



NESM News

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Please save Thursday, December 1st for NESM's 39th Annual Fall Symposium at GORDON COLLEGE !

As has become a tradition these past few years, NESM returns to the beautiful campus of Gordon College for it's Annual Fall Symposium! This year marks the Society's 39th Annual Fall Symposium and will be held on Thursday, December 1st.

For those members who are new and not familiar with Gordon College, it was originally founded in Boston in 1899 as a missionary training institute and named for the Rev. Dr. A.J. Gordon, a prominent clergyman of the late 1800s. In 1955, Gordon moved to its present location in Wenham, Mass. In 1970, the divinity school separated from the college, merging with the Conwell School of Theology in Philadelphia. Then, in 1985, Gordon merged with Barrington College, retaining the name of Gordon College. At the merger, Barrington's distinguished history of Christian service and faithfulness became a part of Gordon's history. Today Gordon College stands as one of the top Christian liberal arts colleges in the country and the only nondenominational Christian college in New England.

The Symposium begins at 12:00 Noon with Registration followed by welcoming statements by NESM's President, Steve Stokowski and Russ Camp of Gordon College. Session I will commence at 1:00 pm, followed by a coffee break at 2:45 pm. Session II will begin at 3:15 pm. We have an interesting program offering the attendees talks on a variety of microscopes and techniques : SEM, fluorescent and atomic force microscopes, high resolution TEM and cryo-electron microscopy. The Annual Business Meeting will convene at 5:00 pm. One of the main agenda items will be the election of new officers for the year 2006. Your attendance and vote at this business meeting is greatly encouraged. We have a wonderful slate of officers, but you can still add your name to the ballot—**please consider running for an office!** New faces are always welcome! Ballots are included in the newsletter. Please mark your ballots and mail it along with your registration form and registration fee.

Dinner will commence at 6:00 pm followed by an after-dinner talk "Cryo-Electron Microscopy: A Bridge from Molecular Structure to Cell Biology" by Dr. David Chester from Yale University. The meeting will adjourn at 8:00 pm with a message from our incoming President, Dan Gibson.

We look forward to seeing you on **December 1st** and encourage you to support our Society!

Mark Your Calendars!

Future Dates for Woods Hole Symposium:*

2006	5/4-5/6	2008	5/1-5/3
2007	5/3-5/5	2009	4/30-5/2

*Note: These dates include a reservation for Thursday also in case we run more workshops

39th Annual Fall Symposium and Business Meeting

Gordon College · 255 Grapevine Road · Wenham, MA 01984 · 978.927.2300

(<http://www.gordon.edu>)

Thursday, December 1, 2005

12:00 pm - **Registration**—Presidential Dining Room (Lane Student Center)

12:45 pm - **Welcome:** Steve Skokowski, NESM President

Session I

1:00 pm “The trace of a crime”.....

Dr. Jeanette Sablock, - Salem State University

1:50 pm “Cytokine Receptor-Mediated Trafficking of Preformed IL-4 in Human Eosinophils Identifies an Innate Immune Mechanism of Cytokine Secretion”

Lisa A. Spencer, Ph.D.- Beth Israel Deaconess Medical Center and Harvard Medical School

2:45 pm *Coffee Break*

Session II

3:15 pm “Cellular mechanotransduction in the heart: studying the role of stress in regulation of cardiac myocytes by using fluorescent and atomic force microscopies”

Nicholas Geisse, Ph.D. - Disease Biophysics Group Harvard University

4:00 pm “The Role of High-Resolution TEM in Developing New Super-Hard Coatings”

James Krzanowski, Ph.D. - University of New Hampshire

5:00 pm **NESM Annual Business Meeting**

-Election

-Reading of Minutes of 2003 Annual Business Meeting

-Report of President

-Report of Treasurer

-Introduction of New Officers

6:00 pm **Dinner**

Mark Retallack on piano and Mark Lucas on guitar, two outstanding Northshore musicians, will play jazz music during dinner

7:00 pm **After-Dinner Speaker**

"Cryo-Electron Microscopy: A Bridge from Molecular Structure to Cell Biology"

Dr. David Chester - Yale University

8:00 pm **Adjournment:** Dan Gibson, Incoming NESM President

Advance Registration Form

Registration after November 28th will **not** include dinner.

**Registration Deadline
November 28, 2005**

To register, please fill out this form below and send it with your check, payable to NESM, to:

Paul Bain
HMS-Countway 212
10 Shattuck Street
Boston, MA 02115
617-432-3236 **If you have questions, please email Paul at: paul_bain@hms.harvard.edu**

First Name _____ Last Name _____ Dr. Ms. Mr.

Company _____ Title _____

Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____ E-mail _____

Advance Registration

- | | |
|---|----------|
| <input type="checkbox"/> NESM Member | \$20.00 |
| <input type="checkbox"/> Non-member | \$35.00* |
| <input type="checkbox"/> Student/retired member | \$5.00 |
| <input type="checkbox"/> Student/retired non-member | \$10.00* |
| <input type="checkbox"/> Dinner** | \$ 5.00 |
| | |
| <input type="checkbox"/> Guest Registration | \$10.00 |
| Guest Name _____ | |
| | |
| <input type="checkbox"/> Guest Dinner** | \$15.00 |

Gordon College staff and students register free of charge

*All non-member registrations includes current-year-only NESM membership

**Dinner not included in registration

Total Enclosed _____

MENU CHOICES

Please select one of the following:

- Chicken
 Salmon

Note: All meals will include: fresh fruit cup, rolls and butter, rice, green beans and chocolate raspberry tort

Note: Anyone desiring a vegetarian entree, please contact Paul Bain (paul_bain@hms.harvard.edu) by November 28th. There is a limited number of these meals available.

REGISTER TODAY!

◆ Meeting Date

December 1, 2005
12 Noon-8:30 pm

◆ Meeting Location

Gordon College

◆ Highlights-2 Scientific Sessions

◆ Dinner with live music/After dinner talk

◆ Meeting Deadline

November 28, 2005



Thank you for your support. Your sustained commitment to NESM allows us to continue to promote excellence in microscopy here in New England.

AMT
Barry Scientific
E.A. Fischione Instr. Inc.
Eastman Kodak
EDAX, Inc.
Electro-Image, Inc.
EMS/Diatome
Energy Beam Sciences
Ernest F. Fullam
EXTEC Corp.
FEI Philips Electron Optics
Gatan, Inc.
Geller MicroAnalytical Lab
HKL Technology
JEOL-USA, Inc.
Ladd Research Indust., Inc.
Leica Microsystems, Inc.
MEDTEC
Micro Star Technologies
NanoTech Consulting
Oxford Inst. America
Princeton Gamma-Tech
Quality Images
Rontec USA, Inc.
SCANNING/FAMS, Inc.
SEMTECH Solutions
SPI Supplies Division
Thermo Electron
Tietz Video & Image Proc.
Systems

Microscopy Society of America

230 East Ohio Street, Suite 400 ■ Chicago, IL 60611-3265 ■ 800-538-3672
FAX: 312-644-8557 ■ E-mail: BusinessOffice@microscopy.org

Please see MSA website (www.msa.microscopy.com) for further information on the society and for submitting application on-line.

WOODS HOLE-SPRING SYMPOSIUM 2005

Winners Best Student Posters

Biology- \$50 each (donated by Quality Images)

“Quantitative Analysis of Vessel Permeability in Mouse Endometrial Implants” - Niraj Trivedi, et al –Department of Vascular Biology, Children’s Hospital –Boston, MA

“Isolation of Restriction Endonucleases from Various Bacterial Samples from Soil” - Ethan Arndt, et al-Biology Department, Gordon College-Wenham, MA

Materials Science-\$50 each (donated by JEOL & FEI Philips)

“Characterization of SiC/copper coated SiC Powders for Fabrication of CuSiC Metal Matrix Composite”- Nirupama Kattamuri, et al-Department of Chemical and Nuclear Engineering, Dept. of Engineering Technology, Center for Advanced Materials-UMASS, Lowell, MA

“Characterization of High Thermal Conductivity Carbon Structures to Use in Metal Matrix Composites: Next Generation Thermal Management Materials”-Sravanthi Mallim, et al-Department of Engineering Technology, Department of Chemical and Nuclear Engineering, Center for Advanced Materials-UMASS, Lowell, MA

Congratulations to you all!

NESM would also like to thank all the students who participated and the corporate sponsors who donated prize money for these well-deserving recipients

REPORT OF THE NOMINATING COMMITTEE

The Nominating Committee for 2005 is pleased to present to the membership the following Slate of Nominees for your consideration at the Annual Meeting and Election of Officers to be held at Gordon College on December 1, 2005.

FOR CORRESPONDING SECRETARY

(Term: 2 years)

Elka Pravda: Elka Pravda is a Smith college graduate with a background in chemistry and biology. She has 3 years experience in light, confocal and electron microscopy and is a trained histotechnologist. She is currently a Research Technician II in the BioImaging Group, Vascular Biology Program at Children's Hospital Boston. She attends Northeastern University Extension school and volunteers at Brigham and Women's Hospital. She is a member of NESM and Sigma Xi. Elka relocated from Mendocino California, enjoys international travel, white water rafting, horseback riding and outdoor activities.

FOR TREASURER (Term: 2 years)

Richard Schalek: Richard has an MS in Physics and a Ph.D. in Materials Science from Michigan State University. He has been active in local Professional Societies for many years, serving as Newsletter Editor, President and Past President for the Michigan Microscopy and Microanalysis Society. In addition, he has served as Corporate Liaison for the Detroit Chapter of ASM and as Treasurer for the Great Plains Chapter of TMS/ASM. Currently he is a Senior Staff Scientist in the Center for Nanoscale Systems at Harvard University where his research centers on developing "Green" technologies.

FOR PRESIDENT-ELECT (Term: 2 years)

FOR BIOLOGICAL DIRECTOR (Term: 3 years)

FOR PHYSICAL SCIENCE DIRECTOR (Term: 3 years)

NESM would like to thank the Nominating Committee for all their hard work. They have come up with two very qualified nominees for Corresponding Secretary and Treasurer. Unfortunately, they could not come up with nominees to fill the positions of President-Elect, Physical Sciences Director and Biological Sciences Director by the time this newsletter went to press. **PLEASE!** Consider running for one of these positions. It is a very rewarding experience to serve on NESM's Board. If anyone else is interested in running for any of the above offices, just add your name to the ballot (which is included in this mailing) or contact Steve Stokowski –President or any of the board members. You will find their contact information inside the newsletter. Either mail it along with your registration form or bring it to the meeting. The election will be held at the annual meeting on **December 1st.**

Project MICRO Update:

Project MICRO was not active this past year. The Festival at the Baker School Extended Day Program (Brookline, MA), planned for this past Spring, was postponed due to a small fire that relocated the Extended Day Program to other quarters in the school! We hope to have one in 2006. Sharon Corliss, the Director, really loved having us, and her staff was very helpful.

There are the possibility of two schools in Belmont and one in Newton that expressed interest in having us run a festival. We are always looking for new prospects. Project MICRO continues to excite youngsters at their Festivals. Please consider running such a Festival in your town—contact your local schools and teachers. Most teachers are thrilled at having their students participate!

If interested, please contact Mary McCann (mccanns@tiac.net) or 617-484-7865. Currently, Mary and I are the only NESM members actively running these festivals and we need new volunteers to participate.

Peggy Sherwood
Corresponding Secretary, NESM

Meetings, Conferences, & Courses 2005-2006

December 1, 2005
NESM Fall Symposium
Gordon College
Wenham, MA
Contact: Paul Bain
Paul_Bain@hms.harvard.edu

Nov 28-Dec 2, 2005
Matl's Research Society
Boston, MA
info@mrs.org

December 10-14, 2005
American Society for Cell Biology
San Francisco, CA
www.ascb.org

January 15-20, 2006
Composites
Ventura, CA
Contact: Alan Lesser
Email: ajl@polysci.umass.edu

March 12-16, 2006
TMS
San Antonio, TX
Cont: TMS Program. Dept.
184 Thorn Road
Warrendale, PA 15086
Ph: 724-776-9000, ext 253
Fax: 724-776-3770
Email: ckobert@tms.org

March 12-17 2006
PITTCON 2006
Orlando, Florida
Email: expo@pittcon.org
www.pittcon.org

Directions to GORDON COLLEGE

Gordon College is easy to get to from the west, south or north. We are located just off exit 17 on Massachusetts State Route 128. Look on a map and we are located just about in the middle between Gloucester, Mass. and Salem, Mass.

From points West:

(New York State, Pennsylvania, Connecticut, Western Massachusetts)

Take an east-bound highway (i.e. Mass Turnpike, Route 90) to Route 95 North. Stay on Route 95 until it separates from Route 128. Take Route 128 North toward Gloucester, passing through Peabody, Danvers and Beverly. Get off at Exit 17. Turn left at top of ramp, going one-quarter-mile to Gordon College, on Grapevine Road. *At the AJ Gordon Chapel, take a right and park in the lot directly in front of it. There will be a sign **Event Parking-NESM**. Proceed to the Lane Student Center-Presidential Dining Room for the meeting. (*See enclosed map of campus for building/parking locations*)

*(**Note:** If you miss this turn-off, you will come to the main entrance of the college, turn around at this point).

From points North:

(Maine, Vermont, New Hampshire, Manchester Airport)

Take Route 95 South to Route 128 North. Remain on Route 128 North, passing through Peabody, Danvers and Beverly. Get off at Exit 17. Turn left at top of ramp, going one-quarter-mile to Gordon College. (follow directions above)

From points South:

(Boston, Logan Airport, Rhode Island, TF Green Airport)

As you leave Boston/Logan Airport, look for signs for 93 North. Take 93 North to Route 95 North, and then follow the directions below.

Stay on Route 95 until it separates from Route 128. Take Route 128 North toward Gloucester, passing through Peabody, Danvers and Beverly. Get off at Exit 17. Turn left at top of ramp, going one-quarter-mile to Gordon College. (follow directions above)

Please note:

Routes 95 and 128 have similar exit numbers. Begin to pay attention to exit numbers once you get onto Route 128 North after it separates from Route 95.

Please See Gordon College Website for map of campus: www.gordon.edu

UPDATE: Proposal to Host 2011 Microscopy and Microanalysis Meeting in Boston

Update November 2005: The status of the 2011 M&M meeting is still in the air. MSA is engaging a new meetings manager, and there is some possibility that the negotiations with the Massachusetts Convention Center Bureau could be reopened. In any case, the longer we wait, the more clear the position of the Hynes will become. I would like to write to Gracie Burke (current MSA President) and be able to tell her who will be the continuing contact with us over the possibility of having M&M 2011 in Boston, as well as expressing our continued interest in that possibility.

Background: For those people who are unaware of this proposal, The Microscopy Society of America Council discussed the selection of the site for the 2011 M&M meeting at their board meeting in the winter of 2004-5. A small group of us at the meeting in Savannah (August 2004), specifically myself, together with Ann Lehman and Louie Kerr, felt that it would be interesting to explore the possibility of bringing the meeting back to Boston; the last meeting here was the 50th Anniversary meeting in 1992.

Accordingly, I circulated the NESM Board in early August, asking for initial reaction, which was strongly positive. I then arranged a meeting with Mary Beth Rebedeau, principal of the Rebedeau Group, the meeting manager retained by MSA, who by chance was visiting Boston on August 18th. Present at the meeting at her hotel were Mary Beth, myself, Ann Lehman, Steve Stokowski and Dan Gibson. The purpose of the meeting was to discuss what would be the responsibilities of NESM if we were to host the meeting, and what would be required by the MSA council in the form of a proposal. We also discussed the choice of venue—either the Hynes auditorium or the new convention center.

Boston would be an appropriate venue for 2011, as the 2010 meeting is scheduled for Portland, OR. The choice of Boston would thus maintain the East-West cycle. We might thus expect the MSA council to consider our proposal carefully. We would likely not be the only group inviting M&M that year, but we have strong enthusiasm, excellent facilities, enormous local involvement in microscopy, and an attractive city, so we might expect the MSA council to consider our carefully constructed proposal very positively.

As of November 5, 2004, I heard nothing about the business of the convention availability. I emailed Mary Beth Rebedeau asking where NESM stood in the selection process. It was clear she will not support a booking at the Hynes; and NESM cannot move forward unless we can get a booking at the new BCEC.

Cheers,

Anthony Garratt-Reed
Clerk and Past-President, NESM

NESM Application for Membership

New Members:

- | | |
|--|----------|
| <input type="checkbox"/> Regular Member | \$15.00 |
| <input type="checkbox"/> Student Member | \$5.00 |
| <input type="checkbox"/> Retired Member | \$5.00 |
| <input type="checkbox"/> Corporate Member* | \$100.00 |

Please make your check payable to NESM and send along with this application to:

NESM
c/o Paul Bain
HMS-Countway 212
10 Shattuck Street
Boston, MA 02115

Current Members:

- Change of Address Only

*Each Corporate Membership entitles two representatives to receive our newsletter. Please duplicate mailing information form as needed.

Mailing Information:

Date _____ Dr. Ms. Mr.

Name _____

Mailing Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____

Email _____

Company/University _____
(if not part of mailing address)

Major Interest: Biological Sciences Physical Sciences
Microscope Type: SEM TEM Light
 Confocal STEM Other

NESM Membership News 2005

The New England Society for Microscopy (NESM), a local affiliate of the Microscopy Society of America (MSA), is a professional organization dedicated to the promotion and advancement of the science and practice of all microscopical imaging, analysis, and diffraction techniques.

Each year, NESM holds four local meetings which feature speakers from both biological and physical science backgrounds. Social hours and buffet dinners are enjoyed at each meeting.

New Members: NESM has a calendar-year membership; new members may join at anytime. To join, please check one of the member categories, and return the above application along with your check payable to NESM.

Membership Renewal: An invoice for annual membership dues will be sent with the first newsletter each year. Dues are payable at meeting registration, or by check no later than May 31st.

**Please make check payable to NESM and send c/o:
Paul Bain, Countway Library, 10 Shattuck St.
Boston, MA 02115**

NESM Officers 2005

President 2005	Steve Stokowski Stone Prod. Cons. (508) 881-6364 spcpetro@aol.com	Physical Sciences Directors 2005	James F. Mancuso-AMT (978) 774-5550; info@amtimaging.com
President-elect 2006	Daniel G. Gibson WPI (508) 831-5543 dgibson@WPI.EDU	2006	David C. Bell-Harvard University (617) 496-6794; dcb@deas.harvard.edu
Past President 2005	Rick Rogers HSPH (617) 432-3472 rogers@bioimage.harvard.edu	2007	Donna Guarrera-JEOL (USA), Inc. (978) 536-2224; guarrera@jeol.com
Treasurer 2005	Paul Bain Countway Library (617) 432-3236 paul_bain@hms.harvard.edu	Biological Sciences Director 2005	Russell R. Camp-Gordon College (978) 867-4385; camp@gordon.edu
Clerk 2006	Tony Garratt-Reed MIT (617) 253-4622 tonygr@MIT.EDU	2006	Renee Dickie-HSPH (617) 432-0123; rdickie@hsph.harvard.edu
Corresponding Secretary 2005	Peggy Sherwood-MGH Wellman Center of Photomedicine (617) 724-4839; mesnesm@rcn.com	2007	William Fowle-Northeastern University (617) 373-3075; w.fowle@neu.edu

		Mailing Address: NESM, P.O. Box 425795, Cambridge, MA 02142	
		(New) NESM Web site: http://nesm.cims.harvard.edu	

Close-Ups of Sustaining members

A long list of the Sustaining Members appears in each issue of the Newsletter. The Sustaining Members contribute greatly to the vigor of our microscopy society. The Saturday exhibition at the Woods Hole Symposium each spring gives microscopists the opportunity to talk directly with the many Sustaining Members who take part in the annual exhibition. We'd like to use the Newsletter to better acquaint you with specific Sustaining Members. A drawing of business cards of those sponsors who exhibited at the Spring meeting led to the following sketches, FEI and Eastman Kodak.

FEI's Tools for Nanotech™, featuring focused ion- and electron-beam technologies, deliver 3D characterization, analysis and modification capabilities with resolution down to the sub-Ångstrom level. The company's continued investment in R&D, combined with its commitment to maintaining a strong focus on market trends and customer needs, has enabled FEI build a leadership position and maintain a steady stream of innovation achievements including the introduction of the world's first DualBeam™ systems (1993), the released of the world's first fully integrated TEM, the Tecnai (1998), and, most recently, the introduction of the Titan™ S/TEM the world's most powerful, commercially available S/TEM (2005). Titan's dedicated platform for corrector and monochromator technologies and their applications is designed for a high degree of automation and provides ultimate stability, performance and flexibility. The microscope transfers information deep into sub-Ångström resolution making way for the highest performance available in both transmission electron microscopy (TEM) and scanning transmission electron microscopy (STEM) modes. The Titan's upgradeable design not only enables larger nanotechnology and national research centers to afford dedicated aberration corrected TEM technology, it opens the door to universities and companies with staged funds to position themselves for the future. With R&D centers in North America and Europe and sales and service operations in more than 40 countries around the world, FEI is bringing the nanoscale within the grasp of leading researchers and manufacturers and helping to turn some of the biggest ideas of this century into reality. More information can be found on the FEI website at: <http://www.feicompany.com/>

Eastman Kodak-write-up not available at this time

See the Spring issue of the Newsletter for Close-Ups of:

ElectroImage

Thermo Electron