

## INTRODUCTION

During my residency at the University of Chicago twenty years ago, I performed the few diagnostic studies employing radioactive isotopes as a "side-line," spending a couple of hours each day in the laboratory. Nuclear Medicine since then has grown into a vast field incorporating in vitro studies, in vivo procedures, and treatment with radioactive isotopes.

The continued development of new isotopes is presenting us with new techniques. Some of these isotopes have such a short half-life that they have to be produced locally, and their purity and concentration have to be controlled by a radiopharmacist who has become a team member of all larger nuclear medicine divisions.

The equipment detecting the radiation emerging from these isotopes has become much more sophisticated, and the quality of the images produced during scanning procedures approaches that of radiographs. But imaging has changed from being a simple reflection of normal or pathological morphology to a method of dealing with abnormal physiology. Dynamic computer-assisted scanning of the heart, for example, can tell us today whether myocardial damage is irreversible, and multiple sequential scans can demonstrate an arteriovenous shunt of the brain.

It is not astonishing that in this rapidly progressing field even the expert might lose sight of the latest developments, and this is the reason why the Department of Radiology of the Medical College of Virginia felt it would be appropriate to present a program on Nuclear Medicine during our Annual Postgraduate Course Series in Williamsburg. We were fortunate in attracting an outstanding faculty which agreed to undergo the additional workload of editing selected papers presented in Williamsburg for publication in this and the forthcoming issue of the *MCV Quarterly*.

I would like to congratulate my colleagues for their superb contributions to the *Quarterly*. I would like to thank Drs. Ghahremani and Sharpe who so ably organized the Postgraduate Course and express my special appreciation to Ms. Mary-Parke Johnson, the Managing Editor of the *MCV Quarterly*, for her support and editorial assistance.

KLAUS RANNIGER, M.D.  
*Professor and Chairman*  
*Department of Radiology*