

SPOTTED

Sympathetic ear; test drive; diversity dearth

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Sympathetic ear

People with autism tend to have difficulty **deducing a person's emotions** from his or her facial expression. But that doesn't mean they can't tell how that person feels.

Three new studies suggest that individuals with autism are just as good if not better than controls at gauging someone's mood **from the sound of her voice**. The studies, highlighted in the September issue of *Scientific American*, are small. But together they support the notion that people on the spectrum do register emotions — they just do it differently than others do.

"This is great news from a treatment perspective," **Kevin Pelphrey**, director of the Autism and Neurodevelopmental Disorders Institute at George Washington University, told the magazine. "It is much easier to help someone overcome an inability to read emotion from faces than it would be to treat a fundamental lack of understanding of emotion from all modalities."

SOURCES:

Scientific American / 16 Aug 2016

An auditory component to autism

<http://www.scientificamerican.com/article/an-auditory-component-to-autism/>

Test drive

Driving can be unpredictable, and **unpredictability can be scary** for people with autism.

This is why **Nilanjan Sarkar** designed a driving simulator for people on the spectrum. The virtual

reality program, **highlighted this week in STAT**, gives drivers in training a safe place to learn and adapt to the stresses of road.

“[We wanted] to identify why they make mistakes and how to correct the mistakes,” says Sarkar, professor of computer and mechanical engineering at Vanderbilt University in Nashville, Tennessee.

STAT’s story features Sam McCarty, a 15-year-old boy with mild autism who is eager to get his license next year. Sam participated in a **pilot study of Sarkar’s simulator**. His mom, Bonnie McCarty, says the experience eased her fears about Sam’s ability to stay focused on the road.

SOURCES:

STAT / 17 Aug 2016

A driving game can help young people with autism learn the real thing

<https://www.statnews.com/2016/08/17/driving-game-autism-virtual-reality/>

Chimera concession

The National Institutes of Health has announced plans to **relax a ban on chimeras** — hybrid creatures that allow researchers to study the fate of human cells inside laboratory animals.

The agency imposed a funding moratorium on studies involving chimeras in September 2015, citing the need to “take a deep breath” and consider some of the ethical issues.

“This is an exciting area of science that is rapidly progressing, but in which ethical and animal welfare considerations might merit additional guidance to move forward,” Carrie Wolinetz, associate director for science policy at the NIH, wrote at the time.

Now, less than a year later, the NIH is **inviting the public to weigh in** on new guidelines for chimera research. The guidelines would allow researchers to introduce human cells into rodent embryos, so long as the cells make up only a small fraction of the animal’s brain. They also stipulate that researchers cannot breed the chimeras.

SOURCES:

The National Institutes of Health / 04 Aug 2016

Next steps on research using animal embryos containing human cells

<http://osp.od.nih.gov/under-the-poliscope/2016/08/next-steps-research-using-animal-embryos-containing-human-cells>

Diversity dearth

Most of the people who participate in autism studies are white, and a new study illustrates the potential fallout when researchers fail to be inclusive.

The study, published yesterday in *The New England Journal of Medicine*, focuses on hypertrophic cardiomyopathy. Black Americans are thought to have a higher risk of developing the hereditary heart condition. But this increased risk is probably a red herring — an artifact of how few blacks were included in past studies.

The finding should serve as a sobering reminder to autism researchers to include minorities in their studies. Failing to do so could generate misleading results, prompting misguided treatments.

“It’s like basing your whole world ... on one opinion or one biologic resource,” **Esteban Burchard**, professor of bioengineering at the University of California, San Francisco, told **Kaiser Health News**. “And that’s a problem because we miss the variation in genetics that is present worldwide.”

SOURCES:

The New England Journal of Medicine / 18 Aug 2016

Genetic misdiagnoses and the potential for health disparities

<http://www.nejm.org/doi/full/10.1056/NEJMsa1507092>**Kaiser Health News** / 17 Aug 2016

Genetic insights about health risks limited by lack of diversity, study finds

<http://khn.org/news/genetic-insights-about-health-risks-limited-by-lack-of-diversity-study-finds/>

Meddling microbes

Researchers go to great lengths to control every possible experimental variable. For mouse studies, this means treating every animal the same: same food, water, bedding and temperature.

But even the most meticulous scientist may be no match for **meddling gut microbes**, according to a story in this week’s *Science*. These tiny bugs can vary from mouse to mouse, affecting systems as far removed as bone — and possibly the brain.

The story highlights one more variable that researchers studying mice could consider. A team of scientists from the University of Missouri will scan a sample of mouse feces for \$125, according to the piece.

This graphic from the story illustrates some other factors that can influence mouse studies:

SOURCES:

Science / 16 Aug 2016

Mouse microbes may make scientific studies harder to replicate

<http://www.sciencemag.org/news/2016/08/mouse-microbes-may-make-scientific-studies-harder-replicate>

Job news

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