

**SPOTTED**

# Funding frenzy; personal pledge

BY KATIE MOISSE

25 SEPTEMBER 2015

**WEEK OF SEPTEMBER 21<sup>ST</sup>**

## Funding frenzy

The National Institutes of Health (NIH) has awarded a \$13 million grant to researchers at two California institutions who are working to create stem cell models of autism.

“The idea is to build computational and molecular tools and cellular resources that are open source, accessible, give reproducible results and are fundamentally useful to stem cell scientists,” **Gene Yeo**, associate professor of cellular and molecular medicine at the University of California, San Diego, one of the recipients, **said in a statement**. The other funded team hails from the Salk Institute for Biological Studies.

The name of the project is the Collaboration on Preclinical Autism Cellular Assays, Biosignatures and Network Analyses. Naturally, the researchers have shortened it to COPACABANA.

The NIH also awarded a **\$2.7 million grant** to **Stemina**, a Cambridge, Massachusetts-based biotech firm on the hunt for autism **biomarkers** — molecules or other measurements that signal autism. The grant will help to fund the **Children’s Autism Metabolome Project**, a study of metabolism in 1,500 children, some of whom have autism. The goal is to identify **biomarkers in the blood** that can help clinicians diagnose the disorder earlier.

### SOURCES:

**UC San Diego Health** / 22 Sep 2015

New grant will fund collaborative effort to build reproducible assays to model autism  
<http://health.ucsd.edu/news/releases/Pages/2015-09-22-grant-to-fund-collaboration-for-reproducible-autism-model.aspx>**GenomeWeb** / 23 Sep 2015

Stemina receives \$2.7M NIH grant for study of metabolic autism biomarkers

<https://www.genomeweb.com/research-funding/stemina-receives-27m-nih-grant-study-metabolic-autism-biomarkers>

---

## Personal pledge

A 15-year-old penned a poignant and inspiring **letter to the editor** of *Molecular Autism*. The letter, published this week, came from Lauren Singer, whose older sister, Jodie, has autism. Lauren's mother, **Alison Singer**, is president of the Autism Science Foundation.

"For 15 years, I have been called her 'unaffected sibling,'" Lauren wrote, describing the pain of watching Jodie become so aggressive last year that she could no longer safely live at home. "I am clearly not an 'unaffected sibling.'"

Lauren's experiences with Jodie have moved her to become an autism researcher. She's already well on her way, studying gender differences in autism as part of her high school's science research program. She is particularly interested in how girls might be **protected from autism-linked mutations**.

"I hope eventually to be part of the scientific research team that discovers how the female protective factor may be the foundation of a new treatment," she wrote.

### SOURCES:

**Molecular Autism** / 17 Sep 2015

Thoughts about sex and gender differences from the next generation of autism scientists

<http://www.molecularautism.com/content/6/1/52>

---

## Autism's advantages

Many stories about people with autism focus on their deficits. But an article in *The Atlantic* this week highlights the **'gifts' that often accompany the disorder**.

"These talents are not limited to quirky party tricks, like knowing whether January 5, 1956 was a Tuesday," the article reads. "Scientists believe they are signs of true intelligence that might be superior to that of non-autistic people."

The article centers on the work of **Laurent Mottron**, professor of psychiatry at the University of Montreal. His research has revealed that people with autism are unusually skilled at **problem-solving and processing complex patterns**. He clearly believes these findings: He collaborates with **Michelle Dawson**, an autism researcher who has autism.

“The limits of autistics should constantly be pushed and their educational materials should never be simplified,” Mottron told *The Atlantic*.

**SOURCES:**

**The Atlantic** / 23 Sep 2015

Autism’s hidden gifts

<http://www.theatlantic.com/health/archive/2015/09/autism-hidden-advantages/406180/>

---

## Magnetic focus

There is mounting interest in the power of transcranial magnetic stimulation (TMS) to ease symptoms of autism. Both **Spectrum** and **Nature** ran articles on the topic this week.

Both pieces highlight the early promise of the technique, which creates a magnetic field around the head that alters electrical activity in the neurons within. But they also underscore the need for more research on the benefits and risks.

Some clinics are already touting TMS as an autism therapy.

“People are paying tens of thousands of dollars for this completely unvalidated treatment,” **Peter Enticott**, a cognitive neuroscientist who ran the only rigorously controlled trial of TMS for autism, told *Spectrum*. “It’s obscene.”

**SOURCES:**

**Nature** / 23 Sep 2015

Brain stimulation in children spurs hope — and concern

<http://www.nature.com/news/brain-stimulation-in-children-spurs-hope-and-concern-1.18405>

---

## Gender gap

Two new studies suggest that early-career female scientists **struggle more to secure funding** than their male counterparts do.

One study, published Tuesday in the *Proceedings of the National Academy of Sciences*, found that women in the Netherlands are **less likely than men** to receive the Dutch equivalent of an NIH Director’s Early Independence Award. The other study, published last week in the *Journal of the American Medical Association (JAMA)*, found that in the U.S., men who are starting new labs

receive, on average, **\$889,000 as seed money** from their institutions. By comparison, women in the same position get just \$350,000.

“I’m hoping that institutions will start to systematically collect data about the startup packages they’re offering so that they can keep an eye on making sure that it’s a fair situation,” **Robert Sege**, lead researcher on the *JAMA* paper, told *Science*. “We need to look at this in a serious, data-driven way, the same way we look at scientific problems.”

**SOURCES:**

**Science** / 22 Sep 2015

Funding woes for early-career female scientists

[http://sciencecareers.sciencemag.org/career\\_magazine/previous\\_issues/articles/2015\\_09\\_22/career.a1500230](http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2015_09_22/career.a1500230)

---