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**LIBERTY SCIENCE CENTER GENIUS GALA 7.0 TO HONOR SARA SEAGER,
'INDIANA JONES OF ASTRONOMY'; VITALIK BUTERIN, CREATOR OF
CRYPTOCURRENCY ETHEREUM; YALE'S SCIENCE OF HAPPINESS PROFESSOR
LAURIE SANTOS; AND LEGENDARY GENOMICS PIONEER GEORGE CHURCH**

MAY 11 GALA MARKS LSC'S 25TH ANNIVERSARY

JERSEY CITY, N.J., April 26, 2018 – One is an MIT professor who has been called the “Indiana Jones of Astronomy” because of her quest to find the “Holy Grail of Planetary Science”—a second Earth. Another is a Russian-Canadian programmer, age 24, who created Ethereum, the world’s second-most valuable cryptocurrency network behind Bitcoin. The third is a Yale professor renowned for both her work looking at the uniqueness of the human mind through the lens of the comparative cognitive abilities of humans, monkeys, and dogs, and for teaching the “Science of Happiness,” the single most popular course at the Ivy League institution. And the last, but certainly not the least, is a legendary genomics pioneer and serial entrepreneur who invented the technique of direct genome sequencing and whose latest company plans to sequence an individual’s genome for less than \$1,000 and securely store the data in blockchain—the technology that underlies cryptocurrency—so that individuals retain permanent ownership and control of their DNA data.

They are **Sara Seager, Vitalik Buterin, Laurie Santos, and George Church**, and they are the distinguished scientists who have been selected to receive Liberty Science Center’s 2018 Genius Awards, the highest honor bestowed by the Center.

The quartet will be honored at a creative black-tie gala at the Center in Jersey City, NJ on Friday, May 11. The event, celebrating LSC’s 25th anniversary, will benefit the Center’s exhibitions and programs, particularly the science education programs that LSC delivers to 91,000 “at-risk” children annually across the New Jersey/New York region.

“Our 2018 Genius Award winners are four visionary women and men of science, ages 24 to 63, who are busting paradigms,” declared LSC President and CEO Paul Hoffman. “Each personifies what it means to be a genius; each is using his or her exceptional intellectual and creative abilities to disrupt and innovate both in their respective fields and for the betterment of humanity.”

The 2018 Genius Gala, which begins at 6:00 pm, brings together more than 700 industry leaders and philanthropists from the NY/NJ metropolitan area. And the chairs and co-chairs of the Center’s 25th Anniversary commemoration represent a veritable “Who’s Who” of the tri-state area’s business and industry titans. The corporate chairs are **Steve Howe**, US Chairman and Americas Managing Partner, EY, and **Ralph Izzo**, Chairman, President, and CEO, PSEG. The co-chairs are: **David Barry**, President and CEO, Urby and Ironstate Development Company; **Christopher S. Boerner**, President and Head of International Markets, Bristol-Myers Squibb; **Jennifer A. Chalsty**, Director, Advisory Council, James

Buchanan Brady Urological Institute, Johns Hopkins University; **Kevin P. Conlin**, Chairman, President, & CEO, Horizon Blue Cross Blue Shield of New Jersey; **Michael DeMarco**, CEO, Mack-Cali Realty Corporation; **Alma DeMetropolis**, Managing Director, JPMorgan Private Bank; **Matthew D. Ellis**, EVP and CFO, Verizon Communications; **Robert C. Garrett**, Co-CEO, Hackensack Meridian *Health* Network; **David T. Gockel**, President and CEO, Langan; **Brian Gragnolati**, President and CEO, Atlantic Health System; **S. Joseph Hand, JD**, SVP, Global HR and Corp. Services, Celgene Corporation; **Robert J. Hariri, MD**, Co-Founder and Vice Chairman, Human Longevity, Inc. and Chairman, Founder, and CEO, Celularity, Inc.; **Barbara G. Koster**, SVP and CIO, Prudential Financial; **Carl R. Kuehner, III**, Chairman and CEO, Building and Land Technology, Inc.; **Bruce L. Levy**, President and CEO, BMR Energy; **Mitch Livingston, Esq.**, President & CEO, NJM Insurance Company; **Barry H. Ostrowsky**, President and CEO, RWJBarnabas Health; **Laura Bilodeau Overdeck**, Founder and President, Bedtime Math; **John Overdeck**, Co-Chairman and Co-Founder, Two Sigma; **Chirag Patel**, Co-CEO, Co-Founder, and Chairman, Amneal Pharmaceuticals; **Carlos Rodriguez**, President and CEO, ADP; **Vijay Swarup, PhD**, VP of R&D, ExxonMobil Research and Engineering Company; **Gregory Tusar**, CEO, Greywolf Consulting, LLC; **Josh S. Weston**, Honorary Chairman, ADP; **Susan Keating**; and **Norman Worthington**, Executive Chairman, The Star2Star Communications and Blueface Companies.

Ticket prices start at \$1,250 per guest with options for table sponsorship ranging from \$12,500 to \$100,000. For more details, please visit lsc.org/gala.

About the Genius Gala Honorees

SARA SEAGER, 46, has been called the Indiana Jones of astronomy. An astrophysicist at MIT, the native of Canada is on a quest for the “holy grail of planetary science”: a second Earth. A pioneer in the new field of exoplanetology, she invented the concept that forms the foundation of exoplanet atmosphere studies today. She and her colleagues also made the first detection of light emitted from an exoplanet and the first spectrum of an exoplanet.

“I like to think of finding a true Earth analog as the completion of the Copernican Revolution,” she has said. “Copernicus started a new paradigm when he said that the Earth was not the center of the universe. If we can identify another Earth-like planet, it comes full circle, from thinking that everything revolves around our planet to knowing that there are lots of other Earths out there.”

When she began her PhD thesis on exoplanets in the mid-1990s, there was skepticism about their detection, and her work was initially ignored. But as of April 25, 2018, there have been 3,717 planets detected around 2,794 stars, and astronomers estimate that there are 100 billion planets in the Milky Way alone. Seager's work is the blueprint for finding another Earth.

VITALIK BUTERIN, 24, is the Russian-Canadian programmer who created Ethereum, the world's second-most valuable cryptocurrency network behind Bitcoin. Ranked No. 10 on *Fortune's* 2017 list of the most influential people in business under the age of 40, he was born in Kolomna, Russia, and raised in Toronto, where he was recognized as mathematically gifted at a young age.

In 2010, he learned about Bitcoin—unstoppable, unmediated digital payments—from his computer-scientist father and started earning Bitcoin himself by writing about cryptocurrency for specialty blogs and scholarly journals. A year later he cofounded *Bitcoin Magazine*, the first serious publication about cryptocurrency. Two years later, he published a white paper describing how blockchain—the distributed ledger technology that underlies Bitcoin—could be an enabling platform for all kinds of autonomous software such as "smart contracts" which self-execute. Thus was born Ethereum.

In 2014, the venture capitalist Peter Thiel awarded Buterin \$100,000 to drop out of the University of Waterloo, where he had completed one year in computer science, and finish writing the code for Ethereum. Today, Ethereum is still in its infancy, albeit with a market cap on April 25 of \$61 billion.

LAURIE SANTOS, 42, is professor of psychology at Yale University and director of its Comparative Cognition Laboratory and Canine Cognition Center. Her work focuses on the age-old question of what is unique about the human mind, approaching this question by comparing the cognitive abilities of humans, monkeys, and dogs.

A related inquiry into the origins of human irrationality led Santos to teach capuchin monkeys to use money. She found that, in monkey business, capuchins make the same poor economic choices that humans do (such as overbuying certain food items when their prices drop). Her research suggests that monkeys possess a theory of mind—the ability to think about what other monkeys think.

At the Canine Cognition Center, Santos studies the canine mind: how dogs perceive the world, solve problems, and make decisions. Her work reveals that Fido is smarter than he appears.

Santos also studies the science of happiness. In January 2018, she started teaching a course at Yale called "Psychology and the Good Life," which is breaking attendance records at the 316-year-old university. One-quarter of Yale's undergraduates—1,182 students—have enrolled in the hope of learning evidence-based strategies for reversing harmful ingrained behaviors and leading happier lives.

GEORGE CHURCH, 63, is a serial entrepreneur and genomics pioneer at Harvard University. On February 7, 2018, he launched his latest startup, Nebula Genomics, which plans to reduce genome cost to the patient from \$999 today to free (or even pay them) and securely query the data via blockchain and other encryption tools—so that the individual retains permanent ownership and control of his or her DNA data (unlike companies like 23andMe and AncestryDNA, which own the genomic data once an individual provides a saliva sample).

He is public about his personal medical data, publishing his own genome online for all to see and freely discusses the medical conditions that govern his life—high cholesterol, dyslexia, and narcolepsy. Falling asleep multiple times a day, he has said, affords him more time for visionary dreaming. One of his dreams—of woolly mammoths roaming the Earth again—is now the subject of a de-extinction effort at Harvard involving the insertion of DNA preserved from the Pleistocene into modern Asian elephants.

Church has been on the bleeding edge of genetics research for four decades. He invented direct genome sequencing in 1984, which led to a partial \$3 billion human genome in 2003 and \$999 clinical-quality today. More recently, he is a champion of the well-known CRISPR gene-editing technology.

He has also been a leader in demonstrating that DNA is an efficient and durable computer storage medium. In 2012, he encoded a 50,000-word book he co-authored, called *Regenesi: How Synthetic Biology Will Reinvent Nature and Ourselves*, into DNA.

Seager, Santos, Buterin, and Church will join previous Genius Award recipients **Katherine Johnson, Ray Kurzweil, Marc Raibert and SpotMini, Frank Gehry, Jack Horner, Ellen Langer, Kip Thorne, Sir Richard Branson, Garry Kasparov, Jane Goodall, Oliver Sacks, Temple Grandin, Dean Kamen, Sylvia Earle, J. Craig Venter, Cori Bargmann, Ernó Rubik, Jeff Bezos, Vint Cerf, and Jill Tarter** in LSC's *Genius Gallery*, a permanent, interactive display at Liberty Science Center.

About Liberty Science Center

Liberty Science Center (LSC.org) is a 300,000-square-foot not-for-profit learning center located in Liberty State Park on the Jersey City bank of the Hudson near the Statue of Liberty. Dedicated to inspiring the next generation of scientists and engineers and bringing the power, promise, and pure fun of science and technology to learners of all ages, Liberty Science Center houses the largest planetarium in the Western Hemisphere, 12 museum exhibition halls, a live animal collection with 110 species, giant aquariums, a 3D theater, live simulcast surgeries, a tornado-force wind simulator, K-12 classrooms and labs, and teacher-development programs. More than 250,000 students visit the Science Center each year, and tens of thousands more participate in the Center's off-site and online programs. Welcoming more than 700,000 visitors annually, LSC is the largest interactive science center in the NYC-NJ metropolitan area.