Integrated Assessment of Exposure to Environmental Contaminants at Agbogbloshie Electronic Wastes Dump

Prof. Julius Fobil is the PI of this 5 year project funded by German and International Development Cooperation (Gesellschaft für Internationale Zusammenarbeit (GIZ) with an amount of €100,000.00. The importation of e-waste from developed countries to developing countries like Ghana and other countries in West Africa is currently occurring on a massive scale, and is only expected to increase over time. Despite the potential risks presented by occupational and community exposures to e-waste, few studies have examined the exposures to this type of waste and resulting adverse effects that may occur. Heavy metals exposures have been documented at e-waste sites in Ghana though have only been assessed at a limited scale. Although many studies have found an association between heavy metals exposures and chronic disease outcomes in humans, very few studies have examined this possible association among e-waste recyclers and none at all in respect of community members near e-waste sites. Furthermore, no studies appear to have evaluated the possible association between food consumption via vegetables cultivated near the e-waste dumpsite or food sold in the nearby open market and internal trace metals exposure. The research is conducting a multi-level assessment of exposure to environmental toxins from e-waste recycling/processing activities at Agbogbloshie; one of the largest e-waste sites in Africa. This study will provide important occupational health training for several students in the master's program in environmental and occupational hygiene/medicine at the School of Public Health, University of Ghana, McGill University, Canada and student from the RWTH Aachen University, Germany. The collaborators are Prof. Küpper and Prof. Felten, Prof. Basu.