

ECOS Spring Meeting
Washington, DC

March 28, 2023

Research on Community Exposures Associated with Oil and Gas Development

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Health Effects Institute Energy

Overview of presentation



HEI Energy: Who we are & how we work



Initial program of community exposure research



The road ahead

HEI Energy: Who we are & how we work

- Nonprofit research organization
- Mission: Provide high-quality and impartial science relevant to health-protective policy decisions about oil and gas development



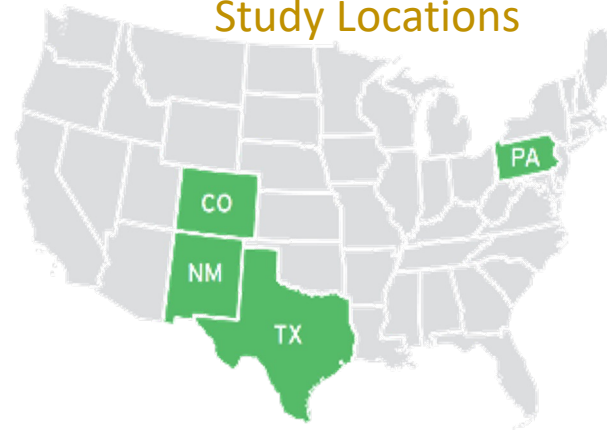
Literature Reviews



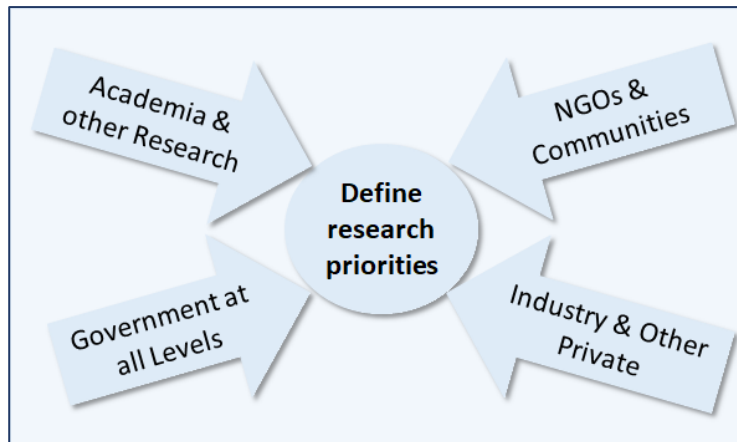
Initial Program of Community Exposure Research

STUDY IMPLEMENTATION

Study Locations



RESEARCH PLANNING



Stakeholder Workshops



FINAL REPORTS 2024 & 2025



Regular updates on progress



Community Exposure Research

Locations and teams

Air Quality and Noise

Tracking Community Exposures
and Releases (TRACER) Collaboration



Jeffrey Collett
Colorado State



Lea Hildebrandt Ruiz
Univ of TX-Austin



Meredith Franklin
Univ of Toronto

Study Duration: 2022-2024

Study Locations



Water Quality



Jennifer Baka
Penn State



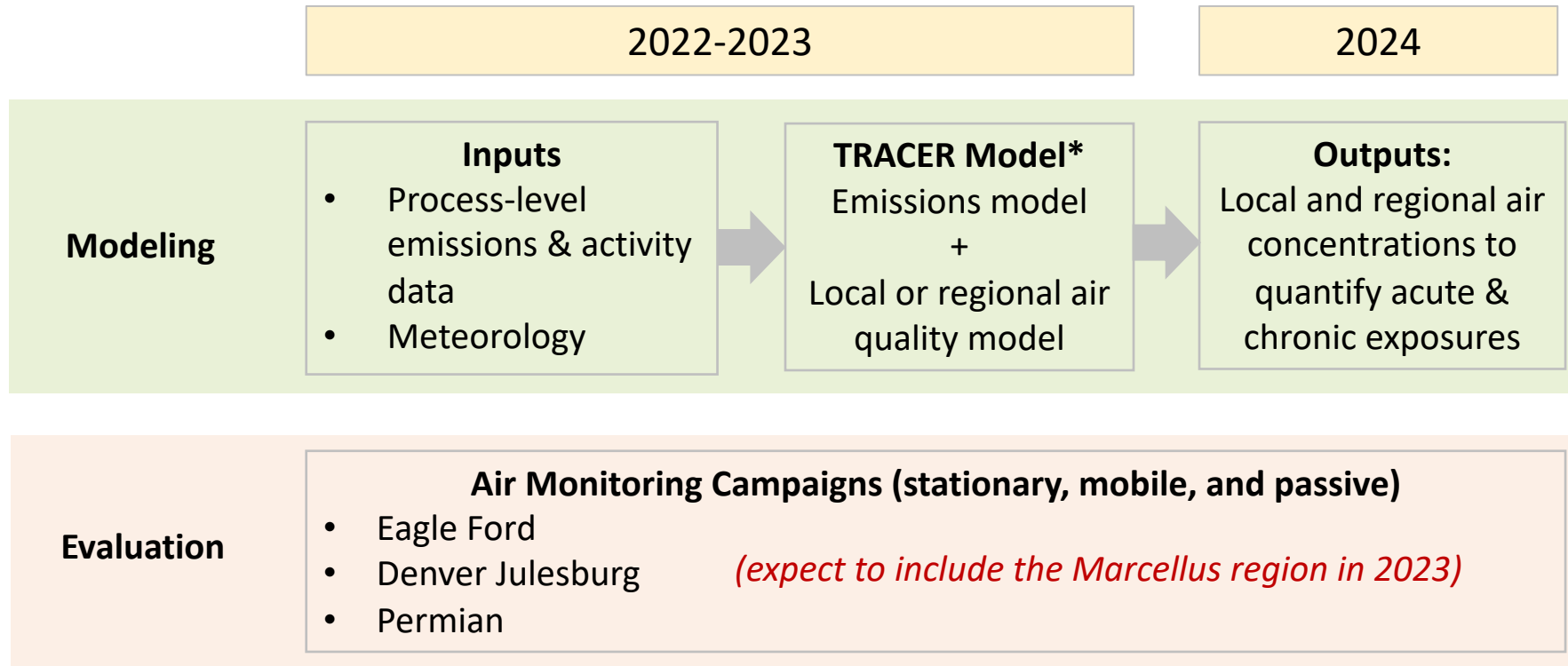
Joseph Ryan
Univ of Colorado

Study Duration: 2022-2023

States, community groups, and individual oil and gas companies providing in-kind support

Community Exposure Research

TRACER collaboration



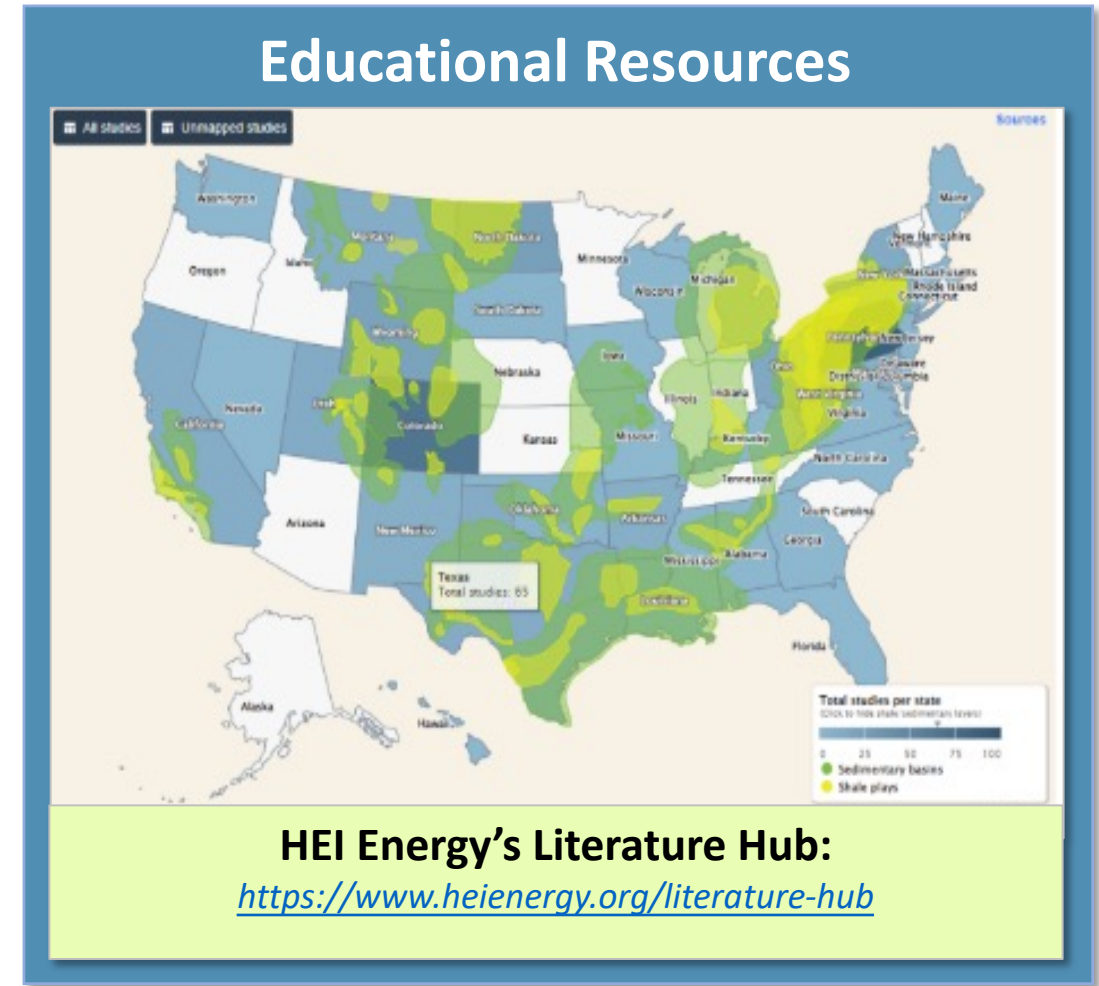
* Builds on the Methane Emission Estimation Tool (MEET) model by including preproduction operations and chemicals of concern for human health in addition to methane (Allen DT et al. 2022. Sci Total Environ, doi:[10.1016/j.scitotenv.2022.154277](https://doi.org/10.1016/j.scitotenv.2022.154277)).

Research designed to inform policy decisions

- Improve understanding of community exposures
- Provide a model that quantifies links between specific oil and gas processes and community exposures, which can help to:
 - *Assess the efficacy of specific emission reduction approaches*
 - *Know how to mitigate any exposures that pose a health concern*
- Feed directly into cumulative risk assessment
 - *Exposure to chemical emissions, radiation, and noise*

The road ahead

- Research presentations
 - HEI Annual Conference Boston, MA (*April 30-May 2, 2023*)
 - Shale Network Workshop Penn State (*May 19, 2023*)
- Strategic research planning underway for next round of research



Thank you

We want to hear from you and how we might provide science that's helpful to your work!

Our website: HEIenergy.org

Contact: dvorhees@healtheffects.org