

PENNSTATE



# Undergraduate spearheads program to decrease child mortality

## Tippy Taps for Africa

**Melissa Beattie-Moss**

**November 30, 2011**

Meet Ce Zhang, a biology major in his senior year in Penn State's Schreyer Honors College.

During the summer of 2009, Ce Zhang traveled to Uganda on a Schreyer Ambassador grant to intern with a nonprofit group called The Uganda Village Project.



Ce Zhang

Tippy Tap hand washing apparatus in action.

As he describes in this video by intern Samantha Kramer, Zhang returned to Penn State determined to raise awareness of how poor hand hygiene in Uganda spreads bacterial diseases, a leading cause of child mortality in the Third World.

Convinced that a simple, low-cost hand washing device called the Tippy Tap could help, he started a student organization called Tippy Taps for Africa aimed at raising funds to install these devices near latrines at eight schools in Uganda and to study their use and effectiveness.

Zhang and his research partner, fellow Penn State undergraduate Adam Mosa, won a first place award in the Penn State Undergraduate Research Exhibition.

Their study, which included a student-led redesign of the device, was funded by a Schreyer Summer Research grant. Zhang and Mosa found that, with Tippy Tap access, hand-washing rates increased by over 90 percent, and reported episodes of stomach pain (a symptom of bacterial infection) decreased by 60 to 70 percent.

*Last Updated November 30, 2011*