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# The US EPA CompTox Chemicals Dashboard website for Environmental Science Data

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*The views expressed in this presentation are those of the authors and do not necessarily reflect the views or policies of the U.S. EPA*

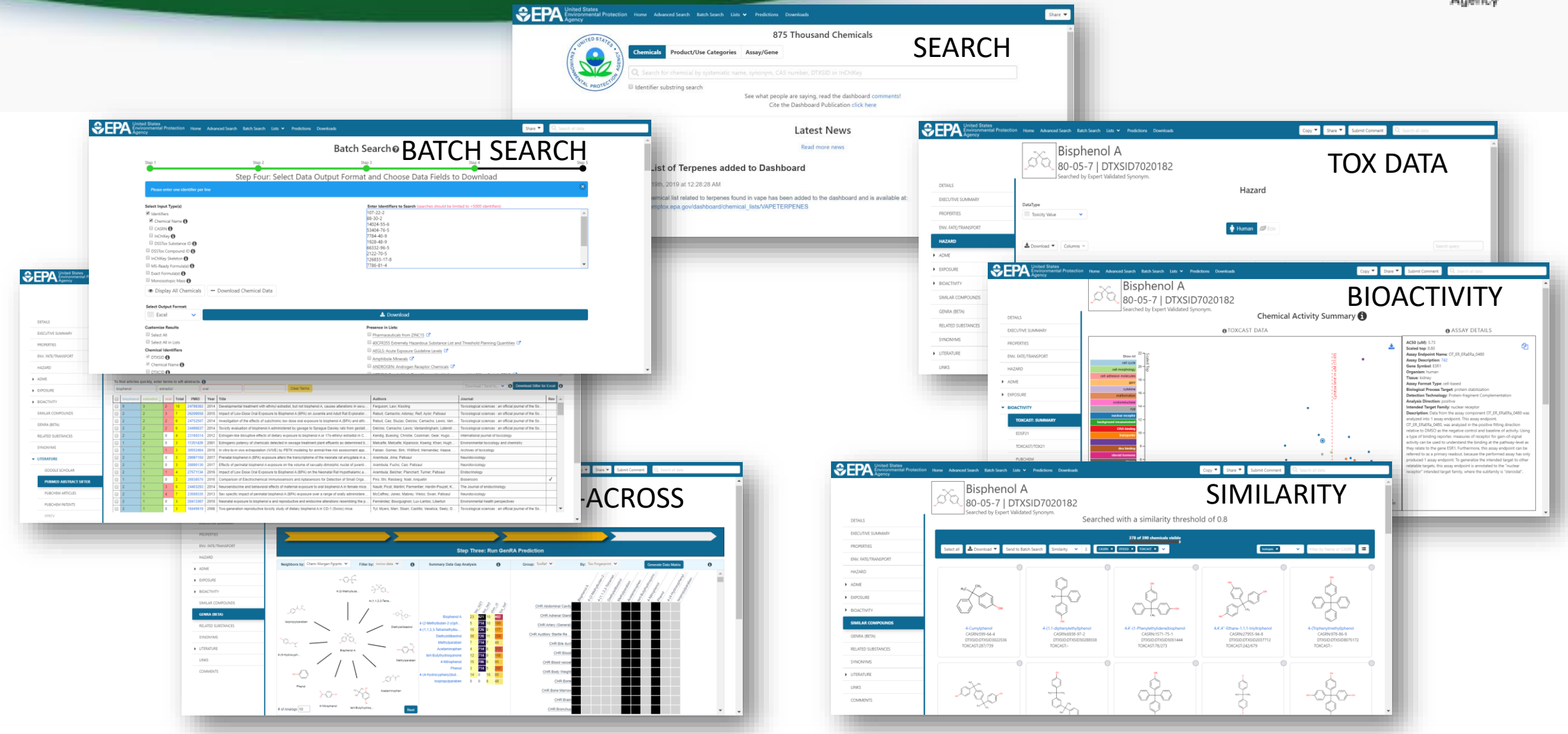
# Problem: Too Many Chemicals and Too Few Quality Data Resources

EPA United States Environmental Protection Agency

- **Fast characterization** of human and ecological **risk** posed by existing and emerging chemicals is a critical challenge
- **Easy access to data** improves efficiency and ultimately accelerates chemical risk assessment
- Develop a "**first-stop-shop**" for environmental chemical data to support US-EPA and partner decision making:
  - Centralized location for relevant chemical data
  - Chemistry, exposure, hazard and dosimetry
  - Combination of existing data and predictive models
  - Publicly accessible, periodically updated, curated

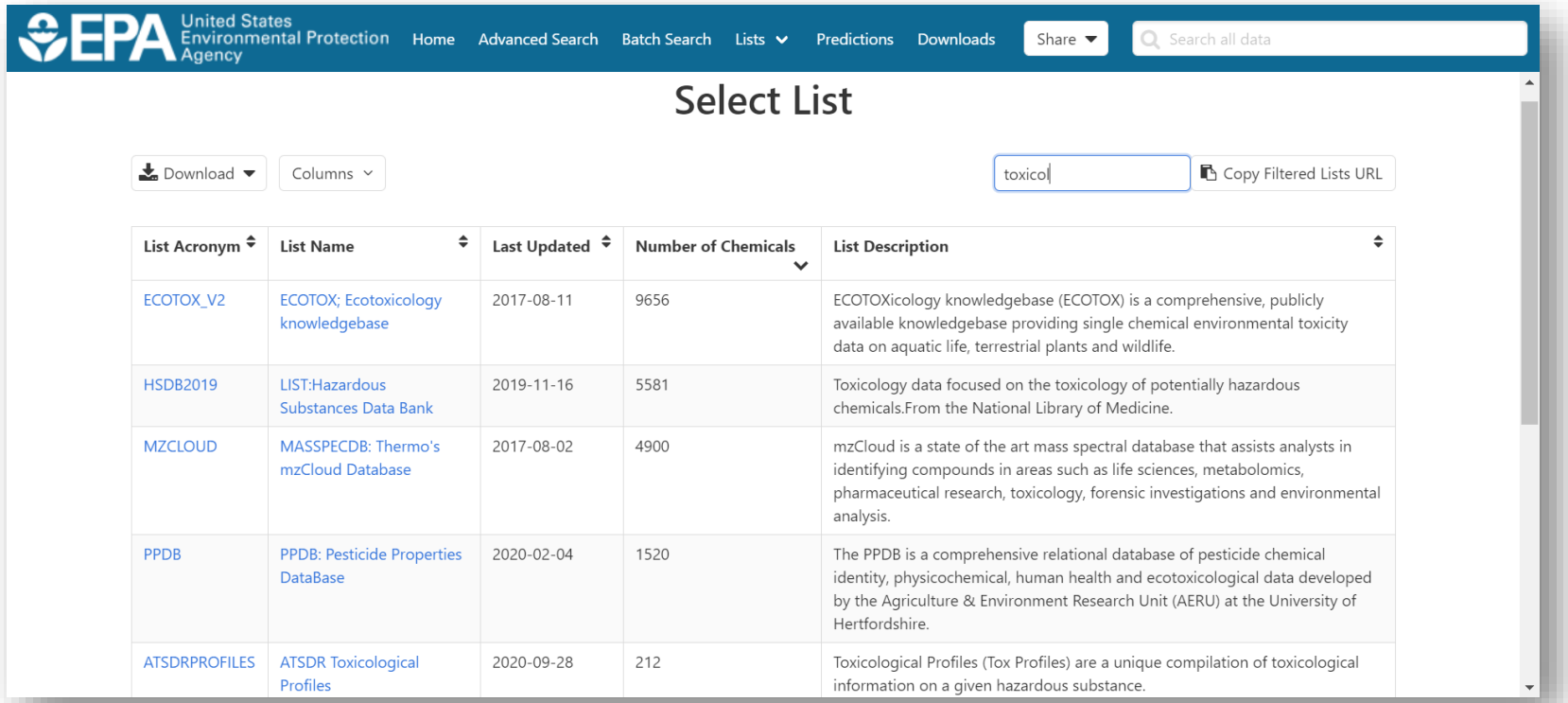
# CompTox Chemicals Dashboard

https://comptox.epa.gov/dashboard



# Focused Lists based on agency programs

- Specific lists and collections of interest to the agency
  - Hydraulic fracturing
  - Disinfectant by-products
  - PFAS chemicals
  - TSCA inventory
  - Pesticides
  - etc…




| List Acronym | List Name | Last Updated | Number of Chemicals | List Description |
|---|---|---|---|---|
| ECOTOX_V2 | ECOTOX; Ecotoxicology knowledgebase | 2017-08-11 | 9656 | ECOTOXicology knowledgebase (ECOTOX) is a comprehensive, publicly available knowledgebase providing single chemical environmental toxicity data on aquatic life, terrestrial plants and wildlife. |
| HSDB2019 | LIST:Hazardous Substances Data Bank | 2019-11-16 | 5581 | Toxicology data focused on the toxicology of potentially hazardous chemicals.From the National Library of Medicine. |
| MZCLOUD | MASSPECDB: Thermo's mzCloud Database | 2017-08-02 | 4900 | mzCloud is a state of the art mass spectral database that assists analysts in identifying compounds in areas such as life sciences, metabolomics, pharmaceutical research, toxicology, forensic investigations and environmental analysis. |
| PPDB | PPDB: Pesticide Properties DataBase | 2020-02-04 | 1520 | The PPDB is a comprehensive relational database of pesticide chemical identity, physicochemical, human health and ecotoxicological data developed by the Agriculture & Environment Research Unit (AERU) at the University of Hertfordshire. |
| ATSDRPROFILES | ATSDR Toxicological Profiles | 2020-09-28 | 212 | Toxicological Profiles (Tox Profiles) are a unique compilation of toxicological information on a given hazardous substance. |

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EPA United States Environmental Protection Agency

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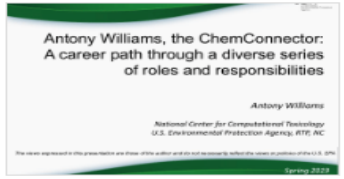


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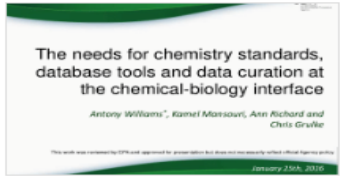


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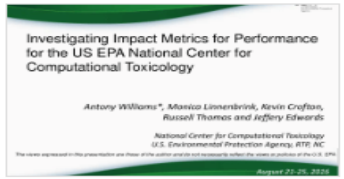


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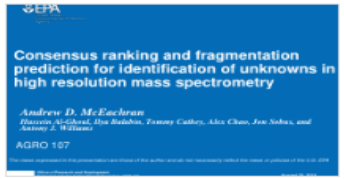


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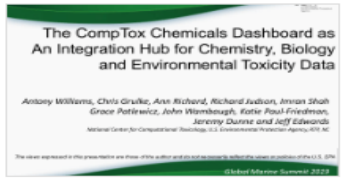


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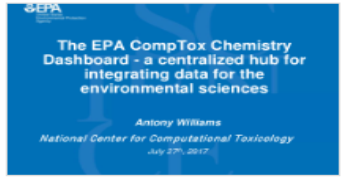


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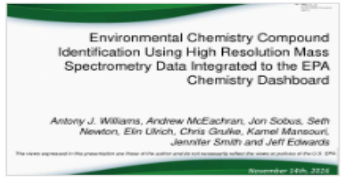


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# Contact

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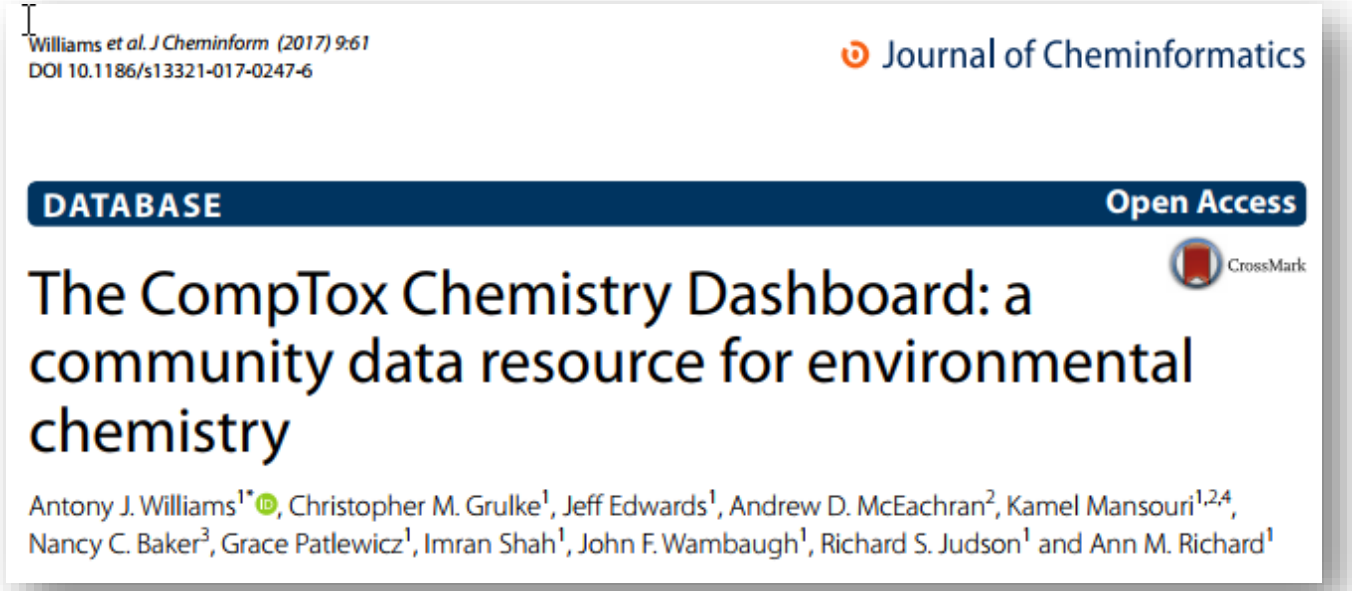


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