

ITSUO YAMAMOTO RECEIVES BERSON-YALOW AWARD FOR RADIOASSAY RESEARCH

Itsuo Yamamoto, MD, PhD, associate professor of radiology and nuclear medicine at Kyoto University School of Medicine in Kyoto, Japan, will be awarded the Berson-Yalow Award for his group's scientific abstracts, selected as the best in the radioassay category at The Society of Nuclear Medicine's (SNM) 33rd Annual Meeting in Washington, DC.

Born in Himeji, Dr. Yamamoto received his MD in 1970 from Kyoto University, and was trained in internal medicine at Amagasaki Hospital in nearby Osaka. Two years later, he returned to Kyoto for post-doctoral work under the guidance of Kanji Torizuka, MD, investigating calcium metabolism. "One of my theses involved bone scintigraphy with technetium-99m-labeled phosphorus compounds, which had just been introduced into nuclear medicine by Subramanian *et al.*," recalled Dr. Yamamoto, who also conducted clinical evaluations of bone scintigraphy.

"Furthermore, I worked in calcium kinetic studies using calcium-47, and

conducted a comparative study of calcium kinetics and bone scintigraphy in patients with various metabolic bone diseases. In the latter half of this post-doctoral course, I was interested in *in vitro* research of calcium metabolism, and studied tissue-cultured bone cells and several radioimmunoassays of calcium-regulating hormones," said Dr. Yamamoto.

After his post-doctoral course, Dr. Yamamoto pursued his interest in *in vitro* assays of calcium-regulating hormones by coming to the United States in 1980. He worked in the laboratory of Professor John T. Potts, Jr., at Massachusetts General Hospital, "where I learned much about parathyroid hormone (PTH) and calcium metabolism. I have investigated PTH-receptors of bone cells and renal tissues for two-and-a-half years," said Dr. Yamamoto.

In 1983, Dr. Yamamoto returned to Kyoto and concentrated on *in vitro* assays of calcium-regulating hormones such as PTH, calcitonin, and vitamin D metabolites.

The two papers selected for the Berson-Yalow Award, "Development of a Sensitive Assay for Bioactive Parathyroid Hormone" (Posterboard No. 670) and "Clinical Evaluation of Measurement of Serum Vitamin D Metabolites" (Posterboard No. 671), will be presented on Monday, June 23, from 3:30-6:00 in the exhibit hall.

In the first abstract, Dr. Yamamoto explains that most radioimmunoassay techniques to measure biologically active parathyroid hormone are not sensitive enough to measure values in normal subjects. His group developed a simple technique, using cyclic adenosine monophosphate (AMP)



Itsuo Yamamoto, MD

measurements from cultured osteoblastic cells, for detecting bioactive parathyroid hormone in normal volunteers and patients with hypoparathyroidism.

For the second study, Dr. Yamamoto's group assessed intestinal calcium absorption using calcium-47 and a whole-body counter, and correlated these findings with measurements of vitamin D metabolites obtained with a newly developed radioassay technique. The group measured serum values of 1,25-dihydroxyvitamin D, a major steroid hormone regulating calcium balance, and other metabolites in 285 healthy controls, 42 patients with hyperparathyroidism, and more than 500 patients with other metabolic bone diseases.

The Berson-Yalow Award was named for Solomon Berson, MD, and Rosalyn S. Yalow, PhD, who developed the radioimmunoassay technique (see page 745). The award was first given in 1977 by the Education and Research Foundation of the SNM to honor the most original scientific abstracts in, and the most significant contributions to, basic or clinical radioassay.

Jillian E. Frohman

Past Recipients of the Berson-Yalow Award

1977	Edward U Buddemeyer, ScD, <i>et al.</i>
1978	Sally J. DeNardo, MD, <i>et al.</i>
1979	Helena Waschlicht-Rodbard, MD, and Jesse Roth, MD
1980	Robert G. Hamilton, PhD, and Franklin N. Adkinson, Jr., MD
1981	None
1982	None
1983	Jacques Bernier, MD
1984	Gerald L. DeNardo, MD
1985	None