

SPOTTED

Tough decision; security check; building brains

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Tough decision

A personal **essay** in *Narrative Inquiry in Bioethics* highlights the challenges some families face when offered **genetic testing** for a loved one with autism. It describes the dilemma of a pregnant doctor whose sister, Maria, has autism. A team of geneticists wants to test Maria for mutations to get clues about the unborn child's autism risk.

"Maria was excited to be an aunt soon, and was willing to do what she could to help my baby — even if what she was helping with was to avoid her own condition," the anonymous doctor writes in the essay.

The test came up with nothing — no autism-linked mutations. But the fact that it happened at all raises **some tough questions**, as pointed out last week in *Discover* magazine's Neuroskeptical

blog.

“What struck me about this story is the way in which the prospect of the genetic test confronted Maria with a very personal decision: will you do something that might help prevent someone else becoming like you? Which amounts to: would you want someone else to have to live your life?”

SOURCES:

Narrative Inquiry in Bioethics /

A sister, a father and a son: Autism, genetic testing, and impossible decisions

<http://www.ncbi.nlm.nih.gov/pubmed/26752577>**Discover** / 16 Jan 2016

Genetic testing for autism as an existential question

<http://blogs.discovermagazine.com/neuroskeptic/2016/01/16/7311/#.VqEH1VMrJBz>

Security check

With more and more medical data being stored and shared online, security is a growing concern. With the right tools and motivation, hackers can access personal and **potentially sensitive information**.

A commentary published Wednesday in *Science Translational Medicine* says cyber attacks on healthcare systems have doubled since 2010. It also outlines steps to **curb this disturbing trend**, such as imposing time limits on researchers' access to certain databases.

“Often, a researcher will need access to particular sensitive information while completing a particular study, and their access to that information should expire when they complete the effort,” the authors write. Another idea is to require one-time passwords or two-factor authentication.

SOURCES:

Science Translational Medicine / 20 Jan 2016

A cybersecurity primer for translational research

<http://stm.sciencemag.org/content/8/322/322ps2>

Looking back

An autism diagnosis can be tough on families. Last week, NPR asked parents in the Washington, D.C., area to describe **the moment they found out** that their child had autism.

Christy Hammett, whose son Francis is now 12, said the car was silent on the way home from the appointment.

“I don’t even remember even saying anything to each other because it was the final word,” she said. “You’ve done all these things, but, you know what, this is what he has. This is it.”

Ronald Hampton, whose son Quintin is now 31, said the news “was very hard to hear.”

“You don’t ever forget that day,” he said. “Everyone wants to have their child to be perfect. You know, the five toes, the five fingers, and all those kind of things.”

SOURCES:

NPR / 05 Nov 2160

Families describe how they felt hearing about an autism diagnosis

<http://www.npr.org/2016/01/15/463221381/families-describe-how-they-felt-hearing-about-an-autism-diagnosis>

Building brains

The latest episode of STAT’s video series “**Science Happens**” features ‘mini-brains’ — tiny blobs of neurons that form complex connections inside a dish. **David Kaplan**, chair of biomedical engineering at Tufts University in Medford, Massachusetts, is using the makeshift brains to study the effects of certain drugs and even concussion-like injuries, according to STAT.

“And as they get more acquainted with these mini-brains, they’re trying to join them together like Lego bricks to make bigger networks,” journalist Carl Zimmer writes for the health and science news site. “We can only dream (or dread) what those maxi-brains might someday do.”

Other researchers are **using mini-brains** to study the effects of autism-linked mutations.

SOURCES:

STAT / 21 Jan 2016

Scientists are building mini-brains to understand the human mind

<http://www.statnews.com/2016/01/21/mini-brains-science-happens/>
