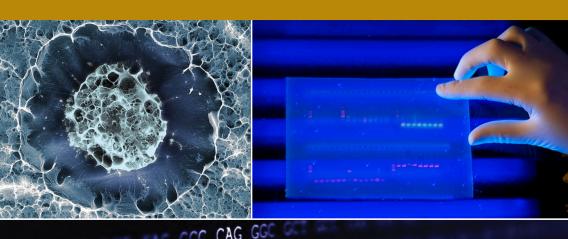
CENTER FOR GENETICS AND SOCIETY







2016 REPORT ON ACTIVITIES



CENTER FOR GENETICS AND SOCIETY

2016 REPORT ON ACTIVITIES

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I. Introduction

With the recent development and widespread adoption of powerful new gene editing techniques, the prospect of genetically manipulating the traits of future human generations is now being actively debated around the world. However, the conversation is taking place mostly among elite scientists, biotech industry figures, fertility professionals, policy makers, and bioethicists. The far-reaching social challenges posed by human germline modification are just beginning to make their way onto the agendas of most advocates for social justice, human rights, and democratic governance.

Introduction

continued

During 2016, the Center for Genetics and Society maintained its founding commitment to build and lead public interest and social justice efforts for responsible uses of human biotechnologies. Our central focus this year was on the profound societal dangers of human germline modification, and the escalating urgency of confronting them

II.

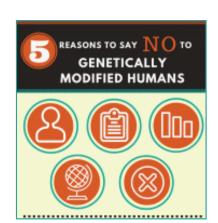
The Case against Human Germline Modification: Confronting the Threat to Social Justice

Over the past 16 years, CGS has advocated the clear position that human germline modification should remain off limits. These efforts now situate us to play a significant role in the unfolding controversy about using gene editing in human reproduction.

Many scholars, scientists, and public-interest advocates look to us for leadership. Our media footprint and online communications platforms amplify our capacity to influence the public conversation. The policy experience that we have accrued further strengthens our work. As one of the few public interest organizations active in the controversy about human germline modification, we have escalated our efforts to raise awareness about the threats it poses to social justice, human rights, and the common good. In 2016, CGS pressed the case against human germline modification through:

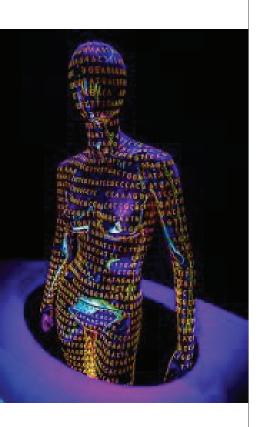
- giving more than 15 invited presentations
- organizing 6 online events
- authoring 7 op-eds and commentaries
- publishing 25 blog posts on Biopolitical Times
- · issuing 5 press statements on breaking news
- appearing in some 100 news articles, including radio and television news
- emailing innovative resources from our website to 2000 allies, colleagues, and science/technology reporters
- organizing strategy calls with colleagues and allies
- participating in policy conversations in the US and the UK

Lectures and presentations. CGS's executive director Marcy Darnovsky spoke at the International Summit on Human Gene Editing, held in December 2015. She was the sole public interest advocate to be invited to present there. In 2016, CGS staff and key consultants delivered invited lectures or presentations on topics related to human germline modification at venues including a conference on assisted reproduction in Geneva, Switzerland; the Capps Forum on Ethics and Public Policy at UC Santa Barbara; the Baby Markets International Congress at UC Irvine; the annual conference of Black Women for Wellness in Los Angeles, CA; and the National Bioneers Conference in San Rafael, CA. (See Section IV.)



The Case against Human Germline Modification

continued



CGS events. CGS organized a range of events about human germline modification, including a film screening and panel discussion; an online conversation with UC Davis stem cell biologist Paul Knoepfler and historian of science Nathaniel Comfort, as part of CGS's *Talking Biopolitics* series; a webinar organized in partnership with the environmental organization Friends of the Earth, GMOs 2.0: Reengineering Life, From Plants to People; and an invitational online conversation with scholars and advocates working on social issues related to assisted reproduction. (See Section IV.)

Op-eds and commentaries. CGS staff and consultants authored invited commentaries on human germline modification for <u>Asian Age / Deccan Chronicle</u>, <u>National Geographic, The Niche, Wall Street Journal, Washington Examiner</u>, and <u>Zócalo Public Square</u>. (See Section V.)

Blog posts. Posts about human germline modification were published on the <u>CGS blog *Biopolitical Times*</u> by authors including Emily Beitiks, Jessica Cussins, Hasmik Djoulakian, Elliot Hosman, Gina Maranto, and Pete Shanks. (See Section V).

Press statements. We issued seven press statements in response to breaking news about human germline modification, including <u>UK Approves Gene Editing</u>

Research Using Human Embryos, <u>US Fertility Doctor Uses Mitochondrial</u>

Manipulation in Mexico where "There are no rules," and <u>Strangely Mixed Signal in</u>

Report on Germline Mitochondrial Manipulations. (See Section V.)

Media citations. We were cited in some 100 articles about human germline modification, by news outlets including Los Angeles Times, Washington Post, Sacramento Bee, US News and World Report, PBS NewsHour, NPR, BBC, NBC; by science and health publications including Science, Nature, Journal of the American Medical Association, and STAT; and by other outlets including Mother Jones, Politico, FiveThirtyEight, Slate, and Forbes. (See Section V.)

Resources. We developed online infographics and resources about human germline modification and disseminated some of them to some 2000 allies, colleagues, and science/technology reporters. These include <u>5 Reasons to Say No to Genetically</u> Modified Humans and Human Gene Editing: A Timeline of CRISPR Cover Stories.

Strategy calls. CGS organized and facilitated a series of productive conference calls with colleagues and allies committed to the responsible use and governance of human gene editing. Participants shared information and perspectives about their own work, upcoming conferences and meetings, and thoughts about next steps. These conversations have helped inform our efforts to raise awareness, build capacity, engage in policy advocacy, frame our message, and identify research needs and potential funding sources.

The Case against Human Germline Modification

continued

Policy processes. In February, CGS participated in a meeting of the California Institute for Regenerative Medicine's Standards Working Group, convened to discuss whether the agency should accept funding proposals that involve editing the genes of human embryos or gametes for research purposes. CGS Advisory Board member Dorothy Roberts is a member of the Standards Working Group, and CGS colleague Charis Thompson was invited to speak at the meeting. Marcy Darnovsky reported on the proceedings on our blog, and her comments appeared in articles in the Los Angeles Times and the Cell Report. If CIRM were to adopt policy recommen-dations on germline editing for research, they would likely be widely influential, but the agency made no subsequent comments on the topic during 2016.

CGS submitted comments on human gene editing for reproduction to the UK <u>Nuffield Council on Bioethics</u>. In March, Marcy Darnovsky and Elliot Hosman were interviewed by the Council's Assistant Director and the Chair of its Working Group on Genome Editing for the group's report, titled <u>Genome Editing: An Ethical Review</u>.

Nuclear transfer techniques (3-person IVF). CGS was widely cited in media coverage related to nuclear transfer techniques that are technically a form of human germline modification. Critical moments included the February release of a report by the US National Academy of Medicine, the announcement in September that a rogue New York-based fertility doctor had used the technique in Mexico to create a child, and the approval of clinical use by the UK's Human Fertilisation and Embryology Authority in December.

III.

Policy, Legislative, and Research

CGS brings principles grounded in social justice to policy developments related to science and technology at state, national, international, and institutional levels. In addition to our program work opposing human germline editing, we successfully opposed a California bill that would have expanded the commercial market in women's eggs in the state, and raised concerns about research policies at Kaiser Permanente.

MARKETS IN WOMEN'S EGGS

CGS took a lead role in defeating a repeat attempt in the California legislature by the American Society for Reproductive Medicine, the fertility industry trade organization, to expand the commercial market for women's eggs. Assembly Bill 2531 would have overturned an existing state law that limits compensation for eggs that will be used for research purposes to reimbursement for women's expenses. CGS and allied women's health, reproductive justice, and public interest organizations opposed the bill because of dramatically insufficient information about the health effects of egg retrieval; the impossibility of true informed consent given the lack of data; the likelihood that low-income women, women of color, and immigrant women would most likely be affected; and the bill's conflict with state law and with recommendations for federal policy.



Policy, Legislative, and Research

continued

For a full explanation of these concerns, see the <u>opposition floor alert</u> and <u>CGS's</u> <u>letter to the Senate Health Committee</u>. Ultimately, the bill's author decided not to bring it up for a final vote because she anticipated a veto from Governor Brown, who had rejected an almost identical bill three years previously. More information about our efforts surrounding the bill can be found in the blog post <u>Victory: Eggs</u>for-Research Bill Dies in California Legislature.

Organizations opposing the bill included the Alliance for Humane Biotechnology, Black Women for Wellness, Black Women's Health Imperative, Breast Cancer Action, Center for Genetics and Society, Friends of the Earth, Forward Together, National Women's Health Network, Our Bodies Ourselves, Pro-Choice Alliance for Responsible Research, and We Are Egg Donors.

BIOETHICS AND RESEARCH BANKS

CGS staffer Elliot Hosman served on the Kaiser Permanente Research Bank
Community Advisory Board for Northern California, and Senior Fellow Osagie on
the project's Bioethics Advisory Board. In several meetings, CGS raised issues related
to the potential dangers of re-inscribing race in genetics, the inadequacy of consent
forms, privacy and data-sharing, the biobanking of tissues and genetic data from
vulnerable populations, unwarranted assumptions about "precision medicine," and
an over- emphasis on genetics in understanding basic health outcomes.

SURROGACY360

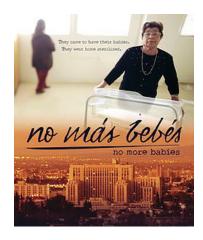
In partnership with the pioneering women's health organization <u>Our Bodies</u> <u>Ourselves</u>, CGS co-launched <u>Surrogacy 360</u>, an educational website that provides the only publicly accessible, objective online information for individuals and couples consider-ing international commercial surrogacy, while also addressing its complex health, legal, and ethical challenges. It provides a unique resource as an independent alterna-tive to the overwhelming amount of information sponsored by fertility clinics, intermediaries, and other industry sources that now dominate the online experience. For more information, see We Launched a New Website! by OBOS's Kiki Zeldes.

GAPS IN ART RESEARCH CONVENING

CGS organized an in-person meeting of California-based members of the Assisted Reproductive Technologies Working Group to discuss "Gaps in ART Research." The meeting process generated an impressive list of ideas for research projects that would advance social justice advocacy efforts related to ART. Key focus areas included collecting, protecting and using data; developing social justice-oriented communications; engaging in direct advocacy; providing tools for engagement with providers and genetic counselors; and fostering interdisciplinary collaboration.

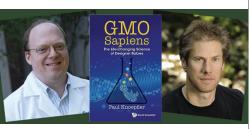


IV.





L to R: Renee Tajima-Peña, Alexandra Minna Stern, Virginia Espino



L: Paul Knoepfler; R: Nathaniel Comfort

CGS Events and Invited Presentations

Throughout 2016, the Center for Genetics and Society challenged and enriched biopolitical conversations with a wide range of public interest voices. We organized and co-organized ten widely attended events, including webinars, film screenings, workshops, and strategy calls, many of which were live-tweeted. In addition, we offered our insights at nearly 20 conferences, events, lectures, and meetings held locally in the Bay Area, across the nation, and internationally.

CGS-ORGANIZED EVENTS

Being Human in a Biotech Age Film Series. Our two 2016 screening and discussion events, both held on the UC Berkeley campus, were:

- February 16: <u>No Más Bebés</u>, followed by a discussion led by director Renee Tajima-Peña and producer Virginia Espino.
- April 12: <u>DNA Dreams</u>, a documentary about a preeminent Chinese biotechnology company working to discover the genetic basis of human intelligence. A panel with celebrated sociologist Troy Duster and bioengineer Terry Johnson followed.

Being Human in a Biotech Age is a collaborative project of the Center for Genetics and Society and two UC Berkeley-based groups: the Center for Science, Technology, Medicine and Society; and the Department of Gender and Women's Studies / Chau Hoi Shuen Gender and Science Initiative. UC Berkeley groups that co-sponsored individual screening events were the Doreen B. Townsend Center for the Humanities, Disability Studies, the Haas Institute for a Fair and Inclusive Society, and the Department of Sociology.

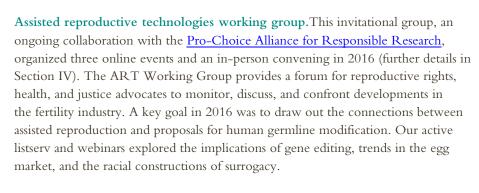
Talking Biopolitics webinar series. 2016 was the sixth year of our <u>Talking Biopolitics</u> series of live online events with cutting-edge biopolitical thinkers. More than 140 people registered for one or both of our two events, and 100 participated. Both events were live-tweeted under #TalkingBiopolitics. Subsequent views on our YouTube channel nearly doubled over those in 2015.

- January 26: Historian of science Nathaniel Comfort interviewed UC Davis stem
 cell biologist Paul Knoepfler about his just-released popular book, <u>GMO Sapiens:</u>
 <u>The Life-Changing Science of Designer Babies</u>. BioNews published a favorable <u>review</u>
 of this event.
- March 2: Renee Tajima-Peña and Virginia Espino, director and producer of the documentary <u>No Más Bebés</u>, talked with Alexandra Minna Stern about their film, which documents the coerced sterilization of Latina women in Los Angeles in the 1970s.

Events and Presentations

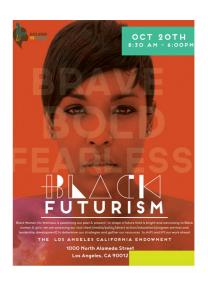
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GMOs 2.0: reengineering life, from plants to people. More than 130 people attended this webinar exploring the new techniques of synthetic biology and gene editing, and their capacity to redesign nature, from seeds to insects to people. Both the event and the report on which it was based, Extreme Genetic Engineering and the Human Future, were produced in partnership with the environmental organization Friends of the Earth. Webinar speakers were CGS consultant Pete Shanks on GMO 2.0 Human Experimentation, Center for Food Safety's Jaydee Hanson on Redesigning Nature with Crispr and Gene Drives, Friends of the Earth's Dana Perls on GMO's: Myths vs Reality, and EcoNexus' Ricarda Steinbrecher on What Has Changed?



SELECTED AND INVITED PRESENTATIONS

- January: Marcy Darnovsky spoke about embryo selection and germline editing
 at the three-day workshop <u>Inter-country Medically Assisted Reproduction:</u>
 <u>Conceiving a human rights ethic of care</u>, held at the Brocher Foundation near
 Geneva, Switzerland. The workshop was attended by 23 participants from 14
 countries.
- March: Marcy delivered the <u>Capps Forum on Ethics and Public Policy lecture</u> at UC Santa Barbara on "Should We Genetically Modify Our Children?"
- April: Pete Shanks and Elliot Hosman spoke at a <u>Shaping San Francisco panel</u> titled "Synthetic Biology: DIY Tinkering Meets Big Capital" (<u>filmed by CSPAN</u>).
- April: Marcy gave a presentation about germline gene editing and assisted reproduction at the 2016 Baby Markets International Congress at UC Irvine. CGS Advisory Board member Dorothy Roberts also spoke on these issues in her keynote address. Members of the ART Working Group also organized a panel on reproductive justice insights into assisted reproduction.
- May: Marcy delivered the <u>convocation address for the School or the Future of Innovation in Society</u>, Arizona State University.
- October: Marcy presented on "Genetics, Reproductive Health, Science & the Future" at the <u>Black Women for Wellness 2016 annual conference, Black</u> Futurism, in Los Angeles, California.
- October: Marcy spoke on "The Perils and Promise of Edge Technologies" panel at the National Bioneers Conference in San Rafael, California.



V.

Media and Communications

CGS's media and online profile continued to grow in 2016. Our communications efforts aimed to increase public, policymaker, and media understanding of biopolitical issues; build CGS's reputation as a thought leader and go-to source for information and commentary; and provide educational resources for colleagues, journalists, and students. Our work includes original writing in a range of formats (books, op-eds and commentaries, and posts on the CGS blog *Biopolitical Times*), frequent appearances by our staff in a wide range of media outlets, and a robust social media and online presence.

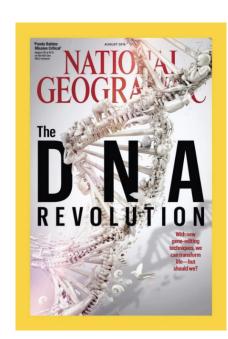
CGS-AUTHORED PUBLICATIONS

Op-eds and commentaries. CGS staff members and consultants published seven op-eds during 2016, all of which focused on aspects of the controversy about human germline modification.

- The Perils of Human Gene Editing for Reproduction, Marcy Darnovsky, Washington Examiner, March 8.
- Should Heritable Gene Editing Be Used on Humans?, Marcy Darnovsky, Wall Street Journal, April 10.
- Genome Games: A Secret Meet and a Controversy, Pete Shanks, Deccan Chronicle, May 22.
- Will Modern Genetics Turn Us Into Gene "Genies?", Marcy Darnovsky, Zócalo Public Square, May 24.
- <u>Hateful Politics Infiltrate Human Genome Editing Debate in France</u>, Elliot Hosman, *The Niche*, June 27.
- Pro and Con: Should Gene Editing Be Performed on Human Embryos?,
 Marcy Darnovsky, National Geographic, July 15.
- Wrong Steps: The First One from Three, The Asian Age/Deccan Chronicle, Pete Shanks, October 2.

Beyond Bioethics anthology. CGS senior fellow Osagie and Marcy Darnovsky's edited anthology, *Beyond Bioethics: Toward a New Biopolitics*, will be published by the University of California Press in Spring 2018.

Biopolitical Times blog. Our staff, consultants, and a growing cohort of guest bloggers published more than 60 posts at Biopolitical Times, some of which were syndicated at the CGS group blog Genetic Crossroads at Psychology Today. Guest contributors made up one-third of the year's blog posts, with commentaries from Diane Beeson, Emily Beitiks, Katayoun Chamany, Katherine Drabiak, George Estreich, Gabriele Werner-Felmayer, Emily Galpern, Alison Irvine, Abby Lippman, Gina Maranto, Daphne Martschenko, Angel Petropanagos, and Carmel Shalev, and Kiki Zeldes.



continued

The following is a selection of blog posts from 2016 by CGS staff, consultants, and guest contributors:

Human Inheritable Genetic Modification

- False Inevitabilities and Irrational Exuberance, Gina Maranto
- The Third Rail of the CRISPR Moonshot: Minding the Germline, Elliot Hosman
- <u>California Stem Cell Agency Considers 'Editing' Human Embryos,</u>
 Marcy Darnovsky
- Public Opposes Human Germline 'Enhancement' by Overwhelming Majority,
 Pete Shanks
- Editorial Precision? Snapshot of CRISPR Germline in the News, Hasmik Djoulakian
- 5 Reasons Why We Need People with Disabilities in the CRISPR Debates, Emily Beitiks
- 7 Highlights from Nuffield Council's Review on the Ethics of Genome Editing, Jessica Cussins

Mitochondrial DNA Replacement ("Three-person IVF")

- UK Researchers Now Say Three-Person Embryo Technique Doesn't Work;
 Propose New Method, Jessica Cussins
- 3-Person IVF Breaking News: Where are the Advocates?, Leah Lowthorp
- Dangers of Unscientific Policy Process: Why the UK's Legalization of 'Three-Person Babies Should Not be the Model for CRISPR, Jessica Cussins
- <u>Slippery Slopes and Biological Curve Balls: Updates on 3-Person IVF</u>, Leah Lowthorp

Assisted Reproduction

- Israeli Parents, Indian Surrogates, a Nepali Earthquake, and 'Cheap White Eggs,'
 Diane Beeson
- We Launched a New Website! Surrogacy360, Kiki Zeldes
- Frozen Eggs and Heated Debates, Angel Petropanagos
- Victory: Eggs-for-Research Bill Dies in California Legislature, Emily Galpern
- Just What We Need: Slicker Infertility Marketing, Gina Maranto

Eugenics

- Trump, Science and Social Justice, Pete Shanks
- Genetic Issues at the London Sperm Bank, George Estreich
- · Dinosaurs are Extinct, but Normalization is Alive and Well, Emily Beitiks
- Forgotten Stories of the Eugenic Age #5: Creating Super-People, Natalie Oveyssi



continued

CGS IN THE NEWS

In response to breaking news, CGS issued eight press statements, and an additional joint statement with Our Bodies Ourselves, to help build a steady stream of media inquiries.

With some 150 citations of CGS in print, online, and broadcast outlets based in 14 different countries, 2016 was the fourth consecutive year with citation numbers demonstrating that our push to establish ourselves as a leading media voice has paid off. The majority of CGS citations in 2016 addressed concerns about human germline modification. We were cited some 100 times on human gene editing for reproduction or nuclear transfer (3-person IVF), about 20 times on issues related to assisted reproduction, and about 30 times on other topics related to human biotechnologies. The following is a selection of these citations, organized by topic:

Human Gene Editing for Reproduction

- We are This Close to 'Designer Babies', Nina Liss-Schultz, *Mother Jones*, February 8.
- California Stem Cell Agency May Fund Tests to Edit Genes in Human Embryos, Melody Petersen, Los Angeles Times, February 12.
- Gene Editing: The Next Frontier in America's Abortion Wars, Sarah Karlin, *Politico*, February 16.
- <u>Cultural Influences Reflected in Divergent US vs. UK Human Embryo Research</u> Policies, Eli Y. Adashi, *JAMA: The Journal of the American Medical Association*, May 3.
- New Advances in Growing Human Embryos Could Prompt Ethical Firestorm, Eric Broodman, STAT, May 4.
- Why This Lab-Grown Human Embryo Has Reignited an Old Ethical Debate, Patrick Monahan, Science, May 4.
- Gene Editing Technique Could Transform Future, Fergus Walsh, BBC, June 6.
- Breaking Taboo, Swedish Scientist Seeks to Edit DNA of Healthy Human Embryos, Rob Stein, *NPR*, September 22.

Mitochondrial DNA Replacement ("Three-person IVF")

- <u>US panel greenlights creation of male 'three-person' embryos</u>, Sara Reardon, *Nature News*, February 3.
- Three-parent DNA treatment for rare defect raises debate, William Brangham, *PBS Newshour*, February 3.
- The Possibility of a Three-Person Baby, Indira Lakshamanan, *The Diane Rehm Show*, February 25.
- <u>Baby Born Using 'Three Parent' Technique</u>, <u>Doctors Say</u>, Maggie Fox, *NBC News*, September 27.
- Three-Person Baby 'Race' Dangerous, James Gallagher, BBC, October 12.



Osagie Obasogie

continued



L to R: Tito Jankowski, Elliot Hosman, Pete Shanks

Assisted Reproduction:

- <u>Is a Surrogate a Mother?</u>, Michelle Goldberg, *Slate*, February 15.
- Frozen Eggs and Title IX, Mary Ann Mason, Chronicle of Higher Education, February 29.
- Senate Eyes Human Egg Business, David Jensen, Capitol Weekly, June 7.
- Should we pay women to donate their eggs for research? No, and here's why., Michael Hiltzik, Los Angeles Times, July 22.
- Bill to Expand Market in Women's Egg Donations Would Undermine Safeguards,
 Deborah Ortiz, Sacramento Bee, August 4.
- Meet Prelude Fertility, the \$200 Million Startup That Wants to Stop the Biological Clock, Miguel Helft, Forbes, October 17.

Miscellaneous:

- The Battle Over CRISPR Could Make or Break Some Biotech Companies,
 Farai Chideya, Five Thirty Eight, January 25.
- Secret Harvard meeting on synthetic human genomes incites ethics debate, Joel Achenbach, *Washington Post*, May 13.
- <u>Scientists Say They Hope to Create A Human Genome in the Lab</u>, Rob Stein, *NPR*, June 2.
- What Ever Happened to Cloning?, Kimberly Leonard, US News and World Report, August 4.
- <u>Public Policy Must Address Technology's Impact</u>, John M. Hein, *Sacramento Bee*, August 13.
- China's \$9 billion effort to beat the U.S. in genetic testing, Ylan Q. Mui, Washington Post, December 30.

CGS ONLINE

Website. As in past years, in 2016 we kept our <u>website</u> actively updated with CGS-authored commentary, resource pages, and blogs posts; event announcements; news articles; and other materials.

Original online resources included the infographic "Five Reasons to Say No to Genetically Modified Humans," a visual representation of media highlights titled "Human Gene Editing: A Timeline of CRISPR Cover Stories," and the comprehen-sive resource pages "About Human Germline Gene Editing" and "About 3-Person IVF." Website traffic grew to historic levels by surpassing 395,000 annual visits, representing a 7.2% growth rate over 2015.

Newsletter and news scan. <u>Biopolitical Views and News</u>, our monthly newsletter, compiles CGS announcements, press statements, blog posts, and other CGS-authored materials, along with a selection of important news articles and commentaries from other sources. We now have more than 5100 subscribers, an increase of 11% over 2015. CGS also releases a biweekly "news scan," a digest of articles drawn from outlets around the world.

continued

Social media. CGS expanded its social media activity, outreach, and visibility through Twitter, Facebook, and YouTube in 2016. Likes on our Facebook increased by 12% over 2015; views on our Youtube channel grew by 22%; and Twitter followers were up 17%. We used Twitter to live-tweet several important events, including two public meetings of the National Academies of Sciences Human Gene Editing Study Group (using the hashtag #GeneEditStudy) and Dorothy Roberts' Tanner Lectures on Human Values, The Ethics of Biosocial Science; and compiled these tweets using Storify.

VII.



Marcy Darnovsky

Who We Are

At the end of 2016, CGS had five full-time and one part-time staff:

- Marcy Darnovsky, PhD, Executive Director
- Charles Garzón, MA, Director of Finance and Administration
- · Victoria Massie, MA, PhD candidate, Communications Coordinator
- Leah Lowthorp, PhD, Program Manager (and Mellon/American Council of Learned Societies Public Fellow)
- Kayla Tolentino, Staff Associate
- Jonathan Chernoguz, Intern

Former staff members in 2016 were:

- Elliot Hosman, Senior Program Associate
- Natalie Oveyssi, Staff Associate
- · Hasmik Djoulakian, Summer Intern
- Stephanie Maroney, UC Davis Mellon Public Scholar

Three current consultants have worked with us for many years:

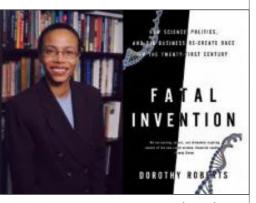
- Pete Shanks, writes regularly for the CGS blog *Biopolitical Times* and authors key reports and other documents, among many other contributions.
- Emily Galpern, former CGS staff member, collaborates on selected aspects of our work on human germline modification, organizes the ART Working Group, and assists with our job searches.
- Jessica Cussins, former CGS staff member, now a graduate student at the Harvard Kennedy School's Program on Science, Technology & Society, occasionally writes for CGS.

Who We Are

continued



Francine Coeytaux



Dorothy Roberts



Alexandra Minna Stern

We have four Fellows:

- Osagie Obasogie, JD, PhD (Senior Fellow), Haas Distinguished Chair and Professor of Bioethics, Joint Medical Program and Division of Community Health Sciences, UC Berkeley
- Diane Beeson, PhD, Professor Emerita of Sociology, California State University, East Bay
- Lisa Ikemoto, JD, LLM, Professor at the University of California, Davis School of Law, Faculty Associate of the UC Davis Center for Science and Innovation Studies, Bioethics Associate of the UC Davis Health System Bioethics Program, and faculty member of the UC North Bioethics Collaboratory
- Gina Maranto, MA, Director of the Ecosystem Science and Policy undergraduate program and coordinator of the graduate program in Environmental Science and Policy at the University of Miami's Leonard and Jayne Abess Center

Our Advisory Board plays essential roles in our fundraising, governance and planning work:

- Francine Coeytaux, MPH (chair), international women's health consultant and cofounder of the Pro-Choice Alliance for Responsible Research
- Dorothy Roberts, JD, Professor of Law and Sociology and of Civil Rights at the University of Pennsylvania Law School and Department of Sociology, and fellow at The Hastings Center
- Alexandra Minna Stern, PhD, Professor of Obstetrics and Gynecology, American Culture, and History and director of the Center for Latin American and Caribbe an Studies at the University of Michigan, and co-director of the Reproductive Justice Faculty Program at the Institute for Research on Women and Gender

Please see the CGS website for full biographies of CGS <u>staff</u>, <u>fellows</u>, <u>key consultants</u> and Advisory Board members.

CGS is fiscally sponsored by the Tides Center. With the guidance of our Advisory Board, and in collaboration with other colleagues and organizations, we work with a growing network of scholars across a range of disciplines; with scientists, health professionals, legal experts and policy analysts; and with advocates across a range of civil society sectors (reproductive health, rights and justice; racial justice; disability rights; environmentalism and others).

Stay Connected

VII. Budget and Funding

CGS's adjusted expenses for 2016 were \$613,166. Current funding for CGS comes from the Appleton Foundation, the Marisla Foundation, the American Council of Learned Societies, the Winiarski Family Foundation, a matching grant from the John D. and Catherine T. MacArthur Foundation, and individual donors. Complete financial reports are available on request.

VIII. Stay Connected

We could not have had such a successful year without you! We invite you to stay connected with us:

- Follow us on social media (Twitter @C_G_S | Facebook | Youtube)
- Visit our <u>website</u> (for CGS-authored commentary, CGS events, resource pages, latest news, infographics, videos)
- Look out for free webinars
- Sign up for our monthly newsletter for latest updates, Biopolitical Views and News
- Donate to a biopolitical future grounded in social justice



L to R: Osagie Obasogie, Nancy Mullane, Marcy Darnovsky, Milton Reynolds







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