

## **Qualifications of Bob Midden For Serving as a Member of the Wood County Board of Health**

I earned a BS degree in chemistry with a minor in Biology at St. John's University in Minnesota in 1974.

I earned a PhD degree in biochemistry at Ohio State University, August 1978.

From my PhD graduation in August 1978 until the end of 1979 I did postdoctoral research in physical organic chemistry with the renowned Dr. Jack Hine who wrote what was considered to be, by many in that field, one of the best textbooks on that subject.

At the beginning of January 1980, I took a position as a postdoctoral fellow in the Department of Environmental Health Sciences in the School of Public Health at Johns Hopkins University in Baltimore. Johns Hopkins School of Public Health is widely considered to be one of the two best Public Health Schools in the country along with the Public Health program at Harvard University. In 1981 I was promoted to Research Associate which was a faculty-level position. In 1983 I was promoted to Assistant Professor. While at Hopkins I helped create a new PhD program in Environmental Chemistry. I developed the curriculum for and taught two quarters of our three-quarter core course in that PhD program. That course was titled "Molecular Mechanisms of the Health Effects of Environmental Agents" and covered the chemical processes that account for the health effects of a wide variety of environmental agents including carcinogens, heavy metals, arsenic, pesticides, atmospheric pollutants, and neurotoxins, among others. To teach that course I used a very large number of research reports from a wide range of scientific disciplines including various aspects of medicine, public health, physiology, toxicology, cell biology, pharmacology, biochemistry, environmental chemistry, and organic chemistry. While I had already acquired knowledge and expertise in some of these fields during my education, I benefited from collaboration with and guidance by some of the best medical personnel, public health professionals, and scientists in the world who also worked at this prestigious University, including Nobel Laureates. I conducted research that was aimed at learning more about the fundamental aspects of the biochemistry of the development of cancer and the aging of cells as well as processes involved in inflammation. I published numerous articles about this research in some of the most respected science research journals and these articles included data, analysis, and conclusions from some of the broad range of science disciplines listed above. That was possible even though I specialized only in biochemistry because of my collaboration with scientists from a variety of fields. This experience gave me a good background for understanding the research in the broad range of the fields of science that are relevant and important for public health.

In 1987 I was recruited to BGSU to help start a new PhD program in photochemical sciences. That was a field of chemistry in which I had made some significant achievements by that time. I've been at BGSU since and have led a number of research projects and initiatives. For twenty years I also served as a university administrative and

held the role of director of several programs, as well as Associate Vice Provost. I have published 38 research articles in reputable scientific journals and have been the recipient of more than \$20 million in grants for science research and education reform.

From 2007 to 2009 I collaborated with Mr. Brad Espen, who was Director of the Environmental Health Division at that time, to investigate the contamination of water in ditches, streams, and rivers in Wood County by indicator bacteria (this is a way to estimate the presence of microorganisms that can cause human disease) and nutrients that cause Harmful Algal Blooms. This research was intended to provide information that could be valuable for helping to protect the health of the residents of our County. I met with and gave presentations to the Board of Health a few times about that research during that period. Even after our formal collaboration ended, I continued to communicate with Brad periodically about our work. I ended that aspect of my research in about 2015 and no longer conduct any research that directly involves the Health Department, so I have no conflict of interest with my research activities. My research currently is devoted to investigating the effectiveness of wetlands for reducing Harmful Algal Blooms as part of the H2Ohio program. None of the wetlands that we are studying are in Wood County. That research is funded by a grant from the State of Ohio. My experience working with Mr. Espen and other members of the Environmental Health Division including Mary Dennis who was Environmental Supervisor and Paul Hagen who was a Sanitarian, gave me insight into the nature of that aspect of operation of the Wood County Board of Health. That knowledge and experience is valuable in my role as a member of the Wood County Board of Health.

I believe that my strong background, experience, and expertise in various aspects of medical, public health, and biochemical research in addition to my teaching experience and my experience in the past working with the Health Department gives me good qualifications for my service on the Board. Because of my background and experience I am able to understand most of the research literature that pertains to the issues that we are addressing, and I can contribute that knowledge to help inform the Board's actions.

I am strongly committed to the mission of the Board of Health which is to "to prevent disease, promote healthy lifestyles and protect the health of everyone in Wood County." My purpose is to use the best available scientific information as published in peer-reviewed, reputable science research journals to guide the operation of the Health Department so that the Department can best serve that mission.