

Dow-funded U-M dioxin study criticized for bias

Scientists call university's lead researcher on project an 'industry-aligning expert'

By Eartha Jane Melzer 10/22/09 12:27 PM

For the last six years, University of Michigan research funded by Dow Chemical has figured prominently in public discussions over what to do about the dioxin contamination caused by the company in the Saginaw River watershed. Federal and state environmental agencies have warned that U-M's Dioxin Exposure Study has failed to answer crucial questions and that its results are being misinterpreted.



University of Michigan researcher David Garabrant (Photo by Eartha Melzer/Michigan Messenger)

Despite this, U-M's lead researcher on the project — a man some environmental health scientists say should not be seen as objective

because of his track record of working for industry interests — is actively insisting his study should shape regulatory action on dioxin.

Some warn that the project is biased, and that the University of Michigan is being used as part of a Dow campaign to avoid liability for some of the most serious dioxin contamination in the entire nation.

Dr. David Garabrant, professor emeritus and founding director of U-M School of Public Health's Risk Science Center, is the lead researcher on U-M's Dioxin Exposure Study which was funded with \$15 million from Dow.

Since 2004, Garabrant and the university have measured dioxin levels in human blood, household dust and soil at residences in and around the Tittabawassee River floodplain, part of the larger contaminated Saginaw River watershed.

“Our study is directly relevant to the issues in Midland and Saginaw. It is very well done. It is rigorous,” Garabrant told Michigan Messenger in a recent interview. “There is no relation between dioxin in soil and dioxin in blood. The mere fact of living on the soil does not have any influence on your blood level of dioxin.”

The Michigan Department of Environmental Quality, and other observers, however, warn that the study has been mischaracterized, and some worry it is being used to downplay the risk of dioxin, an extremely potent toxin.

Last week, the U.S. Environmental Protection Agency announced that the U-M study “failed to answer crucial questions” and would be “of limited use” to the agency because it did not focus on those most at risk for dioxin exposure — children, those who live in the most heavily contaminated areas and people who eat local fish or game. The study also didn't collect health information from the people it sampled.

Even so, the study has received widespread notice and “yielded twenty journal articles that have been published or accepted for publication in the scientific literature and more than one hundred presentations at scientific conferences,” the agency noted.

In a confidential EPA memo leaked to the media in the summer of 2007, the agency was more blunt, naming the university's Dioxin Exposure Study as one of several Dow actions intended to impede cleanup.

The results of the study are consistent with current EPA/MDEQ understanding, and will not have any significant effect on corrective action activities. However, public presentations of the preliminary results have emphasized how little effect living on contaminated soils has on an individual's dioxin blood level. This emphasis has resulted in numerous media stories, an understanding by some members of the public, that remediation of dioxin contamination is unnecessary.

EPA also noted that the contract between the University of Michigan and

Dow was “unpublished.”

In an interview, Garabrant described the extensive outreach activities conducted as part of the study.

“We put out a public booklet out in summer of 2006. We had three times per year meetings with the community advisory panel. We met with members of press — radio, TV, newspapers — repeatedly over the last five years, and gave talks to local groups, medical meetings, medical societies, community groups, the Rotary Club, and Chamber of Commerce.”

Dow, which is facing a class-action lawsuit by residents of the Tittabawassee floodplain as well as cleanup costs, cites the U-M study as evidence that locals are not threatened by contamination.

“We continue to believe that, based on this [University of Michigan] study and decades of studies we’ve conducted of our workers, there is no imminent threat to people living in the area on contaminated soil,” Dow spokeswoman Mary Draves told The Associated Press in May.

Observers challenge Garabrant’s impartiality

“He is using the good name of U of M and his status as a medical doctor to remove responsibility from Dow,” said Terry Miller, chairman of the Lone Tree Council.

Miller is not alone in criticizing Garabrant for the way he carries out corporate-funded research.

In a 2007 International Journal of Occupational and Environmental Health article titled Industry Influence on Occupational and Environmental Public Health by James Huff — now associate director for Chemical Carcinogenesis at the Office of Risk Assessment Research at the National Institute of Environmental Health Sciences — named Garabrant as an example of an “industry-aligning expert.”

“Academic credentials often are used to shield industry views and to create the illusion of objectivity,” Huff wrote. “In fact, a person’s professional address or organization does not reflect his or her public health philosophy, nor does the institution necessarily reflect a purity of pursuit.

“Industry often forms institutes to contradict or cloud damaging findings. One alarming result is that public health officials increasingly accede to or are coerced by industry persuasion.”

Dr. David Egilman, associate professor of community health at Brown University, has written extensively on how corporations fund science as part of a strategy to avoid liability for harms associated with their products.

In an article titled “Maximizing Profit and Endangering Health: Corporate Strategies to Avoid Litigation and Regulation” published in the International Journal of Occupational and Environmental Health he wrote:

In order to reach potential jurors, who are unlikely to read scientific publications, corporations have developed programs to restrict and coordinate the flow of health information to the media. H & K's asbestos media strategy relied on securing interviews of and placing bylined articles by experts "sympathetic to the company's point of view." H & K consultants referred to this as "capturing 'share of mind'" on the national level.

In an interview, Egilman said that he was familiar Garabrant's work, not on dioxin but on asbestos.

"He got paid to do these asbestos studies that I critiqued. Those studies were used to deprive workers of compensation for their illnesses. Companies paid for a result that helped in presenting evidence to juries that their asbestos brakes never hurt anybody."

Garabrant told Michigan Messenger that he was unaware that he'd been named an "industry-aligning expert" and confirmed that he had served as an expert witness for Ford on the question of whether automobile brake shoes cause mesothelioma.