PERCH & Azure PCR collaborate to study proposed methods for increasing the availability of molecular testing in low-resource contexts

About the collaboration:
The PERCH team at Johns Hopkins School of Public Health (JHSPH) is working with Azure PCR to conduct research, education and/or training which are of mutual interest and benefit. The collaboration seeks to validate Azure PCR’s AccuCall automated PCR data-analysis system by comparing it to JHSPH analysis. Both parties wish to determine if automated methods can establish a more effective means for comparing results from different sites and different machine operators. (Source: JSPDH-Azure MoU 20130620)
The Johns Hopkins university PERCH project and Azure PCR Ltd signed a Memorandum of Understanding on 20th June 2013. This agreement enables the PERCH team to evaluate the accuracy and as a result the potential value of Azure PCR’s AccuCall in low-resource contexts. If preliminary results prove successful, it may also enable the PERCH team to use AccuCall’s standardised analysis to increase the reliability of the study by removing an opportunity for operator subjectivity/experimenter bias.

About PERCH:
Pneumonia kills more children around the world than any other disease, but the last major effort to study the causes of childhood pneumonia across many countries was conducted in the 1980’s. This week, a ground-breaking new study called the Pneumonia Etiology Research for Child Health (PERCH) study gets off the ground. A collaboration between 5 African and 2 Asian research sites coordinated by the International Vaccine Access Center (IVAC) at Johns Hopkins Bloomberg School of Public Health, the study will systematically look at current and likely future causes of childhood pneumonia in some of the world’s hardest hit populations.

Aiming to enrol more than 12,000 children in seven different countries, PERCH will be the largest, multi-country study of its kind in over 20 years. The study is funded by a grant from the Bill & Melinda Gates Foundation and is expected to inform global efforts against pneumonia – the world’s biggest killer of young children – in the years to come. The study is being conducted in Bangladesh, The Gambia, Kenya, Mali, South Africa, Thailand, and Zambia, and in collaboration with local and international research stations and universities, including laboratory support from the University of Otago and Canterbury Health Laboratories, New Zealand.

“Every child in the world is at risk of pneumonia. While we’re preventing lots of pneumonia with vaccines due to some germs, we need a new evidence-base on pneumonia to assure that we use effective treatments and develop the right vaccines for the next decade,” said Orin Levine, lead investigator on the study and professor of International Health at Johns Hopkins Bloomberg School of Public Health.
About Azure PCR:
Azure PCR Ltd is a privately held company founded in late 2009. Its first commercial product has been launched and it has a pipeline of future products based on its patent-pending platform technology.
Azure PCR provides automatic analysis of genetic molecular samples (e.g. in infectious disease diagnosis) using highly innovative solutions. The current solutions for analysis of qPCR data (quantitative polymerase chain reaction) are mostly expensive, unreliable and time consuming. Azure PCR’s AccuCall™, is the only product in the market place to perform qPCR data-analysis in a truly automatic manner.
AccuCall has analysed over 400,000 samples to date, demonstrating independently confirmed accuracy of >99.5% and standardised results.