

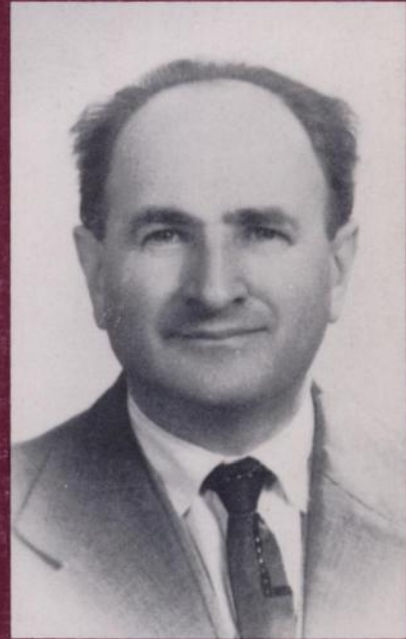


Cancer Research

VOLUME 47 • NO. 24 CNREA 8 • PP 6425-6829

December 15, 1987

PART 1 OF TWO PARTS



This space contributed as a public service.

FOR GENERATIONS CANCER PLAGUED THIS FAMILY. THEN WE CAME INTO THE PICTURE.



It's a tragic coincidence that cancer has taken so many members of this family over the years.

It took Frank Domato in 1961. Patricia O'Hara Brown in 1974. And Serafino Gentile in 1982.

But the fact that the chain of tragedies has now been broken is no coincidence at all.

Over the last 40 years, research programs supported by the American Cancer Society have made increasing progress in the treatment, detection and prevention of cancer.

In 1985 alone, the Society funded over 700 projects conducted by the most distinguished scientists and research institutions in the country.

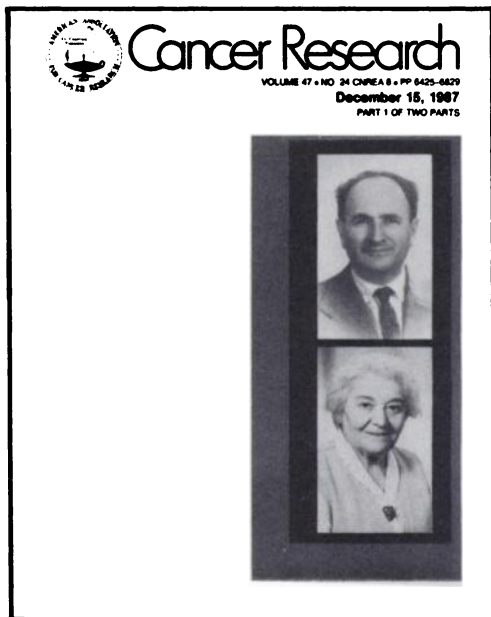
So it's no coincidence that in 1986, cancer did *not* take Debra Gentile—Frank Domato's great-granddaughter. Just as it didn't take hundreds of thousands of others who have been successfully treated for the disease.

You see, we are winning.

But we need you to help keep it that way.

 **AMERICAN CANCER SOCIETY**[®]
Help us keep winning.

COVER LEGEND



Some mycotoxins are known to be carcinogenic in animal species and their potential for carcinogenesis in humans is well recognized. The aflatoxins have been the subject of worldwide attention. Other mycotoxins are also important potential sources, among them fusarial mycotoxins, including the irritant and immunosuppressive trichothecenes, such as T-2 toxin (Bamberg *et al.*, *Tetrahedron*, *24*: 3329, 1968) and the estrogenic resorcylic acid lactones, mainly zearalenone (Christensen *et al.*, *Appl. Microbiol.*, *13*: 653, 1965). These were first discovered as the causes of mycotoxicoses in livestock having consumed moldy fodder.

Famine, war, weather, and soil conditions have been known to lead to widespread fungal contamination of cereal grains and epidemics of toxicoses. Mironov and Joffe found that extracts of fungal cultures containing T-2 toxin and zearalenone reproduced in experimental animals many of the toxic features that followed consumption of bread made from moldy grain. Rats given sublethal doses of either T-2 toxin or zearalenone during the perinatal period developed tumors of the gastrointestinal tract, pancreas, brain, pituitary, uterus, testes, and prostate.

Regina Schoental has pioneered in this field and has emphasized the role of mycotoxins as probable causes of human disorders (see *Adv. Cancer Res.*, *45*: 217, 1985). She was born in Poland in 1906, received her Ph.D. degree from the University of Cracow in 1930, and escaped to England in 1938. Through the kindness of David Keilin she was able to conduct research in the Molteno laboratory at Cambridge. She later moved to Oxford, where she began a most productive collaboration with Florey, Berenblum, Chain, and Heatley in cancer research. After many years at the Medical Research Laboratories at Carshalton, she joined the Royal Veterinary College of the University of London, from which she retired recently.

Pictured are Schoental and Abraham Z. Joffe. Joffe is a professor of mycology and mycotoxicology at the Hebrew University, Jerusalem. He has been a prolific contributor to the literature on the pathogenicity of *Fusarium* and other toxic fungi and their toxic products. We are grateful to Drs. Schoental and Joffe for the photographs and information.

M.B.S.

Editor's Note

The year 1987 saw the retirement of Michael B. Shimkin as Cover Editor of *Cancer Research*. Featuring themes from the history of cancer research on the covers was an innovation begun by Dr. Shimkin while he was Editor of the journal. From January of 1966, when the first historical cover appeared, Dr. Shimkin was responsible for over 250 illustrated covers and legends. He brought to the task the tremendous breadth and depth of his knowledge about the history of research on cancer and a fervent belief in the importance of the perspective afforded to present-day scientists by a study of the past. Drawing on his background and expertise as a researcher, Dr. Shimkin's inspired presentations highlighted contemporary developments as well as older themes.

The Editors extend their warmest thanks and congratulations to Dr. Shimkin for his extraordinary accomplishment of providing cover themes for more than 20 years and their

best wishes for a happy retirement. We are fortunate that we will continue to have the benefit of his experience and advice on the new Cover Editorial Board.

Sidney Weinhouse has begun to serve as the new Cover Editor. The journal is honored to have Dr. Weinhouse's great scope of knowledge and energy brought to bear upon the covers. A group of distinguished researchers, experts in their own fields, has been appointed to assist him in preparing new cover themes. Roswell K. Boutwell, Joseph H. Burchenal, Nancy H. Colburn, George H. Hitchings, Edwin A. Mirand, Howard E. Skipper, John H. Weisburger, Hugh J. Creech, and Dr. Shimkin are the present members of this Cover Editorial Board; others may be added in the future. We welcome the new Cover Editor and Board and look forward to interesting covers in the future.

P. N. Magee
Editor