## **Biographic Summary of William E. Longo, Ph.D.**

I have a Bachelor of Science degree in Microbiology, a Master of Science degree in Engineering and a Doctor of Philosophy degree in Material Science and Engineering, all from the University of Florida. After receiving my Ph.D. in 1983, I remained at the University of Florida and in 1985 became a Visiting Assistant Professor in the Material Science and Engineering Department. At the University of Florida, my research included the characterization of cancer drug-targeting molecules by electron microscopy. From this research I hold two patents for the synthesis of protein microspheres for drug-targeting applications.

In 1983, I founded Micro Analytical Laboratories, Inc. (MAL) which became one of the first commercial laboratories in the country to provide Transmission Electron Microscopy (TEM) analysis of asbestos-containing air and dust samples. I left MAL in 1987 to become President of Materials Analytical Services, Inc. (MAS, Inc.) headquartered in Atlanta, Georgia. In addition to Atlanta, MAS, Inc. had offices in Raleigh, North Carolina; Phoenix, Arizona; Santa Clara & Los Angeles, California and the District of Columbia. MAS, Inc. specialized in the characterization of materials for the following industries: Environmental, Industrial Hygiene, Building and Construction Products, Electronics, and Semiconductors.

In December of 2006, MAS, Inc. was changed to MAS, LLC (MAS) with offices in Suwanee, Georgia and Los Angeles, California. Currently the company's primary focus is industrial hygiene and environmental laboratory testing of samples. MAS also provides material characterization of products for VOC testing and industrial hygiene consulting activities.

Currently, almost 10 % of the MAS staff have their Ph.D.'s and the technical group at MAS includes industrial hygienists, certified industrial hygienists, geologists, biologists, microbiologists, environmental chemists, materials scientists, electron and optical microscopist and product emission specialists. The MAS laboratory in Suwanee, GA is approximately 20,000 square feet and contains state-of-the-art analytical equipment. Since 1988 MAS has analyzed between 300,000 to 400,000 asbestos-containing bulk samples including cosmetic talc samples.

MAS has provided laboratory analyses and consulting services to a wide range of private, public and government entities. A list from these groups would include NASA, the Center for Disease Control, NBC, the University of Tokyo, IBM, FAA, U.S. Treasury Department, GSA, NATO, the National Institute of Health, W.R. Grace, Celotex, Intel and the Environmental Protection Agency (EPA) and the Department of Defense.

I was a member of the EPA Peer Review Group which consisted of five members who peer reviewed the EPA's findings in their ongoing asbestos research with regard to asbestos in building issues. I served as both Vice Chairman and Chairman of the TEM Analytical Committee for the National Asbestos Council (NAC). I was the primary author of the American Society for Testing and Materials (ASTM) D-5755-95 Dust Sampling Method for the Quantification of Asbestos Surface Contamination method that was approved and promulgated as an ASTM standard method in 1995. For my leadership role in developing the ASTM dust method, I was presented an Award of Appreciation by the D-22 Committee on Sampling and Analysis of Atmospheres.

I have been qualified as an expert in both state and federal court as a materials scientist and a microscopist with regard to the use of both optical and electron microscopy for the characterization of asbestos-containing products over 200 times over my career on these issues.

Additionally, I have been also qualified as an expert in state court for the identification of asbestos in cosmetic talc using optical and electron microscopy approximately 25 times.