

Northern California Chapter-Health Physics Society

Celebrating Our 50th Year of Service to the Health Physics Profession

November 2010 - January 2011

#### The NCCHPS November 2010 Chapter Meeting

Thursday, November 18, 2010 - Trader Vic's Restaurant, Emeryville

6 pm - Social Hour

7 pm - Dinner

8 pm - Presentation



### Practical Applications of the NCRP-156 Biokinetic Model For Radionuclide-Contaminated Wounds or, "The Attack of the Radioactive Rats..."

**Abstract:** In 2006, the NCRP released Report #156, which describes a recommended biokinetic model for use in assessment, dosimetry, and treatment of wounds contaminated with radionuclides. This model, when coupled to the appropriate systemic model for the radionuclide in question, allows one to calculate the appropriate intake excretion fractions and dose conversion factors used to assess such intakes. This presentation presents this new model (actually a "family" of models), and gives the audience a better understanding of what radionuclides we need to worry about (e.g., plutonium) and what radionuclides we don't need to worry about (e.g., depleted uranium.)

A recent plutonium puncture wound at a DOE National Laboratory will also be discussed as an example of why you DO NOT want to have any wounds contaminated with transuranics. Time-permitting, anecdotal tales (covering response, assessment, and treatment) from 20+ years of responding to contaminated wounds at a major National Laboratory will be presented. For that reason, the "faint-of-heart" are cautioned against attending this presentation.

**About the Speaker:** W. Gary Mansfield, Gary is a Certified HP, with a Bachelor's Degree in Physics and a Master's Degree in Health Physics. For the last several decades, Gary has specialized in the areas of internal radiation dosimetry, emergency response, and consequence management and evaluation – mostly at LLNL. During his career at LLNL, he developed and managed the Lab's Internal Dosimetry Program, as well as providing support to the DOE (Nuclear Weapons) Accident Response Group (ARG), the Radiological Assistance Program (RAP) and other related DOE incident response programs.

Gary is now "semi-retired" – primarily because they have told him that before he can fully retire, he has to clean out his office. He is amusing himself by providing support to various emergency response/consequence management programs which the Lab supports (e.g., Accident Response Group (ARG), Federal Radiological Monitoring and Assessment Center (FRMAC), National Atmospheric Release Advisory Center (NARAC) and miscellaneous DHS projects.)

Also see our announcement for the January 20, 2011 Dinner Meeting with AAPM in this issue!

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#### NCCHPS President's Column

Dear NCCHPS members,

We are well on our way in the planning for the March 50th anniversary celebratory meeting on the Hornblower. Please check out the separate announcement in this newsletter. We are looking for historical materials that could be shared with our members at the March meeting. If you have such materials (photos, notes, etc..) please contact one of the board members.

We are also making progress on efforts to reach out to students. We have started to gather materials from the HPS that we could use to "advertise" our profession to these students. I want to thank Linnea Wahl, our HPS liaison, and HPS president Ed Maher for their help with this. I also want to thank Kathleen Dinnel-Jones and Elsa Nimmo for agreeing to be our point people at UC Berkeley. We are still looking for more volunteers to help at the other Bay area high schools, universities and colleges. What we need is someone who works at one of these institutions who is willing to be our point of contact. The person would determine where on campus we could best advertise Radiation Protection as a profession. This may be a counseling or job placement office. The person would then approach these offices to explain who we are and what we want to do and seek permission to display our materials. If you work at one of these educational institutions and are willing to help us out, please contact me.

On a parallel path, we are trying to recruit employers of HPs and of other radiation protection professionals to become affiliate members of the Chapter. A couple of national laboratories had expressed interest and we are pursuing this with them. Most of us have an employer. If you are willing to help us approach yours, please let one of the board members know. We could really use your help. The Chapter has a prospectus that you could use to show your employer the benefits the Chapter could provide to them.

Both of these initiatives are meant to be long-term. We need to attract new people to our profession and we need the financial help to accomplish it. I am confident that with your help, we will do just that. On the eve of our 50th anniversary, I can't help but be amazed at how many people have consistently and tirelessly volunteered for so many years to make our Chapter what it is today. I feel so honored to be able to play a part. I am also encouraged to see younger faces at meetings and serving on the board. In order to prepare for the next 50 years, we must have the younger generation's involvement. Our November speaker, Gary Mansfield, helps me illustrate this point. Gary has contributed for so many years but it is time to pass the baton. Younger chapter members, get involved! Let's not wait until Gary fully "cleans out his office!" There are many opportunities to serve; being on the board is just one of them. I hope our younger members see the benefits the Chapter can provide and become involved.

Sincerely,

Quang Le

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#### THE MOYER FELLOWSHIP - A BRIEF HISTORY OF FINANCES

The Burton J. Moyer fellowship was first awarded in 1985. The fellowship was created by our chapter to memorialize the achievements of Prof. Moyer, both as a gentleman and as a scientist. Moyer was Professor of Physics at the University of California, a noted researcher in high energy physics and is generally acknowledged to be "the father of accelerator health physics". Original funding for the fellowship came from his family, his colleagues at UC and at Lawrence Berkeley Lab and from our chapter. Wade Patterson was a guiding light during the early days of creating the award. It soon became apparent that it would be mutually beneficial to coordinate the fellowship with the national Health Physics Society. Wade was able to negotiate an agreement that the HPS would take responsibility for selecting the fellow {through the Academic and Education Committee} and would provide matching funds with our chapter's financial support of the fellowship. Our chapter would retain a voice in selecting the Moyer Fellow. Today, the HPS provides seven fellowships giving financial support to graduate students in Health Physics. The Moyer award is the most prestigious and lucrative of those and includes a stipend of \$8000 disbursed over two years.

The assets of the Moyer Fund were originally held in a brokerage account with Dean Witter. This money was transferred in 2004 to an account with Fidelity Investments. This account presently contains seven equity funds and a money market fund. Our asset mix is 75% in stocks, 5% in bonds and 25% in short term and money market. A very brief performance summary follows:

Deposit to Fidelity, June, 2004	\$70,000
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Net dividends and capital gains,

June, 2004 to Oct. 2010 + \$23,000

**Donations** 

June, 2004 to Oct. 2010 + \$12,000

Disbursements

June 2004 to Oct. 2010 - \$25,000

Total assets, Oct. 2010 \$80,000



Over the past six years, investing has not been exactly a smooth ride. Our fund reached a high of \$100,000 in October, 2007 and then plunged as low as \$60,000 in February, 2009. At our present value of \$80,000 we are just halfway between exuberance and despair.

DONATIONS: Over the past six years the average annual donation total has been \$2000. During the last two chapter years, however, the totals have been \$1425 and \$1200. We have received some larger and likely non-recurring gifts in the past, and it was encouraging to receive an unsolicited donation from the Sierra-Nevada Chapter. It would be nice if a larger number of individual chapter members could make at least a 'small' contribution. This might indicate that our chapter as a whole continues to support graduate study and education in health physics. In 2004, our chapter annual 50% contribution to the fellowship was \$3000. With a higher donation rate from our members and good market performance, we were able to increase that amount twice to first \$3500 and then to the current \$4000. Given the continuing economic uncertainty, it would not seem prudent to consider increasing our payout rate from the fund at this time. If we were to see increased donations from our chapter members and the economy, at least, didn't double-dip, then we could consider additional ways to honor Burton Moyer and to support education in health physics - perhaps even at the local level.

So, please consider a donation for the Moyer Fund. Checks payable to NCCHPS may be sent to our treasurer, with the notation "Moyer Fund" included. - Charles Schmitdt



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NCCHPS-AAPM Joint Dinner Meeting: Thursday, January 20, 2011 Michaels at Shoreline, 2960 N Shoreline Blvd, Mountain View

VIDION NeoVista Anti-Neovascularization Therapy System

NeoVista, Inc. has developed the VIDION ANV Therapy System for the focal delivery of 90Sr beta radiation directly to the site of choroidal neovascularization (CNV) in the treatment of wet age-related macular degeneration (AMD). The retinal surgeon will perform a core pars plana vitrectomy to minimize mechanical traction on the peripheral retina. Local delivery of radiation will permit targeted ANV treatment of the AMD lesion while minimizing the risk of degeneration of neighboring ocular structures due to radiation exposure.

#### ABOUT THE SPEAKER: William Vermeere

- · Assistant Professor Radiological Physics and Radiation Biology, Oregon Health Sciences University (OHSU) Lecturer Medical Physics University of California, San Francisco (UCSF)
- · Vice President and Director of IH and HP (RSO) Eckert and Zeigler (IPL)
- · Staff Engineer Lockheed Missiles and Space
- · Radiation Safety Officer NASA Ames
- Vice President and Program Manager PAI NASA Contract
- · Corporate Radiation Safety Officer- NeoVista



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#### Mark your calendar! It's time to celebrate the Chapter's 50th anniversary.

The reserved Sunset Hornblower dinner cruise for our 50th year celebration on March 21st will hold 120 passengers. Due to the potential challenges of membership interest, we are prioritizing reservations based on past board members/significant others first (commitment/check due by January 31st) and then current membership (commitment/check due by February 25th). Current members' requests to bring significant others will be honored on a first come first served basis after all NCCHPS members have registered. Decisions to include requested significant others will be made on or before February 28th. Checks will be returned to those unfortunate enough to not have made the "cut" or missed the deadline. Obviously, don't delay if you want to share this wonderful 50th year chapter celebration!! Please contact any of the board members for more information.

Send a note with names and your checks to our Treasurer:

Marcia Maria Campos Torres SLAC National Accelerator Center 2575 Sand Hill Rd Mail Stop: 84 Menlo Park, California 94025

#### Deadlines:

- January 31st Past board members/Significant others priority registration, must commit in writing, include \$20 cost, \$80 for significant others
- February 25th Current NCCHPS members/Significant others, must commit in writing, include \$45 for members, \$80 for significant others

Note: \$80 is the actual cost per person for the event.

#### In Memoriam - Alan D. Pasternak

Alan D. Pasternak, Lawrence Livemore National Lab scientist and chosen by Gov. Jerry Brown as one of the original appointees to the California Energy Commission, died Sept. 24 at his home in Lafayette, Calif.

Pasternak graduated from the Ethical Culture Fieldston School in New York City and after college served as an officer in the U. S. Navy from 1956-1959. He received his Ph.D. in chemical engineering from UC Berkeley and his bachelor's degree from Columbia University, where he rowed on the varsity lightweight crew.

At LLNL, he worked on coal gasification and the use of methyl alcohol for fuel. After leaving the California Energy Commission, where he served from 1975 through 1979, he worked as a consultant, and the lobbyist and technical director of the California Radioactive Materials Management Forum.

In 1990, he returned to Livermore part-time to resume his work on energy policy. In that capacity, in 2000 he wrote the paper, "Global Energy Futures and Human Development: A Framework for Analysis," which addresses the importance of electricity to the developing world.

He is survived by his wife, Meta L. Pasternak; his children, Jeremy, Benjamin and Emelia, all of San Francisco; and his grandchildren, Abigail and Samuel.

THE PHYSICS SHIP

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#### NCCHPS Meetings 2010-2011

**November 18, 2010** 

**January 20, 2011** 

March 17, 2011 May 19, 2011

### Visit NCCHPS on the Web:

http://hpschapters.org/ncchps/

Direct input for our next newsletter to:

Warren TenBrook tenbrook1@llnl.gov 925-423-1470

#### **NCCHPS**

c/o Warren TenBrook Lawrence Livermore National Laboratory P.O. Box 808, L-509 Livermore, CA 94550

#### **Upcoming NCCHPS Meetings!**

NCCHPS members \$30 (\$35 @ door)

NCCHPS member's Spouses \$35 Students \$10 Non-members \$40

Thursday, November 18, 2010

Deadline: Please register by, November 10, 2010!

Trader Vic's

9 Anchor Drive off Powell St, Emeryville Marina

Ph: 510-653-3400

http://www.tradervics.com/locations/location-emeryville.html

Ample parking in restaurant lot

Salad: Shanghai Caesar Salad - Ginger lemon aioli, spiced cashews

**Entree Selections:** 

Wood Fired Chicken - Kung Pao marinated breast, Coconut Rice,

Asian Slaw, Citrus peanut dressing

Wood Fired Salmon - Forbidden Rice, Seasonal Veggies, Beurre Blanc Smoked Tofu Curry- smoked Tofu, Roasted Eggplant, Green Curry

Sauce, Jasmine Rice

Dessert: Coffee Crème Brulee - sugar glazed, raspberries

Thursday, January 20, 2011

Deadline: Please register by January 12, 2010

Michaels at Shoreline 2960 N Shoreline Blvd Mountain View CA 94043 Ample parking in restaurant lot.

Salad: Seasonal Greens and intermezzo pasta

Entree Selections:

Breast of Chicken - in herb butter sauce, fresh vegetables Broiled Salmon - in lemon beurre blanc, fresh vegetables Spinach and Cheese Tortellini, Alfredo - with fresh vegetables

Desert: Cheesecake

#### http://hpschapters.org/ncchps/dinner.php3

Only online registrations will be accepted. Contact Eric Packard ONLY if you encounter problems with online registration: eric.d.packard@nasa.gov

#### 2010-2011 NCCHPS Board Members:

President Quang Le (510) 486-7862 qle@lbl.gov

President-Elect Jack Topper (925) 423-8082

Past President
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