

Fast-tracking endocrine assays

March 14 2018

Exposure to endocrine-disrupting chemicals can cause health effects, such as reduced fertility and increased incidences of obesity and diabetes. Two decades ago, Congress directed the U.S. Environmental Protection Agency (EPA) to screen substances for this activity. Now, the agency is ramping up its efforts, according to an article in *Chemical & Engineering News* (C&EN), the weekly newsmagazine of the American Chemical Society.

Senior Editor Britt Erickson explains that EPA responded to this mandate by establishing the Endocrine Disruptor Screening Program, but it got off to a slow start and cost about \$10 million a year. Only a few dozen pesticides had been tested over 20 years. It became clear in 2015 that this approach wasn't going to be an efficient way to screen the thousands of potential endocrine disruptors, including the large number of substances that could possibly interfere with androgen, steroid synthesis and thyroid pathways.

To quickly identify which chemicals require more scrutiny, EPA has shifted focus to high-throughput computational models. C&EN visited EPA's Office of Research & Development in Research Triangle Park, NC, earlier this year to check on the progress. They found that the researchers are well on their way, with an estrogen receptor model and an androgen receptor [model](#) ready for primetime, and even more assays are in the works.

More information: "Endocrine disruptor assays go fast track," [cen.acs.org/articles/96/i11/En ... says-fast-track.html](http://cen.acs.org/articles/96/i11/En...says-fast-track.html)

Provided by American Chemical Society

Citation: Fast-tracking endocrine assays (2018, March 14) retrieved 17 July 2024 from <https://phys.org/news/2018-03-fast-tracking-endocrine-assays.html>

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