

SPOTTED

Face learning; mosaic inheritance; nosy scientists and more

BY EMILY WILLINGHAM

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Face learning

Children with autism often have difficulty **recognizing faces**. The greater the difficulty, the more severe the child's autism features. A new study in monkeys suggests problems with facial recognition could stem from a **lack of practice**. Monkeys raised with no exposure to faces do not develop brain areas typically associated with recognizing faces, according to results reported 4 September in *Nature Neuroscience*.

SOURCES:

Nature Neuroscience / 04 Sep 2017

Seeing faces is necessary for face-domain formation

<https://www.nature.com/neuro/journal/vaop/ncurrent/full/nn.4635.html>

Puzzle problem

When you see a blue puzzle piece, you probably recognize it as a common symbol of autism. What might not register is whether or not the connection is negative. Investigators addressing that question report that puzzle pieces of all kinds, whether associated specifically with autism or not, conjure **negative perceptions of incompleteness**. Their work was published 21 August in *Autism*.

SOURCES:

Autism / 21 Aug 2017

Do puzzle pieces and autism puzzle piece logos evoke negative associations?

<http://journals.sagepub.com/doi/abs/10.1177/1362361317727125>

Mosaic inheritance

The genetics of autism is **famously complex**. Adding yet another layer are mutations that arise during embryonic development in **apparently unaffected parents** of children with autism. The parents are genetic mosaics with a limited number of body cells carrying the changes. Children can inherit a greater proportion of cells with the mutations, potentially increasing autism risk, researchers reported 30 August in the *American Journal of Human Genetics*.

Roughly 7 percent of mutations thought to have arisen spontaneously in children were present in a proportion of a parent's cells. In a press release describing the findings, lead researcher **Brian O'Roak** of Oregon Health and Science University said that "these mutations can go from being in a few percent of the cells of a parent to 100 percent of a child."

SOURCES:

The American Journal of Human Genetics / 30 Aug 2017

Exonic mosaic mutations contribute risk for autism spectrum disorder

<http://www.cell.com/ajhg/fulltext/S0002-9297%2817%2930322-1>

Nosy scientists

Some scientists file Freedom of Information Act (FOIA) requests to access **their competitors' successful grant applications** to major U.S. federal funders, *BuzzFeed* reported on 2 September.

Researchers whom *BuzzFeed* contacted were taken aback — and largely unhappy — to learn that their colleagues were snooping around in their grant proposals. Sometimes, the requests are for educational purposes, such as using the grants as a model of successful grant writing. But in other cases, the FOIA requests look like an effort to get a peek at what the competition is planning to do — and perhaps beat them to it. Almost one-third of FOIA requests to the National Institutes of Health come from academic institutions, *BuzzFeed* reported.

SOURCES:

BuzzFeed / 02 Sep 2017

These scientists got to see their competitors' research through public records requests

<https://www.buzzfeed.com/teresalcarey/when-scientists-foia>

Deadly discrimination

When her son **needed a heart transplant**, disability rights advocate Sunshine Bodey was told that no facility would perform one for her son because of his autism. After several hospitals rejected him, her son Lief ultimately received the transplant, but not before he almost died. Transplant programs have “a wide latitude” when it comes to considering neurocognitive disability in their decisions, Bodey wrote 30 August in *The Washington Post*.

SOURCES:

The Washington Post / 30 Aug 2017

My son has autism. Discrimination almost cost him his life.

https://www.washingtonpost.com/opinions/my-son-has-autism-discrimination-almost-cost-him-his-life/2017/08/30/b899dc58-88e8-11e7-961d-2f373b3977ee_story.html

Brain database

A huge study of brain structures and the gene variants that help shape them was posted 28 August to the preprint site bioRxiv. Using data from 40,000 people, the dozens of researchers involved identified 62 gene variants linked to the **development of brain structures**, such as the amygdala, the brain’s emotion processing center.

Some of the variants also are associated with psychiatric conditions, such as autism and schizophrenia, and a number of them are involved in synaptic signaling.

SOURCES:

bioRxiv / 28 Aug 2017

Genetic architecture of subcortical brain structures in over 40,000 individuals worldwide

<http://www.biorxiv.org/content/early/2017/08/28/173831>

Behaviorist ‘cardgate’

An **applied behavioral analysis** (ABA)-related version of the game “Cards Against Humanity” has upset many in the autism community. After the cards were posted online, **activists expressed anger** about the cards’ crude and dismissive references to people with autism and derisive comments from people who identified as ABA practitioners, *NOS Magazine* reported on 4 September.

The cards make fun of “several abusive practices,” writer **Sarah Luterman** notes. “Pinch the nose to release the jaw’ isn’t funny when you’re on the receiving end of ‘feeding therapy’ or having ammonia sprayed in your mouth as a punishment for noncompliance,” she writes.

The cards also include “multiple references to physical restraint, electric shocks and feces,” according to Luterman.

SOURCES:

NOS Magazine / 04 Sep 2017

‘Cardgate’ scandal uncovers widespread disrespect of autistic people

<http://nosmag.org/cardgate-scandal-uncovers-widespread-disrespect-of-autistic-people/>

Which diagnosis?

Autism and attention deficit hyperactivity disorder **share features** and can coexist, which can make distinguishing the diagnoses difficult. Such distinctions can be important, but **getting a diagnostic label** may not be as useful as some people think, reported *U.S. News and World Report* on 30 August.

It’s not always possible to tell the two conditions apart, developmental pediatrician **Mark Bertin** told the newspaper. “It’s more important to define what help can be offered without having to fully separate everything out,” he said.

SOURCES:

U.S. News and World Report / 30 Aug 2017

Does your child have ADHD or autism spectrum disorder — or both?

<http://health.usnews.com/health-care/patient-advice/articles/2017-08-30/does-your-child-have-adhd-or-autism-spectrum-disorder-or-both>

Autism advantage

Gary Numan, the singer best known for his 1980s hit “Cars,” sees his autism as **“an advantage.”** His condition also inspired his stage persona of a “stand-offish” person who “didn’t engage or smile,” he told the *Daily Express* on 5 September. Autism is “an extension of what I am and a big chunk of my songs are about being alone or misunderstood,” Numan said.

“Asperger’s gives you very useful gifts that other people don’t have such as concentration and

obsession,” he told the *Daily Express*. “When I first got into electronic music I threw myself into it deeply and I knew everything about every bit of equipment in studios I worked in.”

“There’s just a small price to pay for the advantages it brings,” he said.

SOURCES:

Daily Express / 05 Sep 2017

Gary Numan: I don’t see my Asperger’s as a disability — it’s an advantage

<http://www.express.co.uk/life-style/health/850136/gary-numan-aspergers-disability-singer-synth-pop>

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.
