

IN A DIFFERENT VEIN

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PRESIDENT'S MESSAGE

By Suzanne Butch, MA, MT(ASCP)SBB



As we begin our 2009 MABB year, there are economic challenges at work and at home. The MABB will continue its education programs and make them as cost effective as we can. The Education Committee is in full gear planning sessions

throughout the state (my apologies to those above the bridge) that focus on timely topics and issues. Look for announcements on the MABB web page and in your email. The 55th Annual Meeting Program committee is hard at work planning our annual meeting. Mark your calendar for September 16th & 17th, 2009, at the VistaTech Center in Livonia. The Board will do a strategic plan this year to guide us through the next few years.

If you have not done so already, please pay your 2009 dues and support the MABB and its mission to the profession. Your individual and institutional dues play an important part in our financial plans.

Although some committees are already hard at work, it is not too late to volunteer if you are if you are interested in serving on a committee. Just let me know. Keeping involved increases your networking contacts as well providing a service to the membership.

The task of updating the web site is in progress. Your thoughts on new features and what to include will be greatly appreciated.

I look forward to working with you this coming year.

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HOLD THE DATE

**55th MABB
Annual Meeting:
September 16 -
17, 2009**



PRESIDENT'S MESSAGE – Fall 2008

By Laura Cooling, MD, MS

It has been a privilege and honor to serve on the Board of Directors and as 2008 President of the MABB. Once in a while I have to remind myself of how truly unique and lucky we are in the state of Michigan (excluding the current economy, of course). In my home state of Iowa, there has not been a state blood bank association for several decades and very little networking with colleagues in other parts of the state. We should feel great pride that here, in the state of Michigan, there is a large body of talented, engaged and passionate blood bankers. In addition to our annual meeting, we have provided educational opportunities via local “RAP” sessions, PACE credit offerings and the reemergence of the spring wet workshop.

We should not rest on our laurels, however, but should strive to improve the involvement of our members—on committees, as speakers and as new leaders for our organization. We need to identify and recruit new members to the organization, including students and recent graduates of medical technology programs. We need to broaden our appeal to a changing work environment, where blood banking is no longer performed by 1 or 2 dedicated staff members but has become a “core lab” activity performed by generalists. Finally, we need to persist in our efforts to increase our membership and involvement in the western and northern parts of our state.

These goals will not be achieved by the Board of Directors but are the responsibility of all our members. I challenge you to become involved in an MABB committee or event, to recruit a new member or invite an old member to rejoin, to make this year’s annual meeting the largest attendance to date.

QUIZ – Do You Remember...?

Submitted by Sandra Hoffmann, MT(ASCP)SBB

Answers may be found in the Technical Manual, 16th Ed, AABB.

1. The Duffy glycoprotein is a receptor for the merozoites of what parasite?
2. When a plateletpheresis is performed more than once every 4 weeks, what is the platelet count of the allogeneic donor required to be?
3. _____ is defined as a venous hematocrit greater than 65% or hemoglobin greater than 22g/dL at anytime during an infant’s first week of life.
4. The H antigen is expressed on all red cells except which rare phenotype?
5. What does the acronym TRIM stand for?

Answers on page 11...

2008 ANNUAL MEETING SCRAPBOOK



WHAT'S THE BIG DEAL ABOUT LEAN & SIX SIGMA?

By Sue Kozlowski, MT(ASCP)SBB DLM, CSSBB(ASQ)
Manager, Performance Improvement, Henry Ford Hospital

Many healthcare organizations are starting to use Lean and Six Sigma concepts for process improvement. If you're not already familiar with these methodologies, here's a quick overview and primer.

When Toyota began to make automobiles after World War II, they sent a few young engineers to visit Henry Ford's Rouge plant to learn about assembly-line construction. After returning to Japan, they started to design their automotive plant and in the process developed the method that they called the "Toyota Production System." They also introduced quality concepts developed by W. Edwards Deming. Curious about how Toyota was able to increase quality and reliability of their cars, American researchers from MIT visited their factories in the mid-1980's and called the process a "Lean" methodology, meaning that the goal was to have no waste in the process.

Also in the mid-1980's, Motorola engineer Bill Smith was becoming concerned with the way that quality was being measured. Typical processes were expected to have about 93% efficiency, using a +/- 3 Standard Deviation limit (the same as used for many QC processes today in the clinical laboratory). Bill felt that the quality limits should be +/- 6 Standard Deviations, which would translate into an efficiency rate of 99.99966% or about 6.4 defective products per million. This is the origin of the term "Six Sigma." Motorola used statistical analysis to determine which process factors were "Critical to Quality," and then worked to systematically eliminate any variability in those factors that could result in a defect.

Other manufacturing companies began to adopt these methodologies. Service industries also became interested in using Lean and/or Six Sigma. While human services are not as repetitive as manufacturing processes, the concepts can be useful when translated and applied according to the process being studied.

Hospitals and healthcare service organizations began using Lean and/or Six Sigma in the 1990's. While it may seem that some have adopted the Toyota approach entirely - the Virginia Mason Medical Center calls its initiative the "Virginia Mason Production System" - others have adapted the methods to processes such as admission and discharge of inpatients and laboratory specimen flow. Typical healthcare processes tend to run at about a 1 Sigma level - that is, at about a 31% efficiency for a total process (for example, physician writing a lab order through physician receiving accurate results, within a set time period), so there seems to be plenty of opportunity for both Lean and Six Sigma!

Many of the hospitals and health systems in Southeastern Michigan are using a combination of Lean and Six Sigma tools. Some have developed a cadre of "Black Belts" and "Green Belts" as experts in Six Sigma are called; others have positions titled "Sensei" which is the term used for a master teacher and practitioner of Lean. Others keep the traditional titles of Performance

Continued on Page 5...

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Improvement, Quality, or Process Engineering. The steps and concepts will look familiar to anyone who has used Plan-Do-Check-Adjust or Total Quality Management tools, but the way the projects are organized helps to develop effective, lasting solutions when properly applied.

Hallmarks of Lean and Six Sigma methods include starting with the "Voice of the Customer" and using that data to set process targets; mapping and measuring the process as it actually happens (rather than as it looks in the SOP); analyzing the steps of the process to identify where waste or rework occurs; eliminating the waste and rework so that the process can become more reliable and more accurate (in other words, producing fewer "defects" as defined by the customer); and using statistical tools as appropriate to monitor the process and make sure that the improvements are sustained.

More information can be found on-line. Try www.isixsigma.com and www.lean.org to start. Also, there are thousands of books available - try your local library before buying expensive hard-covers, or maybe your hospital library has them.

If your laboratory or Blood Bank is using Lean and/or Six Sigma tools, we invite you to write in to "In a Different Vein" and share your experiences. Contact Jim Fiedor at 313-966-2942 or jfiedor@dmc.org. For more information, please see the last page of this newsletter.

CAT & DOG BLOOD

By Meredith Hoag, MT(ASCP)

U of M Blood Bank

One thing I've noticed working in Blood Bank is quite a few of my co-workers have dogs or cats. We speak of them every day, especially the funny stories, as they are a big part of our families. Being a blood banker, I began to question information about dog and cat blood types, if they donate, how, when, and why. I thought I we could step aside from our everyday "human work" and turn to our pets with some data.

There are 6 dog blood types, but some documents claim there are up to 12 (some are very rare). These blood types are categorized under the "DEA" system, which means Dog Erythrocyte Antigen. Each blood group starts with the letters "DEA," and then is followed by a number. They are: DEA 1.1, DEA 1.2, DEA 3, DEA 4, DEA 5, and DEA 7. These blood types have proteins and carbohydrates on the surface of the red blood cells that determine the blood type.

The "universal donor" is a donor dog who tests positive for only DEA 4. Dogs that are also negative for DEA 1.1 and the majority of the other blood types are also considered universal donors. Donor dogs are generally required to be healthy, happy, greater than 60 lbs, between 1-6 years old, and most importantly, are able to lay still for 10 minutes. Donor dogs can donate every 2 months and about 450 mls (2 cups) are collected from the jugular vein. After donation, dogs get treats, praise, and a high energy meal.

After collection, as with human blood, whole blood is spun in a centrifuge to separate red cells and plasma. A donor dog can help 4 other dogs out of one collection, as 2 packed red blood cells and 2 fresh frozen plasma are produced out of a whole unit. The RBCs can be refrigerated for 5 weeks and FFP frozen for a year.

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Continued from Page 5...

Donor blood is screened for infectious diseases and acceptability. These tests include: CBC, biochemical profile, urinalysis, fecal exam, test for vonWillibrand's factor and diseases such as *Babesia*, *Brucella*, and *Bartonella*. Heartworm, parasite preventatives, and vaccines should all be up to date.

Dogs rarely have antibodies against other blood types, yet crossmatching is recommended, especially if the dog has been given multiple transfusions or has previously whelped/bred (previously pregnant), to err on the side of safety.

Reactions are rare in dogs, as most have never had a transfusion, and may only need one. However, if there is a reaction, it generally consists of a fever and mild facial swelling.

Cat blood types are a bit more interesting and easier to relate to human-type blood banking, reactions, etc. Felines have 3 blood types, which are A, B, and AB (rare). Type A comprises 90%-95% of cats. There is no universal donor blood type in cats, due to naturally occurring isoantibodies against the opposite blood type. Interestingly, if a type B cat gives birth to type A kittens, the kittens can have severe reactions due to the mother having strong antibodies against type A blood, which would be passed on through the mother's milk. This destruction of the kitten's red cells is called neonatal isoerythrolysis. An alarming fact is if less than 1 ml of type A blood is given to a type B recipient, the cat could have a fatal transfusion reaction.

Feline donors must be healthy, happy, greater than 10 lbs (better yet >12 lbs), between 1-6 years old, and friendly and easy to handle. Cats can donate every 3 months. Unfortunately, donors must be anesthetized during donation, as they are difficult to keep still. Blood is collected from the jugular vein, and surprisingly, a cat can donate up to 20% of their total blood volume! A 10 lb cat can donate 55 mls of blood, which is separated into one unit of plasma and one unit of RBC's.

Screening for infection diseases and acceptability include: CBC, biochemical profile, urinalysis, fecal exam, thyroid hormone, *Mycoplasma hemofelis*, and *Bartonella*. Feline donors should also be kept indoors only and vaccinations should be up to date.

Crossmatching consists of a major and minor crossmatch. Antisera is not used. A crossmatch is as simple as mixing donor RBC's with recipient serum (major) and recipient RBC's with donor serum (minor). Hemolysis or agglutination shows incompatibility. Microscopic exams are completed for proof of an apparent visual compatible crossmatch.

It's good to know that blood transfusions are available if our pets ever need them. Some facilities for animals go through much of what we do as blood bankers. For more information on donating and programs you can go to the following references.

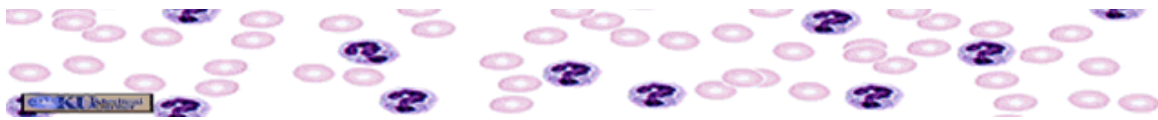
References:

www.vet.utk.edu

www.vetmed.wsu.edu

www.chastainvets.info

www.cvm.msu.edu



Answer the abbreviations/words/numbers to see what the circles reveal.

Submitted by
Meredith Hoag,
MT(ASCP), U of M
Blood Bank

- Test that proves if red cells are coated in vivo. ___ ___
- An anamnestic reaction response to a transfusion. ___ ___ ___
- The “green” stuff. ___ ___
- Risk for baby when Mom gets no Rhogam. ___ ___ ___
- A₁, A₂, and A_x are examples. ___ ___ ___ ___
- Any Duffy antibody ___ ___
- An antibody & a religion ___ ___ ___ ___ ___
- Not plasma, but... ___ ___ ___
- Might be this if DAT is positive ___ ___ ___ ___
- Universal donor ___ ___ ___
- Used for cell suspension & a fine city near Ann Arbor. ___ ___ ___ ___ ___
- RhoGAM® ___ ___ ___
- An enhancement media and a girl’s name. ___ ___
- A Kidd antibody ___ ___
- One “ingredient” in polyspecific AHG. ___
- The anticoagulant in a lavender or pink top. ___ ___ ___
- Any immunoglobulin. ___ ___
- The most famous blood group. ___ ___
- Cells that lack multiple antigens in one blood Group system ___ ___ ___

Answers on page 11...

Michigan Association of Blood Banks (MABB)

ANNUAL MEETING MINUTES

September 17, 2008

Meeting was called to order by Dr. Laura Cooling at 1:20 pm.

INTRODUCTION:

Dr. Cooling stated the many features of the MABB for which we have to be proud. It has been a good year for our educational activities, and we have resurrected the Spring Wet Workshop. With 120 members, we rival other organizations, such as New York State Blood Bank Society, with our spectrum of educational activities.

FINANCIAL REPORT:

Treasurer Terry Downs reported income from corporate donors, exhibitors' fees, lecture sponsorships, meeting registrations, dues from physicians, institutions and individuals. The current fiscal year was compared to the previous fiscal year and annual meeting of 2006. Last year, attendance of the 2007 meeting had fallen from the previous year due to staffing constraints, driving costs and reimbursement limitations. Also, a large \$3000 donation of the 2006 meeting was not repeated by one vendor. RAP sessions and the Spring Workshop brought in revenue. Dividend income is down as it fluctuates with the stock market. Annual dues were up from the previous year.

Expenses include the costs of the annual meeting, with rental of the Schoolcraft College Vista Center, hotel accommodations for our speakers, honoraria, airline fares, printing costs and postal charges of brochures. Expenses for the educational committee to arrange the RAP sessions and Spring Workshop are much lower relative to the annual meeting expenses. The rental cost of hotel rooms almost doubled last year. One airline flight was cancelled, necessitating an additional night for a hotel accommodation. Operating expenses decreased as compared to the previous fiscal year. In the 2006 fiscal year, our new administrative assistant required new equipment and now with those purchases in place, operational expenses have leveled off.

For the 2007 fiscal year, we had a negative margin of \$2195.07. We will be moving a substantial amount of money from the checking account into the Dreyfus money market account. Bank charges, related to the checking account and to providing credit card capabilities to our attendees at the annual meeting, were explained. The Sheikh Saeed Scholarship had no applicants for the last two years.

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VISIT US ONLINE AT
www.mabb.org

Announcements - Newsletter - Upcoming Events -
Job Postings - Contact Information - RAP Sessions
- Useful Links - Photo Gallery - Meet the Board -
Membership Information

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EDUCATION COMMITTEE:

Terry Downs, Chair of the Education Committee, reported on the complete success of the Spring Wet Workshop, the first held in a few years. Various methodologies of antibody identification (tube, solid phase and gel), were well received by participants. Everyone including the supply vendors valued the experience. There is demand in the state for more of these programs. We will try to continue offering the Spring Workshops on either an annual or biannual schedule.

Two upcoming RAP sessions will be given by Dr. O'Malley and Sharon Lowry on Transfusion Reactions. The first will be a luncheon session in Gaylord, Oct. 24th and the second will be a November 5th dinner session in Southfield for Southeastern MI.

Kathryn Watkins and Michele Tuson will co-chair the Education Committee in the upcoming year.

ACCEPTANCE OF THE ANNUAL MEETING MINUTES 2007:

The meeting minutes of 2007 were published "In a Different Vein" and the general consensus was acceptance of last year's minutes. Minutes of the current meeting are being recorded by Barbara O'Malley, Secretary.

MEMBERSHIP COMMITTEE:

Ann Steiner reported that more blood banks are relying on coverage by Medical Technologists who are generalists, rather than dedicated blood bank staff. Many have an interest in acquiring more education about blood banking in order to increase their comfort level when rotating in the BB. She suggests addressing the rotating technologist "In a Different Vein" and as a future session of the Annual Meeting. The rotating techs are also very interested in case study presentations and problem solving. Ann is seeking volunteers for these projects.

Ann commended the MABB as a very successful organization, standing out among surrounding states, some of which have no similar organizations. She encouraged all to adopt Suzanne Butch's philosophy of hire new techs, teach them and put them in front of audiences to spread the word about our profession.

Sharon Lowry shared information of an upcoming brochure for MABB. She and Dr. Cooling reiterated to the audience the importance of sharing "What MABB has meant to me." We would like to include these testimonials from our membership in the brochure.

PUBLICATIONS COMMITTEE:

Jim Fiedor, Chair of the Publications and Archives Committees, reported that newsletters were published in Fall 2007, Winter/Spring 2008 and Summer 2008. He is currently compiling the Fall 2008 newsletter which will include pictures from the Annual Meeting. Website improvements are in progress, including a link to institutional members. He is also working on the MABB brochure and is continually seeking articles for the newsletter, "In a Different Vein".

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ARCHIVES COMMITTEE:

Jim Fiedor reports the archives currently exist in a few different locations, and we are working toward consolidating the storage in a central location. Jim hopes to develop a Master List of the archive contents and to update it annually. Jim has four of several boxes of the archives with the remainder residing at Dr. Newman's house. The archives have been thinned of many old financial documents. They remain a treasury of minutes and photos of Annual Meetings and functions dating back to the 1950s.

Dr. Cooling suggested that members visit Websites from other state organizations (Indiana and Minnesota) where the speakers of their Annual Meetings allowed posting of their PowerPoint presentations on the organizations' websites.

NOMINATIONS COMMITTEE:

Dr. Laura Cooling, MABB President, announced nominations of Allyson Henstock, MT, ASCP for President Elect 2009. Theresa Downs is renominated to remain as Treasurer for an additional term. Karen Gizzi, Member-at-Large, is nominated for a second term. Dr. Sherwin Imlay will be replaced by new Member-at-Large, Judy Easter. Dr. Laura Cooling sought nominations from the floor; there were none. A motion was made to close nominations and a vote for acclimation of nominations carried.

AWARDS:

KAY BEATTIE AWARD RECIPIENT: LouAnn Dake, MA, MT(ASCP), SBB was honored and accepted the award.

FOUNDERS AWARD RECIPIENT: Mary Jo Drew, MD was honored and the award was presented by Linda Cardine, MT, ASCP, SBB, who acknowledged Dr. Drew as most deserving of the Founder's Award. A mini-biographical sketch revealed to us that Mary Jo wasn't certain about choosing science as a career. She enjoys writing fiction and is a master gardener. She as a Past President of the MABB, worked tirelessly for this organization. Dr. Drew graciously accepted the Founders Award.

PRESIDENT'S PLAQUE: Laura Cooling, MD, MS, 2008 MABB President was honored and received the award from Suzanne Butch, President-Elect. Dr. Cooling accepted the award stating MABB is a wonderful organization and she cherishes this tremendous honor.

ADJOURNMENT:

The meeting was adjourned at 1:58 pm.

Respectfully submitted,
Barbara O'Malley, Secretary

QUIZ ANSWERS

Abbreviation Quiz - pg 5

Going down,
it should spell
"Transfusion
Reaction" in
the circles.

DAT
DHTR
AHG
HDFN
Subgroups
Fya (or Fyb)
Lutheran
Serum
WAIHA
O neg
Saline

Rhig
PEG
JkA
C3
EDTA
IgM
ABO
Null

Do You Remember? Quiz - pg 3

1. ANSWER: Plasmodium vivax (page 423)
2. ANSWER: > 150,000/uL (page 163, appendix 5-1)
3. ANSWER: Neonatal polycythemia (page 653)
4. ANSWER: Bombay phenotype (page 372)
5. ANSWER: Transfusion related immunomodulation (page 576)

Answers may be found in the Technical Manual, 16th Ed, AABB.

2009 MABB Officers

President
Suzanne Butch, MA, MT(ASCP)SBB

President-elect
Allyson Henstock, MT(ASCP)SBB

Past President
Laura Cooling, MD, MS

Treasurer
Terry Downs, MT(ASCP)SBB

Secretary
Barbara O'Malley, MD

Members-At-Large
James Fiedor, MT (ASCP)
Karen Gizzi, MT(ASCP)SBB
Judy Easter
Sharon Lowry

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SEND ARTICLES TO EDITORS:

The deadline for next issue is April 1st!

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