

# New Innovation Lab aims to ensure safer drinking water

Warnings from municipalities around the world to “boil water before using” are not uncommon, especially as water distribution systems get older. In some countries, safe water collected from community sources becomes unfit for drinking during transport to homes or becomes contaminated within a building due to inadequate internal plumbing.

In March 2011, the International Association of Plumbing and Mechanical Officials (IAPMO) partnered with The Water Institute at UNC, based in UNC Gillings School of Global Public Health, to address these concerns and reduce potential for recontamination of drinking water.

IAPMO supports a new Innovation Lab through the School called “The Last Mile of Safe Drinking Water Delivery.” The School’s Innovation Labs bring together interdisciplinary experts to accelerate solutions to some of the world’s most pressing public health problems.

Jamie Bartram, PhD, professor of environmental sciences and engineering and director of The Water Institute at UNC, leads the lab. “The idea is to better understand how, why and when drinking water gets contaminated during transport from a nearby source of safe water to the point of use,” Bartram says. “Water lines may become contaminated because of broken

pipes, bacterial buildup, a loss of pressure or other reasons. This Innovation Lab will concentrate on finding ways to reduce recontamination through policy, technology, education, codes and regulation.”

GP Russ Chaney, IAPMO’s chief executive officer, told Dean Barbara K. Rimer that his organization is impressed with the way the School focuses attention and resources on global water and sanitation issues, despite difficult economic times. “What you are doing has put UNC a couple of steps ahead of any other university in the world in our future-oriented approach to water, health and development,” he said. “We’re proud to partner with you.”

Chaney and other IAPMO officials talked to Bartram about water contamination in North Carolina, the United States and throughout the world. “Even though the U.S. has some of the safest drinking water, contamination often does occur after treatment and in the ‘last mile’ of delivery,” Chaney said.

“With our aging infrastructure, this problem is just going to get more and more common,” Bartram says.

In addition to financial support, IAPMO will lend the services of Stuart Asay, PhD, one of the foremost experts on plumbing systems and the protection of potable water from contamination sources.

**– Ramona DuBose  
and Linda Kastleman**

IAPMO officials met in March 2011 with Dean Barbara K. Rimer and Dr. Jamie Bartram. Left to right are Dr. Stu Asay, GP Russ Chaney (CEO), Rimer, Bartram and Pete DeMarco.



PHOTO BY RAMONA DUBOSE

For more information on The Water Institute at UNC, visit: [www.waterinstitute.unc.edu](http://www.waterinstitute.unc.edu).

To learn how your organization can support other Innovation Labs similar to this one, contact Bobbi Wallace at (919) 966-0613 or [bobbi\\_wallace@unc.edu](mailto:bobbi_wallace@unc.edu).