist, its to-do list app, or Sunrise, its calendar app.

Analyzing millions of user keystrokes won't just help Microsoft supply your next turn of phrase; it'll also give it access to troves of valuable behavioral data that is now treated like currency among tech companies large and small. Chances are this trade-off will be worth it for many consumers, just as many of us have willingly let Google mine our search history and Facebook see who we communicate with. But it does potentially give Microsoft another leg up in the increasingly competitive tech industry.