

SPOTTED

Cerebral palsy connection; misleading expressions; multiple maladies and more

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Cerebral palsy connection

Autism and cerebral palsy often occur together, and evidence now links them at the genetic level. Genes and gene networks that are more active in cells from **people with cerebral palsy** include some of those implicated in autism, researchers reported 23 April in *Translational Psychiatry*. Many of the molecular pathways the scientists linked to cerebral palsy disrupt cell signaling or lead to inflammation.

SOURCES:

Translational Psychiatry / 23 Apr 2018

Analysis of 182 cerebral palsy transcriptomes points to dysregulation of trophic signalling pathways and overlap with autism

<https://www.nature.com/articles/s41398-018-0136-4>

Misleading expressions

Autism is thought to involve difficulty **interpreting facial expressions**. But what we assume are universal expressions of, say, fear or happiness may not be so universal — or even accurate indicators of our feelings. Research suggests that rather than communicating our authentic emotions, our expressions reflect what we **hope to achieve socially**. People from disparate cultures may interpret facial expressions differently depending on their social expectations, the *BBC* reported 10 May.

SOURCES:

BBC / 10 May 2018

Why our facial expressions don't reflect our feelings

<http://www.bbc.com/future/story/20180510-why-our-facial-expressions-dont-reflect-our-feelings>

Multiple maladies

People with autism have **more health problems** of almost every kind than the general population, according to a postmortem review of electronic health records. Researchers compared the health problems of 91 people on the spectrum with those of 6,186 controls, matched by age and sex. Only cancer was less frequent among the people who had autism, they reported 7 May in *Autism Research*.

SOURCES:

Autism Research / 07 May 2018

Using machine learning to identify patterns of lifetime health problems in decedents with autism spectrum disorder

<https://onlinelibrary.wiley.com/doi/abs/10.1002/aur.1960>

Brain asymmetry

The left and right sides of the brain differ in structure and function. This **brain asymmetry** may be unusual in autism. But how this feature of the brain varies with sex, age and genetics isn't clear. Researchers have now **obtained some of this information** by analyzing magnetic resonance imaging scans of 17,141 people without known health conditions. The findings, published 15 May in the *Proceedings of the National Academy of Sciences*, offer a baseline for examining how these patterns might differ in conditions such as autism.

SOURCES:

Proceedings of the National Academy of Sciences / 15 May 2018

Mapping cortical brain asymmetry in 17,141 healthy individuals worldwide via the ENIGMA Consortium

<http://www.pnas.org/content/early/2018/05/14/1718418115>

Paleolithic autism

Could the detailed, realistic art that people made in the Upper Paleolithic period be the product of creatives on the spectrum? Images found on cave walls dating back 50,000 to 10,000 years strongly reflect the level of detail seen in the work of **modern-day artists with autism**, researchers argue in an article published 12 May in *Open Archaeology*. This “extreme realism,” the researchers say, arises from the tendency to “detail focus” associated with autism.

SOURCES:

Open Archaeology / 12 May 2018

How do we explain ‘autistic traits’ in European Upper Palaeolithic art?

<https://www.degruyter.com/view/j/opar.2018.4.issue-1/opar-2018-0016/opar-2018-0016.xml>

‘Wrong’ toast

Famed geneticist **Eric Lander**, director of the Broad Institute of MIT and Harvard, found himself in hot water after a toast he made to another famed geneticist, **James Watson**, in honor of Watson’s 90th birthday. Lander, speaking at a genome research meeting, **lauded Watson in his remarks**, drawing fire on Twitter from critics who pointed to Watson’s long history of racist, anti-Semitic and sexist commentary. Lander apologized days later, saying he was “wrong to toast,” *STAT* reported 14 May.

SOURCES:

STAT / 14 May 2018

As Twitter explodes, Eric Lander apologizes for toasting James Watson

<https://www.statnews.com/2018/05/14/apology-eric-lander-james-watson/>

Science watchdogs

Fraud isn’t unknown in science, including in **autism research**. Yet not all university-based fraudsters get their just deserts. Some exploit privacy rules and due-process constraints to keep their past hidden and slip into other institutions where they **engage in the same behavior**. *Retraction Watch* editor **Alison McCook** unpacks how they get away with it in a 14 May report in *Undark*.

SOURCES:

Undark / 14 May 2018

Repeat offenders: When scientific fraudsters slip through the cracks

Autism drug fast-tracked

The U.S. Food and Drug Administration has granted **fast-track designation** to a drug with the potential to address what its maker, **Yamo Pharmaceuticals**, calls the “core features” of autism. The designation is based on results from a trial showing improvements in social skills in those who received the drug, the company said in a 14 May news release.

The designation means the agency will accelerate its review of the drug, called L1-79. L1-79 dampens activity in nerve pathways thought to be involved in social and communication difficulties in autism.

SOURCES:

Yamo Pharmaceuticals / 14 May 2018

FDA grants fast track designation for Yamo Pharmaceutical’s L1-79 in autism spectrum disorder
<https://globenewswire.com/news-release/2018/05/14/1501624/0/en/FDA-Grants-Fast-Track-Designation-for-Yamo-Pharmaceutical-s-L1-79-in-Autism-Spectrum-Disorder.html>

Rare gene profile

Geneticist **Uta Francke**’s breakthrough discoveries include being the first to map genes to chromosomes and uncovering the **variants underlying Rett syndrome**. In a 1 May profile, *The Scientist* traces these and other highlights of Francke’s career, starting with her childhood in World War II Germany and a tragic event that set her on the path to becoming a geneticist.

SOURCES:

The Scientist / 01 May 2018

Rare disease geneticist: A profile of Uta Francke

<https://www.the-scientist.com/?articles.view/articleNo/52376/title/Rare-Disease-Geneticist--A-Profile-of-Uta-Francke/>

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