



**Dear Friends,**

Welcome to the June issue of Livly's newsletter.

*Livly is a young non-profit we formed around the idea of using cells of the innate immune system to combat all sorts of cancer. Livly will draw on the work of others in the field, such as Dr. Zheng Cui, who recently made headlines with the cancer-proof mice he discovered. However, Livly's work will be translational in nature – we work with human cancer-killing cells, and aim to take these basic discoveries forward towards a universal human cancer therapy.*

◆ **Corporate**

Good news: Livly can now receive your tax-deductible donations. Though we have applied for 501(c)(3) status, the paperwork is still being processed by the IRS. For now, donations can be made through the Vitae Institute.

Click to donate through paypal, using the Vitae Institute's website

<http://www.vitaeinstitute.org/donate.php>

*The Vitae Institute is a 501(c)(3) corporation founded by Chris M Smelick to support innovative research in the field of aging diseases. Livly has partnered with Chris and Vitae in order to accept tax-deductible donations. You can also donate by check, to the address below. If paying by check, please put "Livly" in the memo field, so Chris will know to relay it to us.*

By mail

Vitae Institute, c/o Chris Smelick  
524 Ivy Glen Dr  
Winston-Salem, NC, 27127



Through Vitae, we happily received our first \$7,000 in donations last week. A HUGE thank you to our first donors.

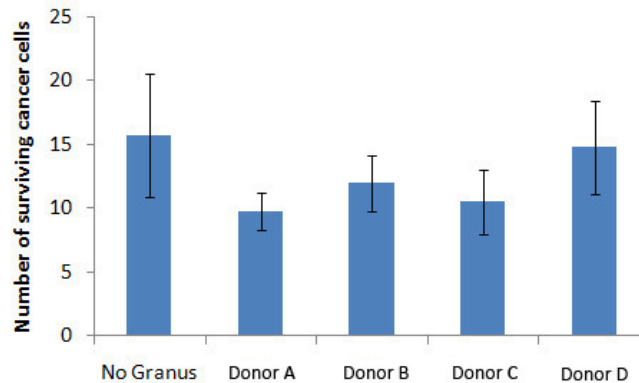
We have begun to use these funds to upgrade equipment and refine our research methods. We may hire a part-time employee to help in cell culture. ***Have experience? Let us know.***

Our basic website is now live: [www.livly.org](http://www.livly.org). You will see a single cancer killing video on the main page (described in the science section). We have many plans for development. Keep an eye on the website for changes in the near future.

◆ Science

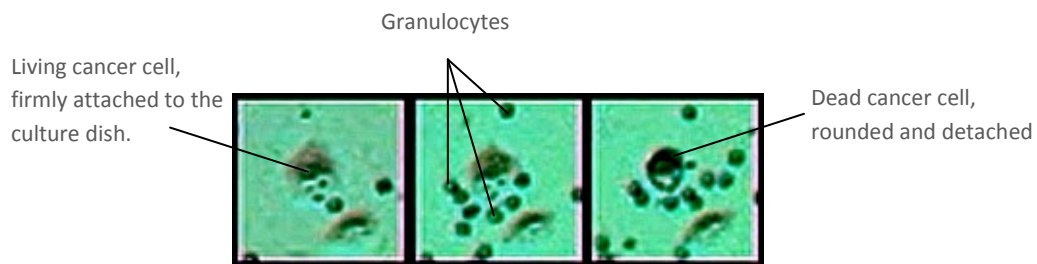
The near-term goal of Livly’s research is to measure the ability of white blood cells from different individuals to destroy cancer cells. Such a “killing assay” could then be used to discover individuals with exceptional innate cancer immunity. In the longer term, this may lead to the discovery of the underlying genetics and the development of therapies based on rare natural cancer immunity in humans.

We have now devised a provisional killing assay, allowing us to compare the ability of granulocytes (a type of white blood cell) from different individuals to kill cancers (Figure 1). We still need to optimize this experiment, reduce the variance, and improve reproducibility.




**Figure 1: Granulocytes from different individuals differ in their cancer-killing ability.** We exposed granulocytes from different blood donors to cancer cells in a culture dish. After 24-hours, we determined the number of surviving cancer cells using Trypan blue, a live-dead stain. Are you wondering how your own cells would do?

To confirm that the killing is caused directly by the granulocytes, we used our time-lapse microscope and recorded an action video of the killing. Figure 2 shows a single cancer cell being attacked and killed by John’s granulocytes. You can watch the video online on Livly’s nascent website [www.Livly.org](http://www.Livly.org).



**Figure 2: Filmstrip.** A cervical cancer cell is surrounded and killed by John’s granulocytes.

Thank you for joining us in this challenge. We absolutely want to hear from you. Questions are encouraged!



John Schloendorn  
President and Co-Founder



Eri Gentry  
CEO and Co-Founder