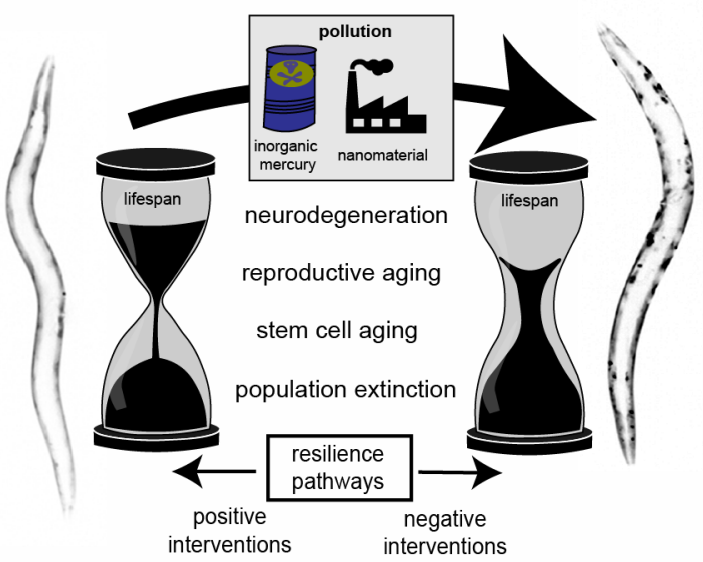
Pollution, xenobiotic, and nanomaterial-induced accelerated aging.

Research Topics:

- **nanoparticle-induced premature aging**
- **pollution-induced premature aging**
- **pollution effects on population dynamics**
- **eco-evo-devo significance of aging**

Methods:

- *C. elegans* genetics
- laboratory populations/ecosystem
- neuro-behavioral tests
- lifespans



Scharf et al., 2022, iScience, Scharf et al., 2016 Nanotox, Scharf et al., 2013 ACS nano

Contact Information:

Andrea Scharf
Assistant Professor
Biological Sciences
scharfa@mst.edu

google scholar profile

Keywords:

- premature aging, pollution, nanomaterial, inorganic mercury, reproductive aging, neurodegeneration, *C. elegans*, protein homeostasis

Potential Collaborative Fields:

- nano-bio-interactions, automated screening tools, neurodegeneration, aging, nanomedicine, aging interventions, ecotoxicology, computational simulations