

**SPOTTED**

# Autism advantage; robot therapists; CRISPR nightmares and more

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## WEEK OF JULY 3<sup>RD</sup>

### Autism advantage

Companies are finding that employing adults with autism is a smart business decision. A 28 June story in *The Atlantic* details the strengths that people on the spectrum **have brought to their work at EY** (formerly Ernst & Young). These strengths include finding signals among noisy cybersecurity data and pointing out missteps in company processes that other employees had never mentioned. The company has 14 people with a known autism diagnosis on its staff and adjusts the business environment in different ways to support them.

“In a traditional interview, you would say, this is not a good candidate,” EY neurodiversity program director Hiren Shukla says about the 14 staffers. He notes, for example, that “they don’t look at you in the eye.” But the company benefits from the patience the employees exhibit when fussing with details. As one senior management official at EY told *The Atlantic*: “Many people not on the spectrum would get worn out, they’d get frustrated, but [neurodiverse people] actually thrive on it.”

#### SOURCES:

**The Atlantic** / 28 Jun 2017

The advantages of autistic employees

<https://www.theatlantic.com/health/archive/2017/06/the-advantages-of-autistic-employees/532014/>

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### Robot therapists

Children with autism often seem to **interact more readily with robots** than with people. Now robots could take on therapy-support duties, such as turn-taking and imitation. According to a 27 June news release, a team at the University of Portsmouth in the United Kingdom is developing

robots that **go beyond the therapist's remote control** and perform therapy-related activities autonomously.

The next stop is Romania, where researchers will work with 40 children on the spectrum in a robot therapy trial. Half of the children will work with the robots and the others will receive a standard autism intervention.

**SOURCES:**

**University of Portsmouth** / 27 Jun 2017

Robots to help children with autism

<http://uopnews.port.ac.uk/2017/06/27/robots-to-help-children-with-autism/>

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## Maori additions

The Maori language now has a word for autism: takiwatanga. Its meaning, reported *BBC News* on 4 July, is "his or her own time and space." New Zealander **Keri Opai**, who helps **develop new words for the language**, told Maori Television that the term reflects that people with autism have their own life rhythms, timing and pacing.

**SOURCES:**

**BBC News** / 04 Jul 2017

Maori words minted for autism and mental health issues

<http://www.bbc.com/news/blogs-news-from-elsewhere-40493398>

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## Diversity discussions

The International Society for Autism Research will host **six weekly seminars this summer** addressing culture and diversity in autism research. The sessions are free and are scheduled to run Thursdays from 13 July to 24 August, with no session offered 20 July. A variety of experts, including **Roy Richard Grinker** of George Washington University and **Nidhi Singhal** of the National Centre for Autism in India, will present. Sessions are intended for all stakeholders in the autism community who are interested in research.

**SOURCES:**

**International Society for Autism Research** / 01 Jul 2017

Summer Institute 2017 - Overview

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## Romantic spectrum

In an interview with *Variety* on 4 July, **Rachel Israel** talks about directing “Keep the Change,” a romantic comedy **starring actors on the spectrum**, including leading man **Brandon Polansky**. Israel collaborated with the actors on the screenplay so that they could help craft “fictional versions of themselves.”

### SOURCES:

**Variety** / 04 Jul 2017

Love story ‘Keep the Change’ challenges misconceptions about autism

<http://variety.com/2017/film/global/love-story-keep-the-change-misconception-autism-1202487229/>

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## Mercenary publishing

A 27 June long read in *The Guardian* unfolds the mercenary history of the **world’s most unusual publishing business**, pay-per-view science publishing, with a focus on industry giant Elsevier. As any published researcher knows and the article describes, most big outfits skirt costs by having investigators do all the writing and peer review for free. Meanwhile, university libraries pay for subscriptions so researchers can access the same articles. Efforts at a revolution, including open-access publishing, have had mixed success.

One rogue attempt at a runaround has landed its founder in hot water. **Alexandra Elbakyan** started Sci-Hub, described as a “sort of Napster for science,” according to an article last week in *The Guardian*. Her brainchild has met with a fate similar to Napster’s: She faces an injunction and charges of copyright infringement, with a court ordering her to pay Elsevier \$15 million in damages for her effort to provide publications with paywalls for free on the Sci-Hub site. Yet she remains defiant, telling *The Guardian*: “Science should belong to the scientists and not the publishers.”

### SOURCES:

**The Guardian** / 27 Jun 2017

Is the staggeringly profitable business of scientific publishing bad for science?

<https://www.theguardian.com/science/2017/jun/27/profitable-business-scientific-publishing-bad-for-science>

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## Diagnostic overlap

Motor difficulties are common in autism but also occur in many other conditions, so that distinguishing among diagnostic options can be challenging. **Priscila Caçola** of the University of Texas at Arlington and her colleagues scanned the literature for studies of both autism and developmental coordination disorder (DCD), which also involves motor problems. In their systematic review, published 29 June in *Research in Autism Spectrum Disorders*, they say that the **differences between the two conditions** make them “unique and separable.” However, because of some overlap, the researchers recommend that people with autism also be evaluated for DCD.

### SOURCES:

**Research in Autism Spectrum Disorders** / 29 Jun 2017

Behavioral comparisons in autism spectrum disorder and developmental coordination disorder: A systematic literature review

<http://www.sciencedirect.com/science/article/pii/S1750946717300399>

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## CRISPR nightmares

In a *Guardian* interview, CRISPR scientist **Jennifer Doudna** talks about her road to life-changing research discovery and a **nightmare she had in which Hitler appeared** wearing a pig mask, reflecting her anxiety about science moving faster than our understanding of its social implications. Addressing a real-life nightmare scenario, she describes herself as “very concerned” about potential cuts to federal science funding in the United States.

### SOURCES:

**The Guardian** / 02 Jul 2017

Jennifer Doudna: ‘I have to be true to who I am as a scientist’

<https://www.theguardian.com/science/2017/jul/02/jennifer-doudna-crispr-i-have-to-be-true-to-who-i-am-as-a-scientist-interview-crack-in-creation>

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## New autism center

Using the medium of the times, **Mark Zylka** announced via Twitter on 28 June that his home

institution, the University of North Carolina at Chapel Hill (UNC), has a **brand-new autism research center** up and running. The **center promises to be** a “model for developing personalized interventions that improve the lives of children and adults with autism spectrum disorder” and boasts 96 researchers with autism-related funding across 34 university departments. The UNC Autism Research Center website also includes a page **offering information about advocacy** with links to several organizations run by people with autism.

**SOURCES:**

**University of North Carolina at Chapel Hill** / 28 Jun 2017

UNC Autism Research Center

<http://autism.unc.edu/>

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## Autism around the world

Tuck into a dozen articles on global autism research in a special issue of *Autism*, published 5 July. Articles cover autism diagnosis and related issues **around the world**, including in Taiwan, South America, Jamaica and Bangladesh. All of the articles are open access.

**SOURCES:**

**Autism** / 05 Jul 2017

Special Issue on: Global Autism Research

<http://journals.sagepub.com/toc/auta/current>

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## ‘Swim Team’

The documentary “Swim Team” follows a squad of 13 teenagers with autism as they **navigate the waters of competitive swimming**. The film, directed by **Lara Stolman**, has won several awards and is scheduled to debut in New York movie theaters on 7 July, followed by wider release in other cities, according to ABC News.

A father named Mike McQuay started the team, the Jersey Hammerheads, in 2013. His son Michael, who has autism, is a team member. “Our kids matter, man,” the older McQuay told ABC News. “I mean, they have a gift. Give them an opportunity, you believe any kid can do something.” In addition to the theater release, PBS will be airing the film on television in October.

**SOURCES:**

**ABC News** / 30 Jun 2017

'Swim Team' for autistic kids makes splash in documentary

[http://abcnews.go.com/Entertainment/wireStory/swim-team-autistic-kids-makes-splash-documentary-48374736 /](http://abcnews.go.com/Entertainment/wireStory/swim-team-autistic-kids-makes-splash-documentary-48374736/)

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## Eminence front

Does it seem fair to offer Olympic runner Usain Bolt a 10-meter head start in an upcoming race as a reward for his previous five wins? It's about as fair as **favoring elite scientists** in grant proposals and publications, argues **Simine Vazire** of the University of California, Davis. She expands upon her thesis against favoring eminence in a 4 July op-ed in *Nature*.

### SOURCES:

**Nature** / 04 Jul 2017

Our obsession with eminence warps research

<https://www.nature.com/news/our-obsession-with-eminence-warps-research-1.22251>

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## 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](mailto:news@spectrumnews.org)**.

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