

# missions and history

The Radiation Emergency Assistance Center/Training Site (REAC/TS) has provided the U.S. Department of Energy (DOE) with expertise related to the medical management of radiation accidents since 1976. REAC/TS has responded to thousands of calls for medical advice and consultation, internal and external radiation dose assessment, and other specialized assistance to physicians, nurses, health physicists, and other emergency response personnel. REAC/TS provides direct support for the DOE's National Nuclear Security Administration (NNSA) Office of Emergency Response and the Federal Radiological Monitoring and Assessment Center (FRMAC).

REAC/TS maintains a 24/7 national and international radiation emergency response capability that includes deployable equipment, personnel experienced in decontamination and treatment of radiation injuries and illnesses, and management of the use of DTPA and Prussian Blue. Additionally, REAC/TS provides continuing medical education in its field of expertise through regularly scheduled in-house courses and specially designed off-site courses.

REAC/TS participates with the international community for radiation accident response via its designation as a World Health Organization (WHO) Collaborating Center of the Radiation Emergency Medical Planning and Assistance Network (REMPAN) and with the Response Assistance Network (RANET) of the International Atomic Energy Agency (IAEA). In addition, REAC/TS has provided continuing medical education and accident response in over 40 countries.

REAC/TS is part of the DOE response network. REAC/TS provides treatment capabilities and consultation assistance on a 24-hour basis, and can be reached by calling (865) 576-3131 (days), or after normal business hours contact DOE Oak Ridge Operations Center at (865) 576-1005. REAC/TS also has a cytogenetic biodosimetry capability, the "gold" standard of ionizing radiation biodosimetry, in which chromosome aberration analysis is used for ionizing radiation dose assessment.

**For more information about REAC/TS or other ORISE programs, visit [orise.orau.gov/reacts/](http://orise.orau.gov/reacts/) or contact REAC/TS at the Oak Ridge Institute for Science and Education, P.O. Box 117, MS-39, Oak Ridge, TN 37831-0117.**

**REAC/TS is managed by ORAU for DOE.**

**reacts**

Oak Ridge Institute for Science and Education  
P.O. Box 117, MS 39  
Oak Ridge, TN 37831-0117

# reacts/ts

RADIATION EMERGENCY ASSISTANCE CENTER/TRAINING SITE  
OAK RIDGE, TENNESSEE

## COURSES IN MEDICAL MANAGEMENT OF RADIATION EMERGENCIES

### Radiation Emergency Medicine (REM)

October 21-24, 2014	April 14-17, 2015
November 4-7, 2014	June 2-5, 2015
February 3-6, 2015	August 11-14, 2015
March 3-6, 2015	

This 3½-day course is intended for Physicians, Nurses, Nurse Practitioners and Physician Assistants who may be called upon to provide emergency medical care following a radiological or nuclear incident. Priority registration will be given to these groups of professionals. This course may also be relevant for Paramedic Instructors but is generally not intended for pre-hospital responders. The course emphasizes the practical aspects of initial hospital management of irradiated and/or contaminated patients through lectures and hands-on practical exercises. The course begins with a discussion of the fundamentals of radiation physics, radiation detection/measurement/identification, prevention of the spread of contamination, how to minimize radiation dose to victims and providers, and the role of Medical/Health Physicists in caring for contaminated victims. Other topics include early evaluation and treatment of the acute radiation syndrome (ARS), acute local injuries, cutaneous injuries and combined injuries. Introductions to common sources of ionizing radiation and hospital preparedness are also provided.

Maximum enrollment: 24      24.5 hours CME credit

The Oak Ridge Institute for Science and Education (ORISE) designates this live activity for a maximum of 24.5 AMA PRA Category 1 Credit(s)<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

### Health Physics in Radiation Emergencies (HP)

March 9-13, 2015      June 8-12, 2015

This 4½-day course is designed primarily for Health Physicists (HP), Medical Physicists (MP), Radiation Safety Officers (RSO) and others who have radiation dose assessment and/or radiological control responsibilities. The course presents an advanced level of information on radiological/nuclear event reconstruction, dose assessments/estimations and integration of the physics discipline with medicine. The course provides the basis for HPs, MPs and RSOs to interact with and provide advice and recommendations to medical practitioners for the diagnosis and treatment of radiation injuries and illnesses. Topics related specifically to medicine include acute local and total body radiation exposure, internal and external contamination and combined injuries. Other topics covered include internal and external dosimetry, bioassay techniques and public information management. Demonstrations, laboratory exercises and group problem-solving sessions complement the didactic presentations. It is recommended that participants have a basic understanding of radiation sciences before attending this course.

Maximum enrollment: 24      32 hours AAHP credit

The American Academy of Health Physics (AAHP) designates this live activity for a maximum of 32 AAHP Credits.



### Advanced Radiation Medicine (ARM)

April 20-24, 2015      August 17-21, 2015

This 4½-day course includes more advanced information for medical practitioners. This program is academically more rigorous than the REM course and is primarily for Physicians, Clinical Nurse Practitioners and Physician Assistants desiring an advanced level of information on the diagnosis and management of ionizing radiation injuries and illnesses. Advanced topics in the diagnosis and management of radiation-induced injuries and illnesses includes the use of cytokines, stem cell transplants, antimicrobials, wound care and other advanced techniques. Group problem-solving is used to thoroughly orient attendees to the management of complex cases. This course is not recommended for pre-hospital, emergency planning or non-medical personnel. Only brief reviews of health physics fundamentals and emergency department interventions are discussed. **Recent completion of the Radiation Emergency Medicine (REM) course is strongly recommended.**

Maximum enrollment: 28      CME credit: 30 hours

The Oak Ridge Institute for Science and Education (ORISE) designates this live activity for a maximum of 30 AMA PRA Category 1 Credit(s)<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.



## REACT/TS faculty & staff

**Albert L. Wiley BNE MD PhD FACR**  
Radiation Oncology  
Medical/Health Physics  
Director, REAC/TS  
Director, World Health Organization (WHO)  
Collaborating Center  
Radiation Emergency Medical  
Preparedness & Assistance Network  
(REMPAN)

**Doran M. Christensen DO**  
Emergency Medicine  
Occupational Medicine  
REAC/TS Associate Director/Staff Physician

**Wm. Mark Hart MS RN EMT-P COHN-S**  
REAC/TS Lead Nurse/Paramedic

**Wayne A. Baxter RN, EMT-P**  
REAC/TS Nurse/Paramedic

**Robert C. Beauchamp RN, BSN, CEN, NREMT-P**  
REAC/TS Nurse/Paramedic

**Seaton Garrett Jr MD FACOEM**  
Occupational and Environmental Medicine  
REAC/TS Staff Physician

**Ronald E. Goans PhD MD MPH**  
REAC/TS Senior Scientific/Medical Advisor  
MJW Corporation

**Glenda Gross**  
REAC/TS Administrative Assistant

**Sue Holloway RT**  
REAC/TS Radiological Technologist

**Amanda Hughes**  
REAC/TS Administrative Assistant

**Carol J. Iddins MD**  
REAC/TS Staff Physician

**Mark S. Jenkins PhD CSP**  
REAC/TS Health Physicist/Industrial Hygienist

**Gordon K. Livingston PhD**  
Radiobiology/Cytogenetics  
Technical Director, REAC/TS  
Cytogenetic Biodosimetry Laboratory (CBL)

**Gail Mack-Bramlette**  
REAC/TS Course Registrar

**Becky Murdock**  
REAC/TS Education Coordinator and  
Radiation Accident Registry Technician

**Steve Sugarman MS CHP CHCM**  
REAC/TS Health Physics Project Manager  
REAC/TS Cytogenetic Biodosimetry  
Laboratory (CBL) Coordinator

**Richard Toohey PhD, CHP**  
REAC/TS Senior Scientific Advisor  
M.H. Chew & Associates, Inc.

### affiliate faculty

**Luiz Bertelli PhD**  
Los Alamos National Laboratory  
Los Alamos, NM

**William F. Blakely PhD**  
Radiation Dosimetry  
REAC/TS Senior Scientific Advisor  
Silver Springs, MD

**Eugene H. Carbaugh, BS, CHP**  
Dade Moeller & Associates  
Richland, WA 99352

**Dennis L. Confer MD**  
Professor, University of Minnesota  
Medical School  
National Marrow Donor Program (NMDP)  
Minneapolis, MN

**Nicholas Dainiak MD**  
Hematology/Radiation Medicine  
Clinical Professor of Medicine  
Yale University School of Medicine  
New Haven, CT

**Ronald G. Edmond EdD**  
Public Relations  
Emergency Management Laboratory (EML),  
ORISE

**Daniel F. Flynn MD**  
Department of Radiation Oncology  
Holy Family Hospital and Medical Center  
Methuen, MA

**Steve Johnson BBA**  
Regional Response Coordinator  
Radiological Assistance Program Region 2  
Oak Ridge Office  
U.S. Department of Energy

**Thomas J. MacVittie PhD**  
University of Maryland Cancer Center  
Baltimore, MD

**David A. McLaughlin MS CHP**  
Internal Dosimetry  
UT-Battelle, Oak Ridge National Laboratory

**David R. Simpson PhD CHP**  
Associate Professor, Health Physics  
Bloomsburg University  
Bloomsburg, PA

## registration form

### Radiation Emergency Medicine (REM) (\$200)

October 21-24, 2014  
November 4-7, 2014  
February 3-6, 2015  
March 3-6, 2015  
April 14-17, 2015  
June 2-5, 2015  
August 11-14, 2015

### Health Physics in Radiation Emergencies (HP) (\$225)

March 9-13, 2015  
June 8-12, 2015

### Advanced Radiation Medicine (ARM) (\$275)

April 20-24, 2015  
August 17-21, 2015

### General Information

Travel, food, and lodging arrangements/expenses are the responsibility of course participants. Local lodging and transportation information will be sent to registered applicants.

Hard-copy course manuals for each of REAC/TS' courses WILL NOT be provided. When you are accepted to attend one of REAC/TS' courses, you will be sent an electronic link to REAC/TS website to access electronic copies of course presentations. You may elect to print these materials and bring to the course as you wish. REAC/TS' lecture room is equipped with electrical outlets and WiFi should you wish to take notes on your computer.

**Please do not send incidental fee until notified of acceptance in a course.**

The incidental fee must be paid at least three weeks before the course begins or your name will be removed from the course roster and another applicant will be admitted.

Make checks payable to: **Oak Ridge Associated Universities**

**A \$25 administrative fee will be charged for a cancellation received less than two weeks before a course begins. We regret that we cannot refund the fee if cancellation is received once the course is in progress.**

NOTE: Incidental fees specified in this brochure are subject to change.

All applicants will be notified promptly of any changes.

Non U.S. citizens should apply early. Special forms are required.

**Courses fill rapidly. Early registration is recommended. Placement on a "waiting list" does not imply acceptance in any course. A new application must be submitted yearly.**

**Registrations are accepted by mail or online. The registration form is available online at [orise.orau.gov/reacts/](http://orise.orau.gov/reacts/)**

**Mail registration form to:**

Gail Mack-Bramlette, Registrar  
REAC/TS, MS 39  
Oak Ridge Institute for Science and Education  
P.O. Box 117 • Oak Ridge, TN 37831-0117  
Telephone: (865) 576-3132  
E-mail: [Gail.Mack@orau.org](mailto:Gail.Mack@orau.org) (information only)

Name: Last  First  Middle Initial  Degree/Certification

Name as it should appear on badge:

Home Address

City  State  Zip Code  Country

Home Telephone: Area Code ( ) Telephone Number -  Citizenship (Required): [ ] U.S. [ ] Other:

Place of Birth (Required) City:  State:  Country:

Sponsoring Organization or Employer (nuclear power utility, health department, state or federal agency, or other):

Employer:

Occupation or Title:

Work Address:

City  State  Zip Code  Country

Work Phone: Area Code ( ) Telephone Number -  E-mail:  Work FAX Area Code ( ) Fax Number -

ORAU/ORISE and its facilities meet the intent of the Americans with Disabilities Act (ADA). Please let us know in advance of any special needs you may have by stating your request here:



The **Oak Ridge Institute for Science and Education (ORISE)** is a U.S. Department of Energy institute focusing on scientific initiatives to research health risks from occupational hazards, assess environmental cleanup, respond to radiation medical emergencies, support national security and emergency preparedness, and educate the next generation of scientists. ORISE is managed by Oak Ridge Associated Universities (ORAU).

Accreditation:  
The **Oak Ridge Institute for Science and Education (ORISE)**, is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

ORISE takes responsibility for the content, quality, and scientific integrity of this ACCME activity. Respective courses are also accredited by the American College of Emergency Physicians and the American Academy of Health Physics.

Funding for REAC/TS courses is provided by the U.S. Department of Energy.

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