

Millersville Professor Receives Grant to Help Research Disease



Chances are, if you are not in the fields of science or medicine, you have not heard of Buruli Ulcer (BU). The debilitating flesh-eating disease is one of 17 neglected tropical diseases (NTD) that the World Health Organization (WHO) hopes to eradicate by 2020. Though eradication is no easy task, Millersville professor Dr. John Wallace is doing his part to achieve that goal with the help of a grant he received from the End Buruli Ulcer Alliance (EBUA)

The Alliance is a non-profit organization whose mission is to prioritize early detection, early care, prevention of disability and encourage successful research. It's all part of an effort to build a global alliance that is committed to make a positive difference in the lives of BU patients and families.

The \$3,500 grant, which Wallace received in December, will help fund travel and the presentation and publication of the results of the research that Wallace is conducting. The primary goal of Wallace's research is to learn more about how the disease is transmitted.

Wallace and his colleagues, Drs. Tim Stinear and Paul Johnson of the University of Melbourne in Australia, are conducting field and laboratory experiments to determine the mode of transmission of Buruli Ulcer. This international collaboration has been working together since 2006 towards unveiling the role of aquatic insects and especially mosquitoes in the ecology of the disease as it relates to transmission.

"My work has taken me to remote parts of Ghana and Benin in West Africa as well as to southeastern Australia where the disease is prevalent as well," said Wallace. "Buruli ulcer is nicknamed the 'Mystery Disease' because we do not know how humans contract the disease. The exact mode of transmission is still not known for Buruli ulcer and has eluded scientists for decades."

Despite the relative prevalence of the disease—between 5,000 and 6,000 cases are reported annually, according to WHO—what little research is being done on the transmission and ecology of BU is slow due to a lack of funding. In addition, funding has been cut recently, which has led to difficulties for researchers such as Wallace.

"EBUA recognizes that in order to move forward in treatment, we need to conduct research and establish how people become infected with the pathogen, *Mycobacterium ulcerans*," said Wallace of the importance of the grant. "This funding will help tremendously towards that end."

In March 2015, Wallace and his partners will present their findings at the Global Buruli Ulcer Initiative Conference at the WHO in Geneva, Switzerland.