

# RADIATION DOSE IS MORE THAN A NUMBER!

## *Agenda*

National Institute of Standards and Technology  
100 Bureau Drive, Gaithersburg, MD  
Green Auditorium  
September 15 and 16, 2011

### THURSDAY, SEPTEMBER 15, 2011

8:00 a.m. **Arrival/Sign In**

8:20 a.m. **Welcome and Introductions**  
NIST/NIAID/NCI

#### Why is Dosimetry Important?

8:30 a.m. **Biological Framework**  
Dick Hill, Ontario Cancer Institute

8:55 a.m. **Physics Framework**  
David Brenner, Columbia University

9:20 a.m. **NIST traceability**  
Mike Mitch, NIST

9:45 a.m. **BREAK**

#### Current Research Portfolio Overview (*emphasis on in vitro, small animal and large animal research categories within each portfolio*)

10:00 a.m. **NIAID Rad/Nuc Program**  
NIAID RAD/NUC Program Staff

10:55 a.m. **NCI Rad/Nuc Research**  
NCI Program Staff

11:20 a.m. **Other Institutions**

- Chris Lissner, DOD/AFFRI,
- Noelle Metting, DOE
- Janice Huff, NASA

12:00 PM **Important Concepts in Radiobiology Dosimetry**  
David Followill, MD Anderson Cancer Center



**NIST**

**NATIONAL  
CANCER  
INSTITUTE**

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1:00 p.m. **LUNCH**

2:00 p.m. **NIST TOUR**  
Marc Desrosiers & Mike Mitch, NIST

3:15 p.m. **BREAK**

### **Survey of equipment/isotopes currently in use** *(Speakers to provide summary handouts)*

3:30 p.m. **Overview**  
Larry Dewerd, University of Wisconsin

3:35 p.m. **Radiation source: external beam, isotope**  
Dan Bourland, Wake Forest University

3:55 p.m. **Dosimetry**  
Larry Dewerd, University of Wisconsin

### **Current Calibration and Standardization Methods**

4:15 p.m. **Calibration Methods for Medical Applications of Radiation**  
Larry Dewerd, University of Wisconsin  
David Followill, MD Anderson Cancer Center

4:35 p.m. **Standardization Methodologies Related to GLP Compliance**  
Tom Seed, Tech Micro Services

5:00 p.m. **ADJOURN FOR THE DAY**



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FRIDAY, SEPTEMBER 16, 2011

### What Can Go Wrong

8:00 a.m.     **Biodosimetry bloopers**  
Mike Robbins, Wake Forest University

**Dosimetry case studies** (*Each presentation should include scenarios and step by step “how to” guides for biodosimetry in each experimental milieu. Speakers to provide summary handouts*)

8:30 a.m.     **Cell culture studies**  
Woody Armour, Johns Hopkins University

9:00 a.m.     **Small animal studies**  
Patricia Lindsay, Princess Margaret Hospital

9:30 a.m.     **BREAK**

9:45 a.m.     **Large animal studies**  
Tom MacVittie, University of Maryland

11:00 a.m.    **Panel Discussion**  
Workshop speakers and members of the audience

#### *Path forward*

- *Set up a web page at NIST dedicated to biodosimetry standardization to serve as a resource to the community for updated information, useful links and FAQ; website development?*
- *establishment of a quality control process to benefit any research employing radiation such as*
- *Standardization requirement for solicited research*
- *Service – NIH-based facility (RPC-like) or fee for service or private non-profit (AAALAC-like)*

1:00 p.m.     **ADJOURN**



**NIST**

