

THE NASCOLA UPDATE

Volume 8, Issue 1

April, 2012

Opening Remarks Executive Secretary—Beth Plumhoff

In 2010, NASCOLA turned 10! That is, we celebrated 10 years of incorporation as a legal nonprofit organization. If you have ever enjoyed the company of a 10-year-old, you know that it can be an interesting experience. Since I have sons, my personal experience is that of 10-year-old boys. Bart Simpson is a forever 10-year-old boy – you get the idea..! They display a wide array of personality traits, emotions, and behavior ranging from being caring, loving children to displaying those less desirable (but interesting!) such as mischievousness and rebelliousness!

NASCOLA can be somewhat like that little boy. Loving and appreciative. Demanding. Mischievous and fun-loving. But always holding a special place in our heart. As an organization, we have seen many changes throughout our 10 years. We have a new slate of officers and new executive committee every 2 years. Always new and exciting, full of possi-

bilities for the future, but always a little disruptive to general operations. I feel a bit like a parent in these situations – assuming the role of the stable, reliable, supportive character. But, like any parent, I would not trade my experiences with NASCOLA for a speaking part on the Simpsons! Well, maybe I would, but none the less, I treasure the interaction with my NASCOLA colleagues.

So, as we move into 2012 and beyond, always remember that NASCOLA is growing up – just like the 10-year-old does – and changes and matures during the course of that journey. Soon, we enter into the teen years! We look forward to the future as we enter into all of our new stages of growth.

Enjoy the newsletter!



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NASCOLA Executive Committee 2012

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President's Report—Dr Van Cott

As you will see in this newsletter, the NASCOLA Executive Committee and volunteers on our Committees have had a productive and exciting year!

NASCOLA is one the organizations sponsoring the first ever Thrombosis and Hemostasis Summit of North America (THSNA) in Chicago, which is the combined effort of multiple coagulation societies across multiple disciplines. THSNA is THE place to be this year if you enjoy coagulation! Vendor exhibit space was sold out early, and there are well over 1000 attendees at last count. Our annual NASCOLA **membership meeting** will take place at THSNA, on Friday May 4. We hope to see you there as dinner is complimentary and we have an exciting scientific program planned.

Membership continues to grow, and we now have 97 Institutional Members, 17 Associate Members, 6 Individual Members, 7 Trainee Members, 4 Honorary Members and 1 Emeritus Member. We have also **expanded the number of proficiency testing programs** that are available in 2012, most notably brand new **fondaparinux, argatroban, dabigatran, rivaroxaban and Orgaran** modules.

We invested in an **upgrade to our website** this year, which has vastly improved the functionality involving the platelet proficiency testing program for participants as well as general administrative activities such as membership renewal. We have received very positive feedback about these improvements from our members.

It has been an impressive year for NASCOLA-related **publications**, as you can see from the list posted on the Bulletin Board on the NASCOLA website and on the list of most recent publications on page 8 of this newsletter. If you have a NASCOLA-related publica-

tion that is not on the list, please let me know. As a reminder, NASCOLA members are invited to write a **Test of the Month** for American Journal of Hematology, which is a mini-overview of a laboratory test of your choosing. Numerous NASCOLA members have contributed these features, which can be seen on our publications list. Let me know if you are interested.

One of NASCOLA's **proudest achievements** since its inception is the production of proficiency testing for interpretation of platelet aggregation and also for electron microscopy platelet dense granule assessment, developed by the Platelet Committee chaired by **Catherine Hayward**. Numerous publications and consensus guidelines have emerged from these efforts. After 5 exceptional years in this role, Dr. Hayward recently decided to step down from this position as of 2013, to focus on her increasing responsibilities as a Dean at McMaster University. NASCOLA extends our deepest gratitude and admiration to Dr. Hayward for these impressive accomplishments, and acknowledge that it will be very difficult to proceed without her. **If anyone is potentially interested in taking over these unique proficiency testing programs in 2013 as new Chair of the Platelet Committee, or anyone who wishes to assist, please let us know.**

We also are indebted to **Marlies Ledford-Kraemer**, who decided to retire in 2012. As our first Executive Secretary and subsequently as our first ECAT Liaison, it is hard to find adequate words to describe how extremely valuable to NASCOLA she has been. Perhaps former NASCOLA President, William Nichols, says it best:

"She was, in my opinion, the single most important person behind NASCOLA's beginnings in the 1990s and

its success and growth".

She already is greatly missed. We extend a warm welcome to **Jana Gausman**, who we are happy to report has taken over this role as our new ECAT Liaison as of 2012.

In my second year as President, I again would like to thank every one of our members for your continued interest in coagulation and your support, and for your response to our NASCOLA questionnaires which have led to the development of consensus guidelines based on our membership practices.

If you have an interest in joining any of our committees or projects, let us know! I am honored to serve NASCOLA as President and look forward to working toward accomplishing NASCOLA's goals and missions.



Immediate Past-President's Report—Dr Hayward

In my former role of President and now my role as Immediate Past President of NASCOLA, it has been a pleasure to be involved in some many important NASCOLA activities. It was a pleasure to participate in the planning for this year's very first THSNA meeting, which is on trajectory for incredible success. Building on the momentum from prior NASCOLA partnership meetings with the International Society of Laboratory Hematology (ISLH), and my role as Executive Secretary for ISLH, I am excited that NASCOLA will again be partnering with the ISLH for its 2013 meeting, which is to be held in Toronto on May 10-12. Dr. Betsy Van Cott and Dr. Marciano Reis, who the Scientific Program Co-Chairs for the Toronto ISLH meeting, are leading the development of an exciting program that will include multiple sessions on coagulation and hemostasis, and a NASCOLA general membership meeting. Please plan to join us in Toronto next May. It will be our pleasure to welcome you all to the very first NASCOLA meeting in Canada. This exciting event will be followed by a 2015 NASCOLA meeting in Toronto, that is being planned conjunction with the events for the International Society on Thrombosis and Haemostasis. These are exciting times. As your Immediate Past President, I am proud of NASCOLA's many successes and look forward to its continued growth and bright future.

Treasurer's Report—Dr Adcock-Funk

NASCOLA remains financially sound and we have sustained another year without any debt! Our finances are right on target for a non-for-profit organization. In 2011, we were able to invest in continuing to build and sustain our infrastructure, mostly our web site and methods to evaluate our proficiency modules. We appreciate the prompt response to our 2012 invoices and at this time, we have received approximately 80% of all payments due. Every indication suggests that 2012 will be another strong year for NASCOLA.

Secretary's Report — Barbara Young, MT(ASCP) SH

As secretary, a portion of my responsibilities include the accurate and timely preparation of the executive committee meeting minutes. Once the minutes are compiled into an initial draft format, all members of the NASCOLA executive committee review them, make edits and changes, and submit back to the secretary where the suggestions, edits and changes are incorporated and the final draft completed. All meeting minutes and agendas are posted to the NASCOLA Web site (www.nascola.com) for NASCOLA member review. Please take a minute to review minutes and agendas to know what your NASCOLA executive committee has been up to! General membership meeting minutes from our last membership meeting in New Orleans in April of 2011 are posted on the NASCOLA Web site as well as presentations and agenda from that meeting.

Education Committee—Dr Zehnder

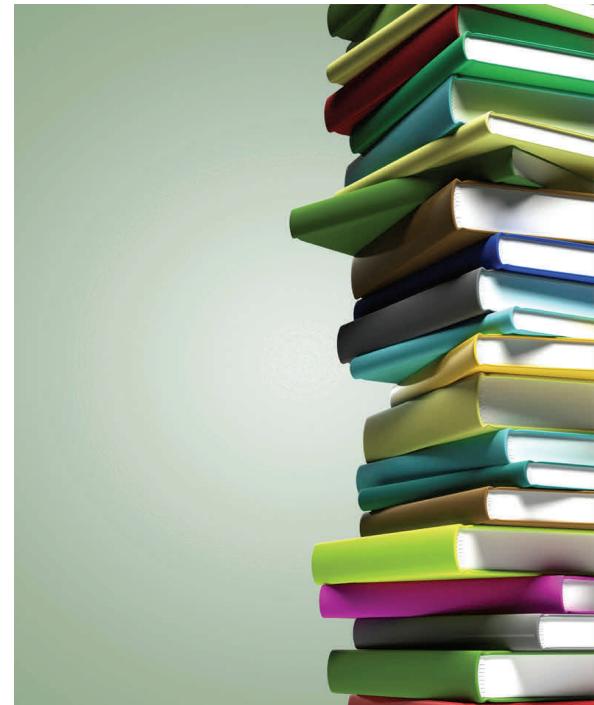
The NASCOLA education committee has continued to be active in planning and supporting the educational activities of our organization. In 2011-2012 we participated in the planning and organization of the curriculum for the first Thrombosis and Hemostasis Summit of North America (THSNA). This is an exciting collaboration among many organizations involved in all aspects of thrombosis and hemostasis including physicians, nurses, pharmacists and laboratorians.

New Projects

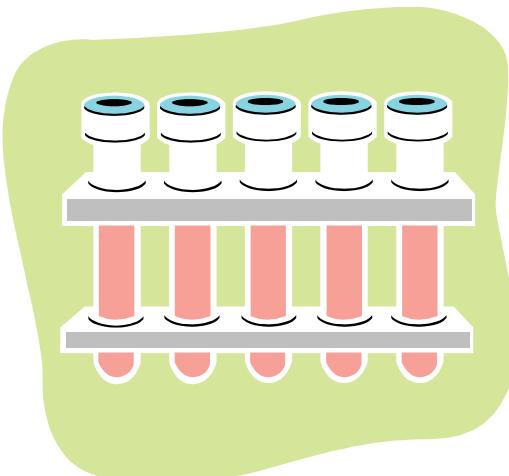
We need new projects for 2012! As always, suggestions for projects and volunteers interested in serving on the committee are welcome. As a rule, committee projects result in publications and/or opportunities to speak at national meetings.

NASCOLA Blog

Anyone interested in a NASCOLA blog? Do you think this is a good idea? What are your thoughts? Please let us know at info@nascola.com



PT / EQA (Proficiency) Program Director—Dr Marlar



Dr. Richard Marlar and Ms. Jana Gausman expertly manage the NASCOLA PT/EQA program from their home base in Oklahoma City.

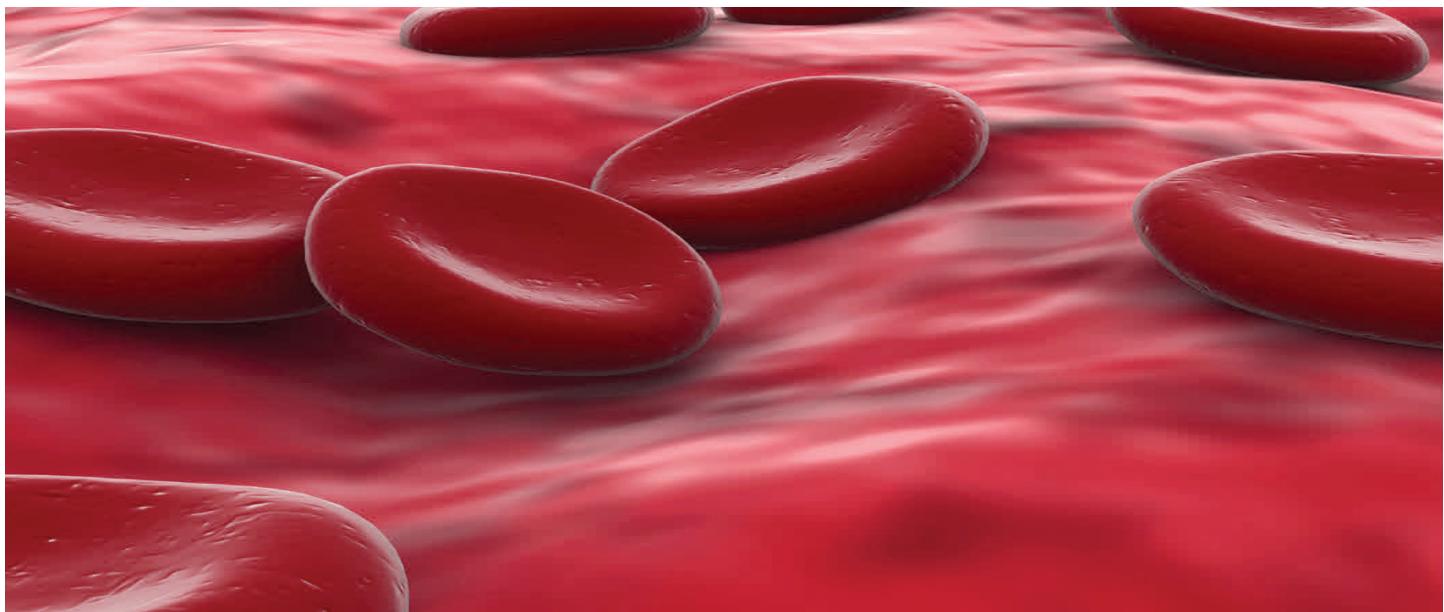
Our collaboration and partnership with the ECAT Foundation continues to provide members with excellent proficiency testing materials and additional modules. For 2012, we scaled down the HIT module to an immunologic testing module once per year. We added 5 new anticoagulant drug testing modules (Orgaran, Fondaparinux, Rivaroxaban, Argatroban, and Dabigatran).

In addition, we offer postanalytic platelet light transmission aggregometry testing and platelet dense granule deficiency challenges for interested members. We have been able to use the NASCOLA Website for the entire postanalytic platelet testing challenge including electronic result submission, scoring and report generation.

Molecular testing modules are supplied by DGKL—a German company. They continue to add important analytes to the testing menu, that we can then pass on to our members. For 2012, we added a new Molecular Module (K-Ras: Codon 12/13/61).

Platelet Committee—Dr Hayward

NASCOLA was the very first EQA organization to launch case-based, EQA challenges to assess platelet dense granule deficiency and the interpretation of findings for light transmission platelet aggregometry cases. This is NASCOLA's fifth anniversary of running such exercises, which were piloted before the launch of regular surveys. Members can read a comprehensive review of NASCOLA platelet EQA experiences in "Hayward CPM, Moffat KA, Plumhoff E, Timleck M, Hoffman S, Spitzer E, Van Cott E, Meijer P. External Quality Assessment of Platelet Disorder Investigations: Results of International Surveys on Diagnostic Tests for Dense Granule Deficiency and Platelet Aggregometry Interpretation" which will be published in an upcoming issue of Seminars in Thrombosis and Haemostasis that is dedicated to quality assurance. As Chair of the Platelet Committee, I would like to thank Karen Moffat, Beth Plumhoff, Marnie Timleck and Ernie Spitzer for making our dense granule EQA exercises possible. NASCOLA is hoping to increase the diversity of sample challenges by transitioning the preparation of the dense granule EQA materials to another center. I would also like to thank Karen Moffat, Beth Plumhoff and Suz Hoffman for their incredible efforts that supported me in leading the preparation, distribution and scoring of our NASCOLA platelet EQA. We have learned that labs perform better on dense granule EQA challenges than on aggregation challenges, likely because interpreting aggregation findings is a very complex process. NASCOLA members are encouraged to review the recommendations in the North American guidelines on how to interpret diagnostic aggregation studies (Hayward CP, Moffat KA, Raby A et al. Development of North American consensus guidelines for medical laboratories that perform and interpret platelet function testing using light transmission aggregometry. *Am J Clin Pathol* 2010 December;134(6):955-63). We have used this guideline for objective scoring of our NASCOLA aggregometry EQA. Finally, I have a word of thanks to Piet Meijer: NASCOLA's experiences with aggregometry interpretation EQA have benefited tremendous from the active participation of ECAT members. We have learned that when labs have problems, it is a worldwide issue. It was my pleasure to accept Piet's invitation to do a "live platelet EQA exercise", at the ECAT participants meeting in Sydney, Australia last year. We've come a long way as a committee! We welcome your comments and suggestions on how to improve the quality of platelet function testing in North America and beyond.



Membership Committee—Barbara Young, MT

Currently, NASCOLA has 97 Institutional Members, 17 Associate Members, 6 Individual Members, 7 Trainee Members, 4 Honorary Members and 1 Emeritus Member. We are very pleased to announce that our total membership has continued to increase incrementally over the last 11 years.

NASCOLA has several categories of membership.

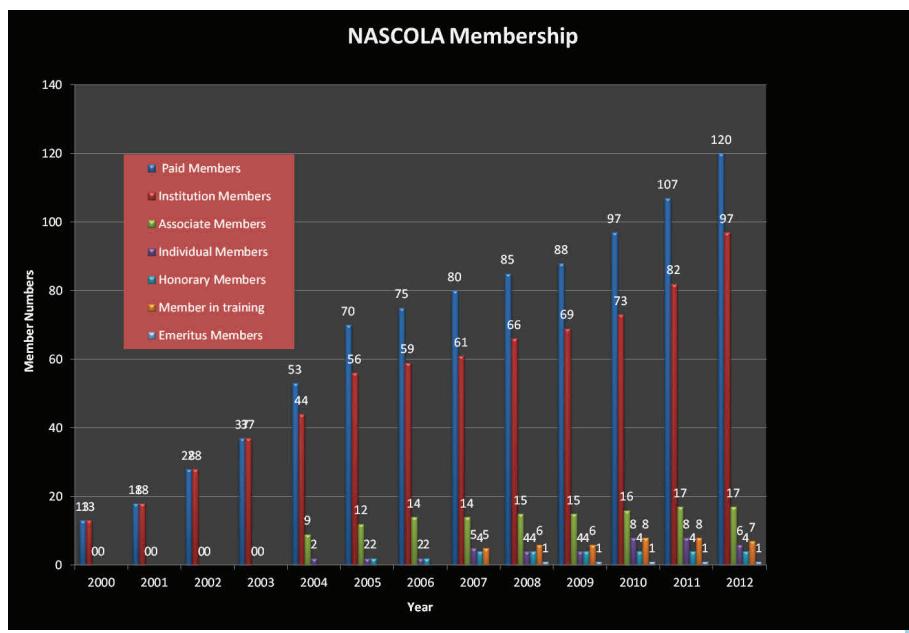
- *Institutional Member:* Represents clinical and reference special coagulation laboratories, most of whom participate in the Proficiency Testing Program.
- *Associate Member :* Designed primarily for diagnostic or therapeutic coagulation companies that support the NASCOLA mission. Some Associate Members also participate in the Proficiency Testing Program.
- *Individual Membership:* Designed for individuals who wish to join and support NASCOLA's mission. If an individual belongs to a coagulation laboratory that is an Institutional Member, there typically is no need to also join as an Individual Member.
- *Emeritus Member:* Allows members who have retired to remain linked and involved with NASCOLA. These individuals can participate in NASCOLA committee work and attend NASCOLA membership meetings.
- *Trainee Memberships:* For students, residents, and fellows at NASCOLA institutions – these individuals may want to use the NASCOLA website as an educational resource and they have the option to participate in a NASCOLA committee or project work.

>5 year Associate Members

- Beckman Coulter
- Bio/Data Corporation
- Centerchem
- Chrono-log Corporation
- DiaPharma
- George King Bio-Medical, Inc.
- Instrumentation Laboratory
- Precision Biologic
- Sekisui Diagnostics, LLC.
- Siemens Healthcare Diagnostics
- Stago

New Members in 2012

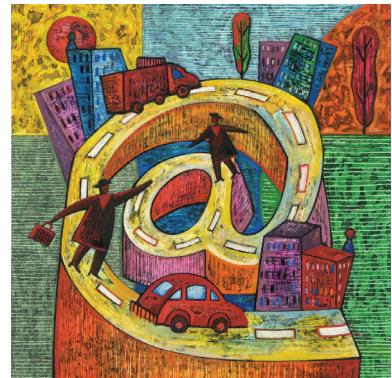
- Affiliated Laboratories, Inc
- Allina Medical Laboratories
- Children's Healthcare of Atlanta (CHOA)
- ClearPoint Diagnostic Laboratories
- Hôpital Maisonneuve-Rosemont
- Indiana University Health
- Long Island Jewish Medical Center
- NYU Langone Medical Center
- The Methodist Hospital
- Vitapath Genetics, Inc



Web Site Committee—Dr Hayward

The NASCOLA Website Working Group has had another very busy and successful year with the redesign and launch of a much improved NASCOLA website with new, user-friendly features. Our webmaster, David Hayward had an incredibly busy year with leading the development and implementation of new features. Members had the opportunity to experience the new ordering and billing system, which was well received. NASCOLA and ECAT participants in our Platelet EQA experienced a completely new view of cases, presented as pages in a book, and

more rapid process for the on-line entry of data. The system supports the automatic generation of customized reports for each participant once the exercise is scored. Our 2011/12 web development included redesign of many administrative functions of the NASCOLA website, which has continued to minimize the administrative time required for conducting NASCOLA business. Our bulletin board continues to keep members up to date on the latest NASCOLA news and upcoming events. As always, we appreciate your suggestions for improving the website and membership experiences.



PT/EQA (Proficiency) Committee—Dr Van Cott

The main goal of the PT/EQA Committee is to analyze NASCOLA proficiency results (using anonymous data) and publish the findings, as well as generate information about current laboratory practices and opinions by surveying our membership, and develop consensus guidelines based on our membership responses. It was a very productive year for the PT/EQA Committee, benefiting from the expertise of many new volunteers on the committee as well as continued efforts from long-term volunteers (see below). A list of publications can be found on the NASCOLA website's bulletin board, and the most recent are listed on page 8 of this newsletter. **If you would like to volunteer for a topic on this committee** please let Elizabeth Plumhoff or Elizabeth Van Cott know info@nascola.com.

PT/EQA committee members continue to present their findings at our annual sci-

tific and membership meeting, which takes place this year in conjunction with THSNA in Chicago May 3-5, 2012. Committee members are presenting NASCOLA data posters at THSNA on heparin-induced thrombocytopenia (HIT), factor VII, and platelets. Be sure to attend our annual NASCOLA membership meeting with complimentary dinner in Chicago on May 4 to hear brief "hot topic" presentations on factor VIII inhibitors by Dr. Pruthi, platelet aggregation by Dr. Hayward, HIT by Dr. Smock, and factor VII by Dr. Zantek.

One of our proudest achievements over the years has been the analyses, consensus guidelines and publications that stem from the Platelet Committee chaired by Catherine Hayward. After 5 exceptional years in this role, Dr. Hayward decided to step down from this position as of 2013, to focus on her increasing responsibilities as a Dean at McMaster University. Her herculean efforts on this committee are most admired and appreciated, and it will be very difficult to proceed without her. **If anyone is potentially interested in taking over the Platelet Committee**, please let us know.

Our committee is indebted to Marlies Ledford-Kraemer, who has been compiling the databases for all the anonymous proficiency data since NASCOLA was first formed. As of 2012, she decided to retire, and she is already greatly missed! All the successes and productivity generated by this committee have depended on her. We extend a warm welcome to Jana Gausman, who has taken over this role as our new ECAT Liaison.



Subcommittee Chairs and Members:

Heparin-induced thrombocytopenia

Kristi Smock, chair

Marlies Ledford-Kraemer, Elizabeth Van Cott

Factors

Nicole Zantek, chair

Peihong Hsu, Majed Refaii, Marlies-Ledford Kraemer, Elizabeth Van Cott

Factor XIII

Peihong Hsu, chair

Nicole Zantek, Elizabeth Van Cott

Factor VIII Inhibitor

Ravij Pruthi, chair

Platelet Committee

Catherine Hayward, chair

Karen Moffat, Elizabeth Plumhoff, Suzanne Hoffman, Elizabeth Van Cott

Anti-factor Xa

Rita Selby, Suzanne Hoffman

Activated protein C resistance

Richard Marlar, chair

Protein C

Stephen Johnson, chair

Jason Baron, Catherine Hayward, Marlies Ledford-Kraemer, Elizabeth Van Cott

Antithrombin III

Dong Chen

Critical values in Special Coagulation

Menaka Pai, chair

Karen Moffat, Elizabeth Plumhoff, Dorothy Adcock, and Catherine Hayward

von Willebrand factor

Wayne Chandler, chair

Lupus anticoagulant analysis was recently published and therefore was not actively pursued this year.

NASCOLA Publications

1. Hayward CPM, Moffat KA, Plumhoff E, Timleck M, Hoffman S, Spitzer E, Van Cott E, Meijer P. External Quality Assessment of Platelet Disorder Investigations: Results of International Surveys on Diagnostic Tests for Dense Granule Deficiency and Platelet Aggregometry Interpretation. *Seminars in Thrombosis and Haemostasis*, in press.
2. Kaatz A, Kouides PA, Garcia DA, Spyropoulos AC, Crowther M, Douketis JD, Chan AKC, James A, Moll S, Ortell TL et al. Guidance on the emergent reversal of oral thrombin and factor Xa inhibitors. *Am J Hematol* 2012; in press.
3. Hayward CPM, Moffat KA, Plumhoff E, Van Cott EM. Approaches to investigating common bleeding disorders: An evaluation of North American coagulation laboratory practices. *Am J Hematol* 2012; in press.
4. Baron JM, Johnson SM, Ledford-Kraemer MR, Hayward CP, Meijer P, Van Cott EM. Protein C Assay Performance. An Analysis of North American Specialized Coagulation Laboratory Association Proficiency Testing Results. *Am J Clin Pathol* 2012; in press.
5. Zehnder J, Price E, Jin J. Controversies in heparin monitoring. *Am J Hematol* 2012; in press.
6. Johnson NV, Khor B, Van Cott EM. Advances in laboratory testing for thrombophilia. *Am J Hematol* 2012; in press.
7. Kim YA, Makar RS. Detection of fetomaternal hemorrhage. *Am J Hematol* 2012; Apr 87:417-423.
8. Gehrie E, Laposata M. Test of the Month: The chromogenic antifactor Xa assay. *Am J Hematol* 2012; Feb 87:194-196.
9. Arinsburg SA, Shaz BH, Westhoff C, Cushing MM. Determination of HPA Typing by Molecular Methods: Importance in Diagnosis and Early Treatment of NAIT. *Am J Hematol* 2012, in press.
10. Zantek ND, Koepsell SA, Tharp DR, Cohn CS. The Direct Antiglobulin Test (DAT): A Critical Step in the Evaluation of Hemolysis. *Am J Hematol* 2012, in press.
11. Moffat KA, Van Cott EM, Plumhoff E, Hayward CPM. Are Clinical Laboratories Following Published Guidelines for the Interpretation of Light Transmission Aggregometry? Results from a NASCOLA Patterns-of-Practice Survey. Abstract, Thrombosis and Hemostasis Summit of North America (THSNA), Chicago IL 2012.
12. Smock KJ, Ledford-Kraemer MR, Meijer P, Van Cott EM. Laboratory Testing for Heparin-Induced Thrombocytopenia: A Report from the North American Specialized Coagulation Laboratory Association (NASCOLA). Abstract, Thrombosis and Hemostasis Summit of North America (THSNA), Chicago IL 2012.
13. Zantek ND, Hsu P, Refaai MA, Ledford-Kraemer M, Meijer P, Van Cott EM. The North American Specialized Coagulation Laboratory Association Experience with Factor VII Proficiency Testing. Abstract, Thrombosis and Hemostasis Summit of North America (THSNA), Chicago IL 2012.
14. Pai M, Moffat KA, Plumhoff E, Hayward CP. Critical values in the coagulation laboratory: results of a survey of the North American Specialized Coagulation Laboratory Association. *Am J Clin Pathol* 2011; Dec 136(6):836-41.
15. Chandler W, Peerschke EIB, Castellone D, and Meijer P. von Willebrand Factor Assay Proficiency Testing, the North American Specialized Coagulation Laboratory Association Experience, *Am J Clin Pathol* 2011 Jun;135(6):862-899.
16. Smock KJ, Saunders PJ, Rodgers GM, Vandita Johari V. Laboratory Evaluation of Clopidogrel Responsiveness by Platelet Function and Genetic Methods. *Am J Hematol* 2011; Dec 86:1032-1034.
17. Marlar RA, Gausman JN. Protein S abnormalities: A diagnostic nightmare. *Am J Hematol* 2011; 2011 May;86(5):418-421.
18. Moffat K, Plumhoff E, Hoffman S, Van Cott E, Meijer P, Hayward C. International Proficiency Challenges for Platelet Light Transmittance Aggregation - Performance and Adherence to Published Guidelines in Diagnostic Laboratories, poster #811 ISLH May 2011.
19. Baron J, Hayward C, Johnson S, Van Cott E. Protein C assays: an analysis of North American Specialized Coagulation Laboratory Association proficiency testing, poster #900 ISLH May 2011.
20. Hayward CM, Moffat KA, Raby A, Israels S, Plumhoff E, Flynn G, Zehnder JL. Development of North American Consensus for Medical Laboratories That Perform and Interpret Platelet Function Testing Using Light Transmission Aggregometry. *Am J Clin Pathol* 2010; 134:955-963.

Continued →

NASCOLA Publications (continued)

21. Khor B, Van Cott EM. Laboratory tests for antithrombin deficiency. *Am J Hematol* 2010 (Dec);85(12):947-50.
22. Dembitzer FR, Ledford Kraemer MR, Meijer P, Peerschke EIB. Lupus anticoagulant testing: performance and practices by North American clinical laboratories. *Am J Clin Pathol* 2010 (Nov); 134: 764-773.
23. Otis SA, Zehnder JL. Heparin-induced thrombocytopenia: Current status and diagnostic challenges. *Am J Hematol*, 2010 (Sep); 85(9): 700-706.
24. Ledford-Kraemer MR. Analysis of von Willebrand Factor (VWF) Structure by Multimer Analysis. *Am J Hematol*, 2010 (July); 85(5): 510-514.
25. Smock KJ, Rodgers GM. Laboratory evaluation of aspirin responsiveness. *Am J Hematol* 2010; May;85(5):358-60.
26. Khor B, Van Cott EM. Laboratory tests for protein C deficiency. *Am J Hematol* 2010; Jun;85(6):440-2.
27. Castellone D, Van Cott EM. Laboratory monitoring of new anticoagulants. *Am J Hematol* 2010 Mar;85(3):185-187.
28. Van Cott EM. All that glitters is gold? *Am J Hematol*. 2010 Apr;85(4):223-224.
29. Smock KJ, Rodgers GM. Laboratory identification of lupus anticoagulants. *Am J Hematol* 2009 Jul;84(7):440-442.
30. Nichols WL, Rick ME, Ortel TL, Montgomery RR, Sadler JE, Yawn BP, James AH, Hultin MB, Manco-Johnson MJ, Weinstein M. Clinical and laboratory diagnosis of von Willebrand disease: a synopsis of the 2008 NHLBI/NIH guidelines. *Am J Hematol*. 2009 Jun;84(6):366-370.
31. Peerschke EI, Castellone DD, Ledford-Kraemer M, Van Cott EM, Meijer P. Laboratory assessment of factor VIII inhibitor titer: the North American Specialized Coagulation Laboratory Association experience. *Am J Clin Pathol*. 2009 Apr;131 (4):552-558.
32. Hayward CPM, Moffat KA, Spitzer E, Timleck M, Plumhoff E, Israels SJ, White J. Results of an external proficiency testing exercise on platelet dense granule deficiency testing by whole mount electron microscopy. *Am J Clin Pathol*. 2009 May;131(5):671-675.
33. Moffat KA, Ledford-Kraemer MR, Plumhoff EA, McKay H, Nichols WL, Meijer P, Hayward CPM. Are laboratories following published recommendations for lupus anticoagulant testing? An international evaluation of practices. *Thromb Haemost*. 2009 Jan;101(1):178-184.
34. Cattaneo M, Hayward CPM, Moffat KA, Pugliano MT, Liu Y, Michelson AD. Results of a worldwide survey on the assessment of platelet function by light transmission aggregometry: a report from the platelet physiology subcommittee of the SSC of the ISTH. *J Thromb Haemost* 2009;7:1029.
35. Pai M, Moffat KA, Plumhoff EA, Adcock DM, Zehnder JL, Hayward CPM. Critical values in the coagulation laboratory: Results of a survey of the North American Specialized Coagulation Laboratory Association. 51st ASH Annual Meeting and Exposition, December 5 – 8, 2009. *Blood* 2009; 114(22); Abst # 1415.
36. Moffat KA, Plumhoff E, Reyes E, Hoffman S, Israels S, Meijer P, Hayward CPM. The interpretation of light transmittance platelet aggregation is inconsistent – Results from an international challenge. XXIIInd Congress of the International Society on Thrombosis and Haemostasis. Boston, USA, July 11-16, 2009. Oral Communication. *Journal of Thrombosis and Haemostasis* 2009; 7(Suppl 2) [on CD-ROM]: Abst OC-MO-134.
37. Verhovsek M, Moffat KA, Hayward CP. Laboratory testing for fibrinogen abnormalities. *Am J Hematol*. 2008 Dec;83 (12):928-931.
38. Abstracts: 2nd Mayo/NASCOLA Coagulation Testing Quality Conference. *Am J Hematol* 2008(Dec);83(12):941-948.
39. Price EA, Hayward CP, Moffat KA, Moore JC, Warkentin TE, Zehnder JL. Laboratory testing for heparin-induced thrombocytopenia is inconsistent in North America: a survey of North American specialized coagulation laboratories. *Thromb Haemost*. 2007 Dec;98(6):1357-1361.
40. Olson JD, Preston FE, Nichols WL. External Quality Assurance in Thrombosis and Hemostasis: An International Perspective. *Semin Thromb Hemost* 2007;33:220-225.
41. Van Cott EM, Ledford-Kraemer M, Meijer P, Nichols WL, Johnson SM, Peerschke EIB. Protein S: An Analysis of the North American Specialized Coagulation Laboratory Association Proficiency Testing. *Am J Clin Pathol* 2005; 123: 778-785.
42. Moffat KA, Ledford-Kraemer MR, Nichols WL, Hayward CP. Variability in clinical laboratory practice in testing for disorders of platelet function: results of two surveys of the North American Specialized Coagulation Laboratory Association. *Thromb Haemost*. 2005 Mar;93(3):549-553.

THANK YOU to Marlies Ledford-Kraemer

Marlies Ledford-Kraemer has been a part of NASCOLA since before the beginning of the organization. She was instrumental in the initial planning stages (1996ff) that ultimately led to our formal organization as a non-profit corporation in 2000.

Marlies served NASCOLA as the organization's first Secretary-Treasurer (1998-2002) and then as NASCOLA's first Executive Secretary (2003-2005), and after resigning that position, she stayed active on NASCOLA Committees and as the ECAT Liaison through 2011. At the December, 2007 NASCOLA annual membership meeting, President Catherine Hayward and the Executive Committee awarded Marlies a NASCOLA lifetime honorary membership - one of only four persons to receive this honor.

Alongside Marlies's devotion to NASCOLA, beginning in 2000 and while still with the Special Coagulation Laboratory at the University of Miami, she created a coagulation education newsletter, The Clotting Times, soon followed by developing CLOT-ED (www.clot-ed.com), an internet-based coagulation educational resource that she managed until transitioning it and The Clotting Times newsletter to ECAT in 2010 while continuing on the editorial board. NASCOLA members are also ECAT members and can access CLOT-ED through the ECAT website.

Dr. William Nichols describes Marlies' contributions in the following quote. He states, "*She was, in my opinion, the single most important person behind NASCOLA's beginnings in the 1990s and its success and growth through about 2005, with ongoing contributions continuing into 2011.*"



With all that behind her, Marlies has decided to "fully retire," including her NASCOLA duties as of the end of 2011. We will certainly miss her!

Thank you, Marlies, for all you have done for NASCOLA and its members!

Photo (circa 2005) courtesy of WL Nichols, MD

Remembering Dr. Yale Arkel NASCOLA's First President

Yale S. Arkel, M.D., 76, died Oct. 15, 2011, from acute myelogenous leukemia. Born in 1935 in Brooklyn, N.Y., Dr. Arkel graduated from Chicago Medical School in 1961. After his hematology fellowship, he went on to found the first major state-funded hemophilia center in New Jersey, led hematology departments and hemostasis centers in New Jersey, and served as the founding president of the North American Specialized Coagulation Laboratories Association. Dr. Arkel was the co-inventor of a test for Factor V Leiden and held academic and faculty positions at the University of Medicine and Dentistry of New Jersey, Columbia University College of Medicine, New York University Medical Center, Yale University School of Medicine, and Albert Einstein Medical School in New York City.

In 1996, Dr. Arkel initiated the concept of a consortium of Special Coagulation Laboratories. He worked with others to finalize the plans and in 1998, the first slate of officers was elected. This first slate of NASCOLA officers included Dr. Heinz Joist, Dr. Bill Nichols, Dr. Richard Marlar, Marlies Ledford-Kraemer, Dr. Alvin Schmaier, and Dr. Doug Triplett. Quite the illustrious group! Dr. Arkel resigned as president in 1999, but continued his support of NASCOLA and was accorded a lifetime honorary NASCOLA membership.

In May 2012, he was recognized at a symposium honoring the late Dr. Ted Spaet, who trained Dr. Arkel during his hematology fellowship at Montefiore Medical Center. Dr. Arkel was honored for his contributions to the discipline of blood coagulation disorders, to the care of patients with bleeding and thrombotic disorders, and to the postgraduate education of physicians and laboratorians. Dr. Arkel also remained actively engaged in his work as medical director of the hemostasis and thrombosis laboratory at Bio-Reference Laboratories in Elmwood Park, N.J.

Outside of work, Dr. Arkel's interests were family, friends, fitness, and reading history. Over the last year of his life, Dr. Arkel, saw his son marry, celebrated his 50th wedding anniversary, saw his grandsons enter grammar school, enjoyed vacations in Colorado and Maine, and presided over numerous family gatherings. He was a devoted, cherished husband to Anne; father to Adam, Louise, Jane, and Jessica; father-in-law to Jack Hannon, Jack Mason, and Simin Ho, and grandfather to Owen and Eamon Arkel Mason.

Dr. Arkel was, and his family remains, profoundly grateful to New York-Presbyterian/Weill Cornell Medical Center for the care he received throughout his illness. It vindicated his conviction that the best medical care is advanced by science, not by profit, practiced with compassion, and should be accessible to all.

Donations may be made in his name to Leukemia Fighters/New York-Presbyterian, c/o Gail J. Roboz, 520 E. 70th St., Starr 340A, New York, N.Y. 10021.

