Student intern driven to develop cyanobacteria as viable carbon-neutral energy source

Biochemist Tarryn Miller has always loved plants. Raised in an agricultural community, the Los Alamos research assistant was focused on science from early childhood, fixated on the Discovery Channel when she wasn’t devouring molecular biology, chemistry physics or astronomy texts.

“Since I was a little girl I have always striven to understand the world through science, and I had really supportive teachers that inspired my curiosity,” says Miller, emphatic about her love of All Things Science. “I like to know everything. I like to be involved, and I wanted to make a difference and improve lives.”
As a child, she supported youth education, helping launch a youth advisory committee and organizing science workshops for Girl Scouts, continuing her volunteerism as a senator at her college.

At the Lab, she volunteers for Expanding Your Horizons, a national program dedicated to helping young women pursue, and succeed in, the fields of science, math, engineering and technology.

At Los Alamos, mentored by David Fox and his algal biofuels team, Miller is focused on cyanobacteria—microscopic solar energy refineries that convert the sun’s energy and atmospheric carbon to energy sources.

Miller is convinced that these fast-growing photosynthetic bacteria may solve the world’s energy crisis.

“I really like algal work; it’s something I can really get behind and believe in,” Miller adds. “They are great candidates for biofuel and bio-product production, and they produce a carbon-neutral energy source, hopefully supplementing and eventually eradicating the need for petroleum-based fuels.”

» Return to homepage