

## Bastyr Signs Sister-School Agreement, Receives \$1 Million NIH Grant

Editorial Staff

Founded as a naturopathic school in 1978, Bastyr University has grown to become one of the largest centers of natural health education and research in the northwestern United States, offering degree programs in acupuncture, Oriental medicine, herbal sciences and other forms of healing. Two recent developments - one concerning an agreement with a traditional Chinese medicine school in China, the other a grant from the National Institutes of Health -- have highlighted the school's continued expansion as one of the nation's leaders in the field of complementary and alternative medicine.

In September, Bastyr president Thomas Shepherd announced that school officials had signed a sister-school agreement with Shanghai University of Traditional Chinese Medicine. The agreement culminates a budding 10-year relationship between the universities, under which students from Bastyr have traveled to Shanghai to receive clinical training in acupuncture and Oriental medicine.

"The agreement is an indication of a successful relationship that has strengthened over time," remarked Terry Courtney, LAc, chair of the school's acupuncture and Oriental medicine department. "This past spring, I had the opportunity to travel to China with a group led by President Shepherd. We spent time working with the administration of Shanghai University, creating new curriculum tracks for advanced studies in areas such as cancer, internal medicine and gynecology. It was an ideal time to move our affiliation to a sister-school status."

"Because it's a more acceptable form of medicine there, our students see a higher volume of patients with a broader range of illnesses," she added, emphasizing the value students receive by being able to travel to China for training. "They're also able to witness a model of integrative care - Western medicine and traditional Chinese medicine - that works remarkably well."

Courtney pointed out that several Bastyr students were currently studying in China and, through e-mail messages, professed that they'd experienced a tremendous outpouring of kindness and concern following the terrorist attacks on the World Trade Center and the Pentagon in September.

The school also announced that it recently received a grant of approximately one million dollars from the National Institutes of Health for a randomized double blind, placebo-controlled trial to study the effectiveness of garlic in HIV-infected patients. Previous studies have shown that many of the anti-viral drug "cocktails" taken by HIV-positive patients, also known as highly active anti-retroviral therapy (HAART), frequently cause high blood cholesterol and triglyceride levels. Researchers from Bastyr and the University of Washington will work together to answer the question of whether garlic can eliminate these unwanted side-effects.

Leanna Standish, a licensed acupuncturist and naturopathic doctor, will be the principal investigator for the garlic trial. In an interview with *Acupuncture Today*, Dr. Standish provided several details about the study and what her research team hopes to accomplish.

AT: Good morning, Dr. Standish. Could you tell us about the garlic study?

LS: The story really goes back to our first NIH grant to study alternative medicine and HIV/AIDS back in 1994. One of our first studies was to find out what alternative therapies are being used by HIV positive men and women all over the United States. One of the things we found was that 53% of our sample, which was over 1,600 people, indicated that they used garlic as an alternative medicine for HIV/AIDS. That was not surprising, but it really encouraged us to consider doing a clinical study of the safety and efficacy of garlic in HIV disease.

The next thing that happened was that Gowsala Sivam, PhD came to Bastyr as a faculty member from Fred Hutchison Cancer Research Center. She had been studying garlic for its anti-cancer activity, which had been showing some very interesting activity as a potent anti-cancer agent. A third fact was that there was some concern and interest in the last three years about the issue of herb-drug interactions. What we've done is ask the following question and try to answer it, which is: will garlic be an effective medicine for treating high cholesterol seen in HIV-positive people that take AIDS drugs?

One of the side-effects of highly active antiretroviral therapy, or HAART, as many people call it, is elevated cholesterol and triglycerides. There's some suspicion that one of the long-term possible negative consequences of going on antiretroviral therapy is having high cholesterol, which could lead to cardiovascular disease.

Given all those things, we've asked the NIH to fund a study of garlic as an agent for lowering cholesterol. The study was funded, and we're now recruiting HIV-positive men and women who take antiretroviral drugs and have elevated cholesterol to come into the study.

AT: How many people are you looking to recruit?

LS: This is a randomized, placebo-controlled trial, and we need to have 51 people in each group to have sufficient statistical power to detect the difference between the individuals receiving garlic compared to individuals receiving a placebo.

We're doing what's called "rolling enrollment." We started enrollment, and we will just continue to enroll people until we have our full complement. We're aiming to enroll 146 people to end up with 51 people - 102 people with the two groups combined finishing the study. It's a 16-week study.

AT: The abstract about your study mentions that you'll be using a standardized supplement in three doses. Could you tell us more about the supplements?

LS: That's a good question. One of the things that I really like about this study is that we're studying two doses, in what we call a dose escalation design. The first four weeks after the patient is enrolled, they're going to be instructed on how to reduce cholesterol just with diet alone using the National Cholesterol Education Project's design for how to get people to lower their cholesterol.

On week five, they start dose one of garlic or placebo, depending on what group they're in. The first dose is 700 milligrams per day of garlicin, the standardized product we're using, and that contains 6.4 milligrams of allicin, the active constituent. They do that for four weeks. On week 11, they start dose two, and that's 1400 milligrams of garlicin per day, which is equivalent to 12.8 milligrams of allicin.

AT: Once you've compiled the information, what are your plans for having it published?

LS: It's very important. I think publishing results is a critical, ethical completion of any study, whether the results are positive or negative. If garlic has no impact, we want to report that; if it does, we want to report that as well. We will publish it, hopefully in a good, peer-reviewed medical journal so it gets the attention of the medical community.

AT: What outcome measures will you be looking for?

LS: The main endpoints are cholesterol and triglycerides. What we're looking for is a reduction in those levels after eight weeks of garlic therapy.

We're also very carefully studying viral load; the (amount of) HIV virus in the blood. We're measuring that on a very frequent basis just to make sure that garlic is safe and doesn't interfere with the effects of the AIDS drugs in any negative way. One possibility is that garlic -- because it does have antiviral properties -- for all we know, could actually reduce the amount of virus in the blood. The study is not really designed to measure that because you'd need a lot more patients for that, but it's just something the people at Bastyr and the research team are very interested in, because of garlic's long-standing literature for its anti-viral effects against a number of viruses.

We're also measuring insulin in the blood, because we're curious about the effects of garlic and insulin, and we're measuring the general safety issues in the blood -- for example, liver function; kidney function; and white blood cells and red blood cells -- just to make sure that there are no adverse effects of garlic. We don't anticipate (them), but one of the things that you do in a good clinical trial is you don't assume that you know. You measure as many things as you can to make sure that everybody's safe.

AT: Is there an open enrollment for the trial, or are you limiting it to just people in Washington?

LS: They'd have to come to the clinic several times, so I don't think it would be logistically possible, but we are very actively looking for people interested in being in the study. I'm hoping that the HIV-affected community is going to see this as an important community effort, because answering this question is going to require the donation of time and energy on the part of 146 HIV-positive people, and so we're hoping that there's a sense of Seattle's HIV-affected community coming together to answer a question around alternative medicine. Seattle has always been a leader in complementary and alternative medicine, especially HIV and AIDS. I'm really happy that the study is happening in Seattle.

AT: What if people want to find out more about the trial: not necessarily to enroll, but just to learn more about it? Is there a contact number people can call?

LS: Yes. It's (206) 834-4146. People can call that number, or they can visit our website ([www.bastyr.edu](http://www.bastyr.edu)).

AT: Thank you, Dr. Standish.

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