Monday, March 28, 2022

Opening Session

9:30 am  Presentation of the Colors
         Joint Armed Forces Honor Guard
         from the Military District of Washington, DC

         Singing of the National Anthem
         Kimberly Jordan
         U.S. Nuclear Regulatory Commission

9:35 am  NCRP Welcome
         Kathryn D. Held
         President, NCRP

9:50 am  Introduction
         Evagelia C. Laiakis
         Jessica S. Wieder
         Program Co-Chairs

Eighteenth Annual Warren K. Sinclair Keynote Address

10:00 am  Introduction of the Speaker
          Kathryn D. Held

          Developing a Long-Term Strategy for Low-Dose Radiation Research
          in the United States
          Joe W. Gray
          Oregon Health & Science University

Applying COVID-19 Lessons to Radiological Emergency Response

Sara D. DeCair, Session Chair

10:20 am  An American in Asia: Takeaways from the Asian COVID-19 Response
          Andrew J. Cordiner
          Federal Bureau of Investigation
          Hazardous Materials Response

10:35 am  Vaccine Hesitancy and the Social Side to Protective Actions
          Monica Schoch-Spana
          Johns Hopkins Center for Health Security

10:50 am  Applying Lessons from the COVID-19 Pandemic Response to Radiological/Nuclear Preparedness, Response and Recovery
          Orly Amir
          U.S. Department of Homeland Security

11:05 am  Interactive Q&A
11:20 am  Break

Identifying National Defense Needs

Jeffrey J. Whicker, Session Chair

11:35 am  National Needs in Emergency Response and Homeland Security
          Julian G. Hill
          U.S. Department of Homeland Security

12:00 pm  National Need for U.S. Department of Defense's Multiple-Parameter Radiological Biodosimetry/Dosimetry Diagnostics Network
          Ricardo A. Reyes
          Defense Health Agency

12:20 pm  Interactive Q&A
12:35 pm  Lunch

Optimizing Next Generation Medical Treatment

Pat B. Zanzonico, Session Chair

1:30 pm  The “Promise” of Targeted Radiopharmaceutical Therapies
          Lisa Bodei
          Memorial Sloan Kettering
Summary

1:45 pm  **Treatment Optimization in Radiopharmaceutical Therapy**  
George Sgouros  
*Johns Hopkins Hospital*

2:00 pm  **Optimizing Next Generation Medical Treatment: Identified Opportunities in Medical School Education**  
Neha Vapiwala  
*University of Pennsylvania*

2:15 pm  **Interactive Q&A**

3:00 pm  **Preclinical Studies with Proton FLASH Radiotherapy for Gastrointestinal and Sarcoma Tumors in Rodents and Canines**  
Constantinos Koumenis  
*University of Pennsylvania*

2:30 pm  **Break**

2:40 pm  **Sometimes a Statement Just Isn’t Enough: The Importance of Considering Your Audience and Their Needs**  
Angela Shogren  
*U.S. Environmental Protection Agency*

2:50 pm  **Interactive Q&A**

3:30 pm  **Break**

3:45 pm  **Introduction of the Lecturer**  
Kathryn D. Held  
*Long-Term Radiation Animal Studies: A Story Continues*  
Gayle Woloschak

3:10 pm  **FLASH: High Therapeutic Potential While Sparing Normal Tissue Complications at Ultra-High Dose Rates: Dosimetry Aspects**  
Magdalena Bazalova-Carter  
*University of Victoria, Canada*

3:20 pm  **Interactive Q&A**

Tuesday, March 29, 2022

**Forty-Fifth Lauriston S. Taylor Lecture on Radiation Protection & Measurements**

3:45 pm  **Introduction of the Lecturer**  
Kathryn D. Held  
*Long-Term Radiation Animal Studies: A Story Continues*  
Gayle Woloschak

9:30 am  **Potential Modifiers of Radiation-related Risk of Circulatory Diseases: Implications for Individual Differences in Radiation Response**  
Preetha Rajaraman

9:50 am  **Interactive Q&A**

10:00 am  **Supporting Space Travel**  
Jeffrey J. Whicker, Session Chair

10:20 am  **Interactive Q&A**
Opportunities in Radiation Science: From Low Dose to Climate Change

Fifth Thomas S. Tenforde Topical Lecture

10:30 am  Introduction of the Lecturer
Jessica S. Wieder

Opportunities in Radiation Science: Applying Our Collective Knowledge to the Challenges of Our Time
Jill A. Lipoti

11:00 am  Break

Addressing Waste Management
Brian A. Powell, Session Chair

11:15 am  DOE Cleanup Efforts with Alaskan Native, Native American, Minority and Low-income Peoples and Communities
Joanna Burger
Rutgers University

11:30 am  In-Service Condition of Radon Barriers over Uranium Mill Tailings Disposal Facilities in the United States
Craig Benson
University of Virginia

11:45 am  ARPA-E ONWARDS Program: Addressing the Backend of Advanced Reactors Fuel Cycles
Robert Ledoux
U.S. Department of Energy

12:00 pm  Interactive Q&A
12:15 pm  Lunch

Reducing Climate Change through Nuclear Power
Willie O. Harris, Session Chair

1:00 pm  Nuclear Energy - Today and Tomorrow
Hilary Lane
Nuclear Energy Institute

1:15 pm  NextGen RP: Applying Remote and Automated Technologies to Enhance and Optimize Nuclear Power Plant Radiation Protection Operations
Karen S. Kim-Stevens
Electric Power Research Institute

1:30 pm  Small Modular Reactor/Advanced Nuclear Reactor Health Physics Challenges
Bryan S. Pell
Duke Energy

1:45 pm  Interactive Q&A

Interactive: Opportunities in Radiation Science

2:00 pm  Evagelia C. Laiakis
Jessica S. Wieder
Program Co-Chairs

Conclusions

2:30 pm  NCRP Vision for the Future and Program Area Committee Activities
Kathryn D. Held
President, NCRP

3:00 pm  Adjourn Scientific Meeting
3:15 pm  NCRP Annual Business Meeting
4:30 pm  Adjourn

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