



Newsletter

Of the

New York Microscopical Society

1 Prospect Village Plaza
(66F Mt. Prospect Avenue)
Clifton, New Jersey 07013-1918



October 2009

N.Y.M.S. (973) 470-8733

Volume 3 (23) Number 8

Meeting Announcement

New York Microscopical Society 2009 Fall Lecture Series

Date: Wednesday, Oct. 21st, 2009, 7:30pm, People's Center,
American Museum of Natural History (use 77th St. entrance/exit only)

SPEAKER: Professor Timothy G. Bromage
Dept. of Biomaterials & Biometrics, New York University College of Dentistry

TITLE: Baggage Handlers and TSA Agents: New Elements in the Pursuit of Art and Science in Microscopy

ABSTRACT: It is important that every image we produce and give to the public shall contain the most powerful content and aesthetic appreciation that our experience allows. In the pursuit of this, with microscope in tow, we sometimes have to go where the stuff is. In this seminar I will review the optics technologies available in the Hard Tissue Research Unit of New York University College of Dentistry, talk about the in-house development of Portable Confocal Scanning Optical Microscopy (PCSOM), and demonstrate how representations of the microscopic are every bit as relevant and important to our world view as our macro- and mega-scopic impressions.

Following the meeting, NYMS members and their guests are welcome to join the speaker for Dinner at a selected, local restaurant. Please contact Roland Scal (rscal@qcc.cuny.edu; 718-631-6071) by noon on Saturday, October 20th to RSVP for dinner.



2009 Eastern Analytical Symposium & Exposition

November 16 - 19, 2009

GARDEN STATE CONVENTION CENTER
50 Atrium Drive, Somerset, NJ 08873 (732) 469-4000
Exit 10 from Route I-287

EXPOSITION:	Monday Nov. 16 — 9:00 - 4:00
3-DAYS	Tuesday Nov. 17 — 9:00 - 4:00
MON. - TUES. - WED.	Wednesday Nov. 18 — 9:00 - 4:00

*******Visit NYMS Booth 517*******



Annual Banquet December 06, 2009 – See Insert.

N.Y.M.S. BOARD OF MANAGERS

President

Angela V. Klaus, Ph.D., exp. June 2012
Department of Biology
Seton Hall University
400 South Orange Ave
South Orange, NJ 07079
klausang@shu.edu

Vice President

Webmaster

Roland Scal, Ph.D., exp. June 2010
Dept. Biological Sciences & Geology, M-213
Queensborough Community College
222-05 56th Avenue
Bayside, NY 11364-1497
Tel 718-631-6071
Fax 718-631-6678
rscal@qcc.cuny.edu

Treasurer

Librarian & Newsletter Editor

Mel Pollinger, exp. June 2011
18-04 Hillery Street
Fair Lawn, NJ 07410-5207
(201) 791-9826, pollingmel@verizon.net

Secretary

Craig Huemmer, exp. June 2012
NYPD Police Laboratory
chuemmer@hotmail.com

Past President

Peter Diaczuk, exp. June 2010
John Jay College
445 W 59th Street
New York, NY 10019
Department of Sciences
212-237-8896
pdiaczuk@jjay.cuny.edu

Past President

Pauline Leary, exp. June 2011
Smiths Detection
21 Commerce Drive
Danbury, CT 06810
(203) 207-9754
Pauline.Leary@smithsdetection.com

Past President

John A. Reffner, Ph.D., exp. June 2011
John Jay College CUNY
97 Ocean Drive East
Stamford, CT 06902
(203) 348-8098, jareffner@cs.com

Curator & Education Chair

Don O'Leary, exp. June 2010
10 Sampson Street, Unit 113
Saddle Brook, NJ 07663
(201) 368-8849
dkoleary@verizon.net

Membership Chair

Mary McCann, exp. June 2012
McCann Imaging
161 Claflin Street
Belmont MA. 02478
(617) 484-7865 Fax (617) 484-2490
mccanns@tiac.net

Board Member

Gary Mayer, exp. June 2011
mayer@co.somerset.nj.us

Board Member

Seymour Perlowitz, exp. June 2010
perlowitz@hotmail.com

Board Member

Archivist & Associate Curator, exp. June 2012
John Scott

The Mission of the New York Microscopical Society

is the promotion of theoretical and applied microscopy and the promotion of education and interest in all phases of microscopy.

Dues and Addresses

Please remember to mail in your Dues to Mary McCann, Membership Chair (see this page for address).

Junior (under age 18) \$10 Annually

Regular \$30

Student (age 18 or above) \$20 Annually

Supporting \$60 Annually

Corporate (includes one advertisement in NYMS News) \$175 Annually

Life \$300 (payable within the year)

To avoid missing notices:

Notify Mary and me if you have changed your address, phone or email.

Alternate Meeting Notifications

Please note that due to time constraints in publishing, some meeting notices may be available by calling Mel Pollinger at 201-791-9826, or by visiting the NYMS website.

Buy and Read a Good Book on Microscopy.

**Antique Microscope (NYMS collection)
shown in the upper right corner of page
one:**



The horseshoe base microscope was evolved beginning about 1840 by Hartnack, from his drum type microscope. This design set the stage for the production of microscopes on an industrial scale which science demanded. Ernst Abbe at Carl Zeiss adopted it and perfected the condenser. The fine focus was

accomplished by a micrometer spindle of 0.5 mm pitch which was sufficiently free from play to do justice to Abbe's high aperture optics (apochromats). By the end of the 19th century more than 100,000 instruments were in use, produced by at least a dozen makers internationally. To distinguish it from the larger and often more complex microscopes from England it was called the continental microscope.

The NYMS instrument is a comparatively modest version. A sliding tube of the rigid type that does not permit to alter the tube-length serves for coarse focusing. The condenser is limited to rather small illuminating apertures and lacks the complications to achieve oblique illumination.

The horseshoe-type microscope was the dominant type from about 1879 to 1902. At that

point Leitz introduced a novel fine focus drive which was arranged in horizontal fashion. In one form or another it became the new standard. The Continental microscope however continued to be made as a lower cost alternative well into the 1920s.

(Text by Jan Hinsch, Photo by Mel Pollinger)

The Birth Of The Microscope – Olympus Online



The microscope was invented by the Dutch spectacle maker, Zaccharias Janssen around 1590. This was the time when Toyotomi Hideyoshi was unifying Japan into a single nation. In 1655, the Englishman Robert Hooke produced a "compound microscope" that included an objective lens and an eyepiece lens. In 1665, he published

Micrographia, the first book describing observations of a variety of organisms made through his microscope. In this book, Hooke named the numerous compartments partitioned by walls as "cells." The discovery of cells triggered the microscope's rapid advancement. Antonie van Leeuwenhoek of Holland made his own simple microscopes using a single lens, which lead to his discovery of red blood cells in 1673, as well as the discovery of bacteria and human sperm. Efforts to improve the microscope were made primarily in England in the 18th and 19th centuries. Microscopes developed by Leitz and Zeiss, both German companies, became popular in the last half of the 19th century and onward.

From The Editor...if you have email:

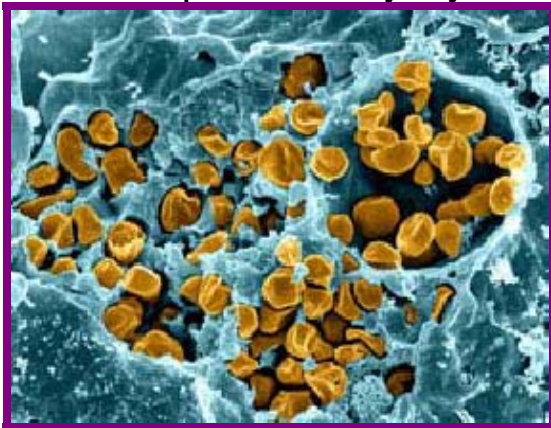
Getting the newsletter by email means you receive bonus files that cannot be sent by "snail mail," but even if you continue your USPS delivery of the newsletter, NYMS needs your email address for reporting priority events and special news. Being able to contact you by email means better communication between us. Mel

To Order Your NYMS Lapel Pins



Send a check in the amount of \$12.00 per pin to New York Microscopical Society, c/o Mel Pollinger, 18-04 Hillery Street, Fair Lawn, NJ 07410. To avoid shipping & handling charges, pins may be purchased directly at any NYMS meeting for \$10.00.

Answer to September 2009 Mystery Photo



Colorized SEM of *F. tularensis*.

Source: National Institute of Allergy and Infectious disease (NIAID) Laboratory of Intracellular Parasites, Tularemia Pathogenesis Section.

No correct answers were received.

Mystery Photo for October 2009



Call or email Mel Pollinger with your guess.
(201)791-9826, pollingmel@verizon.net

In Memorium

With much sadness I have to report the passing of a long-time member and friend of NYMS. Howard L. Taylor, a Life member, died in mid-June of 2008. Howard actively pursued a study of the rotifers, producing a book on that subject. He also built excellent compressoriums, which he sold to microscopists. A biography of Howard L. Taylor's life is forthcoming and will be published on the NYMS website (nyms.org). Howard will continue to live in our memories. The knowledge and enthusiasm he imparted to others in microscopy will continue through his works. He will be missed.

Need a Microscope or part?
Visit NYMS' Surplus Department when you visit NYMS headquarters in Clifton, New Jersey.

Library News

The databasing of the NYMS book library has been completed. This database contains an electronic listing of all NYMS' books by Catalog number, Author (s), Title, Year of publication, physical location and source. NYMS will soon start offering many of its duplicate books to its members at very attractive prices. To help expedite this project, we can now use some volunteers from the membership. The work would involve transferring specific books from their present locations to a bookcase set up for sales. If you are interested in helping, please contact Mel Pollinger at:

(201) 791-9826 or pollingmel@verizon.net.

Eastern Analytical Symposium

If you are planning to volunteer some time at the NYMS booth, contact Mel Pollinger during the first week of November. You will also be required to register before going to our booth. The booth number is 715 and is located in front of the food court. Contact by phone at (201) 791-9826, or email: pollingmel@verizon.net

Got something you want to sell, trade or publish in the Newsletter and/or on the website? Write, call or send an email message to: 201-791-9826 or pollingmel@verizon.net (images accepted)

or

Mel Pollinger, Editor
NYMS Newsletter
18-04 Hillery Street
Fair Lawn, NJ 07410

Regarding how you can receive future newsletters, you may choose one of the following methods:

1. Regular mail, folding may damage images: Do nothing.
2. Email with undamaged full color images, pdf file: Needs your active email address.

