



## Studies in the News

California Research Bureau, California State Library

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## **CRIMINAL JUSTICE & LAW ENFORCEMENT**

***Immigration Detention in California, February 2019. California Department of Justice. Feb. 2019. 147 p.***

<https://oag.ca.gov/sites/all/files/agweb/pdfs/publications/immigration-detention-2019.pdf>

The Attorney General's "review found that the detainee experience varies drastically within and across facilities. Common issues among a number of facilities [include] ... restrictions on liberty, ... language barriers, ... issues with access to medical and mental health care, ... obstacles to contacting family and other support systems, and barriers to adequate representation. These challenges are exacerbated by federal detention standards, which are designed for criminal incarceration. Those standards fail to meet the unique needs of individuals in immigration detention, such as their lack of government-funded counsel, unique mental health issues, and significant language and cultural barriers."

## EDUCATION

***How Can Community Colleges Increase Student Use of Year-Round Pell Grants?*** By Michael J. Weiss. Center for Applied Behavioral Science at MDRC. Feb. 2019. 12 p.  
[https://www.mdr.org/sites/default/files/EASE\\_Brief\\_Phase%202\\_Final2.pdf](https://www.mdr.org/sites/default/files/EASE_Brief_Phase%202_Final2.pdf)

This brief builds upon previous research in Ohio that now includes 10 “community colleges and over 10,000 students. The size of the study allows for an exceptionally precise assessment of the effectiveness of the two interventions across a wide range of community colleges and students. Second, the interventions have now been implemented in two substantially different policy contexts, enabling an assessment of whether these interventions are robust to the shift in Pell Grant policy. Finally, for the first cohort of study participants it is now possible to determine the interventions’ effects on enrollment in the summer of their sophomore year.” The study finds that “[m]any more students will take advantage of the summer session and earn credits toward a degree if thoughtfully encouraged to do so.”

***Preparing School Leaders for Success: Evaluation of New Leaders' Aspiring Principals Program, 2012–2017.*** By Susan M. Gates, et al. RAND. 2019. 115 p.  
[https://www.rand.org/pubs/research\\_reports/RR2812.html](https://www.rand.org/pubs/research_reports/RR2812.html)

“[T]he authors present evidence of the effectiveness of the revised Aspiring Principals program and share lessons that can inform principal-preparation policy and practice.” Some of the researchers’ key findings: “[s]tudents in K-8 schools led by New Leaders principals outperformed comparison students in K-8 schools led by other new principals on achievement tests; individual-level student attendance was higher for students who attended K-8 schools with a New Leaders principal; and, new principals who completed the Aspiring Principals program were more likely than other new principals in the same districts to remain at their schools as principals for a second year.” The Oakland Unified School District was among the school districts that participated in this study.

## EMPLOYMENT

***“The Changing Career Trajectories of New Parents in STEM.”*** By Erin A Cech, et al. *Proceedings of the National Academy of Sciences*, vol. 116 no. 10 (Mar. 5, 2019) pp. 4182-4187.  
<https://www.pnas.org/content/early/2019/02/12/1810862116>

“The gender disparity in STEM fields is well-documented and researchers have mulled over factors including societal expectations and stereotypes, women’s preferences, parenthood, hostile working environments, and outright discrimination. This new study suggests that parenthood does indeed play a role, but it probably acts in concert with other contributors.... In other words, someone who tolerates a negative work climate before they have children may decide, when they become a parent, that the tradeoff is no longer worth it. But that doesn’t mean that parenthood is the root cause; it’s the straw that broke the camel’s back.” ([Science](#), Feb. 18, 2019).

## ENERGY & ENVIRONMENT

***“Use of Supercritical Water for the Liquefaction of Polypropylene into Oil.”*** By Wan-Ting Chen, et al. *Sustainable Chemistry & Engineering*, vol. 7 no. 4 (2019) pp. 3749-3758.  
<https://pubs.acs.org/doi/10.1021/acssuschemeng.8b03841> (Available from the California Research Bureau)

Polypropylene (PP) waste accounts for 23% of the approximately five billion tons of plastic waste that is in our landfills. Researchers at Purdue University have developed a model for converting PP into oil. “Preliminary analyses indicate that this conversion process is net-energy positive and potentially has a higher energy efficiency and lower greenhouse gas emissions than incineration and mechanical recycling.

The oil derived from PP has the potential to be used as gasoline blendstocks or feedstocks for other chemicals.” In the future, the researchers intend to take steps to demonstrate this technology at a commercial scale. ([Science Daily](#), Feb. 6, 2019).

**“Jet Stream Dynamics, Hydroclimate, and Fire in California From 1600 CE to Present.”** By Eugene Wahl, et al. *Proceedings of the National Academy of Sciences*. Mar. 4, 2019. <https://www.pnas.org/content/early/2019/02/15/1815292116> (Available from the California Research Bureau)

“[The study] found that from 1600 to 1903, the position of the North Pacific jet stream over California was linked to the amount of winter rainfall and the severity of the subsequent wildfire season. Wet winters brought on by the jet stream were followed by a less intense wildfire season, while dry winters were followed by more intense fires. But after 1904, the connection between winter moisture and wildfires was seen to weaken. This coincides with the beginning of a fire suppression policy on US federal lands. The connection then disappears completely after 1977.... Now, the build-up of vegetation—the fuel—has combined with the effects of rising temperatures due to climate change to produce a situation where any year may have large fires, no matter how wet the previous winter. High spring and summer temperatures dry out the abundant vegetation and, when combined with high winds, the area burned can greatly increase.” ([BBC News](#), Mar. 4, 2019).

## GENERAL GOVERNMENT

**“Contemporary Climatic Analogs for 540 North American Urban Areas in the Late 21st Century.”** By Matthew Fitzpatrick, et al. *Nature Communications*. vol. 10, issue 614. Feb. 12, 2019. 7 p. <https://www.nature.com/articles/s41467-019-08540-3>

**Interactive map: “What will climate feel like in 60 years?”** <https://fitzlab.shinyapps.io/cityapp/>

“A new interactive map released this week reveals just how radically the climates of United States cities will change in 60 years if emissions continue unabated.... Fresno’s climate will be similar to modern-day Mexicali, Mexico, on the California border.... And Olympia, the capital of Washington state, will feel more like today’s suburbs of Sacramento.... [The map] catalogs climate comparisons for more than 500 urban areas in North America.... ‘Minneapolis-Saint Paul is going to feel like Kansas City, sure—like Kansas City but with less food, less water, a damaged grid, and all of these other systemic problems we’re walking into if we don’t address climate change.’... Experts said the study—and map—could help cities prepare as well.” ([Miami Herald](#), Feb. 19, 2019).

## HEALTH

***Glyphosate in Beer and Wine.*** By Kara Cook. CALPIRG Education Fund. Feb. 2019. 22 p. <https://calpirg.org/feature/cap/glyphosate-pesticide-beer-and-wine>

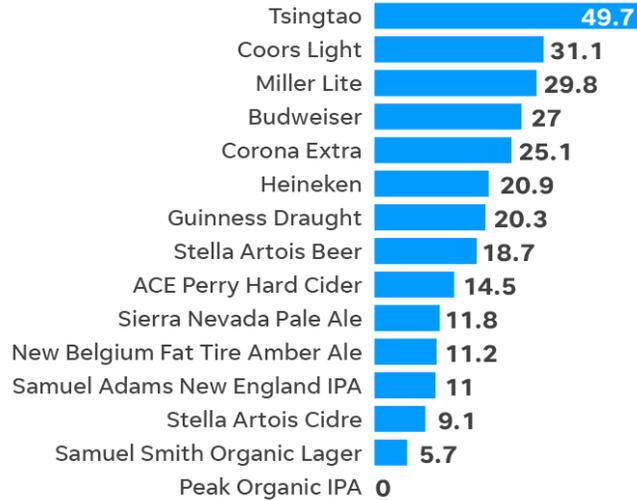
“A new report by the public-interest advocacy group U.S. PIRG reveals that tests of five wines and 15 beers, including organic ones, found traces of the controversial weed killer glyphosate in 19 out of the 20. They include brands like Coors Light, Miller Lite, Budweiser, Corona, Heineken, Guinness, Stella Artois and Samuel Adams.... Glyphosate, a pesticide and herbicide best known as an ingredient in Monsanto’s Roundup, is a probable human carcinogen, according to the International Agency for Research on Cancer, a branch of the World Health Organization.” According to U.S. PIRG, the “level of glyphosate we found are not necessarily dangerous but are still concerning given the potential health risks.” Organic winery Frey Vineyards noted that, while no herbicides “have ever been used” in its farming practices, “glyphosate in trace amounts is now found in rainwater because of its application to conventionally farmed agricultural land. Glyphosate in trace amounts can be found in many food products across the

United States. We urge consumers to speak up to ban all use of glyphosate." ([USA Today](#), Feb. 25, 2019).

### Hidden chemicals in beer

The weed killer glyphosate was found in 14 of the 15 beers U.S. PIRG tested.

Amount of glyphosate (parts per billion)



SOURCE U.S. Public Interest Research Group

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