

the *European Journal of Cancer* (15, 1013, 1979) and under Alsabti's name in the *Japanese Journal of Medical Science and Biology* (32, 53, 1979). When Wierda became aware of Alsabti's plagiarism, he wrote to the editor of the Japanese journal and presented evidence that he had indeed done the work. Owing to these documents and the subsequent discussion of the Alsabti affair in the international press, the editor of the Japanese journal, Akira Shishido, recently wrote to Wierda to inform him that a retraction of the Alsabti article will be published in the August issue of the journal.

Another retraction is close at hand, according to E. Frederick Wheelock, who also had his work lifted by Alsabti. A grant application and several manuscripts written by Wheelock were turned into three separate review articles signed by Alsabti, who had worked in Wheelock's laboratory at the Jefferson Medical College in Philadelphia. One of these review articles appeared in the *Journal of Cancer Research and Clinical Oncology* (95, 209, 1979). Wheelock wrote to a member of the editorial board of this journal, Ekkehard Grundmann, in March and again in May, explaining how the plagiarism took place. Wheelock recently received an answer from Grundmann, who said a retraction will be published in vol. 97, p. 213, of the journal. Armed with this notice of retraction, Wheelock is now writing to the other two journals and asking for similar retractions.

Retraction of the Alsabti papers from two indexing services seems unlikely, according to spokesmen at the National Library of Medicine (NLM) and the Institute for Scientific Information (ISI). NLM publishes *Index Medicus* and ISI the *Science Citation Index*. Spokesmen said there was no precedent for such a retraction, and that the organizations would probably hesitate to set one, as it might force them in the future to pass judgment on oftentimes contentious issues concerning authorship.

Meanwhile, researchers in England have accused Alsabti of pirating two additional papers, the accusations appearing in the 5 July *British Medical Journal*. The first Alsabti paper that is under fire appeared in the *Japanese Journal of Experimental Medicine* (49, 235, 1979). This paper, according to the *British Medical Journal*, is a

word-for-word copy of a paper that appeared 2 years earlier in the *Journal of Clinical Pathology* (30, 1048, 1977) and was authored by K. W. Pettingale and associates from King's College Hospital.

The second Alsabti paper appeared in the *Journal of Surgical Oncology* (11, 129, 1979). The same research appeared 2 years earlier in the *British Journal of Cancer* (36, 550, 1977), also authored by Pettingale and associates. In discussing this plagiarism, the *British Medical Journal* noted that "the figures and text have been changed and some of the conclusions differ, but they are clearly and essentially the same paper."

While Alsabti's trail through the scientific literature is becoming more and more clear, the whereabouts of the man himself are unknown. His \$70,000 house in Roanoke is up for sale, and administrators at the University of Virginia say he left no forwarding address. Based on their short acquaintance with Alsabti, some officials think he will stay in his chosen field. "He definitely knows medicine," says Hugh Davis, director of the Veterans' Administration hospital where Alsabti worked in affiliation with the University of Virginia program. "I'm sure he'll get another residency. There's just no way in the U.S. system to keep track of him."

## NAS Panel Downgrades Radiation Risks

In an attempt to resolve a bitter dispute over how to assess health risks, a committee at the National Academy of Sciences (NAS) has hit upon a compromise that significantly downgrades the risk of cancer due to low-level radiation.

The updated report of the Committee on the Biological Effects of Ionizing Radiation (BEIR) comes a year after 6 members of the 22-person committee filed a dissenting opinion that called the majority report issued in May 1979 alarmist (*Science*, 18 May 1979). In the wake of the dissent, NAS president Philip Handler asked seven members of the committee, including two of the dissenters and excluding the chairman of the original report, epidemiologist Edward P. Rad-

ford of the University of Pittsburgh, to restate the section on estimating cancer risk. The updated report was released on 29 July.

The nub of the dispute has to do with the best way to estimate cancer risks at levels so low that no human epidemiological data are available. For this purpose, the 1980 BEIR report relies on a "linear-quadratic" model for extrapolating downward from the known effects of severe radiation and for calculating the low-level cancer risk. The seven-member panel in its rewrite of the earlier report concluded, for example, that a continuous lifetime exposure to 1 rad of radiation per year to 1 million people would produce 67 to 182 cancer deaths. In contrast to this, the 1979 BEIR report relied on a pure "linear" model and came up with comparable figures that ranged from 68 to 293 cancer fatalities. The BEIR committee had been asked to review and analyze current scientific knowledge on these issues by the Environmental Protection Agency, which along with other agencies uses the data for the development of radiation protection standards.

The 1979 figures, which had the approval of chairman Radford, met stiff resistance from the dissenters, who held that as exposure to radiation decreases, injuries taper off more rapidly than the linear model would predict. These issues have become heated in recent years because of growing public controversy over possible health hazards from radiation emitted by medical x-ray machines, home appliances, and nuclear plants. According to the linear model, for instance, even a miniscule release of radioactivity in a populated area has a negative effect on public health.

The 1980 report with its reduced estimates of risk was approved by the whole committee with the exception of Radford, a proponent of the pure "linear" model, and Harold H. Rossie, a radiologist at Columbia University who led the dissenters and who feels that the risk is still lower and that a pure "quadratic" model is needed to make statistical estimates. In lieu of their approval, the report contains statements from both Radford and Rossie. In his 28-page dissenting opinion, Radford, for example, criticizes the new report for stressing cancer deaths rather than harder-to-define cancer cases.

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