From Free Radicals to Key Characteristics

Celebrating Research to Action - Past, Present, and Future

June 10, 2022

Brower Center, Berkeley, CA

Morning Sessions:

Session 1: Celebrating the ~7th Successful Renewal of the NIEHS Superfund Research Center – Alan Hubbard, Professor of Biostatistics (Chair)

9.00 1.1. Welcome and Introduction – Martyn Smith (Director, UC Berkeley Superfund Research Program - SRP) and Michael Lu (Dean, School of Public Health, UC Berkeley)
1.2. Opening remarks - William Suk*, Director, NIEHS Superfund Research Program
1.3. Opening remarks - Robert Spear, Emeritus Professor and Former Director of COEH

9.15 1.4. Overview of new SRP Projects and Cores 2022-27 – Professors Rachel Morello-Frosch; Joseph Lewnard*;* David Sedlak; Lisa Alvarez-Cohen; Alan Hubbard (UC Berkeley)

Session 2: Celebrating 40 years of the Smith Lab with talks and comments by distinguished alumni – Professors David Eastmond (UC Riverside) and David Ross* (U.Colorado) (Co-Chairs)

10.00 2.1. MPTP, Paraquat and Parkinson's Disease – Prof. Dr. Donato Di Monte*(German Center for Neurodegenerative Diseases), Introduced by David Ross
2.2. Comments by 1980s alumni including Drs. Martha Sandy, Gunilla Ekstrom* and Sarah Jewell*

10.25 Break

10.40 2.3. Benzene, NQO1 and Bone Marrow Toxicity – Professors David Eastmond and David Ross*with comments from collaborators Drs. Nat Rothman*(NCI) and Qing Lan*(NCI)
2.4. Comments from Luoping Zhang (former Superfund PI & 1990s alumnus)

11.05 2.5. Childhood Cancer – Professor Joseph Wiemels (USC) with comments from Dr. Cliona McHale

11.30 2.6. Exposomics – Professor Rosemarie de la Rosa (UC Berkeley)
2.7. Video comments from 2010s alumbus Prof. Fenna Sille*(Johns Hopkins)

11.55 2.8. Summary and wrap up – Professor Emeritus Stephen Rappaport (UC Berkeley)

12.00 Lunch (provided)

Afternoon Sessions

Session 3: Celebrating 10 years of the Key Characteristics (KCs) – Dr. Vincent Cogliano (Deputy Director for Scientific Programs at OEHHA) (Chair)

1.00 3.1. Introduction and the Birth of the KCs – Dr. Vincent Cogliano (OEHHA)

1.10 3.2. 10 years of the KCs of carcinogens – Dr. Kathryn Guyton (National Academies)

1.30 3.3. IARCs experience with the KCs - Recorded video from Dr. Mary Schubauer-Berigan (Head of the IARC Monographs Programme)

1.40 3.4. NAMs and In Silico approaches to the KCs - Dr. Raymond Tice* (RTice Consulting)
3.5. NAMs and In Silico approaches to the KCs - Prof. David Reif (N. Carolina State U.)
3.6. NAMs and In Silico approaches to the KCs - Dr. Kamel Mansouri (NTP)
3.7. NAMs and In Silico approaches to the KCs - Dr. Vangala Subrahmanyam* (Reagene)

2.35 Break

Session 4: Imagining the Future of the KCs – Professor Michele La Merrill (UC Davis) (Chair)

2.50 "New sets of KCs and their potential application"
4.1. Hepatotoxicants – Prof. Ivan Rusyn (Texas A&M)
4.2. Immunotoxicants – Dr. Dori Germolec* (NIEHS)
4.3. EDCs/Metabolic disruptors – Prof. Michele La Merrill (UC Davis)

3.35 Break

3.50 "Applying the KCs in decision making"
4.4. Applying the KCs in decision making – Dr. Martha Sandy (OEHHA, CalEPA)
4.5. Applying the KCs approach for evidence screening and analysis. Dr. Xabier Arzuaga* (US EPA)
4.6. Dr. Amy Wang (NIEHS)

4.35 4.7. Panel discussion on future applications of the KCs - led by Professor Emeritus Amy Kyle (UC Berkeley) with Prof. Tracey Woodruff (UCSF) and Dr. Kathleen Durkin (UC Berkeley)

4.50 4.8. Future directions for the KCs - Dr. Lauren Zeise (Director, OEHHA)

5.00 **Reception**

7:00 **Close**

**Via Zoom*