

SPOTTED

Spotted: Screening support, editing ethics

BY KATIE MOISSE

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Screening support

The debate about the merits of **screening all toddlers for autism**, regardless of whether they have any symptoms, rages on. The U.S. Preventive Services Task Force, charged with making an official recommendation on the matter, says there's insufficient evidence that universal screening does any good. But an op-ed Tuesday in *The New York Times* argues that the group's lack of support for autism screening would essentially **bar researchers from collecting** this crucial evidence.

"Without the stamp of approval from the group, payment for screening is not mandated by the Affordable Care Act. And no studies satisfying the requirements of the task force are likely to be done soon," wrote **Aaron E. Carroll**, associate professor of pediatrics at Indiana University School of Medicine in Indianapolis.

SOURCES:

The New York Times / 08 Sep 2015

Why there's disagreement over screening every child for autism

<http://www.nytimes.com/2015/09/09/upshot/why-theres-disagreement-over-screening-every-child-for-autism.html>

Editing ethics

Editing the genomes of human embryos has "tremendous value" as a tool to answer important biological questions, according to an international group of scientists and bioethicists.

The **Hinxton Group**, which includes members from the U.S. and eight other countries, **announced its stance Thursday**, six months after the creators of the gene-editing tool CRISPR **called for a**

ban on tweaking human DNA. In June, the U.S. House of Representatives introduced a bill that would prevent the Food and Drug Administration from evaluating or conducting research involving genetically modified embryos.

“Policymakers should refrain from constraining scientific inquiry unless there is substantial justification for doing so,” the Hinxton Group concluded in their statement.

The U.S. National Academies of Sciences is hosting an **international summit on genome editing** in early December.

SOURCES:

Hinxton Group / 09 Sep 2015

Statement on genome editing technologies and human germline genetic modification
http://www.hinxtongroup.org/Hinxton2015_Statement.pdf

Reproducibility woes

There has been a huge push in recent months for more replication in science. But an op-ed published Wednesday in *Nature* highlights the **hazards of making replication a prerequisite** for considering a study credible.

Take climate change research. Studies take many years to complete and are difficult to replicate. But a bill passed in March by the U.S. House of Representatives would “prohibit the Environmental Protection Agency from proposing, finalizing, or disseminating regulations or assessments based upon science that is not transparent or reproducible.”

“Replication of the sort that can be done with tightly controlled laboratory experiments is indeed often impossible when you are studying the behavior of dynamic, complex systems, for example at the intersection of human health, the natural environment and technological risks,” wrote **Daniel Sarewitz**, co-director of the Consortium for Science, Policy and Outcomes at Arizona State University.

SOURCES:

Nature / 09 Sep 2015

Reproducibility will not cure what ails science

<http://www.nature.com/news/reproducibility-will-not-cure-what-ails-science-1.18339>

Graduate guidance

Grad school is tough. To make it easier, a pair of Canadian professors has released a list of **10 things not to do**.

The cheeky tips range from not choosing a supervisor based on coolness to avoiding romantic relationships with faculty. The duo also encourages students to “cultivate a group of sympathetic academic friends and colleagues with whom you can share and discuss your exploits.”

“Graduate school can be an enjoyable experience that sets you on the path for a rewarding career,” wrote **Kevin D. Haggerty**, professor of sociology and criminology at the University of Alberta, and **Aaron Doyle**, associate professor of sociology and anthropology at Carleton University, in the *Times Higher Education*. “These 10 tips will be invaluable if you are determined to screw up that prospect.”

SOURCES:

Times Higher Education / 27 Aug 2015

10 steps to Ph.D. failure

<http://www.timeshighereducation.co.uk/features/ten-steps-to-phd-failure>

Diet doubt

A diet popular among families in search of **alternative treatments for autism** had no effect on symptoms in a gold-standard clinical trial.

The rationale for the gluten-free/casein-free diet arose from a theory that autism stems from an inability to break down certain proteins: gluten and casein. These proteins, the theory goes, migrate from the bowels to the blood and then into the nervous system as a result of a ‘**leaky gut**.’ But the new study, published this week in the *Journal of Autism and Developmental Disorders*, **found no evidence** that a diet free of gluten and casein has any effect on autism symptoms.

SOURCES:

Journal of Autism and Developmental Disorders / 05 Sep 2015

The gluten-free/casein-free diet: a double-blind challenge trial in children with autism

<http://www.ncbi.nlm.nih.gov/pubmed/26343026>
