AbstractID: 4528 Title: Memorial Lecture for Robert Loevinger

How perfectly appropriate is the Symposium: "How accurately can we measure dose clinically?" to memorialize Bob Loevinger. The clear threads in Bob's career and seminal work was his quest for improved accuracy in dosimetry measurements, his organization of calibration networks to transfer traceable measurement standards to the clinical physicist, and his development of protocols and formalisms to implement accurate measurements of dose at the clinical level. In his professional career of some 55 years, his contributions were many and important. Quiet and unassuming, Bob was the supreme dosimetrist: he designed and constructed extrapolation chambers for beta dosimetry in his early career, and then the Wide-Angle-Free-Air-Chamber (WAFAC) for prostate-seed dosimetry in his late career; he developed the MIRD schema with Mones Berman for dose calculations in nuclear medicine, and led the development of the TG 21 protocol for the determination of absorbed dose from high-energy photon and electron beams; at the IAEA in the 1960s he was instrumental in the creation of their Dosimetry Laboratory and the IAEA/WHO Secondary Standards Dosimetry Laboratory Network that serve the mostly developing member states, and initiated their postal dosimetry service to clinics in the member states; then at the NBS in the 1970s he worked with the AAPM (he was a charter member) to create the network of Accredited Calibration Dosimetry Laboratories to better disseminate US radiation measurement standards to the clinical community in North America. Much of his work was recognized during his lifetime by numerous awards given him by many organizations, but I think he would be most honored by this Symposium, which gathers like-minded scientists to discuss issues on which he spent his career.