



# In a Different Vein

A NEWSLETTER OF THE  
**MICHIGAN  
ASSOCIATION  
OF  
BLOOD  
BANKS**

**Vol. XXV, No. 1**  
**Winter, 2005**

## President's Message '04 Thank You Dr. Drew!

*MaryJo Drew, MD  
MABB Past President*

It hardly seems possible that 2004 is over. Now that the holiday rush is over, I would like to pause for a few moments to reflect upon the past year and look ahead to 2005.

The MABB 50<sup>th</sup> Annual Meeting, held at Schoolcraft College in Livonia on September 22 & 23, was a great success in all measures of the word. The 50<sup>th</sup> Anniversary Gala Dinner was an event to remember, with excellent food in an upscale setting. This meeting would not have been possible without the efforts and dedication of a great group of committee members, coordinators, board members, speakers and vendors. Kudos to Peggy Stoe and her Annual Meeting Planning Committee for a job well done. We were once again reminded of the depth and breadth of blood banking talent in Michigan, and several nationally acclaimed speakers rounded out the scientific program with thought-provoking presentations. Our new venue provided the ideal location for us to launch into our next 50 years with energy and enthusiasm.

In fact, the response to the Schoolcraft College facility was so positive that we have already reserved space there for the 51<sup>st</sup> Annual Meeting, scheduled for September 21 & 22, 2005. Be sure to mark your calendars now to take part in this meeting! President-elect for 2005, Dr. Bruce Newman, and his Annual Meeting Planning Committee met in early December to select topics and speakers for the 2005 meeting. If there are topics and/or speakers that you would like to recommend, please contact Dr. Newman at [newmanb@usa.redcross.org](mailto:newmanb@usa.redcross.org).

An information-packed Spring Meeting and a series of up-to-the-minute RAP sessions rounded out the year's educational offerings. Sue Bowers and her Education Committee deserve our thanks for the great planning and execution of these events, often on short notice, to keep the events topical and timely for our members. We can certainly look forward to more such offerings in 2005.

*continued on page 9  
see "Dr Drew"*



*2005 MABB President Peggy Stoe with  
Past President Dr. MaryJo Drew*

## President's Message '05 Welcome, Peggy Stoe!

*by Peggy Stoe, MT(ASCP)SBB  
MABB President*

It is my pleasure to serve as 2005 president of the Michigan Association of Blood Banks.

The Michigan Association of Blood Banks is a not for profit organization that consists of individual and institutional members. Our board of directors and committee members are transfusion medicine professionals who volunteer to serve our association. I wish to commend our volunteers for their generous donation of time and hard work to advance the objectives of our association, mainly:

- ♦ To foster scientific investigation, clinical application, education and information exchange related to blood banks and blood transfusion as well as to other areas in the field of immunohematology and tissue and organ transplantation;
- ♦ To encourage and advance the highest standards of administrative and technical performance in the general field of immunohematology as applied to transfusion therapy and/or transplantation; and
- ♦ To provide the education and the forum for building and strengthening professional relationships.

I wish to extend to Dr. Mary Jo Drew my sincere thanks for the past year of service as president of the MABB. It didn't matter what I asked Dr. Drew to do or who I asked Dr. Drew to contact for the 50<sup>th</sup> Annual Meeting, it was done in a

*continued on page 9  
see "Peggy Stoe"*

## MICHIGAN ASSOCIATION OF BLOOD BANKS

Administrative Office

P.O. Box 3605

Center Line, MI 48015-0605

(586) 573-2500 • (586) 573-7058 Fax

Web Site: [www.mabb.org](http://www.mabb.org) • <http://www.mabb.org/>

*In a Different Vein* is a quarterly publication of the Michigan Association of Blood Banks. Current and archived issues of this publication are available at the MABB web site: [www.mabb.org](http://www.mabb.org).

Please feel free to submit any articles, announcements, advertisements, or case studies to *In a Different Vein*. Items of a personal note regarding colleagues are also welcome.

### **Send articles to editors:**

**Mary DePouw • Crittenton Hospital**

(248) 652-5275 ~ e-mail: [mdepouw@crittenton.com](mailto:mdepouw@crittenton.com)

**Bruce Newman MD • American Red Cross**

313-833-2651 ~ e-mail: [newmanb@usa.redcross.org](mailto:newmanb@usa.redcross.org)

**Ann Steiner • Ortho-Clinical Diagnostics**

1 (800) 421-3311, 7, 2, Ext. 4103

e-mail: [asteine2@ocdus.jnj.com](mailto:asteine2@ocdus.jnj.com)

**Submission deadline for next issue is 3/01/2005**

## 2005 MABB OFFICERS

### **PRESIDENT**

Peggy Stoe, MT(ASCP)SBB, CQA, ASQ

### **PRESIDENT-ELECT**

Bruce Newman, MD

### **PAST PRESIDENT**

MaryJo Drew, MD, MHSA

### **TREASURER**

Kathryn Watkins, MT(ASCP)SBB

### **SECRETARY**

Allyson Henstock, MT(ASCP)

### **MEMBERS-AT-LARGE**

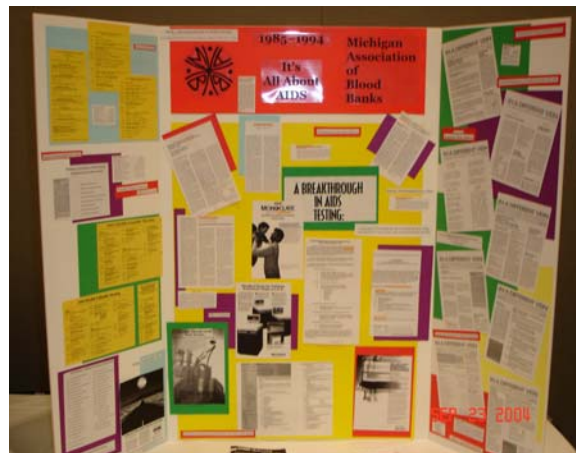
Suzan Bowers, MT(ASCP)SBB

Laura Cooling, MD

James Fiedor, MT(ASCP)

LeeAnn Weitekamp, MD

## MABB Makes History



*MABB Memory Boards . . . 50 years of where we've been*



The 50th Annual Meeting of the Michigan Association of Blood Banks was truly a time of reflection over the last 50 years. Many of the MABB's founders and long time supporters of the association were present to celebrate half a century of progress in blood banking.

Prior to the annual meeting, a very dedicated committee of three gathered to commemorate in poster format some memories for all to see. The archives were opened and some very interesting material was found. Above are photos of two of the display boards compiled by Michelle Tuson, Sharon Cisco, and Linda Cardine. A synopsis of the last 50 years is on the following page. We hope you enjoy it as much as we did!

# MABB Makes History

by Michelle Tuson, MT(ASCP)SBB

Linda Cardine, MT(ASCP)SBB

Some projects just turn out to be more rewarding than others. That was definitely the case with the Historical Posters for the 50<sup>th</sup> Anniversary Annual Meeting. What fun! When we first opened the boxes containing old programs and memorabilia the task seemed daunting. How could we organize and present the material?

As we sorted, it became evident that the organization was a labor of professional dedication and love. From the very beginning there was the scientific curiosity, the sponsorship of the vendors and the camaraderie amongst the members. So that is how we chose to present our history. For each decade we chose scientific topics, great vendor advertisements and threw in some pictures and a little gossip to spice it up.

The hard part was staying on task. Even at one o'clock in the morning we would marvel at the accomplishments of our organization and would have to share our findings with each other. We hope that you found our history as fascinating as we did. Some of the highlights were:

- ♥ John Judd is not only an unqualified expert but at one time he actually had hair. We have the pictures to prove it.
- ♥ The AABB annual meeting was held in Detroit, Michigan in November 1962.
- ♥ "World renowned immuno-hematologist" Dr. R.R.A. Coombs was a guest lecturer in July 1959.
- ♥ During our first decade blood was in glass bottles. The MABB Bulletins at this time included articles on disaster planning, quality in the blood bank, transfusion review, and inspection and accreditation.
- ♥ Michigan Community Blood Centers was "born" on February 1, 1967 with the merger of Detroit Blood Service and Southern Michigan Blood Center. At the helm were Dr. Rosser Mainwaring, Dr. Wayne Zulzer, Kay Beattie and Grace Neitzer.
- ♥ Dr. Patrick Mollison came to Hutzel Hospital in April 1966 to lecture on the Destruction of Red Cells by Antibodies.
- ♥ An important bill was passed by the Michigan State Legislature in June 1967 which provided "protection" to blood banks: "The procurement, processing, storage, distribution or use of whole blood, plasma, blood products and blood derivatives for the purpose of injecting or transfusing them, or any of them, into the human body, for any purpose whatsoever, where there is no medical test to determine fitness of such whole blood, plasma, blood products and blood derivatives, is the rendering of a service and does

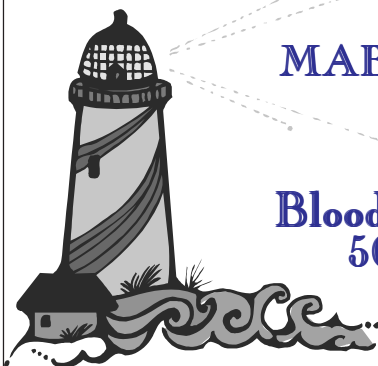
not constitute a sale by any person participating therein, whether or not remuneration is paid, therefore."

- ♥ The second decade 1965-1974 brought with it plastic blood bags and the beginning of apheresis.
- ♥ Dr. Joseph Mann discovered Anti-Xga in Grand Rapids.
- ♥ The years 1975-1984 saw the introduction of LISS, computers in blood banking, BMT, and our silver anniversary. Fenwal PL732 plastic helped to extend and improve platelet storage for 5 days.
- ♥ More guest lectures by members of the "British Mafia": Malcolm Beck and Peter Issitt.
- ♥ The MABB Founder's Award was established in 1982, with Emanuel Hackel as the first recipient.
- ♥ Our fourth decade 1985-1994 was all about AIDS. The FDA and cGMP came into daily blood bank life. The Red Cross entered into a "voluntary agreement" with the Food and Drug Administration, and University of Michigan Hospitals began to work on the computer crossmatch.
- ♥ "In a Different Vein" started its Institutional Member spotlight section.
- ♥ The last decade has brought us Error and Accident Reporting to the FDA, HIPAA, automated instrumentation, and the rise and fall of solvent detergent plasma.
- ♥ Blood bankers keep asking the same questions...  
...the answers just change to keep it interesting.

Throughout all of our rich history, there are names still with us today that were with MABB at the start, a testament to their dedication to this organization. We may be separate labs and different hospitals, but we truly do all share one mission!



Michelle Tuson with the display of MABB's 1<sup>st</sup> decade



## MABB "Lighting the Way"

50 Years of  
Blood Banking Excellence  
50th Annual Meeting  
Sept. 22-23, 2004



*Dr. Emanuel Hackel and Dr. Tim Mervak*



*Dr. Sherwin Imlay and  
MABB President-Elect Dr. Bruce Newman*



*Peggy Stoe and Michelle Tuson*



*Past President Dr. Mary Jo Drew and  
Founder's Award recipient Jan Hamilton*



*Linda Cardine, Suzanne Butch,  
Pat Fedoronko and Mary DePouw*



*Dr. Kathleen Sazama and John Judd*



*Karen Gizzi and  
Michelle Horan-Bensette*

# MABB 50th Anniversary Gala



*John Judd speaking at the Gala*



*Dr. MaryJo Drew presented a letter of recognition from Detroit Mayor Kwame Kilpatrick*



*Margaret Wilde*



*Dr. Emanuel Hackel*



*Dr. Brad Eisenbrey*



*Dedicated MABB supporters:  
Allyson Henstock, Mary DePouw,  
Jan Deters, Sue Bowers & Jan Hamilton*

**more photos on  
page 13**



*John Kilgore of MedAlliance Group, Inc.*



*Mike Kordasiewicz of Terumo Medical Corp.*



*Joseph Roig of Gambro BCT*



*Tim Neldrett of ARC/NTL*



*Marci Moss & Jeff Weathers of Pall Medical*



*George Kelly of Baxter Healthcare*



*Ed DeRose and Ron DiNizo  
of Ortho Clinical Diagnostics Systems*



*Laurie Schmidt of Bryan Biologicals with Kathy  
Shortridge and Rene Fuller of Immucor Gamma, Inc.*



*Angelo D'Anna and Sandy Lenneman  
of the American Red Cross*



*Mike Kirkpatrick of Helmer*

## EXHIBITOR CONTACT INFORMATION:

American Red Cross/SE Michigan Region	Angelo D'Anna	313/494-2816	adanna@comcast.net
American Red Cross/National Testing Labs	Timothy Neldrett	313/465-8554	neldrett@usa.redcross.org
Baxter Healthcare	George Kelly	847/669-6298	george_kelly@baxter.com
Bio-Logics Products, Inc.	Scott McDermott	801/561-9208 X13	sdm@biologicsinc.com
Charter Medical	Maria Milani	336/768-6447 X4218	mmilani@lydall.com
Helmer	Mike Kirkpatrick	800/743-5637 X153	mkirkpatrick@helmerinc.com
Med Alliance Group	John Kilgore	888/891-1200	j.kilgore@comcast.net
Med Alliance Group	Ted Beatty	888/891/1200	ted_beatty@comcast.net
MSA Marketing	Rich Myers	810/227-4226	ms2mm@ismi.net
Ortho-Clinical Diagnostics	Ed DeRose	800/373-3008 X8044	ederose@ocdus.jnj.com
Pall Medical	Marci Moss	248/273-9193 X3728	marci_moss@pall.com
Terumo Medical Corp.	Mike Kordasiewicz	262/895-2643	mike.kordasiewicz@terumomedical.com

# MABB Business Meeting

September 22, 2004

Meeting was called to order at 13:17.

Review of Minutes: Minutes from the 2003 business meeting were approved.

Financial Report: 165 individual members, 25 physician members, 21 institutional members, and 12 emeritus members. The financial report was given and approved as presented.

## Election of Officers:

President elect - Dr. Bruce Newman  
Member at large - Dr. Laura Cooling  
Member at large - Jim Fiedor  
Secretary - Allyson Henstock  
Treasurer - Kathryn Watkins

Slate of candidates was approved as presented.

## Education Committee:

RAP Sessions - topic = automation. One to be held in Traverse City on 9/30/04 and one to be held in Flint on 10/13/04.

SBB Review Session: to begin in September 2005

Publications Committee: No report at this time.

Membership Committee: No report at this time.

Annual Meeting Committee: Have had positive feedback from vendors and the membership regarding the location of the current (2004) meeting.

Thanks were given to the vendors for their support and to the planning committee.

## Award Recipients:

Kay Beattie - Christine Lomas-Frances  
Founders - Jan Hamilton  
Scholarships - no applications received

Old Business: - none

## New Business:

- Pace credits - will be pursued for the future.
- Dr. Drew acknowledged Pat Fedoronko and Margaret Wilde for their retirement.
- Linda Cardine presented Dr. Drew with the past president award.

Meeting adjourned at 13:31.

Respectfully submitted,  
Kathryn Watkins, MT(ASCP)  
MABB Secretary

# ...and on to 2005...

## 2005 Program Planning Meeting

*Save the Date!*

*September 21st and 22nd, 2005*

*MABB 51st Annual Meeting*



*Dr. Laura Cooling, Peggy Stoe,  
Dr. Barry Siegfried, Dr. Rob Davenport*



*Dr. Tim Mervak, Kathryn Watkins, Sharon Cisco,  
Allyson Henstock, Sue Bowers, John Judd and Linda Cardine*



*Dr. Bruce Newman collecting ideas from the committee*

# President's Messages continued

DR. DREW:

Finally, a few parting words. It has been a pleasure and privilege to serve as MABB President during 2004. I have enjoyed working with the members of the board and meeting planning committee, with vendors, and with our members. The dedication of our membership to transfusion medicine, as well as to furthering educational opportunities in the field, was brought home to me time and again. This dedication will continue to serve our mission well in the years to come. Thank you all for the opportunity to be a small part of this grand endeavor. I look forward to continuing involvement with the MABB as I join the "past presidents' club".

MaryJo Drew, MD  
MABB Past President

PEGGY STOE:

heartbeat. I truly believe her special calling is that of a "fund raiser".

Michelle Tuson is another wonderful asset to the MABB in her ability to work with vendors and get them to participate in the Annual Meeting. Thank you, Michelle.

This past year 2 members of the executive board of directors retired from the board, Margaret Wilde and Pat Fedoronko who, by the way retired from her professional career. The quiet demeanor of both ladies did not hide the interest and enthusiasm they had for the MABB.

The 50<sup>th</sup> annual meeting at the VisTa Tech center at Schoolcraft College was a great success. the comments about the facility from attendees and vendors were overwhelmingly positive. I am pleased to announce that Dr. Bruce Newman, president elect and chair of the 51<sup>st</sup> annual meeting has reserved this facility for September 21-22, 2005.

The membership committee, under the direction of Michelle Bensette, will soon be sending out reminder notices for annual membership dues. We have maintained our current membership fees and we sincerely hope you will return your membership card and payments promptly.

The education committee, under the leadership of Sue Bowers, had another very successful season. We are looking forward to Rap Sessions for 2005 and in September beginning of the SBB lecture series.

The Spring Workshop is schedule for May 12<sup>th</sup> at MSU in Lansing. The Spring Workshop Committee is hard at work preparing a very interesting wet workshop and lecture session. We take pride in the fact that we are one of the very few state

meetings that offer a wet workshop. I am very pleased that Terry is recruiting some folks to learn how to prepare samples for the wet workshop. Did you know that the Vi Williams Scholarship and Manny Hackel Scholarship are awarded at this meeting and help defray the cost of attending the spring workshop? All we need are nominations. Please consider applying.

I am very grateful to Mary DePouw for once again agreeing to chair the Newsletter Committee. This committee is very challenging and requires creativity, patience, and pleading...to get those articles and questions published in our newsletter "In A Different Vein".

As a professional association we are constantly looking for new ways to serve our membership. Your board has an ambitious agenda for 2005

1. We will work hard to promote the MABB website <http://www.mabb.org/> as the primary source of information about the association. Membership information and applications, upcoming events, special articles of interest, job opportunities, current and archived issues of "In A Different Vein," links to multiple websites related to blood banks and transfusion practices, maps to events, etc. are available on the website.
2. We will promote membership as a "work essential" and in so doing attempt to build and preserve the future of the transfusion medicine professional.
3. We will listen to your requests for topics for continuing education and seek ways to bring educational programs to the members.
4. We will encourage members to actively participate in this association. Active participation is vital to ensuring the success of the association.

I look forward to working with and for you during the next year. Please feel free to contact me at 734-936-6862 or by email at: [msstoe@umich.edu](mailto:msstoe@umich.edu).



*New MABB President Peggy Stoe*

# Job Postings

## BLOOD BANK TECHNOLOGIST

Henry Ford Health System seeks an experienced blood bank technologist (MT, ASCP) for full time midnight shift position. Great opportunity for experienced person to become a part of a terrific team. We offer flexible scheduling and a supportive environment. Perform routine and, if desired, complex testing to enhance your skills. Continuous education supported and encouraged. Competitive salary and benefits. Contact Linda Cardine at (313) 916-1572.



## MANAGER, TRANSFUSION SUPPORT SERVICES/REFERENCE LAB

*Memorial Blood Centers offers an excellent leadership opportunity for an experienced individual familiar with red cell and platelet serologic methods. Overseeing Transfusion Support Services, you will monitor the accuracy of testing activities and reports, staff competence, and compliance with manufacturers' directions, the FDA and other regulatory agencies. We'll rely on you to develop improved testing, quality control systems and procedures; audit work of personnel and take appropriate action; promote staff training; manage department budgets; and ensure 24/7 lab coverage. Input into new business opportunities will be expected.*

Candidates must be certified Medical Technologists (ASCP) with 5+ years' practical experience in transfusion services. Specialists in Blood Banking (SBB) certification preferred. A take-charge manager, you must be committed to the highest quality standards in all areas, and possess the interpersonal and communication skills necessary to do the job right. Some exposure to potentially infectious materials may be possible. Salary range starting low to mid 50s, along with an excellent benefits package.

Please send cover letter and resume to: Memorial Blood Centers, Human Resource Dept., 2304 Park Avenue, Minneapolis, MN 55404, Fax: (612) 871-1359, Email: [jobs@mbc.org](mailto:jobs@mbc.org), [www.mbc.org](http://www.mbc.org).

## Education Committee Activity

The Education Committee was busy this past summer planning the Fall RAP sessions. Two sessions were planned, one in Flint and one in Traverse City. The "I (immunohematology) ROBOT, Automation in the Blood bank" was the topic for both sessions. Unfortunately the Traverse City session was cancelled due to low attendance. The Flint RAP was a big success. We plan to have a Spring RAP in the Detroit area. We hope to plan another for Traverse City, presenting a topic of interest to that area.

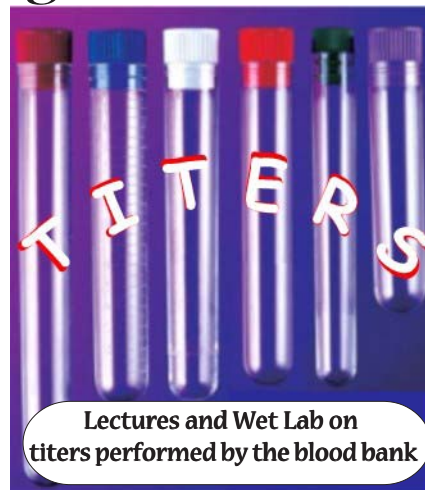
The committee has also begun planning the SBB Lecture Series for 2005. We have moved the start to September 2005 to coincide with the traditional academic year and anticipate to end in May. We are surveying past participants for their input as to the content and structure of this program. We plan to include the SBB Review session and the Management Seminar as part of the Series. Look for details in the Spring.



## MABB SPRING WORKSHOP 2005

May 12, 2005

Michigan State University



**Lectures will include such topics as:**

- Titrers
- Stress in the lab
- TRALI
- Transfusing leukemia patients

See further details in the next issue of  
'In a Different Vein' and at [www.mabb.org](http://www.mabb.org)



*James Fiedor, MT(ASCP)  
Member-at-Large*

## Meet the Board

I began working at Hutzel Hospital in the Spring of 1986 as a phlebotomist and then moved on to become a Microbiology processor. I became a Med tech in the summer of 1988 and began working at Harper Hospital blood bank. I was a blood bank bench tech until March 2002, when I became the Quality Assurance Specialist for ALL the Detroit Medical Center Blood Banks. I oversee the Blood Bank Quality at Huron Valley Sinai Hospital, Sinai/Grace Hospital, Harper/Hutzel Hospital, Children's Hospital of Michigan, Detroit Receiving Hospital and Michigan Orthopaedic Specialty Hospital. (That's a lot to say in one sentence and it's an even bigger responsibility in real life). Moving from a bench tech to a QA specialist is hard to explain. Quality requires a lot of research, reading and investigating, and then to get five hospitals on the same level of understanding and operating usually takes months. It's a big difference from the 45 minute crossmatch, it's a whole different world. However, I enjoy working in and around Blood Banks so much that some days I actually enjoy coming into work.

On a personal note I enjoy running, weight lifting, and attempting to maintain an 80+ year old house with 40+ house plants (the first floor of my house actually illuminates my neighbors driveway), numerous Bonsai trees, three fish tanks, and two cats. I guess you can say I live in the city but try to maintain the country side in my house.

### 2004 MABB Annual Report of the Publications Committee

"In a Different Vein" was published three times in 2004. The Fall/Winter issue following the Annual Meeting was a combined issue.

The committee began featuring a group photo of the blood bank technologists from member hospitals.

It has been discussed that there is a need for more scientific and management information.

A quest for some games and crossword puzzles for future articles has been initiated. We will again be inviting vendors to advertise in the "Vein".

## Fall 2004 RAP Session

The Holiday Inn Gateway Centre in Flint was once again the site for the MABB Fall RAP Session. Held on October 13, 2004, the session was titled "I (immunohematology) ROBOT, Automation in the Blood Bank". It featured speakers from two facilities that have recently implemented automated blood bank testing. An additional highlight was that they had implemented different automated systems.

Peggy Stoe, Supervisor at the University of Michigan Hospital, started the night off with a presentation of their "Provue Experience". She first set the stage by describing their current activity, personnel state and goals for automation. She then went into the nuts and bolts of bringing up a new system, explaining how they performed Installation Qualification (IQ), Operation Qualification (OQ) and Performance Qualification (PQ). She then expanded on the dreaded V, Validation. She showed their process flows, and then followed with data collected since implementation. She ended with their ideas for further potential for process improvement.

Linda Cardine, Supervisor at Henry Ford Hospital, followed with a presentation of their "Going Live with Galileo". She also set the stage with a summary of their current operation, followed by answering the questions "why automate" and "why Galileo". She covered the IQ, OQ and PQ plan, validation and training. She explained how they use the equipment to handle their workflow. She ended with a candid look at problems but concluded with "we love Leo" highlights.

Twenty participants attended this session, which included supervisors, bench techs, and representatives from the two vendors. The dinner was tasty and the conversations lively. Thanks to Peggy and Linda for their time and effort and to the Education Committee for their support. Thanks also go to Jim Rummel at the American Red Cross Great Lakes region for their financial support. Look for another RAP next spring.

Sue Bowers, MT(ASCP)SBB  
Education Committee Chair

# ESTIMATING THE PROBABILITY OF A VASOVAGAL REACTION OR FATIGUE BASED ON COMPREHENSIVE DATA COLLECTED FROM 1,000 WHOLE BLOOD DONORS

*B Newman, A Roth*

Two years ago, four Wayne State premedical students interviewed 1,000 randomly chosen blood donors three weeks after the whole blood donation to determine if the donors had any of seven adverse events. We found that 37% of the donors had one or more adverse events. We were surprised that the number of adverse events in the whole-blood donor population was so high. A previous study based on observation at collection sites found adverse events to be in the 3 to 4% range, but this did not include an additional 9-16%, which was thought to be the bruise rate based on data from blood sample collections in the insurance and hospital industries.

The adverse events to the arm were bruise (23%), sore arm (10%), hematoma (1.7%), and sensory changes (1%), and the adverse events to the body were fatigue (8%), vasovagal reaction (7%), and nausea (0.4%). Adverse events such as bruise, fatigue, and sore arm are delayed but are generally detected by the next day. Therefore, they cannot be detected at the collection site but can only be detected with an interview. Other adverse events occurred at the collection site, but additional occurrences were detected with an interview. For instance, 2.5% of the donors were observed to have a vasovagal reaction at the collection site, but 7% were detected when an interview was added. The same was true for hematomas—0.35% of the donors were detected at the collection site, but 1.7% after an interview. Thus, some adverse events continue to occur after the donors leave the site. Also, we found that almost 1% of the donors had sensory changes which are consistent with a nerve irritation or even nerve injury. This was a very interesting finding because no one thought that nerve irritations or injuries were so common, and it is now being quoted in the neurology literature.

A vasovagal reaction refers to pre-fainting symptoms such as dizziness, sweating, sudden weakness or apprehension, and a pale appearance. These reactions tend to occur toward the end of the phlebotomy or after the donor sits or stands. About 1 in 25 donors will have a vasovagal reaction that will progress to a full faint (loss of consciousness). A vasovagal reaction is a physiologic reaction, but in some cases, there is a psychological component. A vasovagal reaction is the most important adverse event because it has the most influence on whether a donor returns to donate blood, and if it progresses to syncope (unconsciousness), the donor's sudden fall can lead to harm in some cases.

The present study looked at the four most common adverse events—bruise, sore arm, fatigue, and vasovagal reaction and looked at five factors that were potentially associated with these adverse events. These factors were age, weight, blood donation status (first-time or repeat donor), gender, and race. Unfortunately, when a 17-year old, first-time, 130-lb, Caucasian female has a vasovagal reaction, it is difficult to determine which factor or factors contributed to the reaction. In order to determine this, one has to apply some fancy statistical techniques, and the main technique is called statistical regression analysis. To accomplish this, one looks for the one factor that is most associated with the adverse event, for example with vasovagal reaction. One then eliminates all donors associated with this one factor and then one determines the second most common factor. This continues until no additional factor can be correlated with a vasovagal reaction. Based on the frequency of association, one can also determine to what degree each implicated factor is associated with a vasovagal reaction.

In the present study, we found that weight had the highest correlation with the frequency of vasovagal reactions. The higher the weight, the more one was protected from a vasovagal reaction. The second most important factor was age. The higher the age, the more one was protected from a vasovagal reaction. First-time blood donations was also associated with vasovagal reactions, but to a minor degree, and gender and race were not associated with a vasovagal reaction in this study. We were able to produce formulas using statistical regression analysis that described our data. Using the formula for vasovagal reactions for example, we can estimate your risk for having (or not having) a vasovagal reaction based on your weight, age, and donation status (first-time or repeat donor).

We are probably the first ones to have developed formulas to estimate these four adverse events, and our estimates are based on a database that is derived from both observation and interview data. We have prepared a manuscript that describes our findings, and we are sending it to the journal *Transfusion*. This study could not have been done without the help of a statistician.

Bruce Newman, MD  
Medical Director

## More Annual Meeting Highlights



*Past Presidents Jan Hamilton and Sue Adams*



*Sharon Cisco, Kathleen Sazama, Michelle Tuson, Joseph Roig and Christine Lomas-Francis*



*Brad Eisenbrey, Kathleen Sazama, John Judd, Joseph Mann, Christine Lomas-Francis, Emanuel Hackel and Michelle Tuson at the Gala*



*Bob Markey, Drs. Emanuel Hackel and MaryJo Drew with Congressional Recognition of MABB's 50th Anniversary from Sen. Debbie Stabenow*



*Ed DeRose of Ortho Clinical Diagnostics at the Gala dinner*



*The afternoon treat at the 50th Annual Meeting was a special 50th Anniversary cake*

MICHIGAN ASSOCIATION OF BLOOD BANKS  
P.O. Box 3605 • Center Line, MI 48015-0605

## *MABB Past Presidents*



*Mary DePouw, Dr. Tim Mervak, Linda Cardine, Sharon Cisco,  
Michelle Tuson, Dr. Mark Kolins, Jan Hamilton*