Finding cancer treatments in the animal world

Laser tweezers offer hope for quicker cancer diagnosis

Cancer registry guides research, reveals trends
In pursuit of options

Norman deLeuze fuels the hunt for a nontoxic cure for lymphoma

Norman deLeuze is a man accustomed to chasing big dreams. In 1968, the engineer teamed up with a colleague at Aerojet General in Rancho Cordova, Calif., to pursue a lifelong goal: the production of world-class wine. Before long, their business, ZD Wines, was born in a rented Sonoma farm building and the partners were producing 350 cases of wine from their first crush.

Now deLeuze is focusing his unbridled determination on another dream: the discovery of a nontoxic cure for lymphoma. Toward that goal, the vintner and his family have established an endowment supporting what they call the outstanding research approach of UC Davis oncologist Joseph Tuscano.

The fund was launched in December 2006 with a donation of $313,000 by the deLeuze family, their winery and their friends. DeLeuze is continually seeking outside support for the UC Davis endowment, and hopes it will break the $1 million mark by the end of this year.

For deLeuze, 75, the search for a cure is a highly personal cause. In January of 2004, the UC Berkeley graduate was diagnosed with mantle cell lymphoma, a subtype of non-Hodgkins lymphoma. Originating in the body's white blood cells, known as lymphocytes, lymphoma kills more than 24,000 Americans every year.

For a health nut who took scrupulously good care of himself, the diagnosis was a shock, deLeuze's son, Brett, recalled.

My father used to say he wanted to live to 120, and he followed a very healthy, nutrition-conscious lifestyle, said Brett deLeuze, who helps manage the winery along with his mother, Rosa Lee, and two siblings, Robert and Julie.

Then he was diagnosed with cancer and told he was going to die within eight months without chemotherapy or radiation.

Despite that stark forecast, deLeuze said he was not interested in those conventional medical approaches because of their toxicity. Instead, he began researching and trying a host of alternative treatments to fight his cancer, including high doses of intravenous vitamin C and a
When a product containing fermented wheat germ extract appeared effective against his patients lymphoma, UC Davis researcher Joseph Tuscano began the search for the active ingredient.

Tuscano and his colleagues have been researching the potential of fermented wheat germ extract as a supplement to conventional treatments. They have found that the extract has a wide variety of other nutritional supplements.

Using his scientific background, deLeuze has done his best to distinguish the promising approaches from the dubious ones. But a lack of solid data has been a constant frustration.

There are a lot of options out there but none of them has gone through clinical trials, deLeuze said. Basic research that can help people make a careful evaluation and decide what to try is missing.

At UC Davis, Tuscano is seeking to close that gap. Now the primary oncologist for deLeuze, Tuscano has been developing novel, immune-based therapies to treat lymphoma, including the use of monoclonal antibodies. He has also studied a variety of natural, homeopathic compounds, including fermented soy products, in collaboration with two cancer center colleagues, molecular geneticist Philip Mack and urologic oncologist Ralph de Vere White, the UC Davis Cancer Center director.

About a year ago, deLeuze prompted Tuscano to branch out and take a look at another natural product fermented wheat germ extract. Rarely used here but more common in Europe, the compound, known in one form as Avermar, has not been studied in formal, preclinical or clinical studies, Tuscano said. But lab tests have shown promising results in a few human cancers.

When deLeuze began taking Avermar, Tuscano observed him and concluded that his patients lymphoma appeared to be shrinking.

I then tested the product in the laboratory, and found that in fact it was very active for the treatment of lymphoma, both in the test tube and in animal models, Tuscano said. Based on this surprising and significant result, we began a search for the active ingredient.

As an oncologist, Tuscano typically advises that his patients take a traditional approach to their cancer, using proven strategies such as radiation and chemotherapy. But in deLeuze, the doctor saw someone determined to avoid the toxicity of those therapies, no matter the risk.
With the competition intense for federal research grants, gifts such as those from the deLeuze endowment are more critical than ever.

UC Davis oncologist Joseph Tuscano has been developing novel, immune-based therapies to treat lymphoma.

He understands the consequences of avoiding the traditional therapies and is willing to accept those risks to try to identify less toxic treatments, Tuscano said. He has outlived everybody’s expectations for patients who forgo standard cancer care, so he must be doing something right.

With his training, research record and interest in nontraditional responses to cancer, Tuscano was a perfect candidate for the deLeuze family endowment, Norman deLeuze said.

He was pursuing some very nonconventional approaches, and I really enjoyed working with him, deLeuze said. He was at least open-minded about the possibilities out there, and hes willing to listen, to have a two-way conversation.

Tuscano called the deLeuze Family Endowment for a Nontoxic Cure for Lymphoma a substantial and critical boost for the search to find nontoxic treatments for lymphoma. He noted that despite a resurgence of interest in this type of research by the federal government and other groups, funding is highly competitive, making gifts such as those from the deLeuze endowment even more important.

DeLeuze has no illusions that the campaign to find the nontoxic weapon he seeks will be easy. But he is not one to shy away from a long-odds challenge. For 10 years, he and his partner ran their wine business as a part-time concern while holding full-time jobs. By 1978, ZD Wines was crushing a staggering 41 tons of grapes from the 1977 vintage, and it was time for deLeuze to leave engineering behind.

He built an amazing winery, son Brett said, but now he is devoting all his energy to his new dream: finding a cure for lymphoma. Our partnership with UC Davis is a great way for us to get there.

For more information or to contribute to the fund, please call Ann Priggen at (916) 734-9675.