



# The MMS Scope

## Minnesota Microscopy Society

Local affiliate of the **Microscopy Society of America**  
and the **Microanalysis Society**

January 2016

### In this Issue:

#### BCA lab tour:

See the forensic science services of Minnesota's Bureau of Criminal Apprehension up close in a laboratory tour on February 11 in St. Paul.

#### Up ahead:

MinnTS on March 15 (at 3M this year!) and Spring Symposium on April 29.

#### 2016 MMS dues:

Please remember to submit your annual dues to maintain your MMS membership.

#### Call for volunteers

Minnesota Academy of Science looking for science professionals to volunteer at state competitions in Jan-Apr.

#### Thank you, volunteers!

A big thank you to all who gave their time to *Microscope Day* and the *Math and Science Family Fun Fair*.

#### Looking back:

Photo memories from the MMS-Sigma Zeta joint meeting last Nov.

:: coming up next ::

## MINNESOTA BUREAU OF CRIMINAL APPREHENSION LAB TOUR

THURSDAY, FEBRUARY 11, 2016



### BCA LAB TOUR

Tour is free. A 30-45 min. talk will precede the tour of the laboratory.



### EVENT LOCATION

Minnesota BCA  
1430 Maryland Ave. E.  
St. Paul, MN 55106

#### [map it](#)

\* Parking is available in the lot on Phalen Boulevard.



### SCHEDULE

Start time: 3:30 p.m.

Dinner afterward at [Great Moon Buffet](#), Maplewood, for those interested.



### RESERVATIONS

**Cost:** Free

**Deadline:** Sunday, Feb. 7

Reservations may be made by emailing MMS at:

[reservations@mnmicroscopy.org](mailto:reservations@mnmicroscopy.org).

*Please include name and affiliation for each registrant.*



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**CALENDAR of EVENTS**

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**15 MAR 2016****14th Annual MinnTS (Minnesota Technical Symposium)**3M Innovation Center / Executive Forum ***new location!***

Maplewood, Minn.

4:00 – 6:00 p.m. -- Tour of innovation space



Two speakers:

**Stefan Lindvall, CEO, Multi-Tech Systems, Inc.***The Internet of Things (IoT)***Noah Korba, Sr Manager, Network Security, General Mills***Recent Trends in the Cyber Security Threat Landscape***29 APR 2016****MMS Spring Symposium**

Minnesota Science Museum

120 W. Kellogg Blvd.

St. Paul, Minn.



Confirmed speakers:

**Jeff Jansen, Senior Managing Engineer, The Madison Group***Failure Analysis of Plastics***Tammy Lai, Lead Metallurgist, Ecolab/Nalco***Failure Analysis of Metals***John Mansfield, Assoc. Research Scientist, Univ. of Michigan***(Forensics, failure analysis)***Katie Igowsky, Forensic Scientist, Minnesota BCA***The Role of Microscopy in Solving Crimes*

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**DON'T FORGET!**

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Please remember to pay your 2016 MMS membership dues.



## CALL FOR VOLUNTEERS



### MINNESOTA ACADEMY OF SCIENCE

—Promoting Excellence in Science Since 1873—

MANY Volunteers and Judges are needed for the  
2016 Minnesota Academy of Science State Competitions:  
Science Bowls, North Central Regional JSHS, and  
State Science & Engineering Fair

#### Important Dates

##### HS Science Bowl

Saturday,  
January 23, 2016

##### MS Science Bowl

Saturday,  
February 13, 2016

##### North Central Regional JSHS

Saturday - Sunday  
April 2-3, 2016

##### State Science & Engineering Fair

Sunday - Tuesday  
April 3-5, 2016

#### WE NEED YOU!

- (100) High School Science Bowl Volunteers
- (75) Middle School Science Bowl Volunteers
- (54 Judges) High School JSHS
- (60) General Volunteers JSHS
- (54 Judges) MS Papers Science Fair
- (308 Judges) State Science Fair
- (200) General Volunteers State Science Fair.

We ask that you share your passion for science with these students by joining other science professionals in providing an opportunity for over 850 students to apply their science and math knowledge in competitive formats.

There will be a training session the day of each competition.

A brief overview of the volunteer roles in all of the program competitions is explained on the website [www.mnmas.org](http://www.mnmas.org). Under programs, select Science Bowl, JSHS, and/or State Science Fair.

Please let us know if you have any questions about Science Bowl or State Science & Engineering Fair / JSHS.

Barbara Donoho

*Science Bowl Manager*

[bdonoho@mnmas.org](mailto:bdonoho@mnmas.org)

[Register now](#) for  
2016 Science Bowl

Lise Weegman

*State Science & Engineering Fair Director*

[lise@mnmas.org](mailto:lise@mnmas.org)

[Register now](#) for  
2016 State  
Science Fair/JSHS



## THANK YOU



MMS bestows a great heartfelt THANK YOU to all the Project MICRO Volunteers who recently participated in *Microscope Day* and the *Math and Science Family Fun Fair*. It is through their dedication and enthusiasm that these events are possible and succeeds in inspiring the next generation of scientists. It is most appreciated that these volunteers took the time on the weekends to help with these busy events. More than one thousand visitors – parents and kids of all ages – engaged in the microscope activities, many of whom had never used a microscope before.

On Saturday, November 7, 2015, MMS joined the Science Museum for the seventh year of *Microscope Day* from 12:00 to 4:00 p.m. The following volunteers made this awesome event possible:

**Steve Axdal, David Burleson, Pat Erickson, Burton and Muriel Gavin, Jeff Haggerty, Rajesh Kamboj, Renu Kumar, Stuart McKernan, Eric and Mia Morrison, Ann Palmer, Jeff Payne, Mark and Rowan Sanders.**

Before the start of this event, **Stuart McKernan** and **Jeff Payne** gave a special talk about microscopy for a new museum program called *Making Connections* to help recruit and inspire people of color to volunteer at the museum.

On Saturday, November 21, 2015, the University of Minnesota invited MMS for the twelfth year to participate in the *Math and Science Family Fun Fair* from 10:00 am to 4:00 p.m. The following volunteers made this spectacular event possible:

**Gib Ahlstrand, Steve Axdal, Chris Frethem, Muriel Gavin, Jeff and Anna Haggerty, Renu Kumar, Eric Morrison and Ann Palmer.**

A special thank you is extended to Ann Palmer for planning and coordinating *Microscope Day* with the Science Museum and to Jeff Payne for planning and coordinating the *Math and Science Family Fun Fair* with the University of Minnesota.

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THANK  
YOU!

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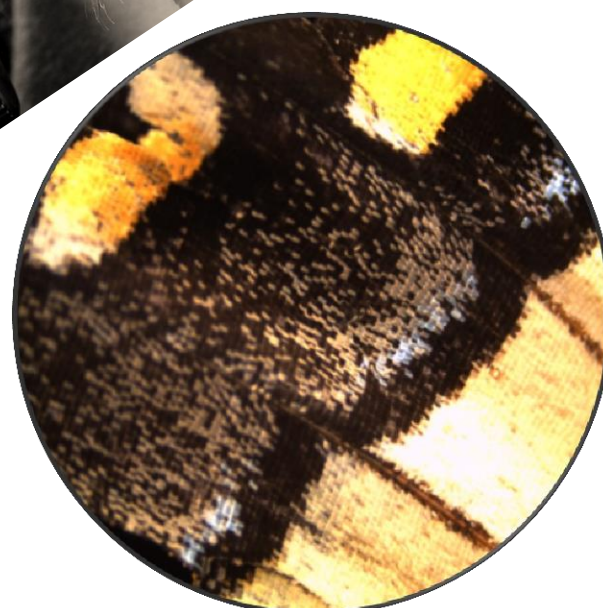
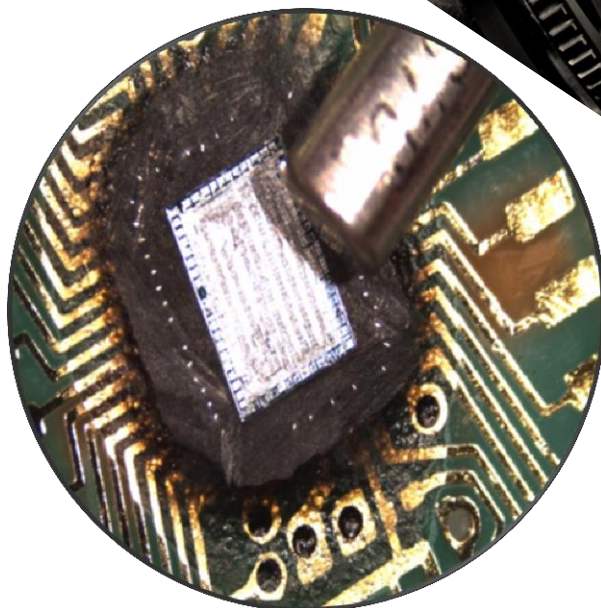
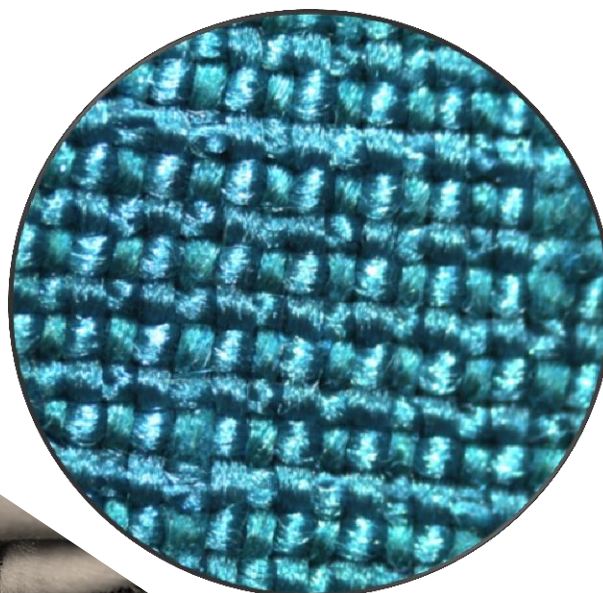


## THANK YOU, VOLUNTEERS!



Below are a few microscopic images of the popular items visitors enjoyed viewing with scopes at *Microscope Day* and the *Math and Science Family Fun Fair* last November – U.S. coins, fabric, a digital watch, and butterfly scales.

## Project MICRO





## PHOTO ALBUM

Enjoy these photo memories from the November 2015 MMS-Sigma Zeta Joint Meeting at Bethel University with guest speaker Gary Reuter from the UMN **BEE LAB**.





## FISCAL REVIEW

## Minnesota Microscopy Society Treasurer's Report 01/01/15 Through 12/31/15

**INCOME**

Dues by membership type	
<i>Corporate</i>	2,800.00
<i>Patron</i>	830.00
<i>Regular</i>	225.00
<i>Student</i>	10.00
<i>Sustaining</i>	300.00
<b>Total Dues</b>	<b>4,165.00</b>
<b>Interest Income</b>	<b>17.94</b>
Meeting Registrations:	
MMS Meeting Registrations	617.82
MinnTS Registrations	3,631.98
<b>Total Meeting Registrations:</b>	<b>4,249.80</b>
<b>Spring Symposium Income</b>	<b>4,792.18</b>
<b>TOTAL INCOME</b>	<b>13,224.92</b>

**EXPENSES**

<b>PayPal Credit Card Fees</b>	<b>302.13</b>
<b>Insurance</b>	<b>326.17</b>
Meeting Expenses:	
MMS Regular Meeting Expenses	1,043.22
MinnTS Meeting Expenses	3,685.90
<b>Total Meeting Expenses</b>	<b>4,729.12</b>
<b>Miscellaneous</b>	<b>80.42</b>
<b>Newsletter</b>	<b>700.00</b>
<b>Project Micro</b>	<b>61.05</b>
<b>Spring Symposium Expense</b>	<b>5,558.73</b>
<b>TOTAL EXPENSES</b>	<b>11,757.62</b>
<b>OVERALL TOTAL</b>	<b><u>1,467.30</u></b>



## MMS CORPORATE SPONSORS

Corporate Sponsors are the backbone of financial support for the Society. These members make it possible for the Society to support Project Micro and to cover many expenses of the regular meetings and the Spring Symposium. MMS gratefully acknowledges the corporate sponsorships provided by the following companies in 2015-2016. To become a Corporate Sponsor, complete and return the MMS membership form at the end of the newsletter.

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Peter Yurek	<b>Medtronic</b>	763-514-1250

If any sponsors are missing from this list, please contact Jason Heffelfinger (763-514-1021, [jason.r.heffelfinger@medtronic.com](mailto:jason.r.heffelfinger@medtronic.com)).





## MMS SUSTAINING & PATRON MEMBERS

The Minnesota Microscopy Society would like to express sincere thanks to our Sustaining and Patron Members. These members provide financial support to the organization above the standard membership fee. This additional support makes it possible for MMS to maintain its financial well being. To become a Patron or Sustaining Member, complete and return the MMS membership form at the end of the newsletter.

### MMS Sustaining Members

Michael Coscio	Medtronic (retired)	Steve Skorich	Medtronic
Bede Willenbring	H.B. Fuller Co., St. Paul (retired)		

### MMS Patron Members

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### MMS Board & Officers 2015-2016

**President:** Jeff Haggerty, Haggerty Analytical, 1032 Marshall Ave., St. Paul Park, MN 55071; (651) 387-9682; [ptfeconsultant@yahoo.com](mailto:ptfeconsultant@yahoo.com)

**Past-President:** Eric Morrison, 1202 Cherokee Ave., West St. Paul, MN 55118; (651) 795-5644; [mister.ericm@yahoo.com](mailto:mister.ericm@yahoo.com)

**President-Elect:** David Burleson, Ecolab, 655 Lone Oak Dr., Eagan, MN 55121-1651; (651) 206-8045; [david.burleson@ecolab.com](mailto:david.burleson@ecolab.com)

**Secretary:** Patricia Sanft, H.B. Fuller Co., P.O. Box 64683, St. Paul, MN 55164; (651) 236-5384; [patricia.sanft@hbfuller.com](mailto:patricia.sanft@hbfuller.com)

**Treasurer:** Bede Willenbring, H.B. Fuller Co. (retired), 4763 Decatur Ave N, New Hope, MN; (763) 533-0649; [treasurer@mnmicroscopy.org](mailto:treasurer@mnmicroscopy.org)

**MAS Representative:** Michael Coscio, Medtronic (retired), 12650 88th Ave N., Maple Grove, MN 55369; (763) 493-3500; [mikecoscio@comcast.net](mailto:mikecoscio@comcast.net)

**Project MICRO Director:** Jeff Payne, 3M Center, Bldg. 201-BE-16, St. Paul, MN 55144-1000; (651) 733-2352; [jjpayne@mmm.com](mailto:jjpayne@mmm.com)

**Corporate Liaison:** Jason Heffelfinger, Medtronic, 6700 Shingle Creek Parkway, Brooklyn Center, MN 55350; (763) 514-1021; [jason.r.heffelfinger@medtronic.com](mailto:jason.r.heffelfinger@medtronic.com)

**Webmaster:** Stuart McKernan, 3M Center, Bldg. 201-BE-16, St. Paul, MN 55144-1000; (651) 736-5993; [smckernan@mmm.com](mailto:smckernan@mmm.com)

**Newsletter Editor:** Maria Graff, Minneapolis, MN; [mariagraff@me.com](mailto:mariagraff@me.com)

## Other Board Members

Peter McSwiggen, McSwiggen & Associates  
St. Anthony, MN; [PMcS@McSwiggen.com](mailto:PMcS@McSwiggen.com)

Ann Palmer, University of Minnesota  
Dept. of Pediatrics, Mpls, MN; [palme003@umn.edu](mailto:palme003@umn.edu)

Sue Okerstrom, Lichen Labs, LLC,  
5942 Benjamin St. NE, Fridley, MN 55432;  
763-432-5630; [sue@lichenlabs.net](mailto:sue@lichenlabs.net)

Please visit the MMS website @ <http://www.mnmicroscopy.org/MMSform.pdf> for a pdf version of the membership form that can be filled in online, printed and mailed or saved and emailed. To pay via credit card, please go to <http://www.mnmicroscopy.org/MMSMembership.html> and use the PayPal link at the bottom.

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## MINNESOTA MICROSCOPY SOCIETY | MEMBERSHIP FORM

All microscopists are urged to support their Society at one of the membership levels offered below. Often, supervisors will support MMS memberships out of their project budget because they recognize that it is a very inexpensive way to maintain and increase the skills of their microscopists. If you have been a member over the years and recognize the value of MMS to the community of microscopists it serves, consider upgrading your membership this year to the Patron or Sustaining level. Thank you.

Name \_\_\_\_\_ Dr  Mr  Ms  Phone (\_\_\_\_) \_\_\_\_\_

Affiliation \_\_\_\_\_ Position \_\_\_\_\_

Address \_\_\_\_\_ ZIP \_\_\_\_\_

E-mail address \_\_\_\_\_

(Newsletter notifications will be e-mailed to the address above.)

Check here  if you do NOT want your name and address to appear in the Society directory.

Are you an MSA member?  MAS Member?

Student (\$5-\$9)  Basic (\$10-\$24)  Patron (\$25-\$99)  Sustaining (≥ \$100)

Payment: Check  PayPal  (Please make your payment via PayPal at

<http://www.mnmicroscopy.org/MMSMembership.html>.)

### Make checks payable to MMS and mail to our Treasurer:

Bede Willenbring, MMS Treasurer  
4763 Decatur Ave. North, New Hope, MN 55428-4402  
E-mail: [Treasurer@MNmicroscopy.org](mailto:Treasurer@MNmicroscopy.org)