



Photograph by Joseph Leute

Andrew Rupnow says major chemical companies are now calling him “out of the blue.” His company, OMNI Solutions, was recently named one of the “Best Entrepreneurial Companies in America” by Entrepreneur magazine.

LAUNDRY GURU BY JAN WILSON

Area entrepreneur devises a way to kill bacteria, viruses, and mold in the commercial laundering industry.

Andrew Rupnow, 35, is out to clean laundry in a big way. The CEO of OMNI Solutions LLC has designed a process that eliminates 99.9% of bacteria, viruses, and mold from commercially laundered linens, and has been conducting most of his research and development at the Wilderness Resort in the Wisconsin Dells.

Bacteria and mold has long been an issue in the commercial laundering industry. In fact, Rupnow’s own grandfather passed away after contracting a bed linen-related infection in the hospital post-surgery. And in January, two wrongful death lawsuits were filed against the University of Pittsburgh Medical Center (UPMC) and Paris Healthcare Linen Services, the company that launders the medical center’s linen.

“The industry always knew there were issues,” Rupnow relates, *“but there really wasn’t a true standard for infection control. [Our] system provides protection against infections that weren’t being controlled previously.”*

By retrofitting existing laundry machines, OMNI Solutions provides UV-based technology to provide better sanitation and lower utility consumption for hospitals, nursing homes, hotels, and even prisons through the use of hydroxyl radicals.

“The earth makes hydroxyls from UV light from the sun,” Rupnow explains, describing them as earth’s sanitizers. *“They create our ozone layer which protects us from pollutants.”* They also happen to be about 500 times stronger than chlorine bleach and produce no harmful byproducts, he notes.

Rupnow was able to replicate what the sun does using UV wavelengths from a lamp to create the hydroxyls. Hydroxyl gas is then injected into the wash process.

After 18 months of research and development, Rupnow discovered even more benefits. *“We learned we can reduce the amount of hot water used, so instead of 140 degrees in a hotel wash process or 160 degrees in a health care laundry, we can bring the water temperature down to about 90 degrees resulting in a significant reduction in hot water usage. We also see a slight reduction in the amount of chemicals needed, and we can reduce total water use by about 20%.”*

That was significant. The Wilderness, he says, processes about 12 million pounds of laundry a year and has saved about \$100,000 a year in utility costs using the OMNI Solutions technology. *“Beyond the savings we’re providing better sanitation. We’re able to kill superbugs, bacteria, and viruses better than hot water and chemicals can, so we have a 99.9% reduction in bacteria and viruses, which is unheard of in the laundry industry.”* Additionally, linens are cleaner, softer, and last longer, he notes.

“What makes this technology different is that it doesn’t care what bacteria or virus is present,” Rupnow says, noting that superbugs, such as MRSA (Methicillin-resistant Staphylococcus aureus) or C. diff (Clostridium difficile) will mutate and change to adapt to new environments. *“Because of the strength of the hydroxyls, they are killed instantly so they never have a chance to build a tolerance or mutate.”*

Funded along the way by “a great angel investor out of Atlanta,” OMNI Solutions has also received tax credits from the Wisconsin Economic Development Corp. (WEDC). Its official launch was in May 2015. Within five months, the company signed a major deal with a California medical supply company requiring 8,000 installations into the nursing home market. *“We got busy quickly,”* Rupnow smiles. Partnerships he’s established with some of the nation’s largest chemical companies are helping with installations.

OMNI Solutions has two divisions: a hospital/commercial laundry division for laundry washed off-site, and an on-premise division for facilities that do laundry on site, such as hotels or nursing homes. *“In our industry, cleanliness is often judged on rewashing, or the percentage of laundry that has to be rewashed to get clean. The industry standard is about 3% to 5%. We’re averaging about 1.5% rewash on a national level.”*

Rupnow has three patents on the technology and he’s looking to expand to Europe and China, but he’s also interested in contacting major sports leagues, like the NFL. *“I was told by someone in the Packers organization that some players shower six or seven times a day. That creates a lot of laundry.”*

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