

US EPA Office of Research and Development

STAR Grant Review Meeting OCM Research Centers and NAMs

Research Triangle Park, NC 16 October 2019







Mission Driven Science

EPA Mission

Protect Human Health and the Environment

Program Offices

(Air, Water, Waste, Chemicals)

- Policies
- Congressional
- Regulations

mandates

National Decisions

Regional Offices

Primary Interface with States

Implementation

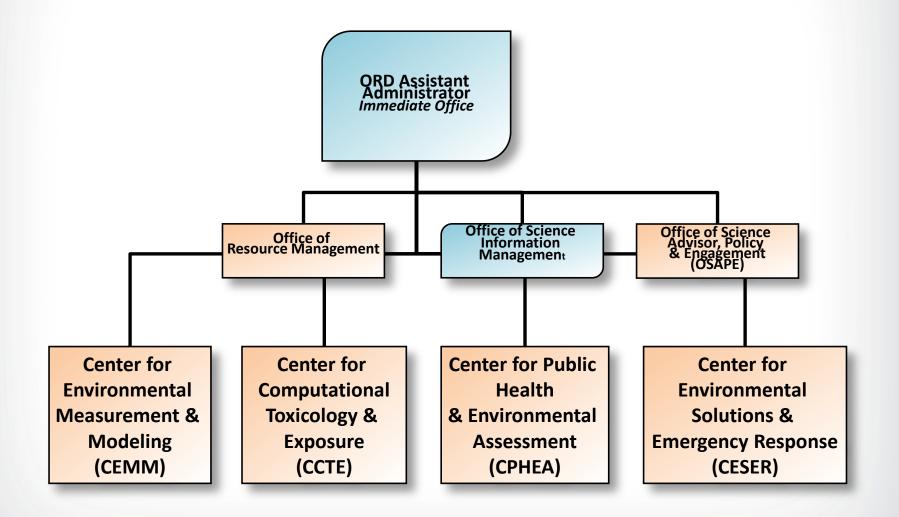
Office of Research and Development

Scientific Foundation



ORD Organization







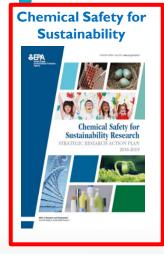




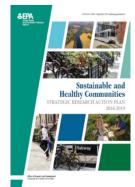
StRAPS: Strategic Research Action Plans

- Describe our research program for internal and external audiences.
- Developed in consultation with EPA partner offices, regions, other stakeholders and advisors--our guide for resource planning activities.
- Implemented by ORD's Labs and Centers.
- Planning and progress reviewed by the Board of Scientific Counselors (BOSC).

Air & Energy The state of the



Sustainable & Healthy Communities



Human Health Risk Assessment



Safe & Sustainable Water Resources



Homeland Security







- Provide the information needed to inform Agency decisions about chemicals.
- Accelerate the pace of chemical assessment and decision-making.
- Replace, Reduce and Refine vertebrate animal testing.
- Provide scientific innovation and leadership to transform chemical screening and assessment.

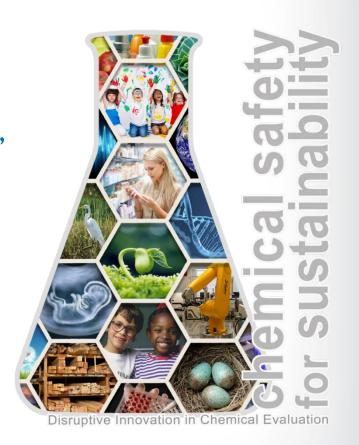




CSS Working Vision



• Chemical Safety for Sustainability (CSS) Research Program provides methods, data, information and tools to EPA partners and stakeholders enabling more informed, timely decisions about chemicals, many of which have not been thoroughly evaluated for potential risks to human or ecological health





CSS Organization

How CSS is Organized (Draft StRAP FY2019-2022):

Topic	Research Area
Chemical Evaluation	High-Throughput Toxicology
	Rapid Exposure Modeling and Dosimetry
	Emerging Materials and Technologies
Complex Systems Science	Adverse Outcome Pathways
	Virtual Tissue Modeling
	Ecotoxicological Assessment and Modeling
Solutions Driven Translation and Knowledge Delivery	Chemical Safety Analytics
	Informatics, Synthesis, and Integration





- STAR Extramural grants program expands and improves ORD's intramural research capabilities.
- STAR grants have contributed to nearly all of the research topics and areas in our chemical safety research program.
- Cooperative agreements have promoted collaboration and cross-fertilization between academic and government scientists.
- Success story!





- Review accomplishments of the Organotypic Culture Models (OCM) for Predictive Toxicology Research Centers.
- Receive update on ongoing research efforts from ORD investigators.
- Introduction to new grantees in response to the RFA,
 Advancing Actionable Alternatives to Vertebrate Animal
 Testing for Chemical Safety Assessment.
- Panel discussion of remaining challenges to the development and implementation of alternative test methods.



Long-Term Visions

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