

**U.S. Environmental Protection Agency
National Center for Environmental Assessment (NCEA)
NCEA Evidence Mapping Student Training Activity**

The [National Center for Environmental Assessment \(NCEA\)](#) is a leader in the science of human health and ecological risk assessment. Tasked with determining how pollutants or other stressors may impact human health and the environment, NCEA occupies a critical position within EPA's Office of Research and Development (ORD) between the research community and EPA's program and regional offices who make regulatory, enforcement, and remedial action decisions.

From October 2018 to June 2020, NCEA will be conducting literature screening activities to help prioritize and identify the scope for several new chemical human health assessments. These screening surveys are sometimes referred to as "evidence maps" or "systematic maps" used to summarize literature characteristics to help identify available types of evidence and gaps ([Miake-Lye et al., 2016](#)).

By working closely with EPA scientists and staff, students will gain the following skills:

- Screening studies for potential relevance using systematic review methods and specialized machine-learning software.
- Utilizing software tools (e.g., automation and machine learning) used to screen studies for relevance which may be used in other projects that include literature searching.
- Depending on the duration of engagement and educational level of the participant, evaluating the quality of individual studies and reaching hazard conclusions using systematic review methods, identifying studies suitable for dose-response analysis, and developing draft toxicity values ([NAS 2018, see Appendix C](#)).



These skills should help students increase the understanding of how studies are used in risk assessment process and enhance their ability to critically assess published literature. These non-laboratory positions are ideal for students interested in learning more about the application of toxicological, epidemiological, and environmental research to support science decisions related to risk assessment. Additionally, students would be acknowledged as contributors on any EPA reports developed from this work!

Eligibility Requirements:

- A minimum level of effort of 3 hours a week for at least 8 weeks is required for meaningful engagement.
- The applicant must be enrolled in good standing in a degree-seeking program (bachelor's, master's, or doctoral degree) at an accredited U.S. educational institution.
- Students must be enrolled at least half-time in an accredited college or university.
- Participants are required to show proof of enrollment and provide a completed resume
- US citizenship is not required for student volunteers.

How to Apply:

Interested students should email a statement of interest/cover letter (no more than 1 page), proof of enrollment, and resume/CV to: NCEA_opps@epa.gov. In the subject line, reference 'NCEA Education Opportunity'. The statement of interest should clearly identify your academic and professional interests. If you have questions, email NCEA_opps@epa.gov.

This is an unpaid educational opportunity for academic credit. Students may work at one of EPA's research facilities in Research Triangle Park, NC, Cincinnati, OH, Washington, D.C., or from a remote location with prior approval. Students will be assigned a mentor for the duration of this educational opportunity. **The participant does not become an EPA employee.**

EPA will accept applicants on a rolling basis.