

SPOTTED

Budget boom; CRISPR retraction; basketball benefit and more

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Budget boom

In the \$1.3 trillion spending deal signed into law 23 March, all but one U.S. science agency is slated to **get a 2018 funding boost**. The National Institutes of Health hit an all-time budget high at \$37 billion, and the National Science Foundation has been allotted \$7.8 billion. The Environmental Protection Agency is alone in seeing its budget stagnate instead of swell, *Nature* reported 22 March.

SOURCES:

Nature / 22 Mar 2018

US science agencies set to win big in budget deal

CRISPR retraction

When potential flaws in the gene-editing tool CRISPR made headlines last year, some researchers were reluctant to accept the results of the small study that **triggered the coverage**. Perhaps they were onto something: *Nature Methods*, which published the study, **has retracted it**, *Retraction Watch* reported 30 March.

The study investigators claimed that CRISPR induced many more accidental mutations than scientists had previously suspected. The journal **cited important limitations** related to the mice the researchers used in the study, *STAT* reported 30 March. When the results originally appeared, shares of genome-editing companies “briefly tanked,” *STAT* reported.

SOURCES:

Retraction Watch / 30 Mar 2018

Nature journal retracts controversial CRISPR paper after authors admit results may be wrong
<https://retractionwatch.com/2018/03/30/nature-journal-retracts-controversial-crispr-paper-after-authors-admit-results-may-be-wrong/>**STAT** / 30 Mar 2018

CRISPR paper that sent stocks tumbling is retracted
<https://www.statnews.com/2018/03/30/crispr-stocks-retraction/>

Basketball benefit

Children with autism who love basketball games but hate the lights and noise are no longer stuck watching games on television. Professional basketball teams across the United States are establishing 'sensory rooms' for their **young fans on the spectrum** and others who need them. The National Basketball Association (NBA) plans to create these spaces in 19 arenas by the 2018-2019 fall season, *CNN* reported 30 March. Four teams — the Cleveland Cavaliers, Sacramento Kings, Oklahoma City Thunder and Utah Jazz — already offer the autism-friendly spaces.

SOURCES:

CNN / 30 Mar 2018

NBA makes space for fans with autism spectrum disorder
<https://www.cnn.com/2018/03/30/health/nba-utah-jazz-sensory-room/index.html>

Autism acceptance month

April is **Autism Acceptance Month**. During this month, the Autistic Self Advocacy Network says, we should share positive, respectful and accurate information about autism. The observance began in 2011 when **Paula Durbin-Westby**, a woman with autism, organized it in response to the autism awareness campaigns that also occur each April.

SOURCES:

Autistic Self Advocacy Network / 02 Apr 2018

Autism Acceptance Month: Acceptance is an action
<http://www.autismacceptancemonth.com/>

Public health promises

Robert Redfield Jr., the newly appointed head of the U.S. Centers for Disease Control and Prevention, promised in his first agency-wide address to **follow where science leads**. In his remarks, he directly addressed the issue of vaccination, saying, “We have got to get the American public to understand that vaccination is important and needs to be fully utilized,” *The Washington Post* reported 29 March.

SOURCES:

The Washington Post / 29 Mar 2018

In emotional speech, CDC’s new leader vows to uphold science

<https://www.washingtonpost.com/news/to-your-health/wp/2018/03/29/in-emotional-speech-cdcs-new-leader-vows-to-uphold-science/>

Epilepsy explained

Looking for clear information about **epilepsy**, which affects about one-third of people with autism? A YouTube channel called Neuro Transmissions featured a video, “**Neuroscience of Epilepsy**,” 25 March as part of Epilepsy Awareness Day. A **neuropsychologist on Twitter** called the epilepsy explainer an “excellent, excellent video on the neuroscience” of the condition.

SOURCES:

YouTube / 25 Mar 2018

Neuroscience of epilepsy

<https://youtu.be/hxRL7Ptihbg>

Musical emotions

Biomedical engineers have invented a way to translate the emotions of children with autism and related conditions into musical sounds. In the method, sensors track physiological states such as breathing and heart rate as cues to emotional states. An algorithm converts those data into sounds of different tempos and frequencies. Differences in these musical features communicate anxiety or comfort, for example, giving the listener insight into the emotions of someone who might otherwise have trouble communicating them.

A 2 April *Smithsonian.com* report looks at **how biomusic works** and offers a sample of it. It also

brings up ethical issues, such as those surrounding the broadcasting of a person's emotional state without that person's clear consent.

SOURCES:

Smithsonian.com / 02 Apr 2018

Can biomusic offer kids with autism a new way to communicate?

<https://www.smithsonianmag.com/innovation/can-biomusic-offer-kids-autism-new-way-communicate-180968649/>

Genetic intelligence testing?

Hundreds of gene variants have been associated with performance on intelligence tests, and one researcher is calling for genetic testing to **ballpark a child's intelligence quotient**.

The researcher, geneticist **Robert Plomin**, is heading up a long-term study on the influence of **genes and environment** on early development in 13,000 pairs of twins in the United Kingdom, *MIT Technology Review* reported 2 April. The magazine also notes that another study is due to reveal results linking academic performance to DNA variants based on a sample of 1 million people.

Genetic tests for intelligence are not terribly accurate, however. What's more, the identified gene variants underlie only a small fraction of intelligence differences, according to *MIT Technology Review*.

SOURCES:

MIT Technology Review / 02 Apr 2018

DNA tests for IQ are coming, but it might not be smart to take one

<https://www.technologyreview.com/s/610339/dna-tests-for-iq-are-coming-but-it-might-not-be-smart-to-take-one/>

Architectural inspiration

Architects planning buildings for people with autism must grapple with the reality that sensory sensitivities are unique to each individual, *Architectural Digest* reported 3 April. Architect **Renee Marcus**, who **designed a boarding school** in Lake Mohegan, New York, for students on the spectrum, says a few basic concepts still broadly apply, including having color coding for specific

rooms and avoiding flickering fluorescent lights.

SOURCES:

Architectural Digest / 03 Apr 2018

Autism informed the entire design of this revolutionary boarding school

<https://www.architecturaldigest.com/story/shrub-oak-international-school>

Yelp for sensory space

A new app tells people where **nearby sensory-safe spaces** are so they can seek respite when overwhelmed in public. Just as with Yelp, a popular website for reviewing local businesses, users of the app can rate spaces, upload images and give details about what each space has to offer, *Fast Company* reported 2 April. KultureCity **developed the app**. It's the same company that partnered with the NBA to create sensory rooms in some arenas.

SOURCES:

Fast Company / 02 Apr 2018

A new 'Yelp for sensory needs' helps people with autism find inclusive spaces

<https://www.fastcompany.com/40551113/a-new-yelp-for-sensory-needs-helps-people-with-autism-find-inclusive-spaces>

News tips

Do you have a new paper coming out? Are you making a career move? Did you see a study or news story that you want to share? Send your news tips to **news@spectrumnews.org**.
