SUMMER 200



A link between donors, volunteers, staff & friends of the Stanford Blood Center

#### Stanford Blood Center

IS PROUD TO SERVE OUR COMMUNITY by providing exceptional service to our donors and supplying the highest quality in blood products to area hospitals and clinics. Did you also know that while most blood centers export the majority of their processing and testing to huge, anonymous facilities, Stanford Blood Center houses its own laboratories? Keeping our processing in-center allows us to provide more than 250 jobs in our community, and ensure the quality of the products we distribute. At SBC, we're committed to quality and community.

### CALENDAR

HOLIDAY CLOSURE:

Grateful Life

Tour

Independence Day, Wednesday, July 4; all centers closed Labor Day, Monday, September 3; all centers closed

#### PROMOTIONS

#### Grateful Life Tour III– Tie-Dye T-shirts!

All Center Locations See Tour Dates Below Each donor visiting one of our donation centers on the tour dates below will receive a tie-dye shirt featuring the logo seen here! These are high-quality shirts, man.

#### Grateful Life III Tour Dates

May 25, 26, 29, 30, 31 • June 1, 2, 4 • July 2, 3, 5 Then Fridays, Saturdays, and Mondays in July

#### EVENTS

#### The Grateful Life Event!

Elephant Pharm – 4470 El Camino Road, Los Altos Saturday, June 2, Noon to 4:00 p.m.

Join Stanford Blood Center and the Elephant Pharm for this far-out, fantastic event that promotes a healthy and sustainable lifestyle.

#### Let Goodwill Recycle Your Unwanted Items!

#### Hillview Center

Monday, June 4 – Friday, June 8, 9:00 a.m. to 5:00 p.m. Come during collection hours and drop-off your unwanted household goods and small appliances, clean clothing, books, and electronics.

#### Monday Movie Madness PLUS!-Movie Ticket, Popcorn, Drink!

Hillview Center Only, Mondays between 7:30 am to Noon Receive a free AMC movie ticket, a small popcorn, and a small fountain drink.

#### Pint for a Pint Days– Pint of Baskin Robbins Ice Cream!

#### All Center Locations

Fridays, Saturdays, and Mondays in June beginning June 8 Donate on the days above at any of our Center locations and you will receive a coupon good for one pint of ice cream at any Northern California Baskin Robbins!

#### Community Night–Independence Day BBQ!

Hillview Center Only Thursday, July 5, 4:30 to 7:30 p.m. A donor favorite! Come on by for burgers, dogs, and karaoke.

#### O What a Party!

#### Hillview Center Only

Thursday, August 16, 7:30 a.m. to 7:30 p.m. Save the Date! Enjoy a day of saving lives and be rewarded with fabulous fun, food, and prizes. Keep your eye on our Web site for details as the summer starts to sizzle...



## Milestenes



CONGRATULATIONS TO ALL who reached a milestone donation. Your dedication is appreciated by the innumerable patients whose lives you have touched.

NAME	NUMBER
	OF DONATIONS
Linda Johnson	400
Glenn Ireland	200
Rafael V. Ornes	100

Please note that "Milestones" is a new feature article. If we've overlooked your recent milestone donation and you'd like to be mentioned in a future edition of Life Link, please contact Michelle Bussenius, Editor, at 650-723-8270, or m.bussenius@stanford.edu.

### Stanford Blood Center's

#### WEB SITE HAS A NEW LOOK!

As PART OF A WEB SITE REDESIGN initiated by Stanford's School of Medicine, our web site recently underwent a major renovation. Visit us at http://bloodcenter.stanford.edu and check out our new, sleek and modern design. Our site still contains the information you're familiar with, but has been updated to be more user-friendly. In the future, we plan on adding more features, so be sure to visit us often.



CORNER WE OFFER OUR GRATITUDE to the following organizations that have donated goods or services. Your generosity helps us attract and reward those who give blood for life!

Corporate

The following merchants kindly offered wonderful prizes for our mobile blood drive prize drawings during the 2006 holiday season. Thank you!

Robaii Crowne Plaza Cabana Hair International Stanford Terrace Inn Laser Quest The Tailor Maid FireHouse Gallery **Diamonds of Palo Alto** Stanford Floral Design Gitti's Fine Lingerie

**Book Buyers** Marriott Residence Inn Bob & Bob Pizz'a Chicago Leaf & Petal The Westin Palo Alto The Prolific Oven Corporate Inn Sunnyvale Amici's East Coast Pizzeria Stanford Lively Arts

### The Joy of Life

CELEBRATING A SECOND LIFE



#### **MESSAGE TO A FRIEND**

Bringing gifts of days, for songs unsung, pure strangers rushed to greet me  $\sim$ so many still to comfort, so much to do undone.

They rallied from varied ranks and in seconds of salvation my narrow artery-rivers swelled full to brim their banks.

They wonder ~ "Giving to whom" as they sit in quiet Blood Centers. Unheard the grateful whispers that flood each healing room.

"Rendering sacred blood, as you do, no greater gift to man. The HERO that banded to save me might well have been YOU."

Today my hand and heart have penned a tangible gift of THANKS. I live, and love ~ and laugh because of you, my dear "Internal Friend".

Joy Shieman

JOY CERTAINLY IS AN APPROPRIATE NAME for this remarkable blood-recipient and poet. Since early childhood, Joy Shieman wished to express the intricacies of the world around her through the "music of poetry." Now an accomplished poet and author, Joy has spent many years helping others discover the beauty, and healing properties, of poetry.

A native of Canada, Joy and her husband, an orthopedic surgeon, settled in Sunnyvale in the early sixties. Despite being busy raising three daughters, Joy managed to find time to volunteer in the mental health unit at El Camino Hospital. During visits, Joy often read to patients, and noticed the calming effect that poetry had upon those listening.

Joy became intrigued by poetry's potential therapeutic usefulness, and found others who shared her vision of integrating poetry therapy into treatment facilities. Together, they founded the National Association of Poetry Therapy (NAPT), an organization comprised of individuals who are committed to promoting growth and healing. Joy is now a Registered Poetry Therapist.

Joy experienced poetry's healing properties when she was unexpectedly hospitalized for a long period following a cardiac operation. During her two month long rehabilitation, Joy relied upon poetry to hasten her own recovery. While hospitalized, Joy received many life-saving transfusions that helped her regain strength. Joy has likened receiving blood to having been given the gift of a "second life." Joy was eager to pen her appreciation for all who selflessly give blood and wrote a poem of thanks to blood donors everywhere:

Considered a pioneer of poetry therapy, Joy remains involved with NAPT, and has initiated the *Seeds of Joy* scholarship fund that provides financial support for practitioners of poetry therapy. Through her and others' efforts, poetry therapy has now become a treatment utilized in health facilities around the globe.

In addition to her work with NAPT, Joy also provided 12 years of service, along with fellow poet Angie Boissevain, judging poems entered in contests written by students of poetry at Palo Alto High School. She also has contributed works to *Borrowed Water*, the first anthology of haiku poetry ever published outside of Japan. Over the years, Joy's poetry has earned her numerous awards and mentions in magazines and newspapers.

She is currently awaiting publication of *Eating Rhubarb Beneath a Cold Moon*, a collection of American haiku poems with a forward written by Stanford University Professor Emeritus of Japanese Literature Makoto Ueda.

Thank you, Joy, for sharing your story and inspiring us with your words.

#### Increasing the Odds Part I

MOST PEOPLE THINK OF STANFORD BLOOD CENTER (SBC) as "only" a blood bank. Did you know that we are also very much committed to supporting research that saves lives? Our blood donors are an integral part of this commitment. Every time you donate, a small vial of your blood is reserved for research purposes. It is very likely that at some point, our researchers have used your blood to help people live better and longer lives.

For example, in our area, Stanford Hospitals and Clinics—long renowned for their state-of-the-art Kidney, Heart, Liver, and Bone Marrow Transplant (BMT) centers—perform hundreds of transplants every year. Stanford Blood Center's Histocompatibility, Immunogenetics and Disease Profiling Laboratory supports the success of these transplants by providing and developing tests that help determine organ recipient and donor organ compatibility. This collaboration towards providing the best in research and patient care can be measured in lives. For example, out of 245 U.S. kidney transplant centers, Stanford's kidney transplant center has the second-best three-year survival rate, and between the years 2000-2004, Stanford Hospital and Clinics had the best one-year kidney transplant survival rate in the country.

Matching a donated organ, whether from a living or deceased donor, requires conducting a series of intricate tests that are designed to evaluate tissue compatibility between the donated organ and recipient. The goal is to decrease the possibility that the recipient will reject the organ. If a donor and a recipient are histocompatible (literally "tissue compatible"), the likelihood of a transplanted organ being rejected is decreased.

Histocompatibility is most likely when the genetic material that is expressed as *antigens* on the surface of recipient and donor lymphocytes (white blood cells) are the same or very similar. Other than identical twins, everyone's antigens are unique. The immune system can recognize and react to differences in antigens. For example, if an unrecognized virus, bacterium, cell, or organ is introduced into the body, lymphocytes in the immune system respond to the foreign antigens by forming *antibodies* that recognize and attack the unknown substance.

This defense mechanism is very useful in keeping us healthy, but if a donor organ contains *human leukocyte antigens* (HLA) that the organ recipient has previously formed antibodies to, histo*incompatibility* between the donor and recipient is almost certain, and rejection of the organ is more likely to occur.

Because a strong HLA match increases the odds that a transplant will be successful, the HLA type of every potential transplant recipient and donor must first be determined. To match the right donor with an available organ, a nation-wide system has been established. Patients needing an organ transplant are first placed on a waiting list. When a potential organ donor becomes available, the donor's HLA type is determined and tests, known as *cross-matches*, are performed to assess the compatibility of the donor organ. A match program is run through UNOS (United Network for Organ Sharing) and the best possible recipient for the organ is chosen.

The science of evaluating tissue compatibility is fairly young, with successful transplants first being performed in the late 1950s. Nearly half of the HLA system was discovered here at SBC's Histocompatibility Laboratory by former researcher Dr. Rose Payne. Our current director, Dr. Dolly Tyan, and former director Dr. Carl Grumet, both studied under Dr. Payne and have dedicated their careers towards advancing the science of predicting matches that ultimately result in better organ transplant outcomes.

One testing method Dr. Payne developed is the cytotoxicity (toxicity to cells) assay. HLA typing, cross-matching, or HLA antibody detection may be performed using this methodology. One application of this test involves evaluating the reaction between a patient's serum (that may contain antibodies) and leukocytes (white blood cells that carry HLA antigens on their surface) from the organ donor in individual wells on a tray. A specially trained technologist examines the cells in each well to determine if the patient's serum has reacted against the leukocytes in each well. A negative reaction (no cell death occurred) indicates possible histocompatibility between donor and recipient. The data is collected and used to further determine HLA type or compatibility.

Serum used in certain assays may be created from the research tubes we collect from our blood donors. Dr. Grumet explains that our donors' normal CONTINUED ON NEXT PAGE DONATED BLOOD NOT ONLY SUPPORTS PATIENTS THAT ARE CURRENTLY IN NEED OF BLOOD. THROUGH RESEARCH, BLOOD DONATED TODAY MAY BE SUPPORTING PATIENTS OF THE FUTURE AS WELL.

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—Claudia Benike Research Associate

## Community Heroes

#### 14 YEAR-OLD BLOOD DRIVE COORDINATOR



WITH THE SPECTAC-ULAR SCENERY OF Los Altos hills as a backdrop, the Ladera Community Blood Drive was in full swing with nearly every donor chair occupied, thanks to the efforts of 14-yearold Blood Drive Coordinator, Ellora Israni.

Ellora's mother, Sonoo Thadaney, originally instituted

this blood drive five years ago in the wake of the September 11 attacks. At the time, Sonoo wanted to create a lasting contribution to her community, as well as commemorate her parents' birthdays. This very popular, and well-attended community drive is held twice a year, as near to her mother's birthday in March, and again, her father's in October, as possible. Sonoo has extended her altruism to her two daughters as well. Since the girls were five years old, Sonoo has encouraged each to volunteer in their community, including helping her with the Ladera blood drive. Over the last few years, Ellora proved so adept at assisting her mother with the many duties involved in running a successful drive, Sonoo felt completely confident allowing Ellora take on the responsibility of promoting, organizing, and conducting this March's drive.

Sonoo's instincts were right on target. The March drive went off without a hitch, with 40 units of life-giving blood collected. Sonoo and Ellora's 11-year old sister, Maya, were present to greet donors and lend a helping hand when needed.

In addition to coordinating blood drives, Ellora is an active freshman at Menlo-Atherton High School. There, she enjoys participating in Junior Varsity Lacrosse, and singing and playing piano in her school's Jazz band. She anticipates pursuing a career that will allow her to continue reaching out to others; perhaps as a psychologist, or in social work. Ellora believes in community and feels that helping others creates a circle of giving. We couldn't agree more, Ellora, and thank you for

your dedication and selfless spirit.

# The Science of blood CONTINUED

variations in antibodies help the lab by providing the material necessary to perform the assays. He adds, "Having access to a large normal population is important in allowing us to pick out individual components of patients' serum."

For years, cytotoxicity assays have been used to determine compatibility, and have resulted in countless successful matches. However, because of the subjective nature of the test, and possible pollution of the assay with other reactive molecules, these tests are not entirely *sensitive* or *specific* in absolutely clearly defining an organ recipient's HLA reaction profile. New testing methods that are more effective at detecting antibodies have recently been developed and are fast replacing the cytotoxicity assay method.

One such testing platform, the Luminex assay, uses polystyrene beads and laser technology to identify antibody reactions. In Luminex, micro-sized plastic beads infused with laserdetectable dyes are coated with known single or multiple HLA antigens. Anti-HLA antibodies, if present in the patient's serum, will react by attaching to specific antigens on the beads. A laser detects the signal emitted by the reaction and can provide specific and sensitive identification of the antibodies present.

These new technologies and their resulting ability to more accurately predict potential transplant failure have the potential to change the way organ donations are managed. In the next *Science of Blood* article, we'll discuss the possible impact new testing may have on the current organ matching system, explore other HLA testing platforms, and examine the significant contributions SBC researchers are currently making towards increasing the odds that a transplant will be successful.

#### STANFORD BLOOD CENTER LOCATIONS



MOUNTAIN VIEW DONOR CENTER 515 SOUTH DRIVE, SUITE 20 MOUNTAIN VIEW, CA 94040



780 WELCH ROAD, SUITE 100 PALO ALTO, CA 94304



HILLVIEW DONOR CENTER 3373 HILLVIEW AVENUE PALO ALTO, CA 94304

#### How To Reach Us

Appointment Office 650-723-7831 or 888-723-7831

Administration 650-723-7994

Autologous and Designated Donations 650-723-6667

National Marrow Donor Program 650-723-5532

Web site http://bloodcenter.stanford.edu

E-mail giveblood@med.stanford.edu



WE'RE ADDING ON! Those of you familiar with our popular Mountain View Center are surely aware that at times, it can get a little "cozy." To accommodate our growing donor base and allow for increased collections, we're adding 1200 square feet onto the existing 1500 square foot space. This remodel will allow us to increase the number of whole blood chairs from three to six; automated blood collection (ABC) chairs from three to four; and donor history rooms from three to four.

Construction is scheduled to begin sometime in early July and is expected to take ten weeks to complete. During the remodel, the Center will be closed. We're considering setting up a temporary collections site in the area, or expanding our Hillview hours for the duration of the construction. We'll be sure to keep our donors posted about the remodel and any changes in location or hours.



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