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collection was used to estimate the prevalence and risk for cervical dysplasia and cancer in the general population of the Kedougou Region of Senegal. Women aged 30 to 50 years from clusters representing the population at large self-selected for participation in a clinical screening test.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): Final data due in January 2014 will be reported. Preliminary data, based on 240 screenings, illustrate the prevalence of cervical dysplasia in the Kedougou Region of Southeastern Senegal at 5.2% with one of three districts displaying a preliminary prevalence of 7.32%. Final data will be based on n=800. The number of identified VIA-positive lesions and the number of cases of suspected frank cervical cancer as well as a comparison of prevalence within each district of the Kedougou region will be reported. The risk factors identified from our survey for the development of cervical dysplasia will also be reported. We will distinguish the risks among all districts in the region.

Summary/Conclusion: We have employed the VIA screening technique to estimate the prevalence of cervical dysplasia and cancer in a rural setting in Senegal. Low-resource setting communities, health leaders in low-income countries, and global health advocates who are prioritizing the advancement of cervical cancer prevention programs will find this work illustrative. In addition to prevalence data, findings about the associated risk factors can guide future interventional research programs aimed at addressing dysplasia or cervical cancer in this population. This will build on previous knowledge that characterizes relevant risk factors for cervical cancer in similar settings while expanding our understanding of how to further develop the cervical cancer services in this specific region. This information will also be used to inform the implementation of cervical cancer prevention programs in other areas in Senegal and similar low-resource settings.

## The Caribbean Consortium for Research in Environmental and Occupational Health (CCREOH): A model for trans-disciplinary global health research

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Background: The Caribbean Consortium for Research in Environmental and Occupational Health's (CCREOH) overarching goal is to address high-priority environmental and occupational health risks in Suriname and those common to the increasingly vulnerable Caribbean region while preserving the unique assets, health, and cultural traditions of indigenous and other health disparate populations. CCREOH's investigator team is indicative of its transdisciplinary research portfolio, bringing together an array of scientists from biology to epidemiology including toxicology and medicine.

Structure/Method/Design: Funded by the Fogarty Center of the National Institutes of Health, CCREOH partners are characterizing key environmental and occupational health (EOH) risks associated with gold mining—related mercury contamination, pesticide use in agriculture including pesticide-induced suicide, and indigenous nutriceutical contamination to inform a gap and opportunities assessment of relevant environmental policies in Suriname and the Caribbean region; creating a sustainable public health and EOH network to serve as the transdisciplinary research and training hub; developing a trans-disciplinary research roadmap to guide the consortium's environmental and

occupational health research leveraging all consortium partner assets; and putting in place a capacity-building portfolio including a regional EOH training program to successfully implement the priority areas articulated in the CCREOH research roadmap. The research roadmap deployed by the CCREOH team represents the continuum from basic, mechanistic approaches to community-based participatory environmental health designs.

Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract): The CCREOH builds on the existing partnerships in place between the University of Suriname, Faculty of Medical Sciences, Tulane University, School of Public Health and Tropical Medicine, and the Caribbean Public Health Agency.

Summary/Conclusion: The CCREOH has conducted and advanced a series of assessments to document baseline capacity levels and community needs focused on health outcome data, laboratory capacity, training programs, and environmental health policy. Currently, research is focused on the impact on the environment and human health of gold mining-related mercury contamination in Suriname through the examination of four Maroon and indigenous communities; analyzing pesticide residues in frequently consumed vegetables and fruits, as well as the role pesticides play as an effector in suicide attempts and successful suicides; exploring the anti-proliferative effects of indicator medicinal plants; and evaluating the data derived from a preliminary environmental and occupational health assessment in Trinidad and Tobago.

## "Bind wounds, not make blood run"—Evaluation of Surinamese plant-derived nutraceuticals for their potential effects on angiogenesis

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Background: Aberrant angiogenesis is involved in a multitude of distinct diseases including cancer, rheumatoid arthritis, chronic wounds, and certain cardiovascular, ocular, and skin diseases. This has led to the development of a wide array of therapeutically efficacious anti- and pro-angiogenic substances, and the identification of a number of (plant-derived) substances that allegedly prevent angiogenesis-dependent diseases. Based on the latter consideration, the Departments of Pharmacology and Physiology of the Faculty of Medical Sciences (FMeW), Anton de Kom University of Suriname (AdeKUS), have implemented a large-scale research project to evaluate Surinamese plant-derived nutraceuticals for their potential to interfere with angiogenesis. Suriname is located on the Guiana Shield, a hotspot with a unique biodiversity and a substantial expanse of pristine tropical rain forest. The project is part of a more comprehensive collaborative effort with the Suriname Conservation Foundation aimed at the identification of Surinamese plants with clinically applicable angiogenesis-interfering properties.

Structure/Method/Design: Candidate plants are acquired on the basis of ethnopharmacological indications from Suriname's rich medicinal folklore and chemosystemic clues from the literature. The plants are authenticated by taxonomists, and then extracted according to the traditional use. Angiogenesis involves, among others, the proliferation, migration, and structural rearrangement of endothelial cells to form tube-like structures. Therefore, the samples are subsequently assessed for these effects in cultured human umbilical vein endothelial cells using a sulforhodamine B, a Boyden chamber, a scratch wound healing, and a tube formation assay.