

putting egg providers' health at risk, never made it to the Governor's desk.



Questions about Deaths in Cancer Trials using Gene-Altered Cells

by Katherine Drabiak, *Biopolitical Times* guest contributor Excitement about immunotherapy and gene therapy approaches to cancer has eclipsed ethical questions about seven recent deaths in clinical trials.





CGS in the NEWS

The Human Egg Business: More Media Coverage of California Cash-

for-Eggs Legislation [citing CGS]

by David Jensen, *California Stem Cell Report* AB 2531, backed by the fertility industry, would remove caps on payments for egg retrieval, thus inducing women to gamble with their health.

Inside New York's Radical Egg-Freezing Clinic for Women

[citing CGS' Marcy Darnovsky]

by Lizzie Crocker & Abby Haglage, *The Daily Beast* Extend Fertility in Manhattan offers egg freezing at half market price. It's also the first standalone practice of its kind in the U.S.

Public policy must address technology's impact

[citing CGS' Marcy Darnovsky]
by John M. Hein, *The Sacramento Bee* "We need to develop habits of mind, or habits of social interaction, that will allow for some very robust public participation on the use of these powerful technologies," says Marcy Darnovsky.

NEWS

Forget Ideology, Liberal Democracy's Newest Threats Come From Technology and Bioscience

by John Naughton, The Guardian

Homo Deus: A Brief History of Tomorrow, reviewed here, argues that "In the 21st century, those who ride the train of progress will acquire divine abilities of creation and destruction, while those left behind will face extinction."

Humans of the Future Could Be Much Faster Than Usain Bolt or Michael Phelps

South China Morning Post

We could be getting closer to the post-human era, where we modify our own genetics to the point that we're less recognisably "human" than ever before.

In the Fight for Our Genes, Could We Lose What Makes Us Human?

by Ziyaad Bhorat, openDemocracy

When genetics become the next currency for corporations and governments we risk the commercialization and politicization of who we are on a level far deeper than our skin.

Staying Ahead of Technology's Curves

by Doug Hill, Boston Globe

Embracing disruptive technologies without trying to anticipate and prepare for their potential consequences is now, more than ever, a bad idea.

Silicon Valley was going to disrupt capitalism. Now it's just enhancing it







by Evgeny Morozov, The Guardian

Tech giants thought they would beat old businesses but the guardians of capitalism are using data troves to become more, not less, resilient.

The surprisingly small benefit of some very (expensive) Big Ideas

by Joe Gibes, *Bioethics* @ *TIU* A new article in *JAMA* looks at the unfulfilled hype that has become entrenched in the fields of stem cells, genetics, and electronic health records.

Ruth Hubbard, 92, First Woman Tenured in Biology at Harvard

by Bryan Marquard, Boston Globe

Ruth Hubbard shifted her focus from the laboratory to the petri dish of politics, becoming a prominent feminist critic of science.

Hacking life: Scientists 'recode' DNA in step toward lab-made

organisms

by Sharon Begley, STAT

It may not be long before scientists assemble genomes of higher organisms, as George Church proposed to do for the human genome.

US government may fund research to combine human cells and animal cells

Associated Foreign Press

Stuart Newman asks: What if we have pigs with human brains and they are wondering why we are doing experiments on them? What about human bodies with animal brains? Could we harvest organs from them?

Experimental Cancer Therapy Holds Great Promise — But at Great <u>Cost</u>

by Meghana Keshavana, STAT

Patients undergoing immunotherapy clinical trials with CAR-T cells are at risk for deadly cytokine release syndrome, but pharmaceutical companies are racing to get FDA approval.

What happens when anyone can edit genes at home? We're about to find out

by Dyllan Furness, Digital Trends

Scientists express concern about the unintentional consequences of gene editing starter kits proliferating in biohacking communities.

Mind your genes! The dark legacy of eugenics lives on

by Natasha Miller, ABC [Australia]

The misguided science of behavioral genetics and the social engineering potential of CRISPR show we have much to remember about the history of eugenics.

Diversity, disability and eugenics: An interview with Rob Sparrow

by Xavier Symons, *BioEdge*

Philosophers and the medical profession have been way too swift to make judgments about other people's quality of life. We're not as far from the bad old eugenics as many think.

Scientists break 13-year silence to insist 'three-parent baby' technique is safe

by Ian Johnston, *The Independent* The researchers conclude the technique "can produce a viable pregnancy." But the pregnancy they established resulted in miscarriage.

The Perils of Planned Extinctions

by Claire Hope Cummings, *Project Syndicate* Instead of taking time to fully consider the ethical, ecological, and social issues of gene-drive technology, many are aggressively promoting its use in conservation.

Stem Cell Company Paid \$443,500 to Former Head of State Agency That Funds Research

by David Jensen, The Sacramento Bee

Conflict-of-interest allegations have dogged the agency since it was created in 2004 by California voters to use state bond proceeds to finance stem cell research.

Stem-Cell Treatments Become More Available, and Face More Scrutiny

by Melinda Beck, *Wall Street Journal* Critics say the clinics are peddling 21st century snake oil and want the FDA to crack down.

These New Stem Cell Treatments Are Expensive — and Unproven

by Michael Hiltzik, Los Angeles Times

"Stem cells have become a medical buzzword," Paul Knoepfler notes. "I see a lot of businesses using direct marketing to patients to take advantage of that."

Will Embryonic Stem Cells Ever Cure Anything?

by Aleszu Bajak, MIT Technology Review

The long, costly effort to cure diabetes with stem cells shows the difficulties and challenges of clinical translation.

Another Scathing Report Causes More Eminent Heads to Roll in the Macchiarini Scandal

by Gretchen Vogel, *Science Magazine* Fallout continues from a scandal involving patient deaths after a surgeon implanted artificial tracheae seeded with stem cells

Kuwait's new DNA collection law is scarier than we ever imagined

by Daniel Rivero, *Fusion* National security policies require residents, citizens, and visitors to submit DNA samples, shaping new definitions of the country's citizenship.

FBI's New DNA Process Produces More Matches in Suspect

Database

by Devlin Barrett, Wall Street Journal

In May, the Bureau reduced the number of genetic locations required for a potential match (from 10-13 to 8-9 loci), resulting in thousands of new "hits."

Gene Mapping May Not Be for Everyone

by Karen Weintraub, *USA Today* Genetic tests reveal variations in the genome that might not cause problems but could lead to unnecessary medical tests, anxiety and treatments.

Athletes are keeping their distance from a genetic test for

concussion risks

by Rebecca Robbin, STAT

Sports competitors, insurers, and researchers are cautious about the privacy and geneticization issues behind testing for "athletic" genes.

The Human Genome Is Having Its Facebook Moment

by Whet Moser, Chicago Magazine

In less than a decade, as many people could have their genomes sequenced as use the social networking site (~1.7 billion monthly users).

Do Olympians Have Better Genes Than You And Me?

by Christina Farr, *Fast Company* Genetic tests aimed at discerning the genetic basis for athletic ability could be used coercively, and are undermined by important environmental factors.

Why Gene Tests for Cancer Don't Offer More Answers

by Jessica Wapner, *Scientific American* Genetic profiling of tumors has a long way to go. Many patients learn that their cancers have mutations for which no drug exists

Illumina Would Like You to Sequence More DNA, Please

by Sarah Zhang, WIRED

The leader of the DNA sequencing market has a start-up accelerator program to find new applications for its technology.

Ethical questions raised in search for Sardinian centenarians' secrets

by Stephanie Kirchgaessner, The Guardian

Samples from residents of Sardinia's "Blue Zone," who are famed for longevity, have been sold to a for-profit British research firm.

In CRISPR Fight, Co-Inventor Says Broad Institute Misled Patent Office

by Antonio Regalado, *MIT Technology Review* Is an email between competing researchers a smoking gun in the billion-dollar battle over patent rights for gene editing?

CRISPR patent fight: The legal bills are soaring

by Sharon Begley, STAT

Editas has already spent \$10.9 million in 2016. Many in the CRISPR field wonder privately why the Broad Institute and UC Berkeley have not reached a settlement.

The \$100,000-Per-Year Pill: How US Health Agencies Choose Pharma Over Patients

by Fran Quigley, Truthout

Big Pharma wasn't always the beneficiary of US government-funded medicine breakthroughs. Then came the 1980s and the Bayh-Dole Act.

How biotech executives profit from legal insider trades

by Damian Garde, *STAT* Biotech bigwigs might be gaming an insider trading loophole to offset losses after failed clinical trials.

New Surrogacy Bill Bars Married Couples with Kids, NRIs, Gays, Live-ins, Foreigners

by Express News Service, *The Indian Express* The draft bill permits only "altruistic surrogacy" for childless couples who have been married for at least five years.

Why India's New Surrogacy Bill Is Bad For Women

by Sharmila Rudrappa, The Huffington Post

In an attempt to regulate surrogacy, the bill has further deregulated the industry and opened the possibilities for deeper harms to working class women.

Surrogates are Workers, Not Wombs

by Amrita Pande, The Hindu

Assumptions about women and reproduction derail effective worker protections in surrogacy regulation, as seen in India's draft legislation.

Surrogacy Still Big Business in Shanghai Despite National Ban

by Alice Yan, South China Morning Post

Since China's one-child policy relaxed two years ago, the surrogacy industry has been expanding despite recent police raids.

Booming demand, state protections attract commercial surrogate birthing

by Kathy Robertson, Sacramento Bee

California has more surrogacy regulation than most states. But the founder of an agency comments, "Anybody in the whole world – even a felon – can open an agency. There is no licensing, no background check."

Sperm Donor at Heart of Canadian Lawsuits Admits He Lied to Company Xytex, Police Say

by Diana Mehta, The Canadian Press

Amidst pending lawsuits, Sperm Donor 9623 has turned himself in to the police for "falsifying paperwork."

Babies' Health Could Be Affected by Variation in IVF Nutrients

by Jessica Hamzelou, New Scientist

Pharmaceutical companies keep the "recipe" of IVF culture media a secret, but research suggests long-term health effects for resulting children.

Two Women Pregnant after Having Ovarian Mitochondria Injected

into Eggs

The Japan Times

Some experts are calling for a careful response to the new procedure, as its safety and effects have not yet been scientifically verified.

Accessible Synthetic Biology Raises New Concerns for DIY Biological Warfare

by Joseph Neighbor, VICE Motherboard

The monopoly on biology once held by governments and universities has been broken, posing significant challenges for the international community.

Finding Good Pain Treatment Is Hard. If You're Not White, It's Even Harder.

by Abby Goodnough, The New York Times

Researchers have found evidence of racial bias and stereotyping in recognizing and treating pain among people of color, particularly black patients.

ExAC Project Pins Down Rare Gene Variants

Nature Editorial

A new study found only 9 of 192 variants were actually linked to pathogenic disease despite ongoing use in diagnosis and treatment.

