

SPOTTED

New journal; organoid ethics; acetaminophen association and more

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New journal

The inaugural issue of *Autism in Adulthood* is available as of 18 April. Offerings in the first **table of contents** cover gender identity, finding friends as an adult on the spectrum, healthcare costs and accessing mental health services. Editor-in-chief **Christina Nicolaidis** writes in an **opening editorial** that she is “filled with gratitude and excitement” that adult perspectives are finding their place in autism research.

SOURCES:

Autism in Adulthood / 18 Apr 2018

The new home for our emerging field

<https://www.liebertpub.com/doi/10.1089/aut.2018.28999.cjn>

Organoid ethics

With the ability to grow human brains in mice, scientists have crossed into treacherous ethical territory, 17 researchers argue in a commentary published 25 April in *Nature*. Some of the ethical issues concern **blurring the boundary** between human and nonhuman animals, the researchers write. The research community needs to decide what experiments are acceptable. For instance, it might be okay to put a human heart in a pig’s body, but perhaps not a human brain.

Other ethical issues are familiar to anyone working with cell lines or other biological samples. They include who owns the samples, consent from the source of the sample for its use, and how to handle human organoids after the research is done. None of these potential ethical pitfalls should bring organoid-related research to a halt, the researchers write.

SOURCES:

Nature / 25 Apr 2018

The ethics of experimenting with human brain tissue

<http://nature.com/articles/doi:10.1038/d41586-018-04813-x>

Acetaminophen association

Some studies have linked acetaminophen exposure in the womb to autism risk, and to **language delay in girls**, but others have not found an association. In the 24 April issue of the *American Journal of Epidemiology*, researchers say the bulk of the data support a connection between the **pain reliever and autism risk**, but the seven available studies have “significant limitations.”

All of the evidence is from observational investigations, the researchers say. In these studies, the women who take acetaminophen might differ in various ways from those who do not, and the risk for bias from different sources is high. The investigators also say the studies “differed gravely in exposure and outcome assessment,” which precludes any firm conclusions based on their collective findings. Pregnant women shouldn’t be made anxious unnecessarily, they write.

SOURCES:

American Journal of Epidemiology / 24 Apr 2018

Prenatal exposure to acetaminophen and risk for attention deficit hyperactivity disorder and autistic spectrum disorder: A systematic review, meta-analysis, and meta-regression analysis of cohort studies

<https://academic.oup.com/aje/advance-article/doi/10.1093/aje/kwy086/4980325>

Asperger’s Nazi ties

The Journal of Molecular Autism published research on 19 April confirming long-time rumors that groundbreaking autism clinician Hans Asperger **cooperated with Nazi colleagues** to consign some disabled children to their deaths. In a 19 April discussion on the Thinking Person’s Guide to Autism, “**Neurotribes**” author **Steve Silberman** and **Maxfield Sparrow**, a writer and advocate on the spectrum, traced how the revelations unfolded and their possible **effects on the autism community**.

Spectrum covered the revelations as well. In 2013, Asperger syndrome was “**put in a coffin**” as a diagnosis in favor of a general autism label in the “Diagnostic and Statistical Manual of Mental

Disorders,” University of Pennsylvania’s **David Mandell** told *Spectrum*.

SOURCES:

Journal of Molecular Autism / 19 Apr 2018

Hans Asperger, national socialism, and “race hygiene” in Nazi-era Vienna

<https://molecularautism.biomedcentral.com/articles/10.1186/s13229-018-0208-6>

Thinking Person’s Guide to Autism / 19 Apr 2018

On Hans Asperger, the Nazis, and autism: A conversation across neurologies

<http://www.thinkingautismguide.com/2018/04/on-hans-asperger-nazis-and-autism.html>

Asperger reaction

Uta Frith, who translated the paper that catapulted Hans Asperger to fame in autism research circles, has commented publicly on reports of Asperger’s collaboration with a **Nazi eugenics program**. Frith is an emeritus professor of cognitive development at University College London. In a 22 April letter to *The Guardian*, Frith calls the reports “deeply upsetting.” She notes that Asperger’s name is no longer used in **most current diagnostic systems** and says it is “up to the autism community to decide whether it should remain in use.”

SOURCES:

The Guardian / 22 Apr 2018

What we must learn from Asperger exposé

<https://www.theguardian.com/society/2018/apr/22/what-we-must-learn-from-asperger-expose>

Misleading measures

Rett syndrome also was named for a clinician **who reportedly worked with Nazis**. Now researchers point to **Rett syndrome** as an example of how common **measures of intelligence can mislead** when applied to a non-neurotypical population.

Evaluating intelligence in children with Rett syndrome using **eye-tracking** instead of intelligence quotient tests reveals that many of the girls score within the normal range. This finding runs counter to the common assumption that these children have severe intellectual disability, the researchers write 17 April in *The Conversation*.

SOURCES:

The Conversation / 17 Apr 2018

Clinicians make mistakes about intellectual impairments – as new Rett syndrome findings show
<https://theconversation.com/clinicians-make-mistakes-about-intellectual-impairments-as-new-rett-syndrome-findings-show-95085>

Genomics guide

A group called **H3Africa** has published an ethics guide for handling **genomics data in Africa**. The guide gives researchers on the continent and their partner communities a framework for the storing, sharing and use of DNA samples. *Nature* editors write in an 18 April editorial that much of the guidance reflects unwritten expectations for good practice that have not necessarily been applied in reality in “the scramble for African genomes.”

SOURCES:

Nature / 18 Apr 2018

A welcome framework for research in Africa

https://www.nature.com/articles/d41586-018-04589-0?WT.ec_id=NATURE-20180419

Brain-cell chorus

Like a background clamor of crickets, neurons of the sensory cortex stay active even without sensory stimuli. Researchers have recorded the chorus of 10,000 such **neurons busily firing** in the visual cortex of mice awake in the dark. They posted a preprint version of their paper describing the results on bioRxiv on 22 April and uploaded all 10,000 recordings to figshare.com for other **scientists to explore** and use in their own projects.

SOURCES:

bioRxiv / 22 Apr 2018

Spontaneous behaviors drive multidimensional, brain-wide neural activity

<https://www.biorxiv.org/content/biorxiv/early/2018/04/22/306019.full.pdf>

Treatment choice

Public health organizations agree that taking the anti-seizure drug valproate during pregnancy can

pose risks to the embryo and fetus, including **raising autism odds**. Nevertheless, researchers say in a commentary published 18 April in *The BMJ*, women should still be able to **decide for themselves** if the benefits for them outweigh these risks, especially if no other medication is available for a potentially life-threatening seizure condition.

SOURCES:

The BMJ / 18 Apr 2018

Weighing the risks of valproate in women who could become pregnant

<https://www.bmj.com/content/361/bmj.k1596>

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.
