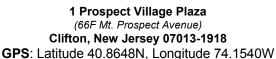


Newsletter

Of the

New York Microscopical Society





May 2013

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

Volume 7 (27) Number 5

Spring 2013 Lecture Series

Forensic Anthropologist Dr. CHRISTIAN CROWDER, PhD, D-ABFA "Histological Analysis of Bone in Forensic Anthropology" Saturday, May 25, 1:30 PM, at the New York Microscopical Society in Clifton, New Jersey

Dr. Christian Crowder is a board-certified analyst and a researcher, writer, educator and leader in laboratory analysis and identification of human remains, especially the histological analysis of bone, and speaks from deep experience in related areas. Dr.Crowder assists formulation and implementation of scientific and administrative policies for laboratory and field operations, mentors scientists and researchers, and trains Forensic Anthropology investigators and students. Dr. Crowder earned his BA from Texas A&M University, his MA at the University of Texas at Arlington, and PhD from the University of Toronto.

Dr. Crowder is currently the Deputy Director of Forensic Anthropology for the Office of Chief Medical Examiner in New York City (OCME), and after over six years there, in late January 2013 he will report for duty at the Office of the Armed Forces Medical Examiner at Dover (DE) Air Force Base. Dr. Crowder is also an Adjunct Lecturer at Pace University, holds a faculty position at the New York University Medical Center, and is affiliated with the NYU Anthropology Department. In his present position with the OCME, Dr. Crowder assists with anthropology casework in the five boroughs of New York City (Manhattan, Brooklyn, Queens, the Bronx, and Staten Island). He is also the site coordinator for the on-going search and recovery of remains at the World Trade Center site.

Prior to his service to the City of New York, Dr. Crowder was a Forensic Anthropologist and Investigator at the Joint POW/MIA Accounting Command - Central Identification Laboratory (JPACCIL) in Hawaii. There Dr. Crowder was in charge of search and recovery operations to account for missing US service members from past conflicts such as World War II and the Vietnam War. Dr. Crowder completed JPAC-CIL missions in Thailand, Vietnam, and Laos, and also assisted local law enforcement and the medical examiner in Hawaii.

As OCME's Forensic Anthropology Unit Deputy Director, Dr Crowder has been on call 24/7 for on scene disaster response with the OCME Special Operations Division. Dr. Crowder has managed the archaeological team and continued recovery operations in and around the World Trade Center site, he directed Fatality Management or supervised Investigation for OCME mass fatality incident operations, and he developed and operated the OCME's hard tissue histology laboratory. Dr Crowder has also assisted daily FAU casework for the five boroughs of NYC in trauma interpretation, identification and evaluation of decomposed, burned, and unidentified remains, and determination of human vs. nonhuman remains.



Continued on Page 3

Save a Tree: Get The Extended Newsletter: By Email Only

Board of Managers (updated)

Diaczuk, Peter, pedicopete@earthlink.net; (212) 237-8896, Expy June 2013,
Scott, John, nyconsnfdn@aol.com; Expy June 2015,Vice President, Program Chair
Pollinger, Mel, pollingmel@optonline.net; (201) 791-9826, Expy June 2014,Treasurer, Editor, Librarian
Klaus, Angela, Ph.D., klausang@shu.edu; Expy June 2015, Secretary, Education Chair
O'Leary, Don, dkoleary@verizon.net; (201) 368-8849,Expy June 2013,Curator, Facilities Manager
Reffner, John A., Ph.D., jareffner@cs.com; (203) 348-8098,Expy June 2014, Awards ChairPresident
McCann, Mary, mccanns@tiac.net;(617) 484-7865,Expy June 2015,Membership Chair
Huemmer, Craig, chuemmer@hotmail.com; Expy June 2015, Board member
Mayer, Gary, mayer@co.somerset.nj.us; Expy June 2014,
Perlowitz, Seymour, perlowitzs@hotmail.com; Expy June 2013,
Reffner, John Jr., jrr1lp@gmail.com; (cell): (215) 527-1882, Expy June 2014,Board member
Scal, Roland, Ph.D., rscal@qcc.cuny.edu; (718) 631-6071,ExpyJune 2013,Board member

Dues and Addresses

Please remember to mail in your Dues to: Mary McCann, Membership Chair McCann Imaging 161 Claflin Street Belmont, MA 02478

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 McCann and Mel Pollinger if you have changed your address, phone or email.

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.

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, or emailing: pollingmel@optonline.net

Awards Given by the **New York Microscopical Society**

The New York

microscopical Society takes great pleasure in recognizing and rewarding individuals who have contributed to either the activities of the society or to furthering microscopy. These awards are described in our website and in a pdf file for our email newsletter recipients. All members are eligible to nominate individuals for these various awards, and are encouraged to do so. John A. Reffner, Awards Committee Chairperson

<u>Awards</u> Committee

Chair: John A. Reffner

Members Jan Hinsch

Don O'Learv Mel Pollinger

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.



Mel Pollinger, Editor 18-04 Hillery St. Fair Lawn, NJ 07410-5207



Dues for 2013 are due!

Buy and Read a Good Book on Microscopy.

Meeting Notice Continued From page 1

See Images in extended email newsletter

<u>Doors will be open at Noon</u>. Refreshments will be available. For additional information, or incase of inclement weather, please contact Mel Pollinger (<u>pollingmel@optonline.net</u>), or (201)791-9826 before the day of the meeting, or by cell at (201) 314-1354 no later than 1 PM (meeting day only).

Following the meeting, NYMS members and their guests are welcome to join the speaker for Dinner at a selected, local restaurant. Cost to members and their guests is \$35.00 per person. Please contact Program ChairJohn Scott at nyconsnfdn@aol.com or by cell at (646) 339-6566 no later than noon on Friday to RSVP for dinner.

William Mancuso Dies

William A. Mancuso, age 76 of Yorktown Hgts, NY, formerly of the Bronx, NY passed away on Sunday, December 30, 2012 in Mt. Kisco, NY.

Mr. Mancuso was born October 8, 1936 in New York City to Gabriel and Julia (Venneri) Mancuso. He graduated from Mt. St. Michael Academy in the Bronx in 1954 and continued his education at The Cooper Union in Manhattan, NY.

Mr. Mancuso was a civil engineer for the NYC General Services Administration in Manhattan, NY. He enjoyed jewelry making and gemology as well as playing his clarinet in the NYS National Guard Band at Ft. Smith and in local parades through the years. William (Bill) was a long-time active member of the New York Microscopical Society.

Mr. Mancuso is survived by his brothers Thomas G. Mancuso of Brewster and Peter Mancuso of Fort Mill, SC. Also several nieces and nephews.

Contributions in William's memory may be made to The Leukemia & Lymphoma Society, 1311 Mamaroneck Ave., Suite 310, White Plains, NY 10605



Bill at NYMS in Clifton

Inter/Micro 2013

Inter/Micro is an internationally recognized conference that attracts microscopists from all areas of light and electron microscopy. Research presentations during the first three days cover techniques and instrumentation, environmental and industrial microscopy, and forensic and chemical microscopy. The final two days will be a hands on microscopy workshop,

Call for Papers

July 15-19, 2013 - Inter/Micro: 64th Annual Applied Microscopy Conference, Chicago, IL, USA Titles & Abstracts due by April 15, 2013

Upcoming conferences

July 15-19, 2013

Inter/Micro: 64th Annual Applied Microscopy

Conference, Chicago, IL, USA

Hosted by: McCrone Research Institute

Contact: Julie Antia

e-mail: intermicro@mcri.org

julie@mcri.org www.mcri.org

Phone: 312-842-7100 Fax: 312-842-1078

Why Become A NYMS Member

I believe one can greatly benefit by becoming an active member of the New York Microscopical Society (NYMS). Our members can utilize the various collections at NYMS, in Clifton, NJ - such as its vast library, prepared slide collections, Global sand collection, numerous microscopes for use by its members for their own projects, our antique microscope collection and many other things including a comprehensive email newsletter, technical and hobby-oriented presentations, etc.

All those interested may apply for our microscopy courses and workshops to enhance their knowledge of microscope usage and/or polarized light microscopy. True, there is a lot of technical stuff offered there, but also much for the casual user and/or hobbyist; but for simple answers, members can email or call for help, or make an appointment to come to NYMS headquarters in Clifton.

There is an application for membership included with each newsletter and in our website: <nyms.org>.

Mel Pollinger

Got News? Send it to The Editor. If you have images and/or article related to microscopy, or a letter to the editor, please send it to me. It could be an interesting book, mystery photo, website or anything else you believe may be of interest to your fellow NYMS members, don't be shy, send it to the Editor.

Visitors Always Welcome to NYMS

Although most of our lecture meetings, workshops and classes are held in the NYMS Clifton facility on the last Sunday of the month, the building may be opened for special purposes at other times, by appointment only. For such an appointment, please contact Mel Pollinger by phone at (201) 791-9826, M-F noon to 9:30pm, or by email at pollingmel@optonline.net.

From The Editor... if you have email: Getting the newsletter by email means you can receive an extended pdf version that cannot be sent by "snail mail." Even if you only continue your USPS delivery of the newsletter, NYMS needs your email address for reporting priority events and special news. Being able to contact you quickly by email means better communication between you & NYMS■■ Mel

Dues for 2013 are due!

Need to use a Microscope?

The various microscopes that are presently set up on the main floor of the New York Microscopical Society building in Clifton, N.J. are there for the use of its members.

Microscope Cleaning Kit

A complete set of tools and accessories to keep your microscope in optimum operating condition. The kit is put together by our Curator/Educational Chairman and available directly from NYMS for only \$35.00 plus shipping & handling, or may be purchased at a meeting. Call or email Mel Pollinger or Don O'Leary for details (see page two for contact numbers).

"Microscopy Today" Magazine For Free

Send an email mentioning NYMS and requesting your free postal mailed subscription, to:

Liz Kasabian Ikasabian@DROHANMGMT.COM> at MSA headquarters.

Sand Collection Obtained: NYMS recently obtained a collection of 225+ small bottles of sand from around the world. Bottles are labeled with locations. Besides the bottles, there are numerous other containers of sands obtained as part of the collection, these are also labeled with locations or type of sand. All collected globally up to the 1980's. Help is needed to catalog the collection. (See page 3) For additional information please contact Mel Pollinger at pollingmel@optonline.net or (201) 791-9826 up to 9pm weekdays.

Answer to Mystery Photo for April 2013



Stalactite forming in the Sterling Hill Zinc Mine, NJ (image inverted). *Photo by Mel Pollinger*

Mystery Photo for May 2013



Want to take a guess? Send it to me by email or call me: pollingmel@optonline.net, (201) 791-9826

Additional Historical NYMS Supplements Email Newsletter recipients will also be getting copies of NYMS Newsletter pdf back-Issues from 2007. Copies of older newsletters will be sent as I convert them.

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@optonline.net (images ok)

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





Supporting Member

NYMS Newsletter Extended Section, May 2013

Directions to NYMS Headquarters

One Prospect Village Plaza (66F Mount Prospect Avenue) Clifton, NJ 07013

GPS: Intersection of Colfax & Mt. Prospect: Latitude 40.8656 N, Longitude 74.1531W, GPS: Our building: Latitude 40.8648 N,

Longitude 74.1540 W

From George Washington Bridge:

In This Section:

- Micro-Garden at the Hinsches Part 3
- Dr. Crowder images
- ·Georgia Microscopical Society Info
- Radio Shack ad
- NYMS Items for Sale
- Membership Application
- ·Last page images

Take Interstate Route 80 west to Exit 57A, Route 19 South. Take Route 19 to Broad Street and continue two lights to Van Houten Avenue. Turn Left. Go to second light, Mount Prospect Avenue and turn left. Building 66F is on the left side, one and a half blocks from Van Houton.

From Lincoln Tunnel:

Follow exit road to NJ route three west. Continue to Bloomfield Avenue exit. Turn right to Circle and go three quarters to Allwood Road West. Mount Prospect Avenue is a few blocks on the right (a small street) Turn right and go to first light (Van Houton) continue. Building 66F is on the left side, one and a half blocks from Van Houton.

From North:

Take Garden state Parkway South to Route 46 Clifton Exit. On 46 Make second exit to Van Houton Ave. Continue to third light Mount Prospect Avenue and turn left. Building 66F is on the left side, one and a half blocks from Van Houten.

From Route 46 coming from west:

Take Broad Street Exit in Clifton and follow Directions above from GW Bridge.

From route 46 coming from East: Take Paulson Avenue Exit in Clifton and follow to Second light, Clifton Ave turn right. Go to next light, Colfax, turn left, go three blocks and turn right on Mount Prospect Ave.. Building 66F is half block on right.

Public transportation from NY:

Take NJ Transit train from Penn Station to Secaucus Transfer Station. Change trains to Bergen Line to Clifton (call NJ Transit for schedules). From Clifton Station cross under tracks to first street and go left one block to Mount

Prospect Street, turn right and Building 66F is one half block on Right.

If you plan to come by bus or train, please copy the links below into your browser:

http://www.njtransit.com/sf/sf_servlet.srv?hdnPageAction=TripPlannerItineraryTo http://www.njtransit.com/sf/sf_servlet.srv?hdnPageAction=BusSchedulesP2PTo http://www.njtransit.com/sf/sf_servlet.srv?hdnPageAction=TrainTo

The Garden Under The Microscope

by Jan & Wiebke Hinsch

Part 3

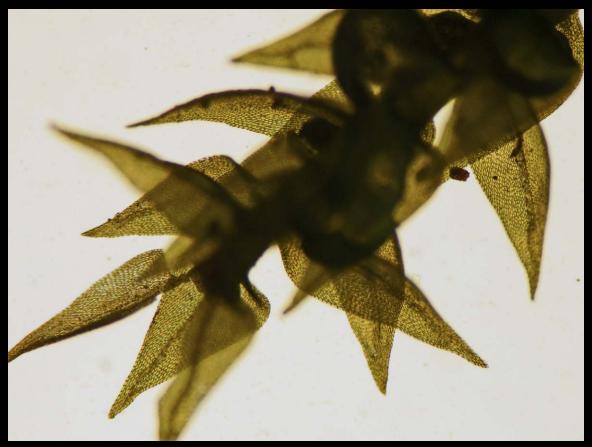
Leaves of Moss and Iris

The cell structure of a moss leaf is very simple and uniform while the leave of a more advanced flowering plant has multiple functions. The 'eyes' in this iris leaf are so-called stomata for the intake of carbon dioxide and release of oxygen and water vapor, in the process of photosynthesis.



Moss Leaf

Leaves of Moss and Iris



Moss Leaf



Iris leaf showing stoma

The ways seeds are dispersed are manifold. Dandelion chose the wind as distributor, which reminds us of a parachute, while burrs cling to furry animals and wool sweaters, which inspired the invention of Velcro.



Dandelion Seed



Circaea Burrs



Velcro



Dandelion seeds clinging to fabric

Paulownia is another sample of mode of transportation. This tree was brought to this country from China by way of ballast on ships that was dumped in the Hudson river, together with its pretty seeds.



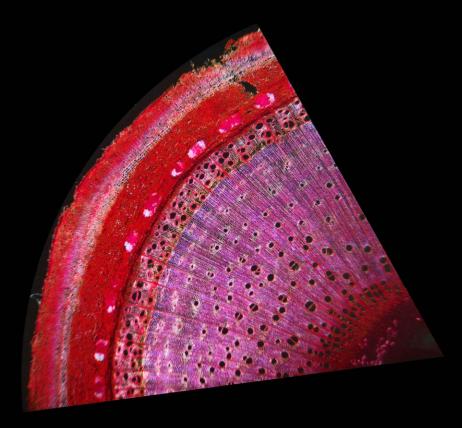
Paulonia



Paulonia Seed Capsules



Paulonia Seeds



Paulonia Tomentosa Cross-Section

Things Coniferous

Pine cones depend on dry warm weather to release their seeds with the wing attached to carry it away from under the mother tree. As we can see in the picture the wide open right cone closed soon after being submerged in water. Under the microscope the seed wing shows this beautiful pattern. We believe that the red parts are resin, that's why the cones burn so well.



Pine Cones



Pine Cones in water for 1 hour

Things Coniferous

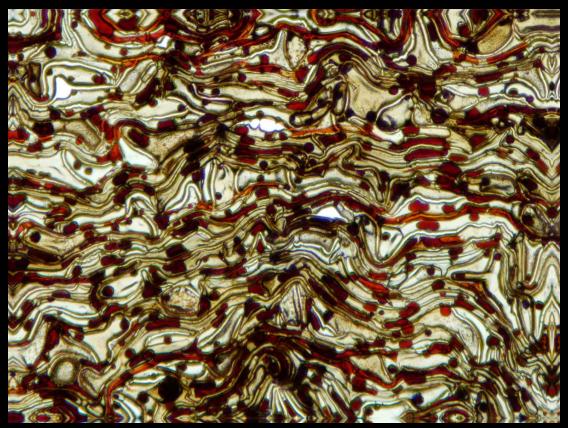


Pine Seeds in Pine Cone



Eastern White Pine Seeds (Pinus strobus)

Things Coniferous



Pine Seeds



White Pine Cones in Fireplace

Prickly Pears & Defenses

Opuntia compressa is the only hardy cactus in our area growing on rocky slopes. It protects its juicy leaves with bundles of barbed spines against hungry animals. Hence its common name: devil's tongue. The fine spines work their way into the skin easily. The bristle compared to the tip of a needle.

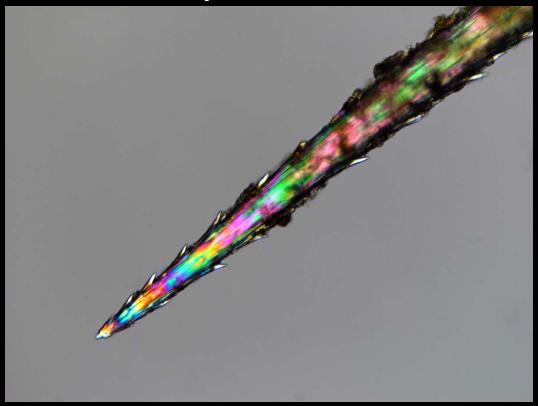


Opuntia compressa in winter



Flowering Opuntia

Prickly Pears & Defenses



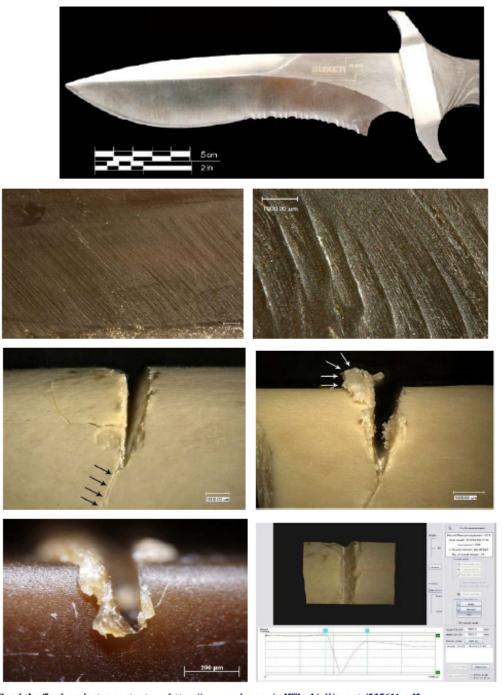
Opuntia Spine – Showing Barbs



Forensic Anthropologist Dr. CHRISTIAN CROWDER, PhD, D-ABFA "Histological Analysis of Bone in Forensic Anthropology"

Saturday, May 25, 1:30 PM, at the New York Microscopical Society in Clifton, New Jersey

From research Dr. Crowder and colleagues recently completed for the U.S. Department of Justice:



Read the final project report, at: https://www.ncjrs.gov/pdffiles1/nij/grants/235611.pdf

USDOJ Award No. 2009-DN-BX-K238, final report: Christian Crowder, Ph.D., Christopher W. Rainwater, M.S., Jeannette S. Fridie, M.A., Microscopic Analysis of Sharp Force Trauma in Bone and Cartilage: A Validation Study. USDJ Document No.: 235611, Report received August 2011.



GEORGIA MICROSCOPICAL SOCIETY

GMS News Up-Date

GMS members Randy Boltin and Thomas Hopen were Special Awards Judges at the 65th Georgia Science and Engineering Fair, held March 22nd, 2013 at the University Georgia in Athens. After looking at the different entries, they awarded Ms. Julia Abelsky with the Dr. Walter C McCrone Award and Mr. Jonathan Rong Li with the Ms. Lucy B. McCrone Award. Ms. Abelsky's project was "Cylindrically Confined Diblock Copolymers and Gold Nanocomposites" and Mr. Li's project was "Facile Solvothermal Synthesis of Silver Nanoplates and Nanodisks". See pictures below of them proudly displaying the awards.



Julia was also the Ms. Lucy B. McCrone Award recipient last year. She is one of four students out of 600 entries this year selected to advance to the international competition, the Intel International Science and Engineering Fair (ISEF), which will be held May 12-17 in Phoenix, Arizona. Additionally, Julia is one of two graduating high school seniors selected to represent Georgia at the month-long 2013 National Youth Science Camp held in June in West Virginia.

Future Meeting

May 22nd - Brian J. Ford, topic to be announced

Any questions, please contact Richard Brown <u>rbrown@mvainc.com</u> or Randy Boltin <u>rboltin@mvainc.com</u>, both at 770-662-8509.



The new disk-based Tandy 600.

A breakthrough in portable computing power and versatility.

Finally—a portable that matches the performance of a desktop computer. Our new Tandy 600 features a 16-bit microprocessor, an 80-character by 16-line display, a builtin 31/2" disk drive that stores 360K of data and 32K RAM (expandable to 224K*).

Five Resident Applications

With Tandy 600's larger display and memory, Multiplan spreadsheet analysis can hold more information. Word processing is as easy as using MS-Word. You'll have quicker access to documents and better storage with the built-in disk drive. File is an electronic data base for names and addresses, expenses, client billing, inventory and more. And you can keep a large number of different files on the pocket size diskettes. With Telecom and the Tandy 600's built-in modem, you're able

to communicate with other computers over phone lines. Telecom will even dial the phone number of anyone listed in the File program. Calendar helps you keep track of daily tasks and activities.

The easy-to-learn resident System Manager lets you run each application, exchange information between applications and manage the files created. You can even set it to turn itself on for unattended operations. And you can add BASIC language ROM (26-3904, \$129.95) to write your own programs.

Tandy...Clearly Superior™

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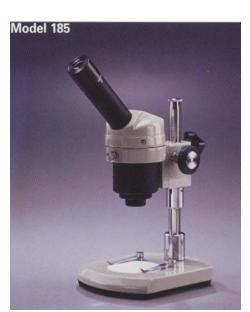
New York Microscopical Society Items For Sale

N.Y.M.S. Microscope Covers

Item #	Size	Member Price	List Price	
MT-003	Small Microscope or Stereo	\$18.00	\$20.00	
MT-004	Lab Microscope or Large Stereo	\$23.00	\$25.00	
MT-005	Large Lab Scope	\$28.00	\$30.00	
MT-009	Large Lab Scope with Camera	\$31.00	\$33.00	
MT-010	Universal Scope with Camera	\$36.00	\$40.00	
MT-012	X-large Scope	\$45.00	\$50.00	
N.Y.M.S. Microscopes (see next page for images)				
185	Monocular Dissecting Microscope	\$85.00	\$99.00	
131	H.S. Student Microscope	\$190.00	\$245.00	
131-FLU	H.S. Student Microscope (Fluorescent)	\$200.00	\$255.00	
125-LED	H.S. Student Microscope (LED)	\$240.00	\$309.00	
Other Items				
	NYMS Glossary of Microscopical Terms	\$20.00		
	NYMS Patch	\$5.00		
	Microscope Cleaning Kit	\$35.00		



Model 131-FLU: Fluorescent



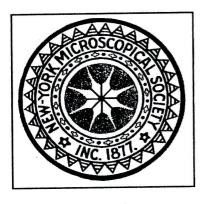
NYMS Lapel Pin

Model 185: 20x



\$10.00

Model 125-LED Cordless



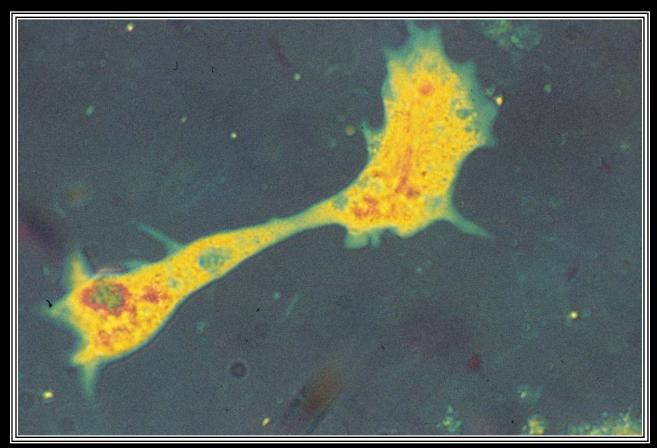
New York Microscopical Society

Please Print

Return to: Mary McCann 161 Claflin Street Belmont, MA 02478

I hereby apply for membership in the New York Microscopical Society.

Name:(DrMs		Nickname
Home Address		
	Env	.E-Mail
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Work. Compar	19	
Phone	Fax	<i>E-Mail</i>
Would you pro	efer to receive NYMS mail at home \square	At work \square By e-mail (best way) \square
Principal work	k or interest in Microscopy	
On what topic	are you available as a speaker?	
Would you like	e information about NYMS committees?	Yes □ No □ Awards □ Membership □
Education 🗆 l	Library □ Finance □ Curator □ Housin	g □ Program □ Publications □ History □
Who referred	vou to NYMS?	
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Degree	Conferring Institution	Date
	lications	
Scientific Fuoi	neations	
Date of birth	optional if over 18)	
I have enclose	ed a check for \$ to cover my ap	plication fees for membership {Annual
\$30. Supportin	ng \$60, Life \$300(payable within the ye	ar), Corporate \$175(includes one
advertisement	in NYMS News), Junior \$5 (under 18 y	ears old)}.Student (over 18) \$20
I understand p	portions of the above information may b	e used in NYMS publications.
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Cionaterna	Date	
NYMS Hoada	garters: One Prospect Village Plaza. C	ifton, NJ 07013 Telephone (973) 470-8733
TATIATION TICHMA	www	The second section of the second seco



Amoeba proteus, 200x – Eric Grave



Benzidine, 100x, Polarized light (P1152437)a - Mel Pollinger