**Draft #10 11-7-16**

**Applicability of Radiation-Response Models**

**To Low Dose Protection Standards**

**American Nuclear Society and Health Physics Society**

**2018 Joint Topical Meeting**

**September 23-26, 2018**

**Pasco, Washington**

**MONDAY**

**OPENING SESSION**

8:00 Welcome and Introductions …………………………………………………………………………..……………….…………….**Alan Waltar**

8:15 Overview—Goals of the Conference ……………………………………………………………………….………………**Mike Lawrence**

8:35 Keynote #1 – The Cost of Fear: An Historical Overview ……………………………………………………….……**Paul Lorenzini**

9:15 Keynote #2—The Need for Changes in Low Level Radiation Regulations ……………………………..……..**Carol Marcus**

**10:00 MORNING BREAK**

10:30 Scientific speaker #1 (relevant proffered paper selected by the program committee) ………..

10:50 Scientific speaker #2 (relevant proffered paper selected by the program committee) ………..

11:10 Scientific speaker #3 (relevant proffered paper selected by the program committee) …………..

11:30 Scientific speaker #4 (relevant proffered paper selected by the program committee) ………..

**NOON: Luncheon –**

**AFTERNOON SESSION: The Cost of Regulating Very Low Radiation Levels**

1:30 Nuclear Fuel Cycle and Waste Management: The Cost of Compliance…………….…………………….  **Jim Conca**

2:00 Environmental Restoration and Site Cleanup: The Cost of Compliance………………………..………………… (TBD)

2:30 The Radiation Compensation Act: Scientific Basis and Cost to U.S. Taxpayers …………………… **Paul Ziemer**

**3:00 AFTERNOON BREAK**

3:30 Epidemiological Perspectives on Low-dose Radiation Effects…………………….…………………………………..**David Hoel**

4:00 Scientific Basis for the Principle of Radiation Hormesis …………………………………………...………………**Doug Boreham**

4:30 Scientific speaker #5 (relevant proffered paper selected by the program committee)……………………..

5:00 Scientific speaker #6 (relevant proffered paper selected by the program committee)……………………..

**6:30 EVENING RECEPTION**

**TUESDAY**

 8:00 Keynote #3 -- What is the Significance of the Assumptions Built in to the Biophysical Argument

 Leading to Linearity at Low Doses? …………………………………………….……………………………………..…… **David Brenner**

 8:45 Keynote #4 -- Radiation Dose, Dose Rate, and the Biological Effects of Radiation………….…...…….. **Julian Preston**

 9:30 Keynote #5 --- Mechanisms of Radiation Damage and Carcinogenesis…………………….………………**Gayle Woloschak**

**10:15 MORNING BREAK**

10:45 Scientific speaker #7 (relevant proffered paper selected by the program committee) ………..

11:15 Scientific speaker #8 (relevant proffered paper selected by the program committee) …………..

11:45 Scientific speaker #9 (relevant proffered paper selected by the program committee) ………..

**NOON: Luncheon –**

**AFTERNOON SESSION: Dose-response Models for Radiation-induced Health Effects**

1:30 It takes a tissue to make a tumor……………………………………………………………………………\*Mary Helen Barcellos-Hoff

2:00 Average Dose Rate and Time to Death in Carcinogenesis…………………………….………………………….……..\*Otto Raabe

2:30 Scientific speaker #10 (relevant proffered paper selected by the program committee) ………..

2:50 Scientific speaker #11 (relevant proffered paper selected by the program committee) …………..

**3:00 AFTERNOON BREAK**

3:30 Scientific speaker #12 (relevant proffered paper selected by the program committee) ………..

3:50 Scientific speaker #13 (relevant proffered paper selected by the program committee) …………..

4:10 Scientific speaker #14 (relevant proffered paper selected by the program committee) ………..

4:30 Scientific speaker #15 (relevant proffered paper selected by the program committee) …………..

4:50 Scientific speaker #16 (relevant proffered paper selected by the program committee) …………..

5:10 Young Scientist Perspectives: (Panel organized by **Cory Stansbury**)

**6:30 SOCIAL MIXER**

**7:00 BANQUET -- (provided) Guest Speaker: (invited famous person or great entertainment)**

**WEDNESDAY**

**MORNING SESSION (A): Recapitulation – What Have We Learned?**

8:00 Keynote #6 --- Biological Effects of Low-dose Radiation…………………………………………….… **Antone L. Brooks**

8:30 Rational Basis for Updating the Limit on Radiation Dose to the General Public……………….……….…**Darrell Fisher**

**MORNING SESSION (B): Federal Agency Positions on Radiation Regulations**

9:00 Update on Federal Regulations for Radiation Protection……………….…………….. \*Stephen Burns, Chair, NRC

9:30 Environmental Protection Agency: Scientific Basis for Radiation Risk Estimates….………...……EPA HQ Scientist

**10:00 MORNING BREAK**

10:30 Department of Energy Requirements for Environmental Restoration of Nuclear Sites ……………….. DOE-EM rep

11:00 NCRP Perspectives on Radiation Risk at Low Dose ………….……………………………..\*John Boice or \*Lawrence Dauer

11:30 ICRP Perspectives on Radiation Risk at Low Dose……….……\*Chris Clement or member of the Main Commission

**NOON: Luncheon –**

**AFTERNOON SESSION: Scientific Studies on Dose-response Relationships**

1:30 Department of Energy Low-dose Radiation Research Program: Research Next Steps…………..….….

2:00 Scientific Summary of Day 1 and Day 2…………………………….……………………………………………………..…..\*Fred Mettler

**2:45 AFTERNOON BREAK**

**Communication of Results**

3:15 Outreach to the General Public….………………………..…………………………………………………………..………..**Paul Locke**

**3:45 SCIENTIFIC PANNEL SUMMARY AND ACTION PLAN -- Ludwig Feinendegen**, \*John Boice, \*Vincent Holahan, \*Chris Clement, **Julian Preston**, **David Brenner**, and **Darrell Fisher**

**4:30 Final Summary Comments and Close of Meeting -- Ludwig Feinendgen**

**5:00 Departures**

NOTES: Speakers in bold already committed

 Speakers with asterisk invited (not yet confirmed)