

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

FDA Considers Further Precautions

A message from the Associate Medical Director



Dr. Susan Galel, M.D.

What's

Your Name?

Has Travel Whispered

Page 4

By Susan A. Galel, MD, Associate Medical Director

The events on September 11, 2001 make it clearer than ever that emergencies can occur at any time. Blood and platelets are life-saving resources that must be available at all times, ready for patients. Many of you have demonstrated your generosity by donating blood at the Stanford Medical School Blood Center. Through this precious gift you helped someone in desperate need – an accident victim, a cancer patient, a child with sickle cell anemia or someone undergoing an organ transplant. Modern medicine could not be successful without you.

Ensuring that safe blood is available for patients in need is our top priority. To protect America's blood supply the Food and Drug Administration (FDA) sets safety standards. Under the FDA's oversight, the Stanford Blood Center screens blood donors and conducts 12 tests on every blood donation. The Stanford Blood Center also performs ongoing research to improve blood safety. Donor eligibility criteria established by the FDA are intended to make the blood supply as safe as possible, while balancing the real difficulty in maintaining an adequate supply of this life-saving resource. Recently, the FDA became concerned about the theoretical risk that a disease called variant CID, the human form of Mad Cow Disease, might be transmissible by blood. Although there is currently no evidence that this disease can be transmitted by blood, the FDA has decided to take certain actions to protect the U.S. blood supply from this theoretical risk. Until there is a blood test that can be used to determine who may have been exposed to this infectious agent, the FDA has decided to exclude as blood donors individuals who have resided in countries where Mad Cow Disease has been found.

In February 2000, the FDA began to exclude individuals as blood donors if

New Donor Clubs Page 5 Armchair Angels Page 6 It's a Family Thing Page 7 Singles Luau Page 8 The Blue Platelet Special Page 10 **Blood Center Aids** Cancer Research Page 12 Fun Stuff Page 14

Blood Center Staff React To 9/11 Events

By Vince Yalon, Administrator of the Stanford Blood Center

My airplane had just taken off at 6:05 on the morning of September 11th. I was on my way to a meeting of the Blood Centers of America, a national association of independent blood provider organizations. Ten minutes into my flight to Boston the captain came on to inform us that we would be returning to San Francisco Airport. He tersely explained that there had been a mid-air collision over New York that would have an impact on all flights heading to the Northeast.

It took an hour and ten minutes to be cleared for landing. When we finally deplaned, there was little information available about what had really occurred. We were just told that there would be no flights leaving SFO for at least the next four to six hours. With the mob exiting the airport, it took me forty minutes to get a cab. Only then, listening to KCBS, did I understand the magnitude of September 11, 2001.

CONT. ON PAGE 3



Around the Hemo Globe

Newsletter Naming Contest Winner Announced

Wow! We received 136 entries for our newsletter naming contest. Submissions came from donors, staff and volunteers of the Stanford Blood Center. The two most popular suggestions were Blood Line and Life Line. Cheryl Fisher of Santa Clara submitted our winner, Life Link. We chose Life Link because it signifies the purpose of this newsletter: to act as a common bond between all those involved with the Blood Center. Following is a list of the honorable mentions, whose entries you will find as page titles in the newsletter: Karen Blackstock, Lynda Cardenas, Dr. Gordon Cohen, Terisa Coleman, Kim Kurtz, and Lisa Sobel.

Stanford Blood Center decided to merge Donor Digest, our whole blood newsletter, and Person to Person, our apheresis publication. We want to make sure everyone connected with the Blood Center is up to date with what's current, no matter how they donate. We hope you like the new look! Please feel free to offer any suggestions to make it even better.

Get Plugged In

http://bloodcenter.stanford.edu Have you ever wondered how much blood is in our inventory? How much is needed? What blood type is critical today? You can find the answer to all those questions and more by visiting the inventory page on our web site, which is updated every weekday. Just log on to the Stanford Blood Center web site, then click the red About Blood button on the left side of your screen. This will reveal the gray Inventory button. Click and you're there.

The Stanford Blood Center web site has other helpful information, including a step-by-step description of the donation process for first-time donors. So tell a friend how they can 'click their way' to saving a life.

Other things to check out are maps & directions to blood center locations, online appointment requests, answers to frequently asked questions, the medical history questions that donors are asked, blood definitions, platelet & marrow donor program information, and employment & volunteer opportunities.

BLOOD CENTER STAFF REACT TO 9/11 EVENTS CONT. FROM FRONT COVER

Realizing there would be donors wishing to donate, I went home, picked up my car and headed in to the Blood Center. No one knew how much blood would be needed. Communication with the New York area was difficult. We received a request from one of our partner blood centers, Sacramento Medical Foundation, to ship 200 red cells as quickly as possible. This enabled them to, in turn, ship 500 red cells to New York. Sacramento Blood Center coordinates our Northern California disaster response plan. Meanwhile, the donors were lining up . . .

We registered 491 donors on September 11th, collecting blood from 390 individuals. Over 200 additional donors were turned away in the parking lot. More than 5,000 calls were logged that day on our phone system. Some waited three hours to donate. Dozens of people volunteered their services to us. Staff worked tirelessly to guide donors through the blood donation stages and, eventually, to process their units of blood. Hundreds of hours of overtime went uncomplainingly into collecting and processing blood on September 11th.

On September 12th, it became apparent that there would not be a need for additional units to be drawn or shipped to New York. Still, in the absence of other relief valves and in an effort to demonstrate support, people came to donate. Many were gently turned away. Many gave pledges to donate in times of future need. So much blood was donated in the three days following the disaster that our needs were filled for weeks ahead. Every blood collection organization in the Country was similarly affected.

Our hearts go out to the victims, their families and loved ones. We will never be the same. We found something out that awful day. We know that when the chips are down, there will be someone there to help us.

Thank you for being a blood donor.



Make A Resolution To Save Someone's Life!

By Michele Gassaway, Community & Media Relations Coordinator

January is a time when the guilt of holiday gluttony overwhelms us and we promise ourselves that this year will be different (or am I the only one that does this? I doubt it!). This year, join me in making a resolution you can keep without lifting dumbbells or strapping on jogging shoes. Make a resolution to save someone's life!

Every day, patients rely on volunteer blood donors to give the gift of life. Donating blood is easy, and this resolution only takes about an hour of your time. If you already donate two times a year, try making it three. If you donate whole blood on a regular basis, recruit a friend to donate with you or give apheresis a try. Learn more about apheresis by turning to page 10.

January is also National Volunteer Blood Donor Month. Q

0

Stanford Blood Center wants to recognize all of our loyal donors. We can't serve patients without you and there's never been a better time to make a promise that makes a difference!

FDA CONSIDERS FURTHER PRECAUTIONS CONT. FROM FRONT COVER

they spent a cumulative total of six months or more in the United Kingdom between 1980 and 1996. At the time this piece is being written, the FDA is considering an expansion of this exclusion to individuals who lived in the United Kingdom for a cumulative period of 3 months or more between 1980 and 1996, individuals who resided elsewhere in Europe for five years or more since 1980, and individuals who received a blood transfusion in the United Kingdom, in an effort to further reduce the theoretical risk of transmitting variant CJD. The FDA wants to ensure, however, that blood supplies will not be jeopardized by this expanded donor exclusion, and will make a final decision on this policy by the end of December 2001. If you have resided in the United Kingdom or Europe, please check with us in January 2002 to determine your eligibility to donate.

We are asking for your help in maintaining a safe and adequate blood supply.

Help us recruit new donors:

Currently, only a fraction of the people who are eligible actually give blood. Please encourage an eligible family member or friend to join you in giving the gift of life. Even if you are not eligible, we hope that you will help us maintain an adequate supply by encouraging others to donate. To help you recruit a new blood donor, we have included an invitation to our Traveler's Club for deferred donors. Cut out the postcard, fill in your name and give the card to an eligible friend or family member. When they bring the card to the blood center, you will both be credited for that visit.

Donate more often:

If you are eligible to donate, we hope you can give more often. Eligible donors can donate whole blood every two months, and platelets 24 times a year. Call (888) 723-7831 today to schedule an appointment.

Blood is needed all year round. Platelets last only 5 days after collection, and red blood cells last only 6 weeks. These precious resources must be continuously replaced.

Thank you for caring. Together, we can continue to save lives. If you

our 'e nts n a	TRAN	Stanford Medical School Blood Center's TRAVELER'S CLUB NEW DONOR INFORMATION- please print Full Name			
fer-					
	DEFERRED DONOR INFORMATION – printed Full Name Address	For an appointment, call 1-888-723-7831 For eligibility questions, call 650-725-9968			
	Phone/email Last date of donation, if known				

have any questions about your eligibility to donate blood, please contact the Stanford Medical School Blood Center Resource Nurse at (650) 725-9968.

> FOR MORE INFORMATION ABOUT FDA POLICIES FOR VARIANT CJD, VISIT US ON THE WEB AT HTTP://BLOODCEN-TER.STANFORD.EDU AND SEE OUR LINKS PAGE. WE WILL LINK YOU TO THE FDA'S GUID-ANCE DOCUMENT.

Stanford Blood Center Welcomes Cardiac Surgeons!

By Jean Stanley, Director of Operations

The need for blood is more important than ever as the Stanford Medical School Blood Center takes this opportunity to welcome two preeminent cardiac surgeons to the Stanford University School of Medicine. Frank L. Hanley, MD, Professor and Chief of the Division of Cardiothoracic Surgery at the University of California, San Francisco and Vadiyala Mohan Reddy, MD, Associate Professor of Surgery and Director of Pediatric Cardiac Surgery at UCSF, joined Lucile Packard Children's Hospital and the Stanford School of Medicine in November.

The Children's Heart Center at the Lucile Packard Children's Hospital at Stanford consists of a team of specially trained physicians, nurses and health professionals who diagnose and treat babies with congenital heart disease and pediatric patients with acquired heart disease. Christopher Dawes, President and Chief Executive Officer of Packard Children's Hospital, states that Dr. Hanley and Dr. Reddy will help establish the children's heart surgery program as a national leader in the treatment of pediatric heart conditions.

With the addition of these two cardiac surgeons, there will be an increased need for blood components to help support the transfusion needs of these children. Red blood cells, platelets, fresh frozen plasma and cryoprecipitate components of all blood types will need to be available. All of these components are prepared from whole blood donations. One unit of whole blood can produce a unit of red blood cells, a platelet, and a fresh frozen plasma or cryoprecipitate. Although many children receive designated donations from family and friends, this is not always possible; therefore donations from our volunteer donors also help support these patients. Every donation counts!

The Stanford Blood Center welcomes Dr. Hanley and Dr. Reddy and looks forward to providing continued support for the transfusion needs of all patients.



Where In The World Have You Been?

By Patricia Stayner, RN, Projects Director Have you ever been stirred by the swaying of palms in a tropical breeze, or heard ancient ruins whispering of lost civilizations from shadowy jungles? Stanford Blood Center medical historians report our donors must be some of the besttraveled in the state! On every visit to the blood center, you encounter the question: IN THE PAST THREE YEARS, HAVE YOU BEEN OUTSIDE THE U.S. OR CANADA? Even though we love to hear about your adventures, and we get into great detail about where you went, and when, and how you got there, that's not the real reason we ask.

What we're after with all that questioning and documentation is whether you have been in an area of the world where malaria is prevalent. Malaria is caused by a protozoa, transmitted by the bite of an infected female Anopheles mosquito. Even today, although rare, malaria remains a medically serious risk of transfusion, and we are required by the Food and Drug Administration to question donors about possible exposure. A blood donor who has been infected with malaria, but who feels well and donates blood, could possibly pass on the infection to the patient who receives their donated blood. Since 1958, blood banks have deferred donors based on possible exposure to malaria and previous illness with malaria to minimize this risk.

In August of this year, our medical historians started asking you verbally about travel in the past three years, even if you marked "no" to the travel question on the History Card. We've found that direct questioning sometimes jogs the memory. It's important that we are able to check all the areas where you've traveled. Our historians have been trained to use a script and decision tree, and to refer to the Centers for Disease Control (CDC) "yellow book" to determine if you've been in a malarial area or not.

If you've traveled to a part of the world where malaria is a risk, we'll ask you to wait to donate blood for a year from the date you returned to the U.S. If you immigrated from a malarial area, or your visit lasted 6 months or more, we'll ask you to wait three years from the date of your return to donate blood. Use the map in the "Where in the World Have You Been" leaflet to help recall all locales you've visited.

If you are temporarily deferred for travel, there may be another way you can keep donating during your deferral period, continuing to help patients. The blood center is an active partner with researchers at Stanford and in the biotech community, providing blood and blood products for many types of research



projects where human blood cells are needed. If your blood matches the needs of a researcher, we will contact you, and you can decide at that time if you want to participate in a research blood donation.

So, remember to recall all of your wanderings when the Blood Center historian asks, "Where in the world have you been?"

Don't Let A Travel Deferral Get You Down!

By Sheila Wolles, RN, Infections Control Nurse

Our donors travel frequently, some travel for long periods of time and many travel to exotic destinations. Unfortunately, there can be a drawback to travel when you're a blood donor. Many donors have returned from their trips to learn that their travel has made them ineligible to continue to donate blood for transfusion purposes. The time frame for travel deferral may be a year (travel to a malarial risk area) or in many cases, indefinite (travel to the UK and/or the rest of Europe for an extended period of time). If you are one of these donors whose eligibility to donate blood for transfusion to others has been affected by travel, you may be interested in donating blood for research.

As a unique blood center with an academic mission, we are pleased to be able to provide medical researchers with much needed blood and blood components to facilitate the development of potentially lifesaving therapies and treatments. We partner with medical researchers at Stanford University and throughout the Bay Area by providing blood products from otherwise healthy, experienced donors who cannot donate blood for transfusion purposes because of travel.

Some of the projects for which

Stanford research donors have provided blood components include validation of new tests to detect infectious viruses, trials of new procedures to inactivate viruses in blood, and the development of tumor vaccines.

Research donations are an important way for you to continue to contribute. As a research blood donor, your donations would be added to your number of donations, and continue to qualify you for donor recognition and events at Stanford Blood Center.

All research blood units are drawn by appointment at one of our two donor centers, located in Mountain View or Palo Alto. If you are interested in our Research Donor Program or have questions, please call Karin Kealoha-Steck at (650) 724-2997. We look forward to seeing many of you who have not been able to donate because of travel return to the Blood Center as research donors.

To learn more about how donors aid research projects, turn to the research section titled Passionate Pursuits, on page 12.

New Clubs For Our Fabulous Donors!

By Jennifer Reczkowski, Center Recruitment Consultant

We've got two new donor programs to announce, and one of them might be for you:



Four Seasons Plus

Many of you are already familiar with our Four Seasons Club. If you donate whole blood four times in a

calendar year, you can receive a great long-sleeved T-shirt! We've just made this club even more fun. Just try donating platelets at either of our Centers and you'll receive a wonderful mug with a new Four Seasons Plus logo! You receive the mug right away, and then you keep your card to continue your donations towards your Four Seasons T-shirt. We've got special cards just for this club, so trade up your Four Seasons card and make it a Plus!

To learn more about platelet donation, also called apheresis, visit our web site at http://blood center.stanford.edu/.



Crimson Donors This program is exclusively for Stanford University faculty, staff, volunteers and students. After donating three times

in a calendar year, you will be awarded a beautiful enamel pin that features this club's special logo – the Stanford block "S" combined with the Stanford Blood Center three hearts logo. For every year that you are an active member, you will be given a bar with the year to add on to your pin. We will be planning special events at our Center on campus for groups at Stanford that are involved in the Crimson Donor program. We also plan to include fun bonuses as incentives for Crimson Donors to continue as active members of the club!

Please send any questions about these clubs or requests for membership cards to Jennifer Reczkowski, Center Recruitment Consultant, at czks@stanford.edu. You can also contact Jennifer if your Stanford group would like to hold a special blood drive event at our Center.

Page 5

Arm Chair Angels





Donors Go For The Gold!

Stanford Blood Center's Annual Golden Donor Breakfast celebrates people who have donated 100 times or more. In 2001, a new platinum level was created for donors reaching their 300th donation. The first donors to go 'platinum' are Eric Buhr, David Mitchell, A. James Roberts, Dick Tagg and John Vonhof.



Phil Edholm, Chief Technology Officer and Vice President, Network Architecture.



Clockwise: Ken Hayes, Real Estate, Western Region; Steve Tabaska, Vice President of Engineering, Xros (A division of Nortel Networks); Dan Pitt, Chair of Technology Center.

Nortel Networks Show Their Support!

Executives blocked off time to donate at our Palo Alto Center after September 11th.

A Moment In History

1937 Bernard Fantus, director of therapeutics at the Cook County Hospital in Chicago, establishes the first hospital blood bank. In creating a hospital laboratory that can preserve and store donor blood, Fantus originates the term "blood bank." Within a few years, hospital and community blood banks begin to be established across the United States. Some of the earliest are in San Francisco, New York, Miami and Cincinnati.

(SOURCE: AMERICAN ASSOCIATION OF BLOOD BANKS/WWW.AABB.ORG)



These Nurses Take Charge

By Mary Hayes, RN, Fixed Site Supervisor The Charge Nurses at Stanford Blood Center are responsible for the smooth flow of any blood collection operation. They are present at all collection sites, monitoring the status and progress of the work going on, and making adjustments in accordance with priorities. Their main goals are donor safety and the safety of the blood product.

All Registered Nurses come to Stanford Blood Center with a wide variety of experience. Some of the nurses have been in blood banking



Charge Nurses

(FROM LEFT TO RIGHT) STANDING: CHIQUI LOPEZ-TECSON, PHYLLIS CASSEL, SIGRID MORRIS, CINDY BOONE AND ANITA TYSSELAND. SITTING: GRACE PENULIAR, RITA KEEFE AND BARBARA COBB. medical field. The individual experiences of each nurse add to the overall knowledge of the group.

There are currently eighteen Charge Nurses. They work at all sites and their weekly schedule could include working in Palo Alto,

Mountain View or on a mobile. Like any collections staff member, they get quite a variety in their work schedule, but they say variety is the spice of life! Look for these names next time you visit with us. Give them a smile, especially on a busy day, and say, "I know you." Then, walk away and keep them guessing. They are: Cathy Benton, Cindy Boone, Phyllis Cassel, Vera Chan, Barbara Cobb, Chris Destro, Barbara Drummond, Mary Hayes, Alison Ianculescu, Mary Jo Jones, Rita Keefe, Chiqui Lopez-Tecson, Mars Mallari, Sigrid Morris, Grace Penuliar, Rhommel Repoldo, Anita Tysseland and Carol Weinrich.



SIGRID MORRIS (LEFT) IS A STANFORD BLOOD CENTER CHARGE NURSE AND HER MOTHER, PAULA LATUSKY, IS A MOBILE BLOOD DRIVE VOLUNTEER.

Volunteering: It's All In The (Blood Center) Family.

By Tessa Moore, Volunteer Services Manager

Who is Sigrid's mom and where will you find her each month? What day does Ruth help in Mountain View and who is her daughter? What family volunteer teams does the Blood Center boast? And how many Stanford Blood Center staff have helped boost the number of volunteers while their teenagers perform community service?

If you answered "Paula Latusky at Lockheed" to the first question you'd be right. Mother of one of our Charge Nurses, Paula has been volunteering at the Blood Center since 1997. She works at the label table on several mobiles each month, but Lockheed and Applied Materials are her favorites. If you're donating blood on a Wednesday morning in Mountain View Ruth Brose, mother of Charge Nurse Carol Weinrich, will make sure you don't faint on her watch.

Hung Wei called me up in August 2000 asking to be label table trained so she could cover for her daughter, Diana Chien, when Diana was unable to make her shift. In the process, she also trained to do canteen and now volunteers on a regular basis at the Welch Road center. Her son David has recently been canteen trained to continue the family tradition.

Robby and July Wang, both Palo Alto High School students, have been helping at the Stanford Medical School Blood Center (SMSBC) since November 2000. Both are label table and canteen trained. July prefers to help mainly in the canteen, while Robby is happier making up bags and at the label table. Brothers George and David Wang, also Palo Alto High students, volunteered over the summer, and David continues in Apheresis. Another sibling team, Jeffrey and Eric Peng, have recently been canteen trained. They are Monta Vista High School students.

In the past year, at least five SMSBC employees have helped fill blood center needs by referring their teenage children to me. Bryan and Sanjay, sons of Deb Hiraki and Shalini Krisnaswamy in the Histocompatibility Lab, respectively, have helped over summer breaks. Darrell Tecson, Chiqui's son, and his cousin Jonathan Lopez, have helped at mobile blood drives over the past couple of years. Chiqui is a nurse and the Mobile Supervisor. Kirsten Kawamoto, Judy's daughter, is a regular during her school breaks.

"It's so nice having my daughter help at the Blood Center", says Judy Kawamoto, Administrative Associate. "Our children always ask us what we do at work and this way Kirsten understands it so much better now. She really enjoys learning about the Blood Center and I love watching her learn and grow as she is volunteering here."

So, do you have a mother, father, son, daughter, spouse, partner, brother, sister, aunt, uncle or cousin who'd make a great SMSBC volunteer? Send them my way because we'd love to have them! Call (650) 723-6795 or email tessamoore@stanford.edu.



A VARIETY OF TASTY FIXINGS WERE SERVED UP TO HUNGRY SINGLES.



DONORS DREW FROM A POOL OF FLOATING DUCKS TO WIN PRIZES.

Singles Take Over Stanford!

By Jennifer Reczkowski, Center Recruitment Consultant On Wednesday, September 5, 2001, volunteer blood donors enjoyed the annual Singles Night

TEMPORARY TATTOOS WITH A TROPICAL THEME PUT PEOPLE IN THE ALOHA SPIRIT. Summer Luau offere One lucky duck of a and won two free tic Mistress of Fun kept tattoos to those getti and staff wore lovely

Summer BBQ held at the Welch Road Center. The Indian Summer Luau offered tropical fun and games with prizes galore. One lucky duck of a donor picked the duck from the prize pond and won two free tickets to Paramount's Great America! The Mistress of Fun kept the games going and gave exotic temporary tattoos to those getting into the Aloha spirit. Volunteers, donors and staff wore lovely leis and listened to Stanford Blood Center's own resident musicians and singers belt out live tunes. It was a lively evening, as 51 donors stopped by to take part in the festivities! We hope the turnout is just as good for our next Singles Night event. Make sure to mark Wednesday, May 29, 2002 on your calendar for the next Singles Night BBQ at the Welch Road Center.

To make an appointment for the next Singles Night bash, please call 1-888-723-7831.

A Moment In History

1900 Karl Landsteiner, an Austrian physician, discovers the first three human blood groups, A, B and O. The fourth, AB, is added by his colleagues A. Decastello and A. Sturli in 1902. Landsteiner receives the Nobel Prize for Medicine for this discovery in 1930.

(SOURCE: AMERICAN ASSOCIATION OF BLOOD BANKS/WWW.AABB.ORG)

Another Way To Save A Life...

Contact Stanford Blood Center's Marrow Donor Coordinator, Diane Hill, and make an appointment to donate blood and request that it be screened for the National Marrow Donor Program (NMDP) Registry. Call (650) 723-5532 or send an email to Diane.Hill@Stanford.edu. For more information about the Marrow Donor Program, log on to the Stanford Blood Center web site, then click the red Donate Blood button on the left side of your screen. This will reveal the gray Marrow Donors button. Click and you're there.

A Moment In History 1840 At St. George's

School in London, Samuel Armstrong Lane, aided by consultant Dr. Blundell, performs the first successful whole blood transfusion to treat hemophilia.

> (SOURCE: AMERICAN ASSOCIATION OF BLOOD BANKS/WWW.AABB.ORG)



DEBORAH SYKES (LEFT) SAVED JUDITH KEMPER'S LIFE BY DONAT-ING BONE MARROW. THEY WERE ABLE TO MEET FOR THE FIRST TIME LAST SUMMER AT STANFORD HOSPITAL'S ANNUAL BONE MARROW TRANSPLANT (BMT) PATIENT REUNION.

Cancer Survivor Meets Her Hero

By June Cooley, Volunteer & Blood Donor

"[The experience] made me appreciate the little things better...because it could be your own family member." That is how marrow donor Deborah Sykes of North Carolina explained what being able to save a life meant to her.

Deborah's marrow recipient was 58-year-old Palo Alto resident Judith Kemper. Patient and donor met physically for the first time at the July 28, 2001 Bone Marrow Transplant Patient Reunion, an annual event put on by Stanford Hospital. The 44-year-old Sykes was accompanied by Stephen her husband; Jeanne Edwards, her daughter; and Maxine Carey, her mother. Both mother and daughter are also blood donors.

Diagnosed with acute myeloid leukemia in the fall of 1999, Kemper faced the prospect of not being eligible for a transplant due to her age. Fortunately for Kemper, Stanford was doing a study of a new transplant method - a non-myeloablative transplant that was not supposed to completely destroy a patient's immune system. Kemper was a candidate for that procedure because of her age, this time. Now all she needed was a matching donor.

When a related match within her family could not be found, a search was made of the National Marrow Donor Program (NMDP) Registry, which turned up five potential donors. Whole blood donor and eventual marrow donor Deborah Sykes of North Carolina was among the five. Deborah received the call that she might be a match for someone in January of 2000. By March, further testing had determined that she would be Judith's donor.

Peripheral Blood Stem Cell (PBSC) collection would be the method used to harvest Deborah's marrow. It is the newer of the two stem cell collection methods. For five days, Deborah received daily injections of the drug Filgrastim, a medication that causes one's bone marrow to release more stem cells into the bloodstream, where the cells can be collected via apheresis. The injections produced only minor bone pain, so Deborah went about her normal activities. At the end of the five days, the marrow was collected in two lengthy apheresis sessions each taking about four hours.

On March 1, 2000, her grandson's birthday, Judith received the marrow. Henceforth, two birthdays would be celebrated on March 1: Tate's birthday and Judith's "rebirthday." When the match was found, Judith had but two months to live.

Like nearly all transplant patients, Judith received blood and platelet transfusions throughout the course of her illness.

Now some 18 months after the transplant, Judith is alive, well, and has Deborah's blood type. She is no longer borderline anemic and can do the hiking she so much enjoys. The meaning of Deborah's gift is definitely not lost on Judith: "She saved my life...without her, I would not be here."



The Blue Platelet Special



Mars M. Mallari

New Face In Apheresis

Mars M. Mallari is Stanford Blood Center's new Apheresis Supervisor. He came from the Puget Sound Blood Center in Seattle, WA. For seven years, Mars worked in various departments there, including Apheresis, Collections (whole blood and autologous), Quality Assurance, Therapeutics and Research. He went where he was needed the most! Previous to that, Mars was with the County Department of Health for two years seeing patients for their medical needs.

Born in the Philippines, Mars finished nursing in Albany, New York and then Medicine and Surgery at Saint Louis University in the Philippines. His wife, Veronica, is also from the Philippines and a fellow medical graduate. Currently, she cares for their three boys: Marverick (11), Marc (10) and Miko (7).

So the next time you bump into Mars, give him a warm welcome.





APHERESIS STAFF AND THEIR CHILDREN NEVER MISS THE OPPORTUNITY TO GET DRESSED UP ON HALLOWEEN.

What's Apheresis Got To Do With It?

By Kent Anderson, Stanford Student with the Community Service Writing Program What is apheresis? And why is it so important? Apheresis is the separation of blood components from whole blood through centrifugation (rapid circular motion that divides liquid by weight). Typically, whole blood donations are separated into their components in a laboratory. Now, blood banks, such as the Stanford Blood Center, can use machines to simultaneously withdraw blood and separate it into its components. The donor's height, weight and platelet count are programmed into the cell seperator, and the machine's on-board computer automatically optimizes the process. As blood is drawn from the donor, the needed component (either platelets, plasma, red cells or white cells) is removed and then the remaining fluid and cells are returned to the donor. Apheresis is an extremely efficient process. It allows a single volunteer the ability to donate enough platelets for two or even three recipients, plus plasma

and even red blood cells in certain circumstances. It takes six whole blood donations to contribute the same amount of platelets as one apheresis donor, giving a single platelet product.

Use of Apheresis machines has increased in recent years as the technology constantly improves. In the past, the process of cell collection and return to donor took about four hours. Now, a donation only takes a little over an hour. In addition to issues of time, the quality of donations has improved, as better technology provides finished blood components. In particular, most apheresis donations are now leukoreduced, since white blood cells and their antibodies can cause problems for the transfusion recipient.

The importance of apheresis technology is that it makes the most of a donor's time. While whole blood donors can only give blood once every eight weeks, people looking to share their platelets may do so every two weeks. But despite all of these benefits to apheresis collection, new apheresis donors are still needed. The Stanford Blood Center currently has 1600 active apheresis donors, compared to about 20,000 whole blood donors. People may be hesitant to give apheresis donations because of the use of machines, which seem to deter a similar percentage of people as does the "fear of needles." Nonetheless, apheresis technology continues to improve, and the use of advanced machines such as the Amicus and Trima to collect specialized, finished blood products becomes more and more the golden standard.



Working Together Works Better

By Patricia Stayner, RN, Projects Director Over the past five years, Stanford Blood Center Apheresis has moved from single platelet procedures taking up to two hours, to multiple component procedures taking an average of only an hour and 20 minutes. Apheresis donors' time is precious, and new technologies allow us to collect finished blood products in less time. We want to make the best use of your valuable time, and assure you on each visit that you have given exactly what patients need that day.

As we move forward into 2002, we are implementing plans to streamline, tailor and expand our apheresis operations at Palo Alto and Mountain View. Here are some of the changes you may notice in the coming months:

COBE Spectra machines at Mountain View have been changed out for smaller, faster Baxter Amicus instruments. Amicus has been in use at the Palo Alto center since January of 1998, and is a very efficient platelet collection device. Mountain View apheresis donors will become a primary source of platelets for patients at the hospitals we serve.

Appointment times will be added in Mountain View to accommodate the large number of donors interested in donating platelets at that location, and hopefully to reduce the wait for an appointment.

Palo Alto apheresis donors will have the opportunity to donate plasma and/or red blood cells in addition to platelets during their apheresis procedures, based on patient needs that day. Both Amicus and the COBE Trima instruments allow plasma to be collected along with platelets, and Trima also allows us to collect a unit of packed red blood cells at the end of the platelet or platelet/plasma procedure.

The blood center will convert its frozen plasma inventory to 100% apheresis plasma over the next two years, plasma of a higher quality and in more consistent quantity than that derived from whole blood collections.

Red Blood Cells will be collected along with platelets whenever possible to supplement those obtained from whole blood donation. Our goal is to increase the apheresis red cell units collected from an average of 80 to an average of 100 units per month.

Appointment times and staff scheduling will be streamlined to assure continued high quality care for donors, and that components are delivered to the laboratory when needed.

• Your blood type will become more of a factor in the procedure selection process—you will begin to hear us talk about your blood type in terms of how you can best help patients.

Whole blood donors will be encouraged to try apheresis by joining the Four Seasons Plus club. See page 5 for details.

As we move ahead with these and other plans, we are grateful to you, the apheresis donor, for allowing us to help you help patients. Your ideas and comments are always welcome!

Step Up To The Platelet

To learn more about becoming an apheresis donor and to make an appointment, please call (650) 723-7831. Also, log on to the Stanford Blood Center web site, then click the red Donate Blood button on the left side of your screen. This will reveal a gray Platelet Donors button: click for more information.

A Moment In History

1628 English physician William Harvey discovers the circulation of blood. Shortly afterward, the earliest known blood transfusion is attempted.

(SOURCE: AMERICAN ASSOCIATION OF BLOOD BANKS/WWW.AABB.ORG)

Passionate Pursuits



Blood Donors Aid Research Projects

By Julie Rae, Scientist II at DNAX

DNAX is a biotech company whose mission is to discover new medicines that will address some of the major unmet medical needs that confront doctors and patients today. The two areas of emphasis are oncology and immunology. While much of the effort at DNAX in the immunology field has focused on T and B cells (or lymphocytes), new work is being launched studying another critical white blood cell, the neutrophil. These cells, also known as granulocytes, are responsible for fighting bacterial and fungal infections and comprise 60-70% of all the white cells in the human body. While these cells have the ability to kill bacteria and fungi, they are quite fragile once taken out of their natural environment in the blood.

To perform experiments in the lab with neutrophils, we must get fresh blood, isolate the cells and conduct the experiments on the same day. The Stanford Blood Center and its donors have been an invaluable resource for these important studies. While blood used for research protocols must still meet strict safety criteria, they are less restrictive than those for blood used for transfusion into humans. This may allow previously deferred donors to be able to contribute.

Many of the novel molecules discovered at DNAX as part of its applied genomics program have yet to be studied for their effects on neutrophils. With freshly purified cells we are able to mimic in the laboratory some of the functions that these cells have in the body. These include chemotaxis (the directional movement of these cells to the site of infection) and oxidative metabolism (the process in which the cells generate potent antibacterial chemicals such as hydrogen peroxide and hypochlorous acid - the active ingredient in bleach!). While much is known about how neutrophils function, ongoing research will lead to new discoveries that will shed light on the way in which these cells participate in health and disease. Donating blood through the Stanford Blood Center and allowing it to be used for research will assist in the quest for new medicines that will improve, and very likely save, countless lives.

A New Treatment For Cancer

By Lisa Jakobovits, Stanford Student with the Community Service Writing Program Dr. Edgar Engleman, M.D is currently using blood donations to find a safe and effective cancer treatment. Stanford Blood Center is unique in that it integrates its research activities with the blood bank, thereby supplying scientists with blood components they need for investigations. Once blood is drawn from a patient it is divided into four components: plasma, platelets, and red and white blood cells. It is also possible to donate only one of the four components using apheresis. Dr. Engleman uses white blood cells in his research, which are responsible for regulating the body's immune system.







Cancer is dangerous because the body's immune system does not recognize cancer cells as abnormal, and therefore does not attack them. Dr. Engleman's research has been in trying to discover a way to "help" the immune system recognize and destroy malignant cancer cells.

His research has primarily involved dendritic cells – a type of white blood cell. Dendritic cells reside in the skin, lungs and mucus. The presence of a foreign substance within the body activates these dendritic cells, and they respond by traveling to the nearest lymph node. In the lymph node, dendritic cells come in contact with T-cells. Dendritic cells train these T-cells to recognize the foreign body, and also stimulate them to produce small proteins called cytokines that attack the foreign body. Dendritic white blood cells are therefore crucial to the process of identifying and destroying infectious agents and cancer.

Dendritic cells comprise only 0.5% of all white blood cells. Dr. Engleman's first task was therefore to isolate these dendritic cells. Once this was accomplished, he was able to experiment with them in vivo. Dr. Engleman's hope was that if he inoculated the isolated dendritic cells with cancerous tumor cells, or substances derived from such cells, that they would become trained to recognize tumor cells as foreign. He then planned to inject the dendritic cells back into the donor patient's body via a blood transfusion. The dendritic cells would activate the T-cells which could destroy the cancer cells.

Dr. Engleman first tested this idea with the AIDS virus. He isolated dendritic cells in a test tube, and then added a protein derived from the AIDS virus. In this experiment the dendritic cells were able to learn that the protein was foreign, activating the T-cells to recognize the AIDS virus.

These results were promising, and in collaboration with Dr. Ronald Levy, Chief of Oncology at Stanford, Dr. Engleman decided to test the effectiveness of pretreated dendritic cells on six patients with malignant lymphoma. All six patients had tried, but not benefited from, traditional cancer treatments. He extracted dendritic cells from each individual, and exposed their cells with a sample of their own cancerous cells. Only a small sample was needed, because each cell within a tumor is identical – each is a clone of a single malignant cell. Therefore, if a dendritic cell learns to recognize one tumor cell it will recognize every cell of the tumor.

Upon following up with these six patients, Dr. Engleman discovered that in two patients the tumor had completely disappeared. In another two, the tumor had stopped growing. The last two showed no response to the treatment. Recently, Dr. Engleman has also performed the treatment on patients with colon and prostate cancer, and had similar results. All of his patients had previously undergone alternate medical treatments without success.

Dr. Engleman's approach has generated a lot of excitement, and is currently being developed in many parts of the world. Through the manipulation of dendritic cells, scientists are attempting to create an immune response to cancer where one did not previously exist. If this treatment is successful, it will become a revolutionary practice that is both safe and free from side effects. The discovery will be partly in thanks to Stanford Blood Center donors, whose blood was used to pioneer this life-saving procedure.

"The true meaning of life is to plant trees, under whose shade you do not expect to sit."

-NELSON HENDERSON



Vampire Bites

Glossary Of Terms

DENDRITIC CELLS: specialized white blood cells whose function is to formally present foreign proteins to the body's immune system

IN VIVO: inside a living organism, as opposed to 'in vitro' which means 'in glass' or outside a living organism.

LEUKOREDUCED: a blood product in which the white blood cells have been removed by filtration or centrifugation to or below the level prescribed by the Food and Drug Administration.

Non-MyeloABLATIVE Transplant: in preparation for transplant, the patient's bone marrow is often "wiped out", and the transplanted cells completely replace the patient's diseased bone marrow. In a non-myelo ablative transplant, the patient's marrow is not destroyed, and the transplanted cells act to fight the patient's diseased cells.

PROTOZOA: a one-celled microscopic organism

SMSBC: acronym for Stanford Medical School Blood Center, pronounced "smiz-bik".

BMT: bone marrow transplant

LYMPHOCYTES: a type of white blood cell with one nucleus constituting 20 – 28% of all white blood cells.

GENOMICS: the science of chromosomes and their associated genes

HEMOGLOBIN: the red blood cell protein that contains iron and carries oxygen to body tissues

LABEL TABLE: the station in the blood drawing area where the blood bag, tubes and paperwork are labeled with unit numbers and other required tags and labels

CRIMSON CLUB: a donor club especially for Stanford University faculty, students and staff

Word Search

Find the capitalized words from the Glossary of Terms.

A C U C A H T R B B R В A K A Q S Р Е Е S F Ο O N Ι R Ο Т S С ΙΜΟΝ ΕG Т Р Е GΟ L ΕN Κ ΕU Ζ Ι QΗ Т Ν Η R Т S D Ν L Ν L Α Ο UΜ Υ E Т А Ι Е Ο LΝ D Ν Т ΥO С МС Е L R U U А Е I E 0 S 0 0 E В Ι Υ ΚU NCCERHG Р А S R S R A U В L Ο D Т Р L M L ХО Е Т R Т Р Т Ν ХО Μ 0 С ΕV S А L EHC D Y Ι В Μ Е R Т Т D Ν Ι U Ι V С L Ι В Ο S В S E L Е V L Ι А U Ν А S M N Ι U Ι С R В RC А А R F S Т S С А Е Е М Ι D L Ν Ζ Ι R Ι R В А EHROE L L D ΕY A S Ζ R R L Е ΟU S Р Ι S C N T A С L BNRI E S M S D A G S U O C R Т Q M Ι A IJ А S M S B C H R O M Z Т А

Calling All You Creative Cats...

Are you a great cook, cool cartoonist, or wacky wordsmith? We could use your talents in our next newsletter. Help donors boost their hemoglobin levels by sending in a healthy recipe that is loaded with iron. Draw a funny cartoon about the Blood

Center. Put your wit to the test with a poem. Or come up with your own way to entertain us.

The sky's the limit. Send your fun stuff to:

Stanford Blood Center Attention: Newsletter 800 Welch Road Palo Alto, CA 94304 or email them to: mgassaway@stanford.edu







Here's a succulently sweet dinner without guilt. It's easy to make and perfect for a low-fat menu.

Sweet & Sour Shrimp With Oranges (5-A-Day)

- 1 medium onion, coarsely chopped
- 1 medium green bell pepper, coarsely chopped
- cup ketchup (no salt added) 3/4
- Grated peel and juice of 1/2 Sunkist lemon
- tablespoon cornstarch 1
- 3 tablespoons brown sugar
- 1/2 cup fresh squeezed orange juice
- 1/4teaspoon ground ginger or 2 teaspoons fresh grated ginger root
- 3 Sunkist oranges, peeled, cut into bite-size pieces Small to medium cooked shrimp, with tails and shells removed (about 7 ounces)
- 3 cups cooked rice (no salt added) Chopped cilantro or parsley

In large non-stick skillet, sprayed with no-stick cooking spray, cook onion and green pepper over medium-high heat until tender but not browned. Add ketchup, lemon peel and juice. Blend cornstarch and sugar with orange juice and ginger; add to sauce. Cook, stirring until thickened. Add orange pieces and shrimp; heat. Serve over hot cooked rice. Sprinkle with chopped cilantro. Serve with lemon wedges, if desired.

NUTRITION INFORMATION FOR ONE SERVING: 365 CALORIES (3% FROM FAT, 1% FROM SATURAT-ED FAT), 14 G PROTEIN, 1 G FAT, 77 G CARBOHY-DRATE, 81 MG CHOLESTEROL, 110 MG SODIUM, 4 G DIETARY FIBER, 691 MG POTASSIUM, % DV-VITA-MIN A-10%, VITAMIN C-163%, IRON-19%. Makes 4 servings.

RECIPE COURTESY OF SUNKIST GROWERS, INC.

Scarlet Letters

Letters to the editor:

We Want To Hear From You! Share your thoughts, feelings and stories about the

Stanford Blood Center, or let us know about an experience that you've had with us. Donors, volunteers, staff and friends of the Blood Center are invited to write letters that may be published in our next newsletter. This is a special section in the publication that will give YOU a voice. Did someone treat you with extra care? Do you have a question, comment or maybe just a fun anecdote? Please share it with us! Send letters to:

STANFORD BLOOD CENTER ATTENTION: NEWSLETTER 800 WELCH ROAD PALO ALTO, CA 94304 OR EMAIL THEM TO: MGASSAWAY@STANFORD.EDU

Please limit letters to no more than 300 words. Letters may be edited.

To the Stanford Blood Center,

I love the Stanford Blood Center. The volunteers and staff are very kind. I feel good about giving blood because I know I am helping someone else. I also look forward to the wonderful juice and cookies. I think everyone should donate blood on a regular basis. I personally consider it a part of life. Sincerely,

Kathleen Judge-Hardin

A special thanks to the following people who contributed to the newsletter:

Susan A. Galel, MD, Associate Medical Director Vince Yalon. Administrator Jean Stanley, Director of Operations Patricia Stayner, RN, Projects Director Sheila Wolles, RN, Infection Control Nurse Jennifer Reczkowski, Center Recruitment Consultant Tessa Moore, Volunteer Services Manager Mary Hayes, RN, Fixed Site Supervisor Michele Gassaway, Community & Media Relations Coordinator June Cooley, Volunteer & Blood Donor Kent Anderson. Stanford Student with the Community Service Writing Program Lisa Jakobovits, Stanford Student with the Community Service Writing Program Julie Rae, Scientist II at DNAX Jennifer Allen, Community Relations Manager at Nortel Networks

STANFORD BLOOD CENTER 800 WELCH ROAD PALO ALTO, CA 94304

STANFORD BLOOD CENTER OF MOUNTAIN VIEW 515 SOUTH DRIVE, SUITE 20 MOUNTAIN VIEW, CA 94040

APPOINTMENTS:

(650) 723-7831 OR	(888) 723-7831		
RESOURCE NURSE:	(650) 725-9968		
ADMINISTRATION:	(650) 723-7994		
FAX:	(650) 725-4470		
Web site: http://bloodcenter.stanford.edu			

STANFORD BLOOD CENTER DONOR HOURS

WHOLE BLC	OD DONA	TIC	NS –
Palo Alto Cer			
Monday	9:00 am	_	5:30 pm
Tuesday	9:00 am	_	5:30 pm
Wednesday	9:00 am	_	5:30 pm
Thursday	Noon	_	7:30 pm
Friday	Closed		
Saturday	8:00 am	_	12:00pm ³
(*open 1st &	3rd Saturd	av s	s only)

WHOLE BLOOD DONATIONS -

Mountain View Center			
Monday	9:00 am	_	5:30 pm
Tuesday	Noon	_	7:30 pm
Wednesday	9:00 am	_	5:30 pm
Thursday	9:00 am	_	5:30 pm
Friday	9:00 am	_	5:30 pm
Saturday	8:00 am	_	12:00 pm

APHERESIS DONATIONS -

Palo Alto		
Monday	12:30 pm –	6:30 pm
Tuesday	12:30 pm –	6:30 pm
Wednesday	7:00 am –	1:00 pm
Thursday	12:30 pm –	6:30 pm
Friday	7:00 am –	1:00 pm
Saturday	7:00 am –	1:00 pm

APHERESIS DONATIONS -

Mountain View			
Monday	1:00 pm	_	6:30 pm
Tuesday	Closed		
Wednesday	Closed		
Thursday	1:00 pm	_	6:30 pm
Friday	Closed		
Saturday	7:30 am	_	1:00 pm

Palo Alto and Mountain View Centers closed Sundays and Holidays.



BLOOD BANK SPECIALIST VICKIE WU PREPARES TO DRAW A PINT FROM ADRIAN BURROWS AT THE LOCKHEED MARTIN BLOOD DRIVE LAST AUGUST.

> NONPROFIT ORG. US POSTAGE PAID PALO ALTO, CA PERMIT NO. 28



STANFORD MEDICAL SCHOOL BLOOD CENTER

> Stanford Blood Center 800 Welch Road Palo Alto, CA 94304