its anchor an existing joint AdeKUS/TU Master of Science in Public Health (MSPH) program. The Caribbean Public Health Agency (CARPHA) is a regional network to engage other countries with similar EOH threats and to disseminate findings.

Outcome & Evaluation: To date, almost 60 graduates are embedded in Suriname's research, medical and public health enterprise. Under the CCREOH short-term research-training umbrella, Surinamese laboratory scientists learned various cell-culture techniques in Tulane's EOH labs. At the mid-career level certificates in EOH and Industrial Hygiene are building critical capacity. A special CCREOH deliverable is a cadre of 5 Surinamese team members pursuing a new hybrid AdeKUS/Tulane PhD degree. In addition, two Surinamese MDs are in advanced stages of PhD training in EOH at TU. All candidates are pursuing research foci commensurate to CCREOH's area of scientific inquiry: examining the impact of exposures to Hg, Cd, Pb, and pesticides and early childhood neurodevelopment. A 2017 Caribbean EOH research workshop on climate change is scheduled.

Going Forward: CCREOH was awarded a GEOHealth hub to assess the impact of environmental exposures on 1000 maternal-child dyads recruited during pregnancy and followed prospectively through four years of age in Suriname (U01-Suriname) complemented by a robust research training portfolio (U2R-Tulane).

Source of Funding: NIH/FIC: 1U2RTW010104-01, and 1U01TW010087-01.

Abstract #: *1.007_PLA*

Piloting a Model for Holistic Environmental Contamination Assessment that Could Be Implemented by Community Scientists

M.C. Hay[1], *J. Levy*[2], *S. Mutiti*[3], *G. Filippelli*[4], *N. Munyinda*[5], *I. Nyambe*[5], *C. Nalweya Mundia*[6], *K. Jordan*[7], *C. Michelo*[8]; [1]*Miami University, Oxford, OH, USA,* [2]*Miami University, Oxford, Ohio, USA,* [3]*Georgia College and State University, Milledgeville, GA, USA,* [4]*Indiana University-Purdue University Indianapolis, Indianapolis, USA,* [5]*University of Zambia, Lusaka, Zambia,* [6]*Zambia Environmental Management Agency, Lusaka, Zambia,* [7]*Miami University, Oxford, USA,* [8]*University of Zambia School of Medicine, Lusaka, Zambia*

Background: Zambia has vast mineral resources that contribute to the country's gross domestic product, but often have negative impacts on the communities that surround the mines. Kabwe is the location of a former lead and zinc mine open between 1906 and 1994; its environmental impacts are still affecting the surrounding communities. Despite numerous remediation efforts in the past 20 years, individual studies repeatedly have shown high lead blood levels of children and widespread soil contamination.

Methods: Given that people live in the impoverished areas surrounding the mine, it is critical to understand the pathways of exposure. Towards this end we conducted a pilot study collaborating across 7 disciplines and 5 institutions (2 Zambian, 3 American) to explore the feasibility of using discrete methodologies that would enable partnerships with citizen-scientists to gather holistic environmental health data and trace pathways of contamination, which would lead to collaborative and targeted amelioration efforts. Our pilot study involved teaching non-specialists methods for sampling air particles, dust from homes, soils, edible plants, water from multiple sources in the low-income communities closest to the mines.

Findings: As expected, soil lead concentrations were high, ranging from 227 to over 2800 mg/kg and decreased with increasing distance from the mine, however household water supply contaminations did not follow the same geographic logic. Lead, cadmium, and chromium in stored in four houses, were as high as 2.07, 0.969 and 0.108 mg/L, respectively, 690, 19 and 10 times the WHO guidelines. The reported sources of these waters were shallow wells and municipal supplies although none of our public samples found high metal concentrations, suggesting contamination is from another source. Our study also involved exploring the residents' openness to health surveys and willingness to collaborate on future efforts to assess and address local environmental health concerns. We were greeted with widespread enthusiasm for the project and availability of under-employed, educated community members eager to find solutions to their local environmental health problems.

Interpretation: Our findings suggest this holistic approach will simultaneously yield interesting data allowing the tracing of pathways of contamination, and will facilitate a collaborative research project with local citizen scientists.

Source of Funding: Global Health Research Innovation Center, Miami University (Oxford, Ohio).

Abstract #: *1.008_PLA*

Implementing Planetary Health Competencies into Medical Education

T. Iroku-Malize[1], *B. Keber*[2], *N. Philippe*[3]; [1]*Hofstra Northwell School of Medicine, Bay Shore, New York, USA,* [2]*Hofstra Northwell School of Medicine, Glen Cove, USA,* [3]*Hofstra Northwell School of Medicine, Bay Shore, USA*

Program/Project Purpose: Planetary health is an emerging field in medicine dealing with the health of human civilization and the state of the natural systems on which it depends. It is the health of human civilisation and the state of the natural systems on which it depends. It has found its way into the curricula of school children and has now moved up into UME and GME. Richard Horton, editor of The Lancet, gave the keynote speech, "Making the Case for Planetary Health: Why and How" at the 2016 Consortium of Universities for Global Health (CUGH) conference.

The Rockefeller Foundation's investments in Planetary Health are dedicated to influence both international and national approaches to health through advocacy and education. Our program created a platform to introduce the concept of planetary health to family physicians and others along the continuum of medical education (students, residents and practicing physicians).

Structure/Method/Design: A literature review was done to understand the current concept of planetary health and the various methods in which the education was being implemented globally.