

New York State Histotechnological Society

# *On Stage*

Volume 33, Issue 3 Summer 2013

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## **New York State Legislative Issues**

Those of you in attendance at the NYSHS annual meeting in Cobleskill were made aware of activity on the legislative front concerning two key issues. First, a measure (A06124/S04097) residing in the Committee on Higher Education is seeking to extend the Limited License deadline from 9/1/13 to 9/1/2020. While in principle we agree with this extension in order to facilitate and resolve many of the issues members have been having with SED and licensure, the bill is written such that extension is intended to apply to laboratory areas that were not included in the original “Restricted License Category”; mainly, Chemistry, Hematology, Microbiology, and Blood Banking. There is no mention of histology as one of the disciplines that should be included in this piece of legislation. We therefore do not support the measure as written but would seek to change the language so that it is inclusive of histology.

The second bill (A01766/S01650), also residing in the Committee on Higher Education, has been before the legislature previously. The Assembly passed this bill while it is still sitting in the senate. The purpose of the bill is to amend the existing provisions of the law related to licensing of clinical laboratory professionals to eliminate the dual licensing standard that depends on whether a laboratory (legally eligible under NYS law) is physically located within the State or outside its borders. The goal is to ensure that individuals tasked with performing clinical laboratory tests are being held to the highest professional standards regardless of the physical location where they practice. Hence, technicians/technologists performing testing on NY state specimens in out of state laboratories retain a New York State Clinical Laboratory license. The bill requires that out of state laboratories licensed and regulated by NYS and that all test specimens originating in NYS demonstrate that they meet the educational standards set by the department of education and department of health. NYSHS supports this measure.

A third measure that has been suggested but does not yet have language, proposes that a licensure category for Pathologist assistants be created. While this measure is still in its infancy, it does have the potential of restricting histologists from performing “grossing” duties. This will affect turnaround times, especially at smaller institutions that do not have the staffing nor resources to hire a PA. As always, the NYSHS is interested in your opinions and thoughts on these matters as we are here to represent our membership. If you would like to express your views, please do not hesitate to reach out to any of the members on the Board of Directors on any of these matters.

This year, NYSHS is starting an initiative to collect statistical and demographic information about the numbers of histologists practicing in NYS. This will be inclusive of those in and out of clinical laboratories. The goal is to determine the number of individuals (because no one actually knows!) practicing histology within the state. Armed with this information, NYSHS will be better suited to negotiate and propose changes to existing laws and help resolve legislative issues facing histologist in NYS.



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**Deadlines for Submission are:**

September 1 - Fall  
December 1 – Winter  
March 1 - Spring  
June 1 - Summer

Membership in the New York State Histotechnological Society, includes a subscription to *On Stage*. The annual membership fee is \$20.00. Please direct membership inquiries to:

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## Summer Letter



Hi Everyone,

What a great turn-out at SUNY Cobleskill for our annual meeting! The meeting was a success with 109 attendees, 18 vendors and 5 excellent speakers! The meeting was kicked off by past-NYSHS president, NYSHS Fellow, Cobleskill Alumnus and current NSH president Beth Shep-

pard. Beth was followed by Dr. Hubbard from St. Peter's and Dr Castero from Cornell University who gave great talks on forensics' and veterinary histopathology. Todd Schreiber gave an interesting talk on Microwave applications and a special thanks to Lorelee McMahon for giving two excellent sessions. We gave out over \$2000 in scholarships and awards to members and students at our meeting luncheon! Other BOD members were recognized for their significant contributions and service to NYSHS. Board members, Diana Scott and Michelle Fuller were awarded the Dominic Europa and Presidents Award respectively, for their dedication and commitment to serve the Society. Sandy Mendel, former NYSHS President and long time contributor, on both the state and national level was appointed a Fellow of the Society. Walter Burns was appointed an NYSHS Honorary member as was Assemblyman Peter Lopez (District 102) for his efforts and success in getting legislation passed that not only created the Histologist licensing category but also allowed the Histotechnology Program at SUNY Cobleskill to re-open. Congratulations to all, and keep up the great work !!

As always, there are so many to thank..... there is a tremendous amount of work that goes on behind the scenes to pull off a meeting. First, I would like to thank the SUNY Cobleskill administration for allowing us to use their beautiful campus and facility; I suspect that we will be back! I would especially like to thank our BOD member, Dr Pam Colony, for all her work planning and hosting the meeting. I would also like to thank the students of the 2013 Histotechnology class for all their hard work and for their great T-shirt design they put together! Of course what would a NYSHS meeting be without the support of Vendors? Be sure to check out our website to see the complete list and be sure to visit their websites! Of course none of this would have happened without the hard work and dedication of the entire BOD who takes on all the responsibilities to have a successful meeting; THANK YOU!!!

We have some other important items to tell you about as well. NSH will be in Providence Rhode Island at the end of September (9/20-9/25). With the meeting so close we, hope to have a good NYS representation so please be sure to check the meeting schedule for committee meetings that you can attend. We are also looking for members to attend the NSH House of Delegates Meeting, held on the last night of the convention. For more info please contact any of the BOD members. There is also many some significant issues going on in Albany so be sure to read the update in this issue.

Enjoy your summer ,

Luis



## **Rapid Decalcification Enables Successful RNA Isolation From Bone Specimens**

By: Sarah A. Mack<sup>1</sup>, Michael D. Hoffman<sup>1,2</sup>, Linda M. Callahan, Ph.D.<sup>3</sup>, and Danielle S.W. Benoit, Ph.D.<sup>1-2,4-5</sup>

1-University of Rochester Medical Center, Center for Musculoskeletal Research

2-University of Rochester, Department of Biomedical Engineering

3-University of Rochester Medical Center, Department of Pathology and Laboratory Medicine

4-University of Rochester, Department of Chemical Engineering

5-University of Rochester Medical Center, Department of Orthopedics

How many of you cringe when you know you have to process and cut frozen specimens? I used to as well, and I understand why you are reluctant to embark on a frozen specimen experiment. Our lab works primarily with bone, and I acknowledge that frozen bone sample preparation can be very difficult. If your samples are not fixed, decalcified, or handled properly, ultimately they will not cut well, and the result will be poor quality sections. Imagine cutting perfusion fixed, 24 hour decalcified samples...are you cringing now? I am not! Our lab recently demonstrated the use of a tape transfer system to prepare these samples, making cutting bone as smooth as butter.

Recently, members of the Center for Musculoskeletal Research at UR began to develop protocols for processing bone allograft specimens for laser capture microdissection (LCM) (Fig. 1). This was done to allow for compatibility of tartrate-resistant acid phosphatase (TRAP) staining of bone, while simultaneously collecting high quality RNA to perform gene expression analysis of individual, transplanted GFP-expressing cells. Concerns that immediately came to mind included:

### **How would we preserve RNA quality to enable polymerase chain reaction (PCR)-based gene expression analysis, while ensuring adequate decalcification for uniform sectioning?**

Procedures commonly used for decalcification reduce RNA quality and are therefore not compatible with LCM for bone sections. In an effort to mitigate this problem, we prepared all of our solutions in diethylpyrocarbonate (DEPC)-treated water. Mice were perfused with cold 4% paraformaldehyde for 30 minutes and rinsed in DEPC water. To preserve TRAP staining capabilities, specimens were then placed directly in cold 14% ethylenediaminetetraacetic acid (EDTA) for 24 hours, rather than literature-recommended formic acid, for decalcification. After decalcification, samples went through a 10%, 20%, and 30% sucrose gradient and were allowed to incubate in OCT medium for 30 minutes prior to snap freezing. Samples were cut immediately into 8  $\mu$ m sections and stored at -80 °C to preserve RNA quality.

### **Frozen sections were prepared to avoid the harsh processing steps of paraffin embedding, but the preparation of adequately thick sections for LCM was still a challenge.**

By using the Leica CryoJane® Tape-Transfer System, we were able to successfully preserve allograft tissue morphology within each section. Furthermore, all cells were preserved with the tape transfer system, including the GFP-expressing cells of interest. Successful preservation of tissue sections enabled the isolation of RNA from GFP-expressing cells and subsequent analysis of gene expression profiles within these target cell populations.

Preliminary data from LCM of prepared samples show good RNA quality. Furthermore, isolated RNA yields detectable gene expression levels of both housekeeping genes and genes of interest. In conclusion, with careful planning and good communication, we were able to successfully decalcify bone specimens for LCM, selectively identify cells of interest (GFP-expressing), and subsequently perform RNA isolation and gene expression analysis.

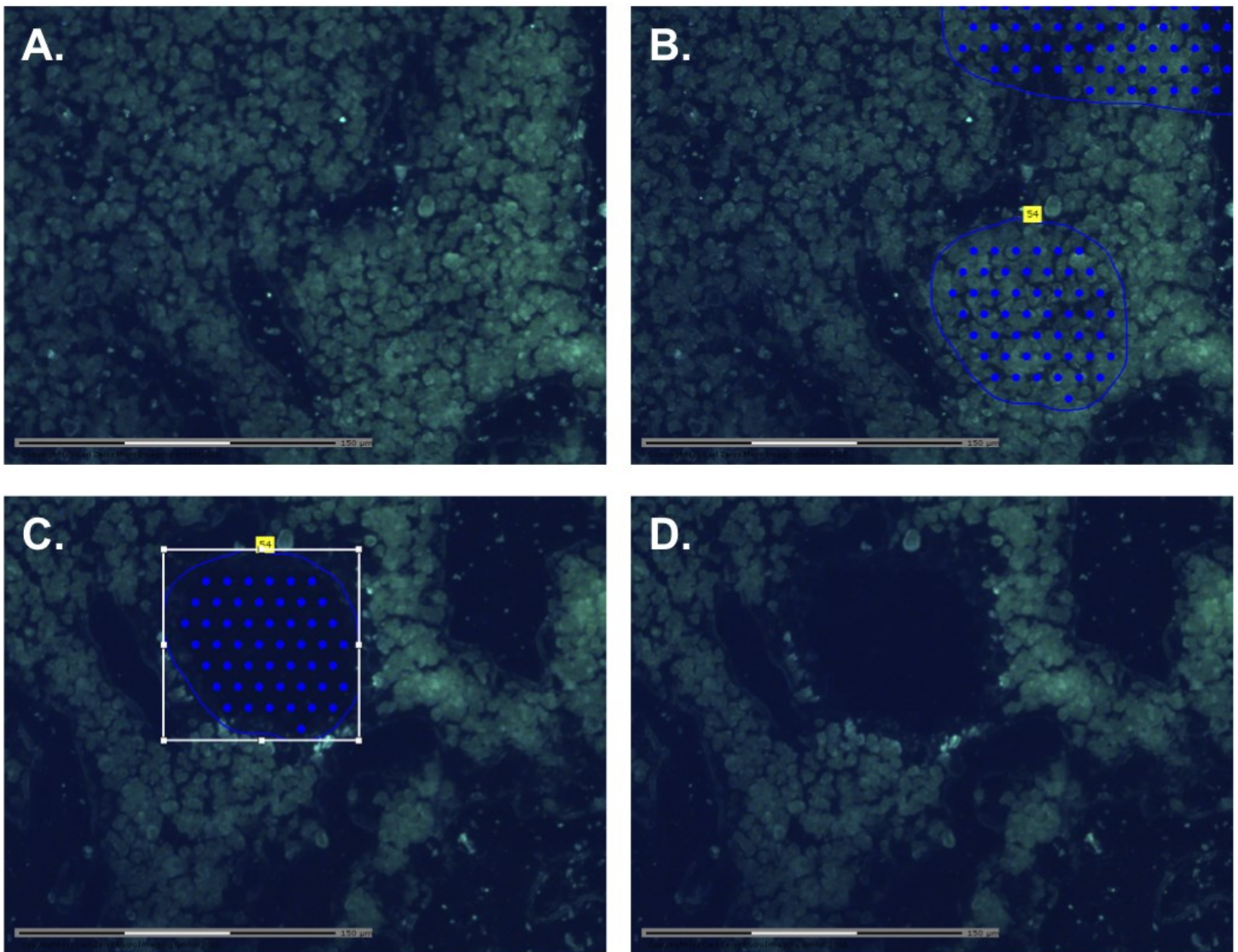
When you have questions about new procedures, ask for help! Talk to your co-workers and consult the literature. If your first attempt fails, try again! Always believe in your skills and never give up!

Cont. on Page 5



# Rapid Decalcification Enables Successful RNA Isolation From Bone Specimens

## Cont.



**Figure 1.** Representative images of LCM capture of GFP<sup>+</sup> mouse mesenchymal stem cells from decalcified femur allograft specimens. Region of interest is identified within field of view (A) and subsequently outlined using the LCM capture software (B; blue outline with dots). Capture of identified region of interest is then performed using laser dissection (C) and isolated cells are removed from histological specimen (D) for subsequent RNA isolation and gene expression analysis (Bar = 150 µm).



Dear Awards Committee,

I would like thank the NYSHS awards committee for selecting and honoring me with the 2013 Dominic Europa award. To be recognized as an inspiration to others is truly a great honor. For those who know me, I try to do my job to the best of my ability and encourage others to do the same. I have seen many junior techs become leaders in the field and they too should be commended for their efforts as they continue to grow in the field.

At the beginning my career many years ago, those in the field helped to mentor and encourage me to do well. They instilled in me to do my best, follow procedures, share information with colleagues, assist co-workers and have a good work ethic. "Remember behind every sample you must provide a quality result as a patient eagerly is awaiting. Your actions have significant impact on the final result."

I had the honor of meeting Dominic Europa once while in school and learned from the start, understand the procedures and follow them without deviation and your quality will be consistent.

I think during our career we encounter so many people who touch our lives with the knowledge they share that each and everyone out there deserves some recognition for a job well done. I thank each of you who have mentored me over the years, and still continue to do so, providing and giving me the opportunity to share my acquired knowledge with others. I couldn't even begin to name them all.

With that being said, I thank each of you who have worked along side of me and continue to grow in the field to keep the momentum going. We have a lot more to do and so many more to reach.

Again, thank you all so very much.

Respectfully,

Diana Scott



## Just a few words from Diana Scott HT, ASCP

As the 2013 CEU coordinator for the NYS Cobleskill meeting I would like to thank everyone who attended the symposium. Remember something new this year! In order to obtain your certificate of participation

I just wanted to remind everyone that the contact hours are available to you through NSH portal. Here you can monitor you activities and print out the necessary documentation for BOC maintenance program, employer required continuing education and those regulatory agencies requiring proof of continuing education. I am enclosing the instructions in case you have been meaning to update your personal files and didn't have the information on how to access the portal readily available. Keep in mind that periodically NSH Audits the attendance sheets and meeting rosters to keep everyone honest. So be sure all NSH CEU sponsored activities you attend, you sign the attendance sheets. Thank again enjoy your summer and if you haven't already thought about the NSH symposium in Rhode Island check out the Web site, I am sure it will be a great educational program.

Best regards, Diana



NYSHS Annual Meeting Vendors



Want to place an ad in the newsletter?

Advertising space is always available.

Contact Stephanie Krauter at

[nysadsadcoordinator@yahoo.com](mailto:nysadsadcoordinator@yahoo.com) for more information.





## NYSHS Annual Meeting 2013



Assemblymen Lopez with Dr. Colony, Beth Sheppard and Luis Chiriboga



SUNY Cobleskill Alumni Reception



Walter Burns receiving Honorary Membership



Sandy Mendel awarded Fellow of the Society



Dr. Castero of Cornell University





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## **NYSHS ELECTION 2013:**

The ballots for the 2013 NYSHS elections have been received and tallied. Angela Fogg will continue to serve as the Vice President. Michelle Fuller will also serve another term as Treasurer. Elected to the Board of Directors positions are newcomer David Marrocco and serving a second term, Carrie Lindberg. Congratulations to all the winners and thanks to everyone who took the time to vote. This is your society and your opinion can make a difference!

It's not too early to consider a run for office for next year's election. The available positions will be President, Corresponding Secretary, Membership Secretary and 3 seats on the Board of Directors. Nominees must be a member of the Society for one year prior to the election, and willing to serve the society for a term of 2 years, beginning the first day of July following the elections.

The member elected to serve as President will act as the executive office of the Society by presiding over all Society meetings, and serve on all committees except for the Nominating Committee. These committees include but are not limited to the Awards Committee and the Education/Scientific Committee.

The Corresponding Secretary is responsible for taking the minutes at all meetings of the Society as well as Board of Directors meetings. This position also entails the maintenance of Society records, and Society correspondence including meeting notices.

As Membership Secretary, one is responsible for collecting member dues, keeping current the list of members, and issuing membership cards to those entitled.

The Board of Directors as a whole is responsible for the formation of the policies of the Society. The seats on the Board of Directors are held by the officers (President, Vice President, Secretaries and Treasurer), as well as 5 additional elected members and the immediate past-President. There shall be at least two meetings of the board of Directors called by the president each calendar year for the purpose of transacting business of the Society, including the planning of the Annual Symposium.

If holding an office or membership on the Board is not for you, you may want to consider serving on one of the many NYSHS committees. Volunteering for a committee can give you insight into the operations of the NYSHS, and familiarity enough to perhaps entice you to run for an office in the future. Also, as a committee constituent you may have the opportunity to receive reduced rates to attend meetings.

For more information on the Society, the Board of Directors and offices, or to volunteer for a committee please visit [www.nyhisto.org](http://www.nyhisto.org)



## Why Should I Become a Member of NYSHS?

By: Sarah Mack, NYSHS Membership Secretary

Why not become a member of NYSHS?!? There are several benefits to becoming a member of the New York State Histotechnological Society. The many benefits of NYSHS membership are:

- Award winning subscription to quarterly newsletter “On-Stage”.
- Discounted rates for attendances to NYSHS’s annual symposia, which are held at various locations within the state to increase accessibility to all members.
- Timely and relevant educational seminars at annual symposia.
- Message Board to keep you up to date on activities and meetings.
- Scholarships made available to students of histotechnology and professionals seeking further education or attendance at annual conferences.
- Opportunity to network with other professionals who may be a valuable source of information and assistance with issues within the field of Histotechnology.
- Representation with the National Society for Histotechnology, regulatory agencies and in Albany.
- Updates on current and future legislation issues.
- Opportunity to participate in the governance activities of the society.
- Discounted rates available to students (must show proof of enrollment).
- Become a member to show your pride in our profession.
- Why not make our mission your mission too?

### NYSHS Mission Statement:

NYSHS is a volunteer non-profit organization dedicated to representing and promoting the advancement of histology as a profession. The society actively pursues this by; offering educational opportunities, advocating on behalf of its members, and increasing the awareness of the general public and other health care professionals about the histotechnology discipline. The society supports educational programs in order to foster student development and professional growth by sharing knowledge and creating a forum for the exchange and distribution of ideas.

The Society is open to anyone who is interested in histology and histotechnology disciplines. NYSHS Membership applications are available on our website at: <http://www.nyhisto.org/>, or contact the membership secretary with any questions you may have.

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NEW YORK STATE HISTOTECHNOLOGICAL SOCIETY  
MEMBERSHIP APPLICATION



**PERSONAL INFORMATION:**

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
  
City: \_\_\_\_\_  
State: \_\_\_\_\_  
  
Zip Code: \_\_\_\_\_  
E-mail: \_\_\_\_\_  
Phone: \_\_\_\_\_ Home  
Phone: \_\_\_\_\_ Work  
  
Employer: \_\_\_\_\_

**Type of Membership:** (check one)

- ☐ New  
☐ Previous (date previous membership)  
☐ Student (College name)

\_\_\_\_\_  
Instructor's signature

**National Information:** (check one)

- ☐ Member of the National Society for Histotechnology  
☐ Non-Member  
☐ Please send me an NSH application

**Nature of Work:** (check one)

- ☐ Clinical  
☐ Research

Education (highest level): \_\_\_\_\_

- ☐ HT  
☐ MT  
☐ HTL  
☐ Other \_\_\_\_\_

Referred by member: \_\_\_\_\_

**MEMBERSHIP INFORMATION:**

Registration: (check one) Membership year runs from July 1 to June 30

☐ Education Annual Membership Fee (tax deductible): \$20.00

☐ Student Full Time Student Fee: \$7.00

**Membership will expire June 30th,**

Please send applications & check payable to NYSHS to:

Sarah Mack  
NYSHS Membership Secretary  
8162 Quanz Rd  
Wayland, NY 14572

