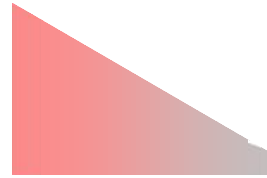


THE CUTTING EDGE

REGION IX NEWSLETTER



FALL NEWSLETTER ~ 2011

Greetings from the Region IX Director Ann Lynde

The NSH S/C in Cincinnati was a big success, congratulations to Region IV and S/C committee for a job well done!

Our website received first place and we also won second place in the T-shirt contest.

The Region IX general meeting held on September 17, there were 41 registered members attended, including 15 first time attendees!

Our focus is now on the 38th Annual Symposium in Vancouver. Our lead people are May Chin and Mark Elliot. There will be email blasts in the New Year asking for volunteers for various areas of the convention.

Thank you to James Tang and Somagen Diagnostics for the Monday night treat of great food.

There is a contest starting in the January 2012. We need a theme for our convention, and the winner will receive a free banquet ticket. So, put on your thinking cap for a theme!

NSH Health and Safety is requesting someone from Canada to present at the Vancouver S/C. If you are interested or know someone who is on a Laboratory Health and Safety committee and would be interested, please let me know by the end of November.

It's time to renew your NSH membership for 2012! If you renew before December 1st, 2011, you will receive an NSH calendar and be put in a drawing to win a Vera Bradley "Tea Garden" Duffle Bag - their newest Breast Cancer Awareness color. You can renew online at www.nsh.org.

"They say hard work never hurt anybody, but I figure why take the chance." - Ronald Reagan

Future NSH S/C Dates



38th Annual Symposium/Convention
September 23-October 3, 2012
Vancouver, BC

39th Annual Symposium/Convention
September 20-26, 2013 in Providence, RI

40th Annual Symposium/Convention
August 21 - 27, 2014 in Austin, TX

Congratulations to the NSH Award Winners

Susan Heng
Leica Leadership in Teaching

May Chin
Luna Foreign Travel Scholarship Award
May is using this award to travel to Costa Rica.

Education Update

Lisa Manning

The year was a busy one for me as the new education chair. It really started off with a bang, working with the Region IX team to coordinate my first regional meeting in Montreal. The meeting was very well attended and the evaluations clearly indicated that the participants learned a lot and enjoyed the speakers and vendor interaction.

Now the weather in some of our provinces is starting to get colder and kids are gearing up to go back to school. This is the time of year when people are thinking about their workshops and courses for the National NSH symposium/convention this year in Cincinnati, Ohio. The program this year looks excellent and I hope that many Canadians will be able to attend this annual event. If not, we should be starting to approach our supervisors to request travel time for the next NSH S/C which will be held in Vancouver next year. Since this symposium/convention will be in our own Region, it would be great to see our current NSH members put forward a push for increasing the Region IX membership and working on preparations for travel arrangements for multiple technologists to have the opportunity to attend this 2012 event.

The Fall is also a great time to start thinking about continuing education (CE) courses and coming up with creative ways to meet most provincially mandated CE requirements. The NSH offers excellent monthly lunch hour teleconferences which are always interesting and informative. The NSH also provides training certificates for teleconference attendees to use for CE credits. For those who prefer to read journals, there are also some amazing articles in the Journal of Histotechnology. The journal covers many diverse topics and usually has some excellent tips on improving or tweaking staining methods and some cutting edge articles about new innovative techniques. An on-site journal club is another way to initiate some CE in the workplace. No matter what stimulates you, the NSH has lots to offer for histotechnologists; you just need to be a member to enjoy all the benefits.

My goals over the next year will be to look into ways to offer more CE and to learn the inner workings of this new position so I can better serve our region. Please email me if you have any suggestions for continuing education or have ideas that you would like to share that may help other technologists who may be struggling to acquire their CE credits.

Lisa Manning



NSH 2011 Teleconference Schedule

www.nsh.org

October 26: Taking it to the Bio "Bank": The Journey of a Biospecimen to a Biomarker

November 16: Violence in the Workplace: What Can We do to Prepare?

December 21: Safe Storage of Laboratory Chemicals

To purchase teleconferences that have already past please visit the NSH Live Learning Center on the NSH website.

Region IX Awards

Tracey Lenek

2011 Region IX Awards Committee

Although the number of nominations and applications received was far less than previous years – the quality of the applicants was once again remarkable. “Five” out of the possible “9” awards had successful applicants, the remaining were not rewarded either due to lack of applications received or the applicants did not meet the award criteria.

In an effort to accommodate delays associated with the rotating postal strike, we continued to accept applications several weeks after the deadline of June 15th.

I would like to thank the awards committee for reviewing the documentation and completing the award selection on such a short timeline, especially since for some this impacted their summer vacation as well.

Thank you to the vendors who sponsor the awards, to the committee for a job well done and most of all to the deserving 2011 NSH Region IX Award Recipients.

Tracey Lenek

THE CUTTING EDGE is the official newsletter of Region IX of the National Society for Histotechnology. It is distributed quarterly to all members in Canada.



The Objectives of THE CUTTING EDGE are to:

- Reflect both Canadian and North American articles pertinent to the practice of Histotechnology
- Publish articles that are beneficial to our discipline.
- Promote communication between Region IX members and members of the other NSH Regions
- Provide a medium for exchange of information among members.

Contributions are welcome.

Please send your articles to:

Ann Lynde

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Production of The Cutting Edge is sponsored by Leica Canada Inc.

<http://www.nshregionix.org/>

2011 Region IX Awards

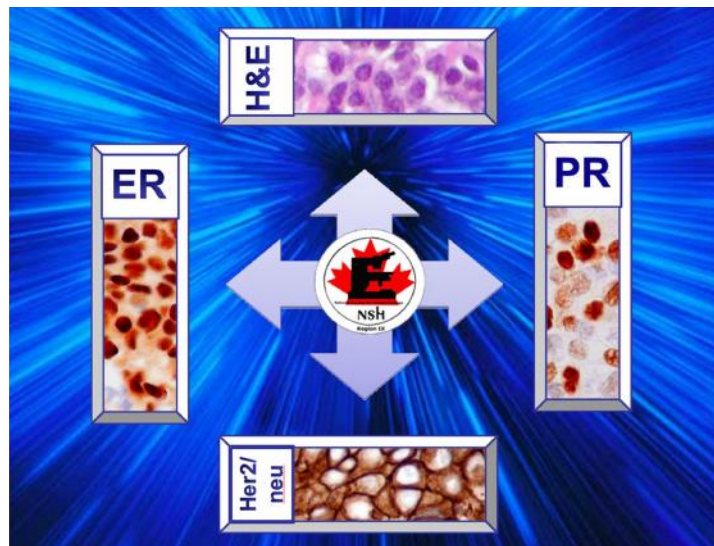
Vendor Plaque of Appreciation – Ventana/Roche

Malcolm D. Silver award - Janet Tunnicliffe

Dako Award Immunohistochemistry/In-situ Hybridization - Elizabeth Colley

Vector Laboratories Histotechnology Student Scholarship Award - Jason Rapps

T-shirt Design Award – May Chin



Health of Pathology Laboratory Technicians at Risk from Common Solvents like Xylene and Toluene

Category: [Laboratory News](#), [Laboratory Pathology](#)

Published: July 5 2011

Study identifies increased incidence of Raynaud's phenomenon among pathology laboratory staff who work with certain chemicals

[Pathologists](#) responsible for health and safety in [histology](#) and [cytology](#) laboratories will be interested in the results of a newly published study involving staff exposure to certain chemicals. Researchers determined that [medical laboratory](#) technicians who handle common solvents develop auto-immune connective tissue diseases in increased numbers.

The new study was published this month in the *Journal of Rheumatology*. It offers credible evidence that clinical laboratory technicians, pathologists, and scientists who work with [toluene](#) and [xylene](#) double their chances of developing a vascular condition known as [Raynaud's phenomenon \(RP\)](#). And for those who work with toluene and xylene combined with acetone or chlorinated solvents, the chance of developing severe RP increases by a factor of nine!

Majority of Cases Involve Women Who Work in Pathology Laboratories

The study was conducted at the [University of Otago](#), in Wellington, New Zealand. Researchers asked all the histology laboratories and cytology laboratories in New Zealand to participate in the study. Every laboratory department in the nation agreed and provided data and access to laboratory workers.

A total of 341 medical laboratory technicians participated in the study, most of whom were women (79%). Those who came into contact with toluene and xylene on a regular basis were twice as likely to develop Raynaud's phenomenon. However, those who worked with acetone or chlorinated solvents combined with toluene and xylene were nine times more likely to develop severe Raynaud's phenomenon.



Skin discoloration caused by Raynaud's phenomenon, which can also lead to necrosis and gangrene. (Image sourced from Wikipedia.com.)

"I am concerned that 75% of those who worked with xylene or toluene handled wet sample slides without gloves. The majority had done so daily for over a decade," said lead researcher [Gordon Purdie](#), BSc, who is a biostatistician. "Absorption through the skin is a classic way for solvents to have a negative impact on health."

As those working in histology or cytology labs know, these solvents are used during tissue processing to produce microscopic slides for viewing by pathologists. Researchers concluded that constant exposure to solvents is a contributing fact in the increased cases of Reynaud's phenomenon among the study's participants.

According to the study, medical laboratory workers who did not handle solvents developed severe Reynaud's phenomenon at the same rate as people who did not work in medical laboratories at all. The researchers could therefore conclude that the increased incidence of Reynaud's phenomenon cases among histology and cytology laboratory workers was the direct result of exposure to solvents.

Symptoms of Raynaud's Phenomenon

Traditionally, Raynaud's phenomenon results from exposure to cold or emotional stress that causes blood vessels in the hands, feet or other extremities to spasm. The alternating constricting and dilating of the vessels are called [vasospastic](#) attacks. They decrease the blood flow to those areas resulting in discoloration, and in extreme forms, can cause the skin to atrophy and lead to [gangrene](#) and [necrosis](#).

This is the first study to demonstrate a link between medical laboratory worker solvent exposure and symptoms of auto-immune connective tissue disease, and has important implications for workplace health and safety," said [Andrew Harrison, Ph.D.](#), a Senior Lecturer in Rheumatology at the University of Otago, and co-author of the study.

Study May Encourage Pathologists to Adopt Alternative Processing Methods

It is likely that this new study by the researchers at the University of Otago will motivate other researchers to also study the health impact of working with the solvents and chemicals commonly found in histology and cytology laboratories. The use of these chemicals for purposes of tissue processing and fixation is widespread. Thus, the findings of this study, if confirmed by future studies, will likely spur pathologists and histology laboratory managers to take steps to reduce staff exposure to these chemicals.

There are alternative methods for processing and fixing tissue that do not involve the chemicals that were the subject of the University of Otago study. One company that is a pioneer in developing automated tissue processing systems that don't require formalin and similar chemicals is [Milestone Medical](#). It offers an [automated tissue processing system](#) that allows the operator to choose "formalin or formalin-free fixation" and "xylene or xylene-free clearing."

Milestone Medical may be among the first of the histopathology companies to recognize the demand by some histology laboratories for automated processing solutions that reduce the staff's direct exposure to chemicals. But with this study, which links exposure to xylene and toluene to a higher incidence of Raynaud's phenomenon, it is likely that more pathology laboratories will now want to look at how to reduce staff exposure to these chemicals—and possibly even eliminate their use.

Pathology groups and histology laboratories will probably also want to assess how this new research study might change the legal liability that the laboratory has, as it pertains to employees who have decades of exposure to xylene, toluene, and similar chemicals, and who may also show the symptoms of Raynaud's phenomenon. In the United States, it doesn't take long for attorneys to recognize a new legal [cause of action](#) and begin advertising to find individuals willing to be the plaintiff in a lawsuit.

Finally, it must be acknowledged that there is already a growing trend to re-design histology and cytology laboratories so that the odor from these chemicals is eliminated. In addition, enhanced use of automation and workflow redesign techniques reduces the direct exposure lab staff has to such chemicals. The findings from this new study linking use of xylene and toluene to Raynaud's phenomenon may serve to accelerate this trend, for all the right reasons pertaining to staff safety.

FORMALDEHYDE PLAN CHECKLIST

- ___ Are MSDS's for formaldehyde available to workers if formaldehyde is used at any concentration?
- ___ Have all employees been identified through initial monitoring who may be exposed to formaldehyde at or above the action level (0.5ppm) or STEL (2.0ppm)
- ___ Are employees shown by initial monitoring to be exposed to formaldehyde at or above the action level (0.5ppm) or STEL (2.0ppm) periodically monitored at least every 6 months?
- ___ Have affected employees received results of exposure monitoring within 15 days of employer receiving results?
- ___ Have regulated areas been established where concentrations of airborne formaldehyde exceeds either the TWA or the STEL?
- ___ Are warning signs posted at all entrances and access ways to regulated areas?

DANGER FORMALDEHYDE IRRITANT AND POTENTIAL CANCER HAZARD
AUTHORIZED PERSONNEL ONLY

- ___ Is access to regulated areas limited to persons trained to recognize the hazards of formaldehyde?
- ___ Are warning signs posted if formaldehyde at or above the action level (0.5ppm) or STEL (2.0ppm)?
- ___ Have engineering and work practice controls been implemented to reduce and maintain employee exposure to formaldehyde at or below the 8-hr TWA and the 15 min. STEL.
- ___ Have respirators been provided to employees whose exposure cannot be reduced to or below PEL's with engineering and work practice controls?
- ___ Is appropriate PPE provided at to employees to prevent skin and eye contact with liquid containing 1.0% or more of formaldehyde?
- ___ Is appropriate PPE provided at no cost to employees to prevent skin and eye contact with formaldehyde?

- ___ Is formaldehyde training provided at the time of initial assignment for all employees exposed to formaldehyde concentrations of 0.1 ppm or greater?
- ___ Is formaldehyde training provided for all employees whenever a new exposure to formaldehyde is introduced into the work area?
- ___ Is formaldehyde training repeated annually for all employees exposed to formaldehyde concentrations of 0.1 ppm or greater?
- ___ Are safety showers and eyewash stations provide if splashing of formaldehyde is likely?
- ___ Are all mixtures or solutions composed of greater than 0.1 % formaldehyde labeled?
- ___ Are all materials labeled that are capable of releasing formaldehyde into the air, under reasonably foreseeable conditions of use, at concentrations reaching or exceeding 0.1 ppm?
- ___ Are all materials capable of releasing formaldehyde at levels above 0.5ppm during normal use, labeled with the words "potential cancer hazard"?

Is medical surveillance provided for all employees exposed to:

- ___ Formaldehyde at concentrations at or above the action level (0.5ppm) or exceeding the STEL (2.0)
- ___ Any employee who develops signs and symptoms of exposure
- ___ All employees exposed to formaldehyde in an emergency
- ___ Are employee exposure records kept for 30 years?
- ___ Are employee medical records kept for 30 years after employment ends?

Copied from the
NSH 2010 Health and Safety Package

**NSH Region IX would like to extend thanks to Leica Microsystems for their continued sponsorship of
The Cutting Edge Newsletter**



2011 MEMBERSHIP APPLICATION

NATIONAL SOCIETY FOR HISTOTECHNOLOGY
 10320 Little Patuxent Parkway, Suite 804, Columbia, MD 21044
 PHONE: 443-535-4060 FAX: 443-535-4055 EMAIL: Histo@nsh.org
 WEBSITE: www.nsh.org

TYPE OF MEMBERSHIP:

PROFESSIONAL STUDENT RETIRED

RENEWING YOUR MEMBERSHIP
NEW MEMBER

* Student Members must provide School & Program Director/Supervisor Name

HISTOLOGY SCHOOL/PROGRAM: _____ PROGRAM

DIRECTOR/SUPERVISOR: _____

MEMBER NAME: _____ NICKNAME: _____

WORK ADDRESS:

TITLE: _____

COMPANY: _____

DEPARTMENT/SUITE: _____

ADDRESS: _____

CITY: _____ STATE: _____

ZIP/POSTAL CODE: _____ COUNTRY: _____

WORK PHONE: _____ FAX: _____

WORK EMAIL: _____

HOME ADDRESS:

ADDRESS: _____

CITY: _____ STATE: _____

ZIP/POSTAL CODE: _____ COUNTRY: _____

HOME PHONE: _____

PERSONAL EMAIL: _____

MAIL PREFERENCE: (Please select primary address)

WORK ADDRESS HOME ADDRESS

WORK EMAIL PERSONAL EMAIL

Please Note: All NSH correspondence will be sent to address selected. In addition this address is published in our on-line membership directory.

NSH MEMBER REFERRED BY: _____

STATE HISTOLOGY LICENSE #: _____

MEMBER DEMOGRAPHICS: DATE OF BIRTH: ____/____/____ GENDER: MALE FEMALE

DESIGNATION (Check all applicable Boxes):

HT (ASCP) HTL (ASCP) MT (ASCP) CT (ASCP) SLS (ASCP) QIHC (ASCP) RT ART MLT

MD PhD OTHER _____ NOT CERTIFIED

I WOULD LIKE TO RECEIVE INFORMATION FROM THE FOLLOWING COMMITTEES:

IHC HARD TISSUE VIR HEALTH & SAFETY QUALITY CONTROL OTHER _____

MEMBERSHIP DUES: \$80 (2011 PROFESSIONAL) \$40 (2011 STUDENT/RETIRED)

WOULD LIKE TO PURCHASE MEMBERSHIP PIN (\$10.00)? YES NO THANKS

WOULD LIKE TO CONTRIBUTE TO EDUCATIONAL FUND? NO THANKS YES \$ _____

WOULD LIKE TO CONTRIBUTE TO ADA FUND? NO THANKS YES \$ _____

(Your donation to the Educational Fund helps provide Awards & Scholarships such as Lee Luna Award, etc & ADA will aid in furthering the education of the physically challenged)

PAYMENT INFORMATION: (Please Remit fee with completed application in US Funds to the NSH office) TOTAL: \$ _____

A check for the total amount due payable to "NSH" is included with this application.

PAID IN CASH/MONEY ORDER

Please charge my **VISA, MC or AMERICAN EXPRESS** for the total listed above.

Card Holder's Name: _____ Signature: _____

Card Number: _____ Expiration Date: _____

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