

THE JOURNAL OF NUCLEAR MEDICINE (ISSN 0161-5505) is published monthly by The Society of Nuclear Medicine Inc., 1850 Samuel Morse Drive, Reston, VA 22090-5316. Second Class Postage paid at New York, NY and additional mailing offices. *Postmaster*, send address changes to *The Journal of Nuclear Medicine*, 1850 Samuel Morse Drive, Reston VA 22090-5316.

EDITORIAL COMMUNICATIONS should be sent to the Editor: Stanley J. Goldsmith, MD, The Journal of Nuclear Medicine, 402 E. 64th St., Suite 1A, New York, NY 10021; (212) 906-9060, Fax: (212) 906-9056. *Books and monographs* covering the use of nuclear medicine and its allied disciplines will be reviewed as space is available. *Send review copies to the Editor.*

BUSINESS COMMUNICATIONS concerning advertising and permission requests should be sent to the publisher, Society of Nuclear Medicine, 1850 Samuel Morse Drive, Reston, VA 22090-5316; (703) 708-9000. Subscription requests and change of address should be sent to: Membership Department, Society of Nuclear Medicine at the address above. Notify the Society of change of address and telephone number at least 30 days before date of issue by sending both the old and the new addresses. Advertisements are subject to editorial approval and are restricted to products or services pertinent to nuclear medicine. Advertising rates are available from the publisher. Closing date is the first of the month preceding the date of issue.

SUBSCRIPTION RATES for 1996 calendar year (effective Sept. 1, 1995) are \$140 within the United States; \$155 for Canada and Pan American countries; \$185 elsewhere. Student subscriptions are \$80 (with proof of student status). Single copies \$15.00; foreign \$18.00; convention issue (May) \$18.00; foreign \$20.00. Make checks payable to Society of Nuclear Medicine. Sales of individual back copies of 1992 through the current issue of *JNM* are available through Matthews Medical Books, 11559 Rock Island Court, Maryland Heights, MO 63043, 1(800)633-2665 or (314) 432-1401. *JNM* is also available in machine-readable format from University Microfilms Intl., 300 N. Zeeb Rd., Ann Arbor, MI 48106, 1(800)521-0600.

COPYRIGHT © 1995 by the Society of Nuclear Medicine, Inc. All rights reserved. No part of this work may be reproduced or translated without permission from the copyright owner. Because the copyright on articles published in *The Journal of Nuclear Medicine* is held by the Society, each author of accepted manuscripts must sign a statement transferring copyright. See Information for Authors for further explanation.

Invasion from Mars

In the United States, Halloween has evolved into a celebration of fantasy, costumes, ghosts and goblins and things that go bump in the night and scare us. The television networks replay vintage horror movies and new ones are prepared to be televised or shown in theatres for the first time during the last week of October.

Fifty-seven years ago on Halloween, the then unknown Orson Welles, who, subsequently, was acknowledged as a legendary actor, writer, director and producer, produced and played a prominent role in a radio drama entitled "Invasion from Mars." This entertainment realistically portrayed media coverage of the events following such an invasion. Despite announcements to the contrary, the suspension of rational thinking required to accept the broadcast as valid seemed to dominate: Many listeners believed that an invasion had occurred. Many panicked, some fled, others contemplated suicide.

Last year a television broadcast on Halloween night chose to entertain and frighten us with a realistic report of an impending collision between earth and an asteroid. The television station, police and news media were besieged with telephone calls from anxious viewers who had incredulously believed the improbable. The worst had come.

Well, all of this interesting, but what has it to do with us?

If the adult population of a developed country is ready to accept that Martians have invaded the earth or that a giant asteroid is on course to collide with the earth, what chance do we have to reach rational assessments of risks involved in the real choices we face as a society? What kind of dialogue can we have about the need for and location of nuclear power plants or transporting nuclear waste and siting disposal facilities? What about radiation exposure to workers and patients from nuclear medicine and radiology procedures?

Even educated physicians have a phobic response to the widely pervasive radiation boogey man. I have seen a radiologist run through the nuclear medicine area. When questioned about the hasty passage, she told me that she had not meant to come into the nuclear medicine area because she was several months pregnant and did not want additional radiation exposure.

Ultrasonographers refuse to study patients who have received diagnostic radionuclides because detectable radiation is present and

(Continued on page 1746)

- by using dual isotope SPECT with ^{201}Tl and $^{99\text{m}}\text{Tc-HMPAO}$. *Am J Neuro-radiol* 1991;12:1187-1192.
20. Ancrì D, Basset JY. Diagnosis of cerebral metastasis by thallium-201. *Br Radiol* 1980;53:443-453.
 21. Van der wall Hans, Murray IPC, Huckstep RL, Philips RL. The role of scintigraphy in excluding malignancy in bone. *Clin Nucl Med* 1993;18:551-557.
 22. Tennvall J, Palmer J, Cederquist E, et al. Scintigraphic evaluation and dynamic studies with thallium-201 in thyroid lesions with suspected cancer. *Eur J Nucl Med* 1981;6:295-300.
 23. Yui N, Kinoshita F, Shimada F. Clinical evaluation of head and neck tumor scintigram with ^{201}Tl -chloride. *Kaku Igaku* 1979;16:221-227.
 24. Sehweil AM, Mckillop JH, Milroy R, et al. Thallium-201 scintigraphy in the staging of lung cancer, breast cancer and lymphoma. *Nucl Med Commun* 1990;11:263-269.
 25. Britten JS, Blank M. Thallium activation of the ($\text{Na}^+ - \text{K}^+$) activated ATP-ase of the rabbit kidney. *Biochem Biophys Acta* 1968;159:160-166.
 26. Sehweil AM, Mckillop JH, Milroy R, Wilson R, Abdel-Dayem HM, Omar YT. Mechanism of Tl-201 uptake in tumors. *Eur J Nucl Med* 1989;15:376-379.

Scatter

(Continued from page 3A)

radiation safety officers nod approvingly to committees assembled to develop policy for this practice. I have met oncologists who will not schedule patients for an office visit on the day of a bone scan because they are anxious about their own exposure to the radiation from the patient.

Although I do not argue with prudent radiation safety procedures, regulatory agencies and radiation safety personnel have fostered the erroneous notion that all detectable radiation is dangerous, that regulatory limits indicate dangerous levels of exposures and that risks exist at all levels of exposure. This evolves into the notion that all detectable radiation is dangerous and represents meaningful risk and that some cancers are caused by any exposure above background. No mention is made that background levels may vary in magnitude in various locales and that the incremental background exposure in certain areas is many times the exposure received from certain occupational activities. Despite intense scrutiny of these high background areas for many years, no adverse effect on the population has been observed.

I wonder what the Martians think of all this?

Stanley J. Goldsmith, MD

Editor-in-Chief, The Journal of Nuclear Medicine

October 1995