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# Newsletter



## NEW ENGLAND CHAPTER OF THE HEALTH PHYSICS SOCIETY

Volume XXXVII No. 5  
March 2002

Continuing Education Committee

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History Committee

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Admissions Committee

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Affiliate Relations Committee

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Finance Committee

Ron Thurlow  
NAESCO Seabrook Station  
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Public Relations Committee

Bill McCarthy  
Massachusetts Institute of Technology  
617.253.0346

## NECHPS MEETING NOTICE

### A Joint Meeting with the New England Section, American Industrial Hygiene Association (AIHA)

Date: Thursday, March 14, 2002

Location: Sheraton Lexington Inn  
727 Marrett Road  
Lexington, MA 02421

Time: 6:00 p.m. Registration/Reception/Cash Bar  
6:30 p.m. Buffet Dinner  
7:15 p.m. Guest Speaker

Topic: Laser Safety

Speaker: Bob Watkins, Senior Radiation Scientist, MA DPH-RCP

Buffet Menu: *Sliced Fresh Fruit Bowl, Mixed Garden Salad Bowl, Tortellini Pasta Salad Bowl, Marinated Vegetable Salad Bowl, Warm Dinner Rolls and Butter, Grilled Lemon Pepper Chicken, Sliced Top Sirloin Beef, Oven Roasted Potatoes, Honey Glazed Carrots, Mini Pastries and Assorted Cake Table, Coffee, Tea, and Decaf Coffee.*

Cost:

Pre-Registered: \$35.00 Members, \$40.00 Non-Members and \$15.00 Students  
At the Door: \$40.00 Members, \$45.00 Non-Members and \$15.00 Students

DIRECTIONS TO LEXINGTON SHERATON (SEE REVERSE SIDE OF SHEET)

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For Pre-registration rate, reservations **must be received** by March 11<sup>th</sup>. Cancellations must be made before March 11<sup>th</sup> or you are responsible for payment.

Mail registration (with check to NECHPS) to: Ed Maher, 42 Tuttle Drive, Acton, MA 01720

OR Register online at [www.nechps.org](http://www.nechps.org) OR call (978) 568-2785

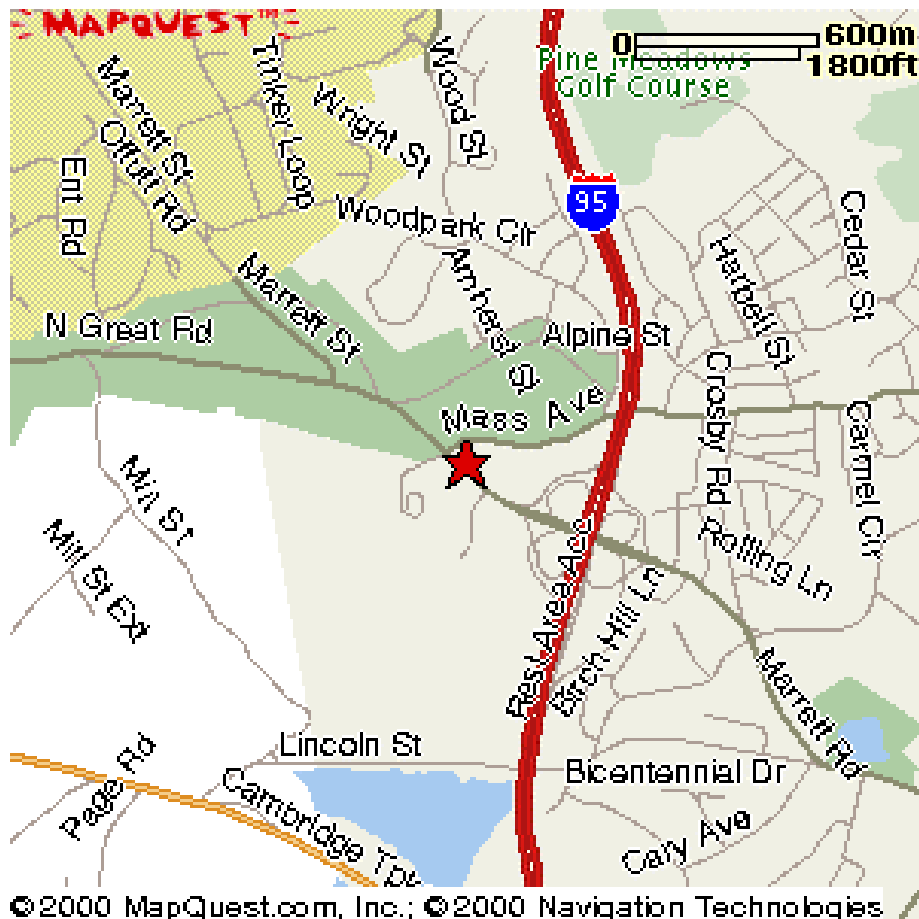
OR E-mail Ed Maher at [efmaher@dukeengineering.com](mailto:efmaher@dukeengineering.com)

## Directions to Sheraton Lexington

**From the South:** Route 95/128 take exit 30 to RT-2A, Concord/E. Lexington.  
Keep right at the fork in the ramp and merge onto Marrett Road/MA-2A E.  
Take the first right into the Sheraton entrance.

**From the North:** Route 95/128 take exit 30B to RT-2A, Hanscom AFB/Concord.  
Merge onto Marrett Road/MA-2A E.  
Take the first right into the Sheraton entrance.

**Phone: (781) 862-8700**



## **Experts Wanted**

The Massachusetts Radiation Control Program is seeking individuals interested in serving as volunteer consultants to the Radiation Control Program's Nuclear Incident Advisory Team (NIAT). NIAT is the emergency response action arm of Radiation Control Program that supplies twenty-four hour response to incidents within the Commonwealth involving radiation.

Individuals with expertise in all types of disciplines are needed to augment the existing network of expert radiation professionals who have volunteered to assist the NIAT in times of need.

If you are interested, please send a letter of interest, along with your resume to:

Robert M. Hallisey, Director  
MA Radiation Control Program  
174 Portland Street, 5th Floor  
Boston, MA 02114

## **Membership Dues**

Members are reminded that they should pay their dues *as soon as possible* to ensure that membership status remains in good standing. You may check your dues status by looking at the mailing label attached to this newsletter - the label will have a statement in the upper right corner: "Paid thru July 2001", for example.

Remember that the current By-Laws state that dues are \$10.00 per year, however, a payment of \$40.00 will get a member 5 years of Chapter membership.

Please send your payment to Ron Thurlow, NECHPS Treasurer, 21 Myrtle Ave, Newburyport, MA, 01950. Dues are always accepted and payable at the Chapter's technical meetings.

## **Free Meetings?!**

**Yes, you *can* have something for nothing. All members who submit articles to the NECHPS Newsletter receive a FREE TICKET to an evening Chapter meeting. The articles must be of interest to the membership.**

**The ticket is valid one year from the date of issue and is valid for yourself or a guest; however, it is not valid for the Annual Meeting.**

**Send some ideas and get a few pennies for your thoughts! The submission deadline for publication in February's *Newsletter* is March 21; send articles to [tbandini@partners.org](mailto:tbandini@partners.org).**

## ***NECHPS Meeting Calendar 2002***

***April 25, 2002*** - Joint meeting with CCHPS with the HPS President-Elect (rescheduled from September 2001)

**Providence Marriott**

***June 6, 2002*** - NECHPS Annual meeting  
**Westford Regency**

Mark Your Calendar !

## NELRAD Annual Meeting

Wednesday, April 24, 2002  
Henderson House, Weston

Theme: **Orphan Sources**

Program as of January 31:

*New Regulations and Guidance for Dealing with Radioactivity in Solid Waste in Pennsylvania*

David J. Allard, Director,  
Bureau of Radiation Protection  
Pennsylvania Department of Environmental  
Protection

*Dump Calls*

Michael Whalen, Jr., Radiation Control Officer  
Department of Public Health  
Commonwealth of Massachusetts

*Orphan Sources: National Perspective*

Joseph Klinger  
Chair, Orphan Source Programs, CRCPD  
Illinois Department of Nuclear Safety

Inquiries: Dr. David Drum  
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# Radiation mutations passed to kids

MSNBC news service - Feb 7 -

A STUDY APPEARING Friday in the journal *Science* gives compelling evidence that low-dose radiation from atomic bomb fallout can have long-term genetic effects, but it is not clear that there are any health consequences from these DNA changes, experts say. And the mutations faded out by the time grandchildren were born, which suggests test ban treaties are doing their job in protecting future generations, the researchers reported. A group of European researchers led by Yuri E. Dubrova of the University of Leicester took blood samples from 40 families in an area of Kazakstan not far from the Semipalatinsk site where the former Soviet Union conducted atomic bomb tests. For a control group, the researchers took blood samples from 28 families in a geographically similar region of Kazakstan that had not been exposed to radiation from the tests. Members of the study group and the control group were matched by year of birth, occupation and ethnicity. The researchers then checked DNA of the two groups for evidence of mutations that could have been passed from one generation to another. In the new study, Dubrova said, they are finding that if you live in an environment that is contaminated where you are continuously exposed, then you start to see these increases in mutations.

**THE NEXT GENERATION** All of the mutations were found in what is known as junk DNA, bits of genetic material that have no known function. These are mutations, but not in critical genes and there is not anything that we can correlate with a health effect, said Dr. William F. Morgan, director of the Radiation Oncology Research Laboratory at the University of Maryland, Baltimore. Morgan, who reviewed the study for *Science*, said the findings give new understanding of how ionizing radiation, such as from an atomic bomb and its fallout, can affect successive generations. Most of what is known about such radiation effects comes from survivors of the atomic bombs dropped on Japan during World War II. Those survivors were exposed to a single,

severe dose of radiation. No inherited mutations were found in that group, said Morgan.

**CONSISTENT WITH ANIMAL STUDIES** Morgan said the findings are consistent with animal studies that showed low-level, chronic exposure to radiation, such as from the fallout of bomb tests, can cause some genetic mutations that are passed to the next generation.

Such mutations, he said, can be traced to radiation exposure affecting sperm at a critical phase of its development. The mutations that pass to the next generation originate predominantly on the male side of reproduction, Morgan said. In an earlier study, Dubrova found similar mutations among families exposed to fallout

from the 1986 nuclear power plant accident at Chernobyl in the Ukraine. Deaths of about 8,000 people in the Ukraine, Russia and Belarus have been blamed on the incident, but another 200,000 are thought to live in areas still contaminated. Dubrova's Chernobyl study, published in *Nature* in 1996, found that children of men living in the contaminated area of Belarus had about twice the number of mutations of a comparison group in Britain. Many researchers said that study was flawed. But Morgan said the new study in Kazakstan supports Dubrova's earlier findings.

## \*\*\*TIME TO UPDATE THE SOCIETY'S DIRECTORY\*\*\*

A valuable tool to all around, the New England Chapter of the Health Physics Society Annual Directory is being updated. But, it is only as good as the information that you, its members, provide. So please, update your membership information through the web page; **www.NECHPS.org!** It's simple. At the Home Page, go to the bottom of the page and click on 'Join Us', then at the next page click on the white word 'Application.' This brings you to the 'Membership Action Form.' Here you can update your personal information that will be published in the next membership directory.

Please take the time to enter your information, as the directory is as only good as the contributions that each of you make. I may be contacting some of you to verify information, or if you are having trouble with the Web Page, please feel free to contact me; Brandon Graber, (860) 447-1791 x3504, or E-mail me **Brandon\_L\_Graber@Dom.com.**

